

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale
Chair

Ren Serey
Executive Director

STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

December 1, 2009

Mr. Dan Gerczak
Anne Arundel County
Office of Planning and Zoning
2664 Riva Road, MS 6303
Annapolis, Maryland 21401

Re: Russell Fabrication/Shenton Property
C 08-0012, G 02013310

Dear Mr. Gerczak,

Thank you for forwarding revised plans for the above-referenced project for review. The applicant proposes to construct a new commercial building and parking lots on an existing 0.77 acre parcel. The property is classified as an Intensely Developed Area (IDA). Since the meeting with Commission staff and the comments in my August 31, 2009 letter, the applicant has incorporated Commission staff recommendations into the revised plans. I have provided one remaining minor comment on the project below:

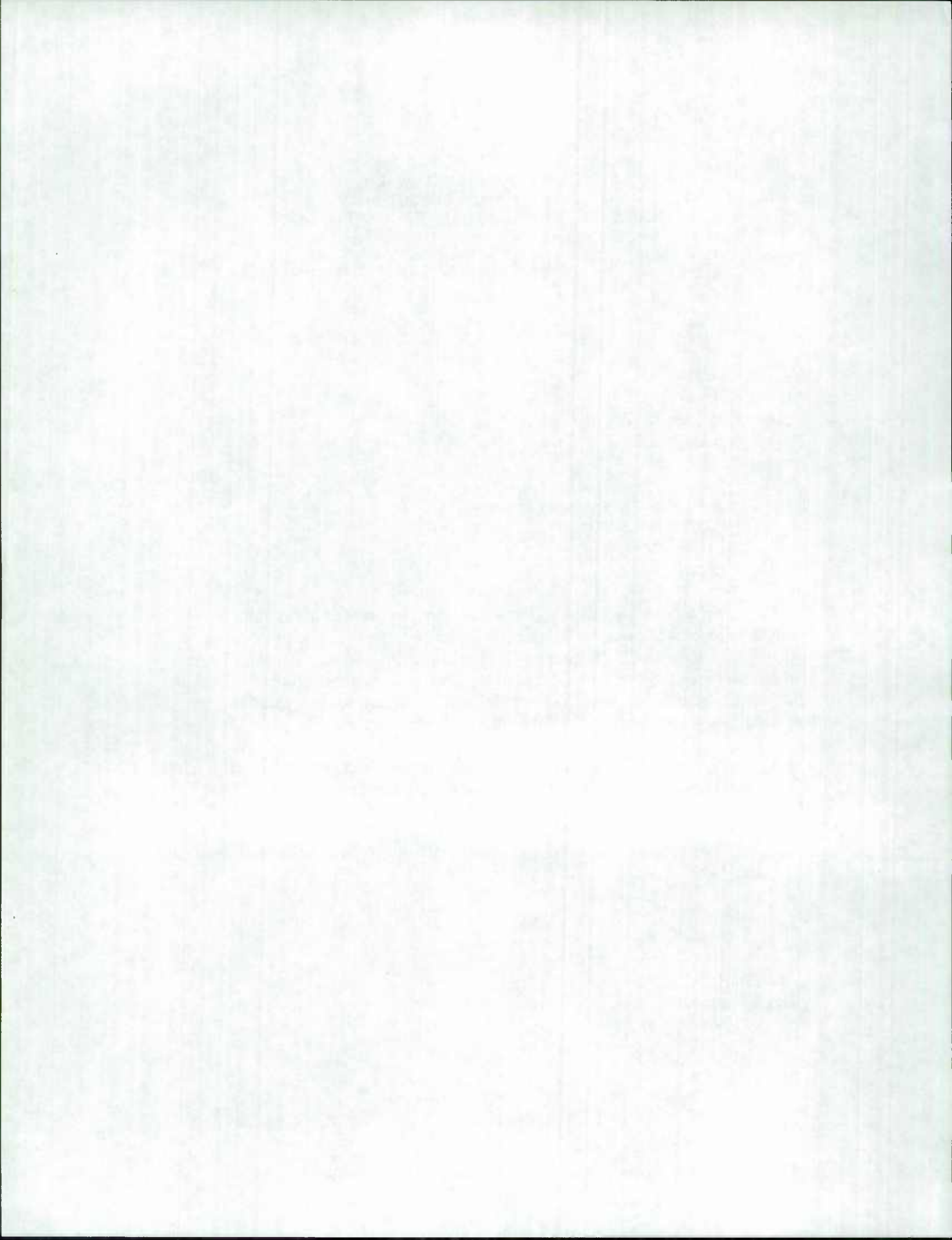
- The applicant must add a note to the final plans guaranteeing the survival of all plant material shown as part of the stormwater management plan.

Thank you for the opportunity to provide comment. If you have questions, please call (410) 260-3479.

Sincerely,

A handwritten signature in black ink, appearing to read "L. Turcan Hockaday", followed by a horizontal line.

L. Turcan Hockaday
Natural Resource Planner
cc: AA 110-08, AA 61-02



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August 31, 2009

Mr. Dan Gerczak
Anne Arundel County
Office of Planning and Zoning
2664 Riva Road, MS 6303
Annapolis, Maryland 21401

Re: Russell Fabrication/Shenton Property
C 08-0012, G 02013310

Dear Mr. Gerczak,

Thank you for forwarding revised plans for the above-referenced project for review. The applicant proposes to construct a new commercial building and parking lots on an existing 0.77 acre parcel. The property is classified as an Intensely Developed Area (IDA). Since this office last provided comments in my June 15, 2009 comment letter, the applicant met with Commission staff to determine how to resolve the remaining comments. The applicant has incorporated Commission staff recommendations from that meeting into the revised plans. I have provided remaining minor comments on the project below:

1. The applicant must add the area of the proposed concrete pad that is within the County right of way into the proposed impervious area section of the 10% calculations. Development on County lands within the Critical Area requires Commission review and approval under COMAR 27.02.02 - State and Local Agency Actions Resulting in Development of Local Significance on Private Lands or Lands Owned by Local Jurisdictions. In the case of this project, if the County determines that the proposed development of its lands within the Critical Area is consistent with Anne Arundel County's Critical Area program, perhaps requiring the applicant to provide a 10% pollutant reduction for the development impact of the concrete pad on its lands along with the rest of the project, in conjunction with correspondence confirming that this project is consistent with the County's Critical Area program, would be a sufficient way to meet the Commission's consistency report submittal and concurrence determination requirements. Once the applicant submits a 10% calculation worksheet showing that the concrete pad has been included in the proposed impervious surface area figure, and the County provides documentation that the proposed development and 10% treatment for the development on County lands is consistent with the County's Critical Area program, this office will consider this comment addressed.
2. As was discussed during the meeting with Commission staff, the proposed grass swale and rain gardens will be considered Best Management Practices (BMPs) in this situation for which half of the normal efficiency rating will be calculated. Using these efficiency numbers in the

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Annapolis: (410) 974-2609 D.C. Metro: (301) 586-0450



Mr. Gerczak
August 31, 2009
Page 2 of 2

calculations, 0.372 of the 0.8706 pounds of phosphorus per year pollutant removal requirement (RR) for the project is addressed with the proposed BMPs, and the applicant will address the remaining 0.499 pounds of phosphorus per year RR by providing plantings on site. The appropriate calculation for determining the number of plantings required to address the 10% requirement is 400 trees per one acre planted equals two pounds of phosphorus removed per year. The applicant has used a different formula to calculate the required number of plantings. The number of proposed plantings for this project, 62 trees and 162 shrubs, is adequate nonetheless.

Thank you for the opportunity to comment. Please telephone me if you have any questions at (410) 260-3481.

Sincerely,



Amber Widmayer
Natural Resources Planner

cc: AA 61-02
AA 110-08

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June 15, 2009

Mr. Dan Gerczak
Anne Arundel County
Office of Planning and Zoning
2664 Riva Road, MS 6303
Annapolis, Maryland 21401

Re: Russell Fabrication/Shenton Property
C 08-0012, G 02013310

Dear Mr. Gerczak,

Thank you for forwarding revised plans for the above-referenced project for review. The applicant proposes to construct a new commercial building and parking lots on an existing 0.77 acre parcel. The property is classified as an Intensely Developed Area (IDA). The applicant has not sufficiently responded to this office's comments from my March 23, 2009 letter. It appears that the best course of action at this point is for the applicant to set up a meeting with Commission staff to discuss and resolve the remaining comments. I have reiterated and expanded upon these comments below:

1. It appears that the applicant is now referring to the proposed parking lot as a driveway in order to justify the proposed use of the grass channels instead of a BMP such as an underground sand filter as previously recommended by this office. As mentioned above, we recommend that the applicant meet with Commission staff to discuss stormwater treatment options other than the proposed grass channels.
2. As requested, the applicant has provided information about the proposed rain gardens that will receive stormwater runoff from the proposed commercial building rooftop. However, all of the nine 975 square foot sections of rooftop being directed to each of the nine rain gardens exceed the maximum 500 square feet of rooftop surface area that can be directed to one raingarden as specified on p. 5.7 of the MDE 2000 Stormwater Manual, and therefore, the full stormwater rooftop disconnect credit can not be deducted for the building rooftop. If the applicant has questions as to how the calculations must be revised or what stormwater treatment alternatives must be provided as a result, this can be discussed in a meeting with Commission staff.
3. Stormwater treatment must be provided for the proposed concrete pad that is within the County right of way in conjunction with this project. Please provide information regarding the appropriate County contact responsible for development of this portion of the site. Development on County lands within the Critical Area requires Commission review and approval under COMAR 27.02.02 - State and Local Agency Actions Resulting in Development of Local Significance on Private Lands or Lands Owned by Local Jurisdictions. If the County

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Mr. Gerczak
June 15, 2009
Page 2 of 2

determines that the proposed development of its lands within the Critical Area is consistent with Anne Arundel County's Critical Area program, it may submit a development proposal and consistency report with a request that the Commission concur with this determination.

Thank you for the opportunity to comment. Please telephone me if you have any questions at (410) 260-3481.

Sincerely,



Amber Widmayer
Natural Resources Planner

cc: AA 61-02
AA 110-08

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April 13, 2009

Ms. Kelly Krinetz
Anne Arundel County
Office of Planning and Zoning
2664 Riva Road, MS 6301
Annapolis, MD 21401

Re: Request for Modification – Russell Fabrication
Modification # 10309

Dear Ms. Krinetz:

Thank you for providing information on the above referenced modification request. The applicant is seeking a modification to bypass the County's subdivision process. The subject property is approximately .75 acres in size and lies entirely within the Intensely Developed Area (IDA) of the Chesapeake Bay Critical Area. The applicant is proposing to develop the property with an industrial building and nine parking spaces. This office has previously provided comments on the property's 10% calculations on March 23, 2009. At this time, this office has no comments on the applicant's request to bypass the subdivision process. As the project moves through the general site review process, this office will provide further comments.

Thank you for the opportunity to provide comment. If you have any questions, please call (410) 260-3481.

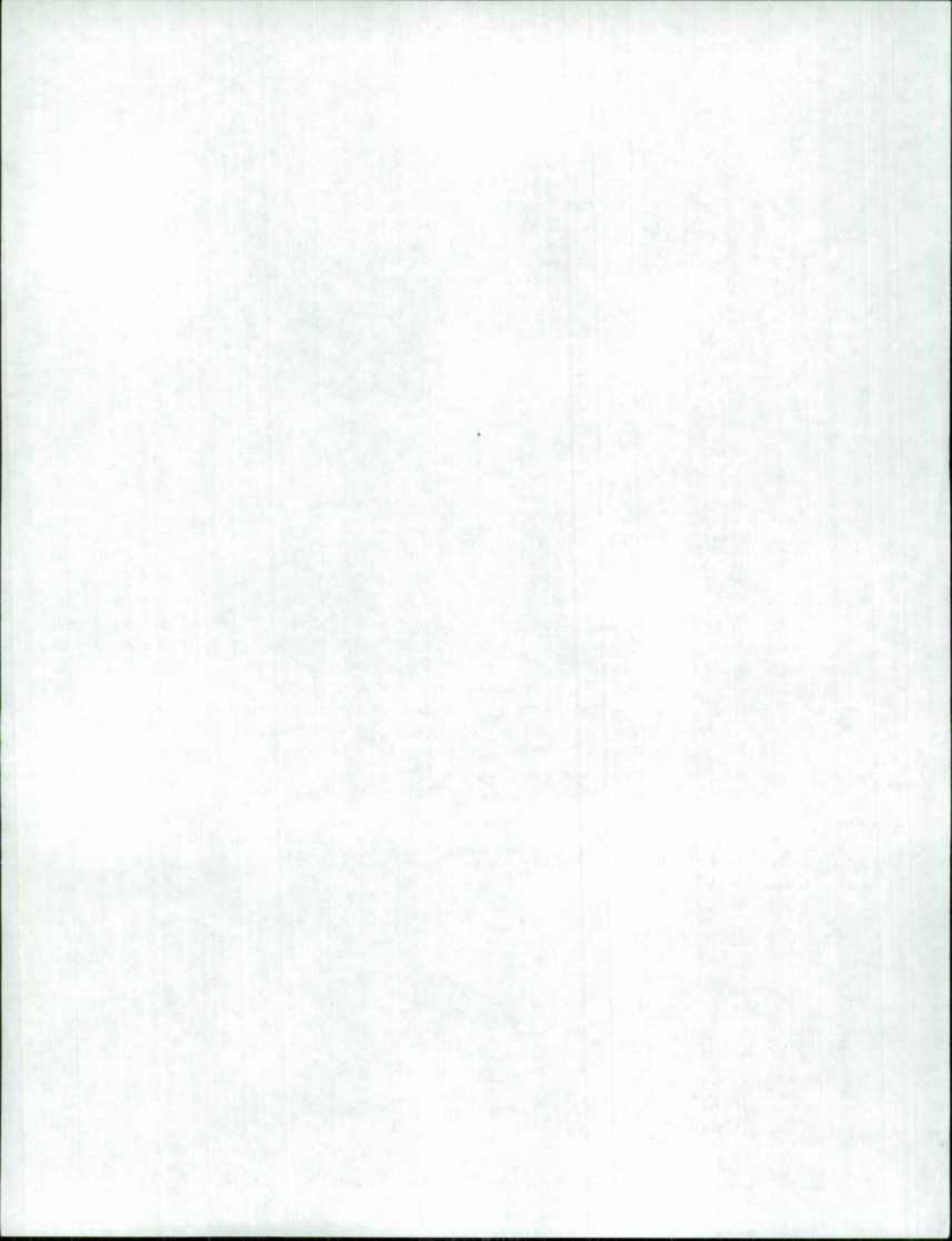
Sincerely,

A handwritten signature in black ink, appearing to read "Amber Widmayer".

Amber Widmayer
Natural Resource Planner

cc: AA 110-08





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Executive Director

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March 23, 2009

Mr. Dan Gerczak
Anne Arundel County
Office of Planning and Zoning
2664 Riva Road, MS 6303
Annapolis, Maryland 21401

Re: Russell Fabrication/Shenton Property
C 08-0012, G 02013310

Dear Mr. Gerczak,

Thank you for forwarding revised plans for the above-referenced project for review. The applicant proposes to construct a new commercial building and parking lots on an existing .77 acre parcel. The property is classified as an Intensely Developed Area (IDA). I have provided my comments below:

1. The comment from my letter dated December 30, 2008 regarding the use of grass channels to treat linear impervious surfaces has not been addressed. Please find attached a copy of the Maryland Department of the Environment (MDE) memo regarding the appropriate uses of grass channels for storm water management purposes.
2. There is no detail included in the site plan of the proposed rain gardens. Additionally, the number of square feet of the roof top is too great to use a disconnect credit to treat run-off. Please have the applicant follow the specifications in the MDE stormwater manual if they wish to utilize disconnection credits.
3. Staff wishes to review comments from the Fire Marshal associated with comment "D" of the report, which was listed as "Intentionally Omitted". Without these comments, Staff is unconvinced of the need for second access point and the additional impervious surface associated with it. Without the second access point, the applicant would be able to meet the 10%Rule requirements with greater ease.
4. It is unclear whether the 'Concrete Pad' to the rear of the property is existing or proposed. Additionally, it is uncertain whether the concrete pad was included in the impervious surface calculations. Please clarify.

March 23, 2009
Russell Fabrication/Shenton Property
Page 2 of 2

Thank you for the opportunity to provide comment. If you have questions, please call
(410) 260- 3481.

Sincerely,

A handwritten signature in black ink, appearing to read 'AW', with a small dot above the final 'i'.

Amber Widmayer

Natural Resource Planner

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December 30, 2008

Mr. Dan Gerczak
Anne Arundel County
Office of Planning and Zoning
2664 Riva Road, MS 6303
Annapolis, Maryland 21401

Re: Russell Fabrication/Shenton Property
C 08-0012, G 02013310

Dear Mr. Gerczak,

Thank you for forwarding revised plans for the above-referenced project for review. The applicant proposes to construct a new commercial building and parking lots on an existing 0.77 acre parcel. The property is classified as an Intensely Developed Area (IDA). I have provided my remaining comments below:

1. The applicant proposes to use grass channels for purposes of addressing the 10% calculations. However, grass channels are intended for treatment of roads and other linear impervious surfaces with an impervious flow path length not more than 75 feet in width. Therefore, the applicant must provide another treatment option to address the 10% pollutant reduction. Please have the applicant submit revised 10% calculations with information about how the pollutant removal requirement will be addressed on site by a Best Management Practice (BMP) in addition to or instead of the proposed grass channels. We note that the applicant has indicated that a high water table on the property prevents the use of a sand filter and other BMPs for addressing the 10% pollutant reduction requirement on site. If this is the case, the applicant must address this requirement by providing a BMP offsite or offsets to address the 10% requirement. This office is happy to meet with the applicant to discuss such alternative methods of meeting this requirement.

Thank you for the opportunity to comment. Please telephone me if you have any questions at (410) 260-3481.

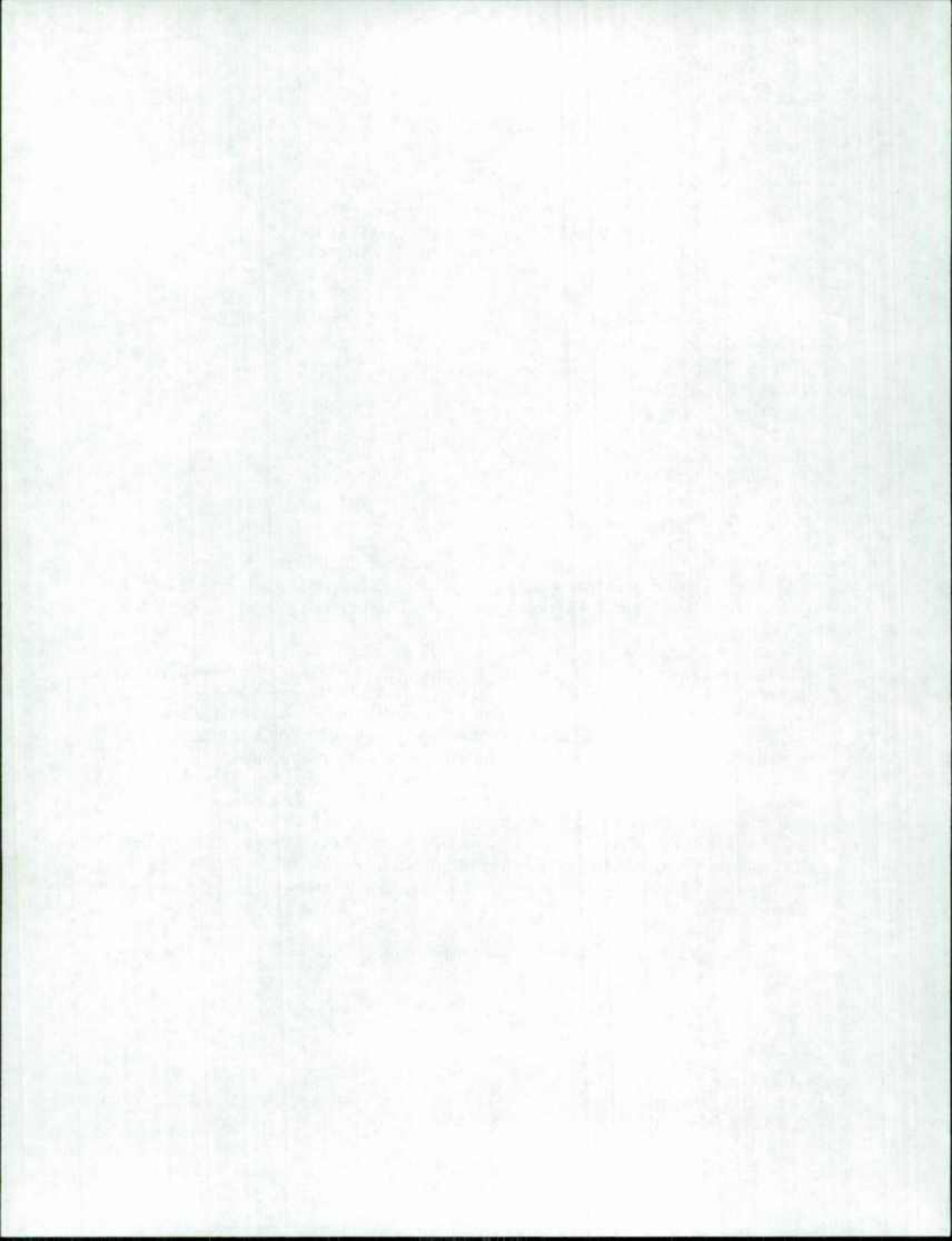
Sincerely,

A handwritten signature in dark ink, appearing to read "Amber Widmayer".

Amber Widmayer
Natural Resources Planner

cc: AA 61-02
AA 110-08





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June 10, 2008

Mr. Dan Gerczak
Anne Arundel County
Office of Planning and Zoning
2664 Riva Road, MS 6301
Annapolis, Maryland 21401

Re: Russell Fabrication/Shenton Property
C 08-0012, G 02013310

Dear Mr. Gerczak,

Thank you for forwarding revised plans for the above-referenced project for review. The applicant proposes to construct a new commercial building and parking lots on an existing 0.77 acre parcel. The property is classified as an Intensely Developed Area (IDA). The applicant has addressed this office's comments from my February 19, 2008 letter and I have provided my remaining comments below:

1. As requested, the applicant has provided the 10% pollutant reduction calculations. The applicant proposes to address the pollutant reduction requirement with a grass channel credit. However, grass channels are intended for treatment of roads and other linear impervious surfaces with an impervious flow path length not more than 75 feet in width. Therefore, the applicant must provide another treatment option to address the 10% pollutant reduction. For instance, it appears that there is room on the site to install a perimeter sand filter. Please have the applicant submit revised 10% calculations with information about how the pollutant removal requirement will be addressed on site by a Best Management Practice (BMP) in addition to or instead of the proposed grass channels.
2. It appears that there is a minor math error in Step 3 of the applicant's 10% calculations. The applicant's calculation for "Rv" is 0.524, and it seems that it should be 0.527 instead. This mistake results in a slightly higher pollutant removal requirement of 0.6486 pounds of phosphorus per year instead of 0.6428 pounds of phosphorus per year. Please have the applicant adjust these calculations as necessary in future submittals.

Thank you for the opportunity to comment. Please telephone me if you have any questions at (410) 260-3481.



