



## CERTIFICATE OF AUTHENTICITY

THIS IS TO CERTIFY THAT THE FOLLOWING ELECTRONIC RECORDS ARE TRUE AND ACCURATE REPRODUCTIONS OF THE ORIGINAL RECORDS OF JAMES CITY COUNTY GENERAL SERVICES DEPARTMENT- STORMWATER DIVISION; WERE SCANNED IN THE REGULAR COURSE OF BUSINESS PURSUANT TO GUIDELINES ESTABLISHED BY THE LIBRARY OF VIRGINIA AND ARCHIVES; AND HAVE BEEN VERIFIED IN THE CUSTODY OF THE INDIVIDUAL LISTED BELOW.

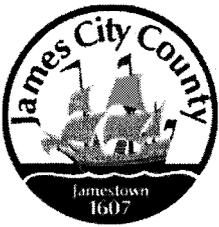
**BMP NUMBER:** 99123

**DATE VERIFIED:** May 10, 2012

**QUALITY ASSURANCE TECHNICIAN:** Leah Hardenbergh

*Leah Hardenbergh*  
\_\_\_\_\_

**LOCATION:** WILLIAMSBURG, VIRGINIA



# Stormwater Division

## MEMORANDUM

**DATE:** March 12, 2010  
**TO:** Michael J. Gillis, Virginia Correctional Enterprises Document Management Services  
**FROM:** Jo Anna Ripley, Stormwater  
**PO:** 270712  
**RE:** Files Approved for Scanning

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**General File ID or BMP ID:** 99123

**PIN:** 3830100018

**Subdivision, Tract, Business or Owner**

**Name (if known):**

Saint Bedes Catholic Church

**Property Description:**

General File

**Site Address:**

3686 Ironbound Road

*(For internal use only)*

**Box** 18

**Drawer:** N/A

**Agreements:** (in file as of scan date)

N

**Book or Doc#:**

**Page:**

Comments

## **Contents for Stormwater Management Facilities As-built Files**

Each File is to contain:

- 1. Maintenance Agreement
- 2. Construction certification
- 3. As-Built plan
- 4. Design Calculations
- 6. Correspondence
- 7. Inspection records
- 8. Miscellaneous

COUNTY OF JAMES CITY, VIRGINIA

PUBLIC IMPROVEMENTS AGREEMENT

THIS AGREEMENT, made this 27 day of October, 2008, by and between, St Bede Catholic Church John McCormick and all successors in interest, party(ies) of the first part, hereinafter referred to as "OWNER," and the COUNTY OF JAMES CITY, VIRGINIA, A Political Subdivision, party of the second part, hereinafter referred to as "COUNTY."

WHEREAS, the party(ies) of the first part is(are) the OWNER of a certain tract of land located in the COUNTY; and

WHEREAS, the OWNER agrees to construct and locate all physical improvements shown on the development plans approved by the Zoning Administrator, hereinafter referred to as "the Administrator," for a project known as SUP-0015-2000 Ironbound Road Sidewalk located at 3686 Ironbound Rd; and

WHEREAS, the OWNER has posted sufficient bond, letter of credit, certified check, or escrow fund ("Security Instrument") pursuant to existing ordinances, approved as to form by the COUNTY Attorney, and with surety satisfactory to the COUNTY in the amount of 8,000 guaranteeing the installation of the aforementioned improvements on or before 10/27/09; and

WHEREAS, the COUNTY has agreed that it will permit issuance of a building permit(s) upon the execution of this agreement.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH: that for and in consideration of the premises and the covenants and agreements herein contained, the parties hereto agree as follows:

1. The OWNER does covenant and agree that it will, without cost to the COUNTY, on or before 10/27/09, construct to the approval of the COUNTY physical improvements shown on the above-referenced development plans approved by the Administrator. If, in the sole judgment of the COUNTY, circumstances beyond the control of the OWNER prevent the OWNER from completing the improvements in the time set forth herein, then the COUNTY may at its sole discretion grant an extension of time for completion of said improvements and in such instance the OWNER and COUNTY shall enter into a new agreement.

2. It is mutually understood and agreed that in the event the OWNER fails to renew or amend the Security Instrument at least 10 days prior to its expiration or fails to complete the physical improvements provided hereinabove, the COUNTY may complete, or cause to have completed, the same and render a bill therefore to the OWNER or Surety who shall be liable to the COUNTY for all proper costs so incurred by the COUNTY.

3. In the event the COUNTY calls, collects or otherwise draws on the Security Instrument pledged under this agreement, OWNER agrees to either pay, or have the COUNTY use the proceeds of the draw to pay, a reasonable administrative fee of \$35.00 plus any costs actually incurred by the COUNTY in drawing on the Security Instrument.

The charge for an administrative fee plus costs shall apply regardless of whether the COUNTY later accepts a renewal or amendment of the Security Instrument.

4. It is mutually understood and agreed that this Agreement does not relieve the OWNER of any responsibilities or requirements placed upon them by the various ordinances of the COUNTY applicable to such development of the property, and the development of the property will be done in strict accordance with such ordinances.

5. It is mutually understood and agreed that if the OWNER shall faithfully execute each and all requirements of the approved development plans and the provisions of this Agreement, and shall indemnify, protect and save harmless the COUNTY from all loss, damage, expense or cost by reason of any claim, suit or action instituted against the COUNTY or its agents or employees thereof, on account of, or in consequence of any breach on the part of the OWNER, then the aforementioned bond, or certified check, shall be released by the COUNTY to the OWNER.

6. The OWNER does hereby agree to indemnify, protect and save harmless the COUNTY from and against all losses and physical damages to property, and bodily injury or death to any person or persons, which may arise out of or be caused by the construction, maintenance, presence or use of the streets, utilities and public easements required by, and shown on, the development plans and the subdivision plat until such time as the said streets shall be accepted as part of the Virginia Department of Transportation's system and utilities and public easements shall be accepted as a part of the James City Service Authority's or the County's system. To insure such indemnification, the COUNTY may require and the OWNER shall provide upon request a Certificate of Public Liability Insurance in an amount approved by the COUNTY Attorney as sufficient, including a governmental endorsement thereto, naming the COUNTY as insured, issued by an insurance company licensed to do business in the Commonwealth of Virginia.

7. It is mutually understood and agreed, that the issuance of a building permit(s) shall not be deemed to be an acceptance by the COUNTY of any street, alley, public space, sewer or other physical improvements shown on the plat or plats for maintenance, repair or operations thereof, and that the OWNER shall be fully responsible therefore and assume all the risks and liabilities therefore.

IN WITNESS WHEREOF, the parties hereto, being first day authorized, have affixed their signatures on the date first above written.

ATTEST:

Melanie Davis

Approved as to form:

Blankinsman  
County Attorney

Owner: JOHN J MCCORMACK  
DIRECTOR OF FINANCE  
(Print Name & Title)

By: John J McCormack  
(Signature)

COUNTY OF JAMES CITY, VIRGINIA

By: [Signature]  
County Agent

COUNTY OF JAMES CITY, VIRGINIA

SILTATION AGREEMENT

THIS AGREEMENT, made this 27<sup>th</sup> day of October, 2008, by and between ST BEDE CATHOLIC CHURCH JOHN MCCORMACK, and all successors in interest, a corporation ("Developer"), and the County of James City, Virginia, ("County"), and SCOTT THOMAS, ("Agent") the County's Administrator of the Erosion and Sediment Control Ordinance.

WITNESSETH:

WHEREAS, Developer, desires approval of plans by the Agent for the County, for a project known as ST BEDE CATHOLIC CHURCH ROAD WIDENING, located at 3686 IRON BOUND RD, which plans include provision of siltation and erosion control measures as required by Chapter 8 of the Code of the County, and

WHEREAS, County desires to ensure the installation, maintenance and adequate performance of such control measures,

NOW THEREFORE, for and in consideration of the foregoing premises and the following terms and conditions, and in further consideration of the approval of the aforesaid plans by the County and the issuance of permits for the work proposed to be done thereunder the parties hereto agree as follows:

1. Developer has either:

- a. deposited with Agent, and Agent by this execution hereof acknowledges that he holds, the sum of eight thousand five hundred dollars (\$ 8,500.- ) in escrow under and subject to the terms of this agreement, or;
- b. has furnished the County an irrevocable letter of credit or bond with corporate surety, whose terms and conditions are acceptable in substance and in form to the County Attorney, in the sum of \_\_\_\_\_ dollars (\$ \_\_\_\_\_ ), which letter of credit or bond is under and subject to the terms of this agreement.

The deposit, letter of credit or bond (collectively "Security Instrument") is designed to insure performance of the Developer's obligations and to insure reimbursement to the County in the event that it performs work or causes work to be performed pursuant to this Agreement and plans approved by and on file with the County.

2. In the event measures for the control of siltation and/or erosion as provided for on the plans referred to herein, or on any approved revision thereof, are not constructed at or prior to the occurrence of any rainstorm or other phenomena actually causing any siltation or erosion, County or its authorized agent shall have the right to enter upon Developer's property and construct such measures or do such other work as may be necessary to prevent further erosion or siltation, provided that County shall first give notice in writing to Developer or his superintendent of its intent so to do.

3. In the event measures for the control of siltation and/or erosion have been constructed, but fail, through overload and/or inadequate maintenance, to perform the function for which they were intended, County or its authorized agent, may in like manner to paragraph 2 above, enter to perform such reconstruction or maintenance as may be necessary to restore performance in accord with the plans, or approved revisions thereof, upon giving notice in writing to Developer or his superintendent of its intent so to do.

4. In the event there occurs siltation and/or erosion from the property covered by the plans referred to herein in sufficient quantity adversely to affect downstream drainage, or travel on any street, road, highway or other public way, then County may take such steps as may be necessary to restore functions to the affected drainage or travel way.

5. a. In the event County determines work shall be performed or causes to be performed work of any nature, including labor, use of equipment, and materials, under the provisions of paragraphs 2, 3 and 4 above, either by County staff, or other contractor, Agent shall draw and disburse to County on its order such sum or sums as may be requested, provided, however, that Agent's liability so to disburse shall be limited to the undistributed balance in its hands of:
1. the escrow amount, or
  2. the letter of credit, or
  3. the bond

Such surety may be drawn in total, if at the time the surety is to expire, if all improvements or any portion thereof are not complete and surety has not been adequately extended or replaced to ensure completion of the improvements. In addition, the County may draw a Security Instrument in the event it is not renewed or amended to remain in effect at least 10 days prior to its expiration. A notice that such draw has been made shall be delivered or mailed by County to Developer.

- b. In the event the County calls, collects or otherwise draws on the Security Instrument pledged under this agreement, Developer agrees to either pay, or have the County use the proceeds of the draw to pay, a reasonable administrative fee of \$35.00 plus any costs actually incurred by the County in drawing on the Security

Instrument. The charge for an administrative fee plus costs shall apply regardless of whether the County later accepts a renewal or amendment of the Security Instrument.

6. In the event Agent makes disbursement pursuant hereto, Developer agrees to deposit within ten (10) days of such disbursement, an amount sufficient either:

- a. to restore escrow amount to its original balance as shown in paragraph 1; or
- b. to furnish an additional letter of credit in the amount of the draft; or
- c. to secure such additional bonds as to restore same to its original balance as shown in paragraph 1.

7. It is expressly agreed by all parties hereto that it is the purpose and intent of this Agreement to ensure the installation, maintenance, and performance of measures provided for on approved plans or revisions thereof, for the control of siltation and erosion, and for the restoration of function of facilities for drainage or vehicular travel if such facilities are adversely affected in their function by siltation or erosion from the property the subject of such plans. This Agreement shall not be deemed to create or affect any liability of any party hereto for any damage alleged to result from or be caused by erosion or siltation.

8. It is expressly agreed by the parties hereto that either:

- a. the escrow amount shall be held by Agent unless distributed in accordance with paragraph 5 above, or paid to County as part of the cost to complete improvements required by ordinance and/or agreement, or released in writing by County, through its Agent, or
- b. the letter of credit or bond shall be held by Agent unless distributed in accordance with paragraph 5 above, or paid to County as part of the cost to complete improvements required by ordinance and/or agreement, or released in writing by County, through its Agent.

IN WITNESS WHEREOF, the parties hereto, being first duly authorized, have affixed their signatures on the date first above written.

ATTEST:

  
\_\_\_\_\_

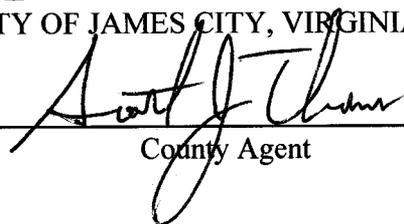
Approved as to form:

  
\_\_\_\_\_ County Attorney

Owner: JOHN J. MCCORMACK  
DIRECTOR OF FINANCE (SEAL)  
(Print Name and Title)

BY:   
\_\_\_\_\_ (Signature)

COUNTY OF JAMES CITY, VIRGINIA

BY:   
\_\_\_\_\_ County Agent

0359c.agr

COUNTY OF JAMES CITY, VIRGINIA

SILTATION AGREEMENT

THIS AGREEMENT, made this 19<sup>th</sup> day of MAY, 2005, by and between SAINT BEDE PARISH - CATHOLIC DIOCESE OF RICHMOND, and all successors in interest, a corporation ("Developer"), and the County of James City, Virginia, ("County"), and Darryl Cook, ("Agent") the County's Administrator of the Erosion and Sediment Control Ordinance.

WITNESSETH:

WHEREAS, Developer, desires approval of plans by the Agent for the County, for a project known as PLAN OF DEVELOPMENT ST. BEDE'S RECTORY AND PARKING EXPANSION located at 3686 IRONBOUND RD, which plans include provision of siltation and erosion control measures as required by Chapter 8 of the Code of the County, and

WHEREAS, County desires to ensure the installation, maintenance and adequate performance of such control measures,

NOW THEREFORE, for and in consideration of the foregoing premises and the following terms and conditions, and in further consideration of the approval of the aforesaid plans by the County and the issuance of permits for the work proposed to be done thereunder the parties hereto agree as follows:

1. Developer has either:

- a. deposited with Agent, and Agent by this execution hereof acknowledges that he holds, the sum of \_\_\_\_\_

dollars (\$ 97,108 ) in escrow under and subject to the terms of this agreement, or;

- b. has furnished the County an irrevocable letter of credit or bond with corporate surety, whose terms and conditions are acceptable in substance and in form to the County Attorney, in the sum of NINETY SEVEN ONE HUNDRED AND EIGHT dollars (\$ 97,108 ), which letter of credit or bond is under and subject to the terms of this agreement.

The deposit, letter of credit or bond (collectively "Security Instrument") is designed to insure performance of the Developer's obligations and to insure reimbursement to the County in the event that it performs work or causes work to be performed pursuant to this Agreement and plans approved by and on file with the County.

2. In the event measures for the control of siltation and/or erosion as provided for on the plans referred to herein, or on any approved revision thereof, are not constructed at or prior to the occurrence of any rainstorm or other phenomena actually causing any siltation or erosion, County or its authorized agent shall have the right to enter upon Developer's property and construct such measures or do such other work as may be necessary to prevent further erosion or siltation, provided that County shall first give notice in writing to Developer or his superintendent of its intent so to do.

3. In the event measures for the control of siltation and/or erosion have been constructed, but fail, through overload and/or inadequate maintenance, to perform the function for which they were intended, County or its authorized agent, may in like manner to paragraph 2 above, enter to perform such reconstruction or maintenance as may be necessary to restore performance in accord with the plans, or approved revisions thereof, upon giving notice in writing to Developer or his superintendent of its intent so to do.

4. In the event there occurs siltation and/or erosion from the property covered by the plans referred to herein in sufficient quantity adversely to affect downstream drainage, or travel on any street, road, highway or other public way, then County may take such steps as may be necessary to restore functions to the affected drainage or travel way.

5. a. In the event County determines work shall be performed or causes to be performed work of any nature, including labor, use of equipment, and materials, under the provisions of paragraphs 2, 3 and 4 above, either by County staff, or other contractor, Agent shall draw and disburse to County on its order such sum or sums as may be requested, provided, however, that Agent's liability so to disburse shall be limited to the undistributed balance in its hands of:

1. the escrow amount, or
2. the letter of credit, or
3. the bond

Such surety may be drawn in total, if at the time the surety is to expire, if all improvements or any portion thereof are not complete and surety has not been adequately extended or replaced to ensure completion of the improvements. In addition, the County may draw a Security Instrument in the event it is not renewed or amended to remain in effect at least 10 days prior to its expiration. A notice that such draw has been made shall be delivered or mailed by County to Developer.

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- b. the letter of credit or bond shall be held by Agent unless distributed in accordance with paragraph 5 above, or paid to County as part of the cost to complete improvements required by ordinance and/or agreement, or released in writing by County, through its Agent.

IN WITNESS WHEREOF, the parties hereto, being first duly authorized, have affixed their signatures on the date first above written.

ATTEST:

Owner: WILLIAM H. CARR, PASTOR (SEAL)  
(Print Name and Title)

*Wignia K. Debed*

BY:

*[Signature]*  
(Signature)

Approved as to form:

COUNTY OF JAMES CITY, VIRGINIA

*[Signature]*  
County Attorney

BY:

*[Signature]*  
County Agent

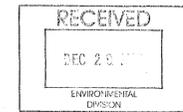
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# SAINT BEDE CATHOLIC CHURCH ROAD WIDENING IMPROVEMENTS

JAMES CITY COUNTY, VIRGINIA

SUP: 0015-2000 JCC SP: 0080-2008

COUNTY OF JAMES CITY FINAL SITE PLAN	
APPROVALS	DATE
Fire Dept. <i>SJT/ler</i>	6/22/08
Health Dept.	
VDOT	
Planning <i>Ecc</i>	7/15/08
Environ <i>SJT/ler</i>	6/22/08
Zoning Adm. <i>mar</i>	11/17/08
JCSA <i>CLP/ler</i>	12/18/08
County Eng. <i>dec/ler</i>	6/22/08
REA	
Other	



ENGINEERS • ARCHITECTS • PLANNERS  
**DJG** INC.  
 449 McLaws Circle, Williamsburg, VA 23185  
 Phone: 757-253-0673 Fax: 757-253-2319  
 Mobile: 757-374-5015 www.djginc.com  
 COMMITTEE TO EXCELLENCE

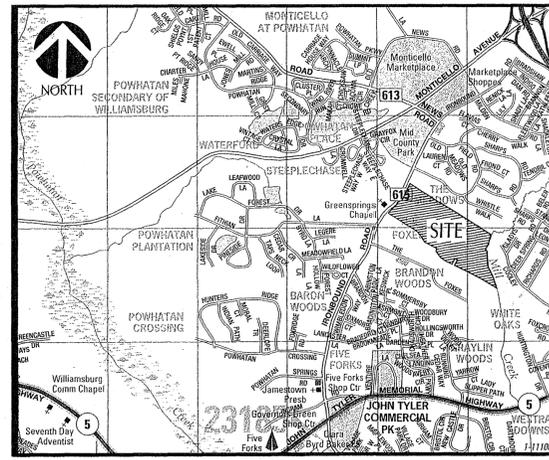


**PROPERTY ADDRESS:**

3686 IRONBOUND ROAD  
 WILLIAMSBURG, VA 23188

**PROPERTY INFORMATION:**

SITE ACREAGE: 42.50 ACRES  
 ZONING: R8 - RURAL RESIDENTIAL  
 PARCEL ID. NUMBER: 3830 100 018  
 UTILITY EASEMENT INSTRUMENT DOC # 08 002 3683



COPYRIGHT ADC THE MAP PEOPLE PERMITTED USE NUMBER 200606151

**VICINITY MAP**

SCALE: 1" = 2000'

**CONTACTS**

**OWNER**  
 ST. BEDE CATHOLIC CHURCH  
 3686 IRONBOUND ROAD  
 WILLIAMSBURG, VIRGINIA  
 OWNERS CONTACT: JACK CAREY  
 P. (757) 871-1781

**ENGINEER/ARCHITECT**  
 DJG, INC.  
 449 MCLAWS CIRCLE  
 WILLIAMSBURG, VA 23185  
 DANIEL J. DEYOUNG, P.E.  
 P. (757) 253-0673  
 F. (757) 253-2319  
 E. ddeyoung@djginc.com

**SHEET INDEX**

TS1	TITLE SHEET
C1	MASTER PLAN
C2	SITE PLAN
C3	NOTES AND DETAILS

**SITE TABULATION:**

TOTAL SITE ACREAGE: 42.50 ACRES  
 TOTAL AREA TO BE DISTURBED: 24,358 SF = 0.56 ACRES  
 EXISTING IMPERVIOUS AREA: 231,705.37 SF = 5.32 ACRES  
 NEW IMPERVIOUS AREA = 8,414 SF = 0.19 ACRES  
 TOTAL SITE IMPERVIOUS AREA = 240,119.37 SF = 5.51 ACRES  
 TOTAL NEW OPEN SPACE = 1,611,187.63 SF = 36.99 ACRES

**RESPONSIBLE LAND DISTURBER**

DANIEL J. DEYOUNG, P.E. OF DJG, INC. (757) 253-0673, IS IDENTIFIED AS THE RESPONSIBLE LAND DISTURBER WHO WILL BE IN CHARGE OF AND RESPONSIBLE FOR CARRYING OUT THE LAND DISTURBING ACTIVITY. THIS PERSON MEETS THE APPLICABLE REQUIREMENTS OF VIRGINIA CODE SECTION 10.1-563 AND 10.1-566 BY VIRTUE OF BEING A VA PROFESSIONAL ENGINEER.

UPON AWARD OF THE CONTRACT AND BEFORE ANY LAND DISTURBING ACTIVITY CAN BEGIN, THE CONTRACTOR SHALL EXECUTE AND SUBMIT A RESPONSIBLE LAND DISTURBER NOTIFICATION FORM TO JAMES CITY COUNTY. AWARD OF THE CONTRACT WILL RELIEVE THE ABOVE SIGNER OF ALL RESPONSIBILITY.

**GENERAL NOTES:**

- NO NEW SIGNS ON PUBLIC PROPERTY ARE PROPOSED WITH THE APPLICATION.
- ANY NEW UTILITIES SHALL BE PLACED UNDERGROUND IN ACCORDANCE WITH SECTION 24-200 OF THE JAMES CITY COUNTY ZONING ORDINANCE.
- SITE RECEIVES PUBLIC WATER AND SEWER.
- PROPOSED AMENDMENTS ADDRESS INTERNAL TRAFFIC ISSUES. THE PROPOSED RESOLUTION IS TO PROVIDE PAVEMENT WIDENING TO INCREASE TURNING RADI, INCREASE MERGING AND QUEING DISTANCES WHEN EXITING THE FACILITY AND INCREASE TRAFFIC EFFICIENCY AT THE DROP-OFF/PICK UP AREA.

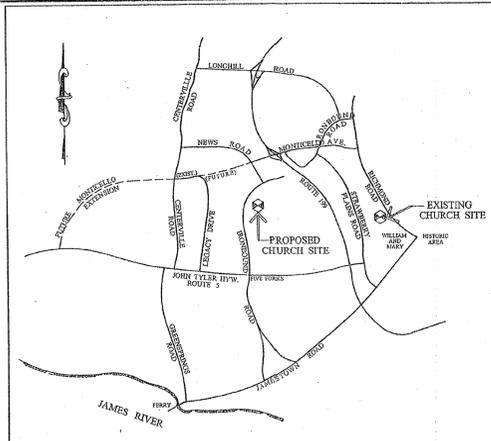
REVISIONS	
DATE	DESCRIPTION
1 9/25/08	RESPONSE TO JCC COMMENTS DATED 7/9/08

TITLE SHEET  
 ST. BEDE CATHOLIC CHURCH  
 AMENDED SITE PLAN  
 WILLIAMSBURG, VIRGINIA

SCALE AS NOTED	DESIGNED LS	DRAWN ME	CHECKED KS	DATE 6/25/08
COMMISSION NUMBER 2080010				
SHEET NUMBER TS1				
1 OF 4				

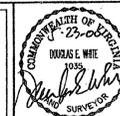
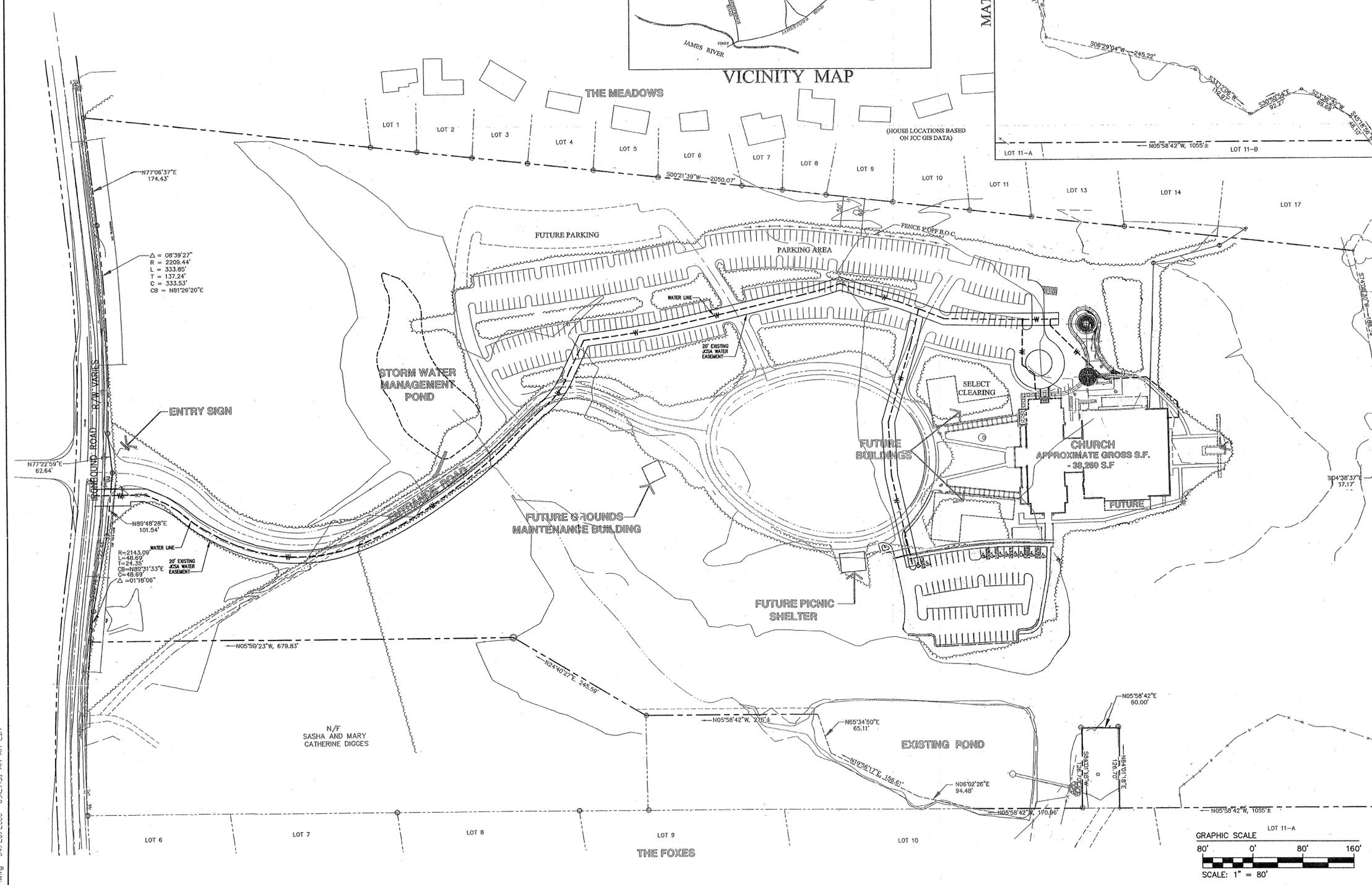
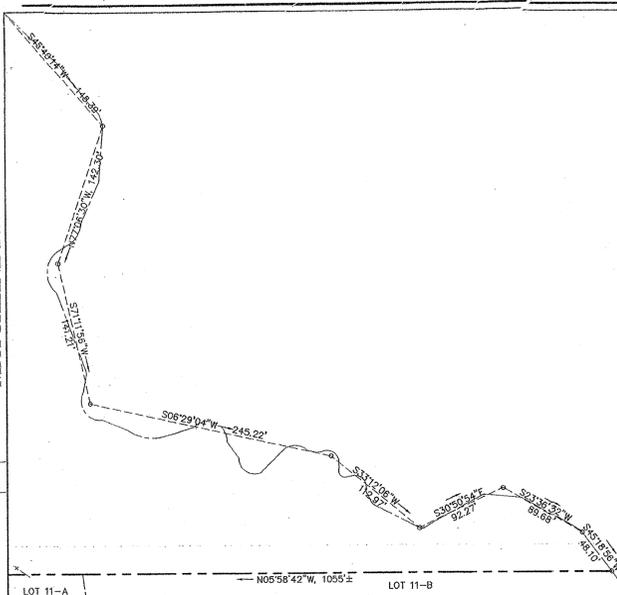
### PLAN DATA

**PLANNED USE:** CHURCH (ASSEMBLY)  
**PHASING:** NONE  
**FLOOR SPACE:** 38,260 GROSS SQ. FT.  
**ACREAGE:** 42.8± ACRES



VICINITY MAP

MATCHLINE BELOW



4229 Hubbard Road  
 Suite 100  
 Williamsburg, VA 23185  
 Tel: (757) 253-2519  
 Fax: (757) 253-2519  
 Email: info@landmarkdesign.com



LANDMARK DESIGN GROUP  
 Landscape Architects • Environmental Consultants

REVISIONS	DATE	DESCRIPTION
1	1/9/25/08	RESPONSE TO JCC COMMENTS DATED 7/9/08

REVISIONS	DATE	DESCRIPTION
1	1/9/25/08	RESPONSE TO JCC COMMENTS DATED 7/9/08

**MASTER PLAN FOR SPECIAL USE PERMIT**  
**ST. BEDE CATHOLIC CHURCH**

MATCHLINE ABOVE  
**MASTER PLAN FOR SPECIAL USE PERMIT**  
**ST. BEDE CATHOLIC CHURCH**

N/F  
 SASHA AND MARY  
 CATHERINE DIOCESE

GRAPHIC SCALE  
 80' 0' 80' 160'  
 SCALE: 1" = 80'  
 1 OF 1

**ENGINEERS • ARCHITECTS • PLANNERS**  
 449 McLaws Circle, Williamsburg, VA 23185  
 Phone: 757.253.2519 • Fax: 757.253.2519  
 Website: www.dfginc.com



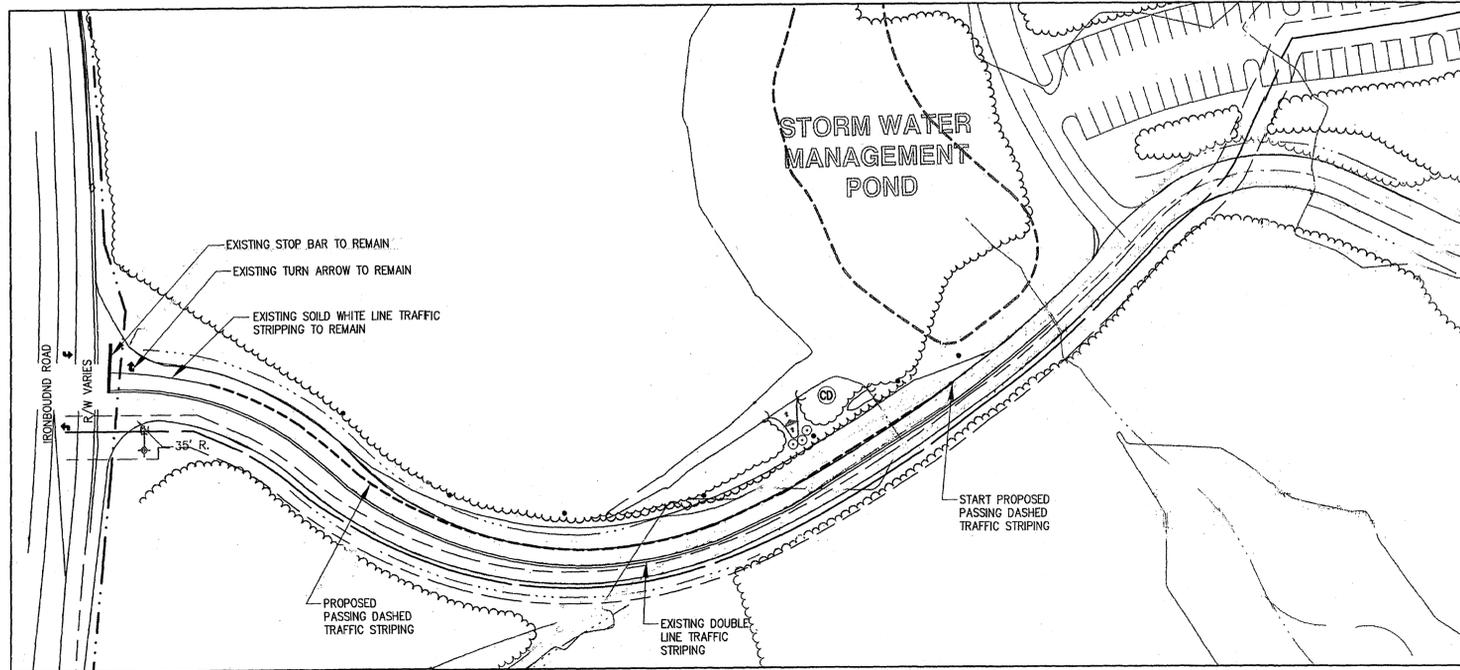
COMMUNITY OF VIRGINIA  
 DANIEL JACKSON  
 DE YOUNG  
 Lic. No. 003517  
 PROFESSIONAL ENGINEER

REVISIONS	DATE	DESCRIPTION
1	1/9/25/08	RESPONSE TO JCC COMMENTS DATED 7/9/08

**MASTER PLAN**  
**ST. BEDE CATHOLIC CHURCH**  
**AMENDED SITE PLAN**  
 WILLIAMSBURG, VIRGINIA

SCALE AS NOTED  
 DESIGNED: LUS  
 DRAWN: ME  
 CHECKED: KS  
 DATE: 6/25/08

COMMISSION NUMBER  
**2080010**  
 SHEET NUMBER  
**C1**  
 2 OF 4



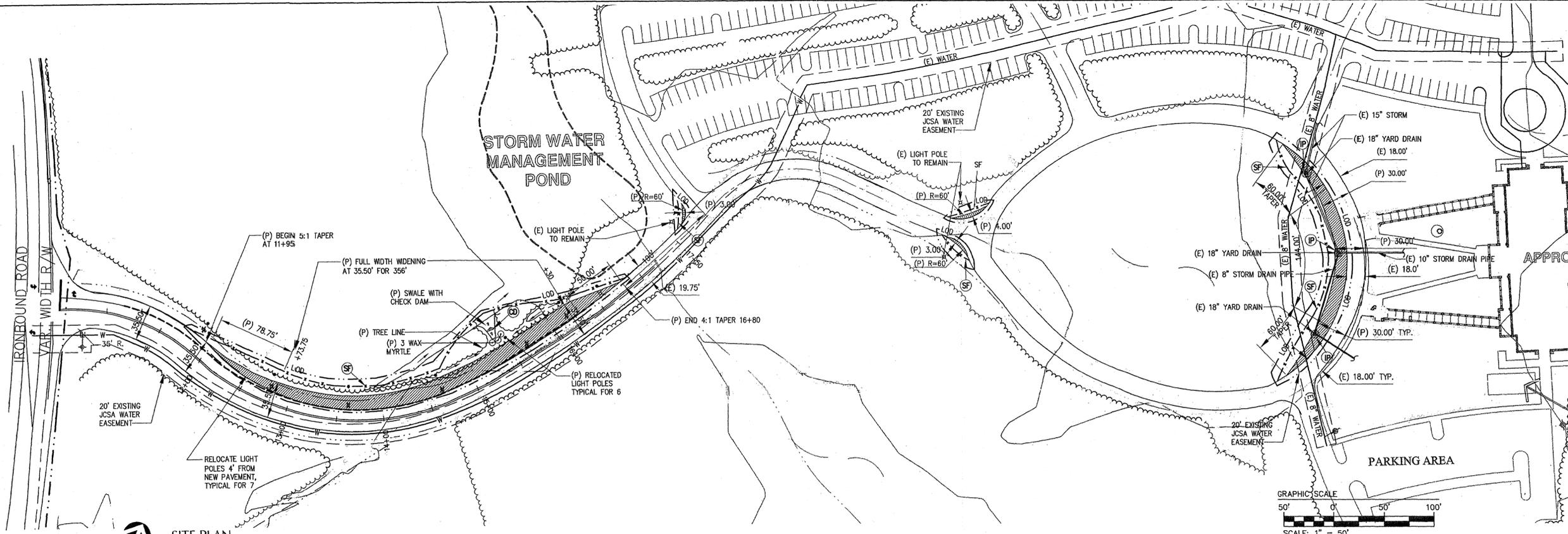
**STRIPING PLAN**  
SCALE: 1"=50'

**LEGEND**

- EXISTING:**
- = FIRE HYDRANT
  - ⊗ = LIGHT POLE (L.P.)
  - ⊙ = POWER POLE
  - ⊕ = SIGN
  - R/W = RIGHT-OF-WAY
  - ⊕ = WATER METER
  - ⊕ = STORM CATCH BASIN
  - ⊕ = FIBER OPTICS CABLE WITNESS POST
  - ⊕ = IRON ROD FOUND
  - ⊕ = IRON ROD SET
  - ⊕ = IRON PIPE FOUND
  - ⊕ = IRON PIPE SET
  - 280 = CONTOURS (FEET)
  - = EXISTING TREE
  - = TREELINE
  - = STORMWATER PIPES
- PROPOSED:**
- (E) = EXISTING
  - (P) = PROPOSED
  - R = CURB RADIUS
  - TYP. = TYPICAL
  - = RELOCATE LIGHT POLE
  - ▨ = CONCRETE PAVEMENT
  - - - LOD - - - = LIMIT OF DISTURBANCE
  - x - x - = (SF) = SILT FENCE
  - ⊕ (IP) = INLET PROTECTION PER VESCH 3.07

**GENERAL NOTES**

1. MASTER PLAN AND TOPOGRAPHY UNDERLAY IS FROM APPROVED LANDMARK DESIGN GROUP DEVELOPMENT DRAWINGS DATED 03/21/2000. DESIGNED BY DEW AND CHECKED BY RSP. THIS IS DRAWING SHEET C1 FROM THE MASTER PLAN SPECIAL USE PERMIT DRAWING SET. THE DRAWING IS STAMPED BY DOUGLAS E. WHITE - L.S.# 1035 AND APPEARS AS SHEET C1 OF THIS SUBMISSION.
2. PVC IRRIGATION PIPING EXISTS AT THE PROPOSED EDGE OF WIDENING AT THE PROPOSED DROP OFF/ PICK UP AREA. CONTRACTOR MUST TAKE CARE AND NOT DISTURB THIS SYSTEM.
3. THE LIMIT OF DISTURBANCE AND SILT FENCE LINES ARE CONcidental. THEY ARE SHOWN IN THEIR APPROXIMATE POSITION.
4. ALL ROADS SHALL BE PRIVATE RIGHT-OF-WAYS AND SHALL NOT BE MAINTAINED BY JAMES CITY COUNTY OR THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT).
5. CONTRACTOR TO ENSURE WIDENED PAVEMENT DRAINS TO EXISTING YARD DRAINS WHICH MAY HAVE TO BE ADJUSTED VERTICALLY.
6. TREE REPLACEMENT: ANY TREES WITH A DIAMETER OF 10" OR MORE WHICH ARE REMOVED DUE TO ROAD WIDENING SHALL BE REPLACED 1 FOR 1 WITH A MIXTURE OF THE FOLLOWING: LOBLOLLY PINE, RED MAPLE, SWEET GUM, AMERICAN HOLLY, RED OAK, TULIP POPLAR. MINIMUM SIZE SHALL BE 1 GALLON.
7. LANDSCAPE INFORMATION: SHRUBS TO SCREEN ROCK CHECK DAM SHALL BE SOUTHERN WAX MYRTLE (MYRTICA CERIFERA). MATURE HEIGHT 10'-15'.
8. REQUIRED PERMITS AND AGREEMENTS TO BE EXECUTED:  
 SUBMIT TO: ITEM:  
 JCC LAND-DISTURBING PERMIT  
 JCC SILTATION AGREEMENT, WITH SURETY SHALL BE EXECUTED BY OWNER  
 DCR VIRGINIA STORM WATER MANAGEMENT PERMIT (VSWMP) REGISTRATION STATEMENT
9. EASEMENTS DENOTED AS "JCSA EASEMENTS" ARE FOR THE EXCLUSIVE USE OF THE JAMES CITY COUNTY SERVICE AUTHORITY AND THE PROPERTY OWNER. OTHER UTILITY SERVICE PROVIDERS DESIRING TO USE THESE EASEMENTS WITH THE EXCEPTION OF PERPENDICULAR UTILITY CROSSINGS MUST OBTAIN AUTHORIZATION FOR ACCESS AND USE FROM JCSA AND THE PROPERTY OWNER. ADDITIONALLY, JCSA SHALL NOT BE HELD RESPONSIBLE FOR ANY DAMAGE TO IMPROVEMENTS WITHIN THIS EASEMENT, FROM ANY CAUSE.