Mr. Gerczak
June 10, 2008
Page 2 of 2

Sincerely,

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Amber Widmayer
Natural Resources Planner

cc: AA 61-02
AA 110-08



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www.dnr.state.md.us/criticalarea/

February 19, 2008

Ms. Kelly Krinetz
Anne Arundel County
Office of Planning and Zoning
2664 Riva Road, MS 6301
Annapolis, Maryland 21401

Re: Shenton Property/Russell Fabrication
C 08-0012, G 02013310

Dear Ms. Krinetz,

I have received the above-referenced project for review. The applicant proposes to construct a new commercial building and parking lots on an existing 0.77 acre parcel. The property is classified as an Intensely Developed Area (IDA). I have provided my comments below:

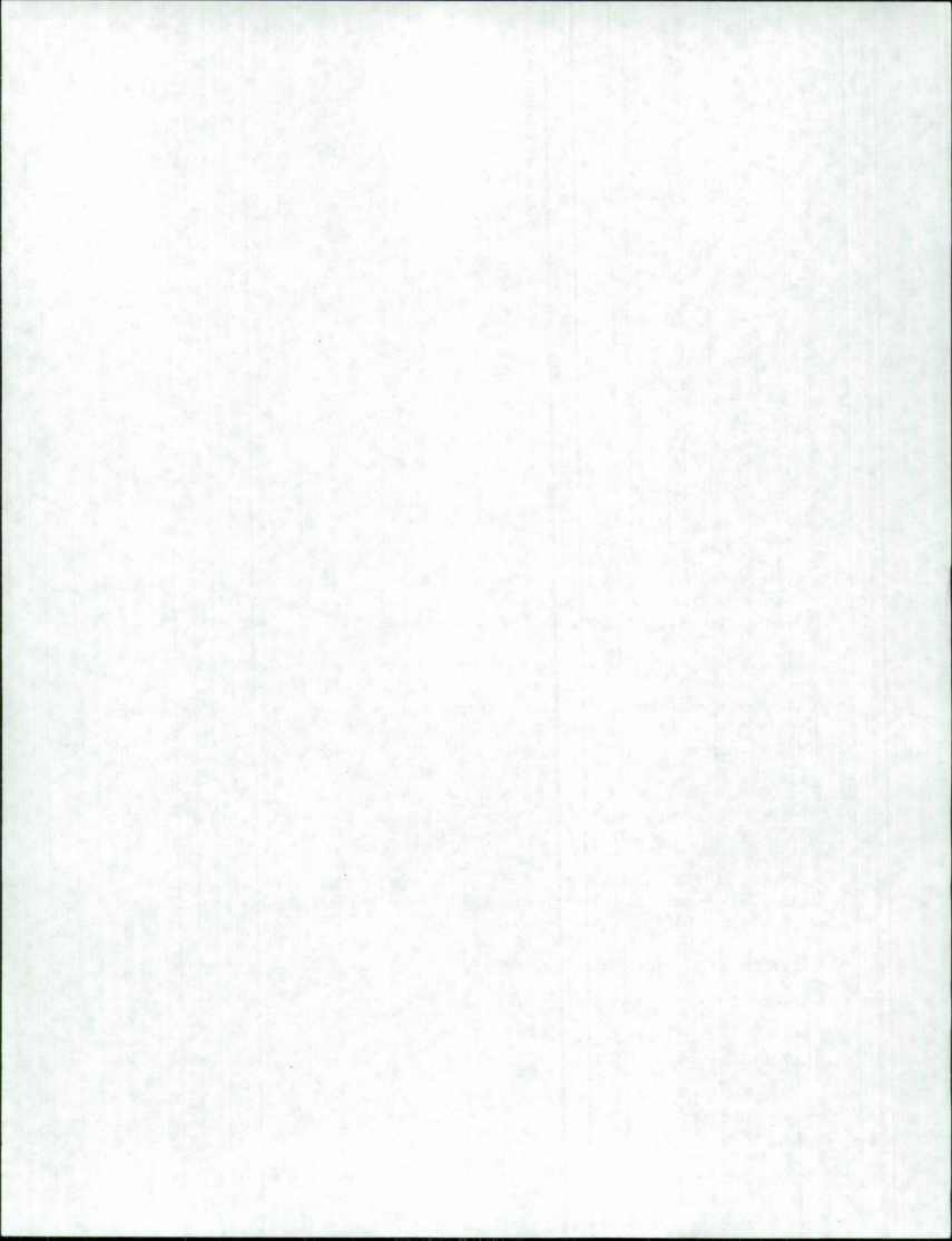
1. Because the property is designated IDA, the applicant must show how the 10% pollutant removal requirement will be addressed for this project. Please have the applicant complete and submit the 10% pollutant reduction calculations using the worksheet which can be found on our website under the guidance documents link, or by going directly to the web address below.
http://www.dnr.state.md.us/criticalarea/10percent_rule_manual/worksheet_a.pdf
2. Please have the applicant provide a revised site plan which includes the 10% calculations described above, and demonstrates any stormwater best management practices (BMPs) required to address the pollutant removal requirement.
3. COMAR 27.01.02.03.D(4) requires that if practicable, permeable areas within IDA shall be established in vegetation. Please provide a landscape plan demonstrating that this requirement has been addressed.

Thank you for the opportunity to comment. Please telephone me if you have any questions at (410) 260-3481.

Sincerely,

Amber Widmayer
Natural Resources Planner

cc: AA 61-02





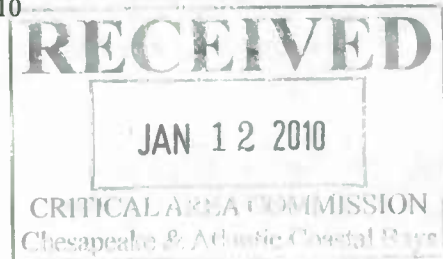
**ANNE
ARUNDEL
COUNTY**

M A R Y L A N D
County Executive John R. Leopold

2664 RIVA ROAD, P.O. BOX 6675
ANNAPOLIS, MARYLAND 21401
OFFICE OF PLANNING AND ZONING

January 6, 2010

Ms. Michele D. Bennett
Wilkerson & Associates
P. O. Box 17
Dunkirk, MD 20754



Re: Name: Russell Fabrication
Site Development Plan: C # 2008-0012-00NC
Grading Permit # G02013310

Dear Ms. Bennett:

The Site Development Plan for the referenced project has been reviewed by the agencies listed below and copies of their comments are attached.

- A. OPZ/Planning Approved w/comments December 1, 2009
- B. OPZ/Engineering Approved w/comments December 8, 2009
- C. Critical Area Commission Approved w/comment December 1, 2009

I. The agency comments listed below (copies attached) must be addressed with grading and building permit submittals:

- A. OPZ/Planning Comments dated December 1, 2009
- B. OPZ/Engineering Comments dated December 8, 2009
- C. Critical Area Commission Comment dated December 1, 2009

II. Adequacies of Facilities issues for items A through E have been reviewed and are approved subject to any noted conditions.

- A. Fire Suppression: Adequacy of Fire Suppression has been addressed. The Fire Marshal approved the project on March 18, 2009.
- B. Roads: Adequacy of Facilities for Roads has been addressed for this development. The site will generate less than 50 trips.
- C. Schools: Adequacy of Facilities for Schools is not applicable. There are no new residential lots being created.
- D. Utilities: Adequacy of Facilities for Utilities has been addressed. A SWAMP analysis of public sewer services was performed and the Department of Public Works has approved 7 EDU's of sewer. The Health Department has approved the private well.
- E. Storm Drains: Adequacy of Facilities for Storm Drains has been addressed. The proposed storm drainage system adequately conveys stormwater runoff in a non-erosive manner to the Site and Tributary Outfalls, and to the Point-of-Investigation (POI), located approximately 360 feet north-northeast of the intersection of Snug Harbor Road and Woods Wharf Road, where an existing drainage channel discharges into an existing 30-inch culvert, discharging into Parish Creek.

III. Decision:

Based upon the information submitted for the above referenced project, this office recommends Site Development Plan approval to the Department of Inspection and Permits as of the date of this letter. This recommendation is subject to items in Section I listed above being satisfactorily addressed prior to the issuance of the grading and building permit for the project.

IV. Resubmittal/Agreements/Expiration:

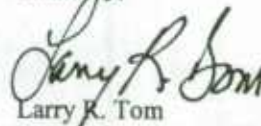
Each agency submittal package for the grading/building permit(s) shall include a point-by-point response letter addressing the items in Section I.

The developer/owner shall prepare, execute and deliver at one time all agreements, including a public works agreement, a forestation agreement, a deed to right-of-ways containing public road improvements constructed by the developer, and all other deeds, easements, rights-of-way, agreements and other documents required by Article 17, of the Anne Arundel County Code.

Please be advised that the Adequacy of Facilities approval is valid for six months from the date of this letter (July 6, 2010) per Article 17-5-205 and the Site Development Plan expires one year from the date of this letter (January 6, 2011) per Article 17-4-206 unless the developer/owner obtains the appropriate permit(s) or in the case where the Site Development Plan is not associated with a permit, establishes the use within one year.

If you have any questions regarding this project, please call Dan Gerczak at 410-222-7458 or e-mail to pzgerc@aacounty.org

Sincerely,



Larry R. Tom
Planning and Zoning Officer

cc: Kelly Krinetz, Critical Area Team Administrator
CA Team: JFB, DWG
Permit Application Center: Judy Motta
Lt. Francis X. Fennell, Fire Marshal Division
Amber Widemayer, Critical Area Commission
Site Plan File/Diary C 2008-0012-00NC



**Office of Planning and Zoning
Development Division**

INTER-OFFICE CORRESPONDENCE

DATE: December 1, 2009

TO: File

FROM: Environmental/Planning/Landscape, OPZ, Mail Stop 6305, Dan Gerczak

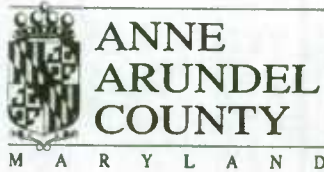
SUBJECT: C 2008-0012, Russell Fabrication, G02013310

Planning: Approved with comment

- 1) The Allocation letter/notification will be forthcoming under a separate cover. The Allocation information must be noted on the SDP and grading permit plans (cover sheet).
- 2) The modification decision (M10309) must be noted on the SDP and grading permit plans (cover sheet).

Environmental: Approved

Landscape: Approved



County Executive John R. Leopold

**Office of Planning and Zoning
Development Division**

INTER-OFFICE CORRESPONDENCE

DATE: December 8, 2009
TO: Dan Gerczak – Planner II
FROM: John F. Bassford Jr., PE – Engineer III
SUBJECT: Russell Fabrication
SDP C#08-0012
Permit #G02013310

Engineering and Utility Review #8

The above-referenced project has been reviewed for Public Works and Utility issues based on the package dated 10/29/09, and the following comments apply:

Adequacy of Public Facilities is being addressed as follows:

Fire Suppression:

The site will be served by a private well. A fire suppression tank may be required by the Fire Marshal's Office. The final decision regarding Adequacy of Facilities for Fire Suppression is being deferred to the Office of the Fire Marshal.

Utilities:

The site will be served by a private well. Adequacy of Facilities for Water will be deferred to the Anne Arundel County Department of Health. A SWAMP Analysis of public sewer service was performed and the Department of Public Works has indicated that capacity is currently available for 7 EDU's of sewer. The consultant/developer is being advised that the availability of capacity is not guaranteed until an allocation request has been processed and approved by the Department of Public Works.

Storm Drainage:

Adequacy of Facilities for Storm Drainage has been addressed. The proposed storm drainage system adequately conveys storm water runoff in a non-erosive manner to the Site and Tributary Outfalls, and to the Point-of-Investigation (POI), located approximately 360-ft north-northeast of the

intersection of Snug Harbor Road and Woods Wharf Road, where an existing drainage channel discharges into an existing 30-in culvert, discharging into Parish Creek.

The following are comments regarding the plans as submitted; only the comments indicated in the closing paragraph require a point-by-point response:

A. Roads

The site has frontage along Woods Wharf Road which is a County public road and is currently classified as a Collector road. The road along the entire frontage of this development has been fully improved to the required county standard based upon its classification, therefore right-of-way dedication and frontage improvements are not being required.

1. No Comment

B. Storm Drainage

Storm drainage through and from this development is accomplished by utilizing a combination of open swales and closed storm drain system.

1. The overall text in the plan view on the public drain & fire suppression tank plan is too small. See the standards established in the County Design Manual. The labels for the plan features must be clear and readable, and the proposed public features easily identifiable.
2. Address all comments as outlined in the marked public plans and in the Storm Drainage Design Checklist.

C. Stormwater Management

The proposed SWM design for this "New Development" site consists of the use of the Grass Channel and Rooftop Disconnect Credits to address the required Water Quality volume (WQ_v) and Groundwater Recharge volume (Re_v) for the industrial building, the parking lot and drive on-site. Quantity management of the Channel Protection volume (Cp_v) is not proposed, as the discharge from the developed site is indicated as less than 2-cfs. Quantity management of the Overbank and Extreme Flood volumes (Q_p and Q_f) are not proposed, based on the assertion that the site has adequate conveyance to tidal outfall.

1. As a condition of Site Development Plan approval, it is incumbent upon the Applicant to provide a copy of the building architectural plans as part of the grading permit review, which clearly show the necessary roof details to divide the roof into the 975-sf drainage areas so runoff is distributed properly to the proposed raingardens as designed.
2. In regards to previous comment #C.6, the raingarden details provided do not specify that the underdrain must be in a gravel layer below the planting soil. Add a gravel layer to the detail.

D. Utilities

This development will be served by:

- i) Public sewer in Sewer Service Area #08 – Broadwater (Existing Service)
 - ii) Private water in Water Service Area #07 – Rural (No Public Service)
1. Previous comment #D.1 has not been adequately addressed. Revise the easement for the fire suppression tank on the public plans to reflect the revised dimensions (21.5-ft x 51-ft) as previously indicated.

E. Site Development/Grading Plan

1. A Private Stormwater Management Agreement will be required at time of grading permit.
2. Please ensure that the grading permit is resubmitted through the Permit Application Center to address comments that have been deferred to permit and ensure that the set of plans approved with the grading permit is the same as the final site development plan.

F. Plat

1. Revise the easement plat to reflect the same bearings (the same direction) as indicated in the description. Also note the Point-of-Beginning on the plat.
2. A Public Works Agreement is required for the culvert pipe replacement and fire suppression tank installation.

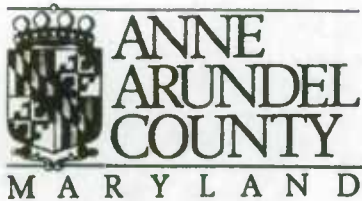
G. Floodplain

1. A floodplain study is not required for this project.

Additional comments are provided on redline mark-ups of the plans and checklist. The documents can be picked up from the Office of Planning and Zoning, Development Division, 2664 Riva Road, 3rd Floor, Annapolis, MD 21401.

We recommend Site Development Plan approval with the comments B.1-2, C.1-2, D.1, E.1-2, F.1-2, the marked plans and checklist items being addressed prior to approval of the grading permit plans for this project.

Cc: Sub-comments
SDP File



County Executive John R. Leopold

2664 RIVA ROAD, P.O. BOX 6675
ANNAPOLIS, MARYLAND 21401

OFFICE OF PLANNING AND ZONING

December 8, 2009

Wilkerson & Associates, Inc.
Box 17
Dunkirk, Maryland 20754

Attn: Mr. Bob Lee, R.L.S

Re: Marked-up Plans Associated with
Russell Fabrication
SDP #C-08-0012
Permit #G02013310

Dear Mr. Lee,

Please find attached the Public Storm Drain / Fire Suppression Tank Plans, and the Storm Drainage Design Checklist for the above referenced project with marked comments. Make the necessary changes to the plans in conjunction with the written comments dated December 8, 2009 and resubmit the revised easement plat, description, and public plans directly to this office for review. The marked plans and checklist must accompany the re-submittal of the public plans. All other comments not related to the public plans are to be addressed with resubmission of the grading permit.

If you have any questions, please contact me at 410-222-7960.

Sincerely,

A handwritten signature in black ink that reads "John F. Bassford Jr.".

John F. Bassford Jr., P.E.
Engineer III
Development Division

Attachments

Cc: SDP File

J:\Shared\subdiv\BASSFORD\SDP's\C#08-0012 Russell Fabrication - Mark-up Trans#8 DOC

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaux G. McHale
Chair

Re Serey
Executive Director

STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

December 1, 2009

Mr. Dan Gerczak
Anne Arundel County
Office of Planning and Zoning
2664 Riva Road, MS 6303
Annapolis, Maryland 21401

Re: Russell Fabrication/Shenton Property
C 08-0012, G 02013310

Dear Mr. Gerczak,

Thank you for forwarding revised plans for the above-referenced project for review. The applicant proposes to construct a new commercial building and parking lots on an existing 0.77 acre parcel. The property is classified as an Intensely Developed Area (IDA). Since the meeting with Commission staff and the comments in my August 31, 2009 letter, the applicant has incorporated Commission staff recommendations into the revised plans. I have provided one remaining minor comment on the project below:

- The applicant must add a note to the final plans guaranteeing the survival of all plant material shown as part of the stormwater management plan.

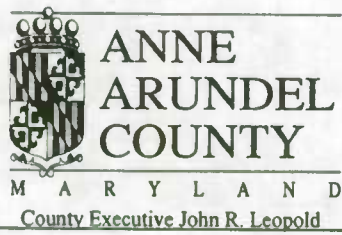
Thank you for the opportunity to provide comment. If you have questions, please call (410) 260-3479.

Sincerely,

A handwritten signature in black ink, appearing to read "L. Turcan Hockaday".

L. Turcan Hockaday
Natural Resource Planner
cc: AA 110-08, AA 61-02

AA 110-05



2664 RIVA ROAD, P.O. BOX 6675
ANNAPOLIS, MARYLAND 21401
OFFICE OF PLANNING AND ZONING

June 16, 2009

Mr. Bob Lee
Wilkerson & Associates
P. O. Box 17
Dunkirk, MD 20754

Re: Name: Russell Fabrication Property
Site Development Plan No. C # 2008-0012
Grading Permit # G02013310

Dear Ms. Bennett:

The Site Development Plan for the referenced project has been reviewed by the agencies listed below and copies of their comments are attached.

- A. OPZ/Planning Approval withheld June 15, 2009
- B. OPZ/Engineering Approval withheld June 12, 2009
- C. OPZ/Landscape Approved w/comment June 15, 2009
- D. Critical Area Commission Approval withheld June 15, 2009
- E. OPZ/Environmental Approved w/comment June 15, 2009

I. Before approval of the Site Development Plan, the following agency comments must be resolved:

- A. OPZ/Planning Comments dated June 15, 2009
- B. OPZ/Engineering Comments dated June 12, 2009
- C. Critical Area Commission Comments dated June 15, 2009

II. Adequacy of Facilities for item E has been reviewed and must be resolved with resubmittal. Items A, B, C and D are acceptable and will be approved with the final Site Development Plan provided no changes occur and subject to any noted conditions.

- A. Fire Suppression: Adequacy of Fire Suppression has been addressed. The Fire Marshal approved the project on March 18, 2009.
- B. Roads: Adequacy of Facilities for Roads has been addressed for this development. The site will generate less than 50 trips.
- C. Schools: Adequacy of Facilities for Schools is not applicable. There are no new residential lots being created.
- D. Utilities: Adequacy of Facilities for Utilities has been addressed. A SWAMP analysis of public sewer services was performed and the Department of Public Works has approved 7 EDU's of sewer. The Health Department has approved the private well.

Mr. Bob Lee
June 16, 2009
Page 2

E. Storm Drains: Adequacy of Facilities for Storm Drains has not been addressed. Engineering comments from John Bassford dated June 12, 2009 must be resolved before adequacy of storm drains can be determined.

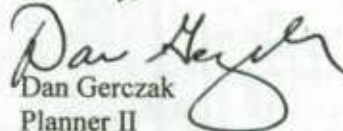
IV. Decision:

A. This office must withhold approval of the Site Development Plan until the issues set forth in Sections I and II have been resolved.

B. In accordance with Article 17-4-203 the resubmittal must be made within forty-five (45) days of the date of this letter and must include separate packages labeled with the name of the required review agency. Each package is to include a point-by-point response letter addressing the items in section I and II above, and any other supplemental information necessary for review. Resubmittal in accordance with the attached Resubmittal Cover Sheet must be sent directly to Judy Motta at the Permit Application Center by August 5, 2009.

If you have any questions regarding this project, please call me at 410-222-7960 or email to pzgerc05@aacounty.org.

Sincerely,


Dan Gerczak
Planner II

cc: Kelly Krinetz, Critical Area Team Administrator
CA Team: JFB, DWG
Permit Application Center: Judy Motta
Lt. Francis X. Fennell, Fire Marshal Division
Amber Widemayer, Critical Area Commission
Site Plan File/Diary



Office of Planning and Zoning
Development Division

INTER-OFFICE CORRESPONDENCE

DATE: June 15, 2009

TO: File

FROM: Environmental/Planning/Landscape, OPZ, Mail Stop 6305, Dan Gerczak

SUBJECT: C 2008-0012, Russell Fabrication, G02013310

Environmental: Approved with comment

- 1) The IDA water quality improvements must be approved by OPZ/Engineering and the Critical Area Commission.

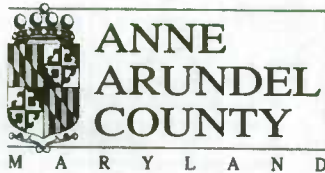
Planning: Approval withheld

- 1) The OPZ/Planning approval is withheld pending resolution of all agency review comments.

Landscape: Approved with comment

- 1) On the landscape plan, please identify the landscape professional.

This office does not recommend Planning approval for the Site Development Plan at this time.



County Executive John R. Leopold

**Office of Planning and Zoning
Development Division**

INTER-OFFICE CORRESPONDENCE

DATE: June 12, 2009
TO: Dan Gerczak – Planner II
FROM: John F. Bassford Jr., PE – Engineer III
SUBJECT: Russell Fabrication
Site Development Plan
SDP C#08-0012
Permit #G02013310

Engineering and Utility Review #6

The above-referenced project has been reviewed for Public Works and Utility issues based on the package dated 5/13/09, and the following comments apply:

Adequacy of Public Facilities is being addressed as follows:

Fire Suppression:

The site will be served by a private well. A fire suppression tank may be required by the Fire Marshal's Office. The final decision regarding Adequacy of Facilities for Fire Suppression is being deferred to the Office of the Fire Marshal.

Utilities:

The site will be served by a private well. Adequacy of Facilities for Water will be deferred to the Anne Arundel County Department of Health. A SWAMP Analysis of public sewer service was performed and the Department of Public Works has indicated that capacity is currently available for 7 EDU's of sewer. The consultant/developer is being advised that the availability of capacity is not guaranteed until an allocation request has been processed and approved by the Department of Public Works.

Storm Drainage:

Adequacy of Facilities for Storm Drainage has not been addressed. It has not been demonstrated that the proposed storm drainage system adequately conveys storm water runoff in a non-erosive manner to the Site and Tributary Outfalls, and to the Point-of-Investigation.

The following are comments regarding the plans as submitted; only the comments indicated in the closing paragraph require a point-by-point response:

A. Roads

The site has frontage along Woods Wharf Road which is a County public road and is currently classified as a Collector road. The road along the entire frontage of this development has been fully improved to the required county standard based upon its classification, therefore right-of-way dedication and frontage improvements are not being required.

1. No Comment

B. Storm Drainage

1. Previous comment #B.1 has not been adequately addressed. The following revisions to Sheets 1, 4, 5 & 6 of 6 of the SDP plan set are required so the right-to-discharge computations can be verified:

A. Provide separate existing and proposed condition drainage area maps, at the same scale, at a scale no smaller than 1"= 100'.

B. Clearly show the proposed site features on the proposed condition drainage area map.

C. Address all checklist items as indicated on the Storm Drainage Design Checklist.

2. In regards to previous comment #B.3, the drainage areas used in the computations for culvert sizing are not consistent. The Storm Drain Flow Tabulation (Sheet 1 of 6) indicates 6.2-acres. The 100-scale Proposed SWM and Storm Drain Drainage Area Map below the computations shows Area A = 0.73-ac and Area C = 5.53-ac, for a total of 6.26-ac. The map on Sheets 5 & 6 of 6 shows the Tributary Drainage Area (the same total drainage area) as being 6.57-ac. Make these areas consistent, revise the necessary computations, and confirm the proposed culvert sizes.
3. Provide a storm drain drainage area map, at a minimum scale of 1"= 100', as part of the Public Storm Drain Plan. See the Storm Drainage Design Checklist.
4. Address all comments as outlined in the marked Public Storm Drain Plan and in the Storm Drainage Design Checklist. The Storm Drainage Design Checklist impacts both the Public Storm Drain Plan and the SDP.

C. Stormwater Management

The proposed SWM design for this "New Development" site consists of the use of the Grass Channel, Rooftop and Non-Rooftop Disconnect Credits to address the required Water Quality volume (WQ_v) and Groundwater Recharge volume (Re_v) for the industrial building, the parking lot and drive on-site. Quantity management of the Channel Protection volume (Cp_v) is not proposed, as the discharge from the developed site is indicated as less than 2-cfs. Quantity management of the Overbank and Extreme Flood volumes (Q_p and Q_f) are not proposed, based on the assertion that the site has adequate conveyance to tidal outfall.

1. Previous comment #C.1 has still not been adequately addressed. Refer to comment #B.1 above. The Site/Tributary Outfalls and the POI locations have been shown on Sheet 5 of 6. However, the existing and proposed condition drainage area maps are still not at the same scale (Sheet 4 of 6 is 20-scale, Sheet 6 of 6 is 40-scale), and the proposed conditions map shows no proposed features. Revise.

2. Previous comment #C.2 has still not been adequately addressed. The computations provided for the grass channel credit are now consistent with plan view on Sheet 2 of 6, but are not consistent with the SWM Concept notes on the same sheet. Each grass channel now has a unique design cross-section. Indicate all three unique cross-sections on the plan.
3. In regards to previous comment #C.3, see the items below:
 - a. Runoff to the western end of the proposed building must drain around the building, either into Grass Channel #1 or Grass Channel #3. Revise the drainage area and computations accordingly. If the velocity is above 1-fps for the WQ_v storm, alternate methods must be implemented to address the WQ_v in that drainage area.
 - b. The drainage area indicated for Grass Channel #1 or Grass Channel #3 does not account for off-site area which reaches the channels. Off-site area to the west reaches Grass Channel #1 and off-site area to the south reaches Grass Channel #3. The entire drainage area to the channel must be considered for the WQ_v runoff, flow, and velocity calculations. Revise accordingly. If the velocity is above 1-fps for the WQ_v storm, alternate methods must be implemented to address the WQ_v in that drainage area.
4. Previous comment #C.4 has still not been adequately addressed. The evaluation of the 10-yr and 100-yr cannot be confirmed. See item #B.1 above and revise the drainage area maps accordingly.
5. Previous comment #C.6 has not been adequately addressed. Provide a detail of the building roof showing how the 975-sf areas are being divided and distributed to the raingardens. The detail will also need to be part of the architectural plans, and the architectural plans will need to be submitted to the Public Works reviewer at time of building permit for verification.
6. Previous comment #C.7 has not been adequately addressed. Provide *full* construction details for the proposed raingardens. How is rooftop discharge to be diverted through/around the raingarden once the soil is saturated and any freeboard inundated? These are elevated raingardens. What are the walls constructed of? Does a membrane protect the building wall from the raingarden in case of seepage? Provide all construction details.

D. Utilities

This development will be served by:

- i) Public sewer in sewer service area "Broadwater" (08).
 - ii) Private water in water service area "Rural" (07).
1. Add the proposed fire suppression tank, notes, details, etc., to the Public Storm Drain Plan.
 2. Add an easement for the fire suppression tank to the SDP and the Public Storm Drain Plan.

E. Site Development/Grading Plan

1. A Private Stormwater Management Agreement will be required at time of grading permit.
2. Please ensure that the grading permit is resubmitted through the Permit Application Center to address any comments that may have been deferred to permit and ensure that the set of plans approved with the grading permit is the same as the final site development plan.

F. Plat

1. A plat is no longer being processed to legalize this parcel. Provide an easement plat and description for the fire suppression tank.

2. A Public Works Agreement is required for the culvert pipe replacement and fire suppression tank installation.

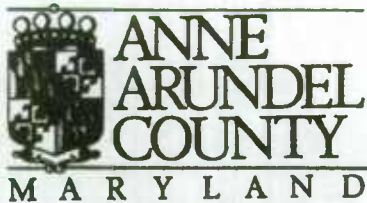
G. Floodplain

1. A floodplain study is not required for this project.

Additional comments are provided on redline mark-ups of the plans and checklist. The documents can be picked up from the Office of Planning and Zoning, Development Division, 2664 Riva Road, 3rd Floor, Annapolis, MD 21401.

We are unable to grant Site Development Plan approval of these plans until comments B.1-4, C.1-6, D.1-2, F.1-2, the marked plans and checklist items have been adequately addressed.

Cc: Jamie Richardson
SDP File



County Executive John R. Leopold

2664 RIVA ROAD, P.O. BOX 6675
ANNAPOLIS, MARYLAND 21401

OFFICE OF PLANNING AND ZONING

June 12, 2009

Wilkerson & Associates, Inc.
Box 17
Dunkirk, Maryland 20754

Attn: Mr. Bob Lee, R.L.S

Re: Marked-up Plans Associated with
Russell Fabrication
SDP #C-08-0012
Permit #G02013310

Dear Mr. Lee,

Please find attached the Public Storm Drain Plan and the Storm Drainage Design Checklist for the above referenced project with marked-up comments (in red). Make the necessary changes to the plans in conjunction with the written comments dated June 12, 2009 and resubmit for review. The marked-up plans and checklist must accompany the next re-submittal of the Site Development Plan package, or review will not be conducted.

If you have any questions, please contact me at 410-222-7960.

Sincerely,

A handwritten signature in cursive script that reads "John F. Bassford Jr.".

John F. Bassford Jr., P.E.
Engineer III
Development Division

Attachments

Cc: SDP File

J:\Shared\subdiv\JBASSFORD\SDP's\C#08-0012 Russell Fabrication - Mark-up Trans#6.DOC

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale
Chair

Ren Serey
Executive Director

STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

June 15, 2009

Mr. Dan Gerczak
Anne Arundel County
Office of Planning and Zoning
2664 Riva Road, MS 6303
Annapolis, Maryland 21401

Re: Russell Fabrication/Shenton Property
C 08-0012, G 02013310

Dear Mr. Gerczak,

Thank you for forwarding revised plans for the above-referenced project for review. The applicant proposes to construct a new commercial building and parking lots on an existing 0.77 acre parcel. The property is classified as an Intensely Developed Area (IDA). The applicant has not sufficiently responded to this office's comments from my March 23, 2009 letter. It appears that the best course of action at this point is for the applicant to set up a meeting with Commission staff to discuss and resolve the remaining comments. I have reiterated and expanded upon these comments below:

1. It appears that the applicant is now referring to the proposed parking lot as a driveway in order to justify the proposed use of the grass channels instead of a BMP such as an underground sand filter as previously recommended by this office. As mentioned above, we recommend that the applicant meet with Commission staff to discuss stormwater treatment options other than the proposed grass channels.
2. As requested, the applicant has provided information about the proposed rain gardens that will receive stormwater runoff from the proposed commercial building rooftop. However, all of the nine 975 square foot sections of rooftop being directed to each of the nine rain gardens exceed the maximum 500 square feet of rooftop surface area that can be directed to one raingarden as specified on p. 5.7 of the MDE 2000 Stormwater Manual, and therefore, the full stormwater rooftop disconnect credit can not be deducted for the building rooftop. If the applicant has questions as to how the calculations must be revised or what stormwater treatment alternatives must be provided as a result, this can be discussed in a meeting with Commission staff.
3. Stormwater treatment must be provided for the proposed concrete pad that is within the County right of way in conjunction with this project. Please provide information regarding the appropriate County contact responsible for development of this portion of the site. Development on County lands within the Critical Area requires Commission review and approval under COMAR 27.02.02 - State and Local Agency Actions Resulting in Development of Local Significance on Private Lands or Lands Owned by Local Jurisdictions. If the County

TTY for the Deaf

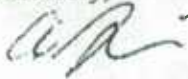
Annapolis: (410) 974-2609 D.C. Metro: (301) 586-0450

Mr. Gerczak
June 15, 2009
Page 2 of 2

determines that the proposed development of its lands within the Critical Area is consistent with Anne Arundel County's Critical Area program, it may submit a development proposal and consistency report with a request that the Commission concur with this determination.

Thank you for the opportunity to comment. Please telephone me if you have any questions at (410) 260-3481.

Sincerely,



Amber Widmayer
Natural Resources Planner

cc: AA 61-02
AA 110-08

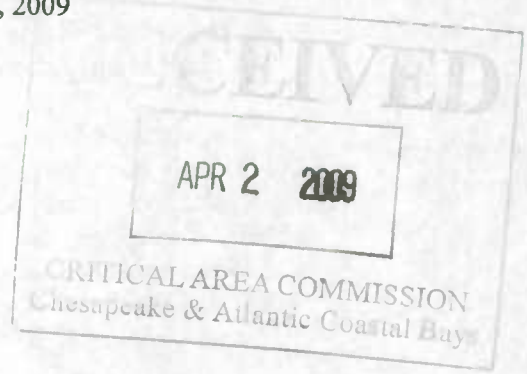


2664 RIVA ROAD, P.O. BOX 6675
ANNAPOLIS, MARYLAND 21401

OFFICE OF PLANNING AND ZONING

March 27, 2009

Ms. Michele D. R. Bennett
Wilkerson & Associates
P. O. Box 17
Dunkirk, MD 20754



Re: Name: Russell Fabrication Property
Site Development Plan No. C # 2008-0012
Grading Permit # G02013310

Dear Ms. Bennett:

The Site Development Plan for the referenced project has been reviewed by the agencies listed below and copies of their comments are attached.

- A. OPZ/Planning Approval withheld March 26, 2009
- B. OPZ/Engineering Approval withheld March 26, 2009
- C. OPZ/Landscape Approval withheld March 26, 2009
- D. Fire Marshal Division Approved March 18, 2009
- E. Critical Area Commission Approval withheld March 23, 2009
- F. OPZ/Environmental Approved w/comment March 26, 2009

I. Before approval of the Site Development Plan, the following agency comments must be resolved:

- A. OPZ/Planning Comments dated March 26, 2009
- B. OPZ/Engineering Comments dated March 26, 2009
- C. OPZ/Landscaping Comments dated March 26, 2009
- D. Critical Area Commission Comments dated March 23, 2009

II. Adequacy of Facilities for item E has been reviewed and must be resolved with resubmittal. Items A, B, C and D are acceptable and will be approved with the final Site Development Plan provided no changes occur and subject to any noted conditions.

- A. Fire Suppression: Adequacy of Fire Suppression has been addressed. The Fire Marshal Fire approved the project on March 18, 2009.
- B. Roads: Adequacy of Facilities for Roads has been addressed for this development.
- C. Schools: Adequacy of Facilities for Schools is not applicable. There are no new residential lots or uses created or proposed.
- D. Utilities: Adequacy of Facilities for Utilities has been addressed. A SWAMP analysis of public sewer services was performed and the Department of Public Works has approved 7 EDU's of sewer. The Health Department has approved the private well.

Ms. Michele D. R. Bennett
March 27, 2009
Page 2

E. Storm Drains: Adequacy of Facilities for Storm Drains has not been addressed. Engineering comments from John Bassford dated March 26, 2009 must be resolved before adequacy of storm drains can be determined.

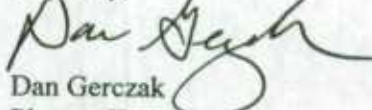
IV. Decision:

A. This office must withhold approval of the Site Development Plan until the issues set forth in Sections I and II have been resolved.

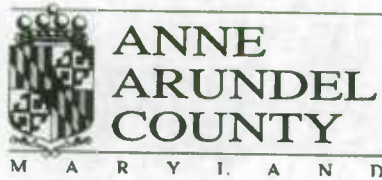
B. In accordance with Article 17-4-203 the resubmittal must be made within forty-five (45) days of the date of this letter and must include separate packages labeled with the name of the required review agency. Each package is to include a point-by-point response letter addressing the items in section I and II above, and any other supplemental information necessary for review. Resubmittal in accordance with the attached Resubmittal Cover Sheet must be sent directly to Judy Motta at the Permit Application Center by May 13, 2009.

If you have any questions regarding this project, please call me at 410-222-7960.

Sincerely,


Dan Gerczak
Planner II

cc: Kelly Krinetz, Critical Area Team Administrator
CA Team: JFB, DWG
Permit Application Center: Jamie Richardson
Lt. Francis X. Fennell, Fire Marshal Division
Amber Widemayer, Critical Area Commission
Tom Gruver, Health Dept.
Site Plan File/Diary



**Office of Planning and Zoning
Development Division**

INTER-OFFICE CORRESPONDENCE

DATE: March 26, 2009

TO: File

FROM: Environmental/Planning/Landscape, OPZ, Mail Stop 6305, Dan Gerczak

SUBJECT: C 2008-0012, Russell Fabrication, G02013310

Environmental: Approved with comment

- 1) The IDA water quality improvements must be approved by OPZ/Engineering.

Planning: Approval withheld

- 1) The modification (M10309) decision to legality will be forthcoming under a separate cover. The simultaneous development of two illegal adjacent parcels (parcel 841 and parcel 212) must be coordinated. Access to the W2 manufacturing building from parcel 841 (Paglia) may be required.
- 2) Please provide a copy of the architectural plans. Please elaborate on the proposed manufacturing activity. Please address whether there will be boat storage at this location. Please address whether there will be multiple units with bay doors and whether there will be free flowing internal movement/flow of the structure.
- 3) Please show the one loading (15' x 30') parking space location on the plan. Please address if there will be any boat trailer parking on the site.
- 4) Please identify the main entrance/pedestrian doors to the building. Please address pedestrian safety. The proposed sidewalks are on the opposite side of the building from the parking areas.

Landscape: Approval withheld

- 1) Please provide the name of the landscape professional who prepared the plan on the plan.
- 2) Please provide an updated cost estimate on the plan. The estimate must be bonded at permit.
- 3) The proposed plantings must meet the 50% of the building façade requirement.
- 4) The interior planting requirements are contradictory on the landscape plan (720 sq. ft. vs. 859 sq. ft.).
- 5) Please identify the plantings being utilized for interior planting. Please note that interior plantings cannot be utilized to meet buffer planting requirements.

This office does not recommend Planning or Landscape approval for the Site Development Plan at this time.



County Executive John R. Leopold

**Office of Planning and Zoning
Development Division**

INTER-OFFICE CORRESPONDENCE

DATE: March 26, 2009
TO: Dan Gerczak – Planner II
FROM: John F. Bassford Jr., PE – Engineer III
SUBJECT: Russell Fabrication
Site Development Plan
SDP C#08-0012
Permit #G02013310

Engineering and Utility Review #5

The above-referenced project has been reviewed for Public Works and Utility issues based on the package dated 2/20/09, and the following comments apply:

Adequacy of Public Facilities is being addressed as follows:

Fire Suppression:

The site will be served by a private well. A fire suppression tank may be required by the Fire Marshal's Office. The final decision regarding Adequacy of Facilities for Fire Suppression is being deferred to the Office of the Fire Marshal.

Utilities:

The site will be served by a private well. Adequacy of Facilities for Water will be deferred to the Anne Arundel County Department of Health. Adequacy of Facilities for Sewer has been adequately addressed for this development. A SWAMP Analysis of public sewer services was performed and the Department of Public Works has indicated that capacity is currently available for 7 EDU's of sewer. The consultant/developer is being advised that the availability of capacity is not guaranteed until an allocation request has been processed and approved by the Department of Public Works.

Storm Drainage:

Adequacy of Facilities for Storm Drainage has not been addressed. It has not been demonstrated that the proposed storm drainage system adequately conveys storm water runoff in a non-erosive manner to the Site and Tributary Outfalls, and to the Point-of-Investigation.

The following are comments regarding the plans as submitted; only the comments indicated in the closing paragraph require a point-by-point response:

A. Roads

The site has frontage along Woods Wharf Road which is a County public road. Right-of-way dedication and frontage improvements are not being required.

1. No Comment

B. Storm Drainage

1. In regards to previous comment #B.2, make the following revisions to Sheet 5 of 5, the POI Drainage Area Map, so the right-to-discharge computations can be verified:

- A. Provide at a scale of 1"= 100'.
- B. Provide separate existing and proposed condition maps.
- C. Show the soil type delineations.
- D. Show the T_c path and segments.

2. Previous comment #B.4 was not addressed. Provide a public storm drain plan for installation of the proposed 19-in x 30-in ERCP culvert in Woods Wharf Road for review. Include a completed copy of the current Storm Drainage Design Checklist.

3. Complete computations are to be provided with each submittal. Provide culvert computations for the proposed 18-in and 19-in x 30-in culverts with subsequent submittals.

C. Stormwater Management

The proposed SWM design for this "New Development" site consists of the use of the Grass Channel, Rooftop and Non-Rooftop Disconnect Credits to address the required Water Quality volume (WQ_v) and Groundwater Recharge volume (Re_v) for the industrial building, the parking lot and drive on-site. Quantity management of the Channel Protection volume (Cp_v) is not proposed, as the discharge from the developed site is indicated as less than 2-cfs. Quantity management of the Overbank and Extreme Flood volumes (Q_p and Q_f) are not proposed, based on the assertion that the site has adequate conveyance to tidal outfall.

1. Previous comment #C.1 has not been adequately addressed. Refer to comment #B.1 above. Clearly label the Site/Tributary Outfall and the POI locations on the DA Map on Sheet 5 of 5, and provide both existing and proposed Stormwater Management DA maps at the same scale, no smaller than 1"= 100' in scale.
2. In regards to previous comment #C.2 (in general), the computations provided for the grass channel credit indicate the use of a 4-ft wide bottom. The plan view and grass channel cross-section both show a 2-ft wide bottom. Make the necessary revisions. Also indicate on the cross-section the design side slope of 3:1.
3. Previous comment #C.2.a has not been adequately addressed. Provide a drainage area map specifically for the areas draining to the grass channels, so the credit computations can be verified.
4. Previous comment #C.3 has not been adequately addressed. The evaluation of the 10-yr and 100-yr cannot be confirmed. See item #B.1 above and revise the drainage area maps accordingly.

5. In regards to previous comment #C.4, the SWM Concept Note (on Sheet 2 of 5) makes reference to use of the Non-Rooftop Disconnect Credit. Where is this credit being applied? The grass channels are designed for the Grass Channel Credit. Clarify.
6. Provide a detail of the building roof showing how the 975-sf areas are being divided and distributed to the raingardens. The detail will also need to be part of the architectural plans, and the architectural plans will need to be submitted to the Public Works reviewer at time of building permit for verification.
7. Provide full construction and planting details for the proposed raingardens.

D. Utilities

This development will be served by:

- i) Public sewer in sewer service area "Broadwater" (08).
 - ii) Private water in water service area "Rural" (07).
1. No Comments

E. Site Development/Grading Plan

1. A Private Stormwater Management Agreement will be required at time of grading permit.
2. Please ensure that the grading permit is resubmitted through the Permit Application Center to address any comments that may have been deferred to permit and ensure that the set of plans approved with the grading permit is the same as the final site development plan.

F. Plat

1. A Public Works Agreement is required for the culvert pipe replacement and fire suppression tank installation.

G. Floodplain

1. A floodplain study is not required for this project.

We are unable to grant Site Development Plan approval of these plans until comments B.1-3, C.1-7, and F.1 have been adequately addressed.

Cc: Jamie Richardson
SDP File

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale
Chair

Ren Serey
Executive Director

STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

March 23, 2009

Mr. Dan Gerczak
Anne Arundel County
Office of Planning and Zoning
2664 Riva Road, MS 6303
Annapolis, Maryland 21401

Re: Russell Fabrication/Shenton Property
C 08-0012, G 02013310

Dear Mr. Gerczak,

Thank you for forwarding revised plans for the above-referenced project for review. The applicant proposes to construct a new commercial building and parking lots on an existing .77 acre parcel. The property is classified as an Intensely Developed Area (IDA). I have provided my comments below:

1. The comment from my letter dated December 30, 2008 regarding the use of grass channels to treat linear impervious surfaces has not been addressed. Please find attached a copy of the Maryland Department of the Environment (MDE) memo regarding the appropriate uses of grass channels for storm water management purposes.
2. There is no detail included in the site plan of the proposed rain gardens. Additionally, the number of square feet of the roof top is too great to use a disconnect credit to treat run-off. Please have the applicant follow the specifications in the MDE stormwater manual if they wish to utilize disconnection credits.
3. Staff wishes to review comments from the Fire Marshal associated with comment "D" of the report, which was listed as "Intentionally Omitted". Without these comments, Staff is unconvinced of the need for second access point and the additional impervious surface associated with it. Without the second access point, the applicant would be able to meet the 10%Rule requirements with greater ease.
4. It is unclear whether the 'Concrete Pad' to the rear of the property is existing or proposed. Additionally, it is uncertain whether the concrete pad was included in the impervious surface calculations. Please clarify.

March 23, 2009
Russell Fabrication/Shenton Property
Page 2 of 2

Thank you for the opportunity to provide comment. If you have questions, please call (410) 260- 3481.

Sincerely,

A handwritten signature in black ink, appearing to read 'AW', with a horizontal line extending to the right.

Amber Widmayer

Natural Resource Planner

ANNE ARUNDEL COUNTY

Annapolis, Maryland

RESUBMITTAL COVER SHEET

TO: Office of Planning and Zoning/Development Division

FROM: _____

RE: Subdivision Name – Russell Fabrication Property
Site Development Plan # C 2008-0012

PLEASE FIND ATTACHED RESPONSE LETTER/REVISED PLAN (AND ANY AGENCY-MARKED PRINTS) PACKAGES FOR:

X	OPZ/Subdivision Review Planner	Health Department
X	OPZ/Engineering Review	Board of Education
	OPZ/Traffic Review	Archaeological/Historical
	OPZ/Utilities Review	Fire Marshal Division
	House Numbers/Street Names	Md. State Aviation Adm.
	OPZ/Environmental	Office of Law
X	OPZ/Landscape	Other Agency: I & P
	Soil Conservation District	DPW/Street Light-Signs
	Recreation and Parks	X Critical Area Commission
	State Highway Administration	

The engineer/developer certify that all of the above-mentioned agencies are being responded to with their own completed package. Each package shall contain the necessary response letter/plans/plats/studies, computations (if applicable) and agency marked-up plans (if provided) addressing all of the items required to be addressed in the prior review comments from each agency. All correspondence, plans, plats, studies, comps, etc. must list both the correct subdivision and project numbers.

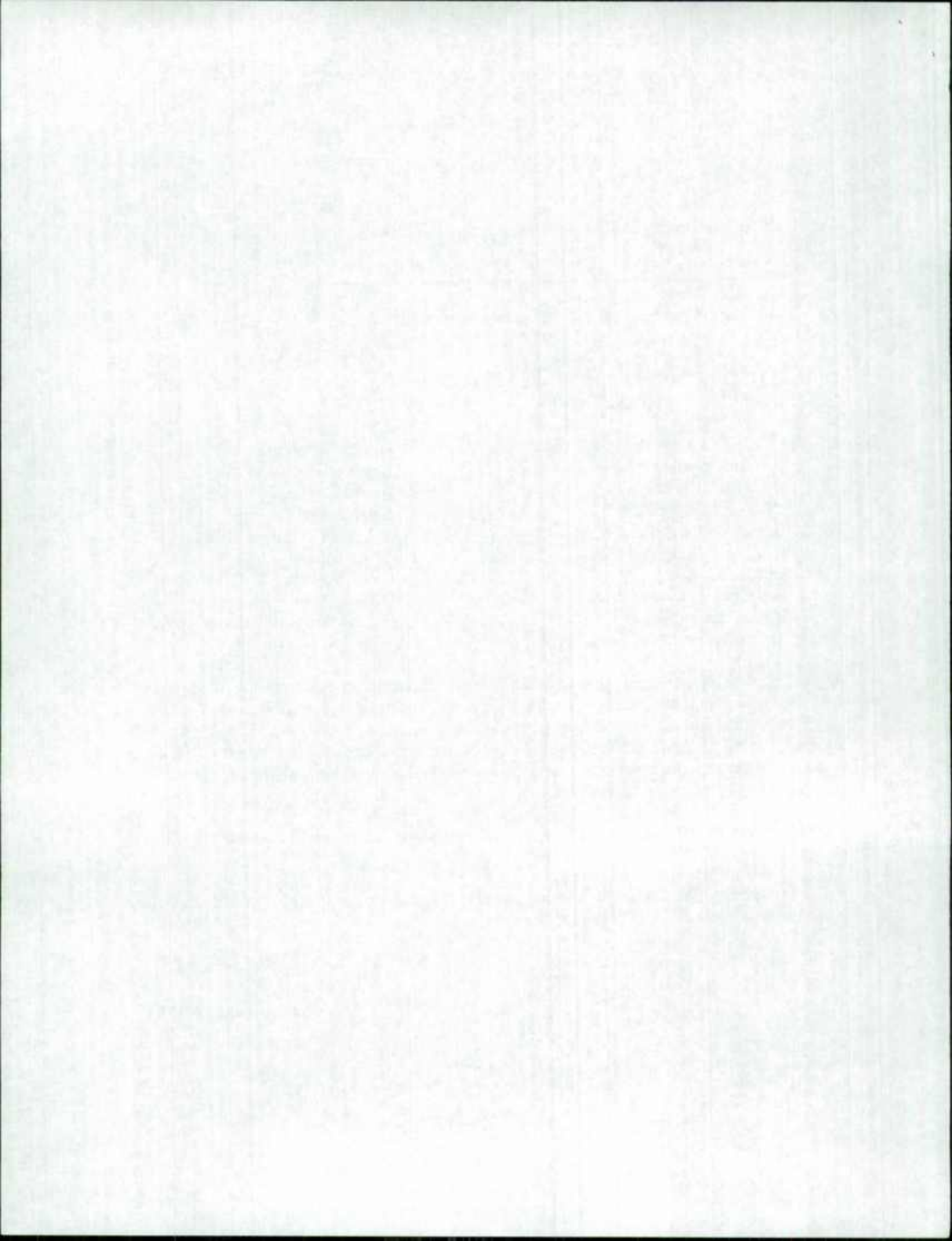
Submit the completed resubmittal package to Nancy McGuckian on the 1st floor of PAC prior to acceptance by OPZ/Development Division.