**SITE PLAN**  
SCALE: 1"=50'

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NO.	DATE	DESCRIPTION
1	12/25/08	RESPONSE TO JCC COMMENTS DATED 7/9/08.

SITE PLAN  
 ST. BEDE CATHOLIC CHURCH  
 AMENDED SITE PLAN  
 WILLIAMSBURG, VIRGINIA

SCALE AS NOTED	COMMISSION NUMBER
RESIGNED LS/AME	2080010
DRAWN MADE	SHEET NUMBER
CHECKED KMS	C2
DATE 6/25/08	OF 4

**JAMES CITY COUNTY ENVIRONMENTAL DIVISION**  
**EROSION AND SEDIMENT CONTROL NOTES**

**REVISED 07/06/01**

THE PURPOSE OF THE EROSION CONTROL MEASURES SHOWN ON THESE PLANS SHALL BE TO PRECLUDE THE TRANSPORT OF ALL WATERBORNE SEDIMENTS RESULTING FROM CONSTRUCTION ACTIVITIES ENTERING ONTO ADJACENT PROPERTIES OR STATE WATERS. IF FIELD INSPECTION REVEALS THE INADEQUACY OF THE PLANS TO CONFINE SEDIMENT TO THE PROJECT SITE, ALL APPROPRIATE MODIFICATIONS WILL BE MADE TO CORRECT ANY PLAN DEFICIENCIES. IN ADDITION TO THESE NOTES, ALL PROVISIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS SHALL APPLY TO THIS PROJECT.

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, 3RD EDITION, 1992. THE CONTRACTOR SHALL BE THOROUGHLY FAMILIAR WITH ALL APPLICABLE MEASURES CONTAINED THEREIN THAT MAY BE PERTINENT TO THIS PROJECT, INCLUDING MINIMUM STANDARDS 1 THROUGH 19. IF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS FOUND TO BE INADEQUATE IN THE FIELD, THE MINIMUM STANDARDS WILL APPLY IN ADDITION TO THE PROVISIONS OF THE APPROVED PLAN.
2. AS A PREREQUISITE TO APPROVAL OF AN EROSION AND SEDIMENT CONTROL PLAN FOR LAND-DISTURBING ACTIVITIES, THE NAME OF A RESPONSIBLE LAND DISTURBER SHALL BE PROVIDED. THE RESPONSIBLE LAND DISTURBER SHALL BE AN INDIVIDUAL WHO HOLDS A VALID CERTIFICATE OF COMPETENCE ISSUED BY THE VIRGINIA DEPARTMENT OF CONSERVATION AND IS DEFINED AS THE PERSON IN CHARGE OF AND RESPONSIBLE FOR CARRYING OUT THE LAND DISTURBING ACTIVITY. PERMITS OR PLANS WITHOUT THIS INFORMATION ARE DEEMED INCOMPLETE AND WILL NOT BE APPROVED UNTIL PROPER NOTIFICATION IS RECEIVED. ALSO, IF THE PERSON DESIGNATED AS RESPONSIBLE LAND DISTURBER CHANGES BETWEEN THE TIME OF PLAN APPROVAL AND THE SCHEDULED PRECONSTRUCTION MEETING, THE ENVIRONMENTAL DIVISION SHALL BE INFORMED OF THE CHANGE, IN WRITING, 24-HOURS IN ADVANCE OF THE PRECONSTRUCTION MEETING.
3. A PRECONSTRUCTION MEETING SHALL BE HELD ON THE SITE BETWEEN THE COUNTY, THE DEVELOPER, THE PROJECT ENGINEER, THE RESPONSIBLE LAND DISTURBER, AND THE CONTRACTOR PRIOR TO ISSUANCE OF THE LAND DISTURBER PERMIT. THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION TO THE COUNTY FOR APPROVAL PRIOR TO THE PRECONSTRUCTION MEETING. THE DESIGNATED RESPONSIBLE LAND DISTURBER IS REQUIRED TO ATTEND THE PRECONSTRUCTION MEETING FOR THE PROJECT.
4. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS SHALL BE PROTECTED BY A TEMPORARY CONSTRUCTION ENTRANCE TO PREVENT TRACKING OF MUD ONTO PUBLIC RIGHT-OF-WAYS. AN ENTRANCE PERMIT FROM THE VIRGINIA DEPARTMENT OF TRANSPORTATION IS REQUIRED PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN STATE RIGHT-OF-WAYS. WHERE SEDIMENT IS TRANSPORTED INTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE THOROUGHLY CLEANED AT THE END OF EACH DAY (STD & SPEC 3.02)
5. SEDIMENT BASINS AND TRAPS (STD. & SPEC 3.13 AND 3.14), PERIMETER DIKES (STD. & SPEC 3.09 AND 3.12), SEDIMENT FILTER BARRIERS (STD. & SPEC 3.05) AND OTHER MEASURES INTENDED TO TRAP SEDIMENT ON-SITE MUST BE CONSTRUCTED AS A FIRST STEP IN GRADING AND MUST BE MADE FUNCTIONAL PRIOR TO ANY UPLSLOPE LAND DISTURBANCE TAKING PLACE. EARTHEN STRUCTURES SUCH AS DAMS, DIKES, AND DIVERSIONS MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER INSTALLATION. PERIODIC INSPECTIONS OF THE EROSION AND CONTROL MEASURES BY THE OWNER OR OWNERS REPRESENTATIVE SHALL BE MADE TO ASSESS THEIR CONDITION. ANY NECESSARY MAINTENANCE OF THE MEASURES SHALL BE ACCOMPLISHED IMMEDIATELY AND SHALL INCLUDE THE REPAIR OF MEASURES DAMAGED BY ANY SUBCONTRACTOR INCLUDING THOSE OF THE PUBLIC UTILITY COMPANIES.
6. SURFACE FLOWS OVER CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER REDIRECTING FLOWS FROM TRANSVERSING THE SLOPES OR BY INSTALLING MECHANICAL DEVICES TO SAFELY LOWER WATER DOWN SLOPE WITHOUT CAUSING EROSION. A TEMPORARY FILL DIVERSION (STD SPEC 3.10) AND SLOPE DRAIN (STD & SPEC) SHALL BE INSTALLED PRIOR TO THE END OF EACH WORKING DAY.
7. SEDIMENT CONTROL MEASURES MAY REQUIRE MINOR FIELD ADJUSTMENTS AT THE TIME OF CONSTRUCTION TO INSURE THEIR INTENDED PURPOSE IS ACCOMPLISHED. ENVIRONMENTAL DIVISION APPROVAL WILL BE REQUIRED FOR OTHER DEVIATIONS FROM THE APPROVED PLAN.
8. THE CONTRACTOR SHALL PLACE SOIL STOCKPILES AT THE LOCATIONS SHOWN ON THE PLAN. SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. OFF-SITE WASTE OR BORROW AREA SHALL BE APPROVED BY THE ENVIRONMENTAL DIVISION PRIOR TO THE IMPORT OF ANY BORROW OR EXPORT OF ANY WASTE TO OR FROM THE PROJECT SITE.
9. THE CONTRACTOR SHALL COMPLETE DRAINAGE FACILITIES WITHIN 30 DAYS FOLLOWING COMPLETION OF ROUGH GRADING AT ANY POINT WITHIN THE PROJECT. THE INSTALLATION OF DRAINAGE FACILITIES SHALL TAKE PRECEDENCE OVER ALL UNDERGROUND UTILITIES. OUTFALL DITCHES FROM DRAINAGE STRUCTURES SHALL BE STABILIZED IMMEDIATELY AFTER CONSTRUCTION OF THE SAME (STD SPEC 3.18). THIS INCLUDES INSTALLATION OF EROSION CONTROL, STONE OR PAVED DITCHES WHERE REQUIRED. ANY DRAINAGE OUTFALLS REQUIRED FOR A STREET MUST BE COMPLETED BEFORE STREET GRADING OR UTILITY INSTALLATION BEGINS.
10. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREA WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
11. NO MORE THAN 300 FEET OF SANITARY SEWER, STORM DRAIN, WATER, OR UNDERGROUND UTILITY LINES ARE TO BE OPEN AT ONE TIME. FOLLOWING INSTALLATION OF ANY PORTION OF THESE ITEMS, ALL DISTURBED AREAS ARE TO BE IMMEDIATELY STABILIZED (I.E. THE SAME DAY).
12. IF DISTURBED AREA STABILIZATION IS TO BE ACCOMPLISHED DURING THE MONTHS OF DECEMBER, JANUARY, OR FEBRUARY, STABILIZATION SHALL CONSIST OF MULCHING (STD & SPEC 3.35). SEEDING WILL THEN TAKE PLACE AS SOON AS THE SEASON PERMITS.
13. THE TERM SEEDING, FINAL VEGETATIVE COVER, OR STABILIZATION ON THIS PLAN SHALL MEAN THE SUCCESSFUL GERMINATION AND ESTABLISHMENT OF A STABLE GRASS COVER FROM A PROPERLY PREPARED SEEDBED CONTAINING THE SPECIFIED AMOUNTS OF SEED, LIME, AND FERTILIZER. IRRIGATION SHALL BE REQUIRED AS NECESSARY TO ENSURE ESTABLISHMENT OF GRASS COVER.
14. ALL SLOPES STEEPER THAN 3H:1V SHALL REQUIRE THE USE OF EROSION CONTROL BLANKETS AND MATTING TO AID IN THE ESTABLISHMENT OF A VEGETATIVE COVER. INSTALLATION SHALL BE IN ACCORDANCE WITH STD & SPEC 3.36. SOIL STABILIZATION BLANKETS AND MATTING AND MANUFACTURER'S INSTRUCTIONS. NO SLOPES SHALL BE CREATED STEEPER THAN 2H:1V.
15. INLET PROTECTION (STD. & SPEC 3.07 AND 3.08) SHALL BE PROVIDED FOR ALL STORM DRAIN AND CULVERT INTLETS FOLLOWING CONSTRUCTION OF THE SAME.
16. TEMPORARY LINERS, SUCH AS POLYETHYLENE SHEETS, SHALL BE PROVIDED FOR ALL PAVED DITCHES UNTIL THE PERMANENT CONCRETE LINER IS INSTALLED.
17. PAVED DITCHES SHALL BE REQUIRED WHEREVER ACCELERATED EROSION IS EVIDENT. PARTICULAR ATTENTION SHALL BE PAID TO THOSE AREAS WHERE GRADES EXCEED 3 PERCENT.
18. TEMPORARY EROSION CONTROL MEASURES SUCH AS SILT FENCE ARE NOT TO BE REMOVED UNTIL ALL DISTURBED AREAS ARE STABILIZED. TRAPPED SEDIMENT SHALL BE SPREAD, SEED, AND MULCHED. AFTER THE PROJECT AND STABILIZATION IS COMPLETE, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS.
19. NO SEDIMENT TRAP OR SEDIMENT BASIN SHALL BE REMOVED UNTIL A) AT LEAST 75 PERCENT OF THE LOTS WITHIN THE DRAINAGE AREA TO THE TRAP OR BASIN HAVE BEEN SOLD TO A THIRD PARTY (UNRELATED TO THE DEVELOPER) FOR THE CONSTRUCTION OF HOMES; AND/OR B) 60 PERCENT OF THE SINGLE-FAMILY LOTS WITHIN THE DRAINAGE AREA TO THE TRAP OR BASIN HAVE BEEN COMPLETED AND THE SOIL STABILIZED. A BULK SALE OF THE LOTS TO ANOTHER BUYER DOES NOT SATISFY THIS PROVISION. SEDIMENT TRAPS AND SEDIMENT BASINS SHALL NOT BE REMOVED WITHOUT THE EXPRESS AUTHORIZATION OF THE JAMES CITY COUNTY ENVIRONMENTAL DIVISION.
20. RECORD DRAWINGS (AS-BUILTS) AND CONSTRUCTION CERTIFICATIONS ARE BOTH REQUIRED FOR NEWLY CONSTRUCTED OR MODIFIED STORMWATER MANAGEMENT/BMP FACILITIES. CERTIFICATION ACTIVITIES SHALL BE ADEQUATELY COORDINATED AND PERFORMED BEFORE, DURING, AND FOLLOWING CONSTRUCTION IN ACCORDANCE WITH THE CURRENT VERSION OF THE JAMES CITY COUNTY ENVIRONMENTAL DIVISION, STORMWATER MANAGEMENT/BMP FACILITIES, RECORD DRAWINGS AND CONSTRUCTION CERTIFICATION, STANDARD FORMS AND INSTRUCTIONS.
21. DESIGN AND CONSTRUCTION OF PRIVATE-TYPE SITE DRAINAGE SYSTEMS OUTSIDE VDOT RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT VERSION OF THE JAMES CITY COUNTY ENVIRONMENTAL DIVISION, STORMWATER DRAINAGE CONVEYANCE SYSTEMS (NON-BMP RELATED), GENERAL DESIGN AND CONSTRUCTION GUIDELINES.

**EROSION AND SEDIMENT CONTROL NARRATIVE**

MINIMUM STANDARDS MAINTAINED AS NOTED IN THESE PLANS FOR THE DURATION OF THE PROJECT UNLESS OTHERWISE DIRECTED BY THE OWNER OR THE OWNERS REPRESENTATIVE.

PROJECT DESCRIPTION: THE PURPOSE OF THIS PROJECT IS FOR ROAD WIDENING IMPROVEMENTS AT FIVE AREAS AT ST. BEDE CATHOLIC CHURCH.

THE PROPOSED AREA OF DISTURBANCE FOR THIS PROJECT IS APPROXIMATELY 23,693 SF (0.54 ACRES), 8,314 SF (0.19 ACRES) OF IMPERVIOUS AREA WILL BE CREATED.

**EXISTING SITE CONDITIONS:**

THE SITE IS AN EXISTING CHURCH AND PARKING LOT WHICH DRAINS TO AN EXISTING STORMWATER SYSTEM. THERE ARE NO CRITICAL EROSION AREAS ON THE SITE. SOIL EROSION SHALL BE PREVENTED THROUGH THE USE OF SILT FENCE.

ADJACENT AREAS: THIS SITE IS LOCATED ON 3686 IRONBOUND ROAD IN WILLIAMSBURG VIRGINIA. IT IS BORDERED BY IRONBOUND ROAD AND RESIDENTIAL PROPERTIES.

SOILS: SOIL INFORMATION FOR THIS AREA IS FROM THE USDA SOIL SURVEY. THE PREDOMINANT SOIL TYPES AT THE AREA OF DISTURBANCE ARE:

- #1C CRAVEN-UOHEE COMPLEX - THESE SOILS ARE DEEP AND MODERATELY WELL DRAINED. THE SLOPES RANGE FROM 6% TO 10%.
- #10B CRAVEN FINE SANDY LOAM - THIS SOIL IS DEEP, GENTLY SLOPING AND MODERATELY WELL DRAINED. THE SLOPES RANGE FROM 2% TO 6%.

EROSION AND SEDIMENT CONTROL MEASURES: UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK 1992.

**STRUCTURAL PRACTICES:**

SILT FENCE (3.05): SILT FENCE WILL BE INSTALLED AT THE LIMITS OF GRADING IN ORDER TO INTERCEPT AND DETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED AREAS DURING CONSTRUCTION OPERATIONS AND TO PREVENT SEDIMENT FROM LEAVING THE SITE. SILT FENCE SHALL BE INSTALLED AT THE PERIMETER OF THE SITE AS SMALL DRAINAGE AREAS EXIST IN THESE LOCATIONS.

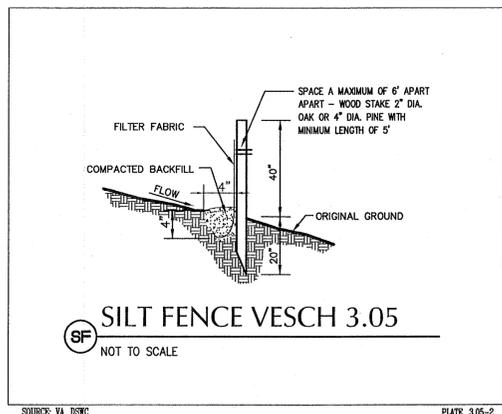
STORM DRAIN INLET PROTECTION (3.07): INLET PROTECTION (INCLUDES YARD INLET PROTECTION) SHALL BE PROVIDED FOR ALL EXISTING STORM DRAIN INTLETS IN ORDER TO PREVENT SEDIMENTS FROM MIGRATING OFF-SITE AND ACCUMULATING WITHIN THE DRAIN SYSTEM.

VEGETATIVE PRACTICES: PERMANENT AND TEMPORARY SEEDING ACTIVITIES OF DENUDED AREAS SHALL BE IN ACCORDANCE WITH THE MINIMUM STANDARDS OF THE CURRENT VIRGINIA EROSION AND SEDIMENTATION CONTROL HANDBOOK.

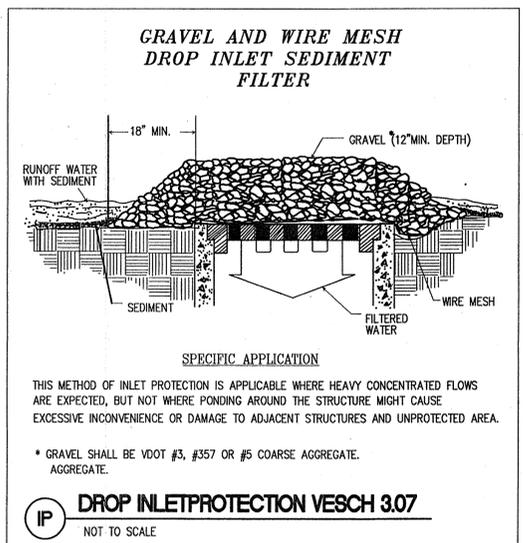
TEMPORARY SEEDING (3.31): ALL DISTURBED AREAS ARE TO BE STABILIZED BY SEEDING AND MULCHING AS SOON AS GRADING IS COMPLETED. REFER TO VESCH SECTION 3.31 FOR APPROPRIATE STANDARDS AND CRITERIA.

PERMANENT STABILIZATION: PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT (UNDISTURBED) FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE (1) YEAR. FINAL STABILIZATION SHALL BE INSPECTED BY THE CITY OF NEWPORT NEWS EROSION CONTROL INSPECTOR OR REPRESENTATIVE. TOPSOIL TO BE USED ON SITE SHALL BE INSPECTED AS REQUIRED IN VESCH 3.30. % PURE LIVE SEED SHALL BE A TALL FESCUE VARIETY LISTED IN CATEGORY 1, "2004-2005 VIRGINIA TURF GRASS VARIETY RECOMMENDATIONS", APPLIED AT A RATE OF 250 LBS/ACRE, (4 TO 6 LBS/1000 SQ.FT). PLANTING TIMES SHALL BE SEPT. 1 TO OCT. 15 OR FEBRUARY AND MARCH. FERTILIZER WILL BE OF A CONTROLLED RELEASE COMMERCIAL GRADE APPLIED BY HAND OR IN HYDROSEED MIX. LIMING MATERIAL WILL BE USED AS NECESSARY TO RAISE PH LEVELS OF THE TOPSOIL TO A POINT FAVORABLE TO THE SEED SPECIFIED. AREAS NOT TO BE SEEDDED WILL BE STABILIZED WITH CONCRETE OR ASPHALT AS INDICATED WITHIN THE CONSTRUCTION DOCUMENTS.

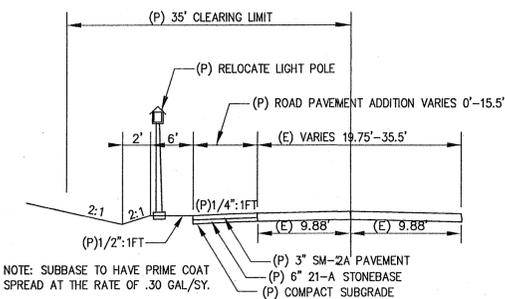
CONSTRUCTION GENERAL MAINTENANCE: ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED AFTER EACH SIGNIFICANT RAINFALL EVENT. FURTHER, ALL MEASURES SHALL BE INSPECTED, AND REPAIRED/PREPARED IF NECESSARY, PRIOR TO FORECASTED LARGE STORM EVENTS. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR: \* THE SILT FENCE AND INLET PROTECTION CONTROLS WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION OF THE FABRIC. SEDIMENT SHALL BE REMOVED WHEN THE LEVEL OF SEDIMENT DEPOSITION REACHES HALFWAY TO THE TOP OF THE BARRIER. THE CONTRACTOR IS RESPONSIBLE TO ADHERE TO ALL MAINTENANCE REQUIREMENTS OF THE EROSION AND SEDIMENT CONTROL MEASURES AS OUTLINED IN VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, 1992. THE SEEDED AREAS WILL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREA SHOULD BE FERTILIZED AND RESEEDDED AS NEEDED.



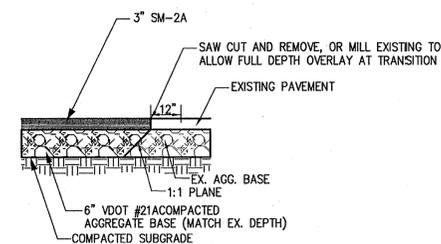
SOURCE: VA. DSWC PLATE 3.05-2



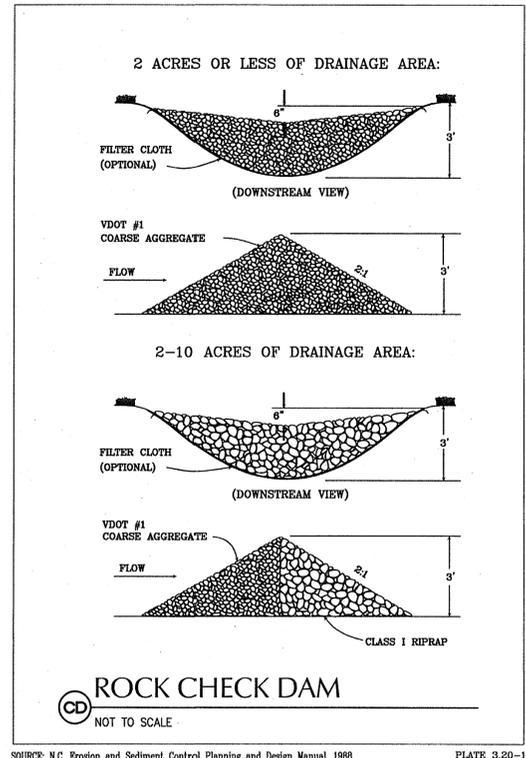
SOURCE: VA. DSWC PLATE 3.07-2



TYPICAL SECTION OF PROPOSED WIDENING  
NOT TO SCALE



NEW & EXISTING PAVEMENT TRANSITION  
NOT TO SCALE



SOURCE: N.C. Erosion and Sediment Control Planning and Design Manual, 1988 PLATE 3.20-1

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COMMONWEALTH OF VIRGINIA  
 PROFESSIONAL SEAL  
 DANIEL JACKSON  
 L.C. No. 009817  
 DEVELOPING  
 CIVIL ENGINEER

NO.	DATE	DESCRIPTION
1	8/25/08	RESPONSE TO ACC COMMENTS DATED 7/9/08.

NOTES AND DETAILS  
 ST. BEDE CATHOLIC CHURCH  
 AMENDED SITE PLAN  
 WILLIAMSBURG, VIRGINIA

SCALE AS NOTED	COMMISSION NUMBER
DESIGNED DATE	2080010
DRAWN DATE	SHEET NUMBER
CHECKED DATE	C3
DATE	4 OF 4

**TRANSMITTAL**

**DATE:** November 17, 2008

**TO:** Environmental  
Fire  
JCSA

**FROM:** Leanne Reidenbach, Senior Planner

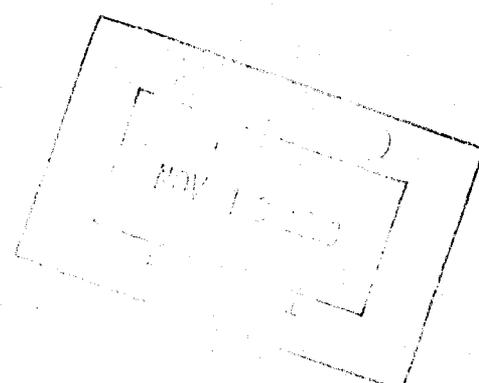
**SUBJECT:** SP-0128-2008, St. Bede *CATHOLIC CHURCH - ROAD WIDENING IMPROVEMENTS* Internal Sidewalks SP Amend.

**ITEMS**

**ATTACHED:** Plan

**ACTION:** Please review and return comments by December 1, 2008.

**NOTES:** Plan amends SP-0028-2001 to pave portions of existing mulch trails that connect the parking lot to the church building. See SUP-0015-2000 for conditions.



*PLAN AMENDMENT IS APPROVED BY THE ENVIRONMENTAL DIVISION. SO LONG AS ALL LAND DISTURBING OPERATIONS ARE LIMITED TO PATH ONLY, NO LAND DISTURBING PERMIT WILL BE REQUIRED.*

*Leanne Reidenbach (607 SST)  
11/18/08*

*11/18/08  
B.11. No comments.  
Mike.*

*11/18/08  
B.11. No comments.  
Mike.*

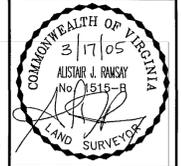
# SAINT BEDE CATHOLIC CHURCH

SP-132-04

RECEIVED  
PLANNING DEPARTMENT  
MAR 2005

COUNTY OF JAMES CITY  
FINAL SITE PLAN

APPROVALS	DATE
Fire Dept. <i>SE/CLMS</i>	2/28/05
Health Dept. <i>CLMS</i>	1/29/04
VDOT	
Planning <i>A</i>	4/11/05
Environ. <i>DE/CLMS</i>	4/7/05
Zoning Act. <i>A</i>	4/15/05
JCSA <i>TR/CLMS</i>	4/15/05
County Eng. <i>CLMS</i>	4/15/05
Other	



## Legend

(UG) INDICATES UNDERGROUND UTILITY  
(OH) INDICATES OVER-HEAD UTILITY

EXISTING	DESCRIPTION	PROPOSED
	SANITARY SEWER	
	WATER	
	STORM SEWER	
	ELECTRIC LINE	
	GAS LINE	
	TELEPHONE	
	CABLE TV LINE	
	CLEANOUT	
	FORCE MAIN	
	MANHOLE	
	CATCH BASIN/CURB BASIN	
	DROP INLET	
	PLASTIC YARD DROP INLET	
	HEADWALL (W/ WINGS)	
	FLARED END SECTION	
	WATER METER	
	METER VAULT	
	YARD HYDRANT (SIAMESE CONNECTION)	
	FIRE HYDRANT	
	VALVE	
	TELEPHONE PEDESTAL	
	TELEPHONE POLE	
	POLE W/ LIGHT	
	POWER POLE	
	GUY WIRE	
	POLE MOUNTED SIGN	
	GROUND ELEVATION	
	GROUND CONTOUR	
	CONCRETE CURB	
	CURB & GUTTER	
	REV. CONC. CURB & GUTTER	
	WARPED CURB & GUTTER	
	GRAVEL PAVEMENT	
	CEMENT CONCRETE	
	BITUMINOUS CONCRETE	
	BUILDING	
	PROJECT LIMITS	
	RIGHT-OF-WAY	
	CENTERLINE/BASELINE	
	PROPERTY LINE	
	DITCH, SWALE LINE	
	TREE LINE	
	FENCE	
	GUARDRAIL	
	BORING LOCATION W/ No.	
	BENCHMARK	

NOTE: SOME SYMBOLS SHOWN IN THIS LEGEND MAY NOT NECESSARILY BE USED FOR THIS PROJECT.

## BERKELEY MAGISTERIAL DISTRICT JAMES CITY COUNTY, VIRGINIA

### SITE PLAN AMENDMENT FOR RECTORY AND PARKING EXPANSION (AMENDMENT TO SP-28-01)

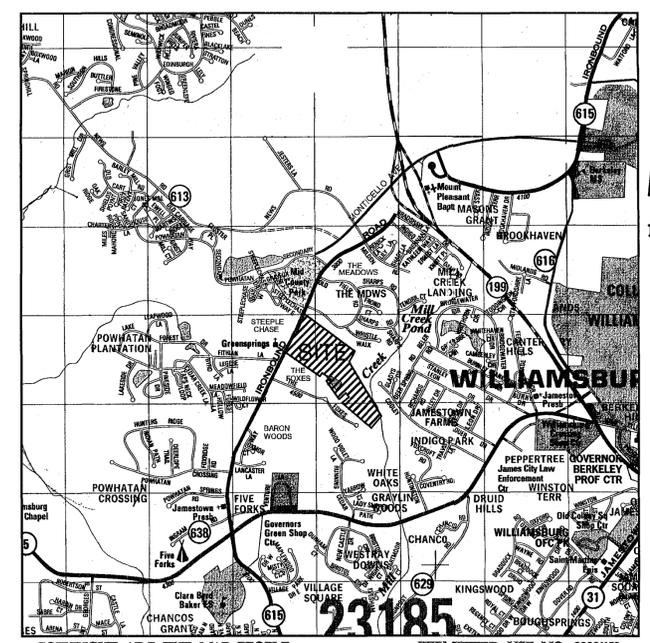
FIRST SUBMITTAL NOVEMBER 11, 2004  
SECOND SUBMITTAL FEBRUARY 4, 2005  
THIRD SUBMITTAL MARCH 17, 2005

## SHEET INDEX

SHEET NO.	DESCRIPTION
C-1	COVER SHEET
C-2	OVERALL PLAN
C-3	SITE DEVELOPMENT PLAN
C-4	NOTES AND DETAILS
C-4A	NOTES AND DETAILS
C-4B	FORCEMAIN & WATERLINE PROFILE
C-5	ENVIRONMENTAL INVENTORY AND WATERLINE PROFILE
C-6	GRINDER PUMP NOTES AND DETAILS
L-1	LANDSCAPE PLAN
L-2	LANDSCAPE NOTES AND DETAILS

## STATISTICAL DATA

TAX MAP AND PARCEL:	(38-3)(1-18)
ZONING:	R-8, RURAL RESIDENTIAL DISTRICT
PROPOSED USE:	HOUSE OF WORSHIP (SUP-15-00 APPROVED)
GROSS SITE ACREAGE:	42.9 AC.
EXISTING COVERAGE BY BUILDINGS:	33,052 SQ. FT.
PROPOSED BUILDING:	6,588 SQ.FT.
EXISTING SITE IMPERVIOUS AREA, (PERCENT):	5.1 AC. ( 11.9% OF PROPERTY )
PROPOSED IMPERVIOUS:	0.85 AC. ( 2.0% OF PROPERTY )
PROJECT AREA:	1.8 AC. ( 2.8% OF PROPERTY )
AREA DISTURBED:	1.8 AC. ( 2.8% OF PROPERTY )
F.E.M.A. PANEL NUMBER	510201 0035 B - DATED: FEB. 6, 1991
F.E.M.A. F.I.R.M. ZONE	ZONE X
PROPOSED RECTORY DATA:	
TOTAL FLOOR AREA:	6,588 SQ. FT.
PROPOSED HEIGHT:	30 FT.
PROPOSED FLOORS:	THREE ( INCLUDES BASEMENT )
PARKING REQUIREMENTS:	
USE CATEGORY:	CATEGORY C
PARKING REQUIRED:	300 SPACES
PARKING EXISTING:	318 SPACES (INCLUDES 301 REGULAR, 17* H.C. INCLUDING 7 TEMPORARY H.C.)
PARKING PROPOSED:	RECTORY: 51 REGULAR, 4 EXPECTANT MOTHER SPACES, 10 H.C. SPACES (3 VAN ACCESSIBLE)
TOTAL SITE PARKING:	379 SPACES
OWNER / DEVELOPER:	SITE ENGINEER:
SAINT BEDE PARISH	LANDMARK DESIGN GROUP
CATHOLIC DIOCESE OF RICHMOND	4029 IRONBOUND ROAD, SUITE 100
3686 IRONBOUND ROAD	WILLIAMSBURG, VA 23185
WILLIAMSBURG, VA 23188	TELEPHONE: (757)-253-2975
	FAX: (757)-229-0049



## VICINITY MAP

SCALE: 1"=200'

THE PURPOSE OF THIS SITEPLAN AMENDMENT IS TO ADD THE RECTORY, CORRESPONDING UTILITIES, AND ADDITIONAL PARKING.



NOTES:

ANY EXISTING UNUSED WELLS SHALL BE ABANDONED IN ACCORDANCE WITH STATE PRIVATE WELL REGULATIONS AND JAMES CITY COUNTY CODE.

ALL COMPONENTS OF THE WATER DISTRIBUTION AND SANITARY SEWER SYSTEM SHALL BE INSTALLED AND TESTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AUTHORITY STANDARDS AND SPECIFICATIONS FOR WATER DISTRIBUTION AND SANITARY SEWER SYSTEMS, THE HRPDC REGIONAL STANDARDS, AND THE COMMONWEALTH OF VIRGINIA WATERWORKS AND SANITARY SEWERAGE REGULATIONS. THE CONTRACTOR SHALL USE ONLY NEW MATERIALS, PARTS, AND PRODUCTS ON ALL PROJECTS. ALL MATERIALS SHALL BE STORED SO AS TO ASSURE THE PRESERVATION OF THEIR QUALITY AND FITNESS FOR THE WORK. A COPY OF THE JCSA STANDARDS AND REGIONAL STANDARDS MUST BE KEPT ON-SITE BY THE CONTRACTOR DURING FULL TIME OF INSTALLING, TESTING, AND CONVEYING FACILITIES TO THE JCSA.

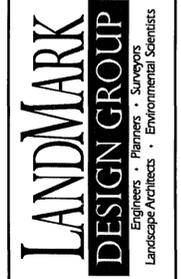
ALL SIGNAGE SHALL BE IN ACCORDANCE WITH ARTICLE II, DIVISION 3 OF THE JAMES CITY COUNTY ZONING ORDINANCE.

NO STOCKPILES ARE ANTICIPATED FOR THIS PROJECT. IF CONTRACTOR ELECTS TO USE ONE, IT MUST BE IN ACCORDANCE WITH THE VESCH.

RECORD DRAWINGS AND CONSTRUCTION CERTIFICATION WILL BE REQUIRED FOR THE MANUFACTURED BMP INSTALLATION IN ACCORDANCE WITH CURRENT COUNTY REQUIREMENTS

ON OCTOBER 4, 2004, THE JAMES CITY COUNTY PLANNING COMMISSION DETERMINED THAT THE PROPOSED RECTORY WAS CONSISTENT WITH THE ST. BEDE MASTER PLAN ADOPTED BY THE BOARD OF SUPERVISORS ON DECEMBER 19, 2001.

RESPONSIBLE LAND DISTURBER  
ALISTAIR J. RAMSAY, LAND SURVEYOR (LIC. NO. 1515-B), LANDMARK DESIGN GROUP, WILLIAMSBURG, VIRGINIA WILL SERVE AS RESPONSIBLE LAND DISTURBER FOR THE DURATION OF THE REVIEW PROCESS ONLY. THE OWNER WILL PROVIDE A QUALIFIED RESPONSIBLE LAND DISTURBER UPON ISSUANCE OF A LAND DISTURBANCE PERMIT OR SITE APPROVAL, WHICH EVER COMES FIRST.



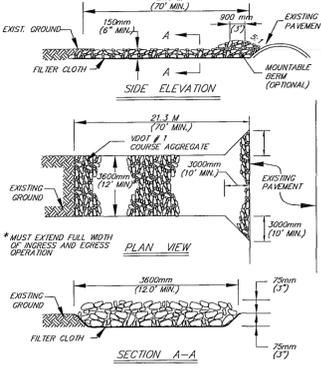
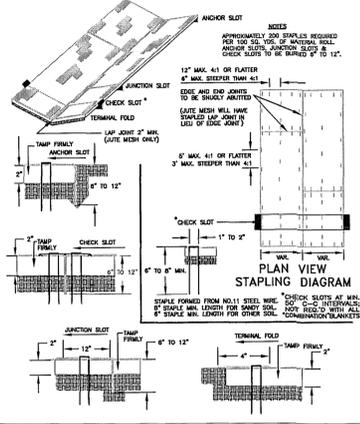
REVISIONS:	
By	RMH
Date	MHL
Comments	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

COVER SHEET  
PLAN OF DEVELOPMENT  
SAINT BEDES RECTORY  
AND PARKING EXPANSION  
JAMES CITY COUNTY, VIRGINIA

DRAWING STATUS	
1	Initial Review
2	Client for Review
3	Pre-Approval Meeting
4	Final Approval
5	1st Submittal
6	2nd Submittal
7	3rd Submittal
8	Approved

Designed:	CRO	Date:	11/11/04
Checked:	CRO	Scale:	AS SHOWN
File Mgr./Drawn:	MHL	CADD File name:	COVER.dwg
Project Number:	1970077-002.00	Dwg. File No.:	15502 W
Drawing Number:			

**TYPICAL TREATMENT - 1  
(SOIL STABILIZATION BLANKET)  
INSTALLATION CRITERIA**



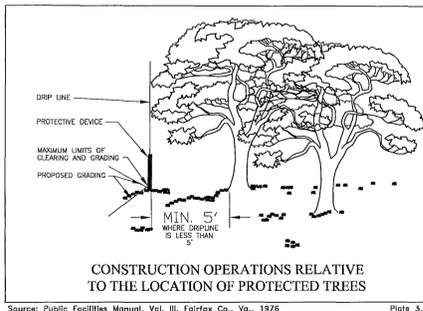
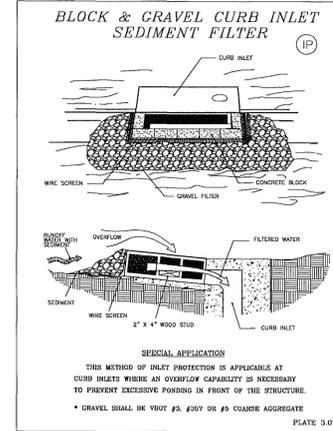
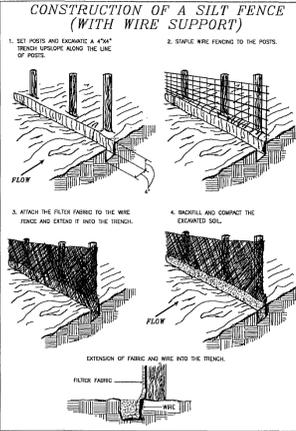
CE TEMPORARY GRAVEL CONSTRUCTION ENTRANCE  
NOT TO SCALE

PERMANENT SEEDING TABLE 3.3.2.0  
SITE SPECIFIC SEEDING MIXTURES FOR COASTAL PLAIN AREA

MINIMUM SEED LBS PER ACRE	TOTAL LBS PER ACRE
COMMON BERMUDAGRASS **	175-200 LBS.
KENTUCKY 31 OR TURF-TYPE VALL FESCUE	75 LBS.
HYBRID BERMUDAGRASS **	200-250 LBS.
KENTUCKY 31 OR TURF-TYPE VALL FESCUE	40 LBS. (UNHALLED)
HYBRID BERMUDAGRASS (SEED) **	30 LBS. (HALLED)
GENERAL SLOPE (2:1 OR LESS)	
KENTUCKY 31 FESCUE	128 LBS.
RED TOP GRASS	2 LBS.
SEASONAL NURSERY CRISP *	20 LBS.
LOW MAINTENANCE SLOPE (STEEPER THAN 3:1)	
KENTUCKY 31 TALL FESCUE	95-108 LBS.
COMMON BERMUDAGRASS **	0-15 LBS.
RED TOP GRASS	2 LBS.
SEASONAL NURSERY CRISP *	20 LBS.
SERJEA LESPEDEZA **	20 LBS.
LOW MAINTENANCE SLOPE (STEEPER THAN 3:1)	150 LBS.

\* USE SEASONAL NURSERY CRISP IN ACCORDANCE WITH SEEDING DATES AS STATED BELOW:  
 FEBRUARY MARCH THROUGH APRIL: BROAD LEAF  
 MAY 15 THROUGH AUGUST: FURNAL WILLET  
 SEPTEMBER OCTOBER THROUGH NOVEMBER 15th: PARKER BEE  
 NOVEMBER 15th THROUGH JANUARY: WINTER WHEAT

\*\* MAY THROUGH OCTOBER, USE HALLED SEED. ALL OTHER SEEDING PERIODS, USE UNHALLED SEED. SEEDING DATES MAY BE ADDED TO ANY SLOPE OR LOW MAINTENANCE MIX DURING WARMER PERIODS, ADD 10-20 LBS/ACRE IN MIXES.



JAMES CITY COUNTY ENVIRONMENTAL DIVISION  
EROSION AND SEDIMENT CONTROL NOTES - REVISED 7/8/01

THE PURPOSE OF THE EROSION MEASURES SHOWN ON THESE PLANS SHALL BE TO PRECLUDE THE TRANSPORT OF ALL WATERBORNE SEDIMENTS RESULTING FROM CONSTRUCTION ACTIVITIES FROM ENTERING ONTO ADJACENT PROPERTIES OR STATE WATERS. IF FIELD INSPECTION REVEALS THE INADEQUACY OF THE PLAN TO CONFINE SEDIMENT TO THE PROJECT SITE, ALL APPROPRIATE MODIFICATIONS WILL BE MADE TO CORRECT ANY PLAN DEFICIENCIES. IN ADDITION TO THESE NOTES, ALL PROVISIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS SHALL APPLY TO THIS PROJECT.

1. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, 3RD EDITION, 1992. THE CONTRACTOR SHALL BE THOROUGHLY FAMILIAR WITH ALL APPLICABLE MEASURES THEREIN THAT MAY BE PERTINENT TO THIS PROJECT, INCLUDING MINIMUM STANDARDS 1 THROUGH 19. IF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS FOUND TO BE INADEQUATE IN THE FIELD, THE MINIMUM STANDARDS WILL APPLY IN ADDITION TO THE PROVISIONS OF THE APPROVED PLAN.

2. AS A PREREQUISITE TO APPROVAL OF AN EROSION AND SEDIMENT CONTROL PLAN FOR LAND-DISTURBING ACTIVITIES, THE NAME OF A RESPONSIBLE LAND-DISTURBER SHALL BE PROVIDED. THE RESPONSIBLE LAND-DISTURBER SHALL BE AN INDIVIDUAL WHO HOLDS A VALID CERTIFICATE OF COMPETENCE ISSUED BY THE VIRGINIA DEPARTMENT OF CONSERVATION AND IS DEFINED AS THE PERSON IN CHARGE OF AND RESPONSIBLE FOR CARRYING OUT THE LAND-DISTURBING ACTIVITY. PERMITS OR PLANS WITHOUT THIS INFORMATION ARE DEEMED INCOMPLETE AND WILL NOT BE APPROVED UNTIL PROPER NOTIFICATION IS RECEIVED. ALSO, IF THE PERSON DESIGNATED AS RESPONSIBLE LAND-DISTURBER CHANGES BETWEEN THE TIME OF PLAN APPROVAL AND THE SCHEDULED PRECONSTRUCTION MEETING, THE ENVIRONMENTAL DIVISION SHALL BE INFORMED OF THE CHANGE, IN WRITING, 24-HOURS IN ADVANCE OF THE PRECONSTRUCTION MEETING.

3. A PRECONSTRUCTION MEETING SHALL BE HELD ON-SITE BETWEEN THE COUNTY, THE DEVELOPER, THE PROJECT ENGINEER, THE RESPONSIBLE LAND-DISTURBER AND THE CONTRACTOR PRIOR TO ISSUANCE OF THE LAND DISTURBING PERMIT. THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION TO THE COUNTY FOR APPROVAL PRIOR TO THE PRECONSTRUCTION MEETING. THE DESIGNATED RESPONSIBLE LAND-DISTURBER IS REQUIRED TO ATTEND THE PRECONSTRUCTION MEETING FOR THE PROJECT.

4. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS SHALL BE PROTECTED BY A TEMPORARY CONSTRUCTION ENTRANCE TO PREVENT TRACKING OF MUD ONTO PUBLIC RIGHT-OF-WAYS. AN ENTRANCE PERMIT FROM VDOT IS REQUIRED PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN STATE RIGHT-OF-WAYS. WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE, THE ROAD SHALL BE THOROUGHLY CLEANED AT THE END OF EACH DAY (STD. & SPEC. 3.02).

5. SEDIMENT BASINS AND TRAPS (STD. & SPEC. 3.1.3 AND 3.1.4), PERIMETER DIKES (STD. & SPEC. 3.09 AND 3.12), SEDIMENT FILTER BARRIERS (STD. & SPEC. 3.05) AND OTHER MEASURES INTENDED TO TRAP SEDIMENT ON-SITE MUST BE CONSTRUCTED AS A FIRST STEP IN GRADING AND MUST BE MADE FUNCTIONAL PRIOR TO ANY UPSLOPE LAND DISTURBANCE TAKING PLACE. EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER INSTALLATION. PERIODIC INSPECTIONS OF THE EROSION CONTROL MEASURES BY THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE MADE TO ASSESS THEIR CONDITION. ANY NECESSARY MAINTENANCE OF THE MEASURES SHALL BE ACCOMPLISHED IMMEDIATELY AND SHALL INCLUDE THE REPAIR OF MEASURES DAMAGED BY ANY SUBCONTRACTOR INCLUDING THOSE OF THE PUBLIC UTILITY COMPANIES.

6. SURFACE FLOWS OVER CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER REDIRECTING FLOWS FROM TRANSVERSING THE SLOPES OR BY INSTALLING MECHANICAL DEVICES TO SAFELY LOWER WATER DOWN SLOPE. A TEMPORARY FILL DIVERSION (STD. & SPEC. 3.10) AND SLOPE DRAIN (STD. & SPEC. 3.15) SHALL BE INSTALLED PRIOR TO THE END OF EACH WORKING DAY.

7. SEDIMENT CONTROL MEASURES MAY REQUIRE MINOR FIELD ADJUSTMENTS AT TIME OF CONSTRUCTION TO INSURE THEIR INTENDED PURPOSE IS ACCOMPLISHED. ENVIRONMENTAL DIVISION APPROVAL WILL BE REQUIRED FOR OTHER DEVIATIONS FROM THE APPROVED PLAN.

8. THE CONTRACTOR SHALL PLACE SOIL STOCKPILES AT THE LOCATIONS SHOWN ON THE PLAN. SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. OFF-SITE WASTE OR BORROW AREAS SHALL BE APPROVED BY THE ENVIRONMENTAL DIVISION PRIOR TO THE IMPORT OF ANY BORROW OR EXPORT OF ANY WASTE TO OR FROM THE PROJECT SITE.

9. THE CONTRACTOR SHALL COMPLETE DRAINAGE FACILITIES WITHIN 30 DAYS FOLLOWING COMPLETION OF ROUGH GRADING AT ANY POINT WITHIN THE PROJECT. THE INSTALLATION OF DRAINAGE FACILITIES SHALL TAKE PRECEDENCE OVER ALL UNDERGROUND UTILITIES. OUTFALL DITCHES FROM DRAINAGE STRUCTURES SHALL BE STABILIZED IMMEDIATELY AFTER CONSTRUCTION OF THE SAME (STD. & SPEC. 3.18). THIS INCLUDES INSTALLATION OF EROSION CONTROL STONE OR PAVED DITCHES WHERE REQUIRED. ANY DRAINAGE OUTFALLS REQUIRED FOR A STREET MUST BE COMPLETED BEFORE STREET GRADING OR UTILITY INSTALLATION BEGINS.

10. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS OF DENUDED AREAS THAT MAY BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.

11. NO MORE THAN 300 FEET OF SANITARY SEWER, STORM DRAIN, WATER OR UNDERGROUND UTILITY LINES ARE TO BE OPEN AT ONE TIME. FOLLOWING INSTALLATION OF ANY PORTION OF THESE ITEMS, ALL DISTURBED AREAS ARE TO BE IMMEDIATELY STABILIZED (I.E., THE SAME DAY).

12. IF DISTURBED AREA STABILIZATION IS TO BE ACCOMPLISHED DURING THE MONTHS OF DECEMBER, JANUARY OR FEBRUARY, STABILIZATION SHALL CONSIST OF MULCHING (STD. & SPEC. 3.35). SEEDING WILL THEN TAKE PLACE AS SOON AS THE SEASON PERMITS.

13. THE TERM SEEDING, FINAL VEGETATIVE COVER OR STABILIZATION ON THIS PLAN SHALL MEAN THE SUCCESSFUL GERMINATION AND ESTABLISHMENT OF A STABLE GRASS COVER FROM A PROPERLY PREPARED SEEDBED CONTAINING THE SPECIFIED AMOUNTS OF SEED, LIME AND FERTILIZER (STD. & SPEC. 3.32). IRRIGATION SHALL BE REQUIRED AS NECESSARY TO ENSURE ESTABLISHMENT OF GRASS COVER.

14. ALL SLOPES STEEPER THAN 3:1 V SHALL REQUIRE THE USE OF EROSION CONTROL BLANKETS AND MATTINGS TO AID IN THE ESTABLISHMENT OF A VEGETATIVE COVER. INSTALLATION SHALL BE IN ACCORDANCE WITH STD. & SPEC. 3.35, MULCHING, STD. & SPEC. 3.36, SOIL STABILIZATION BLANKETS AND MATTING AND MANUFACTURERS INSTRUCTIONS. NO SLOPES SHALL BE CREATED STEEPER THAN 2H:1V.

15. INLET PROTECTION (STD. & SPEC. 3.07 AND 3.08) SHALL BE PROVIDED FOR ALL STORM DRAIN AND CULVERT INLETS FOLLOWING CONSTRUCTION OF THE SAME.

16. TEMPORARY LINERS, SUCH AS POLYETHYLENE SHEETS, SHALL BE PROVIDED FOR ALL PAVED DITCHES UNTIL THE PERMANENT CONCRETE LINER IS INSTALLED.

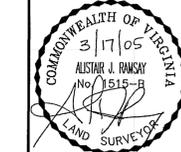
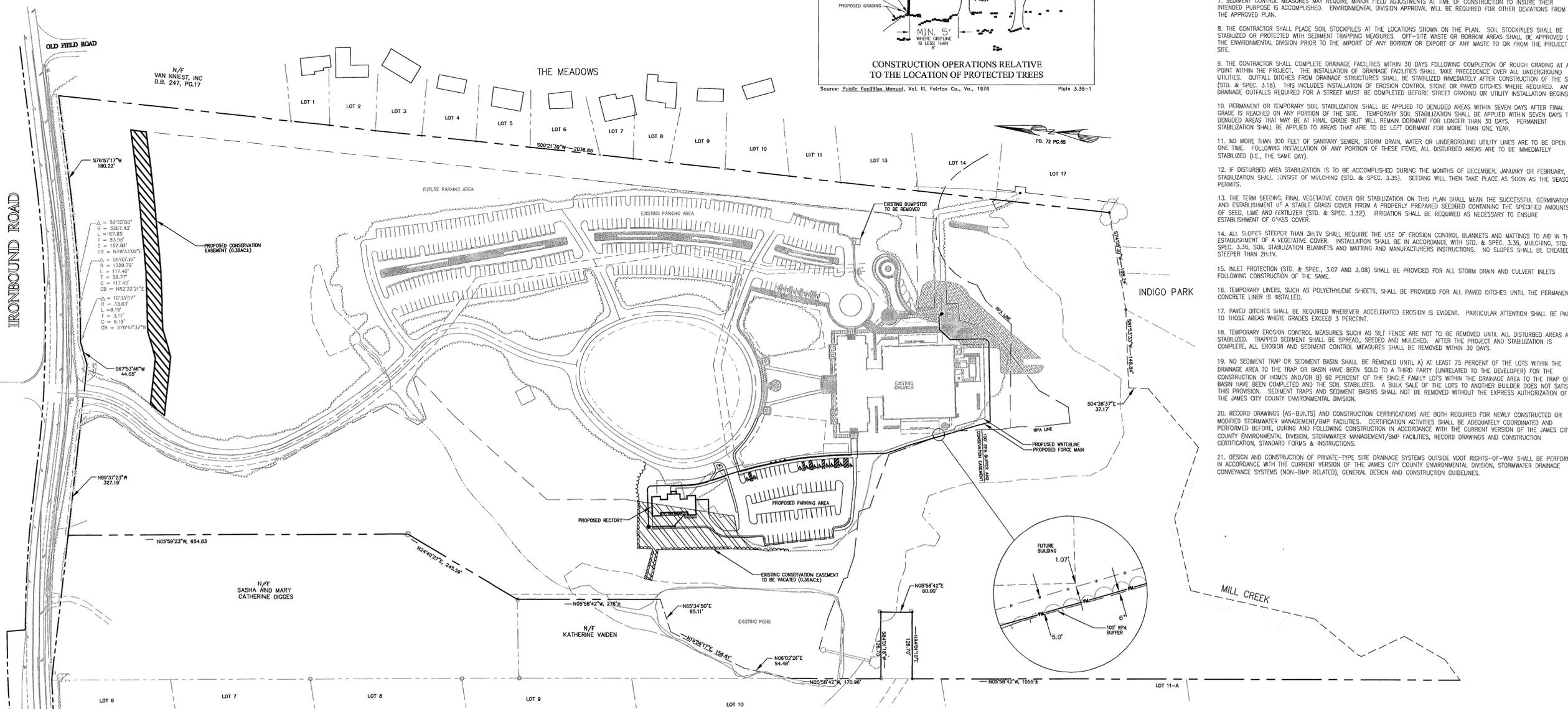
17. PAVED DITCHES SHALL BE REQUIRED WHEREVER ACCELERATED EROSION IS EVIDENT. PARTICULAR ATTENTION SHALL BE PAID TO THOSE AREAS WHERE GRADES EXCEED 3 PERCENT.

18. TEMPORARY EROSION CONTROL MEASURES SUCH AS SILT FENCE ARE NOT TO BE REMOVED UNTIL ALL DISTURBED AREAS ARE STABILIZED. TRAPPED SEDIMENT SHALL BE SPREAD, SEEDED AND MULCHED. AFTER THE PROJECT AND STABILIZATION IS COMPLETE, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS.

19. NO SEDIMENT TRAP OR SEDIMENT BASIN SHALL BE REMOVED UNTIL (A) AT LEAST 75 PERCENT OF THE LOTS WITHIN THE DRAINAGE AREA TO THE TRAP OR BASIN HAVE BEEN SOLD TO A THIRD PARTY (UNRELATED TO THE DEVELOPER) FOR THE CONSTRUCTION OF HOMES AND/OR (B) 60 PERCENT OF THE SINGLE FAMILY LOTS WITHIN THE DRAINAGE AREA TO THE TRAP OR BASIN HAVE BEEN COMPLETED AND THE SOIL STABILIZED. A BULK SALE OF THE LOTS TO ANOTHER BUILDER DOES NOT SATISFY THIS PROVISION. SEDIMENT TRAPS AND SEDIMENT BASINS SHALL NOT BE REMOVED WITHOUT THE EXPRESS AUTHORIZATION OF THE JAMES CITY COUNTY ENVIRONMENTAL DIVISION.

20. RECORD DRAWINGS (AS-BUILTS) AND CONSTRUCTION CERTIFICATIONS ARE BOTH REQUIRED FOR NEWLY CONSTRUCTED OR MODIFIED STORMWATER MANAGEMENT/BMP FACILITIES. CERTIFICATION ACTIVITIES SHALL BE ADEQUATELY COORDINATED AND PERFORMED BEFORE, DURING AND FOLLOWING CONSTRUCTION IN ACCORDANCE WITH THE CURRENT VERSION OF THE JAMES CITY COUNTY ENVIRONMENTAL DIVISION, STORMWATER MANAGEMENT/BMP FACILITIES, RECORD DRAWINGS AND CONSTRUCTION CERTIFICATION, STANDARD FORMS & INSTRUCTIONS.

21. DESIGN AND CONSTRUCTION OF PRIVATE-TYPE SITE DRAINAGE SYSTEMS OUTSIDE VDOT RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT VERSION OF THE JAMES CITY COUNTY ENVIRONMENTAL DIVISION, STORMWATER DRAINAGE CONVEYANCE SYSTEMS (NON-BMP RELATED), GENERAL DESIGN AND CONSTRUCTION GUIDELINES.



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Email: info@landmarkdesign.com

**LANDMARK  
DESIGN GROUP**  
Engineers • Planners • Surveyors  
Landscape Architects • Environmental Scientists

No.	Date	Description	REVISIONS	
			By	Comment
1	02/03/05	REVISION PER COUNTY COMMENTS		

No.	Date	Description	STATUS	
			By	Comment
1	11/11/04	1st Submittal		
2	02/04/05	2nd Submittal		
3		3rd Submittal		

**OVERALL PLAN  
PLAN OF DEVELOPMENT  
SAINT BEDES RECTORY  
AND PARKING EXPANSION**  
JAMES CITY COUNTY, VIRGINIA

Designed: CRO	Date: 11/11/04
Checked: CRO	Scale: 1"=100'
File Mgr./Drawn: MHL	CADD File name: SHEET2
Project Number: 1970077-002.00	Dwg. File No.: 15501A W
Drawing Number:	

AMENDMENT TO SP-28-01  
2 of 10  
JCC CASE NO. SP-132-04

NOTE: BMP NOT TO BE BUILT UNTIL LATER STAGES OF CONSTRUCTION (AFTER PARKING LOT IS PAVED).

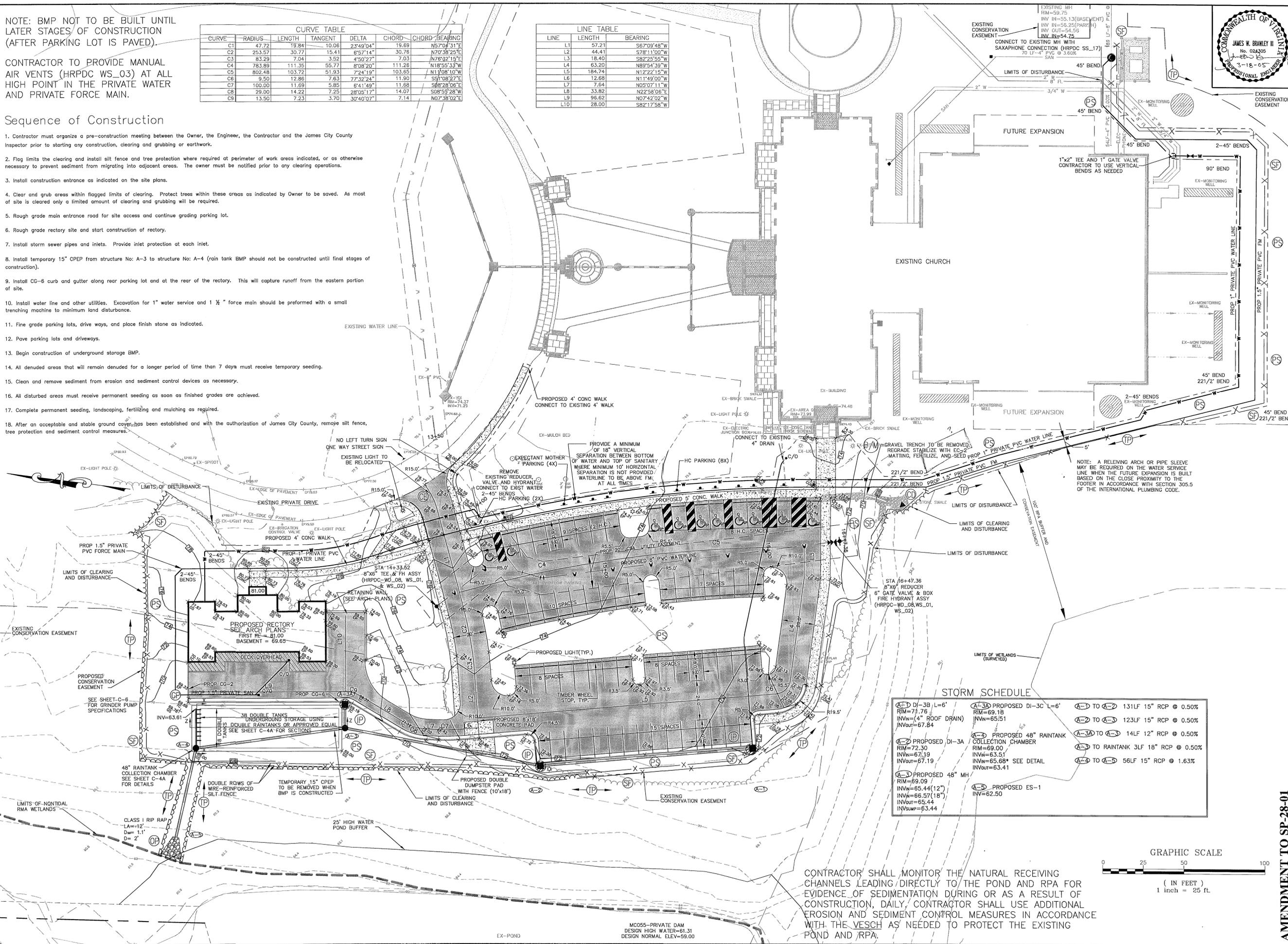
CONTRACTOR TO PROVIDE MANUAL AIR VENTS (HRPDC WS\_03) AT ALL HIGH POINT IN THE PRIVATE WATER AND PRIVATE FORCE MAIN.

CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	DELTA	CHORD	CHORD BEARING
C1	47.72	19.84	10.06	23°49'04"	19.69	N57°04'31"E
C2	253.57	30.77	15.41	6°57'14"	30.78	N70°38'25"E
C3	83.29	7.04	3.52	4°50'27"	7.03	N76°32'19"E
C4	783.89	111.35	55.77	8°08'20"	111.28	N18°55'33"W
C5	802.48	103.72	51.93	7°24'19"	103.65	N11°28'10"W
C6	9.50	12.86	7.63	77°32'24"	11.90	S51°08'27"E
C7	100.00	11.69	5.85	6°41'49"	11.68	S68°28'06"E
C8	29.00	14.22	7.25	28°05'17"	14.07	S08°55'28"W
C9	13.50	7.23	3.70	30°40'07"	7.14	N07°38'02"E

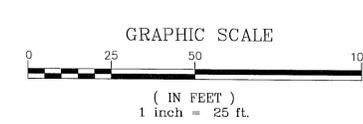
LINE TABLE		
LINE	LENGTH	BEARING
L1	57.21	S67°09'48"W
L2	44.41	S78°11'00"W
L3	18.40	S82°25'55"W
L4	63.20	N89°54'39"W
L5	184.74	N12°22'15"W
L6	12.68	N11°49'00"W
L7	7.64	N05°07'11"W
L8	33.82	N22°58'06"E
L9	96.62	N07°42'02"W
L10	28.00	S82°17'58"W

### Sequence of Construction

- Contractor must organize a pre-construction meeting between the Owner, the Engineer, the Contractor and the James City County Inspector prior to starting any construction, clearing and grubbing or earthwork.
- Flag limits the clearing and install silt fence and tree protection where required at perimeter of work areas indicated, or as otherwise necessary to prevent sediment from migrating into adjacent areas. The owner must be notified prior to any clearing operations.
- Install construction entrance as indicated on the site plans.
- Clear and grub areas within flogged limits of clearing. Protect trees within these areas as indicated by Owner to be saved. As most of site is cleared only a limited amount of clearing and grubbing will be required.
- Rough grade main entrance road for site access and continue grading parking lot.
- Rough grade rectory site and start construction of rectory.
- Install storm sewer pipes and inlets. Provide inlet protection at each inlet.
- Install temporary 15" CPEP from structure No: A-3 to structure No: A-4 (rain tank BMP should not be constructed until final stages of construction).
- Install CG-6 curb and gutter along rear parking lot and at the rear of the rectory. This will capture runoff from the eastern portion of site.
- Install water line and other utilities. Excavation for 1" water service and 1 1/2" force main should be performed with a small trenching machine to minimum land disturbance.
- Fine grade parking lots, drive ways, and place finish stone as indicated.
- Pave parking lots and driveways.
- Begin construction of underground storage BMP.
- All denuded areas that will remain denuded for a longer period of time than 7 days must receive temporary seeding.
- Clean and remove sediment from erosion and sediment control devices as necessary.
- All disturbed areas must receive permanent seeding as soon as finished grades are achieved.
- Complete permanent seeding, landscaping, fertilizing and mulching as required.
- After an acceptable and stable ground cover has been established and with the authorization of James City County, remove silt fences, tree protection and sediment control measures.

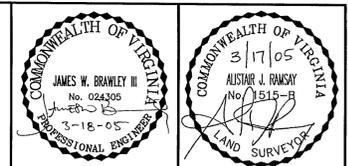


STORM SCHEDULE		
A-1	DI-3B L=6'	RIM=71.76 INVIn=67.19 INVOut=67.84
A-2	PROPOSED DI-3A	RIM=72.30 INVIn=67.19 INVOut=67.19
A-3	PROPOSED 48" MH	RIM=69.09 INVIn=65.44(12") INVIn=66.57(18") INVOut=65.44 INVSump=63.44
A-3A	PROPOSED DI-3C L=6'	RIM=69.18 INVIn=65.51
A-4	PROPOSED 48" RAIN TANK COLLECTION CHAMBER	RIM=69.00 INVIn=63.51 INVOut=65.68* SEE DETAIL INVOut=63.41
A-5	PROPOSED ES-1	RIM=69.09 INV=62.50
A-6	TO A-2	131LF 15" RCP @ 0.50%
A-7	TO A-3	123LF 15" RCP @ 0.50%
A-8	TO A-3A	14LF 12" RCP @ 0.50%
A-9	TO RAIN TANK	3LF 18" RCP @ 0.50%
A-10	TO A-5	56LF 15" RCP @ 1.63%



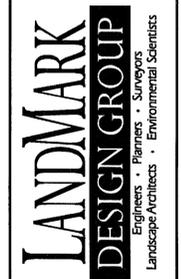
CONTRACTOR SHALL MONITOR THE NATURAL RECEIVING CHANNELS LEADING DIRECTLY TO THE POND AND RPA FOR EVIDENCE OF SEDIMENTATION DURING OR AS A RESULT OF CONSTRUCTION, DAILY. CONTRACTOR SHALL USE ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE VESCH AS NEEDED TO PROTECT THE EXISTING POND AND RPA.