This marked form highlighting the specific agency must accompany your resubmittal otherwise it can not be accepted by P&Z/Development Division.

Developer/Engineer (SEAL)

Attachments

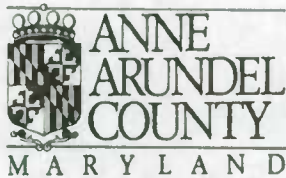
J:\subdiv\Callahan, Steve-Resubmittal Cover Sheet.doc 01/02/07



RECEIVED

OCT 20 2008

CRITICAL AREA COMMISSION



2664 RIVA ROAD, P.O. BOX 6675
ANNAPOLIS, MARYLAND 21401

OFFICE OF PLANNING AND ZONING

October 16, 2008

Ms. Michele D. R. Bennett
Wilkerson & Associates
P. O. Box 17
Dunkirk, MD 20754

Re: Name: Russell Fabrication Property
Site Development Plan No. C # 2008-0012
Grading Permit # G02013310

Dear Ms. Bennett:

The Site Development Plan for the referenced project has been reviewed by the agencies listed below and copies of their comments are attached.

- | | | |
|----|--------------------------|--------------------------------------|
| A. | OPZ/Planning | Approval withheld September 29, 2008 |
| B. | OPZ/Engineering | Approval withheld September 25, 2008 |
| C. | OPZ/Utilities | Approved September 25, 2008 |
| D. | OPZ/Environmental | Approved September 29, 2008 |
| E. | OPZ/Landscape | Approval withheld September 29, 2008 |
| F. | Fire Marshal Division | Approval withheld September 17, 2008 |
| G. | Health Department | Approved August 28, 2008 |
| H. | Critical Area Commission | Approval withheld October 11, 2008 |

I. Issues:

- 1) Legality Waiver #4785 granted on May 26, 1993 for parcel 119 states that this parcel is an improperly subdivided parcel. This critical area parcel must obtain a Modification to legality.
- 2) The second access onto Snug Harbor Road issue must be resolved.
- 3) The Critical Area Commission has reiterated their comments from June 10, 2008 via an e-mail notice. Those comments are attached for your review.

II. Before approval of the Site Development Plan, the following agency comments must be resolved:

- | | | |
|----|--------------------------|-----------------------------------|
| A. | OPZ/Planning | Comments dated September 29, 2008 |
| B. | OPZ/Engineering | Comments dated September 25, 2008 |
| C. | OPZ/Landscaping | Comments dated September 29, 2008 |
| D. | Fire Marshal Division | Comments dated September 17, 2008 |
| E. | Critical Area Commission | Comments dated June 10, 2008 |

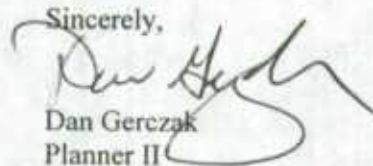
Ms. Michele Bennett
October 16, 2008
Page 2

- III. Adequacy of Facilities for item A and E have been reviewed and must be resolved with resubmittal. Items B, C and D are acceptable and will be approved with the final Site Development Plan provided no changes occur and subject to any noted conditions.
- A. Fire Suppression: Adequacy of Fire Suppression has not been addressed. Fire comments from Lt. Francis X. Fennell dated September 17, 2008 must be resolved before adequacy of fire suppression can be determined.
 - B. Roads: Adequacy of Facilities for Roads has been addressed for this development.
 - C. Schools: Adequacy of Facilities for Schools is not applicable. There are no new residential lots or uses created or proposed.
 - D. Utilities: Adequacy of Facilities for Utilities has been addressed. A SWAMP analysis of public sewer services was performed and the Department of Public Works has approved 7 EDU's of sewer. The Health Department has approved the private well.
 - E. Storm Drains: Adequacy of Facilities for Storm Drains has not been addressed. Engineering comments from Rania Carriker dated September 25, 2008 must be resolved before adequacy of storm drains can be determined.

IV. Decision:

- A. This office must withhold approval of the Site Development Plan until the issues set forth in Sections I, II and III have been resolved.
- B. In accordance with Article 17-4-203 the resubmittal must be made within forty-five (45) days of the date of this letter and must include separate packages labeled with the name of the required review agency. Each package is to include a point-by-point response letter addressing the items in section I, II and III above, and any other supplemental information necessary for review. Resubmittal in accordance with the attached Resubmittal Cover Sheet must be sent directly to Judy Motta at the Permit Application Center by December 1, 2008.

If you have any questions regarding this project, please call me at 410-222-7960.

Sincerely,

Dan Gerczak
Planner II

cc: Kelly Krinetz, Critical Area Team Administrator
CA Team: RSC, DWG
Permit Application Center: Jamie Richardson
Lt. Francis X. Fennell, Fire Marshal Division
Amber Widemayer, Critical Area Commission
Tom Gruver, Health Dept.
Site Plan File/Diary



**Office of Planning and Zoning
Development Division**

INTER-OFFICE CORRESPONDENCE

DATE: September 29, 2008

TO: File

FROM: Environmental/Planning/Landscape, OPZ, Mail Stop 6305, Dan Gerczak

SUBJECT: C 2008-0012, Russell Fabrication, G02013310

Environmental: Approved with comment

- 1) The IDA water quality improvements must be approved by OPZ/Engineering.

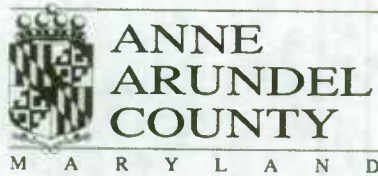
Planning: Approval withheld pending your meeting with Chris Soldano

- 1) The submitted deed work and previous waiver decision for parcel 119 (W4785) indicates this parcel was created by deed without subdivision approval. This critical area parcel is not legally buildable without subdivision review and approval of a plat or a Modification to legality and the subdivision process is obtained. The simultaneous development of two illegal adjacent parcels (parcel 841 and parcel 212) must be coordinated. Access to the W1 manufacturing building from parcel 212 may be considered.
- 2) The general layout and multiple accesses are not desirable. Please eliminate the access closest to Snug Harbor Road and provide the interior drive access as necessary. The building must be moved closer to Woods Wharf Road (north and east direction) to maximize the retention of woodland on site. Please note that parking may occur 15 feet from the property line without a Modification.
- 3) Please note that access to parcel 841 from this site is also to be investigated and coordinated with the Paglia-Pamarast subdivision. Or access from parcel 841 to this site may be warranted.

Landscape: Approval withheld

- 1) The Planning design issues must be resolved prior to landscape approval.

This office does not recommend Planning or Landscape approval for the Site Development Plan at this time.



Office of Planning and Zoning
Development Division

INTER-OFFICE CORRESPONDENCE

DATE: September 25, 2008
TO: Dan Gerczak - Planning and Zoning / Planner
FROM: Rania Carriker – Planning and Zoning / Engineer
SUBJECT: C#08-0012 Russell Fabrication
(See: G02013310)

Engineering and Utility Review

The above-referenced project has been reviewed for Public Works and Utility issues and the following comments apply:

Adequacy of public facilities is being addressed as follows:

Fire Suppression:

The site will be served by a private well. A fire suppression tank may be required by the Fire Marshal's office. The final decision regarding adequacy of facilities for fire suppression is being deferred to the Office of the Fire Marshal.

Utilities:

Adequacy of facilities for utilities has been adequately addressed for this development. A SWAMP analysis of public sewer services was performed and the Department of Public Works has approved 7 EDUs of sewer.

Storm Drainage:

Adequacy of facilities for storm drainage has not been adequately addressed. The site outfall, the tributary outfall, and to the Point of Investigation (POI) have not been addressed per county SWM code/guidelines.

The following are comments regarding the plans as submitted; only the comments indicated in the closing paragraph require a point-by-point response:

A. Roads

The site has frontage along Woods Wharf Road which is a county public road. Right of way dedication and frontage improvements are not being required.

1. Our previous comment concerning the number of accesses to the site remain outstanding. Per county Engineer Manager, during your August meeting she did not come to an agreement with

your office on this issue, therefore, your August 18, 2008 response that “the number of entrances to the site is pending the planner’s decision and that a modification for the minimum 300’ sight distance on Woods Wharf Road may be required” is not currently acceptable.

B. Storm drains

1. The Environmental Conservation Plan (ECP), indicated in your August 18, 2008 response letter, was not included in the submittal package. Therefore, our previous comment B.1 “provide separate DA map (per county SWM guidelines) that clearly shows the site outfall, the tributary drainage area, the tributary outfall, and the point of investigation (POI)” remain outstanding. Please, also refer to the adequacy of facilities/storm drainage in this letter.
2. Add an “outfall statement” to the plans, as it was previously requested.

C. Stormwater Management

It is proposed to manage the Water Quality volume (WQv) and the Recharge (Rev) volume for the industrial building, the two parking lots, and the two drives via onsite grass channels. Per county Engineer Manager, during your August meeting it was not determined that the site has “direct outfall to tidal waters”, therefore, the Cpv and Qp volumes are required.

1. WQv, Rev, and Cpv computations “for the entire site” are required and they must be submitted in the SWM report and/or onto the plans, as it was previously requested.
2. Please also refer to comment B.1 above. An ECP was not received, and the DA that addresses the site and tributary outfalls and the POI on plan 1 of 4 is not acceptable as proposed. Please make note that the DA map must include the tributary drainage area (based on which the tributary outfall is defined) and the POI must be downstream from the tributary outfall.
3. The CPv, Qp, and Qf volumes must addressed for this project, as required. Please address previous comments C.2 and C.10.
4. Revise the SWM Note (on plan 2 of 4) accordingly.

D. Utilities

This development will be served by:

- i) Public sewer in sewer service area “Broadwater” (08).
 - ii) Private water in water service area “Rural” (07/07).
1. A SWAMP analysis of water and sewer was requested and the results were attached to our March 19, 2008 letter.

E. Final Development/Grading Plan

1. A private stormwater management agreement will be required for the proposed grass channels.

We are unable to grant *Site Development Plan* approval of these plans until comments A, B, and C have been adequately addressed.



DWG

INTEROFFICE CORRESPONDENCE

Fire Department

John R. Leopold, County Executive
David L. Stokes, Fire Chief

TO: Dan Gerczak, Planning & Zoning

CC: SUBCOMMENTS@aacounty.org

FROM: Lt. Francis X. Fennell CFPS, Fire Marshal Division

DATE: September 17, 2008

SUBJECT: Project Name: **Russell Fabrication**
Site Development Plan No.: **C08-0012**

Site Development Plan Review

Conditional approval is granted subject to compliance with the following comments:

1. Underground fire suppression drafting tanks shall be shown on the record plat.
2. Tanks should be installed per Anne Arundel County detail 1/64 and 1/64A, Department of Public Works, underground storage tank for fire suppression.

The following comments are provided for informational purposes. These requirements will be enforced during the building permit review process.

3. A person may not stand or park a vehicle within 15 feet of a fire department water supply.
4. Dumpsters may not be placed within 15' of any structure.
5. Street signs and curb/roadway markings designating the road as NO PARKING may be required by the fire department as deemed necessary for adequate access and operational requirements. Roadways and fire lanes must provide 20' of width, free of any obstructions.
6. Requirements for establishment of "NO PARKING-FIRE LANE" zone:

- a. All curb areas designated as Fire Lanes are to be painted YELLOW for the entire length of the designation.
- b. On the yellow curb areas, "NO PARKING" is to be painted in four (4) to six (6) inch letters (BLACK) at intervals not to exceed fifty (50) feet.
- c. All wall or curb areas that have been designated as Fire Lanes shall have a six (6) inch YELLOW line painted approximately fifteen (15) feet from the wall along the entire length of the designation.
- d. Along the entire length of the designated Fire Lane area, at intervals not to exceed fifty (50), "NO PARKING – FIRE LANE" is to be painted on the roadway in twelve (12) inch YELLOW letters. This shall be done along the curb area and within the yellow lined area.
- e. All parking lines which have been superceded by the Fire Lane designation shall be removed or painted over to obliterate the lines.
- f. Marking (unpaved surfaces) – A 20' wide entrance shall be provided marked. The entire length of the unpaved fire lane shall be permanently outlined with shrubs, fencing, reflective signs or similar markers shall have markers placed across the lane. Curb cuts should be provided.
- g. Curb-cuts – extend at least 2 feet beyond each edge of the fire lane.
- h. No parking – fire lane signs provided by Anne Arundel County are needed for areas designated as fire lane. Contact the Fire Marshal Division after roadways or unpaved fire lanes have been marked for information or obtaining signs.



M A R Y L A N D

County Executive John R. Leopold

Anne Arundel County Department of Health
J. Howard Beard Health Services Building
3 Harry S. Truman Parkway
Annapolis, MD 21401
Phone 410-222-7193 Fax 410-222-7678
TTY: 410-222-7153 www.aahealth.org

Frances B. Phillips, R.N., M.H.A.
Health Officer

MEMORANDUM

TO: Judy Motta, MS-6001
Office of Planning and Code Enforcement

FROM: J. Thomas Gruver, MS-3101
Division of Environmental Health

DATE: August 28, 2008

RE: SUBJECT NAME: Russell Fabrication
SITE DEV PLAN: C08-0012000NC
Tax Map #: 69 Block #: 11 Parcel #: 212

The Anne Arundel County Department of Health has no objection subject to the availability of public sewer.

cc: Chris Saldano
Janet Scott

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale
Chair

Ren Serey
Executive Director

STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

June 10, 2008

Mr. Dan Gerczak
Anne Arundel County
Office of Planning and Zoning
2664 Riva Road, MS 6301
Annapolis, Maryland 21401

Re: Russell Fabrication/Shenton Property
C 08-0012, G 02013310

Dear Mr. Gerczak,

Thank you for forwarding revised plans for the above-referenced project for review. The applicant proposes to construct a new commercial building and parking lots on an existing 0.77 acre parcel. The property is classified as an Intensely Developed Area (IDA). The applicant has addressed this office's comments from my February 19, 2008 letter and I have provided my remaining comments below:

1. As requested, the applicant has provided the 10% pollutant reduction calculations. The applicant proposes to address the pollutant reduction requirement with a grass channel credit. However, grass channels are intended for treatment of roads and other linear impervious surfaces with an impervious flow path length not more than 75 feet in width. Therefore, the applicant must provide another treatment option to address the 10% pollutant reduction. For instance, it appears that there is room on the site to install a perimeter sand filter. Please have the applicant submit revised 10% calculations with information about how the pollutant removal requirement will be addressed on site by a Best Management Practice (BMP) in addition to or instead of the proposed grass channels.
2. It appears that there is a minor math error in Step 3 of the applicant's 10% calculations. The applicant's calculation for "Rv" is 0.524, and it seems that it should be 0.527 instead. This mistake results in a slightly higher pollutant removal requirement of 0.6486 pounds of phosphorus per year instead of 0.6428 pounds of phosphorus per year. Please have the applicant adjust these calculations as necessary in future submittals.

Thank you for the opportunity to comment. Please telephone me if you have any questions at (410) 260-3481.



Mr. Gerczak
June 10, 2008
Page 2 of 2

Sincerely,



Amber Widmayer
Natural Resources Planner

cc: AA 61-02
AA 110-08

ANNE ARUNDEL COUNTY

Annapolis, Maryland

RESUBMITTAL COVER SHEET

TO: Office of Planning and Zoning/Development Division

FROM: _____

RE: Subdivision Name – Russell Fabrication Property
Site Development Plan # C 2008-0012

PLEASE FIND ATTACHED RESPONSE LETTER/REVISED PLAN (AND ANY AGENCY-MARKED PRINTS) PACKAGES FOR:

X	OPZ/Subdivision Review Planner	X	Health Department
X	OPZ/Engineering Review		Board of Education
	OPZ/Traffic Review		Archaeological/Historical
X	OPZ/Utilities Review	X	Fire Marshal Division
	House Numbers/Street Names		Md. State Aviation Adm.
	OPZ/Environmental		Office of Law
X	OPZ/Landscape		Other Agency: I & P
	Soil Conservation District		DPW/Street Light-Signs
	Recreation and Parks	X	Critical Area Commission
	State Highway Administration		

The engineer/developer certify that all of the above-mentioned agencies are being responded to with their own completed package. Each package shall contain the necessary response letter/plans/plats/studies, computations (if applicable) and agency marked-up plans (if provided) addressing all of the items required to be addressed in the prior review comments from each agency. All correspondence, plans, plats, studies, comps, etc. must list both the correct subdivision and project numbers.

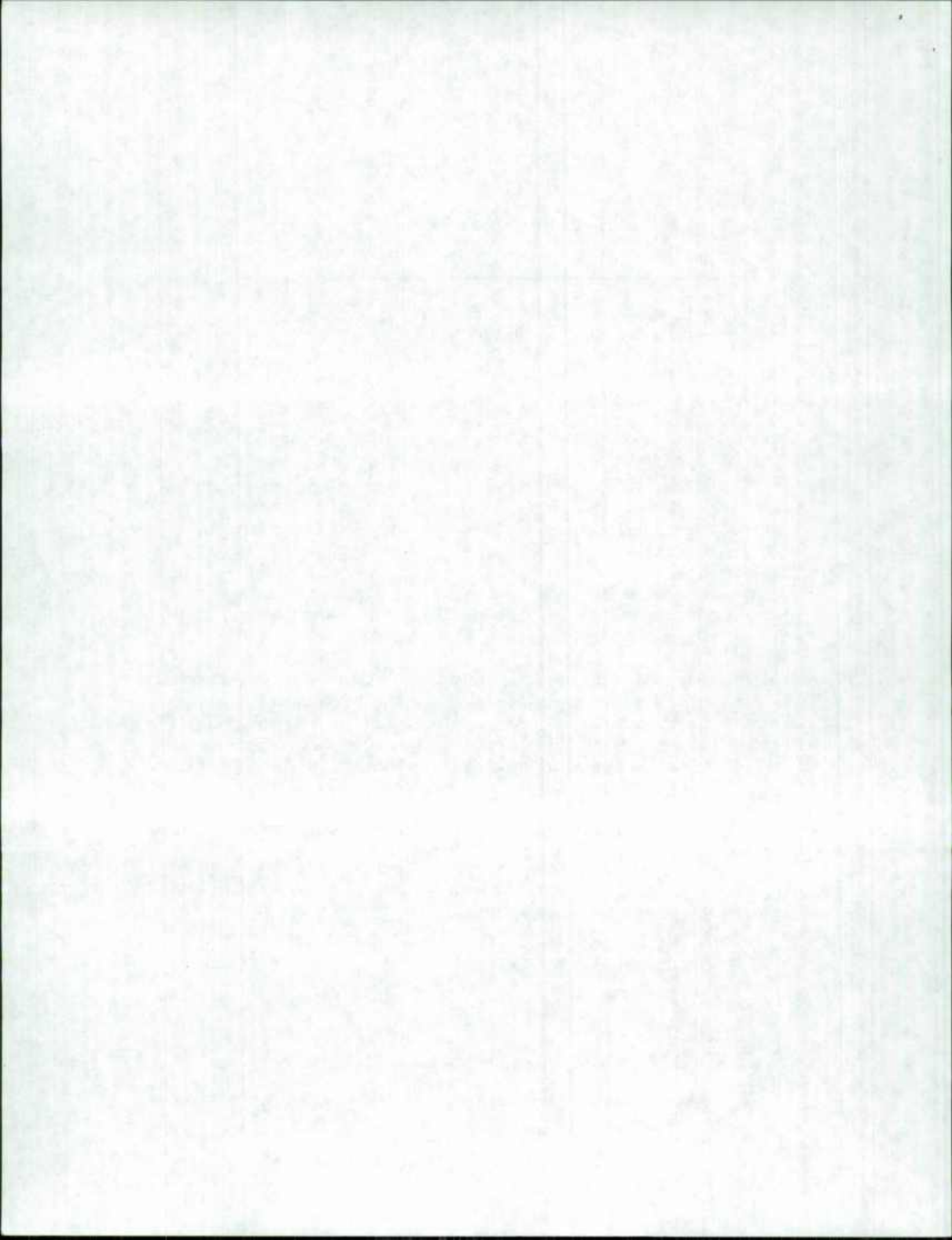
Submit the completed resubmittal package to Nancy McGuckian on the 1st floor of PAC prior to acceptance by OPZ/Development Division.

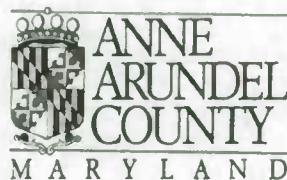
This marked form highlighting the specific agency must accompany your resubmittal otherwise it can not be accepted by P&Z/Development Division.

Developer/Engincer (SEAL)

Attachments

J:\subdiv\Callahan, Steve-Resubmittal Cover Sheet.doc 01/02/07





2664 RIVA ROAD, P.O. BOX 6675
ANNAPOLIS, MARYLAND 21401

OFFICE OF PLANNING AND ZONING

July 3, 2008

Ms. Michele D. R. Bennett
Wilkerson & Associates
P. O. Box 17
Dunkirk, MD 20754

Re: Name: Russell Fabrication Property
Site Development Plan No. C # 2008-0012
Grading Permit # G02013310



Dear Ms. Bennett:

The Site Development Plan for the referenced project has been reviewed by the agencies listed below and copies of their comments are attached.

A.	OPZ/Planning	Approval withheld June 27, 2008
B.	OPZ/Engineering	Approval withheld June 20, 2008
C.	OPZ/Utilities	Approval withheld June 20, 2008
D.	OPZ/Environmental	Approval withheld June 27, 2008
E.	OPZ/Landscape	Approval withheld June 27, 2008
F.	Fire Marshal Division	Approval withheld June 18, 2008
G.	I&P- Permit Application Center	Approved May 22, 2008
H.	Health Department	Approved w/comment Feb. 13, 2008
I.	Critical Area Commission	Approval withheld June 10, 2008

I. Issues:

- 1) Legality Waiver #4785 granted on May 26, 1993 for parcel 119 states that this parcel is an improperly subdivided parcel. This critical area parcel must obtain a Modification to legality.
- 2) The second access onto Snug Harbor Road must be eliminated per OPZ/Administration.

II. Before approval of the Site Development Plan, the following agency comments must be resolved:

A.	OPZ/Planning	Comments dated June 27, 2008
B.	OPZ/Engineering	Comments dated June 20, 2008
C.	OPZ/Utilities	Comments dated June 20, 2008
D.	OPZ/Environmental	Comments dated June 27, 2008
E.	OPZ/Landscaping	Comments dated June 27, 2008
F.	Fire Marshal Division	Comments dated June 18, 2008

Ms. Michele Bennett
July 3, 2008
Page 2

G. Critical Area Commission Comments dated June 10, 2008
H. Health Department Comment dated February 13, 2008

III. Adequacy of Facilities for item A and E have been reviewed and must be resolved with resubmittal. Items B, C and D are acceptable and will be approved with the final Site Development Plan provided no changes occur and subject to any noted conditions.