MC055-PRIVATE DAM  
DESIGN HIGH WATER=61.31  
DESIGN NORMAL ELEV=59.00



4028 Ironbound Road  
Williamsburg, VA 23188  
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Fax. (757) 253-2975  
Email: jwb@landmarkdesign.com

5544 Greenbush Road  
Virginia Beach, VA 23462  
Tel. (757) 473-2000  
Fax. (757) 473-7633  
Email: jrb@landmarkdesign.com



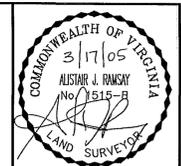
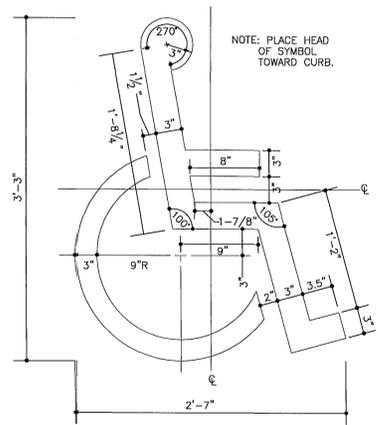
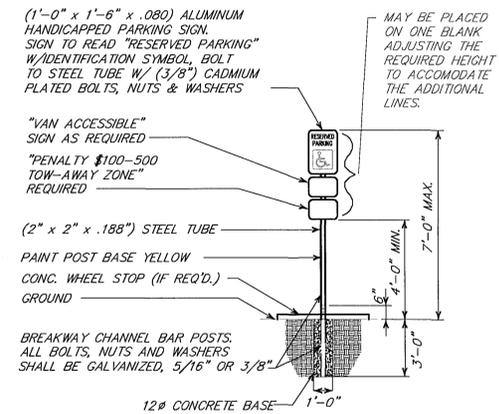
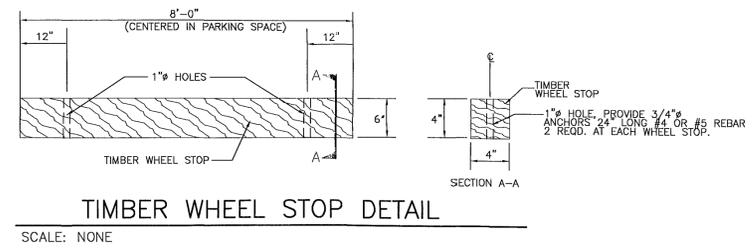
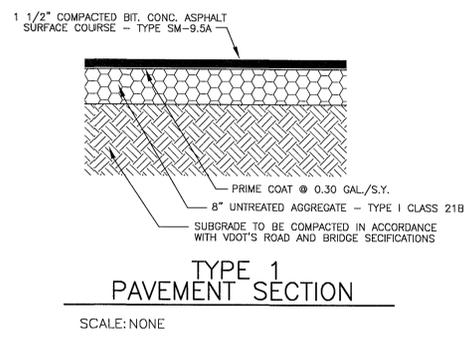
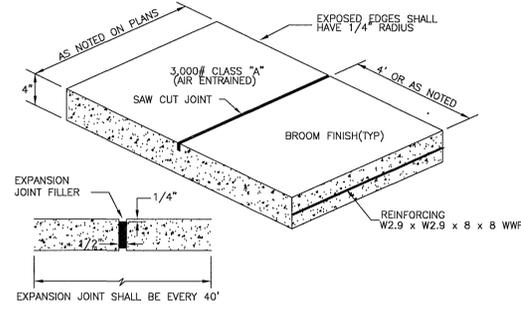
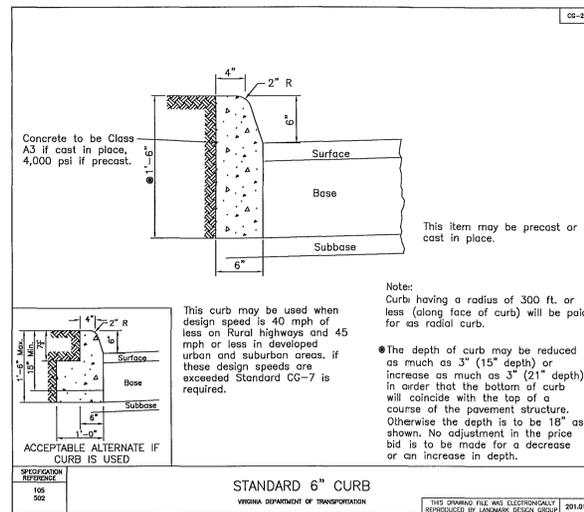
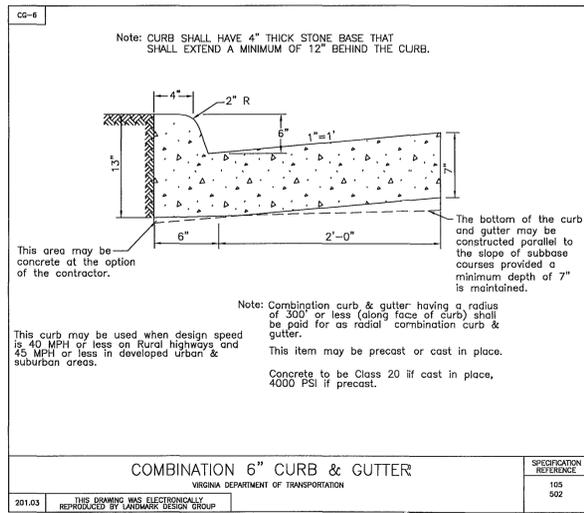
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**SITE DEVELOPMENT PLAN**  
**PLAN OF DEVELOPMENT**  
**SAINT BEDES RECTORY**  
**AND PARKING EXPANSION**  
JAMES CITY COUNTY, VIRGINIA

REVISIONS	
NO.	DATE
1	11/11/04
2	11/11/04
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GENERAL NOTES

- ALL WORK TO BE IN ACCORDANCE WITH THE VIRGINIA DEPARTMENT OF TRANSPORTATION, "ROAD AND BRIDGE SPECIFICATIONS", CURRENT EDITION, AND THE VIRGINIA DEPARTMENT OF TRANSPORTATION, "ROAD AND BRIDGE STANDARDS" 2001, CURRENT SUBDIVISION STREET REQUIREMENTS, UNLESS OTHERWISE NOTED, THE VIRGINIA WORK AREA PROTECTION MANUAL, "THE HAMPTON ROADS PLANNING DISTRICT COMMISSION REGIONAL STANDARDS, SECOND EDITION", AND VDOT SOIL AND AGGREGATE COMPACTION MANUAL, LATEST EDITION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITTING AND POSTING EROSION AND SEDIMENT CONTROL BOND.
- SELECT CLEARING AND GRUBBING TO CONSIST OF REMOVAL OF ALL TREES, ROOTS, STUMPS AND SNAGS EXCEPT THOSE TREES DESIGNATED BY OWNER TO REMAIN, ALL TREES SO DESIGNATED TO BE PROTECTED FROM DAMAGE TO THE TRUNK AND ROOT SYSTEM.
- CONTRACTOR MUST OBTAIN BURNING PERMIT OR PERMISSION TO BURN FROM JCC.
- ALL DRAINAGE STRUCTURES TO CONFORM TO VIRGINIA DEPARTMENT OF TRANSPORTATION, "ROAD AND BRIDGE STANDARDS", 2001, UNLESS OTHERWISE INDICATED. ALL INLET STRUCTURES ARE TO INCORPORATE INLET SHAPING.
- ALL LOCATIONS OF UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE. PRIOR TO COMMENCEMENT OF CONSTRUCTION, CONTRACTOR TO NOTIFY OWNERS OF ALL UTILITIES (DOMINION VIRGINIA POWER, VERIZON, ETC.) OF PROPOSED CONSTRUCTION SO THAT THEY MAY LOCATE AND SAFEGUARD THEIR FACILITIES. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR IS DIRECTED TO NOTIFY ALL APPLICABLE OWNERS OF THE UTILITIES OF THE LIMITS OF IMPENDING CONSTRUCTION IN ORDER THAT THE UTILITY OWNERS MAY SAFEGUARD THEIR FACILITIES. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. VERIFICATION SHALL CONSIST OF EXPOSING THE UTILITY BY EXCAVATION AND ESTABLISHING THE EXACT HORIZONTAL AND VERTICAL LOCATION. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITIES AT HIS OWN EXPENSE. THE CONTRACTOR SHALL NOTIFY THE OWNER AND OWNER REPRESENTATIVE OF ALL CONDITIONS, CONFLICTS, IN UTILITY LOCATIONS, OR INCONSISTENCIES IN ORDER THAT THEY MAY BE RESOLVED, COORDINATED AND RECORDED.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING SURE THAT TRUCKS LEAVING SITE ARE CLEANED SUFFICIENTLY SO AS NOT TO CREATE A ROADWAY NUISANCE OR HAZARD.
- ALL STOCKPILES (IMPORTED FILL MATERIAL, TOPSOIL) ARE TO BE LOCATED ON SITE AT THE DIRECTION OF THE OWNER AND LOCATIONS ARE TO BE COORDINATED WITH THE ASSIGNED ENVIRONMENTAL DIVISION INSPECTOR. A SKETCH PLAN WITH ASSOCIATED EROSION AND SEDIMENT CONTROL PLAN MEASURES MAY ALSO BE NECESSARY FOR REVIEW AND APPROVAL.
- THE CONTRACTOR AND SUBCONTRACTOR (S) SHALL HAVE A COPY OF THE CURRENT JCSA STANDARDS AND SPECIFICATIONS FOR SANITARY SEWER SYSTEMS, JCSA STANDARDS AND SPECIFICATIONS FOR WATER DISTRIBUTION SYSTEMS, VDOT ROAD AND BRIDGE SPECIFICATIONS, VDOT ROAD AND BRIDGE STANDARDS, AND VDOT SOIL AND AGGREGATE COMPACTION MANUAL. THE CONTRACTOR SHALL HAVE AT LEAST ONE (1) SET OF APPROVED PLANS WITH ALL APPROVED REVISIONS.
- ALL SITE CONCRETE, INCLUDING DROP INLET TOPS, ENDWALLS ETC. SHALL HAVE A PLAIN BROOM FINISH SURFACE.
- NO ASHES, PUTREFACTIVE REFUSE, LARGE STONES, OR OTHER MATERIAL OF ANY UNSATISFACTORY CHARACTER SHALL BE USED AS EMBANKMENT OR BACKFILL. THE CONTRACTOR SHALL NOT PERMIT EXCAVATIONS TO BE USED AS A DUMPING GROUND FOR REFUSE. AFTER COMPLETION OF SITE GRADING, ALL MATERIAL NOT USED THEREIN, INCLUDING SUCH EARTH AS CANNOT BE PROPERLY USED TO REFILL THE EXCAVATION, SHALL BE REMOVED AND DISPOSED OF IN SUCH A MANNER AND AT SUCH POINT OR POINTS AS APPROVED OR DIRECTED. ALL ROADS, SIDEWALKS AND OTHER PLACES ON THE LINE OF THE WORK SHALL BE LEFT FREE, CLEAN AND IN GOOD ORDER, SAID CLEANING UP SHALL BE DONE BY THE CONTRACTOR.
- THE CONTRACTOR SHALL PROVIDE TO THE OWNER'S REPRESENTATIVE COMPACTION REPORTS ON ALL PORTIONS OF THE WORK ASSOCIATED WITH THIS PROJECT AS REQUIRED BY THE PUBLICATIONS REFERENCED IN GENERAL NOTE #1. SAID COMPACTION REPORTS SHALL BE BY A CERTIFIED MATERIALS TESTING COMPANY AND IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF THE PUBLICATIONS REFERENCED IN GENERAL NOTE #1.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH COMPLETION OF REQUIRED EARTHWORK. IF ADDITIONAL FILL MATERIAL IS REQUIRED, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE SUCH AT NO ADDITIONAL EXPENSE TO THE OWNER.
- SHOULD UNSUITABLE MATERIAL BE ENCOUNTERED DURING CONSTRUCTION OF THE UTILITIES, ROADWAYS, OR SIDEWALKS, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE THE UNSUITABLE MATERIAL AND REPLACE IT WITH SUITABLE MATERIAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPORTING SELECT MATERIAL IF ON-SITE SUITABLE MATERIAL IS NOT AVAILABLE. THE CONTRACTOR WILL BE PERMITTED AND IS ENCOURAGED TO VISIT THE SITE IN ADVANCE OF THE BID DATE TO SAMPLE AND EVALUATE INSITU MATERIAL AS NECESSARY TO PREPARE HIS/HER BID AND AT HIS/HER EXPENSE.
- THE CONTRACTOR SHALL PROVIDE THE OWNER'S REPRESENTATIVE ONE SET OF PLANS SHOWING THE AS-BUILT LOCATIONS OF THE STORM SEWER SYSTEM, WATER DISTRIBUTION SYSTEM (INCLUDING SERVICES), SANITARY SEWER SYSTEM (INCLUDING SERVICES), AND ALL LOCATIONS WHERE UNSUITABLE MATERIAL WAS ENCOUNTERED AND THE LIMITS OF UNDERCUT NECESSARY TO CONSTRUCT THIS PROJECT.
- THE CONTRACTOR IS TO FURNISH AND INSTALL STOP SIGNS, NO PARKING SIGNS, AND ANY OTHER SIGNAGE AS REQUIRED. ALL ROADWAY SIGNS AND THEIR INSTALLATION WILL BE IN ACCORDANCE WITH THE VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL REPORT ANY CONFLICTS OR DISCREPANCIES ON THIS PLAN TO THE OWNER'S REPRESENTATIVE FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK.
- ANY SUBSEQUENT REVISIONS, ADDITIONS, AND/OR DELETIONS SHALL REQUIRE SPECIFIC WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL EROSION AND SEDIMENT CONTROL MEASURES AND RESTORING AREAS GRADED TO SERVE AS SEDIMENT TRAPS AND/OR SEDIMENT BASINS UPON ACHIEVING FINAL STABILIZATION.
- CONTRACTOR SHALL MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES UNTIL FINAL SITE STABILIZATION IS ACHIEVED.
- ALL UTILITIES MUST BE UNDERGROUND.
- CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITIES WITH THE APPROPRIATE UTILITY COMPANY/AGENCY.
- CONTRACTOR SHALL PROVIDE GEOTECHNICAL TESTING BY A QUALIFIED COMPANY OF SUBGRADE FOR VERIFICATION OF DESIGN PAVEMENT SECTION.
- STREET SIGNS OR THE ALPHA NUMERIC LETTERING SHALL BE OF A REFLECTIVE MATERIAL.
- ONLY JCSA PERSONNEL ARE AUTHORIZED TO OPERATE VALVES ON THE EXISTING WATER MAIN.
- TOPSOIL FROM SITE; IMPORTED OR AMENDED ON SITE SHALL BE FREE OF SUBSOIL, DAY OR IMPURITIES, PLANTS, WEEDS OR ROOTS. TOPSOIL TO BE SPREAD TO A MINIMUM DEPTH OF 6", RAKED SMOOTH AND GRADED TO ELIMINATE ROUGH, LOW OR SOFT AREAS. SEE PLANTING NOTES AND DETAILS (L-3) FOR FURTHER SOILS REQUIREMENTS, SODDING AND TEMPORARY PERMANENT SEEDING.



4028 Ironbound Road  
Williamsburg, VA 23188  
Tel: (757) 252-2975  
Fax: (757) 252-0608  
Email: info@landmark4g.com

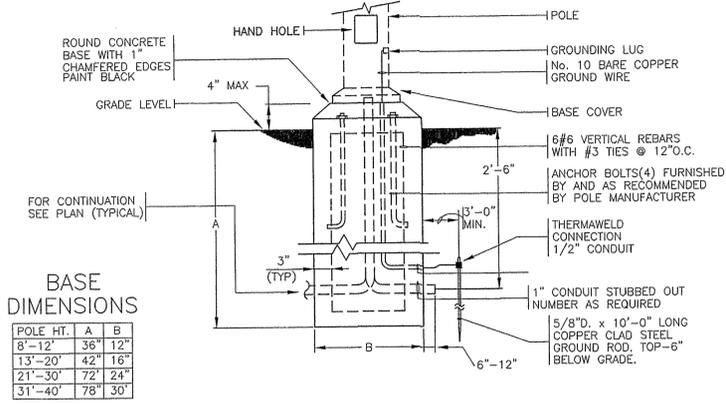
5514 Greenbush Road  
York, VA 23462  
Tel: (757) 473-2000  
Fax: (757) 497-7933  
Email: info@landmark4g.com

**LANDMARK DESIGN GROUP**  
Engineers • Planners • Surveyors  
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DRAWING STATUS		REVISIONS	
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**NOTES AND DETAILS**  
PLAN OF DEVELOPMENT  
SAINT BEDES RECTORY  
AND PARKING EXPANSION  
JAMES CITY COUNTY, VIRGINIA

Designed:	CRO	Date:	11/11/04
Checked:	CRO	Scale:	AS SHOWN
File Mgr./Drawn:	MHL	CADD File name:	DETAILS.dwg
Project Number:	1970077-002.00	Dwg. File No.:	15500B W
Drawing Number:			



**BASE DIMENSIONS**

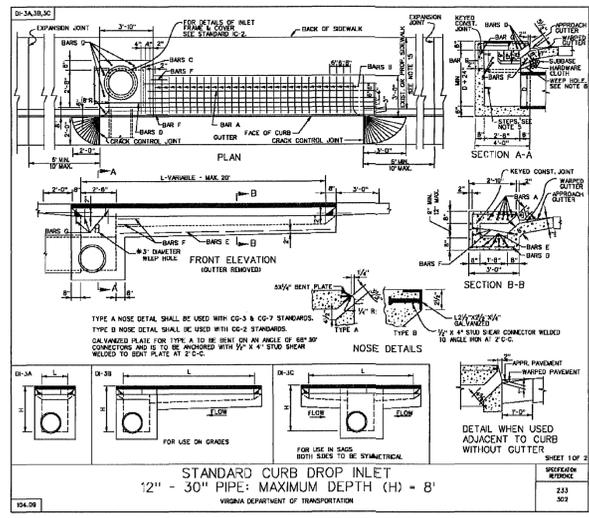
POLE HT.	A	B
8'-12"	36"	12"
13'-20"	42"	16"
21'-30"	72"	24"
31'-40"	78"	30"

**BELOW GRADE POLE BASE DETAIL**  
NO SCALE

**LIGHTING FIXTURE SCHEDULE**

DESCRIPTION	NO.	LAMPS	MANUFACTURER	CATALOG NO.	REMARKS
PARKING LOT FIXTURE	1	MS 250/C/BU/3K	HADCO	D20-A-8-3-250M-277	1 & 2

- NOTES:  
 1. PROVIDE SUPER METAL HALID LAMP, SEE DRAWING C-3 FOR LOCATIONS  
 2. PROVIDE HOUSE SIDE SHIELD

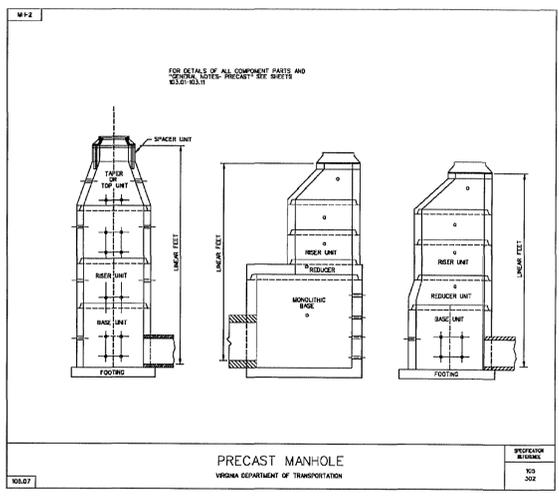


**STANDARD CURB DROP INLET**  
12" - 30" PIPE: MAXIMUM DEPTH (H) = 8"

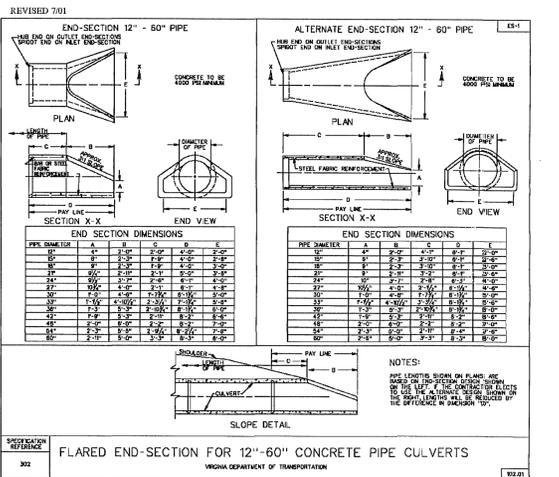
**TABLE OF QUANTITIES**

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			CONCRETE	BAR #									
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D-30	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D-30	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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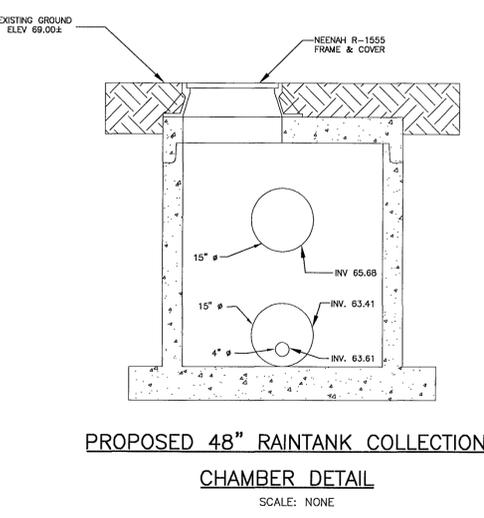
**STANDARD CURB DROP INLET**  
12" - 30" PIPE: MAXIMUM DEPTH (H) = 8"



**PRECAST MANHOLE**  
VIRGINIA DEPARTMENT OF TRANSPORTATION



**FLARED END-SECTION FOR 12"-60" CONCRETE PIPE CULVERTS**  
VIRGINIA DEPARTMENT OF TRANSPORTATION



**PROPOSED 48" RAIN TANK COLLECTION CHAMBER DETAIL**  
SCALE: NONE

**ACF Technical RainTank Maintenance**

With adequate pre-treatment of storm water before it enters the RainTank, heavy sediments, trash, and other debris will not enter the system. Therefore, most maintenance efforts should be directed at the pre-treatment structures to ensure they are functioning properly.

To monitor the accumulation of fine sediments that may enter the detention/retention area, RainTank systems may include a monitoring well, flush ports, or both (see image 2).

**Monitoring Wells**  
Typically made of perforated 6" PVC Pipe that runs from the bottom of the RainTank up to ground level, these are typically used to visually inspect the system and take simple measurements to gauge the depth of accumulated sediments (see image 1).

**Flush Ports**  
Running from the bottom of the RainTank up to ground level; flush ports are made from solid PVC Pipe with notches cut into the bottom. As water is pumped into the port the notches will direct water down to the bottom of the system to create turbulence, thereby re-suspending accumulated sediments.

After pumping water into the tanks, flushing is completed by vacuuming sediment laden water out of the system either through the inlet structure or through the flush port. The diameter of the flush port is determined by a number of factors including the rate at which water will be pumped into the system, the number of flush ports incorporated, and the possible requirement of vacuuming through the port. Experience has shown that an 18" port is more than adequate for virtually any required use, with 6" - 12" ports more common when vacuuming will be performed at the inlet structure.

**ACF Environmental**  
2831 Cardwell Road  
Richmond, VA 23234  
800-448-3636  
www.acfenvironmental.com

**ACF Environmental RainTank Maintenance**

**Installing the Maintenance System**  
To install the PCV Pipe, the RainTank can be easily cut with a reciprocating saw (see image 3). Whenever possible cut between the interior baffles of the Tank.

Both types of penetrations of the RainTank system should be capped at the surface. In landscaped areas, this may be accomplished with a simple pipe cap or plastic valve box (see image 4 lower inset). In paved areas, metal lids are more appropriate (see image 4).

**Maintenance Intervals**  
Maintenance Schedules for the RainTank System are a function of the contributing area and the type of pre-treatment specified. A standard maintenance schedule may include quarterly inspections during the first year of use, with yearly inspections thereafter. Flushing should be performed if sediment should reach a pre-determined depth or volume of the storage capacity which reduces performance of the system to unacceptable levels.

**Availability**  
All system components, including caps, lids, and valve boxes are available from ACF Environmental. Contact your local sales representative or our Sales Office at 800-448-3636 for assistance.

**ACF Environmental**  
2831 Cardwell Road  
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**Atlantis Water Management for Life**



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Fax: (757) 472-2000  
Email: info@landmarkdesign.com

**LANDMARK DESIGN GROUP**  
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**REVISIONS:**

No.	Date	Comment
02/03/05		REVISION PER COUNTY COMMENTS

**DRAWING STATUS:**

11/20/04	11/20/04	11/20/04
Interface Review	Client for Review	Pre Approval Bidding

**COUNTY APPROVAL:**

DATE	BY	REMARKS

**NOTES AND DETAILS**  
 PLAN OF DEVELOPMENT  
 SAINT BEDES RECTORY  
 AND PARKING EXPANSION  
 JAMES CITY COUNTY, VIRGINIA

**AMENDMENT TO SP-28-01**

Designed:	Date:
CRO	11/11/04
Checked:	Scale:
CRO	AS SHOWN
File Mgr./Drawn:	CADD File name:
MHL	SHEET-4A.dwg
Project Number:	Dwg. File No.:
1970077-002.00	15500A.W
Drawing Number:	



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 Norfolk, VA 23508  
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 Fax: (757) 229-0049  
 Email: info@landmarkdesign.com

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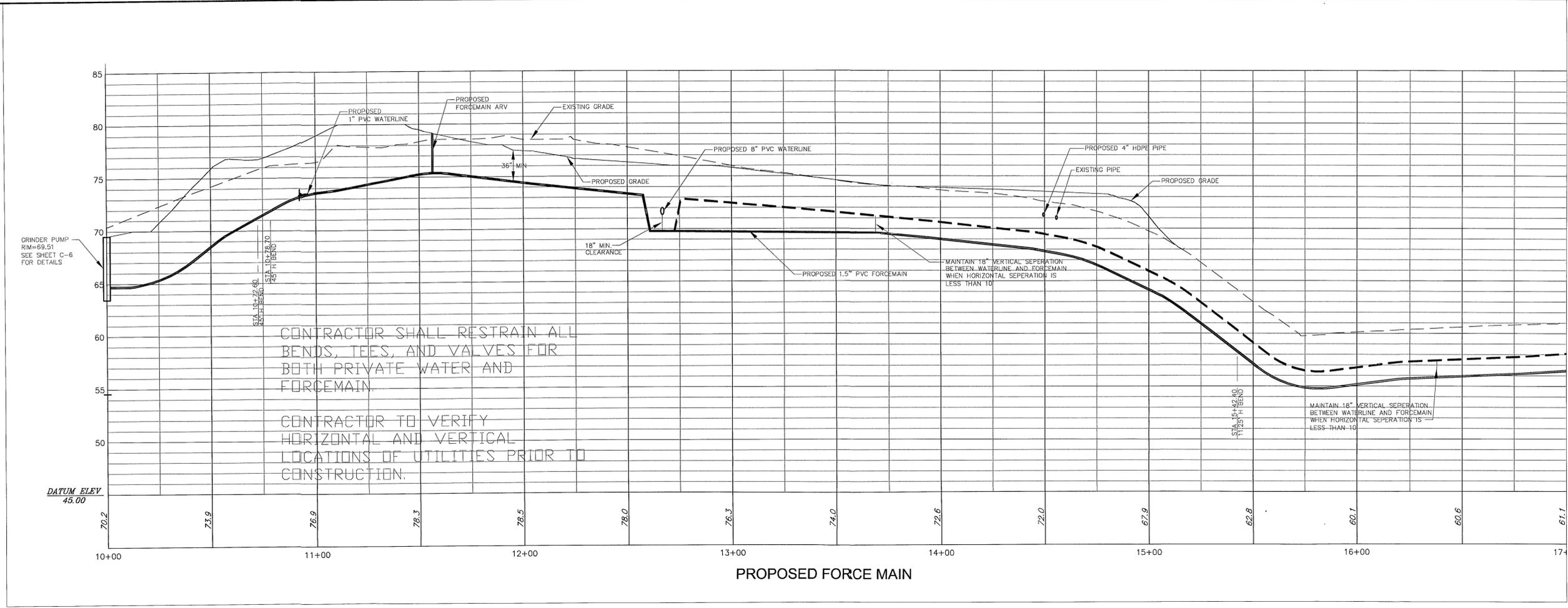
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1	02/03/05

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No.	Date
112304	11/23/04

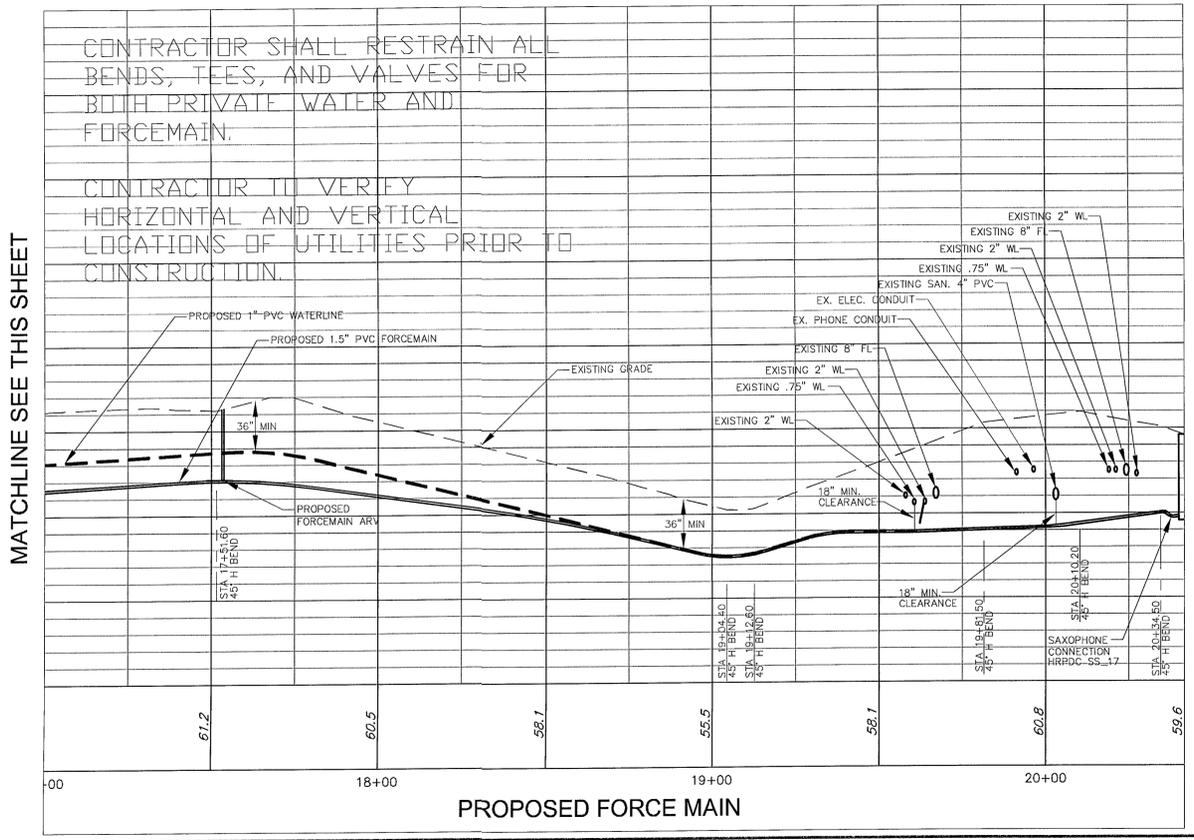
**FORCE MAIN & WATERLINE PROFILE**  
 PLAN OF DEVELOPMENT  
 SAINT BEDES RECTORY  
 AND PARKING EXPANSION  
 JAMES CITY COUNTY, VIRGINIA

Designed: CRO	Date: 11/11/04
Checked: CRO	Scale: AS SHOWN
File Mgr./Drawn: MHL	CADD File name: SHEET-4B.dwg
Project Number: 1970077-002.00	Dwg. File No.: 15500B W
Drawing Number:	

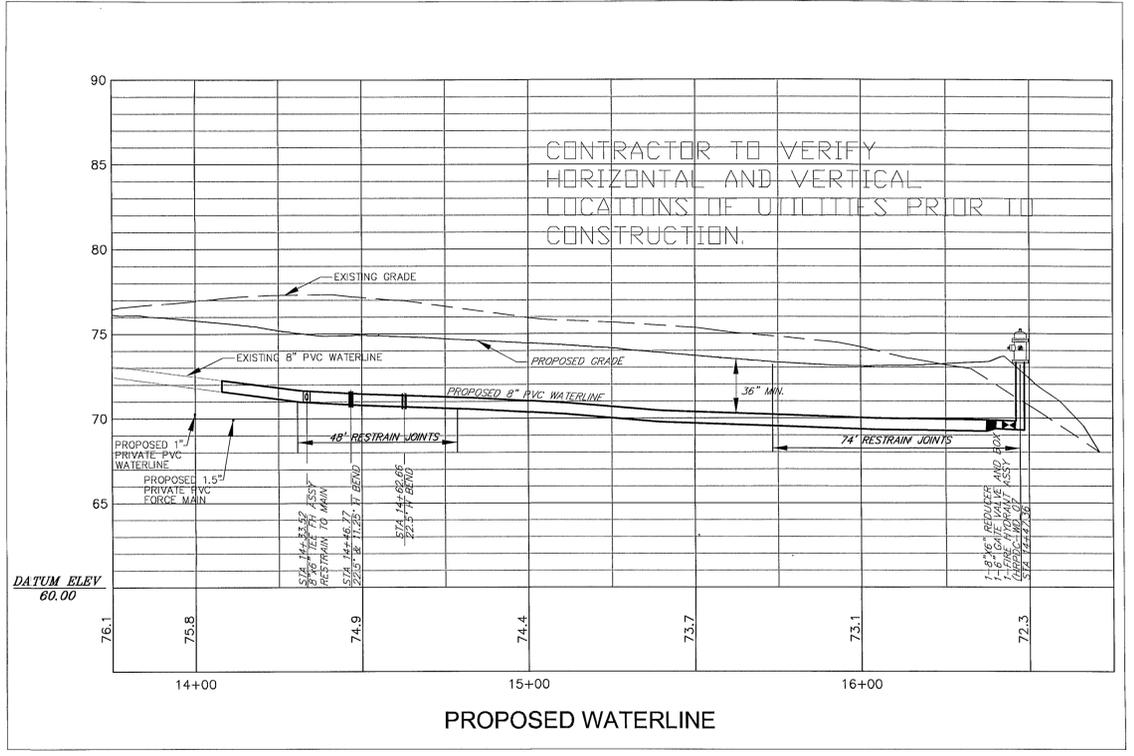
6 OF 10  
 JCC CASE NO. SP-132-04



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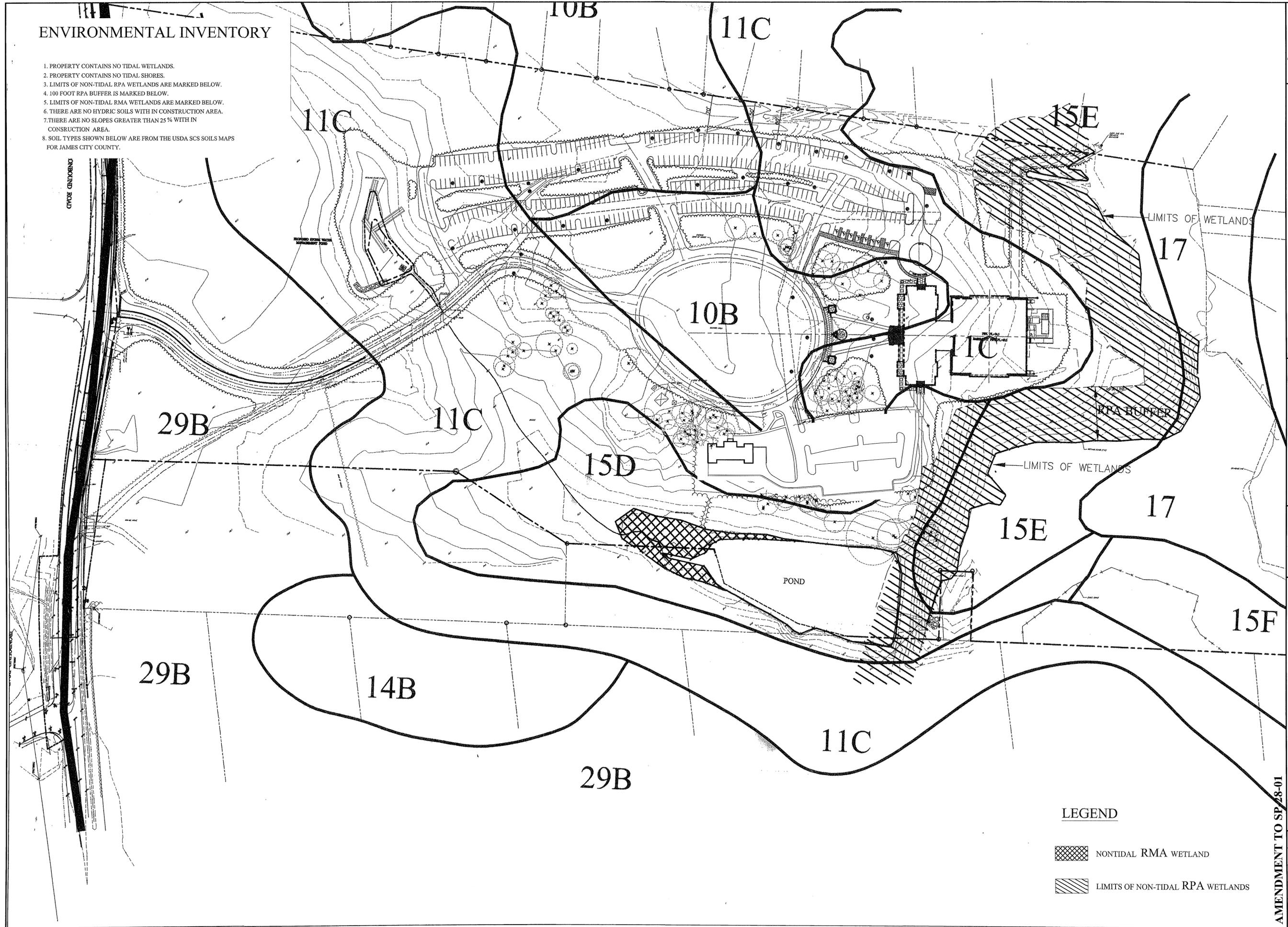


CONTRACTOR TO VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES PRIOR TO CONSTRUCTION.