- A. Fire Suppression: Adequacy of Fire Suppression has not been addressed. Fire comments from Inspector Charles Disney dated June 18, 2008 must be resolved before adequacy of fire suppression can be determined.
- B. Roads: Adequacy of Facilities for Roads has been addressed for this development.
- C. Schools: Adequacy of Facilities for Schools is not applicable. There are no new residential lots or uses created or proposed.
- D. Utilities: Adequacy of Facilities for Utilities has been addressed. A SWAMP analysis of public sewer services was performed and the Department of Public Works has approved 7 EDU's of sewer. The Health Department must approve the private well.
- E. Storm Drains: Adequacy of Facilities for Storm Drains has not been addressed. Engineering comments from Rania Carriker dated June 20, 2008 must be resolved before adequacy of storm drains can be determined.

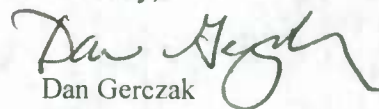
IV. Decision:

A. This office must withhold approval of the Site Development Plan until the issues set forth in Sections I, II and III have been resolved.

B. In accordance with Article 17-4-203 the resubmittal must be made within forty-five (45) days of the date of this letter and must include separate packages labeled with the name of the required review agency. Each package is to include a point-by-point response letter addressing the items in section I, II and III above, and any other supplemental information necessary for review. Resubmittal in accordance with the attached Resubmittal Cover Sheet must be sent directly to Judy Motta at the Permit Application Center by August 18, 2008.

If you have any questions regarding this project, please call me at 410-222-7960.

Sincerely,



Dan Gerczak
Planner II

cc: Kelly Krinetz, Critical Area Team Administrator
CA Team: RSC, MWM, DWG
Permit Application Center: Dan Kane, Jamie Buser
Inspector Charles Disney, Fire Marshal Division
Kate Schmidt, Critical Area Commission
Tom Gruver, Health Dept.
Site Plan File/Diary



**Office of Planning and Zoning
Development Division**

INTER-OFFICE CORRESPONDENCE

DATE: June 27, 2008

TO: File

FROM: Environmental/Planning/Landscape, OPZ, Mail Stop 6305, Dan Gerczak

SUBJECT: C 2008-0012, Russell Fabrication, G02013310

Environmental: Approval withheld

- 1) Please show and provide the critical area information on the Final Development Plan.
- 2) The IDA water quality improvements must be approved by OPZ/Engineering.

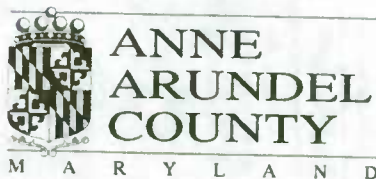
Planning: Approval withheld

- 1) The submitted deed work and previous waiver decision for parcel 119 (W4785) indicates this parcel was created by deed without subdivision approval. This critical area parcel is not legally buildable without subdivision review and approval of a plat or a Modification to legality and the subdivision process is obtained. The simultaneous development of two illegal adjacent parcels (parcel 841 and parcel 212) must be coordinated. Access to the W1 manufacturing building from parcel 212 may be considered.
- 2) The general layout and multiple accesses are not desirable. Please eliminate the access closest to Snug Harbor Road and provide the interior drive access as necessary. The building must be moved closer to Woods Wharf Road (north and east direction) to maximize the retention of woodland on site. Please note that parking may occur 15 feet from the property line without a Modification.
- 3) Please note that access to parcel 841 from this site is also to be investigated and coordinated with the Paglia-Pamarast subdivision. Or access from parcel 841 to this site may be warranted.

Landscape: Approval withheld

- 1) The cost estimate to the Landscape Plan was not found with this resubmittal.

This office does not recommend Environmental, Planning or Landscape approval for the Site Development Plan at this time.



Office of Planning and Zoning
Development Division

INTER-OFFICE CORRESPONDENCE

DATE: June 20, 2008
TO: Dan Gerczak - Planning and Zoning / Planner
FROM: Rania Carriker - Planning and Zoning / Engineer
SUBJECT: C#08-0012 Russell Fabrication
(See: G02013310)

Engineering and Utility Review

The above-referenced project has been reviewed for Public Works and Utility issues and the following comments apply:

Adequacy of public facilities is being addressed as follows:

Fire Suppression:

The site will be served by a private well. A fire suppression tank may be required by the Fire Marshal's office. The final decision regarding adequacy of facilities for fire suppression is being deferred to the Office of the Fire Marshal.

Utilities:

Adequacy of facilities for utilities has been adequately addressed for this development. A SWAMP analysis of public sewer services was performed and the Department of Public Works has approved 7 EDUs of sewer.

Storm Drains:

Adequacy of facilities for storm drainage has not been adequately addressed. The site outfall, the tributary outfall, and to the Point of Investigation (POI) have not been addressed per county SWM code/guidelines.

The following are comments regarding the plans as submitted; only the comments indicated in the closing paragraph require a point-by-point response:

A. Roads

The site has frontage along Woods Wharf Road which is a county public road. Right of way dedication and frontage improvements are not being required.

1. Address previous comment A.1: Reduce the number of access points into the site to one.

B. Storm drains

1. Previous comment B.1 was addressed incorrectly. Please provide "separate" drainage area map (per county SWM guidelines) that clearly shows the site outfall, the "tributary drainage area", the tributary outfall, and the point of investigation (POI).
2. Please properly address previous comment B.2: Submit "downstream analysis" (including cross-sections, Qs -in cfs, and velocities for the 1-year and 10-year storm events) at the outlet of the currently proposed 19"x30" RCP stormdrain.
3. Address previous comment B.3: submit computations demonstrating adequacy of the further downstream ex. 30" RCP.
4. Address previous comment B.4: Provide an outfall statement on the plans.

C. Stormwater Management

It is proposed to manage the industrial building, the two parkings, and the two drives via onsite grass channels.

1. Address previous comment C.1: Submit completed checklists, as required.
2. Per previous comment: "The runoff computation for the 1-year from the site is computed to be 2.19 cfs. Channel protection volume is required". However, based on your response and since the submitted SWM computations are unclear, please submit for review the following: WQv, Rev, and Cpv computations (per MDE guidelines) for the entire site. The need for Cpv management will be re-evaluated with resubmittal.
3. Address previous comment C.4: Provide computations as shown on page 5.16 of the State SWM to address your use of the grass channel credit.
4. Previous comment C.5 was addressed incorrectly. Please submit a "separate" Environmental Conservation Plan on which the environmental features are shown clearly and are labeled.
5. Address previous comment C.6: refer to comment B.1 above.
6. Submit a "separate photo location map" for the color photo walking tour, on which the location of the existing ditches and culverts (shown in the pictures) are also shown on said map.
7. Address previous comment C.8: Q10 is required. This project does not have a direct discharge to tidal waters. Please make note that complete pre- and post- development DAs for the 10-year storm event are required.

D. Utilities

This development will be served by:

- i) Public sewer in sewer service area "Broadwater" (8).
 - ii) Private water in water service area "Rural" (7).
1. A SWAMP analysis of water and sewer was requested and the results were attached to our March 19, 2008 letter.

E. Final Development/Grading Plan

1. The need for a private stormwater management agreement will be determined with next submittal.
2. The plans and the "professional's certification" must be re-sealed -since they are either smeared or not shown at all.

We are unable to grant *Site Development Plan* approval of these plans until comments A, B, C, D.2, E.2, and E.3 have been adequately addressed.

Please call Janet Scott at 410-222-7455 to schedule a meeting to discuss the comments.



INTEROFFICE CORRESPONDENCE Fire Department

John R. Leopold, County Executive
David L. Stokes, Fire Chief

TO: Dan Gerczak, Planning & Zoning

CC: Jamie Richardson, Planning & Zoning

FROM: Inspector Charles Disney, Fire Marshal Division

DATE: June 18, 2008

SUBJECT: Project Name: Russell Fabrication
Site Development Plan No; C08-0012
Site Development Plan Review

Approval is withheld pending compliance with the following comments:

1. Underground fire suppression drafting tanks shall be shown on the record plat.
2. Tanks should be installed per Anne Arundel County detail 1/64 and 1/64A, Department of Public Works, underground storage tank for fire suppression.

The following comments are provided for informational purposes. These requirements will be enforced during the building permit review process.

1. Roadways or fire lanes must be provided such that no exterior portion of a structure is greater than 150 feet from fire vehicle access. Provide fire department access such that all points of the buildings can be reached by an 150 foot hose line as measured from the closest point of fire vehicle access.
2. Fire lanes, if required to provide emergency vehicle access, must have a clear height of 14ft. and be a minimum of 20 ft. in width, with 10 ft. setback from outer most projection of the structure. The surface must be capable of supporting a minimum of 35 tons. Maximum grades for fire lanes are as follows:
 - a. Concrete surfaces - 15%
 - b. Asphalt surfaces - 12%
 - c. Unpaved surfaces - 5%

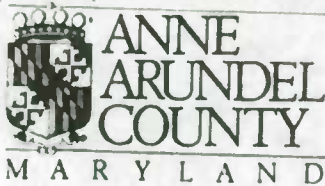
- d. Cross grade - 5%
3. Requirements for establishment of "NO PARKING-FIRE LANE" zone.
- a. All curb areas designated as Fire Lanes are to be painted YELLOW for the entire length of the designation.
 - b. On the yellow curb areas, "NO PARKING" is to be painted in four (4) to six (6) inch letters (BLACK) at intervals not to exceed fifty (50) feet.
 - c. All wall or curb areas that have been designated as Fire Lanes shall have a six (6) inch YELLOW line painted approximately fifteen (15) feet from the wall along the entire length of the designation.
 - d. Along the entire length of the designated Fire Lane area, at intervals not to exceed fifty (50), "NO PARKING - FIRE LANE" is to be painted on the roadway in twelve (12) inch YELLOW letters. This shall be done along the curb area and within the yellow lined area.
 - e. All parking lines which have been superceded by the Fire Lane designation shall be removed or painted over to obliterate the lines.
 - f. Marking (unpaved surfaces) - A 20' wide entrance shall be provided marked. The entire length of the unpaved fire lane shall be permanently outlined with shrubs, fencing, reflective signs or similar markers shall have markers placed across the lane. Curb cuts should be provided.
 - g. Curb-cuts - extend at least 2 feet beyond each edge of the fire lane.
 - h. No parking - fire lane signs provided by Anne Arundel County are needed for areas designated as fire lane. Contact the Fire Marshal Division after roadways or unpaved fire lanes have been marked for information or obtaining signs.
4. Dead end roadways/streets greater than 150 foot in length shall be provided with an approved turn-around.
5. An on site water supply must be provided for fire protection in accordance with NFPA 1142, Standard on Water Supplies for Suburban and Rural Fire Fighting. The tank must be located within 1000 feet of any structure as measured linearly along approved roads or fire lanes and will be used by fire apparatus to draft water from. Tanks shall be installed per Anne Arundel County detail 1/64 and 1/64A, Department of Public Works, underground storage tank for fire suppression. Tank locations must be shown on the site plans however, the capacity of the tank and calculations in accordance with NFPA 1142 should be indicated at the time of building permit application. A review of tank capacity is not completed during the site plan review process.

OR

If the building is provided with a sprinkler system, an on site water supply in accordance with NFPA 1142 is *not* required. On site water supply requirements for the sprinkler system must be determined in accordance with NFPA 13,

Standard for the Installation of Sprinkler Systems. This tank will be used only for the sprinkler system. The plans should indicate if this option is selected (i.e., the building will have a fire sprinkler system). **Note: Drafting sites are not accepted as a reliable source of water for fire suppression. Per conversation with Lt. Frank Fennel and Michele D.R. Bennett.**

307H



County Executive John R. Leopold

Anne Arundel County Department of Health
J. Howard Beard Health Services Building
3 Harry S. Truman Parkway
Annapolis, MD 21401
Phone 410-222-7193 Fax 410-222-7678
TTY: 410-222-7153 www.aahealth.org

Frances B. Phillips, R.N., M.H.A.
Health Officer



MEMORANDUM

TO: Nancy McGuckian, MS-6001
Office of Planning and Code Enforcement

FROM: J. Thomas Gruver, MS-3101 *Thomas Gruver*
Division of Environmental Health

DATE: February 13, 2008

RE: SUBJECT NAME: Russell Fabrication
SITE DEV PLAN: 08-0012
Tax Map #: 69 Block #: 11 Parcel #: 212

The Anne Arundel County Department of Health has no objection to the above referenced project subject to the availability of public sewer & public water.

NOT AVAILABLE

JTG/mnc

Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor



Margaret G. McHale
Chair

Ren Serey
Executive Director

STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS

1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

June 10, 2008

Mr. Dan Gerczak
Anne Arundel County
Office of Planning and Zoning
2664 Riva Road, MS 6301
Annapolis, Maryland 21401

Re: Russell Fabrication/Shenton Property
C 08-0012, G 02013310

Dear Mr. Gerczak,

Thank you for forwarding revised plans for the above-referenced project for review. The applicant proposes to construct a new commercial building and parking lots on an existing 0.77 acre parcel. The property is classified as an Intensely Developed Area (IDA). The applicant has addressed this office's comments from my February 19, 2008 letter and I have provided my remaining comments below:

1. As requested, the applicant has provided the 10% pollutant reduction calculations. The applicant proposes to address the pollutant reduction requirement with a grass channel credit. However, grass channels are intended for treatment of roads and other linear impervious surfaces with an impervious flow path length not more than 75 feet in width. Therefore, the applicant must provide another treatment option to address the 10% pollutant reduction. For instance, it appears that there is room on the site to install a perimeter sand filter. Please have the applicant submit revised 10% calculations with information about how the pollutant removal requirement will be addressed on site by a Best Management Practice (BMP) in addition to or instead of the proposed grass channels.
2. It appears that there is a minor math error in Step 3 of the applicant's 10% calculations. The applicant's calculation for "Rv" is 0.524, and it seems that it should be 0.527 instead. This mistake results in a slightly higher pollutant removal requirement of 0.6486 pounds of phosphorus per year instead of 0.6428 pounds of phosphorus per year. Please have the applicant adjust these calculations as necessary in future submittals.

Thank you for the opportunity to comment. Please telephone me if you have any questions at (410) 260-3481.



Mr. Gerczak
June 10, 2008
Page 2 of 2

Sincerely,

A handwritten signature in black ink, appearing to read 'AW', with a horizontal line extending to the right.

Amber Widmayer
Natural Resources Planner

cc: AA 61-02
AA 110-08

ANNE ARUNDEL COUNTY

Annapolis, Maryland

RESUBMITTAL COVER SHEET

TO: Office of Planning and Zoning/Development Division

FROM: _____

RE: Subdivision Name – Russell Fabrication Property
Site Development Plan # C 2008-0012

PLEASE FIND ATTACHED RESPONSE LETTER/REVISED PLAN (AND ANY AGENCY-MARKED PRINTS) PACKAGES FOR:

- | | | | |
|---|--------------------------------|---|---------------------------|
| X | OPZ/Subdivision Review Planner | X | Health Department |
| X | OPZ/Engineering Review | | Board of Education |
| | OPZ/Traffic Review | | Archaeological/Historical |
| X | OPZ/Utilities Review | X | Fire Marshal Division |
| | House Numbers/Street Names | | Md. State Aviation Adm. |
| X | OPZ/Environmental | | Office of Law |
| X | OPZ/Landscape | | Other Agency: I & P |
| | Soil Conservation District | | DPW/Street Light-Signs |
| | Recreation and Parks | X | Critical Area Commission |
| | State Highway Administration | | |

The engineer/developer certify that all of the above-mentioned agencies are being responded to with their own completed package. Each package shall contain the necessary response letter/plans/plats/studies, computations (if applicable) and agency marked-up plans (if provided) addressing all of the items required to be addressed in the prior review comments from each agency. All correspondence, plans, plats, studies, comps, etc. must list both the correct subdivision and project numbers.

Submit the completed resubmittal package to Nancy McGuckian on the 1st floor of PAC prior to acceptance by OPZ/Development Division.

This marked form highlighting the specific agency must accompany your resubmittal otherwise it can not be accepted by P&Z/Development Division.

Developer/Engineer (SEAL)

Attachments

J:\subdiv\Callahan, Steve-Resubmittal Cover Sheet.doc 01/02/07

Worksheet A: Standard Application Process

Calculating Pollutant Removal Requirements

RECEIVED

Step 1: Calculate Existing and Proposed Site Imperviousness

DEC 09 2008

A. Calculate Percent Imperviousness

1) Site Area within the Critical Area IDA, A = 0.7718 Acres

PLANNING AND ZONING
DEVELOPMENT

2) Site Impervious Surface Area, Existing and Proposed, (See Table 4.1 for details)

	(a) Existing (acres)	(b) Proposed (acres)
Roads	_____	_____
Parking Lots	_____	0.1976
Driveways	_____	_____
Sidewalks/paths	_____	_____
Rooftops	_____	0.2089
Decks	_____	_____
Swimming pools/ponds	_____	_____
Other	_____	_____
Impervious Surface Area	_____	0.4065

C08-0012

00 NC

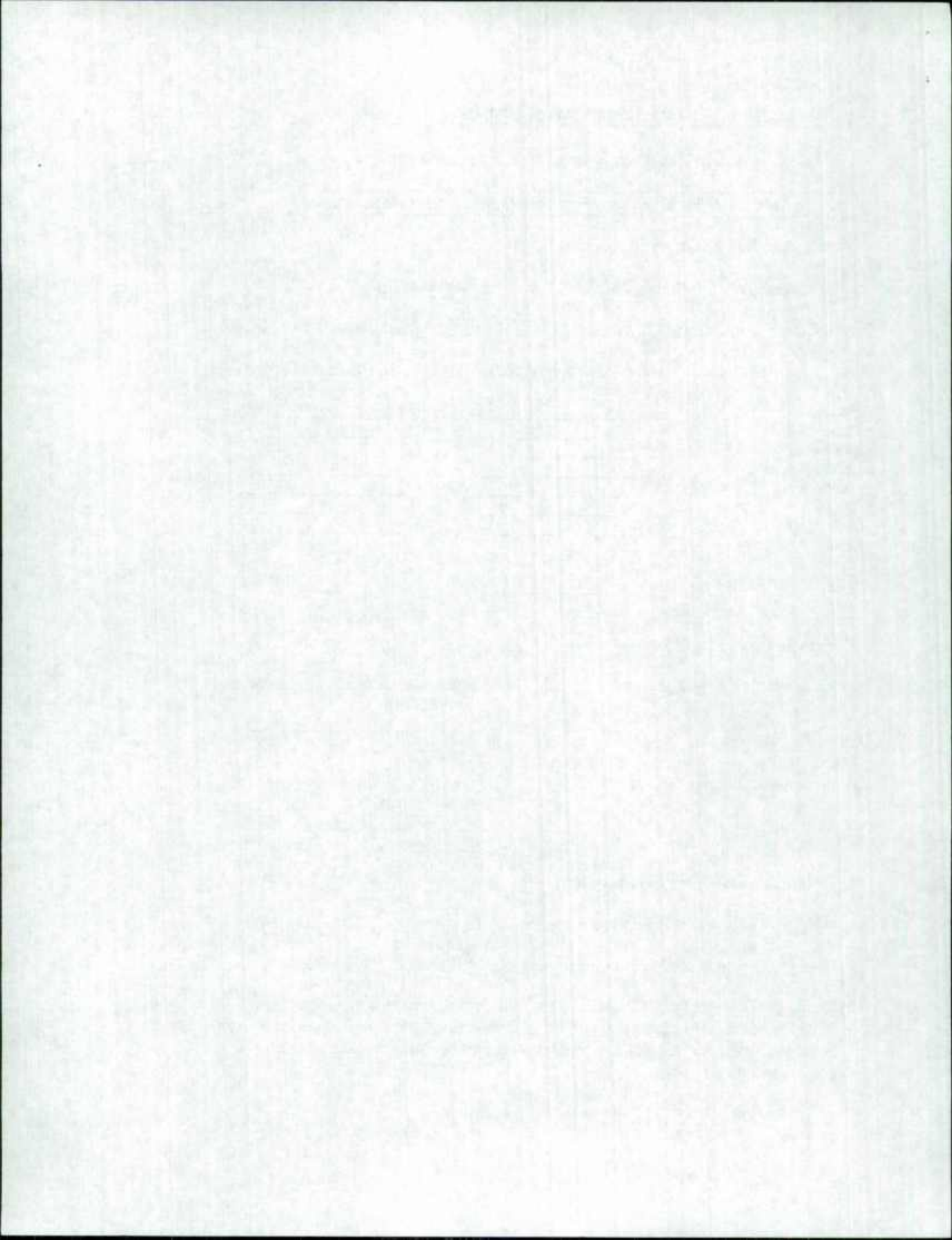
3) Imperviousness (I)

Existing Imperviousness, I_{pre} = Impervious Surface Area / Site Area
 = Step 2a / Step 1
 = _____ / _____
 = _____

Proposed Imperviousness, I_{post} = Impervious Surface Area / Site Area
 = Step 2b / Step 1
 = 0.4065 / 0.7718
 = 53%

B. Define Development Category (circle)

- 1) New Development: Existing imperviousness less than 15% I (Go to Step 2A)
- 2) Redevelopment: Existing imperviousness of 15% I or more (Go to Step 2B)
- 3) Single Lot Development: Single lot being developed or improved; single family residential development; and more than 250 square feet of impervious area and associated disturbance (Go to Section 5, Residential Approach, for detailed criteria and requirements).



Step 2: Calculate the Predevelopment Load (Lpre)

A. New Development

$$\begin{aligned}
 L_{pre} &= (0.5)A \\
 &= 0.5 \quad \underline{0.7718} \\
 &= \underline{0.3859}
 \end{aligned}$$

Where:

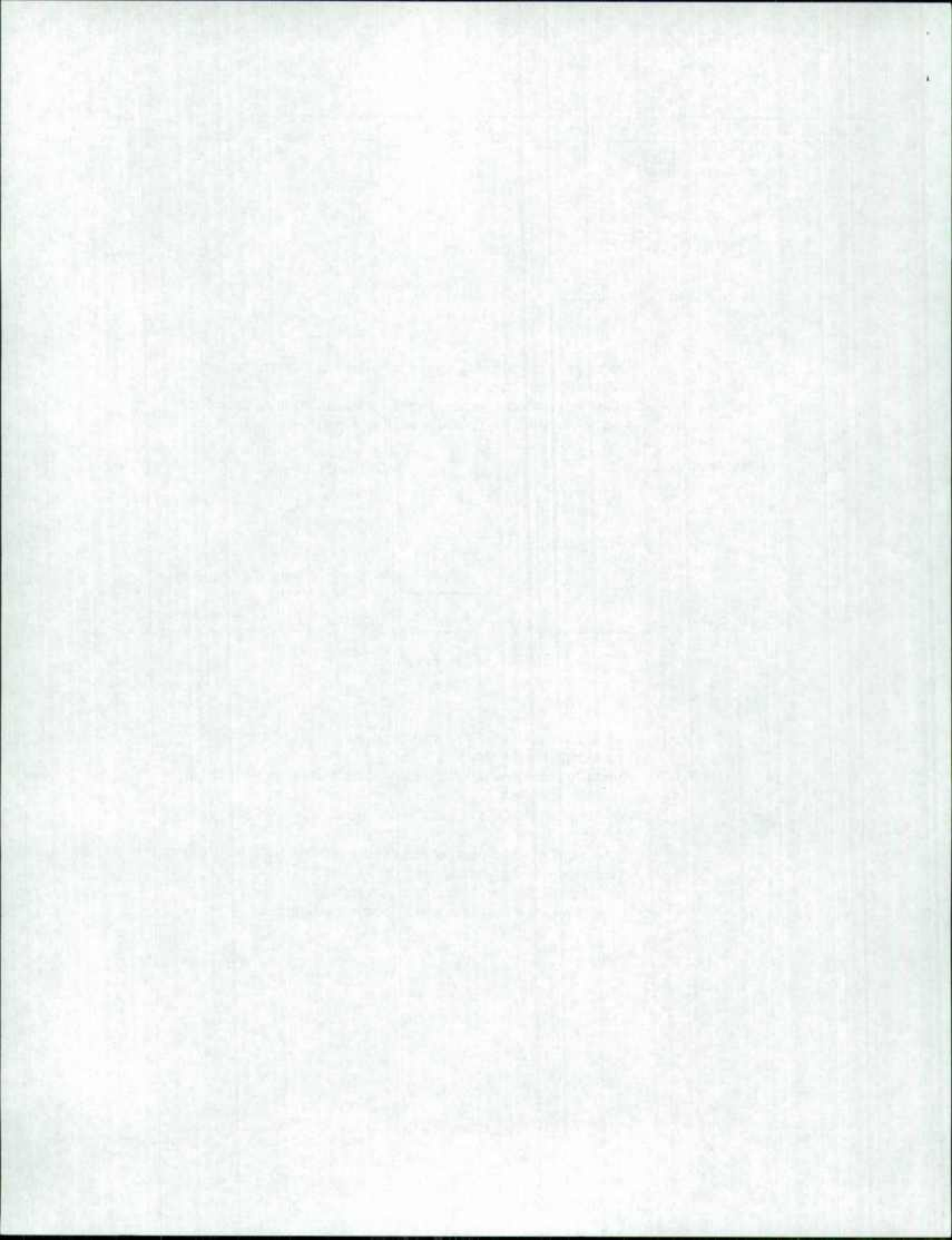
- Lpre = Average annual load of total phosphorus exported from site prior to development (lbs/year)
- 0.5 = Annual total phosphorus load from undeveloped lands (lbs/acre/yr.)
- A = Area of site within the Critical Area IDA (acres)

B. Redevelopment

$$\begin{aligned}
 L_{pre} &= (Rv) (C) (A) (8.16) \\
 Rv &= 0.05 + 0.009 (l_{pre}) \\
 &= 0.05 + 0.009 * \underline{\hspace{2cm}} = \underline{\hspace{2cm}} \\
 L_{pre} &= \underline{\hspace{2cm}} * \underline{\hspace{2cm}} * \underline{\hspace{2cm}} (8.16) \\
 &= \underline{\hspace{2cm}} \text{ lbs/year of total phosphorus}
 \end{aligned}$$

Where:

- Lpre = Average annual load of total phosphorus exported from site prior to development (lbs/year)
- Rv = Runoff coefficient, which expresses the fraction of rainfall which is converted into runoff
- lpre = Pre-development (existing) site imperviousness (i.e. l=75 if site is 75% impervious)
- C = Flow-weighted mean concentration of the pollutant (total phosphorus) in urban runoff (mg/l) = 0.30 mg/l
- A = Area of site within the Critical Area IDA (acres)
- 8.16 = Includes regional constants and unit conversion factors



Step 3: Calculate the Post-Development Load (Lpost)

A. New Development and Redevelopment

$$\begin{aligned}
 L_{\text{post}} &= (R_v) (C) (A) (8.16) \\
 R_v &= 0.05 + 0.009 (I_{\text{post}}) \\
 &= 0.05 + 0.009 * \underline{53} = \underline{0.5270} \\
 L_{\text{post}} &= \underline{0.5270} * \underline{0.30} * \underline{0.7718} (8.16) \\
 &= \underline{0.9956} \text{ lbs/year of total phosphorus}
 \end{aligned}$$

Where:

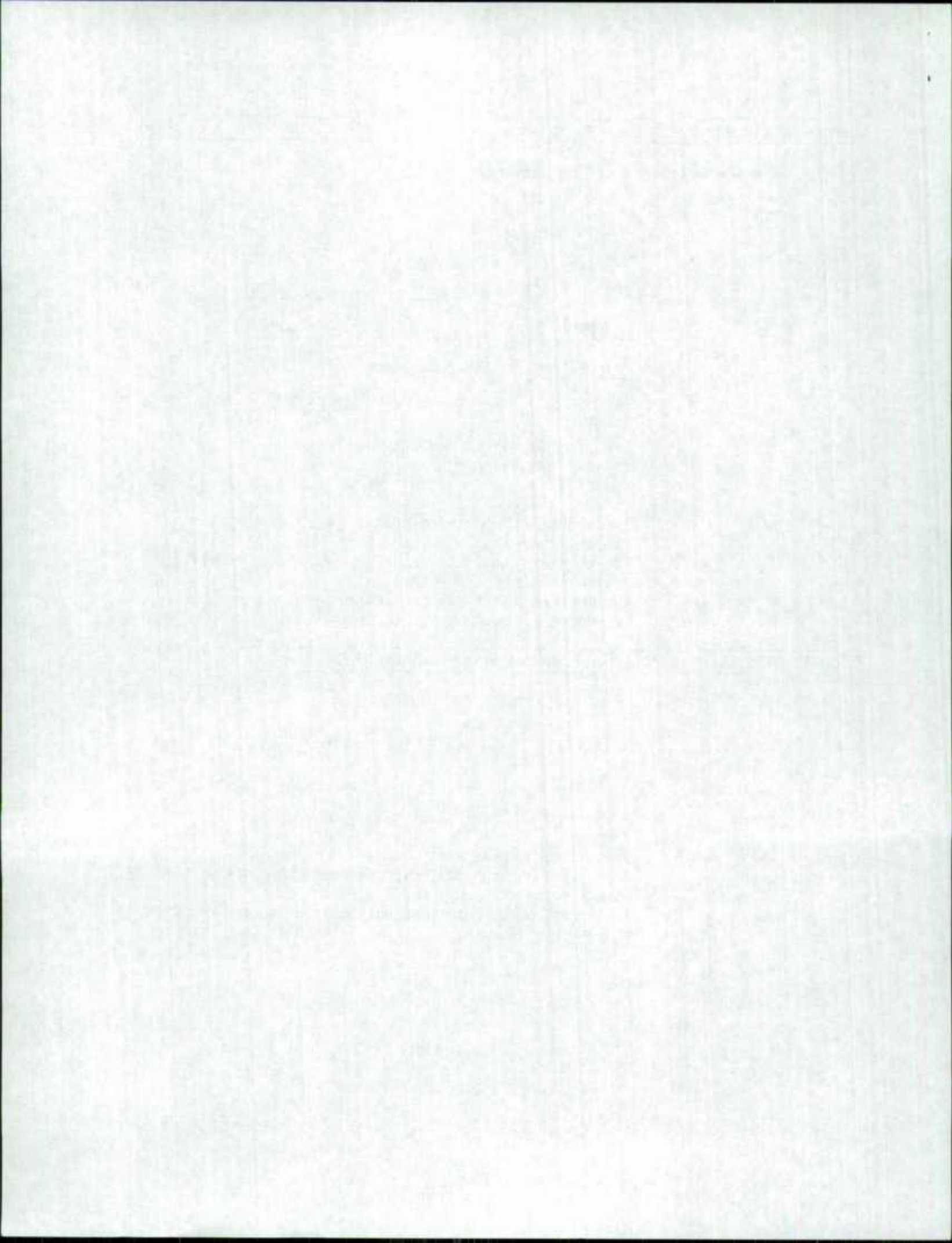
- Lpost = Average annual load of total phosphorus exported from site post-development (lbs/year)
- Rv = Runoff coefficient, which expresses the fraction of rainfall which is converted into runoff
- Ipost = Pre-development (existing) site imperviousness (i.e. I=75 if site is 75% impervious)
- C = Flow-weighted mean concentration of the pollutant (total phosphorus) in urban runoff (mg/l) = 0.30 mg/l
- A = Area of site within the Critical Area IDA (acres)
- 8.16 = Includes regional constants and unit conversion factors

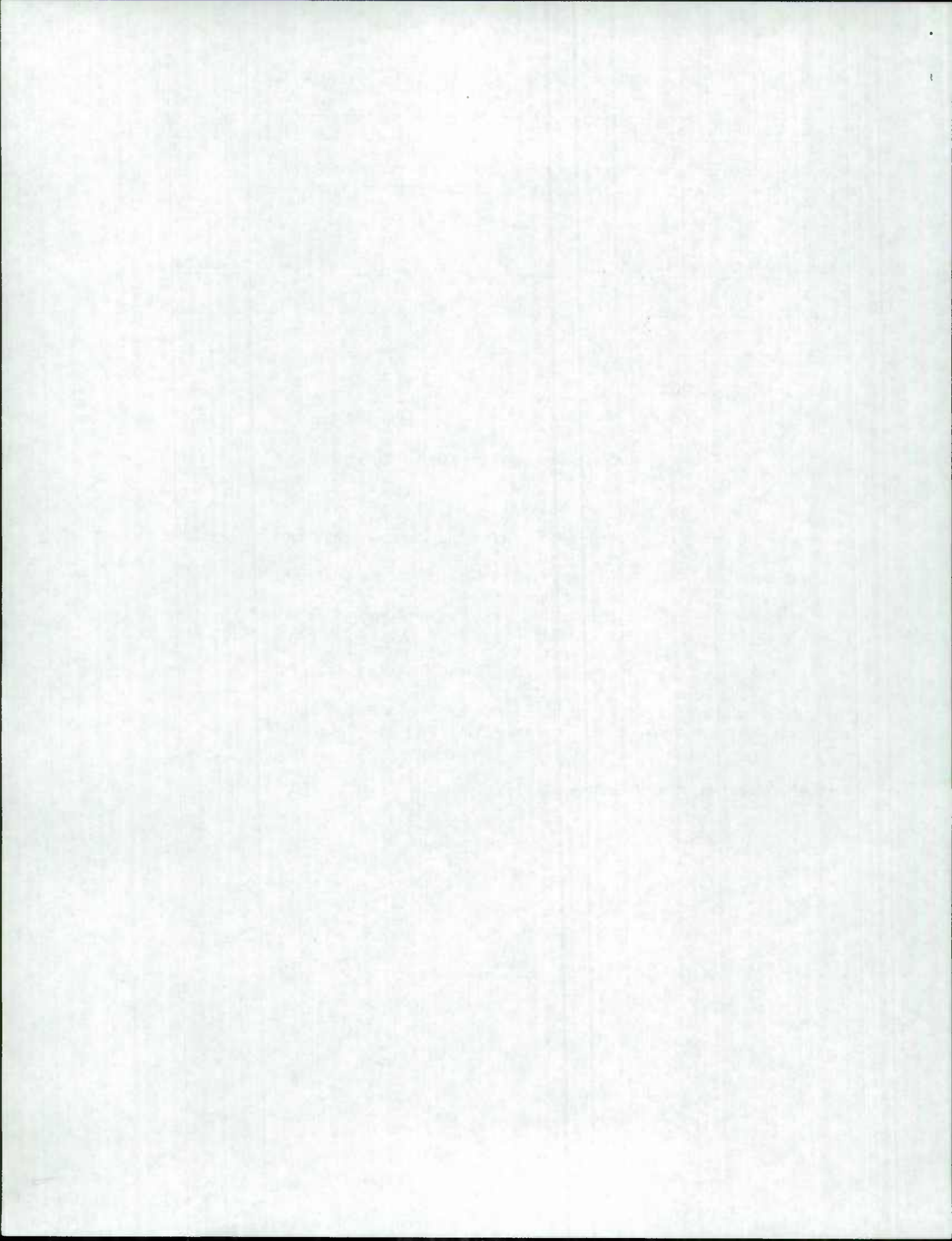
Step 4: Calculate the Pollutant Removal Requirements (RR)

$$\begin{aligned}
 RR &= L_{\text{post}} - (0.9) (L_{\text{pre}}) \\
 &= \underline{0.9956} - (0.9) \underline{0.3859} \\
 &= \underline{0.6484}
 \end{aligned}$$

Where:

- RR = Pollutant removal requirement (lbs/year)
- Lpost = Average annual load of total phosphorus exported from site post-development (lbs/year)
- Lpre = Average annual load of total phosphorus exported from site prior to development (lbs/year)





Widmayer, Amber

From: Widmayer, Amber
Sent: Friday, October 10, 2008 4:38 PM
To: 'Dan Gerczak'
Subject: Russell Fabrication- C08-001200NC

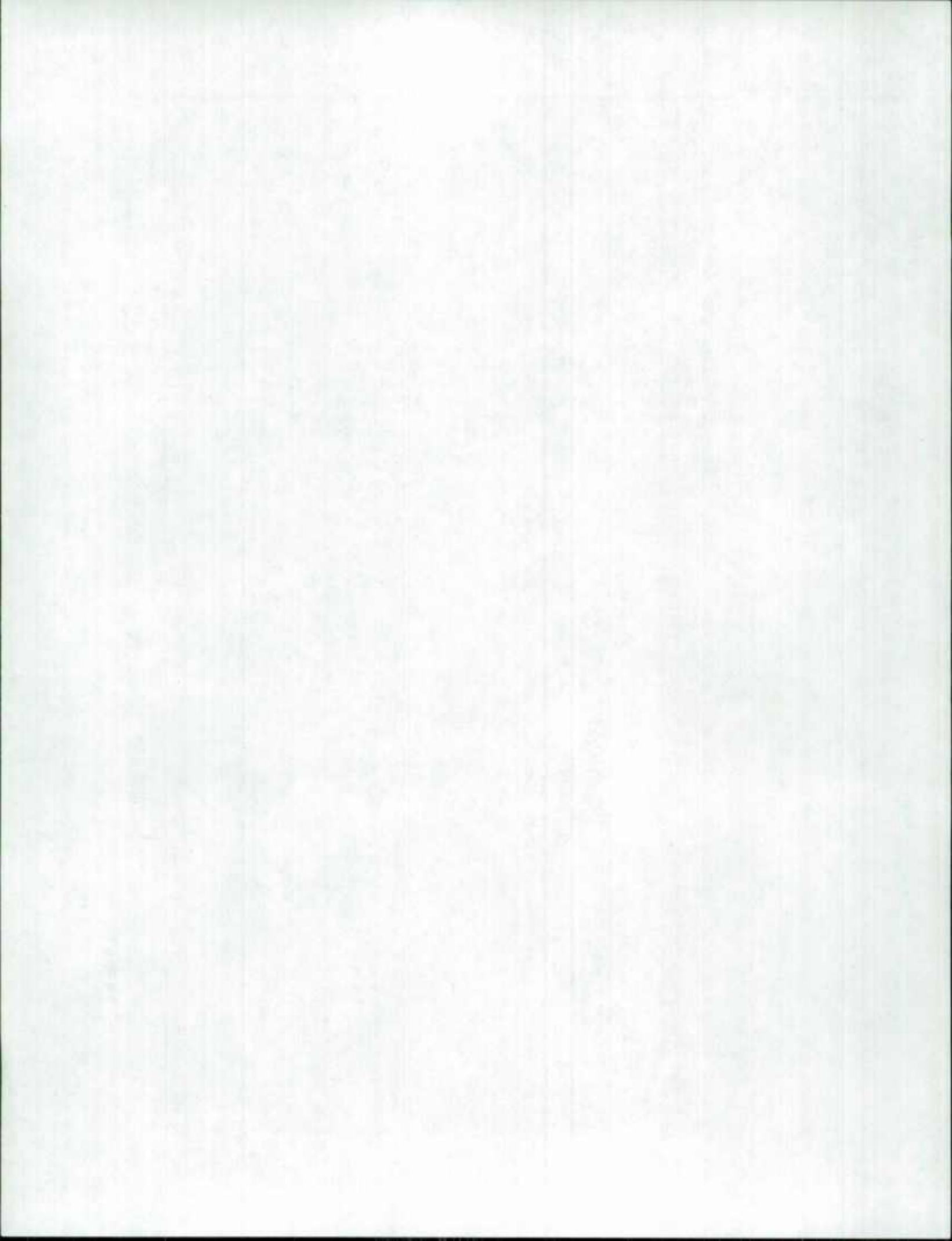


Grass Channel.pdf
(39 KB)

Hello Dan,

I apologize for the delay in getting back to you on this project. We were waiting to hear back from MDE on a question about the proposed 10% treatment. I am attaching a memo from MDE on the proper use of grass channels. We do not believe that the grass channel credit is an appropriate way of addressing the 10% requirement for this project based on this memo. Therefore, our comments remain the same as in our last comment letter. We are happy to meet with the applicant if necessary to discuss alternative ways of meeting the 10% requirement.

Thanks,
Amber Widmayer
410 260 3481





MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230

410-537-3000 • 1-800-633-6101

Martin O'Malley
Governor

Shari T. Wilson
Secretary

Anthony G. Brown
Lieutenant Governor

Robert M. Summers, Ph.D.
Deputy Secretary

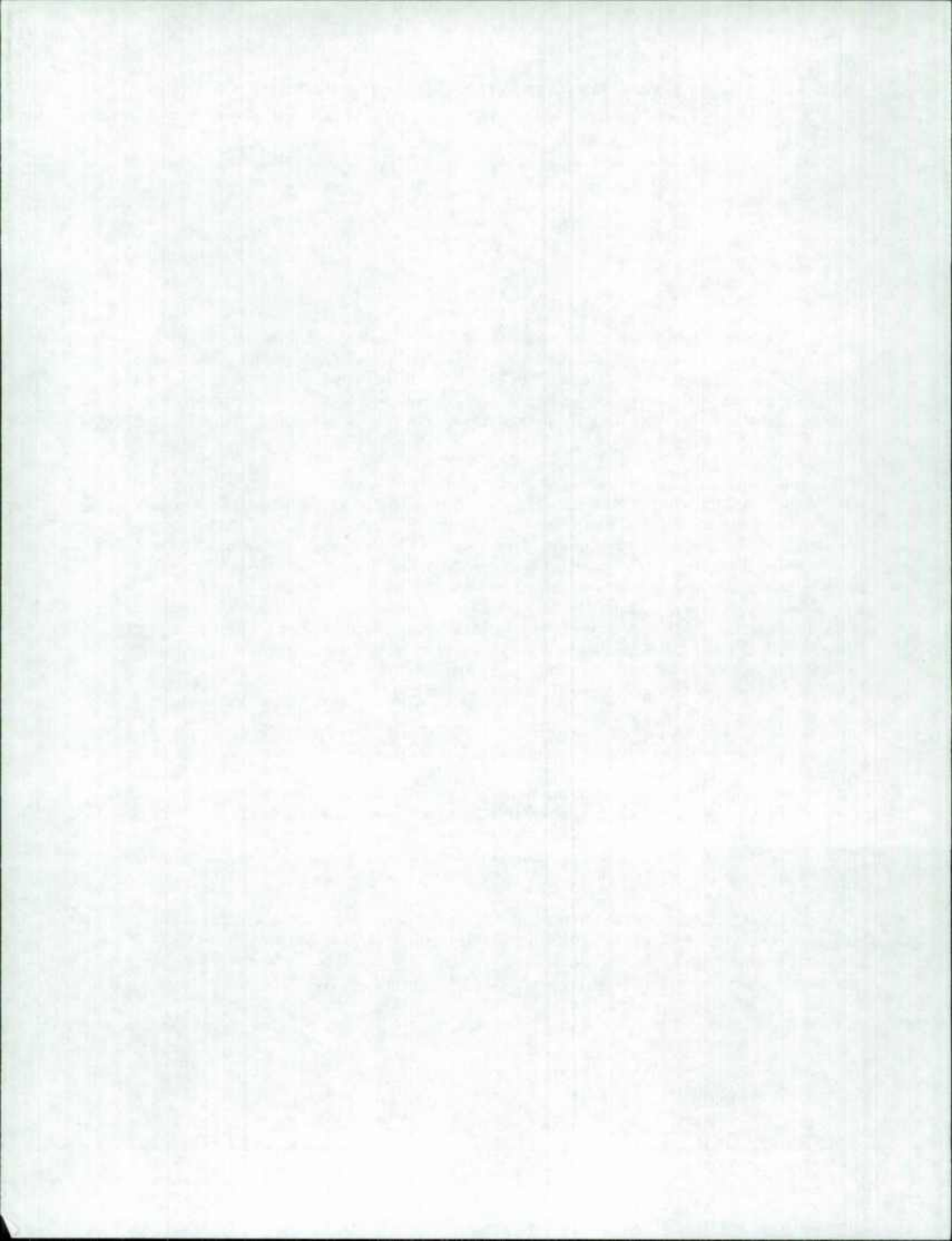
Grass Channel Credit Implementation

The Maryland Department of the Environment (MDE), Water Management Administration (WMA) offers the following to clarify a common issue concerning the implementation of the Grass Channel credit as found in Chapter 5 of the 2000 Maryland Stormwater Design Manual (the Manual). This credit encourages the use of open section roads and conveyances to disconnect linear or small discrete impervious areas. Unfortunately, the Manual provides too little detail on the design of qualifying channels. Please consider the following:

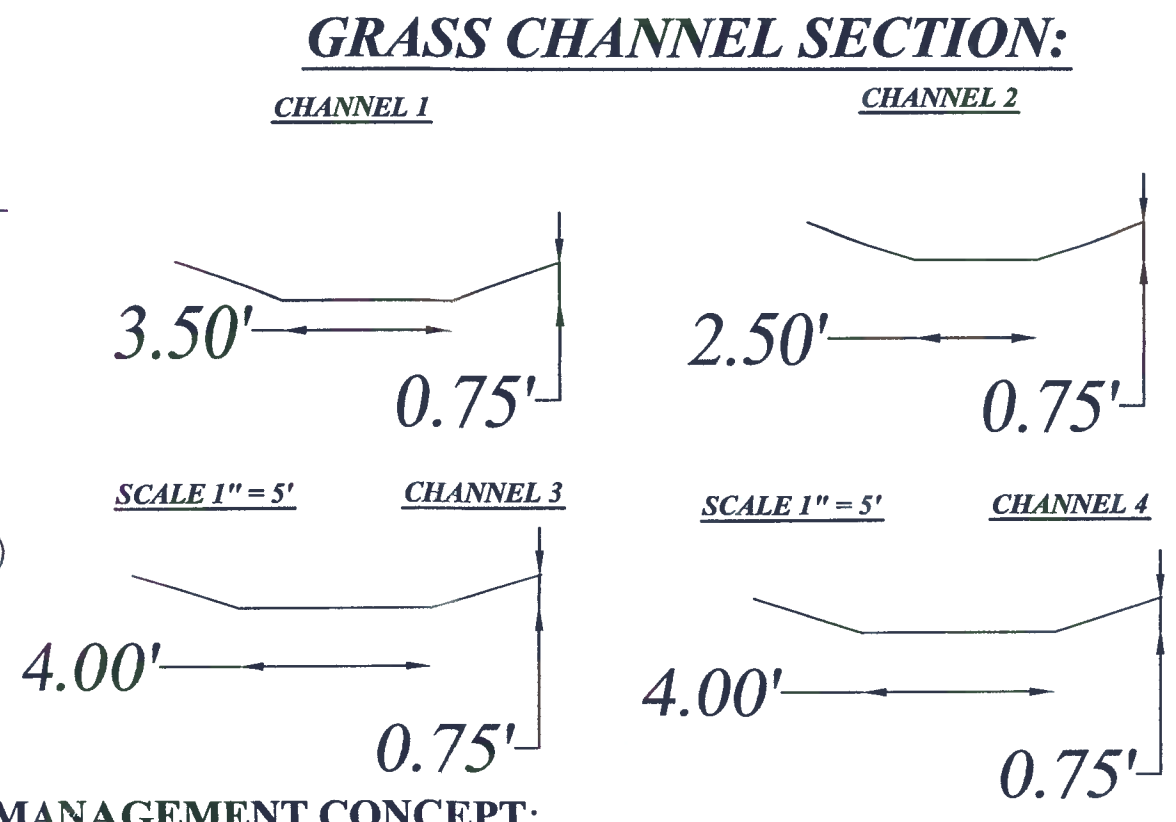
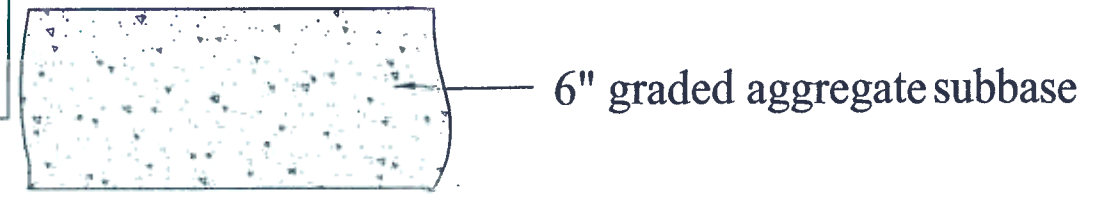
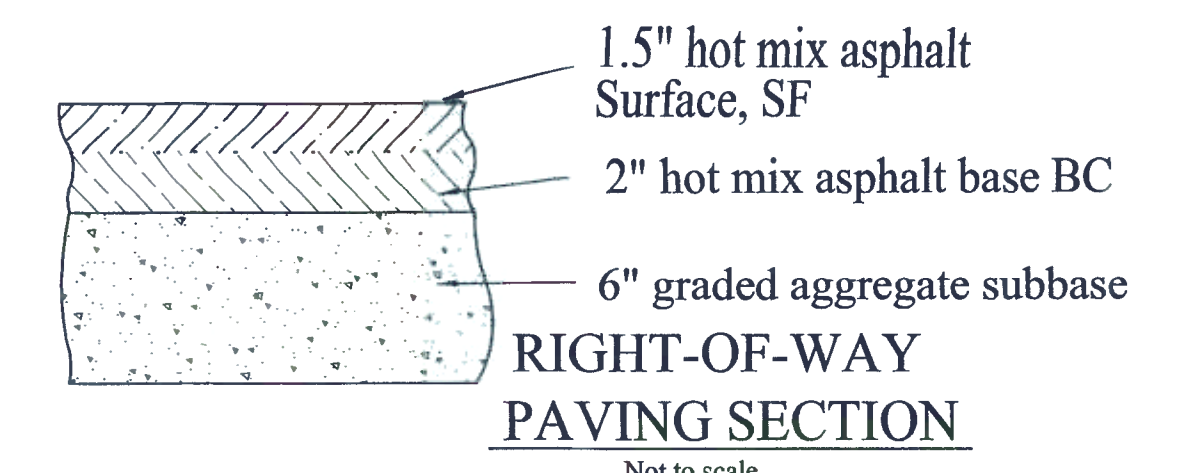
The Manual states that the use of open grass channels will automatically meet the Re_v for impervious areas draining into the channel. Furthermore, grass channels that meet the additional criteria listed on page 5.14 may also be used to address WQ_v . What is typically overlooked when considering this credit are conditions provided in Figure 5.3 and implied throughout Chapter 5. First, please consider the plan view drawing on Figure 5.3. This detail is clearly marked "Channel length is directly proportional to roadway length". Second, sheetflow conditions are critical for water quality treatment in several of the credits, including this one. To ensure sheetflow, MDE limits the application of nonstructural practices to 1,000 square feet of imperviousness per single discharge point. This condition is outlined on page 5.9 (Non Rooftop Disconnection) and may be applied wherever sheetflow is encouraged. Other conditions that apply include the 75 foot maximum contributing impervious area flow path and that the length of disconnection be equal to or greater than the contributing length.