# ENVIRONMENTAL INVENTORY

1. PROPERTY CONTAINS NO TIDAL WETLANDS.
2. PROPERTY CONTAINS NO TIDAL SHORES.
3. LIMITS OF NON-TIDAL RPA WETLANDS ARE MARKED BELOW.
4. 100 FOOT RPA BUFFER IS MARKED BELOW.
5. LIMITS OF NON-TIDAL RMA WETLANDS ARE MARKED BELOW.
6. THERE ARE NO HYDRIC SOILS WITH IN CONSTRUCTION AREA.
7. THERE ARE NO SLOPES GREATER THAN 25% WITH IN CONSTRUCTION AREA.
8. SOIL TYPES SHOWN BELOW ARE FROM THE USDA SCS SOILS MAPS FOR JAMES CITY COUNTY.

CYBOR ENGINEERING



## LEGEND

- NONTIDAL RMA WETLAND
- LIMITS OF NON-TIDAL RPA WETLANDS



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 DESIGN GROUP**  
 Engineers • Planners • Surveyors  
 Landscape Architects • Environmental Scientists

REVISIONS:	
No.	Date

DRAWING STATUS	

**ENVIRONMENTAL INVENTORY**  
 PLAN OF DEVELOPMENT  
 SAINT BEDES RECTORY  
 AND PARKING EXPANSION  
 JAMES CITY COUNTY, VIRGINIA

Designed: CRO	Date: 11/11/04
Checked: CRO	Scale: 1"=25'
File Mgr./Drawn: RMJ	CADD File name: SHEETS.dwg
Project Number: 1970077-002.00	Dwg. File No.: 15499W
Drawing Number: C-5	





**PLANTING NOTES:**

THE CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, ETC. NECESSARY TO COMPLETE ALL PLANTING AS SHOWN ON THIS DRAWING, AS SPECIFIED HEREIN OR IN SUPPLEMENTAL SPECIFICATIONS, AND/OR AS REQUIRED BY JOB CONDITIONS. THE WORK IN GENERAL, INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING:

- (1) SOIL TESTING
- (2) TOPSOIL
- (3) PLANTING AREA PREPARATION;
- (4) PLANTING PIT EXCAVATION AND SOIL AMENDMENT;
- (5) PLANT MATERIAL, AND MULCH;
- (6) FERTILIZING;
- (7) STAKING, (WHEN REQUIRED);
- (8) CHEMICAL APPLICATION; (WHEN REQUIRED)
- (9) MAINTENANCE AND GUARANTEE;
- (10) ALL OTHER ITEMS NECESSARY TO MAKE WORK COMPLETE;
- (11) SEEDING.

THE PLANTING CONTRACTOR IS RESPONSIBLE FOR COORDINATING WORK WITH THE IRRIGATION CONTRACTOR AND OTHER CONTRACTORS. THIS PLAN DOES NOT GUARANTEE THE EXISTENCE OR NON-EXISTENCE OF ANY UTILITIES. PRIOR TO ANY CONSTRUCTION, EXCAVATION, OR ROTO-TILLING THE CONTRACTOR SHALL ASSUME THE RESPONSIBILITY OF VERIFYING THE LOCATIONS OF ALL UTILITIES, ABOVE AND/OR BELOW GROUND, PUBLIC AND/OR PRIVATE THAT MAY EXIST AND CROSS THROUGH THE AREAS OF CONSTRUCTION.

**(1) SOIL TESTING**

(1.1) THE CONTRACTOR IS RESPONSIBLE FOR SOILS TESTING AND ANALYSIS FOR SUITABILITY FOR PLANTING AND LANDSCAPE TREATMENTS REQUIRED IN THIS CONTRACT. EXISTING TOPSOIL SHALL BE UTILIZED TO THE GREATEST EXTENT POSSIBLE THROUGHOUT THE PROJECT. A MINIMUM OF 3 SOIL SAMPLES SHALL BE TAKEN TO REPRESENT THE FULL RANGE OF SITE CONDITIONS. SOIL SAMPLES SHALL BE TAKEN TO A DEPTH OF AT LEAST 6 INCHES LARGER THAN THE DEPTH SPECIFIED ON THE PROJECT. WHERE HARD PAN EXISTS, DEEPER SAMPLING MAY BE REQUIRED. (1.2) SOIL ANALYSIS SHALL BE BY CERTIFIED LABORATORY AND SHALL INCLUDE SOIL TEXTURE, COMPOSITION, ORGANIC MATTER CONTENT, PH, SALINITY, AND FERTILITY (AVAILABLE NUTRIENTS). FOR SOILS NOT MEETING TOPSOIL SPECIFICATIONS BELOW, THE REPORT SHALL INCLUDE RECOMMENDATIONS FOR AMENDING THE SOILS TO BRING THEM INTO COMPLIANCE WITH THESE SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR THE COSTS OF SOILS TESTING, AND SHALL SUBMIT 3 COPIES OF THE SOILS REPORT TO THE OWNER.

**(2) TOPSOIL**

(2.1) NECESSARY QUANTITIES OF TOPSOIL SHALL BE SUPPLIED BY THE CONTRACTOR AND APPROVED BY THE OWNER OR HIS REPRESENTATIVE. THE CONTRACTOR SHALL APPLY TOPSOIL ONLY AFTER SECURING SOIL TEST, AS SPECIFIED ABOVE, APPLYING RECOMMENDED TREATMENT THEREOF, AND SUBMITTING FOR APPROVAL. (2.2) TOPSOIL REQUIREMENTS MAY BE MET IN ANY OF THE FOLLOWING WAYS:  
 A. ON-SITE TOPSOIL MEETING SPECIFICATIONS MAY BE STRIPPED AND STOCKPILED ON-SITE.  
 B. ON-SITE TOPSOIL NOT MEETING SPECIFICATIONS MAY BE STRIPPED, STOCKPILED AND AMENDED ON SITE, TO MEET SPECIFICATIONS.  
 C. OFF-SITE TOPSOIL MEETING SPECIFICATIONS AND FROM AN APPROVED SOURCE MAY BE PROVIDED.

(2.3) TOPSOIL TESTING SPECIFICATIONS AND FROM AN APPROVED SOURCE THE RIGHT-OF-WAY, AND AT LOCATIONS APPROVED BY THE OWNER, UNLESS THE WORKING AREA IS SUCH THAT THE PRESENCE OF THE MATERIAL WOULD INTERFERE WITH ORDERLY PROSECUTION OF THE WORK. STOCKPILE AREAS OUTSIDE OF THE RIGHT-OF-WAY SHALL BE LOCATED BY THE CONTRACTOR AT HIS EXPENSE. (2.4) STRIPPING TOPSOIL SHALL BE CONFINED TO THE AREA OVER WHICH THE EXCAVATION IS TO BE ACTIVELY PROSECUTED WITHIN 15 DAYS FOLLOWING THE STRIPPING OPERATION. EXCAVATION AND EMBANKMENT CONSTRUCTION SHALL BE CONFINED TO THE MINIMUM AREA NECESSARY TO ACCOMMODATE THE CONTRACTOR'S EQUIPMENT AND WORK FORCE ENGAGED IN THE EARTH MOVING WORK. (2.5) TOPSOIL, EITHER ON-SITE OR OFF-SITE, SHALL BE THE ORIGINAL TOP LAYER OF A SOIL PROFILE FORMED UNDER NATURAL CONDITIONS. TECHNICALLY DEFINED AS THE "A" HORIZON BY THE SOIL SOCIETY OF AMERICA, IT SHALL CONSIST OF NATURAL, FRAGILE, LOOSE SOIL WITHOUT MIXTURES OF SUBSOIL OR OTHER FOREIGN MATERIALS, AND SHALL BE REASONABLY FREE FROM STUMPS, HARD LUMPS, STIFF CLAY, STONE, NOXIOUS WEEDS, BRUSH, OR OTHER DEBRIS. IT SHALL HAVE DEMONSTRATED BY EVIDENCE OF HEALTHY VEGETATION GROWING, OR HAVING GROWN ON IT PRIOR TO STRIPPING, THAT IT IS REASONABLY WELL DRAINED AND DOES NOT CONTAIN SUBSTANCES TOXIC TO PLANTS.

(2.5.1) "A" HORIZON: "A" HORIZONS SHALL BE CLEAR, GROUND OR SHREDDED BARK OR HARDWOOD MULCH. IN PLANTING AREAS WHERE SLOPES EXCEED 3:1 AND AT DRAINAGE DISPERSON POINTS OR ALONG NATURAL WATERWAYS WHERE CONCENTRATIONS OF SURFACE WATER EMPTY FROM CULVERTS OR PAVED DITCHES, HEAVY JUTE MESH SHALL BE INSTALLED. SHREDDED HARDWOOD OR BARK MULCH SHALL HAVE BEEN COMPOSTED FOR AT LEAST TWO MONTHS PRIOR TO APPLICATION. FRESHLY GROUND MULCH WILL NOT BE ACCEPTED. FINELY GROUND MULCH WHICH INHIBITS DRAINAGE, ENCOURAGES WEED GROWTH OR OTHER RESISTANT MINERALS OF SAND OR SILT SIZE OR (3) HORIZONS DOMINATED BY 1 OR 2 ABOVE BUT TRANSITIONAL TO OTHER HORIZONS. (2.5.2) "AN UNDERLYING B OR C": "AN UNDERLYING B OR C" AT HORIZON SUBSIDIARIES, AT HORIZONS SHALL BE MINERAL HORIZONS, FORMED OR FORMING AT OR ADJACENT TO THE SURFACE, IN WHICH THE FEATURE EMPHASIZED IS AN ACCUMULATION OF HUMIFIED ORGANIC MATTER INTIMATELY ASSOCIATED WITH THE MINERAL FRACTION. THE SOIL IS A DARK OR DARKER THAN UNDERLYING HORIZONS BECAUSE OF THE PRESENCE OF ORGANIC MATTER. THE ORGANIC MATERIAL IS ASSUMED TO BE DERIVED FROM PLANT AND ANIMAL REMAINS AND IS DEPOSITED ON THE SURFACE OF THE SOIL, OR DEPOSITED WITHIN THE HORIZON WITHOUT APPRECIABLE TRANSLATION. (2.5.3) "A" HORIZON TOPSOIL CONTENT: "A" HORIZON TOPSOIL SHALL BE IN ACCORDANCE WITH THE FOLLOWING MATERIALS BY PERCENTAGE

SAND	42-58%
CLAY	15-20%
ORGANIC MATERIAL	12-18%

(2.6) TOPSOIL SHALL HAVE A PH IN THE RANGE OF 5.8 TO 7.0 PRIOR TO MIXING WITH AMENDMENTS.

**(3) PLANTING AREA PREPARATION**

(3.1) PLANTING AREAS, BECAUSE OF SOIL COMPACTION DURING CONSTRUCTION, ALL PLANTING AREAS SHALL BE LOOSENEED BY ROTO-TILLING AS SPECIFIED BELOW. AREAS UNDER THE DRIP LINE OF TREES OR SHRUBS TO REMAIN IN PLACE SHALL NOT BE ROTO-TILLED. A PLANTING AREA IS ANY AREA IN WHICH NEW PLANTING OCCURS. (3.2) PRIOR TO EXCAVATION OF INDIVIDUAL TREE AND SHRUB PITS, A DIAMETER EQUAL TO TEN TIMES THE DIAMETER OF THE ROOT BALL SHALL BE ROTO-TILLED TO A DEPTH EQUAL TO THE DEPTH OF THE ROOT BALL FOR PLANTS HAVING ROOT BALLS NO DEEPER THAN 12" FOR PLANTS HAVING ROOT BALLS OVER 12" DEEP. THE ROTO-TILLED AREA SHALL BE 12" DEEP. UNDER NO CIRCUMSTANCES SHALL THE ROTO-TILLED DEPTH BE GREATER THAN THE DEPTH OF THE ROOT BALL. (3.3) IN CONTINUOUS SHRUB AND GROUND COVER BEDS, THE ROTO-TILLED PERIMETER SHOULD EXTEND TO A DISTANCE OF 5 TIMES THE DIAMETER OF A SINGLE ROOTBALL OF THE PERMIER PLANTS. DEPTH OF TILLAGE FOR SHRUBS SHALL BE AS SPECIFIED ABOVE.

**(4) PLANTING PIT EXCAVATION AND SOIL AMENDMENT**

(4.1) TREE AND SHRUB PITS SHALL BE 3 TIMES THE WIDTH OF THE ROOTBALL, AND SHALL BE DUG SO THAT THE BOTTOM OF THE ROOT BALL REST ON UNDISTURBED SOIL, AND THE TOP OF THE ROOT BALL WILL BE 2" ABOVE FINISH GRADE. (4.2) GROUND COVER, ANNUAL AND PERENNIAL BEDS SHALL BE FILLED TO A DEPTH OF 12" OR IF SOIL AMENDMENTS ARE REQUIRED, EXCAVATED TO A DEPTH OF 12" UNLESS OTHERWISE NOTED ON THE PLANS. PLANTS SHALL BE EVENLY SPACED WITHIN THE FILLED PLANTING AREA AND SET TO MAINTAIN THE ORIGINAL GROUND DEPTH WHILE ALLOWING FOR A 2" TOP DRESSING OF MULCH. (4.3) WHENEVER POSSIBLE, THE EXCAVATED SOIL SHOULD BE USED OR AMENDED TO BE USED AS BACKFILL MATERIAL IN ORDER TO ELIMINATE OR MINIMIZE THE OCCURRENCE OF HYDROLOGIC DISCONTINUITIES, AND/OR SOIL INTERFACE PROBLEMS COMMON TO PLANTING BEDS CONTAINING SOILS OF DIFFERENT TEXTURE. (4.4) WHERE SOILS TESTING OR SUBSEQUENT OBSERVATION INDICATES THAT THE TEXTURE OF THE EXISTING SOIL IS UNSUITABLE FOR THE PLANT SPECIES BEING PLANTED (I.E. HEAVY CLAY, PURE SAND) THE ON-SITE SOIL SHALL BE AMENDED AS RECOMMENDED WITH THE SOILS REPORT TO PROVIDE SUITABLE TEXTURE. WHERE SOILS TESTS DO NOT REVEAL TEXTURAL DEFICIENCIES, YET SUBSEQUENT EXCAVATIONS DO, THE BACKFILL MIXTURE SHALL BE 68% EXISTING SOIL AND 32% TOPSOIL AS DEFINED ABOVE. (4.5) WHERE SOILS TESTS INDICATE THAT THE PH, SALINITY OR CHEMICAL COMPOSITION IS UNSUITABLE FOR THE PLANT SPECIES BEING PLANTED, THE SOIL SHALL BE AMENDED AS RECOMMENDED WITHIN THE SOILS REPORT TO ACHIEVE SUITABLE CHEMICAL PROPERTIES. AFTER AMENDING, PLANTING SOIL FOR DECIDUOUS PLANTS SHALL HAVE A PH VALUE BETWEEN 6.0 AND 7.0, AND FOR EVERGREEN OR SEMI-EVERGREEN PLANTS SHALL HAVE A PH VALUE BETWEEN 5.0 AND 6.0. A REPRESENTATIVE SAMPLE FROM THE EXCAVATED SOIL SHALL BE FIELD TESTED FOR PH UTILIZING A RELIABLE SOIL PH METER OR SOIL PH TEST KIT. THE PH VALUE OF THE NATURAL SOIL BACKFILL MIXTURE MAY BE AMENDED BY ADDING LIMESTONE OR ALUMINUM SULFATE AS NEEDED. (4.6) WHERE SOILS TESTING OR SUBSEQUENT EXCAVATION INDICATE THE EXISTING SOIL IS UNSUITABLE FOR USE AS BACKFILL MATERIAL, BECAUSE OF THE PRESENCE OF DEBRIS OR OTHER DETERMINABLE MATERIAL, THE BACKFILL MATERIAL SHALL BE 68% TOPSOIL, AS DEFINED ABOVE, AND 32% CLEAN SAND. (4.7) AMENDED BACKFILL SOIL REPLACES ONLY THE SOIL EXCAVATED FROM THE TREE AND SHRUB PITS (3 TIMES THE WIDTH OF THE ROOT BALL), NOT THE ENTIRE ROTO-TILLED AREA. (4.8) FOR TREES IN POORLY DRAINAGE SITES, A VERTICAL PIPE SHALL BE INSTALLED AT THE EDGE OF THE PLANT PIT EXCAVATION, EXTENDING TO A LEVEL EQUAL TO THE TOP OF THE MULCH. THE PIPE END SHALL BE THREADED AND FITTED WITH A THREADED CAP.

**(5) PLANT MATERIAL AND MULCH**

(5.1) THE NAMES OF PLANTS REQUIRED UNDER THIS CONTRACT CONFORM TO THOSE GIVEN IN L.H. BAILEY'S HORTUS THRU, 1976 EDITION. NAMES OF VARIETIES NOT INCLUDED HEREIN CONFORM GENERALLY WITH NAMES CURRENT IN THE NURSERY TRADE. ALL PLANTS SHALL HAVE A HEARTY OF GROWTH THAT IS NORMAL FOR THEIR SPECIES AND THEY SHALL BE SOUND, HEALTHY AND VIGOROUS, WITH WELL DEVELOPED ROOT SYSTEMS. ALL PLANT MATERIAL SHALL BE FREE FROM INSECT PLANT DISEASES, AND INJURIES. ALL PLANTS SHALL EQUAL OR EXCEED THE MEASUREMENTS SPECIFIED IN THE PLANT LIST, WHICH HAVE MINIMUM ACCEPTABLE SIZES. TREES SHALL HAVE SINGLE TRUNKS EXCEPT AS NOTED. ALL SHRUBS SHALL BE HEALTHY, VIGOROUS, AND OF GOOD COLOR. ONLY DAMAGED OR BROKEN BRANCHES OF PLANT MATERIAL MAY BE PRUNED AND ANY NECESSARY PRUNING SHALL BE DONE AT THE TIME OF PLANTING. HOWEVER, UNDER NO CIRCUMSTANCES SHALL THE CENTRAL LEADER OF A PLANT BE PRUNED. BALLING AND BURLAPPING OF PLANTS SHALL FOLLOW THE CODE OF STANDARDS CURRENTLY RECOMMENDED BY THE AMERICAN STANDARD FOR NURSERY STOCK.

(5.2) ALL TAGS, STRINGS OR ANY OTHER MATERIAL ATTACHED TO THE PLANTS SHALL BE REMOVED AT THE TIME OF THE PLANTING. LABEL AT LEAST ONE TREE, SHRUB AND GROUND COVER OF EACH VARIETY WITH A SECURELY ATTACHED WATERPROOF TAG BEARING THE BOTANICAL NAME AND LEGIBLE COLOR AND SIZE AS SPECIFIED IN THE PLANT LIST OF REQUIRED PLANTS. LABELS SHALL BE SECURELY ATTACHED TO PLANTS AND SHALL BE LEGIBLE FOR 60 DAYS AFTER DELIVERY TO THE PLANTING SITE. WIRE IDENTIFICATION TAGS SHALL NOT BE USED. (5.3) SUBSTITUTIONS WILL BE PERMITTED ONLY UPON SUBMISSION OF PROOF THAT ANY PLANT IS NOT OBTAINABLE. ALL SUBSTITUTIONS MUST BE AUTHORIZED BY THE OWNER OR THE OWNER'S REPRESENTATIVE IN WRITING PROVIDING FOR USE OF THE NEAREST EQUIVALENT OBTAINABLE SIZE OR VARIETY OF PLANT HAVING THE SAME ESSENTIAL CHARACTERISTICS AS THE ORIGINAL VARIETY WITH AN EQUIVAILABLE ADJUSTMENT OF CONTRACT PRICE. (5.4) BALLED AND BURLAPPED PLANTS (B&B) SHALL BE DUG WITH FIRM, NATURAL BALLS OF EARTH. TOPSOIL SUPPORTING ROOTS AND DEPTH TO ENCOMPASS THE FIBROUS AND NECESSARY ROOT SYSTEM NECESSARY FOR FULL RECOVERY OF THE PLANT. BALLS SHALL BE FIRMLY WRAPPED WITH BURLAP OR PLANK MATERIAL AND BOUND WITH TWINE OR CORD. BURLAP SHALL NOT BE PULLED OUT FROM UNDER B&B DURING PLANTING OPERATIONS. B&B PLANTS WHICH CANNOT BE PLANTED IMMEDIATELY ON DELIVERY SHALL BE COVERED WITH MOST SOIL, MULCH, OR OTHER MATERIAL TO PROVIDE PROTECTION FROM DRYING WINDS AND SUN. (5.5) PLANTS NOTED "CONTAINER" ON THE PLANT LIST MUST BE CONTAINER GROWN WITH WELL ESTABLISHED ROOT SYSTEMS. LOOSE CONTAINERIZED PLANT MATERIAL WILL NOT BE ACCEPTED. ALL PLANTS NURSED AND PLANTS WITH ROOT BALLS BROKEN DURING TRANSPORT OR PLANTING OPERATIONS WILL BE REJECTED. B&B-ROOTED PLANTS (B&B) SHALL BE PLANTED OR HEeled-IN IMMEDIATELY UPON DELIVERY. ALL PLANTS SHALL BE WATERED AS NECESSARY UNTIL PLANTED. (5.6) NEW PLANTINGS SHALL BE LOCATED WHERE SHOWN ON THE PLAN EXCEPT WHERE OBSTRUCTIONS BELOW GROUND ARE ENCOUNTERED OR WHERE CHANGES HAVE BEEN MADE AFTER APPROVAL BY THE OWNER OR THE OWNER'S REPRESENTATIVE. REASONABLE CARE SHALL BE EXERCISED TO HAVE PLANTING PITS DUG AND SOIL PREPARED PRIOR TO MOVING PLANTS TO THEIR RESPECTIVE LOCATIONS TO ENSURE THAT THEY WILL NOT BE UNNECESSARILY EXPOSED TO DRYING OR PHYSICAL DAMAGE. (5.7) A LIST OF PLANTS, INCLUDING SIZES, QUANTITIES AND OTHER REQUIREMENTS, IS SHOWN ON THE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE QUANTITIES AS SHOWN ON THE DRAWINGS. IF DISCREPANCIES OCCUR IN THE QUANTITIES SHOWN, THE PLANTING PLANS SHALL GOVERN. (5.8) THE PLANTING CONTRACTOR WILL BE NOTIFIED BY THE GENERAL CONTRACTOR WHEN OTHER DIVISIONS OF THE WORK HAVE PROCEEDED SUFFICIENTLY TO COMMENCE WORK ON THE PLANTING OPERATION. THEREAFTER, PLANTING OPERATIONS SHALL BE CONDUCTED UNDER FAVORABLE WEATHER CONDITIONS DURING THE NEXT SEASON OR SEASONS WHICH ARE NORMAL FOR SUCH WORK. RELOCATION OF TREES OR OTHER UNDERGROUND OBSTRUCTIONS, RELOCATIONS TO AVOID OBSTRUCTIONS, AND PROVISION OF DRAINAGE FOR PLANTING AREAS SHALL BE DONE ONLY AS APPROVED BY THE OWNER OR THE OWNER'S REPRESENTATIVE. (5.9) ALL PLANTS SHALL BE PLANTED UPRIGHT AND FACED TO GIVE THE BEST APPEARANCE OR RELATIONSHIP TO ADJACENT STRUCTURES. ROOTS SHALL BE SPREAD IN THEIR NORMAL POSITION. UNBROKEN OR PRUNED ROOTS SHALL BE CUT OFF CLEANLY. PLANTS WITH CURLING ROOTS SHALL NOT BE ACCEPTED. BURLAP TWINE AND OTHER FASTENING MATERIAL SHALL BE CUT AND PUSHED TO THE BOTTOM OF THE PLANT PIT PRIOR TO BACKFILL MATERIAL BEING PLACED. THE PLANT SHALL NOT BE ROCKED BACK AND FOURTH TO ENTIRELY REMOVE THE WRAPPING MATERIAL. NOR SHALL ANY OTHER PRACTICE BE PERFORMED WHICH COULD CAUSE THE ROOT BALL TO BREAK APART. WHEN WIRE BASKETS ARE USED ON THE ROOT BALL OF PLANTS THE WIRE SHALL BE REMOVED TO AT LEAST 12" BELOW THE TOP OF THE ROOT BALL. (5.10) AT THE TIME OF PLANTING, AND AT MANY TIMES LATER AS SEASONAL CONDITIONS REQUIRE, EACH PLANT AND THE SOIL AROUND IT SHALL BE THOROUGHLY WATERED. CARE SHOULD BE EXERCISED WHEN WATERING TO AVOID FLOODING OF PLANTS AND BEDS, DISPLACEMENT OF MULCH MATERIAL AND EROSION OF SOIL. AVOID USE OF HIGH PRESSURE HOSES. THE CONTRACTOR SHALL MAKE, AT HIS EXPENSE, WHATEVER ARRANGEMENTS MAY BE NECESSARY TO ENSURE AN ADEQUATE SUPPLY OF WATER TO MEET THE NEEDS OF THIS CONTRACT DURING INSTALLATION. THE CONTRACTOR SHALL ALSO FURNISH ALL NECESSARY HOSE, EQUIPMENT ATTACHMENTS AND ACCESSORIES FOR THE ABOVE WATERING OF PLANTED AREAS AS MAY BE REQUIRED UNDER ACCEPTANCE BY THE OWNER OR THE OWNER'S REPRESENTATIVE. (5.11) MULCH SHALL BE CLEAN, GROUND OR SHREDDED BARK OR HARDWOOD MULCH. IN PLANTING AREAS WHERE SLOPES EXCEED 3:1 AND AT DRAINAGE DISPERSON POINTS OR ALONG NATURAL WATERWAYS WHERE CONCENTRATIONS OF SURFACE WATER EMPTY FROM CULVERTS OR PAVED DITCHES, HEAVY JUTE MESH SHALL BE INSTALLED. SHREDDED HARDWOOD OR BARK MULCH SHALL HAVE BEEN COMPOSTED FOR AT LEAST TWO MONTHS PRIOR TO APPLICATION. FRESHLY GROUND MULCH WILL NOT BE ACCEPTED. FINELY GROUND MULCH WHICH INHIBITS DRAINAGE, ENCOURAGES WEED GROWTH OR OTHER RESISTANT MINERALS OF SAND OR SILT SIZE OR (3) HORIZONS DOMINATED BY 1 OR 2 ABOVE BUT TRANSITIONAL TO OTHER HORIZONS. (5.12) ALL PLANTS SHALL BE MULCHED IMMEDIATELY AFTER PLANTING. GROUND COVER SHALL BE MULCHED WITH A 3" LAYER OF SHREDDED HARDWOOD OR BARK MULCH. ALL OTHER PLANTING BEDS, SHRUBS AND TREE PLANTINGS SHALL BE MULCHED WITH A 3" MINIMUM LAYER OF MULCH. THIS MULCH SHALL ENTIRELY COVER THE AREA OF THE PLANTING PIT, BED, OR EXCAVATION AROUND EACH PLANT WITH THE EXCEPTION OF THE AREA IMMEDIATELY ADJACENT TO THE PLANT TRUNK OR TRUNKS. THE AREA IMMEDIATELY ADJACENT TO THE PLANT TRUNK OR TRUNKS SHALL BE LEFT FREE OF ANY MULCH.

**(6) FERTILIZING**

(6.1) THE FERTILIZER SHOULD BE A DRY SOLID RELEASE FORM OF FERTILIZER. IT SHOULD CONTAIN AT LEAST 50% WATER INSOLUBLE NITROGEN. THE FERTILIZER SELECTED SHOULD ALSO HAVE A LOW ADJUSTED SALT INDEX TO PREVENT BURNING. THE PH OF THE FERTILIZER SHOULD NOT EXCEED 3-1-2 UNLESS THE SOIL TEST REVEALS THAT ADJUSTED LEVELS OF P AND K ARE NECESSARY. (6.2) FOR DECIDUOUS TREES, USE OSMOCOPE (18-8-12) AT THE RATE EQUIVALENT TO 4 LBS ACTUAL N/1000 SQ FT OF ROOT ZONE AREA/YEAR. FOR EVERGREEN TREES USE 2 LBS ACTUAL N/1000 SQ FT OF ROOT ZONE AREA/YEAR. (6.3) MIX THE FERTILIZER INTO THE BACKFILL SOIL OF THE TREE PITS. FOR SHRUB BEDS, MIX THE FERTILIZER INTO THE AREA THAT HAS BEEN ROTO-TILLED FOR THE PLANTS. (6.4) THE FERTILIZER RATE FOR CONTINUOUS GROUND COVER AND SHRUB BEDS SHOULD BE DERIVED BY CALCULATING THE ENTIRE ROOT ZONE AREA. THE ROOT ZONE AREA IS FOUND BY MEASURING THE AREA CONTAINING THE MULTIPLE PLANT ROOTS. USE OSMOCOPE (18-8-12) AT A RATE EQUIVALENT TO 4 LBS N/1000 SQ FT OF ROOT ZONE AREA. THE FERTILIZER SHOULD BE EVENLY DISTRIBUTED WITHIN THE SHRUB BED SOIL. (6.5) ALWAYS BE SURE THAT ADEQUATE MOISTURE IS AVAILABLE WHEN FERTILIZING SO THAT THE FERTILIZER WILL BE DISSOLVED AND INTO THE SOIL SOLUTION FOR ROOT UPTAKE AND TO AVOID BURNING THE ROOTS.

**(7) STAKING**

(7.1) TREES REQUIRING SUPPORT WILL BE INDICATED IN THE COMMENTS SECTION OF THE PLANTING SCHEDULE. ALL TREES REQUIRING SUPPORT SHALL BE STAKED ACCORDING TO THE DETAILS PROVIDED. (7.2) TWO STAKES SHALL BE REQUIRED PER TREE. THE STAKES SHALL BE DRIVEN VERTICALLY INTO THE GROUND TO A DEPTH OF 2 TO 2 1/2 FT, ON OPPOSITE SIDES OF THE TREE, IN SUCH A MANNER AS NOT TO INJURE THE ROOT BALL OR ROOTS. STAKES FOR SUPPORTING TREES SHALL BE 2" SQUARE OR ROUND, BY 8'. THE STAKES SHOULD BE SOUND WOOD TREATED WITH A SUITABLE WOOD PRESERVATIVE. A SINGLE BURLAP LOOP SHALL BE PLACED AROUND THE TRUNK, ABOVE THE FIRST MAJOR BRANCH, AND TACKED TO ONE OF THE WOODEN STAKES. ANOTHER SINGLE BURLAP LOOP SHALL ALSO BE PLACED AROUND THE TRUNK ABOVE THE FIRST MAJOR BRANCH, AND TACKED TO THE OTHER WOODEN STAKE. THE BURLAP SHOULD BE TAUT. (7.3) WOODEN STAKES AND BURLAP TIE SHOULD BE REMOVED AFTER ONE YEAR.

**(8) CHEMICAL APPLICATION**

(8.1) ALL PESTICIDES SHALL BE PRODUCTS OF RECOGNIZED COMMERCIAL MANUFACTURERS, AND SHALL CONFORM TO ALL APPLICABLE FEDERAL, STATE, AND LOCAL PESTICIDE LAWS. PESTICIDES SHALL BE APPLIED WITH CALIBRATED EQUIPMENT ACCORDING TO EPA LABEL RESTRICTIONS AND REGULATIONS BY A CERTIFIED APPLICATOR. ANY DAMAGE INCURRED TO THE SITE, ADJACENT PROPERTIES, OR APPLICATOR DURING PESTICIDE APPLICATIONS WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. (8.2) PESTICIDES SHOULD BE USED ONLY WHEN NECESSARY TO TREAT AN OUTBREAK OF A HARMFUL PEST OR DISEASE PROBLEM. THE OWNER OR THE OWNER'S REPRESENTATIVE SHALL BE NOTIFIED 24 HOURS PRIOR TO THE APPLICATION OF ANY PESTICIDE. (8.3) INSPECTION OF THE WORK TO DETERMINE COMPLETION OF THE CONTRACT EXCLUSIVE OF THE POSSIBLE REPLACEMENT OF PLANTINGS, WILL BE MADE BY THE OWNER OR THE OWNER'S REPRESENTATIVE AT THE CONCLUSION OF THE INSTALLATION PERIOD UPON WRITTEN NOTICE REQUESTING SUCH INSPECTION. REQUEST SHALL BE SUBMITTED BY CONTRACTOR AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED DATE FOR INSPECTION. AFTER INSPECTION, THE CONTRACTOR WILL BE NOTIFIED IN WRITING BY THE OWNER OR THE OWNER'S REPRESENTATIVE OF ACCEPTANCE OF THE WORK, EXCLUSIVE OF THE POSSIBLE REPLACEMENT OF PLANTS SUBJECT TO GUARANTEE; OR, IF THERE ARE ANY DEFICIENCIES, THE CONTRACTOR WILL BE NOTIFIED OF THE DEFICIENCIES NECESSARY FOR COMPLETION OF THE WORK. PLANTINGS SHALL NOT BE CONSIDERED ACCEPTED UNTIL ALL DEFICIENCIES HAVE BEEN CORRECTED AND APPROVED IN WRITING.

**(9) MAINTENANCE AND GUARANTEE**

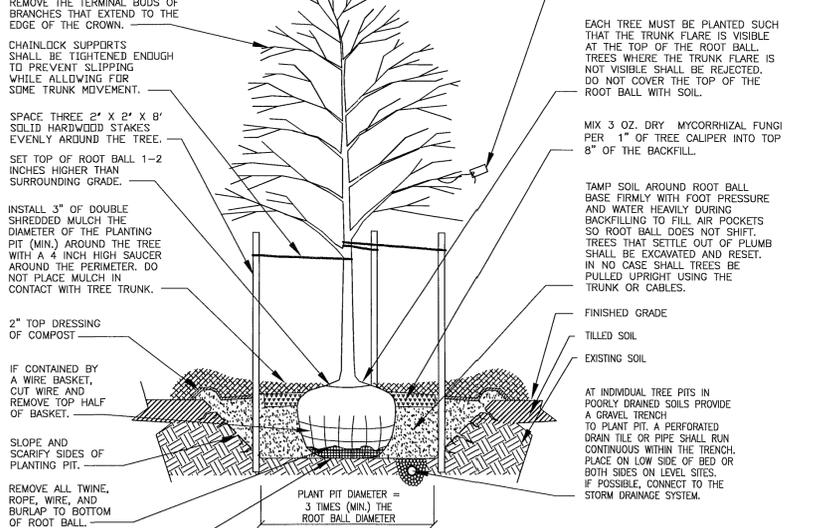
(9.1) THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING HIS WORK FOR THE PERIOD OF ONE YEAR AFTER ACCEPTANCE BY THE OWNER OR THE OWNER'S REPRESENTATIVE. MAINTENANCE SHALL INCLUDE MOWING, WATERING, WEEDING, WEEDING, MULCHING, REMOVAL OF DEAD MATERIALS, RESTORING OF PLANTS TO PROPER GRADES OR UPRIGHT POSITIONS, RESTORATION OF EARTH BERMS, AND OTHER NECESSARY OPERATIONS. ADEQUATE PROTECTION FOR LAWN AREAS AGAINST TRESPASSING DURING PLANTING OPERATIONS AND AGAINST DAMAGE OF ANY KIND SHALL BE PROVIDED. NOTHING IN THESE NOTES IS INTENDED TO RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO REPAIR EXISTING LAWN AREAS DAMAGED BY WORKMEN ENGAGED IN THE COMPLETION OF THIS PROJECT. (9.2) INSPECTION OF THE WORK TO DETERMINE COMPLETION OF THE CONTRACT EXCLUSIVE OF THE POSSIBLE REPLACEMENT OF PLANTINGS, WILL BE MADE BY THE OWNER OR THE OWNER'S REPRESENTATIVE AT THE CONCLUSION OF THE INSTALLATION PERIOD UPON WRITTEN NOTICE REQUESTING SUCH INSPECTION. REQUEST SHALL BE SUBMITTED BY CONTRACTOR AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED DATE FOR INSPECTION. AFTER INSPECTION, THE CONTRACTOR WILL BE NOTIFIED IN WRITING BY THE OWNER OR THE OWNER'S REPRESENTATIVE OF ACCEPTANCE OF THE WORK, EXCLUSIVE OF THE POSSIBLE REPLACEMENT OF PLANTS SUBJECT TO GUARANTEE; OR, IF THERE ARE ANY DEFICIENCIES, THE CONTRACTOR WILL BE NOTIFIED OF THE DEFICIENCIES NECESSARY FOR COMPLETION OF THE WORK. PLANTINGS SHALL NOT BE CONSIDERED ACCEPTED UNTIL ALL DEFICIENCIES HAVE BEEN CORRECTED AND APPROVED IN WRITING. (9.3) NURSERY STOCK SHALL BE FULLY GUARANTEED FOR ONE FULL YEAR. ALL PLANTS THAT FAIL TO MAKE NEW GROWTH FROM A DORMANT CONDITION OR THAT DIE DURING THE FIRST YEAR AFTER PLANTING SHALL BE REPLACED. ALL REPLACEMENTS SHALL CONFORM TO SIZE AND VARIETY WITH THE ORIGINAL SPECIFICATIONS. ALL COSTS OF REPLACEMENTS SHALL BE BORNE BY THE CONTRACTOR. (10) ALL OTHER ITEMS NECESSARY TO MAKE WORK COMPLETE (10.1) ANY PLANT MATERIAL NOT PLANTED SHALL BE REMOVED FROM THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL UNUSED RUBBISH AND DEBRIS FROM THE SITE UPON COMPLETION OF HIS WORK. (11) SEEDING (11.1) THIS SECTION INCLUDES, BUT IS NOT LIMITED TO: TILLAGE, PH BALANCING, FERTILIZING, WATERING, SEEDING, MAINTENANCE MOWING, AND MULCHING OF ALL DISTURBED AREAS WITHIN THE CONTRACT LIMIT LINES NOT OCCUPIED BY STRUCTURES, PAVEMENT, IMPERV, OR PLANTING BEDS. (11.2) QUALITY ASSURANCE: SEEDING WORK SHALL BE PERFORMED BY A SINGLE FIRM SPECIALIZING AND EXPERIENCED IN LANDSCAPE WORK. (11.3) SHIP MATERIALS WITH CERTIFICATES OF INSPECTION REQUIRED BY GOVERNING AUTHORITIES, COMPLY WITH REGULATIONS APPLICABLE TO LANDSCAPE MATERIALS. (11.4) DELIVERY, STORAGE AND HANDLING: FERTILIZER, SOIL AMENDMENTS, AND SEED SHALL BE DELIVERED TO THE SITE IN ORIGINAL UNOPENED CONTAINERS. THE MANUFACTURER'S GUARANTEED ANALYSIS, NAME, TRADEMARK, AND STATEMENT OF CONFORMANCE, TO STATE AND FEDERAL LAWS, IN LIEU OF CONTAINERS, FERTILIZER AND SOIL AMENDMENTS MAY BE FURNISHED IN BULK WITH A MANUFACTURER'S CERTIFICATE INDICATING THE ABOVE INFORMATION ACCOMPANYING EACH DELIVERY. DURING DELIVERY, SEED, FERTILIZER AND SOIL AMENDMENTS SHALL BE KEPT IN DRY STORAGE AWAY FROM CONTAINERS. PRECAUTIONS SHALL BE TAKEN TO PROTECT CONTAINERS FROM RUPTURE UPON USE. (11.5) JOB CONDITIONS: (11.5.1) PRIOR TO BEGINNING THE WORK OF THIS SECTION, VERIFY THAT THE SITE WORK CONTRACTOR HAS COMPLETED THE FINISH GRADING. THE FRONT 4" OF TOPSOIL SHALL BE IN PLACE AND ROUGH GRADE LEVELS SHALL BE AT THE FINISH GRADE LEVEL, IN ALL LANDSCAPE AREAS, INCLUDING AREAS TO BE ESTABLISHED IN TURF. (11.5.2) PRIOR TO TOPSOIL PLACEMENT ALL AREAS TO RECEIVE TOPSOIL SHALL BE CLEARED OF ALL DEBRIS. ANY DEBRIS SHALL BE REMOVED FROM THE SITE. TO CLIMATE A TRANSITION ZONE BETWEEN UNSETTLED SOIL AND NEW SOIL, TOPSOIL SHALL BE PLACED IN TWO (2) TWO INCH (2") LAYERS. THE FIRST LAYER SHALL BE PLACED AND THOROUGHLY TILLED IN PRIOR TO PLACEMENT OF SECOND LAYER. (11.5.3) THE LANDSCAPE CONTRACTOR SHALL PLACE A FOUR INCH (4") COMPACTED LAYER OF TOPSOIL OVER ALL AREAS TO BE ESTABLISHED IN TURF. THE TOPSOIL LAYER SHALL BRING ALL TURF AREAS AND SHRUB BEDS TO FINISH GRADE. (11.5.4) DETERMINE LOCATIONS OF ALL UNDERGROUND UTILITIES AND PERFORM WORK IN A MANNER WHICH WILL AVOID DAMAGE. ALL UTILITIES ARE NOT NECESSARILY SHOWN ON DRAWINGS AND CONTRACTOR SHALL ASSUME RESPONSIBILITY OF DETERMINING EXISTENCE OR NON-EXISTENCE OF ALL UTILITIES. MAINTAIN GRADE STAKES SET BY OTHERS UNTIL REMOVAL IS MUTUALLY AGREED UPON BY PARTIES CONCERNED. (11.5.5) WHEN CONDITIONS DETRIMENTAL TO LAWN ESTABLISHMENT, GROWTH AND MAINTENANCE ARE ENCOUNTERED, SUCH AS RUBBLE FILL, ADVERSE GRADE, OBSTRUCTIONS OR OBSTRUCTIONS, NOTIFY THE OWNER'S REPRESENTATIVE BEFORE BEGINNING WORK. (11.6) WARRANTY LAWS: THE ESTABLISHMENT PERIOD FOR LAWN AREAS SHALL BE FROM THE TIME OF THE INSTALLATION UNTIL THE THIRD CUTTING. LAWN AREAS WITH AN ESTABLISHED STAND SHALL BE UNIFORM IN COVERAGE AND OF THE SPECIFIED MIXTURE. NO INDIVIDUAL LAWN AREA SHALL HAVE UNACCEPTABLE PORTIONS IN EXCESS OF ONE PERCENT OF THE TOTAL LAWN AREA. ALL REPLACEMENTS SHALL BE SUBJECT TO THE WARRANTY REQUIREMENTS AS THE ORIGINAL STOCK, UNLESS OTHERWISE DONE DURING REPLACEMENT OPERATIONS SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR. (11.7) SOIL AMENDMENTS: (11.7.1) LIME: TO PH BALANCE SOIL. NATURAL DOLOMITIC LIMESTONE CONTAINING NOT LESS THAN 80% NATURAL CARBONATES WITH A MINIMUM OF 20% MAGNESIUM CARBONATES. GROUND SO NOT LESS THAN 80% PASSES A 20-MESH SIEVE AND NOT LESS THAN 80% PASSES A 40-MESH SIEVE. (11.7.2) ALUMINUM SULFATE: TO PH BALANCE SOIL. COMMERCIAL GRADE IN DRY POWDER FORM. (11.7.3) SUPERPHOSPHATE: SOLUBLE MIXTURE OF TREATED MINERALS; 20% AVAILABLE PHOSPHORIC ACID. (11.8) FERTILIZER: GRANULAR OR PELLET FORM, HORTICULTURAL GRADE COMPLETE FORMULAS, DRY AND FREE-FLOWING, UNIFORM IN COMPOSITION, AND SUITABLE FOR APPLICATION BY SPREADING EQUIPMENT. THE FERTILIZER SHALL CONFORM TO THE APPLICABLE STATE FERTILIZER LAWS. (11.9) SEED: STATE-CERTIFIED SEED OF THE LATEST SEASON'S CROP COMMON TO THE SITE LOCATION. PROVIDE FRESH, CLEAN, NEW-CROP SEED COMPLYING WITH ESTABLISHED STANDARDS FOR PURITY AND GERMINATION. SEED SHALL BE SUBJECT TO THE REQUIREMENTS OF AGRICULTURE RULES AND REGULATIONS UNDER THE LATEST EDITION OF THE FEDERAL SEED ACT. SEED SHALL BE DELIVERED TO THE DEALER AND SHALL BE DELIVERED TO THE SITE IN SEALED CONTAINERS WHICH SHALL BEAR THE DEALER'S GUARANTEED ANALYSIS. SEED THAT HAS BECOME WET, MOLDY, OR OTHERWISE DAMAGED WILL NOT BE ACCEPTABLE. SEEDING: ATHLETIC FIELD MIXTURE RATE: 6 LBS/1000 SF FERTILITY DATE DESCRIPTION FESCUE ARUNDINACEA 'REBEL 30' - 'REBEL 30' TALL FESCUE, 7-12 DAYS 80% LOULUM PERENNE 'PALMER II' - 'PALMER II' PERENNIAL RYEGRASS 10% POA PRATENSIS - KENTUCKY BLUEGRASS 90-85% 10% 10-21 DAYS (11.10) STRAW MULCH: STRAW SHALL BE STAKES FROM OATS, WHEAT, RYE, BARLEY OR RICE THAT IS FREE FROM NOXIOUS WEEDS, CHEMICALS, MOLD OR OTHER OBJECTIONABLE MATERIALS WITH A MULCH TACKIFIER. STRAW SHALL BE IN AN AIR-DRY CONDITION SUITABLE FOR PLACING STRAW SUPPLIED FOR MECHANICAL APPLICATION SHALL BE CHOPPED. (11.11) WOOD CELLULOSE FIBER: (11.11.1) MULCH SUPPLIED FOR USE WITH HYDRAULIC APPLICATION OF GRASS SEED AND FERTILIZER SHALL CONSIST OF SILVA-FIBER MULCH BY WETTERAUER COMPANY, WASHINGTON, WA (800)443-9174 OR EQUAL. WOOD CELLULOSE FIBER SHALL NOT BE UTILIZED HOWEVER FROM 6/1 TO 8/15, DURING THIS TIME, STRAW MULCH SHALL BE UTILIZED. (11.11.2) PROCESSING OF WOOD CELLULOSE FIBER SHALL BE IN SUCH A MANNER THAT IT WILL NOT CONTAIN GERMINATION OR GROWTH INHIBITING ELEMENTS. (11.11.3) WOOD CELLULOSE FIBER SHALL BE DYED AN APPROPRIATE COLOR TO ALLOW VISUAL METERING OF ITS APPLICATION. (11.11.4) WOOD CELLULOSE FIBER SHALL HAVE THE PROPERTY OF BECOMING EVENLY DISPERSED AND SUSPENDED WHEN AGITATED IN WATER, WHEN SPRAYED UNIFORMLY ON THE SURFACE OF THE SOIL. THE FIBERS SHALL FORM A BLUETTER-LIKE GROUND COVER WHICH RETAINS MOISTURE AND ALLOWS INFILTRATION TO THE UNDERLYING SOIL. (11.11.5) WEIGHT SPECIFICATIONS FROM SUPPLIERS FOR APPLICATIONS SHALL REFER TO AIR-DRY WEIGHT OF THE FIBER. A STANDARD EQUIVALENT TO 10 PERCENT MOISTURE. (11.12) THE LANDSCAPE CONTRACTOR SHALL CAREFULLY CORRELATE HIS WORK WITH THAT OF OTHER SITE DEVELOPERS. THE LANDSCAPE CONTRACTOR IS REQUIRED TO INSTALL AND MAINTAIN HIS FINISHED WORK AT HIS EXPENSE. (11.13) SEED BED PREPARATION: (11.13.1) SEEDING SHALL NOT BE DONE WHEN THE GROUND IS FROZEN, SNOW COVERED, SATURATED, OR IN ANY OTHER CONDITION WHICH WOULD MAKE ESTABLISHMENT AND SURVIVAL OF LAWS UNLIKELY. (11.13.2) AT THE TIME OF BEGINNING SEED BED PREPARATION, TOPSOIL SHALL BE IN A LOOSE, FRAGILE CONDITION, FREE FROM STONES IN ANY DIMENSION, STICKS, ROOTS AND OTHER EXTRANEOUS MATTER. IF TOPSOIL HAS BECOME CRUSTY, HARDENED OR ERRODED SINCE BEING SPREAD, IT SHALL BE A PART OF THIS WORK TO RESTORE SOIL TO THE LOOSE CONDITION DESCRIBED ABOVE. (11.13.3) SPREAD FERTILIZER AT THE RATE OF 4 LBS./1000 SF AT TIMES PER YEAR, ADD PH BALANCING AGENTS AT RATES RECOMMENDED BY THE SOIL TEST REPORT TO ACHIEVE A PH OF 5.5 TO 6.8. BLEND ADDITIVES THOROUGHLY INTO UPPER 4" OF TOPSOIL. REMOVE ANY ROOT OR OTHER DEBRIS WHICH MAY SURFACE. TILL AREAS UNTIL SOIL IS LOOSE AND FRAGILE AND ALL SOIL AMENDMENTS ARE UNIFORMLY DISTRIBUTED. (11.13.4) WORK ALL AREAS TO A SMOOTH EVEN SURFACE FREE FROM IRREGULARITIES, RIDGES, OR DEPRESSIONS. PREPARED AREAS SHALL MEET REQUIRED FINISH GRADE ELEVATIONS AND SHALL DRAIN ADEQUATELY. REPAIR ALL WASHED AND ERODED PORTIONS. (11.13.5) MOISTEN PREPARED AREAS IF SOIL IS DRY. WATER THOROUGHLY, THEN ALLOW SURFACE MOISTURE TO EVAPORATE. DO NOT CREATE MUDDY SOIL CONDITIONS. (11.13.6) SOW SEED USING A SPREADER OR SEEDING MACHINE AT THE RATE OF 6 LBS./1000 SF. DO NOT SEED WHEN WIND VELOCITY EXCEEDS 5 MPH. HOUR, DISTRIBUTE SEED EVENLY OVER ENTIRE AREA BY SOWING EQUAL QUANTITY IN 2 DIRECTIONS AT RIGHT ANGLES TO EACH OTHER. OVERSEED AT A RATE OF 8 LBS./1000 SF. (11.13.7) RAKE SEED LIGHTLY INTO TOP 1/4" OF SOIL. FIRM ENTIRE AREA WITH A ROLLER NOT EXCEEDING 90 LBS. PER FOOT OF ROLLER WIDTH, AND WATER WITH A FINE SPRAY. (11.13.8) UNLESS INDICATED OTHERWISE ON THE DRAWINGS, PROTECT NEWLY SEEDD AREAS BY SPREADING MULCH TO A UNIFORM AND CONTINUOUS DEPTH OF 1-1/2" LOOSE MEASUREMENT (70-90 LBS./1000 SF). (11.14) MAINTENANCE DURING ESTABLISHMENT PERIOD: (11.14.1) IT IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO DETERMINE WATER APPLICATION RATES. (11.14.2) THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MAINTENANCE DURING THE ESTABLISHMENT PERIOD UNTIL FINAL ACCEPTANCE. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER SEEDING AND SHALL INCLUDE WATERING, FERTILIZING, REMOVAL OF OBSTRUCTIONS, THE CONTRACTOR WILL BE NOTIFIED OF THE DEFICIENCIES NECESSARY FOR RECONSTRUCTION OF ALL AREAS DAMAGED BY EROSION OR OTHER OCCURRENCE. (11.14.3) STAKES IN LAWN AREAS SHALL BE REMOVED WITHIN THE AVERAGE HEIGHT REACHES 3-1/2 INCHES. MOWING HEIGHT SHALL BE 2-1/2 INCHES. (11.15) CLEAN-UP AND PROTECTION: (11.15.1) KEEP PAVEMENTS CLEAN AND WORK AREA IN AN ORDERLY CONDITION. (11.15.2) PROTECT SEEDD AREAS AND MATERIALS FROM DAMAGE DUE TO OPERATIONS BY OTHER CONTRACTORS, TRADES, AND TRESPASSERS. MAINTAIN PROTECTION DURING INSTALLATION AND UNTIL FINAL ACCEPTANCE. TREAT, REPAIR OR REPLACE DAMAGED SEEDD AREAS AS DIRECTED. (11.16) COMPLETION AND ACCEPTANCE: (11.16.1) THE COMPLETION OF THE CONTRACT WILL BE ACCEPTED AND NOTICE OF COMPLETION RECORDED ONLY WHEN THE ENTIRE CONTRACT IS COMPLETED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE. (11.16.2) WITHIN TEN (10) DAYS OF THE GENERAL CONTRACTOR'S NOTIFICATION THAT THE INSTALLATION IS COMPLETE, THE OWNER'S REPRESENTATIVE WILL INSPECT THE INSTALLATION AND, IF FINAL ACCEPTANCE IS NOT GIVEN, WILL PREPARE A "PUNCH LIST". (11.16.3) FINAL ACCEPTANCE WILL BE GIVEN BY THE OWNER'S REPRESENTATIVE UPON SATISFACTORY COMPLETION OF ALL WORK INCLUDING "PUNCH LIST" ITEMS.

**PLANT SCHEDULE**

KEY	QTY	BOTANICAL NAME	COMMON NAME	HEIGHT	CALIPER	ROOT	SPACING	COMMENTS
<b>TREES</b>								
AA	3	Amelanchier arborea	Serviceberry	8'-10'		B&B	AS SHOWN	
PT	5	Pinus taeda	Loblolly Pine	8'-10'		B&B	AS SHOWN	
QP	13	Quercus phellos	Willow Oak	12'-14'	2 1/2" - 3"	B&B	AS SHOWN	
<b>SHRUBS</b>								
IV	12	Itea virginica 'Henry's Garnet'	Virginia Sweetspire	24"-30"		3 Gal.	AS SHOWN	
PL	16	Prunus laurocerasus 'Otto Luyken'	Otto Luyken Laurel	18"-24"		B&B	AS SHOWN	

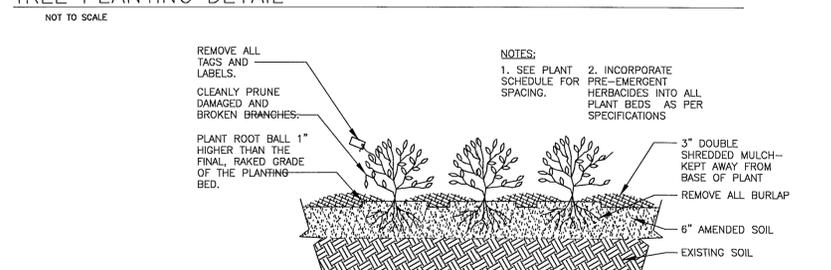
IN THE EVENT THERE IS A DISCREPANCY BETWEEN THE PLANT SCHEDULE AND THE DRAWINGS, CONTRACTOR SHALL INSURE THAT ALL PLANT MATERIALS IN THE DRAWING ARE INCLUDED IN THE BID.

DO NOT HEAVILY PRUNE THE TREE AT PLANTING. REMOVE CROSSING BRANCHES, CO-DOMINANT LEADERS, AND BROKEN BRANCHES. DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.



INSTALL 3" OF DOUBLE SHREDDED MULCH THE DIAMETER OF THE PLANTING PIT (MIN.) AROUND THE TREE WITH A 4 INCH HIGH SAUCER AROUND THE PERIMETER. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK. 2" TOP DRESSING OF COMPOST. FINISHED GRADE. TILLED SOIL. EXISTING SOIL. IF CONTAINED BY A WIRE BASKET, CUT WIRE AND REMOVE TOP HALF OF BASKET. PLACE ROOT BALL ON UNEXCAVATED SOIL TO PREVENT SETTLING. 3. TILL EXISTING SOIL TO A DEPTH OF 6" AND A DISTANCE TO TIMES THE DIAMETER OF THE ROOT BALL IN ALL DIRECTIONS FROM EACH PLANTING PIT EXCEPT IN AREAS THAT HAVE ROOTS OF EXISTING PLANTS THAT ARE TO BE RETAINED. 4. ALL STAKING MATERIAL SHALL BE REMOVED AS SOON AS THE TREE HAS SUFFICIENT ROOTS TO NO LONGER REQUIRE STAKING FOR UP TO ONE YEAR FROM PLANTING. TREES THAT REMAIN UNSTABLE WITHOUT STAKING AFTER ONE YEAR SHALL BE REJECTED AND REPLACED.

**TREE PLANTING DETAIL**



(11.14.4) WASTE MATERIAL SHALL BE REMOVED FROM THE SITE DAILY. (11.15) CLEAN-UP AND PROTECTION: (11.15.1) KEEP PAVEMENTS CLEAN AND WORK AREA IN AN ORDERLY CONDITION. (11.15.2) PROTECT SEEDD AREAS AND MATERIALS FROM DAMAGE DUE TO OPERATIONS BY OTHER CONTRACTORS, TRADES, AND TRESPASSERS. MAINTAIN PROTECTION DURING INSTALLATION AND UNTIL FINAL ACCEPTANCE. TREAT, REPAIR OR REPLACE DAMAGED SEEDD AREAS AS DIRECTED. (11.16) COMPLETION AND ACCEPTANCE: (11.16.1) THE COMPLETION OF THE CONTRACT WILL BE ACCEPTED AND NOTICE OF COMPLETION RECORDED ONLY WHEN THE ENTIRE CONTRACT IS COMPLETED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE. (11.16.2) WITHIN

ST. BEDES RECTORY  
James City County, Virginia

Required planting for area adjacent to building:  
2500 sq. ft. divided by 200 = 12.5 required ornamental trees or shrubs - 13 trees or 65 shrubs

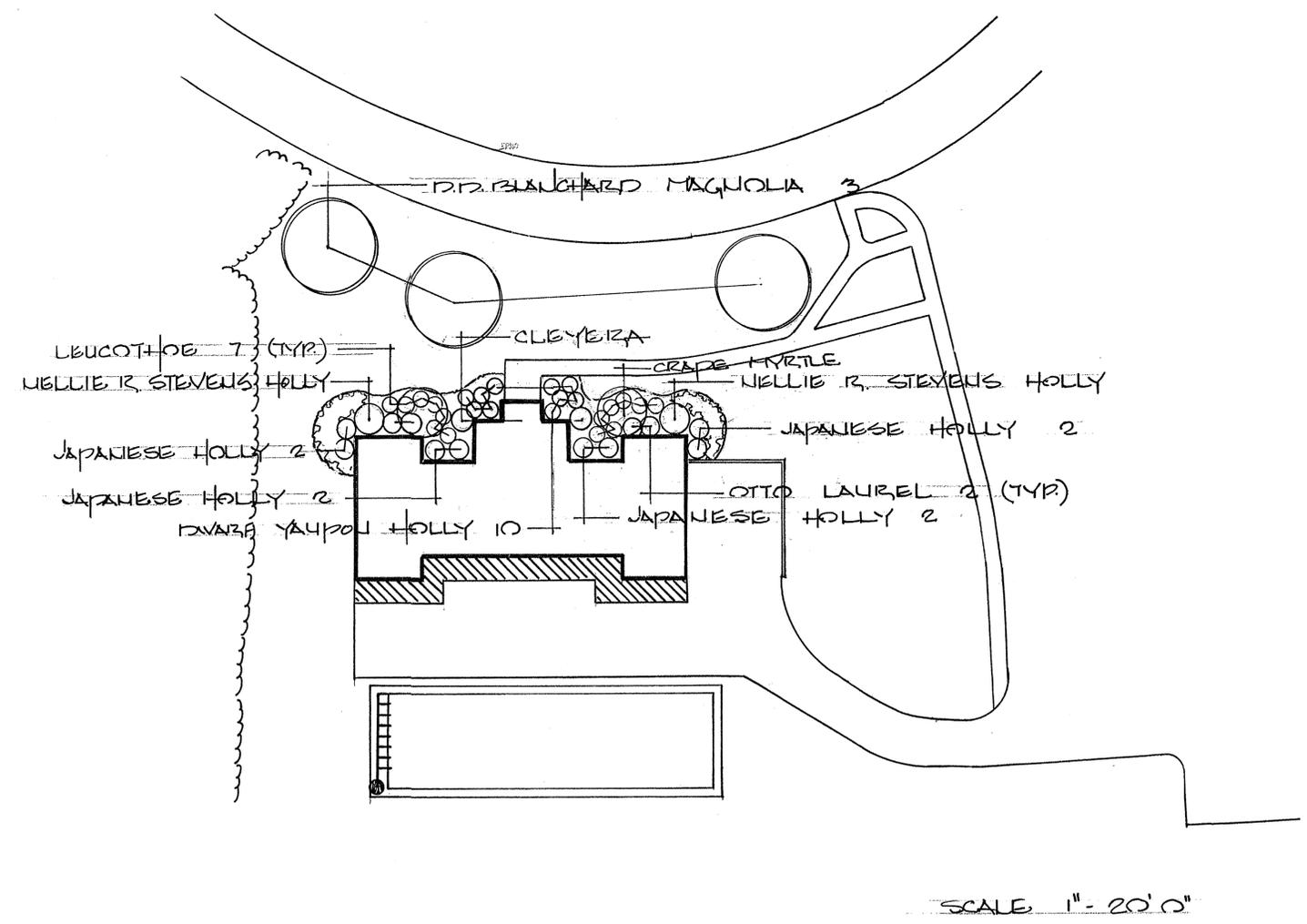
Provided: 5 Ornamental trees  
40 Shrubs

PLANT LIST

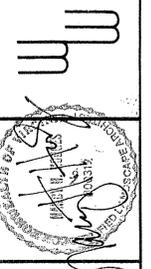
Qty.	Botanical Name/Common Name	Size
3	Magnolia D. D. Blanchard D. D. Blanchard Magnolia	2½" cal.
2	Lagerstroemia indica Crape Myrtle	8-9' ht.
2	Cleyera japonica Cleyera	36" ht.
2	Ilex Nellie R. Stevens Nellie R. Stevens Holly	5-6' ht.
8	Ilex crenata Bennetts Compacta Bennetts Japanese Holly	24-30" spd.
10	Ilex vomitoria nana Dwarf Yaupon Holly	18" spd.
14	Leucothoe fontaniana Leucothoe	18" spd.
4	Prunus laurocerasus 'Otto Luyken' Otto Luyken Laurel	24-30" spd.

PLANTING SPECIFICATIONS

Planting specifications prepared by Landmark Design Group and submitted on Sheet L-2 of the Plan of Development of Saint Bedes Rectory, James City County, Virginia



WINN, WINN & ASSOCIATES  
LANDSCAPE CONTRACTORS  
1201 LIBERTY STREET  
NORFOLK, VA 23523



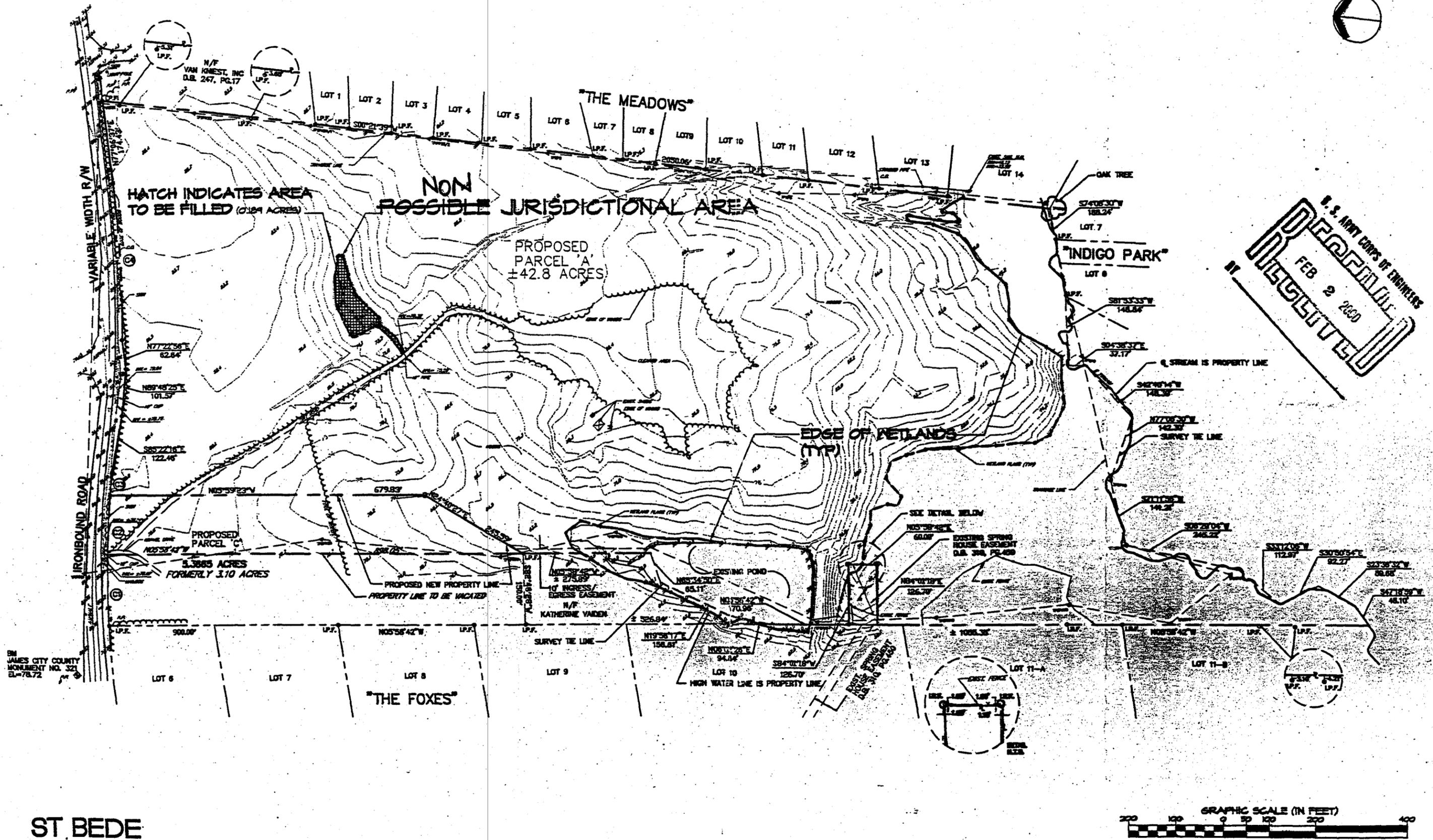
LANDSCAPE PLAN  
SAINT BEDES RECTORY  
JAMES CITY COUNTY  
VIRGINIA

DATE  
JAN '05  
COMM. NO.  
00367  
SHEET NO.



sediment trap NON jurisdictional - J. Leonard

FIGURE 1



ST. BEDE

SP-028-01

# ST. BEDE CATHOLIC CHURCH

## CALCULATIONS MANUAL FOR REVISIONS AND SUPPLEMENTAL INFORMATION

July 26, 2001



**The LandMark Design Group Inc.**  
4029 Ironbound Road, Suite 100  
Williamsburg, VA 23188  
(757) 253-2975

REVISIONS

Subject \_\_\_\_\_  
 \_\_\_\_\_  
 Computed \_\_\_\_\_ Checked \_\_\_\_\_



Project # \_\_\_\_\_  
 Client \_\_\_\_\_  
 Date \_\_\_\_\_ Sheet # \_\_\_\_\_

Engineers • Planners • Surveyors • Landscape Architects • Environmental Consultants

233

EXISTING & FUTURE POOL

PRE DEVELOPMENT      POST DEVELOPMENT

Q<sub>OUT</sub>      WSE      Q<sub>OUT</sub>      WSE

1 YEAR	2.87	59.37	2.85	59.37
2 YEAR	6.16	59.62	6.08	59.61
10 YEAR	24.81	60.49	23.51	60.44
100 YEAR	49.15	61.35	47.83	61.31

**Pond POND: EXISTING FARM POND**

Inflow = 7.37 cfs @ 12.58 hrs, Volume= 1.673 af  
 Outflow = 2.87 cfs @ 13.76 hrs, Volume= 1.463 af, Atten= 61%, Lag= 70.8 min  
 Primary = 2.87 cfs @ 13.76 hrs, Volume= 1.463 af

Routing by Stor-Ind method, Time Span= 9.00-29.00 hrs, dt= 0.04 hrs

Peak Elev= 59.37' Storage= 29,057 cf  
 Flood Elev= 62.00' Storage= 191,079 cf  
 Plug-Flow detention time= 213.4 min calculated for 1.461 af (87% of inflow)  
 Storage and wetted areas determined by Irregular sections

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
58.90	52,309	1,090.6	0	0	52,309
62.00	71,465	1,343.9	191,079	191,079	101,526
64.00	92,645	1,646.0	163,653	354,732	173,466

**Primary OutFlow** (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir

#	Routing	Invert	Outlet Devices
1	Primary	59.00'	<b>5.0' long Broad-Crested Rectangular Weir</b> Head (feet) 0.50 1.00 1.50 Coef. (English) 2.53 2.63 2.72

**Pond UNC: UNCHANGED FARM POND**

Inflow = 6.89 cfs @ 11.88 hrs, Volume= 1.593 af  
 Outflow = 2.85 cfs @ 13.89 hrs, Volume= 1.387 af, Atten= 59%, Lag= 120.7 mi  
 Primary = 2.85 cfs @ 13.89 hrs, Volume= 1.387 af

Routing by Stor-Ind method, Time Span= 9.00-29.00 hrs, dt= 0.04 hrs

Peak Elev= 59.37' Storage= 28,992 cf  
 Flood Elev= 62.00' Storage= 191,079 cf  
 Plug-Flow detention time= 215.5 min calculated for 1.385 af (87% of inflow)  
 Storage and wetted areas determined by Irregular sections

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
58.90	52,309	1,090.6	0	0	52,309
62.00	71,465	1,343.9	191,079	191,079	101,526
64.00	92,645	1,646.0	163,653	354,732	173,466