Although not explicit, there are limiting requirements placed on the use of grass channels, especially with respect to their use for treating non-linear blocks of imperviousness. In absence of better guidance, and in addition to the listed requirements (page 5.14), MDE currently recommends that the grass channels be used for linear imperviousness only and that the length of a qualifying channel be proportional (or 1:1) to the length of the contributing imperviousness. If grass channels are used to treat blocks of imperviousness (e.g., parking lots, buildings) then the maximum contributing length of imperviousness shall be 75 feet or less, maximum imperviousness to a single discharge point shall be 1,000 square feet or less, and the grass channel length must be greater than the contributing length.

As with many facets of the new stormwater program, MDE encourages professional judgment and common sense in the application of setbacks from other site features. Also, designers should check with the local approval authority for any additional requirements. Any questions may be directed to the Sediment, Stormwater & Dam Safety Program at 410.537.3543 or email (scomstock@mde.state.md.us).



NO.	TYPE	INV. IN	INV. OUT	RIM/TC/TOP	REMARKS	LOCATION	(CENTER OF STRUCTURE)
ES R1	18" CONC. END SEC.		1.17	TOP = 2.75'	A.A. CO. STD. D7475	WOODS WHARF PUBLIC R.O.W.	N 428,496.2079 E 1,451,507.0074
ES R2	18" X 30" CONC. END SEC.	1.54		TOP = 3.12'	A.A. CO. STD. D7475	WOODS WHARF PUBLIC R.O.W.	N 428,492.454 E 1,451,448.8332
ES 3	18" CONC. END SEC.		2.10	TOP = 3.60'	A.A. CO. STD. D7475	WOODS WHARF PUBLIC R.O.W.	N 428,444.0464 E 1,451,439.8081
ES 4	18" CONC. END SEC.	3.20		TOP = 4.70'	A.A. CO. STD. D7475	WOODS WHARF PUBLIC R.O.W.	N 428,397.2053 E 1,451,424.8856

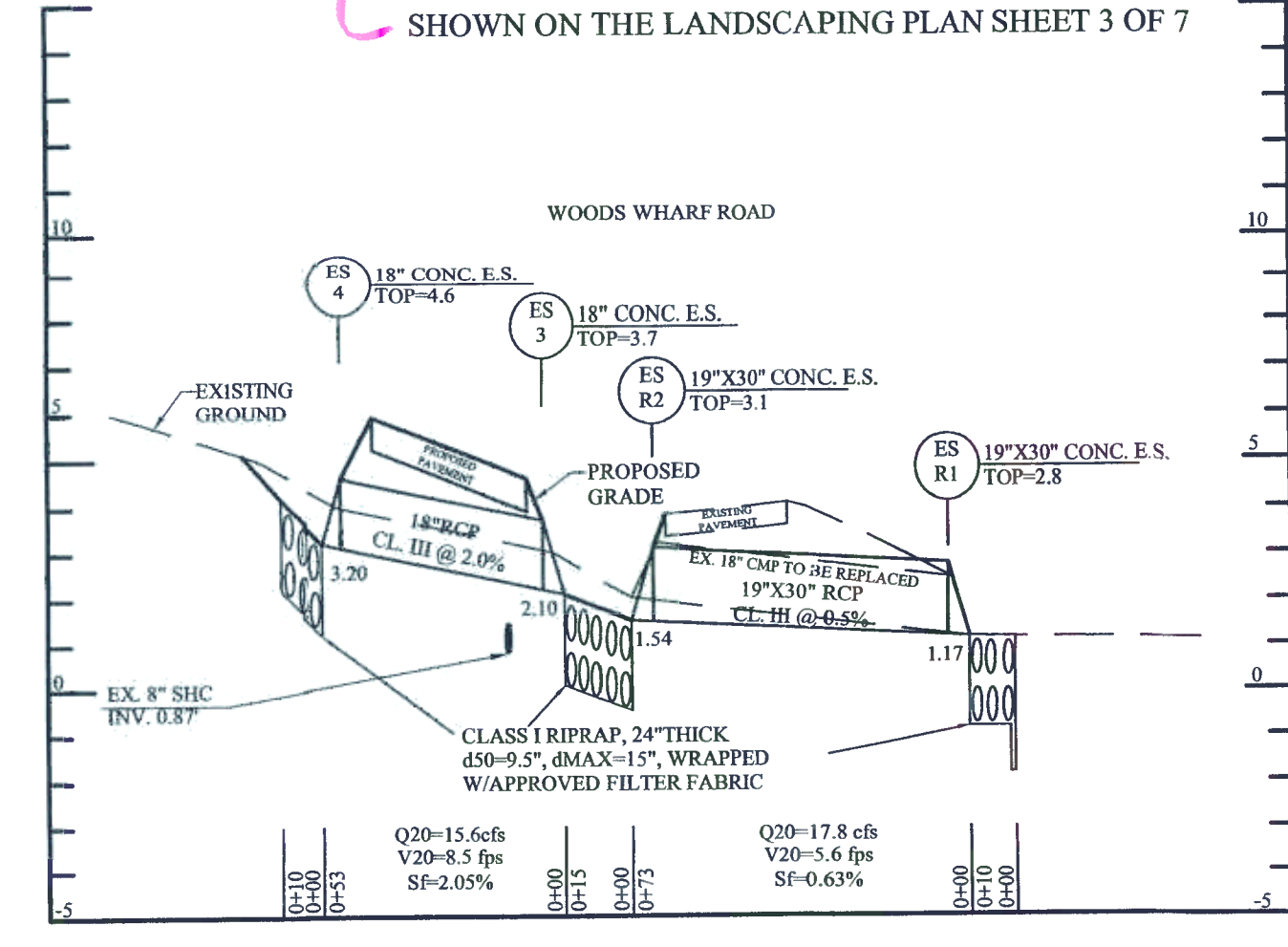


STORMWATER MANAGEMENT CONCEPT:
 THIS SITE DEVELOPMENT PLAN WAS DESIGNED UTILIZING THE 2000 MARYLAND STATE STORMWATER MANAGEMENT MANUAL'S: USING THE CREDITS TO THE MAXIMUM EXTENT AVAILABLE, THEREFORE THE ROOFTOP DISCONNECTION CREDIT FOR THE PROPOSED BUILDING WITH THE USE OF 10 RAIN GRADENS HEREON SHOWN AND USING THE GRASS CHANNEL CREDIT BY IMPLEMENTING THREE GRASS CHANNEL THAT WILL TREAT THE THE MAXIMUM EXTENT THE PROPOSED DRIVEWAY AND THE PARKING AREAS PROPOSED. THE FOLLOWING ITEMS ARE CHECKED IN ORDER FOR THE WQ CREDIT TO BE OBTAINED:

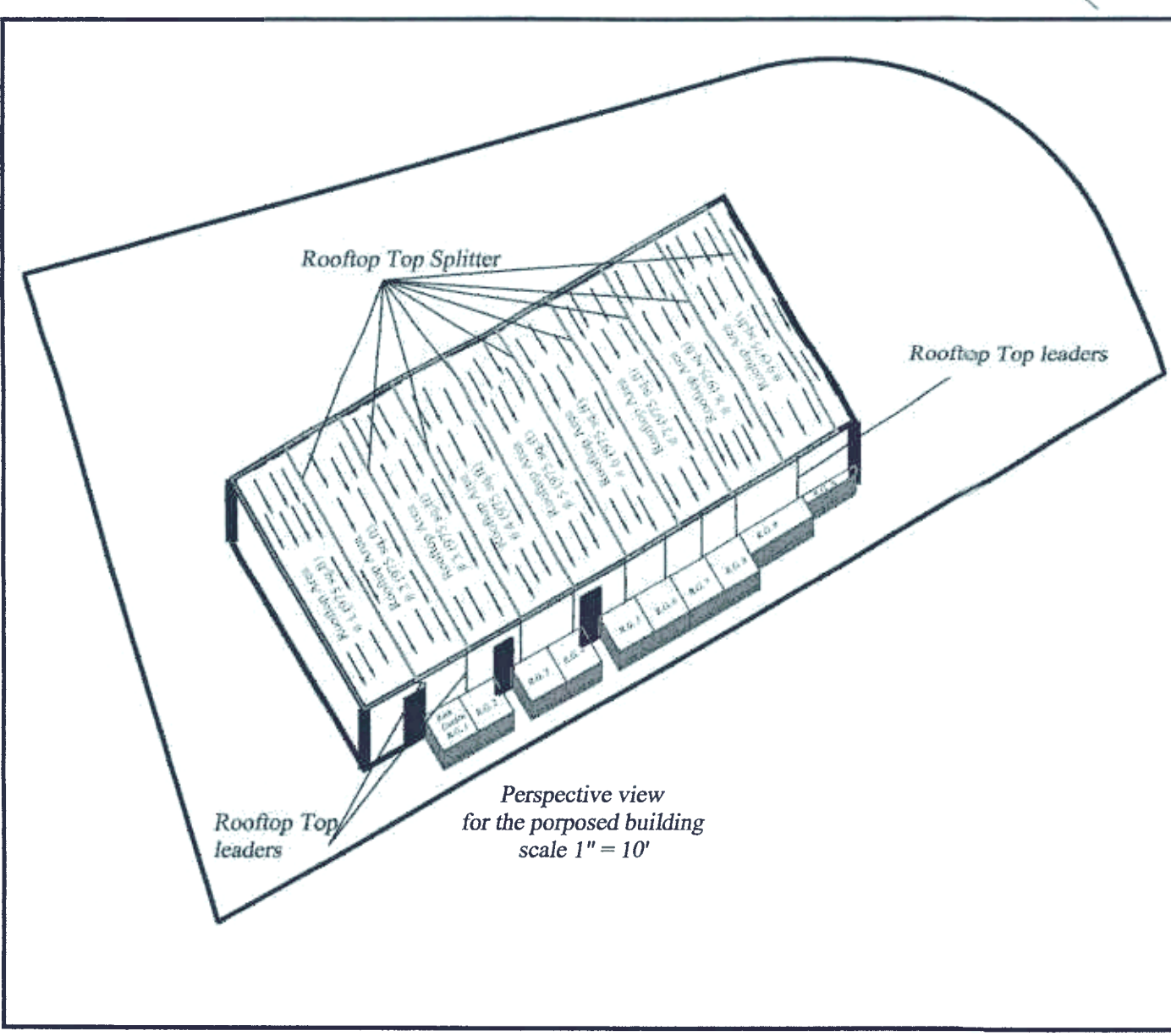
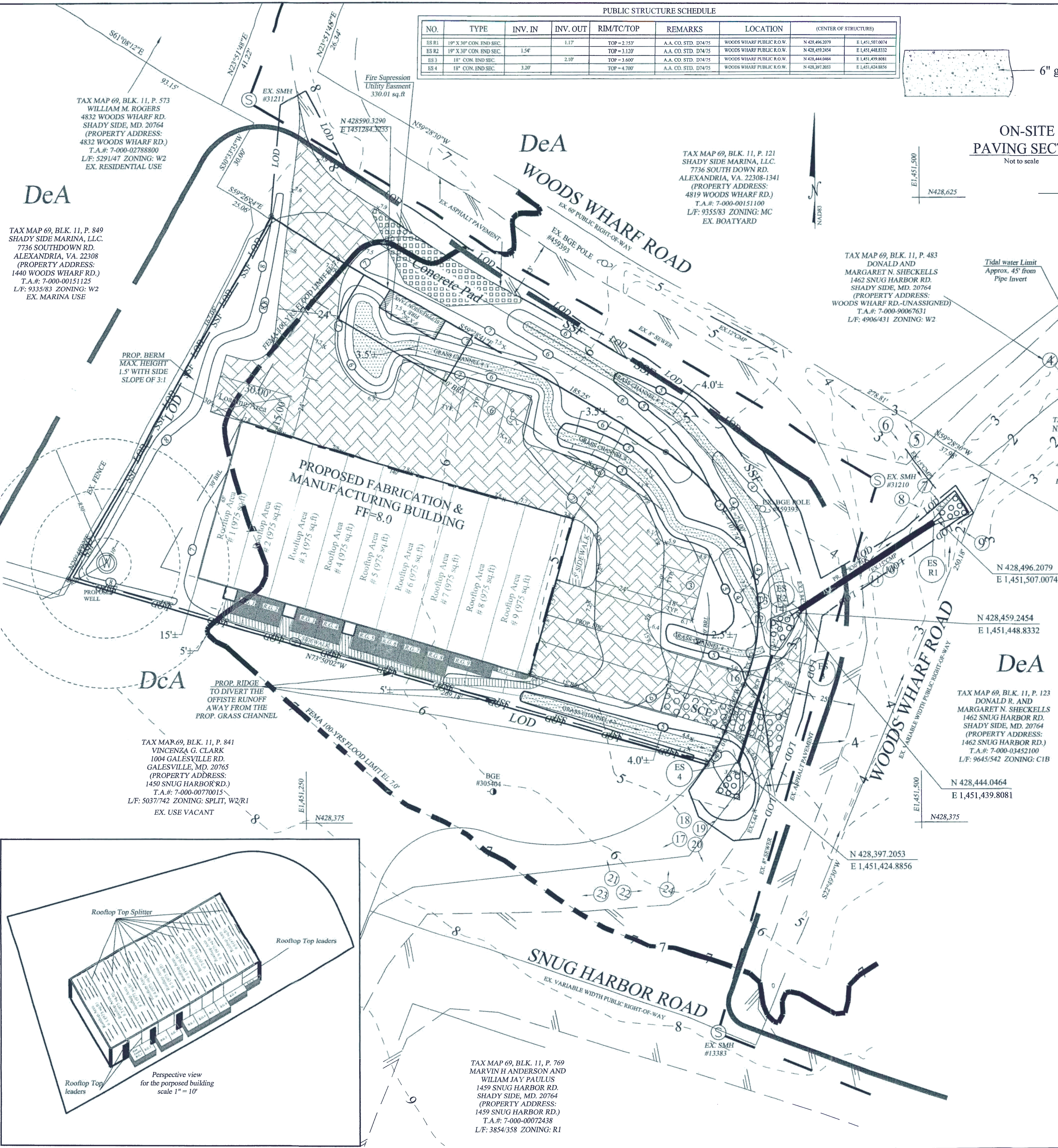
- A-) FOR THE GRASS CHANNEL CREDIT: channels 1, 2, 3, and 4
- THE MAXIMUM FLOW VELOCITY FOR THE ONE-INCH RAINFALL IS LESS THAN 1 FPS.
 - THE MAXIMUM FLOW VELOCITY FOR THE 10 YEAR STORM IS NON-EROSIVE.
 - THE BOTTOM WIDTH SHALL BE 3.5', 2.5', 4.0', and 4.0' for grass channel 1, 2, 3, & 4 respectively.
 - THE SIDE SLOPES SHALL BE 3:1.
 - THE CHANNEL SLOPE IS 1%, 2%, 1.25%, and 1.00% for grass channel 1, 2, 3, & 4 respectively.
 - ROOFTOP DISCONNECTION HAS NOT BEEN UTILIZED.
- B-) FOR THE RAIN GARDEN:
- EACH RAIN GARDEN CAN TREAT 1,000 SQ.FT. OF ROOFTOP IMPERVIOUS WITH 100 SQ.FT. OF SURFACE AREA. THE PROPOSED STRUCTURE IS 9,100 SQ.FT. THEREFORE 10 RAIN GRADENS ARE PROPOSED. PLEASE REFER TO SWM REPORT FOR FURTHER COMPS.
 - THE PROPOSED 1 YEAR, 24 HOUR RUNOFF IS LESS THAN 2 CUBIC FEET PER SECOND FOR THE PROPOSED DEVELOPMENT, THEREFORE CHANNEL PROTECTION VOLUME IS NOT REQUIRED.
 - OVERBANK FLOOD PROTECTION AND EXTREME FLOOD VOLUME WERE DETERMINED NOT TO BE REQUIRED FOR THE SITE DUE TO THE FACT THAT A TAILFALL HAS A DIRECT DISCHARGE INTO TIDAL WATERS AND THE PROPOSED DEVELOPMENT WILL NOT CAUSE EROSION, FLOODING, OR ANY OTHER ADVERSE IMPACT ON THE DOWNSTREAM STORMWATER CONVEYANCE SYSTEM.

AS FOR THE CRITICAL AREA 10% RULE WE HAVE THE FOLLOWING:
 WHEN USING THE DISCONNECTION ROOFTOP, AND THE USE OF GRASS CHANNEL CREDIT TABLE 4.3 OF THE MARYLAND CHESAPEAKE AND ATLANTIC COASTAL BAYS CRITICAL 10% RULE GUIDANCE MANUAL STATES THE FOLLOWING:
 DISCONNECTION OF ROOFTOP:
 - APPLICATION OF THIS CREDIT REDUCES THE POST-DEVELOPMENT SITE IMPERVIOUS USED TO CALCULATE THE AVERAGE ANNUAL LOAD TOTAL PHOSPHORUS REPORTED FROM THE POST DEVELOPMENT SITE.
 - THE DISCONNECTED IMPERVIOUS SURFACE AREA IS DEDUCTED FROM THE TOTAL IMPERVIOUS SURFACE AREA WHEN CALCULATING PROPOSED IMPERVIOUSNESS IN WORKSHEET A, STEP 1

GRASS CHANNEL CREDIT: SAME AS FOR THE DISCONNECTION OF ROOFTOP.
 THEREFORE APPLYING THESE RULE AND BECAUSE THE APPLICANT IS USING THE CREDITS FOR BOTH THE STRUCTURE AND THE DEVELOPED DRIVEWAY AND PARKING AREAS AND DUE TO THE CRITICAL AREA COMMISSION REQUIREMENT AND ALSO DUE TO THE PARTICULARITY OF THE JOB ALL THE CREDIT USED IS CONSIDERED TO TREAT 50%. THEREFORE TO MEET ALL THE CRITICAL AREA CONSIDERATION FOR POLLUTANT REMOVAL WE WILL TREAT THE OTHER 50% BY PLANTING. THE PLANTING WILL BE SHOWN ON THE LANDSCAPING PLAN SHEET 3 OF 7



STORM DRAIN PROFILES
 SCALE: HOR. 1" = 40' VERT. 1" = 4'



TAX MAP 69, BLK. 11, P. 769
 MARVIN H ANDERSON AND
 WILIAM JAY PAULIS
 1459 SNUG HARBOR RD.
 SHADY SIDE, MD. 20764
 (PROPERTY ADDRESS:
 1459 SNUG HARBOR RD.)
 T.A.#: 7-000-0072438
 L/F: 3854358 ZONING: R1

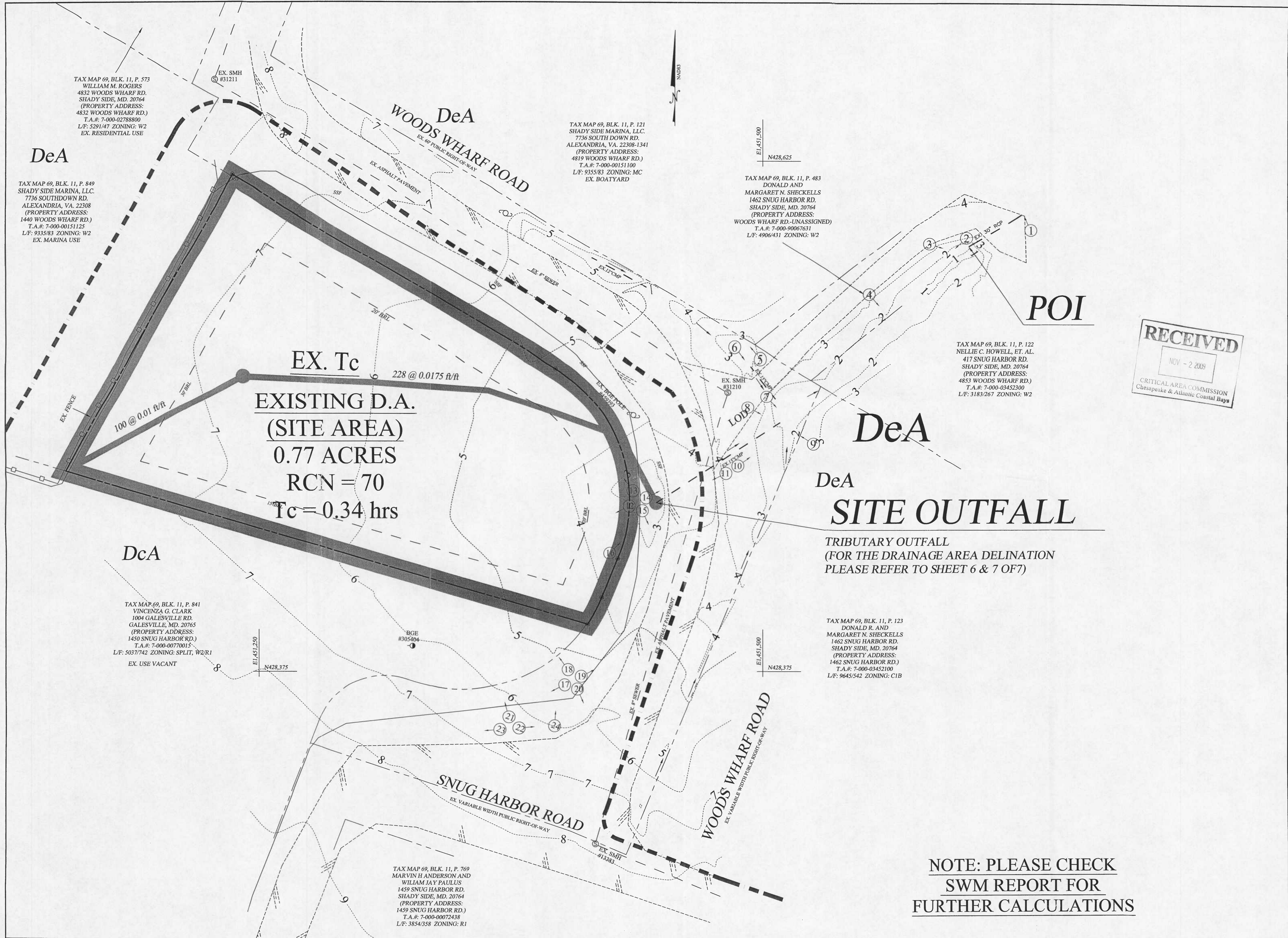
COMMERCIAL SITE DEVELOPMENT PLAN
 TAX MAP 69 BLOCK 11 PARCEL 212
PROPOSED RUSSELL FABRICATION
 ZONING: W2 SCALE: 1"=20' ZIP CODE: 20764
 SDP # 2008-0012 GRADING PERMIT NUMBER G02013310
 7TH ASSESSMENT DISTRICT 7TH COUNCILMANIC DISTRICT ANNE ARUNDEL COUNTY, MARYLAND