**Primary OutFlow (Free Discharge)**  
 ←1=Broad-Crested Rectangular Weir

#	Routing	Invert	Outlet Devices
1	Primary	59.00'	<b>5.0' long Broad-Crested Rectangular Weir</b> Head (feet) 0.50 1.00 1.50 Coef. (English) 2.53 2.63 2.72

**Pond POND: EXISTING FARM POND**

Inflow = 13.78 cfs @ 12.56 hrs, Volume= 2.757 af  
 Outflow = 6.16 cfs @ 13.44 hrs, Volume= 2.535 af, Atten= 55%, Lag= 53.1 min  
 Primary = 6.16 cfs @ 13.44 hrs, Volume= 2.535 af

Routing by Stor-Ind method, Time Span= 9.00-29.00 hrs, dt= 0.04 hrs

Peak Elev= 59.62' Storage= 44,083 cf  
 Flood Elev= 62.00' Storage= 191,079 cf  
 Plug-Flow detention time= 168.3 min calculated for 2.535 af (92% of inflow)  
 Storage and wetted areas determined by Irregular sections

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
58.90	52,309	1,090.6	0	0	52,309
62.00	71,465	1,343.9	191,079	191,079	101,526
64.00	92,645	1,646.0	163,653	354,732	173,466

**Primary OutFlow (Free Discharge)**  
 ↑ 1=Broad-Crested Rectangular Weir

#	Routing	Invert	Outlet Devices
1	Primary	59.00'	<b>5.0' long Broad-Crested Rectangular Weir</b> Head (feet) 0.50 1.00 1.50 Coef. (English) 2.53 2.63 2.72

**Pond UNC: UNCHANGED FARM POND**

Inflow = 12.60 cfs @ 12.59 hrs, Volume= 2.721 af  
 Outflow = 6.08 cfs @ 13.64 hrs, Volume= 2.504 af, Atten= 52%, Lag= 63.1 min  
 Primary = 6.08 cfs @ 13.64 hrs, Volume= 2.504 af

Routing by Stor-Ind method, Time Span= 9.00-29.00 hrs, dt= 0.04 hrs

Peak Elev= 59.61' Storage= 43,772 cf  
 Flood Elev= 62.00' Storage= 191,079 cf  
 Plug-Flow detention time= 166.7 min calculated for 2.504 af (92% of inflow)  
 Storage and wetted areas determined by Irregular sections

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
58.90	52,309	1,090.6	0	0	52,309
62.00	71,465	1,343.9	191,079	191,079	101,526
64.00	92,645	1,646.0	163,653	354,732	173,466

**Primary OutFlow** (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir

#	Routing	Invert	Outlet Devices
1	Primary	59.00'	<b>5.0' long Broad-Crested Rectangular Weir</b> Head (feet) 0.50 1.00 1.50 Coef. (English) 2.53 2.63 2.72

**Pond POND: EXISTING FARM POND**

Inflow = 47.00 cfs @ 12.46 hrs, Volume= 7.119 af  
 Outflow = 24.81 cfs @ 12.98 hrs, Volume= 6.864 af, Atten= 47%, Lag= 31.3 min  
 Primary = 24.81 cfs @ 12.98 hrs, Volume= 6.864 af

Routing by Stor-Ind method, Time Span= 9.00-29.00 hrs, dt= 0.04 hrs

Peak Elev= 60.49' Storage= 98,232 cf  
 Flood Elev= 62.00' Storage= 191,079 cf  
 Plug-Flow detention time= 107.8 min calculated for 6.850 af (96% of inflow)  
 Storage and wetted areas determined by Irregular sections

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
58.90	52,309	1,090.6	0	0	52,309
62.00	71,465	1,343.9	191,079	191,079	101,526
64.00	92,645	1,646.0	163,653	354,732	173,466

**Primary OutFlow** (Free Discharge)  
 ↑1=Broad-Crested Rectangular Weir

#	Routing	Invert	Outlet Devices
1	Primary	59.00'	<b>5.0' long Broad-Crested Rectangular Weir</b> Head (feet) 0.50 1.00 1.50 Coef. (English) 2.53 2.63 2.72

**Pond UNC: UNCHANGED FARM POND**

Inflow = 39.01 cfs @ 12.59 hrs, Volume= 7.279 af  
 Outflow = 23.51 cfs @ 13.13 hrs, Volume= 7.030 af, Atten= 40%, Lag= 32.0 min.  
 Primary = 23.51 cfs @ 13.13 hrs, Volume= 7.030 af

Routing by Stor-Ind method, Time Span= 9.00-29.00 hrs, dt= 0.04 hrs

Peak Elev= 60.44' Storage= 95,155 cf  
 Flood Elev= 62.00' Storage= 191,079 cf  
 Plug-Flow detention time= 106.9 min calculated for 7.030 af (97% of inflow)  
 Storage and wetted areas determined by Irregular sections

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
58.90	52,309	1,090.6	0	0	52,309
62.00	71,465	1,343.9	191,079	191,079	101,526
64.00	92,645	1,646.0	163,653	354,732	173,466

**Primary OutFlow (Free Discharge)**  
 ↑1=Broad-Crested Rectangular Weir

#	Routing	Invert	Outlet Devices
1	Primary	59.00'	<b>5.0' long Broad-Crested Rectangular Weir</b> Head (feet) 0.50 1.00 1.50 Coef. (English) 2.53 2.63 2.72

**Pond POND: EXISTING FARM POND**

Inflow = 82.71 cfs @ 12.41 hrs, Volume= 11.880 af  
 Outflow = 49.15 cfs @ 12.85 hrs, Volume= 11.604 af, Atten= 41%, Lag= 26.4 min  
 Primary = 49.15 cfs @ 12.85 hrs, Volume= 11.604 af

Routing by Stor-Ind method, Time Span= 9.00-29.00 hrs, dt= 0.04 hrs

Peak Elev= 61.35' Storage= 151,321 cf  
 Flood Elev= 62.00' Storage= 191,079 cf  
 Plug-Flow detention time= 87.0 min calculated for 11.604 af (98% of inflow)  
 Storage and wetted areas determined by Irregular sections

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
58.90	52,309	1,090.6	0	0	52,309
62.00	71,465	1,343.9	191,079	191,079	101,526
64.00	92,645	1,646.0	163,653	354,732	173,466

**Primary OutFlow (Free Discharge)**  
 ↑1=Broad-Crested Rectangular Weir

#	Routing	Invert	Outlet Devices
1	Primary	59.00'	<b>5.0' long Broad-Crested Rectangular Weir</b> Head (feet) 0.50 1.00 1.50 Coef. (English) 2.53 2.63 2.72

**PRE-POST ANALYSIS ST BEDE'S CHURCH Type II 24-hr Rainfall=8.00" (AMC=2)**

Prepared by LandMark Design Group, Inc.

Page 8

HydroCAD® 5.95 s/n 001766 © 1986-2001 Applied Microcomputer Systems

07/18/2001

**Pond UNC: UNCHANGED FARM POND**

Inflow = 72.65 cfs @ 12.53 hrs, Volume= 12.262 af  
 Outflow = 47.83 cfs @ 12.98 hrs, Volume= 11.992 af, Atten= 34%, Lag= 26.5 min  
 Primary = 47.83 cfs @ 12.98 hrs, Volume= 11.992 af

Routing by Stor-Ind method, Time Span= 9.00-29.00 hrs, dt= 0.04 hrs

Peak Elev= 61.31' Storage= 148,707 cf

Flood Elev= 62.00' Storage= 191,079 cf

Plug-Flow detention time= 85.5 min calculated for 11.992 af (98% of inflow)

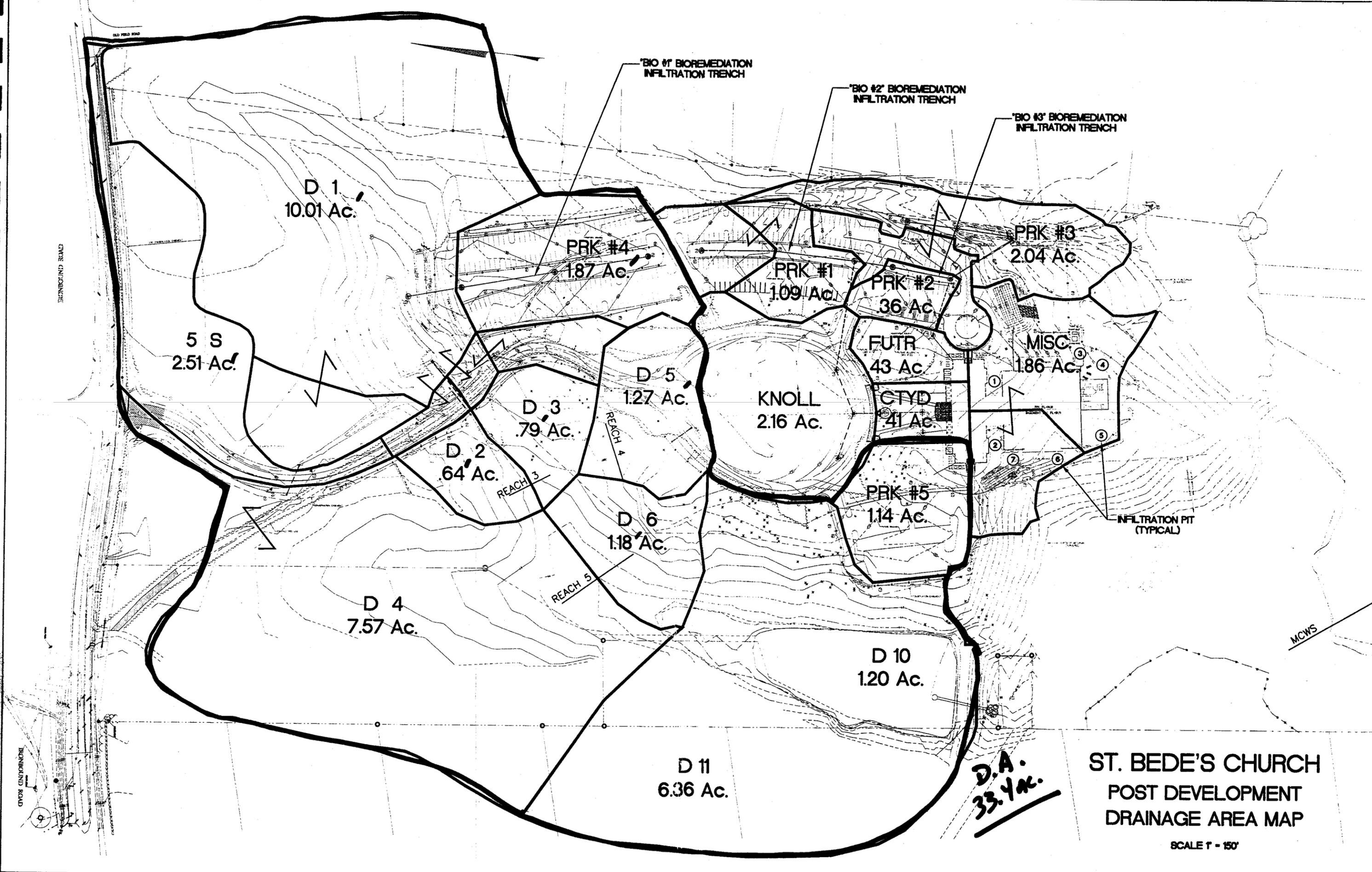
Storage and wetted areas determined by Irregular sections

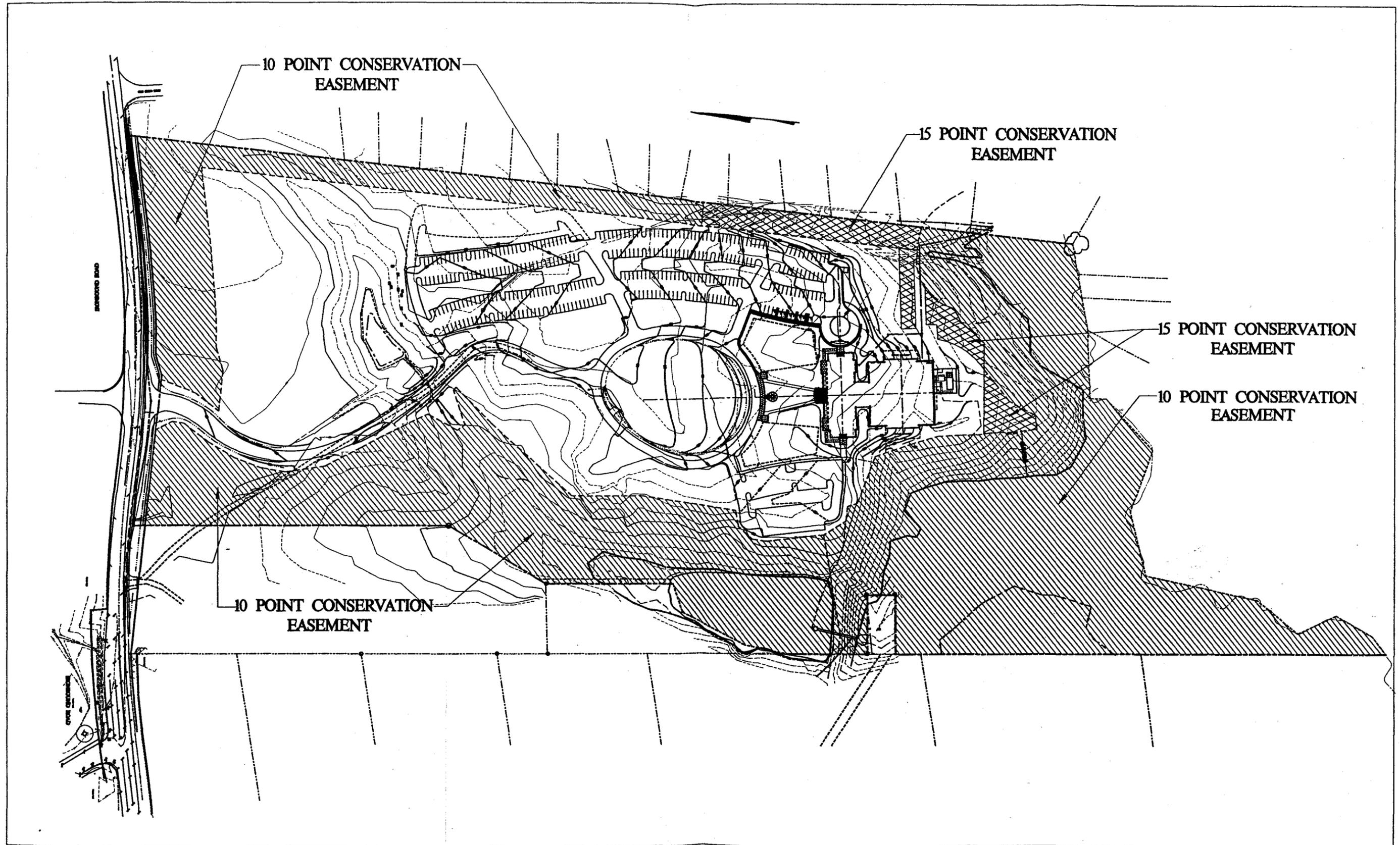
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
58.90	52,309	1,090.6	0	0	52,309
62.00	71,465	1,343.9	191,079	191,079	101,526
64.00	92,645	1,646.0	163,653	354,732	173,466

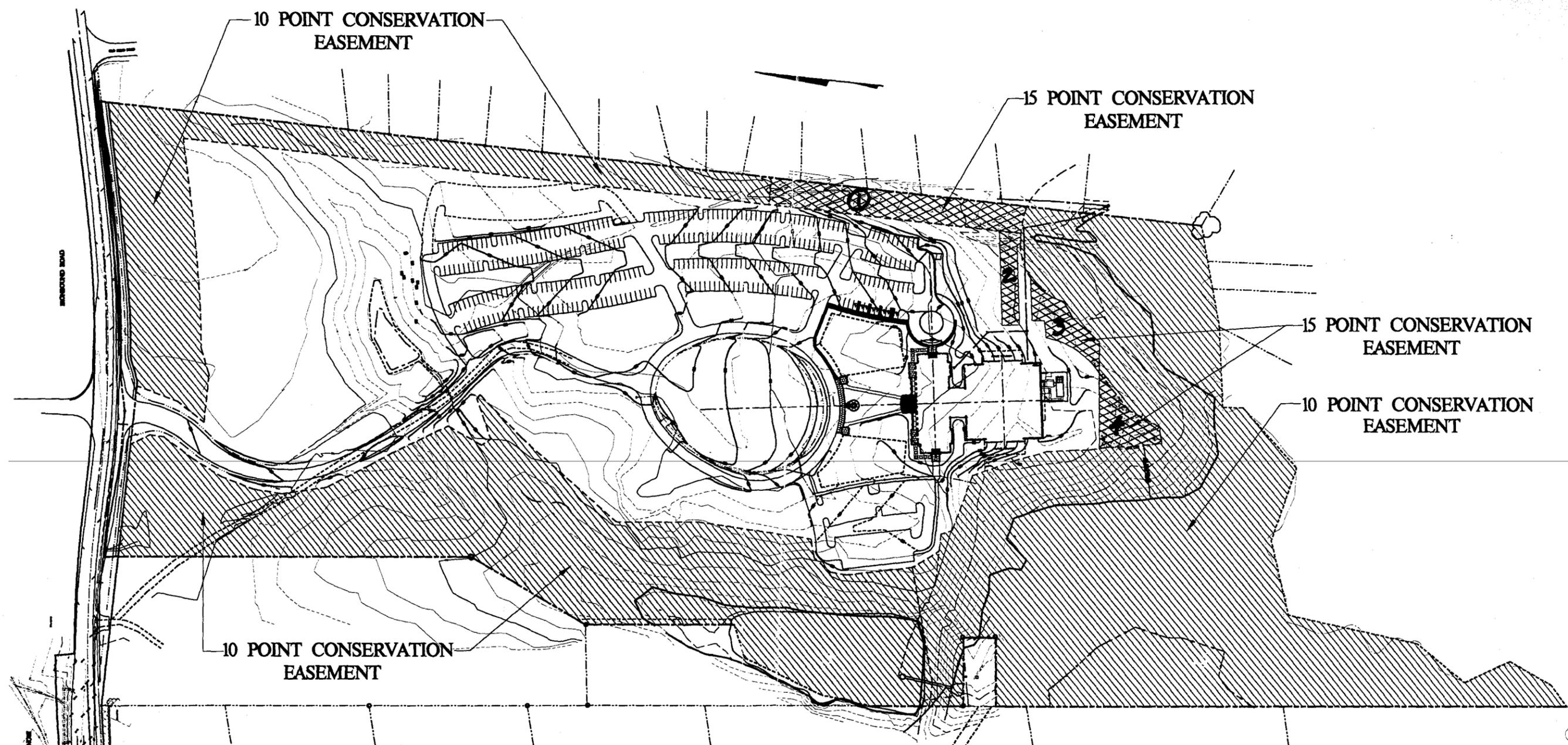
**Primary OutFlow (Free Discharge)**

↑1=Broad-Crested Rectangular Weir

#	Routing	Invert	Outlet Devices
1	Primary	59.00'	<b>5.0' long Broad-Crested Rectangular Weir</b> Head (feet) 0.50 1.00 1.50 Coef. (English) 2.53 2.63 2.72







REARLAND ROAD

10 POINT CONSERVATION EASEMENT

15 POINT CONSERVATION EASEMENT

15 POINT CONSERVATION EASEMENT

10 POINT CONSERVATION EASEMENT

10 POINT CONSERVATION EASEMENT

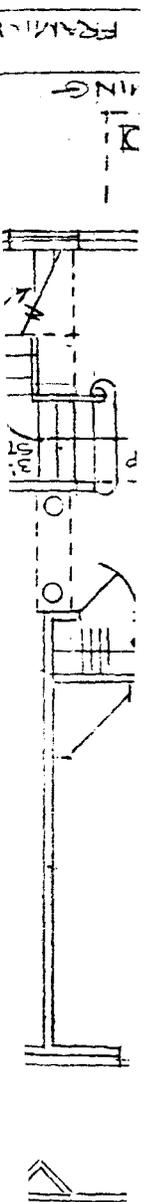


SITE 32.33  
 20.45 AC @ 0.1 ~ 4.778  
 $20.13 / 42.8 = 47.03\%$

4.703  
 $4.778 - 4.703 = 0.0750$  points

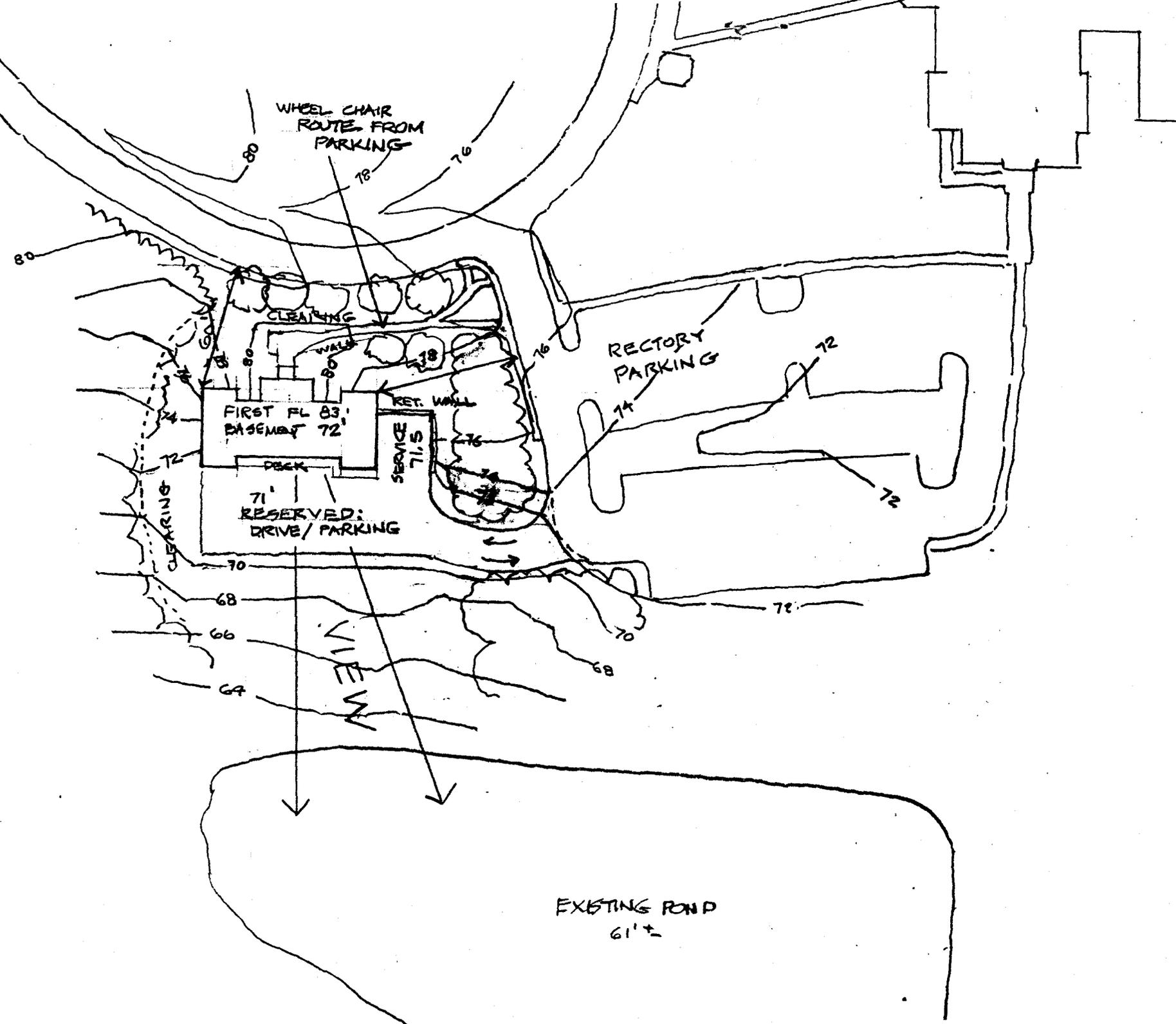
0.15 pt per 1% CREDIT  
 ①  $400 \times 50 = 0.459 AC.$   
 ②  $150 \times 35 = 0.121 AC.$   
 ③  $50 \times 150 = 0.172 AC.$   
 ④  $\frac{1}{2}(110)(150) = 0.189 AC.$   
0.941 AC.

1" = 200'  
 SCALE



N

St. Bedes  
Rectory  
Concept



7/13/2001

PROJECT NAME ST Bedes  
LMDG JOB NO. 1970077

TABLE 2

WORKSHEET FOR BMP POINT SYSTEM

TOTAL SITE = 42.8 ACRES  
RPA = 10.47 ACRES  
STRUCTURAL  
SITE AREA = 32.33 ACRES

*FARM POND  
NOT IN POINT  
TALLY. NOT  
M.P. BMP..*

A. STRUCTURAL BMP POINT ALLOCATION

BMP	BMP POINTS		FRACTION OF SITE SERVED BY BMP		WEIGHTED BMP POINTS
Pond #1 Infiltration Basin, 1"/ac	10	x	14 / 32.33	=	4.330
Median biofilters/swales to creek	8	x	1.55 / 32.33	=	0.384
Median biofilters/swales for future lot	8	x	1.14 / 32.33	=	0.282
Rear roof runoff treatment - infiltration trench @ 1 "/imp. ac	10	x	0.50 / 32.33	=	0.155

TOTAL WEIGHTED STRUCTURAL BMP POINTS: 5.151

B. NATURAL OPEN SPACE CREDIT

FRACTION OF SITE		NATURAL OPEN SPACE CREDIT		POINTS FOR NATURAL OPEN SPACE
20.45 / 42.8	x	(0.1 per 1%)	=	4.778
0.54 / 42.8	x	(0.15 per 1%)	=	0.189

TOTAL NATURAL OPWN SPACE CREDIT: 4.967

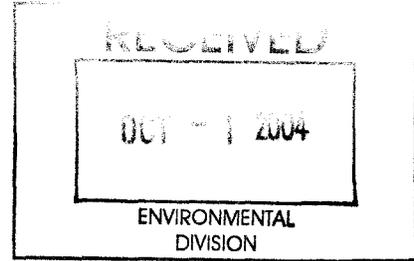
C. TOTAL WEIGHTED POINTS

5.15	+	4.97	=	10.118
STRUCTURAL BMP POINTS		NATURAL OPEN SPACE POINTS		TOTAL

# LANDMARK DESIGN GROUP

September 30, 2004

Mr. Chris Johnson  
Senior Planner  
Department of Development Management  
James City County  
P.O. Box 8784  
Williamsburg, VA 23187-8784



Re.: St. Bede Catholic Church  
Site Plan Amendment

Dear Chris:

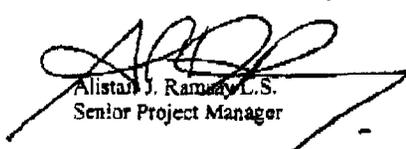
The following summarizes the discussions and agreements per the Roundtable meeting of 9/27/04 for the aforementioned project. Please review and revise as necessary so a final draft can be prepared for submission with the site plan amendment.

1. LMDG will provide historical information concerning the RPA determination for the property.
2. The original master drainage map and BMP Point sheet will be modified to reflect proposed construction.
3. All runoff will be treated prior to discharge into the existing pond.
4. Bio-retention will be utilized in lieu of a large BMP which would require additional clearing and impact of the existing conservation easement
5. The proposed outfall(s) from the bio-retention areas will extend to the existing pond.
6. The County Engineer will be contacted and provided a schematic of the proposed impact and required modifications to the conservation natural open space easement.
7. The proposed waterline to the rectory will be connected behind the existing meter, and will be a private line.
8. The proposed force main will be noted as private on the plans and no maintenance will be provided for the Grinder Pump.
9. The fire department will be contacted to determine if there is adequate flow for fire service within the existing lines.
10. Utility service and sizing will be coordinated through JCSA by categorizing the multi-purpose room and the ground floor handicapped bathroom as mixed use, with the remainder of the rectory categorized as a private dwelling.
11. It was discussed to locate as many handicapped spaces closer to the building as possible.

If you need any additional information or if can be of further assistance please do not hesitate to call me.

Sincerely,

The LandMark Design Group, Inc.

  
Alistair J. Ramsay L.S.  
Senior Project Manager

AJR/tmp

Copy: Ken Yerby, The Bush Companies  
File 1970077-002.00

Engineers ♦ Planners ♦ Surveyors ♦ Landscape Architects ♦ Environmental Scientists  
4029 Ironbound Road, Suite 100, Williamsburg, VA 23188 (757) 253-2975 FAX: (757) 229-0049 [imd@landmarkdg.com](mailto:imd@landmarkdg.com)

TOTAL P. 01

# LANDMARK DESIGN GROUP



September 30, 2004

Mr. Chris Johnson  
Senior Planner  
Department of Development Management  
James City County  
P.O. Box 8784  
Williamsburg, VA 23187-8784

Re.: St. Bede Catholic Church  
Site Plan Amendment

Dear Chris:

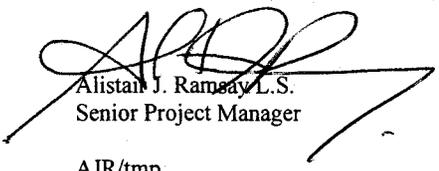
The following summarizes the discussions and agreements per the Roundtable meeting of 9/27/04 for the aforementioned project. Please review and revise as necessary so a final draft can be prepared for submission with the site plan amendment.

1. LMDG will provide historical information concerning the RPA determination for the property.
2. The original master drainage map and BMP Point sheet will be modified to reflect proposed construction.
3. All runoff will be treated prior to discharge into the existing pond.
4. Bio-retention will be utilized in lieu of a large BMP which would require additional clearing and impact of the existing conservation easement
5. The proposed outfall(s) from the bio-retention areas will extend to the existing pond.
6. The County Engineer will be contacted and provided a schematic of the proposed impact and required modifications to the conservation natural open space easement.
7. The proposed waterline to the rectory will be connected behind the existing meter, and will be a private line.
8. The proposed force main will be noted as private on the plans and no maintenance will be provided for the Grinder Pump.
9. The fire department will be contacted to determine if there is adequate flow for fire service within the existing lines.
10. Utility service and sizing will be coordinated through JCSA by categorizing the multi-purpose room and the ground floor handicapped bathroom as mixed use, with the remainder of the rectory categorized as a private dwelling.
11. It was discussed to locate as many handicapped spaces closer to the building as possible.

If you need any additional information or if can be of further assistance please do not hesitate to call me.

Sincerely,

The LandMark Design Group, Inc.

  
Alistair J. Ramsay, L.S.  
Senior Project Manager

AJR/tmp

Copy: Ken Yerby, The Bush Companies  
File 1970077-002.00

Engineers ♦ Planners ♦ Surveyors ♦ Landscape Architects ♦ Environmental Scientists  
4029 Ironbound Road, Suite 100, Williamsburg, VA 23188 (757) 253-2975 FAX: (757) 229-0049 [imgd@landmarkdg.com](mailto:imgd@landmarkdg.com)

# LANDMARK DESIGN GROUP

September 13, 2004

Mr. Chris Johnson  
Senior Planner  
Department of Development Management  
James City County  
P.O. Box 8784  
Williamsburg, VA 23187-8784



Re.: St. Bede Catholic Church  
Site Plan Amendment

Dear Chris:

Enclosed area three (3) sets of the preliminary site plan and revised master plan for the above referenced project. The plans have been revised to reflect the proposed Rectory location and final design of the adjacent parking.

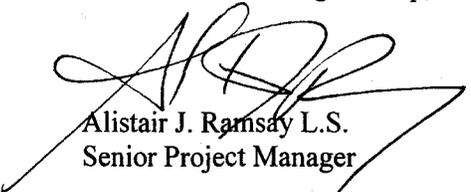
There are several issues of concern that we would like to discuss prior to completion and submission of the formal site plan amendment.

1. The proposed Rectory and associated drive aisle will encroach into the existing platted conservation easement. It is our intent to offset the lost area at a location acceptable to the County equal in size to the original, plus any additional area required to maintain the necessary BMP points associated with CBPO.
2. The drive aisle proposed for access to the rectory has been reduced to 12 feet of pavement. It is our opinion that this drive aisle is a private driveway for access to the rectory only. Access will be restricted to residents and guests of the rectory itself.
3. The proposed Rectory and the potential for a height waiver requirement in addition to the master plan update process.

If you need any additional information or if can be of further assistance please do not hesitate to call me.

Sincerely,

The LandMark Design Group, Inc.



Alistair J. Ramsay L.S.  
Senior Project Manager

AJR/tmp

Copy: Ken Yerby, The Bush Companies  
File 1970077-002.00

Engineers ♦ Planners ♦ Surveyors ♦ Landscape Architects ♦ Environmental Scientists

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99123\_ST\_BEDES\_CATHOLIC\_CHURCH\_RECTORY - 045

TRANSMITTAL



DATE: March 21, 2005

TO: Environmental  
JCSA (2)  
County Engineer  
Scott Whyte

FROM: Christopher Johnson, Senior Planner

SUBJECT: SP-132-04. St. Bede Catholic Church, Rectory Building

ITEMS ATTACHED: Revised Site Plan  
Revised Calculations (Environmental, JCSA)  
Preliminary Easement Plat

INSTRUCTIONS: Please review and comment or approve and sign.

RETURN BY: April 4, 2005

AGENCY COMMENTS:

Approved DEC 4/7/05

RECEIVED APR 08 2005  
- Ove April 11, 2005

Is this development served by Newport News Waterworks? \_\_\_\_ (JCSA please check if yes)

If checked, planner will fax a copy of preliminary approval letter with Fire Department comments, and the JCSA completed water data sheet to Newport News Waterworks as soon as all three are available.

## Scott Thomas

---

**From:** John J. McGlennon  
**Sent:** Saturday, March 19, 2005 12:50 PM  
**To:** 'Paterwhc@aol.com'  
**Cc:** John Horne; Scott Thomas  
**Subject:** Rectory building issue

Dear Father Carr:

This message is to confirm our conversation earlier in the week regarding the concerns of James City County regarding plans for construction of the rectory building.

As you recall, when the St. Bede Church was constructed, a parcel of land was dedicated as a permanent conservation area on the property to address the environmental impact of the building. That land was to be left undisturbed.

Now the rectory building is proposed to be sited in a way which encroaches on this conservation area by about six-tenths of an acre. The county has requested that your application address this change. The preferred and recommended change is to submit a revised plat of the church property identifying an appropriate and equivalent conservation area. Staff has communicated this advice to your professionals dealing with the application. As I understand it, this is the issue which has raised the county concern, and it requires a simple, inexpensive revision which can allow your plans to proceed in a timely fashion.

If I have miscommunicated the situation, I'm sure our Development manager and Environmental staff will clarify, and if I can be of further assistance, I hope you will let me know.

John

John J. McGlennon  
Jamestown District Supervisor  
James City County Board of Supervisors  
757-221-3034 W  
757-220-0568 H

# LANDMARK DESIGN GROUP



March 17, 2005

Mr. Christopher Johnson  
James City County Planning Division  
101-E Mounts Bay Road  
Williamsburg, VA 23188

**Re: SP-132-04 St. Bede Catholic Church Rectory and Parking Expansion  
Response to Review Agency Comments**

Dear Chris:

We have received your comments dated March 7, 2005, and those of other reviewing agencies on the referenced site plan amendment and offer the following responses to those comments:

### **Planning**

1. Landscape plan by others has been signed.
2. Landscape plan by others has been revised as requested.

### **James City Service Authority**

1. Proposed JCSA Utility easement adjusted to 20' from 15' as requested.
2. Sign relocated as requested.

### **County Engineer**

1. Preliminary Plat has been included with this resubmission. The clients attorney is preparing the associated deed of easement, and will be forwarded when available.

### **Environmental**

1. Note added to cover.
2. Acknowledged. This will be included in the global agreement.
3. Check dam added and SF extended.
4. Silt fence extended as requested.
5. Additional tree protection keys and symbols have been added as requested.
6. See County Engineer comment #1 above.
7. Narrative revised as requested.
8. Note added as requested.