WILKERSON & ASSOCIATES INC.
 ENGINEERS & SURVEYORS
 Box 17 Dumfries, Maryland
 (410) 257-3532 / (301) 955-8272

SHEET 2 OF 7
 SITE DEVELOPMENT PLAN

RECEIVED
 NOV - 2 2009
 CRITICAL AREA COMMISSION
 Chesapeake & Atlantic Coastal Bays

DATE	REVISION
OCTOBER, 2009	
	SCALE: 1" = 20'
	DRAWN BY: MDR, MJK
	DRAWING NO: 1102-2009
	PROJECT: RUSSELL FABRICATION
	FILE NO: 2009-0012
	JOB # 1102-2009



DeA

TAX MAP 69, BLK. 11, P. 849
SHADY SIDE MARINA, LLC.
7736 SOUTHDOWN RD.
ALEXANDRIA, VA. 22308
(PROPERTY ADDRESS:
1440 WOODS WHARF RD.)
T.A.#: 7-000-00151125
L/F: 9335/83 ZONING: W2
EX. MARINA USE

TAX MAP 69, BLK. 11, P. 573
WILLIAM M. ROGERS
4832 WOODS WHARF RD.
SHADY SIDE, MD. 20764
(PROPERTY ADDRESS:
4832 WOODS WHARF RD.)
T.A.#: 7-000-02788800
L/F: 5291/47 ZONING: W2
EX. RESIDENTIAL USE

EX. Tc
228 @ 0.0175 ft/ft
**EXISTING D.A.
(SITE AREA)
0.77 ACRES
RCN = 70
Tc = 0.34 hrs**

DcA

TAX MAP 69, BLK. 11, P. 841
VINCENZA G. CLARK
1004 GALESVILLE RD.
GALESVILLE, MD. 20765
(PROPERTY ADDRESS:
1450 SNUG HARBOR RD.)
T.A.#: 7-000-00770015
L/F: 5037/742 ZONING: SPLIT, W2/R1
EX. USE VACANT

TAX MAP 69, BLK. 11, P. 769
MARVIN H ANDERSON AND
WILLIAM JAY PAULUS
1459 SNUG HARBOR RD.
SHADY SIDE, MD. 20764
(PROPERTY ADDRESS:
1459 SNUG HARBOR RD.)
T.A.#: 7-000-00072438
L/F: 3854/358 ZONING: R1

TAX MAP 69, BLK. 11, P. 121
SHADY SIDE MARINA, LLC.
7736 SOUTHDOWN RD.
ALEXANDRIA, VA. 22308-1341
(PROPERTY ADDRESS:
4819 WOODS WHARF RD.)
T.A.#: 7-000-00151100
L/F: 9335/83 ZONING: MC
EX. BOATYARD

TAX MAP 69, BLK. 11, P. 483
DONALD AND
MARGARET N. SHECKELLS
1462 SNUG HARBOR RD.
SHADY SIDE, MD. 20764
(PROPERTY ADDRESS:
WOODS WHARF RD.-UNASSIGNED)
T.A.#: 7-000-90067631
L/F: 4906/431 ZONING: W2

TAX MAP 69, BLK. 11, P. 122
NELLIE C. HOWELL, ET. AL.
417 SNUG HARBOR RD.
SHADY SIDE, MD. 20764
(PROPERTY ADDRESS:
4833 WOODS WHARF RD.)
T.A.#: 7-000-03452300
L/F: 3183/267 ZONING: W2

TAX MAP 69, BLK. 11, P. 123
DONALD R. AND
MARGARET N. SHECKELLS
1462 SNUG HARBOR RD.
SHADY SIDE, MD. 20764
(PROPERTY ADDRESS:
1462 SNUG HARBOR RD.)
T.A.#: 7-000-03452100
L/F: 9645/542 ZONING: C1B

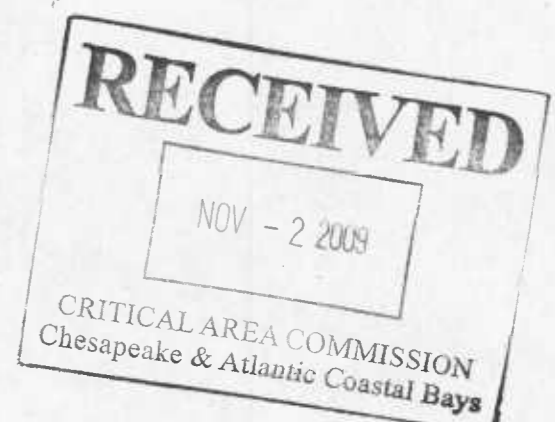
POI

DeA

DeA

SITE OUTFALL

TRIBUTARY OUTFALL
(FOR THE DRAINAGE AREA DELINATION
PLEASE REFER TO SHEET 6 & 7 OF 7)



**NOTE: PLEASE CHECK
SWM REPORT FOR
FURTHER CALCULATIONS**

COMMERCIAL SITE DEVELOPMENT PLAN	
TAX MAP 69, BLOCK 11	PARCEL 212
PROPOSED RUSSELL FABRICATION	
ZONING: W2	SCALE: 1" = 20'
SDP # 2008-0012	GRADING PERMIT NUMBER G02013310
7TH ASSESSMENT DISTRICT	7TH COUNCILMANIC DISTRICT
ANNE ARUNDEL COUNTY, MARYLAND	

WILKERSON & ASSOCIATES INC.	
ENGINEERS & SURVEYORS	
Box 17 Dunkirk, Maryland	
(410) 257-3332, (301) 855-8272	

SHEET 4 OF 7	
ENVIRONMENTAL CONSERVATION PLAN	

DATE	REVISION
OCT. 2009	RECEIVED
SCALE	1" = 20'
DRAWN BY	MDB, MKK
DATE	NOV 02 2009
PROJECT	CRITICAL AREA COMMISSION
BY	Chesapeake & Atlantic Coastal Bays
JOB #	07-16701

Grass Channel Layout

Using The Rational Method:

A) PRE-DEVELOPED CONDITIONS:
THE DRAINAGE AREA IS THE SAME IN THE PRE-DEVELOPED
CONDITIONS AND THE POST DEVELOPED CONDITIONS. THE AMOUNT OF
RUNOFF IS CHANGED TO TO THE INCREASE IN IMPERVIOUS AREA.

$$Q_{pre} = C \times I \times A$$

where:

C pre = Run Off Coefficient = actual land use with soil type CD
= weighted C Factor = $(1.41 \times 0.9 + 10.18 \times 0.3) / 11.59 = 0.373$
I pre = 6.52 hrs = 30 minutes
= Rain Fall Intensity Depends on Tc
= 3.85 in/hr

$$A = \text{Drainage Area} = 11.59 \text{ AC.}$$

$$Q_{pre} = 0.373 \times 3.850 \times 11.59 = 16.64 \text{ cfs}$$

Channel Calculator(pre)

Given Input Data:

Shape Trapezoidal
Solving for Depth of Flow
Flowrate 16.6400 cfs
Slope 0.0060 ft/ft
Manning's n 0.0200
Height 18.0000 in
Bottom width 24.0000 in
Left slope 0.1667 ft/ft (V/H)
Right slope 0.1667 ft/ft (V/H)

Computed Results:

Depth 9.1102 in
Velocity 3.3441 fps
Full Flowrate 82.8345 cfs
Flow area 4.9759 ft²
Hydraulic radius 134.8093 in
Hydraulic radius 5.3151 in
Top width 133.3010 in
Area 16.4973 ft²
Perimeter 242.9368 in
Percent full 50.6124 %

Critical Information

Critical depth 8.5824 in
Critical slope 0.0079 ft/ft
Critical velocity 3.6987 fps
Critical area 4.4989 ft²
Critical perimeter 128.3897 in
Critical hydraulic radius 5.0459 in
Critical top width 126.9688 in
Specific energy 0.9330 ft
Minimum energy 1.0728 ft
Froude number 0.8809
Flow condition Subcritical

Using The Rational Method:

A) PRE-DEVELOPED CONDITIONS:
THE DRAINAGE AREA IS THE SAME IN THE PRE-DEVELOPED
CONDITIONS AND THE POST DEVELOPED CONDITIONS. THE AMOUNT OF
RUNOFF IS CHANGED TO TO THE INCREASE IN IMPERVIOUS AREA.

$$Q_{pre} = C \times I \times A$$

where:
C pre = Run Off Coefficient = actual land use with soil type CD
= weighted C Factor = $(1.41 \times 0.9 + 10.18 \times 0.3) / 11.59 = 0.373$
I pre = 6.52 hrs = 30 minutes
= Rain Fall Intensity Depends on Tc
= 3.85 in/hr

$$A = \text{Drainage Area} = 11.59 \text{ AC.}$$

$$Q_{pre} = 0.373 \times 6.30 \times 11.59 = 27.215 \text{ cfs}$$

Channel Calculator 100-years (pre)

Given Input Data:

Shape Trapezoidal
Solving for Depth of Flow
Flowrate 27.2150 cfs
Slope 0.0060 ft/ft
Manning's n 0.0200
Height 2.0000 ft
Bottom width 2.0000 ft
Left slope 0.1667 ft/ft (V/H)
Right slope 0.1667 ft/ft (V/H)

Computed Results:

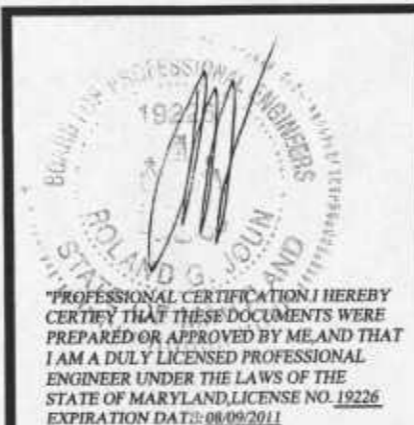
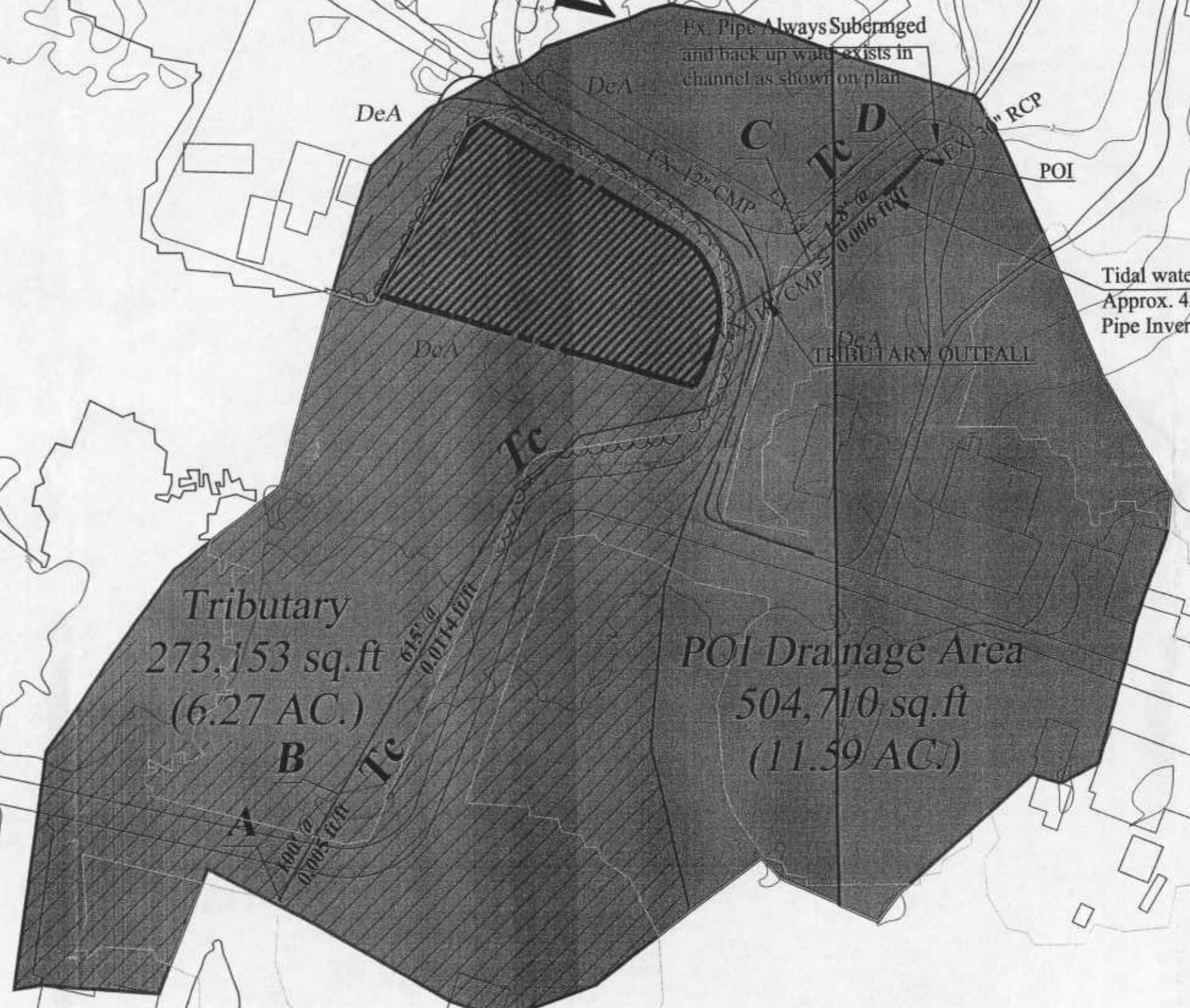
Depth 0.9402 ft
Velocity 3.7912 fps
Full Flowrate 167.8586 cfs
Flow area 7.1837 ft²
Hydraulic radius 13.4363 ft
Hydraulic radius 0.5347 ft
Top width 13.2068 ft
Area 27.9952 ft²
Perimeter 26.3263 ft
Percent full 47.0120 %

Critical Information

Critical depth 0.8998 ft
Critical slope 0.0078 ft/ft
Critical velocity 4.0913 fps
Critical area 6.6569 ft²
Critical perimeter 12.9448 ft
Critical hydraulic radius 0.5143 ft
Critical top width 12.7559 ft
Specific energy 1.1638 ft
Minimum energy 1.3498 ft
Froude number 0.9088
Flow condition Subcritical

STEAMBOAT RD
JUNIPER STREET

WOODS WHARF RD.
PARISH CREEK / WEST RIVER
SNUG HARBOR ROAD



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ENGINEERS & SURVEYORS
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www.wilkerasonassociates.com

REVISIONS			
NO.	DATE	ITEM	BY

RUSSEL FABRICATION ANNE ARUNDEL COUNTY, MARYLAND		RECEIVED NOV 02 2009
SCALE: AS SHOWN	APPROVED BY:	DRAWN BY: WMC/A COMMISSION
DATE: OCTOBER, 2009	CHECK BY: RJ	PROJECT NO.:
SHEET 6 OF 7		POI DRAINAGE AREA (EXISTING CONDITIONS)
SCALE: 1" = 100'		AA27DRAINAGE

Grass Channel Layout

Using The Rational Method:
POST-DEVELOPED CONDITIONS:
 THE DRAINAGE AREA IS THE SAME IN THE PRE-DEVELOPED
 CONDITIONS AND THE POST-DEVELOPED CONDITIONS. THE AMOUNT OF
 RUNOFF IS CHANGED TO THE INCREASE IN IMPERVIOUS AREA.

$$Q_{post} = C \times I \times A$$

where:
C post = Run Off Coefficient = actual land use with soil type C/D
 = weighted C Factor = $(1.91 \times 0.9 + 9.66 \times 0.3) / 11.59 = 0.40$
Tc post = 0.52 hrs = 30 minutes
I = Rain Fall Intensity Depends on Tc
 = 3.85 in/hr

A = Drainage Area = 11.59 AC.

$$Q_{post} = 0.4 \times 3.85 \times 11.59 = 17.77 \text{ cfs}$$

Channel Calculator (post)

Given Input Data:
 Shape Trapezoidal
 Solving for Depth of Flow
 Flowrate 17.7800 cfs
 Slope 0.0060 ft/ft
 Manning's n 0.0200
 Height 18.0000 in
 Bottom width 24.0000 ft
 Left slope 0.1667 ft/ft (V/H)
 Right slope 0.1667 ft/ft (V/H)

Computed Results:
 Depth 9.3788 in
 Velocity 3.4012 fps
 Full Flowrate 82.8345 cfs
 Flow area 5.2275 ft²
 Flow perimeter 138.0763 in
 Hydraulic radius 5.4518 in
 Top width 136.5236 in
 Area 16.4973 ft²
 Perimeter 242.9368 in
 Percent full 52.1047 %

Critical Information
 Critical depth 8.8548 in
 Critical slope 0.0078 ft/ft
 Critical velocity 3.7494 fps
 Critical area 4.7421 ft²
 Critical perimeter 131.7018 in
 Critical hydraulic radius 5.1849 in
 Critical top width 130.2358 in
 Specific energy 0.9613 ft
 Minimum energy 1.1068 ft
 Froude number 0.8846
 Flow condition Subcritical

Using The Rational Method:
POST-DEVELOPED CONDITIONS:
 THE DRAINAGE AREA IS THE SAME IN THE PRE-DEVELOPED
 CONDITIONS AND THE POST-DEVELOPED CONDITIONS. THE AMOUNT OF
 RUNOFF IS CHANGED TO THE INCREASE IN IMPERVIOUS AREA.

where:
C post = Run Off Coefficient = actual land use with soil type C/D
 = weighted C Factor = $(1.91 \times 0.9 + 9.66 \times 0.3) / 11.59 = 0.40$
Tc post = 0.52 hrs = 30 minutes
I = Rain Fall Intensity Depends on Tc
 = 6.30 in/hr

A = Drainage Area = 11.59 AC.

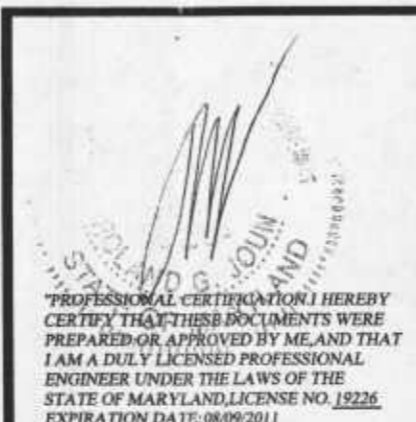
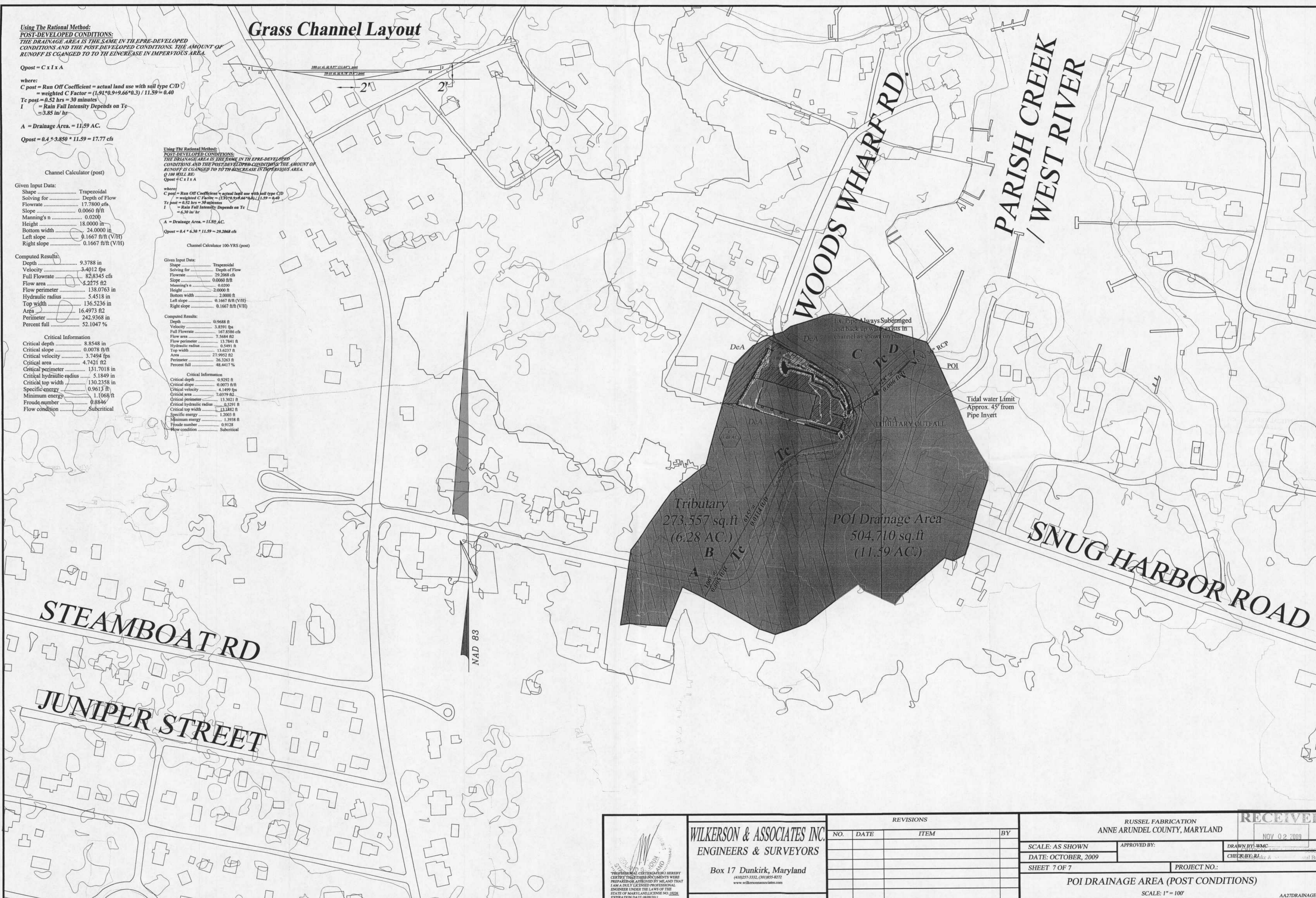
$$Q_{post} = 0.4 \times 6.30 \times 11.59 = 29.2668 \text{ cfs}$$

Channel Calculator 100-YRS (post)

Given Input Data:
 Shape Trapezoidal
 Solving for Depth of Flow
 Flowrate 29.2668 cfs
 Slope 0.0060 ft/ft
 Manning's n 0.0200
 Height 2.0000 ft
 Bottom width 2.0000 ft
 Left slope 0.1667 ft/ft (V/H)
 Right slope 0.1667 ft/ft (V/H)

Computed Results:
 Depth 0.9688 ft
 Velocity 3.8591 fps
 Full Flowrate 167.8586 cfs
 Flow area 7.5684 ft²
 Flow perimeter 13.7841 ft
 Hydraulic radius 0.5491 ft
 Top width 13.6237 ft
 Area 27.9952 ft²
 Perimeter 26.3263 ft
 Percent full 48.4417 %

Critical Information
 Critical depth 0.9292 ft
 Critical slope 0.0073 ft/ft
 Critical velocity 4.1499 fps
 Critical area 7.0379 ft²
 Critical perimeter 13.3023 ft
 Critical hydraulic radius 0.5291 ft
 Critical top width 13.1882 ft
 Specific energy 1.2003 ft
 Minimum energy 1.3938 ft
 Froude number 0.9128
 Flow condition Subcritical



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REVISIONS			
NO.	DATE	ITEM	BY

RUSSEL FABRICATION ANNE ARUNDEL COUNTY, MARYLAND		RECEIVED NOV 02 2009
SCALE: AS SHOWN	APPROVED BY:	DRAWN BY: WMC
DATE: OCTOBER, 2009	CHECKED BY: RJ	PROJECT NO.:
SHEET 7 OF 7	POI DRAINAGE AREA (POST CONDITIONS)	
SCALE: 1" = 100'		AA27DRAINAGE