Mr. Christopher Johnson  
James City County Planning Division  
Re: SP-132-04 St. Bede Catholic Church Rectory and Parking Expansion

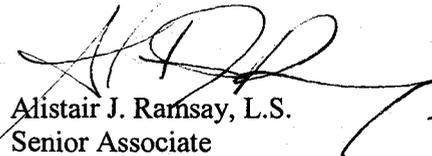
February 4, 2005

Page 2

We trust that we have satisfactorily addressed all of your comments. Please call if you have any questions or need any additional information.

Sincerely,

The LandMark Design Group, Inc.



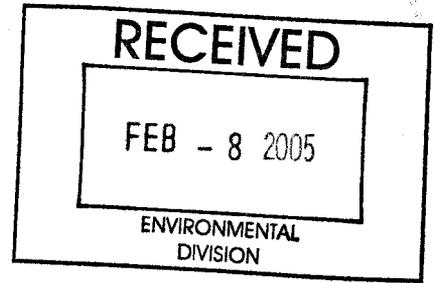
Alistair J. Ramsay, L.S.  
Senior Associate

AJR/tmp  
Enclosure

Copy: Mr. Ken Yerby, Bush Construction  
Mr. Fred Mone, St. Bede Catholic Church  
File 1970077-002.00

**LANDMARK**  
**DESIGN GROUP**

TRANSMITTAL



DATE: February 7, 2005

TO: **Environmental**  
JCSA (2)  
Fire Department  
County Engineer  
Scott Whyte

FROM: Christopher Johnson, Senior Planner

SUBJECT: SP-132-04. St. Bede Catholic Church, Rectory Building

ITEMS ATTACHED: Revised Site Plan  
Engineering Calculations (Environmental, JCSA)

INSTRUCTIONS: Please review and comment or approve and sign.

RETURN BY: February 21, 2005

AGENCY COMMENTS:

*2ND*  
RECEIVED FEB 23 2005  
- *Due FEB 28*

Is this development served by Newport News Waterworks? \_\_\_\_ (JCSA please check if yes)

If checked, planner will fax a copy of preliminary approval letter with Fire Department comments, and the JCSA completed water data sheet to Newport News Waterworks as soon as all three are available.



February 4, 2005

Mr. Christopher Johnson  
James City County Planning Division  
101-E Mounts Bay Road  
Williamsburg, VA 23188

**Re: SP-132-04 St. Bede Catholic Church Rectory and Parking Expansion  
Response to Review Agency Comments**

Dear Chris:

We have received your comments dated December 30, 2004, and those of other reviewing agencies on the referenced site plan amendment and offer the following responses to those comments:

**Planning**

1. Cover sheet revised as requested.
2. Remaining civil sheets have been revised as requested.
3. Note added to cover sheet as requested.
4. Cover sheet has been modified to show updated parking count. Even with the modified handicap parking, the minimum required parking is achieved.
5. Labels and signs added for proposed handicap parking.
6. Proposed light has been identified and details provided on sheet C-4A.
7. Note added to cover as requested.
8. Additional landscaping plans for the Rectory to be provided by owner.
9. Landscaping revised.
10. This species of gum doesn't produce gumballs.

**James City Service Authority**

1. Email attached from Marcy Garnett (DEQ) stating she does not need to see these plans.
2. Professional Engineer has signed sheets pertaining to the force main.
3. Acknowledged.
4. Water data sheet provided in the calculations book.
5. Everything is now shown at 25-scale on sheet C-3. Sheet C-2 is an overall for convenience.
6. Fixture unit count is provided in the calculations book.
7. Proposed water main extension profile is located on sheet C-5. Stationing has been revised as requested. Restrain joints are shown on the profile as requested. HRPDC call-outs have been added to the plan.

**Sheet C-1**

1. Note added to cover sheet as requested.

Engineers • Planners • Surveyors • Landscape Architects • Environmental Scientists  
4029 Ironbound Road, Suite 100, Williamsburg, VA 23188 (757) 253-2975 FAX: (757) 229-0049 [Imdg@landmarkdg.com](mailto:Imdg@landmarkdg.com)

Sheet C-3

1. The water service and force main have been label as requested.
2. Note revised as requested.
3. Note added to the plan.
4. A horizontal bend was not intended.
5. Easement has been label as requested.
6. Handicap signs are located 3' from water and 2' from force main. However, both of these utilities are private lines and are to be maintained by owner.

Sheet L-1

1. Landscaping has been relocated out of the easement.

Supporting Engineering Calculations

1. Calculations have been revised. See sheet C-6.

Fire Department

1. The fire hydrant shown at the end of the waterline has been labeled and an additional fire hydrant has been added for the Rectory.

County Engineer

1. A draft of the amended plat showing the vacating of conservation easement around the Rectory is attached.

Environmental

1. Acknowledged.
2. Acknowledged.
3. Acknowledged.
4. Environmental Inventory is located on sheet C-5.
5. Design checklist has been included in the calculation book.
6. Note added to sheet C-1.
7. Limits of disturbance and clearing have been identified and all disturbed area accounted for on the cover.
8. Sequence of Construction has been added to sheet C-3.
9. Construction entrance has been added to the plans.
10. The sidewalk is draining toward the parking lot, and therefore less area is draining to the slope than at pre-development conditions. Silt fence and tree protection is shown on the plans to protect the RPA.
11. Tree protection has been shown on the plans as requested.
12. Tree protection has been shown on the plans as requested.
13. Wire reinforced silt fence has been added to the plans as requested and 2 rows have been called for along the western limits.
14. Inlet protection has been added to the plans as requested.

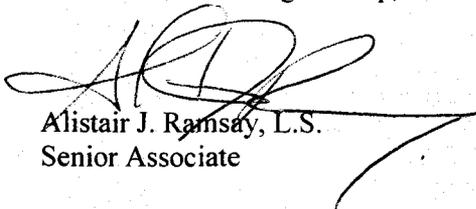


15. The La has been modified to 12' as request, however the 10 yr storm event of 0.69 cfs and a velocity of 4.08 fps falls below the minimum requirements, which is 6' per VESCH. *TOPO DICTATES SIZE*
16. Raintanks will be constructed after the curb has been installed and permanent seeding has been called for on the plans.
17. Note added to sheet C-3 as requested. *YES IT IS!*
18. The existing pond has been labeled as requested. Although not required a 25' buffer has been shown from the design high water level.
19. The total drainage to Pond #1 has been re-evaluated at 13.5 acres. The BMP worksheet has been revised to include a reduced denominator discounting the conservation easement not draining to a structural BMP, as allowed per letter dated 02/13/97 from Wayland Bass, "We allow conservation easement areas that do not drain to a structural BMP to be removed from the denominator." The area included has been shaded blue on the 10-point map, and includes the green area but not the red. As you can see the 10 points are provided without the inclusion of the raintanks.
20. A copy of the amended plat has been included for review.
21. The proposed conservation line has been labeled as requested.
22. Drainage maps have been provided in the design report.
23. Drainage from the side yard is directed toward the pavement on the rear side of the Rectory and into the manufacturer BMP.
24. Manufacturer's information packet has been provided as requested. The raintank storage area was designed with no infiltration intended. Maintenance plan provided on sheet C-4A. Minimum cover has been labeled over the raintanks.
25. We are not proposing infiltration for the manufactured BMP. We are releasing the 2- and 10-year storm at or below the pre-development rates.
26. A second section has been included on the plans on sheet C-4A.
27. Channel protection worksheet has been provided in the design report and BMP storage provided is greater than required.
28. Pre-development calculations had been revised to reflect only 1/2 acre of drainage.

We trust that we have satisfactorily addressed all of your comments. Please call if you have any questions or need any additional information.

Sincerely,

The LandMark Design Group, Inc.



Alistair J. Ramsay, L.S.  
Senior Associate

AJR/tmp  
Enclosure

Copy: Mr. Ken Yerby, Bush Construction  
Mr. Fred Mone, St. Bede Catholic Church  
File 1970077-002.00



## Al Ramsay

---

**From:** Bill Brown  
**Sent:** Monday, January 17, 2005 9:05 AM  
**To:** Al Ramsay; Melissa H Lindgren  
**Subject:** FW: St.Bede's Church

-----Original Message-----

**From:** Curt Nordeman  
**Sent:** Monday, January 17, 2005 8:27 AM  
**To:** Bill Brown  
**Cc:** Shawn Gordon (E-mail)  
**Subject:** FW: St.Bede's Church

Curt Nordeman  
LandMark Design Group Inc.  
4029 Ironbound Road Suite 100  
Williamsburg, Virginia 23188  
(757) 253-2975 Office  
(757) 229-0049 Fax

-----Original Message-----

**From:** Garnett, Marcy [mailto:mggarnett@deq.virginia.gov]  
**Sent:** Sunday, January 16, 2005 8:36 PM  
**To:** Curt Nordeman  
**Subject:** RE: St.Bede's Church

Hi Curt: This pump station review is waived since the pump rating is < 20 gpm and is discharging to gravity. Also, the inspection is not needed since the plan review is waived. Thanks for checking. Marcy

-----Original Message-----

**From:** Curt Nordeman [mailto:cnordeman@landmarkdg.com]  
**Sent:** Wed 1/12/2005 4:37 PM  
**To:** Garnett, Marcy  
**Cc:**  
**Subject:** St.Bede's Church

Marcy, we received a comment from JCSA on this site plan that we are required to get your approval for the grinder pump. The pump is an E-One (11 gpm) that serves a Rectory and pumps to an existing manhole. Do you need to review this project? Are you going to do a pump inspection after completion?

Curt Nordeman  
LandMark Design Group Inc.  
4029 Ironbound Road Suite 100  
Williamsburg, Virginia 23188  
(757) 253-2975 Office  
(757) 229-0049 Fax



## DEVELOPMENT MANAGEMENT

101-A MOUNTS BAY ROAD, P.O. BOX 8784, WILLIAMSBURG, VIRGINIA 23187-8784

(757) 253-6671

ENVIRONMENTAL DIVISION  
(757) 253-6670  
EnvDiv@james-city.va.us

PLANNING  
(757) 253-6685  
planning@james-city.va.us

COUNTY ENGINEER  
(757) 253-6678

E-MAIL: devman@james-city.va.us

FAX: (757) 253-6822

INTEGRATED PEST MANAGEMENT  
(757) 259-4116

April 17, 2008

Pastor William H Carr  
St Bede's Catholic Church  
P.O. Box 5400  
Williamsburg VA 23188

Re: St. Bede's Rectory Building and Parking Expansion

Dear Pastor Carr:

The purpose of this letter is to inform you that the \$49,000 Letter of Credit No. F846495 for the above referenced project expires on May 19, 2008. As stated in the Siltation Agreement prior to release of this surety all construction must be complete. The remaining items to be completed include stabilization of all disturbed areas (future site of rectory needs seed and straw), submission of as built drawings and construction certification for the stormwater management facilities, and install underground storage tanks. As construction has not been completed the Letter of Credit will need to be extended.

James City County will grant an extension to this Letter of Credit for up to one year. We will require delivery of the revised Letter of Credit to the **James City County Environmental Division, 101-E Mounts Bay Road, Williamsburg VA 23185**, no later than 4:00 p.m., **May 12, 2008** to avoid draw of existing surety.

Sincerely,

Scott J Thomas  
Environmental Director

cc: SunTrust Bank

7/13/2001

PROJECT NAME ST Bedes  
 LMDG JOB NO. 1970077

TABLE 2

WORKSHEET FOR BMP POINT SYSTEM

TOTAL SITE = 42.8 ACRES  
 RPA = 10.47 ACRES (form. 11.13 ac.)  
 STRUCTURAL  
 SITE AREA = 32.33 ACRES



REDUCED DUE TO REMOVAL OF CULVERT AT ENT. ROAD (14 AC)

A. STRUCTURAL BMP POINT ALLOCATION

BMP	BMP POINTS	FRACTION OF SITE SERVED BY BMP	WEIGHTED BMP POINTS
Pond #1 Infiltration Basin, 1"/ac	* <u>10</u> 9.3357	<u>14</u> / 32.33	= 4.0427 <del>4.330</del>
Median biofilters/swales to creek	8	1.55 / 32.33	= 0.384
Median biofilters/swales for future lot	8	1.14 / 32.33	= 0.282
Rear roof runoff treatment - infiltration trench @ 1"/imp. ac	10	0.50 / 32.33	= 0.155

TOTAL WEIGHTED STRUCTURAL BMP POINTS: 4.8637 ~~5.151~~

B. NATURAL OPEN SPACE CREDIT

FRACTION OF SITE	NATURAL OPEN SPACE CREDIT	POINTS FOR NATURAL OPEN SPACE
<u>20.45</u> / 42.8	(0.1 per 1%)	= 4.778
<u>0.54</u> / 42.8	(0.15 per 1%)	= <del>0.189</del> 0.33

0.94 / ac.  
SEE MAP

TOTAL NATURAL OPWN SPACE CREDIT: 4.967 5.108

C. TOTAL WEIGHTED POINTS

4.8637 ~~5.15~~ + 5.108 ~~4.97~~ = 9.9717 ~~10.118~~

STRUCTURAL BMP POINTS                      NATURAL OPEN SPACE POINTS                      TOTAL

\* 9.3 weighted due to series-treatment train approach. 50% REMOVAL EFFICIENCY FOR D.A. TO Pond #1 thru bioretention cells.  
 revised St Bedes JCC 10POINT BMP SHEET.xls

∴ 10 points achieved.  
 JH  
 01.20-01



## The Bush Companies

Full Service Real Estate Development  
Construction • Property Management • Real Estate Brokerage • Mortgage Brokerage • Investments

August 24, 2006

Ms. Tina Cooke  
Environmental Inspector  
James City County  
PO Box 8784  
Williamsburg VA 23187-8784

RE: St. Bede's Church  
Parking Lot Expansion

Dear Ms. Cooke:

Per your request, please find attached a drawing that shows the spoil area (originally delineated as "future parking"), clearing, tree protection, construction areas, etc. We intend to clear the site, grub, grade and reseed.

Although the drawings show the rectory, unfortunately the church cannot afford to build the rectory at this time. However, we would like to clear, grub, grade and seed this area as well as the "future parking". The utilities for the rectory will also be installed later. We will install pipe sleeves under the pavement for this future work.

All other work shown on the plans will be constructed.

If you should need anything further, please do not hesitate to give me a call on my cell at 871-5579.

Sincerely,

BUSH CONSTRUCTION CORPORATION

Linwood A. Burton, II  
Vice President

8/24/06  
will need  
→ site plan  
for "future  
parking" to  
be used as  
offsite dump  
site. Need  
permittin<sup>g</sup> &  
fcs's thereafter



LETTER OF CREDIT NUMBER FB46495

AMENDMENT DATE: MAY 07, 2009

APPLICANT:  
ST. BEDE CATHOLIC CHURCH  
3686 IRONBOUND ROAD  
PO BOX 5400  
WILLIAMSBURG, VA 23188

BENEFICIARY:  
JAMES CITY COUNTY  
ENVIRONMENTAL DIVISION  
P.O. BOX 8784  
WILLIAMSBURG, VA 23187

THIS AMENDMENT IS TO BE CONSIDERED AS PART OF THE ABOVE MENTIONED  
CREDIT AND MUST BE ATTACHED THERETO.

AMENDMENT NO. 004

EXPIRATION DATE NOW READS MAY 19, 2010.

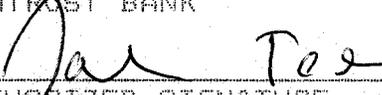
ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

PLEASE DIRECT ALL INQUIRIES TO:

SUNTRUST INTERNATIONAL DIVISION  
ATTN: LETTER OF CREDIT DEPARTMENT  
25 PARK PLACE, 16TH FLOOR, MC 3707  
ATLANTA, GEORGIA 30303  
PHONE: 800-951-7847. SELECT OPTION 3, THEN OPTION 1  
FAX: 404-588-8129

SINCERELY,

SUNTRUST BANK

  
AUTHORIZED SIGNATURE Dale Toothill  
Assistant Vice President

105



LETTER OF CREDIT NUMBER F846495

MAY 07, 2009

BENEFICIARY:  
JAMES CITY COUNTY  
ENVIRONMENTAL DIVISION  
P.O. BOX 8784  
WILLIAMSBURG, VA 23187

DEAR SIR OR MADAM:

PLEASE FIND ATTACHED THE AMENDMENT TO OUR LETTER  
OF CREDIT.

PLEASE DIRECT ALL INQUIRIES TO:

SUNTRUST BANK  
ATTN: STANDBY LETTER OF CREDIT DEPARTMENT  
25 PARK PLACE, 16TH FLOOR, MC 3706  
ATLANTA, GEORGIA 30303  
PHONE: 800-951-7847 OPTION 3.1.

SINCERELY,

SUNTRUST BANK  
105

**JCC ENVIRONMENTAL ROUTING SLIP**

TO: Angela      DATE: 5/8/09  
FROM: Melanie

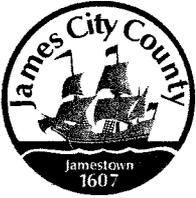
---

- For Your Comments
  - For Your Approval
  - Note & Return
  - Note & File
  - Reply & Send Me a Copy
  - Take Appropriate Action
  - Call Me
  - See Me
  - FYI
  - Signature
- 



COMMENTS:

*Amendment to LK*  
*OK Angela 5/11/09*



## DEVELOPMENT MANAGEMENT

101-A MOUNTS BAY ROAD, P.O. Box 8784, WILLIAMSBURG, VIRGINIA 23187-8784  
(757) 253-6671

E-MAIL: [devtman@james-city.va.us](mailto:devtman@james-city.va.us)  
FAX: (757) 253-6822

ENVIRONMENTAL DIVISION  
(757) 253-6670  
[environ@james-city.va.us](mailto:environ@james-city.va.us)

PLANNING  
(757) 253-6685  
[planning@james-city.va.us](mailto:planning@james-city.va.us)

COUNTY ENGINEER  
(757) 253-6678

MOSQUITO CONTROL  
(757) 259-4116

April 7, 2009

Pastor William H Carr  
St Bede's Catholic Church  
P.O. Box 5400  
Williamsburg VA 23188

Re: St. Bede's Rectory Building and Parking Expansion

Dear Pastor Carr:

The purpose of this letter is to inform you that the \$49,000 Letter of Credit No. F846495 for the above referenced project expires on May 19, 2009. As stated in the Siltation Agreement prior to release of this surety all construction must be complete. The remaining items to be completed include the submission of as built drawings and construction certification for the stormwater management facilities, and a letter of intent for future development. As construction has not been completed the Letter of Credit will need to be extended.

James City County will grant an extension to this Letter of Credit for up to one year. We will require delivery of the revised Letter of Credit to the **James City County Environmental Division, 101-E Mounts Bay Road, Williamsburg VA 23185**, no later than 4:00 p.m., **May 12, 2009** to avoid draw of existing surety.

Sincerely,

Scott J Thomas  
Environmental Director

cc: SunTrust Bank

Mail 4/12

JAMES CITY COUNTY ENVIRONMENTAL DIVISION

Surety Tracking Sheet

Date: 3/30/09

Due Date: 4/3/09

Project Name: St. Bedes Catholic Church Rectory Building + Parking Expansion

Requested By: \_\_\_\_\_ Phone #: \_\_\_\_\_

Date Notified: \_\_\_\_\_ Case Number: SP-132-04

Siltation Surety: Original \$ \_\_\_\_\_ Current \$ 49,000 Needed \$ 49,000.00

- Calculate Evaluate/Reduce Release

Work to be completed for SILTATION Surety

- Stabilization of all disturbed areas
Removal of temporary erosion control measures
Submission of as-built drawings for stormwater management facility
Submission of construction certification for the stormwater management facility
Completion of field-related BMP items
Other - Submit letter of intent for future development
Comments-

Subdivision Surety: Original \$ \_\_\_\_\_ Current \$ \_\_\_\_\_ Needed \$ \_\_\_\_\_

\*maximum reduction of 80% of original bond amount unless project is to be released

- Calculate Evaluate/Reduce Release

Work to be completed for SUBDIVISION Surety

- Paving of streets
Dedication of streets to Virginia Dept of Transportation (VDOT)
Completion of water and sewer systems (JCSA)
Completion of water and sewer punchlist items
Submission of as-built drawings for water and sewer systems
Installation of street lights and street signs
Other -
Comments-

INDICATE YOUR APPROVAL BY INITIALING THE APPROPRIATE BLANK:

3/30/09 INSP SUPR CHF WTSHD ENV
INSP SUPR ENG PLNR DIR
Revised 12/11/08 3/30/09 RELEASE PROJECT



LETTER OF CREDIT NUMBER FB46495

AMENDMENT DATE: MAY 09, 2008

APPLICANT:  
ST. BEDE CATHOLIC CHURCH  
3686 IRONBOUND ROAD  
PO BOX 5400  
WILLIAMSBURG, VA 23188

BENEFICIARY:  
JAMES CITY COUNTY  
ENVIRONMENTAL DIVISION  
P.O. BOX 8784  
WILLIAMSBURG, VA 23187

THIS AMENDMENT IS TO BE CONSIDERED AS PART OF THE ABOVE MENTIONED CREDIT AND MUST BE ATTACHED THERETO.

AMENDMENT NO. 003

EXPIRATION DATE NOW READS MAY 19, 2009.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

PLEASE DIRECT ALL INQUIRIES TO:

SUNTRUST INTERNATIONAL DIVISION  
ATTN: LETTER OF CREDIT DEPARTMENT  
25 PARK PLACE, 16TH FLOOR, MC 3707  
ATLANTA, GEORGIA 30303  
PHONE: 800-951-7847. SELECT OPTION 3, THEN OPTION 1  
FAX: 404-588-8129

SINCERELY,

SUNTRUST BANK

Dale Toothill  
Assistant Vice President

AUTHORIZED SIGNATURE

105



LETTER OF CREDIT NUMBER F846495

MAY 09, 2008

BENEFICIARY:  
JAMES CITY COUNTY  
ENVIRONMENTAL DIVISION  
P.O. BOX 8784  
WILLIAMSBURG, VA 23187

DEAR SIR OR MADAM:

PLEASE FIND ATTACHED THE AMENDMENT TO OUR LETTER  
OF CREDIT.

PLEASE DIRECT ALL INQUIRIES TO:

SUNTRUST BANK  
ATTN: STANDBY LETTER OF CREDIT DEPARTMENT  
25 PARK PLACE, 16TH FLOOR, MC 3706  
ATLANTA, GEORGIA 30303  
PHONE: 800-951-7847 OPTION 3.1.

SINCERELY,

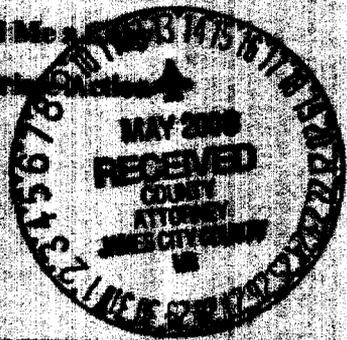
SUNTRUST BANK  
105

ACCIDENTAL ROUTING

TO: Adm DATE: 5/12/08

FROM: TC

- For Your Comments
- For Your Approval
- Note & Return
- Note & File
- Reply & Send Me a Copy
- Take Appropriate Action
- Call Me
- See Me
- FYI
- Signature



COMMENTS:

Amended 4/c

OK  
now 5/13/08



## DEVELOPMENT MANAGEMENT

101-A MOUNTS BAY ROAD, P.O. BOX 8784, WILLIAMSBURG, VIRGINIA 23187-8784

(757) 253-6671

ENVIRONMENTAL DIVISION

(757) 253-6670

EnvDiv@james-city.va.us

PLANNING

(757) 253-6685

planning@james-city.va.us

COUNTY ENGINEER

(757) 253-6678

E-MAIL: devman@james-city.va.us

FAX: (757) 253-6822

INTEGRATED PEST MANAGEMENT

(757) 259-4116

April 17, 2008

Pastor William H Carr  
St Bede's Catholic Church  
P.O. Box 5400  
Williamsburg VA 23188

Re: St. Bede's Rectory Building and Parking Expansion

Dear Pastor Carr:

The purpose of this letter is to inform you that the \$49,000 Letter of Credit No. F846495 for the above referenced project expires on May 19, 2008. As stated in the Siltation Agreement prior to release of this surety all construction must be complete. The remaining items to be completed include stabilization of all disturbed areas (future site of rectory needs seed and straw), submission of as built drawings and construction certification for the stormwater management facilities, and install underground storage tanks. As construction has not been completed the Letter of Credit will need to be extended.

James City County will grant an extension to this Letter of Credit for up to one year. We will require delivery of the revised Letter of Credit to the **James City County Environmental Division, 101-E Mounts Bay Road, Williamsburg VA 23185**, no later than 4:00 p.m., **May 12, 2008** to avoid draw of existing surety.

Sincerely,

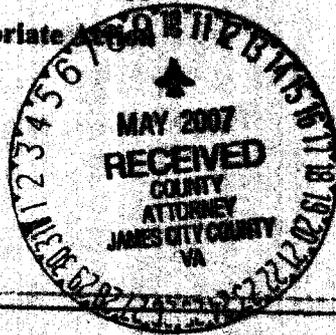
Scott J Thomas  
Environmental Director

cc: SunTrust Bank

**JCC ENVIRONMENTAL REVIEW SLIP**

TO: Jenny      DATE: 5/19/07  
FROM: Melanie

- For Your Comments
- For Your Approval
- Note & Return
- Note & File
- Reply & Send Me a Copy
- Take Appropriate Action
- Call Me
- See Me
- FYI
- Signature



**COMMENTS:**

*Amended  
Reduced to \$19,000.*

*OK.  
Adrian 5/19/07*



LETTER OF CREDIT NUMBER F846495

AMENDMENT DATE: MAY 09, 2007

APPLICANT:  
ST. BEDE CATHOLIC CHURCH  
3686 IRONBOUND ROAD  
PO BOX 5400  
WILLIAMSBURG, VA 23188

BENEFICIARY:  
JAMES CITY COUNTY  
ENVIRONMENTAL DIVISION  
P.O. BOX 8784  
WILLIAMSBURG, VA 23187

THIS AMENDMENT IS TO BE CONSIDERED AS PART OF THE ABOVE MENTIONED CREDIT AND MUST BE ATTACHED THERETO.

AMENDMENT NO. 002

EXPIRATION DATE NOW READS MAY 19, 2008.

THERE IS A DECREASE IN LETTER OF CREDIT AMOUNT OF 48,108.00 U.S. DOLLARS FOR A NEW TOTAL OF 49,000.00 U.S. DOLLARS.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

PLEASE DIRECT ALL INQUIRIES TO:  
SUNTRUST BANK  
ATTN: STANDBY LETTER OF CREDIT DEPARTMENT  
25 PARK PLACE, 16TH FLOOR, MC 3706  
ATLANTA, GEORGIA 30303  
PHONE: 800-951-7847 OPTION 3.

SINCERELY,  
SUNTRUST BANK

A handwritten signature in dark ink, appearing to read "Dale Toothill", is written over a horizontal line.

**Dale Toothill**  
**Assistant Vice President**

AUTHORIZED SIGNATURE  
105



LETTER OF CREDIT NUMBER F846495

MAY 09, 2007

BENEFICIARY:  
JAMES CITY COUNTY  
ENVIRONMENTAL DIVISION  
P.O. BOX 8784  
WILLIAMSBURG, VA 23187

DEAR SIR OR MADAM:

PLEASE FIND ATTACHED THE AMENDMENT TO OUR LETTER  
OF CREDIT.

PLEASE DIRECT ALL INQUIRIES TO:

SUNTRUST BANK  
ATTN: STANDBY LETTER OF CREDIT DEPARTMENT  
25 PARK PLACE, 16TH FLOOR, MC 3706  
ATLANTA, GEORGIA 30303  
PHONE: 800-951-7847 OPTION 3.

SINCERELY,

SUNTRUST BANK  
105



## DEVELOPMENT MANAGEMENT

101-E MOUNTS BAY ROAD, P.O. BOX 8784, WILLIAMSBURG, VIRGINIA 23187-8784

E-MAIL: devtman@james-city.va.us

(757) 253-6671

FAX: (757) 259-4032

ENVIRONMENTAL DIVISION

(757) 253-6670

ENVIRON@JAMES-CITY.VA.US

PLANNING

(757) 253-6685

PLANNING@JAMES-CITY.VA.US

COUNTY ENGINEER

(757) 253-6678

MOSQUITO CONTROL

(757) 259-4116

April 9, 2007

Pastor William H Carr  
St Bede's Catholic Church  
P.O. Box 5400  
Williamsburg VA 23188

Re: St. Bede's Rectory Building and Parking Expansion

Dear Pastor Carr:

The purpose of this letter is to inform you that the \$97,108 Letter of Credit No. F846495 for the above referenced project expires on May 19, 2007. As stated in the Siltation Agreement prior to release of this surety all construction must be complete. The remaining items to be completed include the removal of temporary erosion control measures around the parking lot and submission of as-built drawings and construction certification for the stormwater management facility. As construction has not been completed the Letter of Credit will need to be extended.

James City County will grant an extension to this Letter of Credit for up to one year reduced to \$49,000. We will require delivery of the revised Letter of Credit to the **James City County Environmental Division, 101-E Mounts Bay Road, Williamsburg VA 23185**, no later than 4:00 p.m., May 11, 2007 to avoid draw of existing surety.

Sincerely,

Darryl E. Cook  
Environmental Director

cc: SunTrust Bank ✓

ACCREDITED ROUTES

TO: Joe DATE: 6/28/05

FROM: Joe

- For Your Comments
- For Your Approval
- Note & Return
- Note & File
- Reply & Send Me a Copy
- Take Approval
- Call Me
- See Me
- FYI
- Signature



COMMENTS:

Lynette - Parking Expansion  
will need to be added on  
Amended etc.

OK 7/1/05  
L.P.P.

220-1222 <sup>7/1/05</sup>

9  
561-6963

Fred Moyne

# SUNTRUST

AMENDMENT DATE: JUNE 10, 2005  
LETTER OF CREDIT NUMBER: F846495

APPLICANT:  
ST. BEDE CATHOLIC CHURCH  
3686 IRONBOUND ROAD  
PO BOX 5400  
WILLIAMSBURG, VA 23188

BENEFICIARY:  
JAMES CITY COUNTY  
ENVIRONMENTAL DIVISION  
P.O. BOX 8784  
WILLIAMSBURG, VA 23187

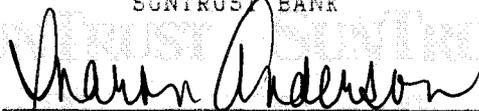
THIS AMENDMENT IS TO BE CONSIDERED AS PART OF THE ABOVE MENTIONED  
CREDIT AND MUST BE ATTACHED THERETO.

AMENDMENT NO. 001

THE BENEFICIARY STATEMENT NOW READS AS FOLLOWS: YOUR WRITTEN  
STATEMENT THAT ST. BEDE CATHOLIC CHURCH HAS FAILED TO  
SATISFACTORILY PERFORM, PRIOR TO THE EXPIRATION OF THIS LETTER OF  
CREDIT, ALL OR PART OF THE TERMS AND CONDITIONS OF THE SILTATION  
AGREEMENT DATED MAY 19, 2005, PERTAINING TO THE ST. BEDE RECTORY  
AND PARKING EXPANSION OR ANY PLANS APPROVED BY AND ON FILE WITH  
THE COUNTY OF JAMES CITY AND THAT JAMES CITY COUNTY IS, IN  
CONSEQUENCE ENTITLED TO THE AMOUNT OF THE ACCOMPANYING DRAFT.

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

SINCERELY,  
SUNTRUST BANK

  
\_\_\_\_\_  
AUTHORIZED SIGNATURE  
SHARON ANDERSON

AVP

# SUNTRUST

LETTER OF CREDIT NUMBER: F846495

JUNE 10, 2005

BENEFICIARY:  
JAMES CITY COUNTY  
ENVIRONMENTAL DIVISION  
P.O. BOX 8784  
WILLIAMSBURG, VA 23187

DEAR SIR OR MADAM:

PLEASE FIND ATTACHED THE AMENDMENT TO OUR LETTER  
OF CREDIT.

TELEPHONE INQUIRIES MAY BE MADE TO AIMEE MAIER  
AT 404-532-0947 REGARDING OUR LETTER OF CREDIT  
OR ANY AMENDMENTS THERETC.

PLEASE ADDRESS ALL CORRESPONDENCE TO:  
SUNTRUST BANK  
25 PARK PLACE, 16TH FLOOR  
STANDBY LETTERS OF CREDIT DEPT. - 3706  
ATLANTA, GA 30303

# SUNTRUST

IRREVOCABLE LETTER OF CREDIT F846495 PAGE 1

LETTER OF CREDIT NUMBER: F846495  
ISSUANCE DATE: MAY 27, 2005

APPLICANT:  
ST. BEDE CATHOLIC CHURCH  
3686 IRONBOUND ROAD  
PO BOX 5400  
WILLIAMSBURG, VA 23188

BENEFICIARY:  
JAMES CITY COUNTY  
ENVIRONMENTAL DIVISION  
P.O. BOX 8784  
WILLIAMSBURG, VA 23187

FOR USD 97,108.00  
(NINETY SEVEN THOUSAND ONE HUNDRED EIGHT 00/100 U.S. DOLLARS)

DATE OF EXPIRATION: MAY 19, 2007  
PLACE OF EXPIRATION: AT OUR COUNTERS

ATTENTION: DIRECTOR, ENVIRONMENTAL DIVISION

WE HEREBY ISSUE THIS IRREVOCABLE LETTER OF CREDIT IN YOUR FAVOR WHICH IS AVAILABLE AGAINST YOUR DRAFTS AT SIGHT ON SUNTRUST BANK. EACH DRAFT HEREUNDER MUST BEAR UPON ITS FACE 'DRAWN UNDER SUNTRUST BANK LETTER OF CREDIT NO. F846495 DATED MAY 27, 2005' AND BE ACCOMPANIED BY THE FOLLOWING DOCUMENTS:

YOUR WRITTEN STATEMENT THAT ST. BEDE CATHOLIC CHURCH HAS FAILED TO SATISFACTORILY PERFORM, PRIOR TO THE EXPIRATION OF THIS LETTER OF CREDIT, ALL OR PART OF THE TERMS AND CONDITIONS OF THE AGREEMENT DATED MAY 19, 2005, PERTAINING TO THE ST. BEDE RECTORY OR ANY PLANS APPROVED BY AND ON FILE WITH THE COUNTY OF JAMES CITY AND THAT JAMES CITY COUNTY IS, IN CONSEQUENCE ENTITLED TO THE AMOUNT OF THE ACCOMPANYING DRAFT.

ALL DRAFTS MUST REFERENCE THE NUMBER AND ISSUE DATE OF THIS CREDIT.

THIS LETTER OF CREDIT IS ISSUED SUBJECT TO THE INTERNATIONAL

# SUNTRUST

IRREVOCABLE LETTER OF CREDIT F846495 PAGE 2  
STANDBY PRACTICES 1998 PUBLICATION 590.

WE HEREBY AGREE WITH YOU THAT ALL DRAFTS DRAWN IN COMPLIANCE WITH THE TERMS OF THIS LETTER OF CREDIT WILL BE DULY HONORED UPON PRESENTATION AND DELIVERY OF THE DOCUMENTS SPECIFIED ABOVE TO SUNTRUST BANK, 919 EAST MAIN STREET, 22ND FLOOR, ATTN: LETTER OF CREDIT DEPARTMENT-GA-ATL-MC3706, RICHMOND, VA 23219 ON OR BEFORE MAY 19, 2007.

SINCERELY,

SUNTRUST BANK



AUTHORIZED SIGNATURE  
JON CONLEY, VP  
VICE PRESIDENT

---

# SUNTRUST

LETTER OF CREDIT NUMBER: F846495

MAY 27, 2005

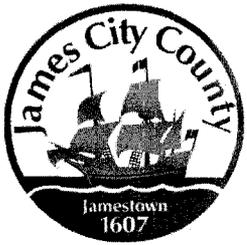
JAMES CITY COUNTY  
ENVIRONMENTAL DIVISION  
P.O. BOX 8784  
WILLIAMSBURG, VA 23187

PLEASE FIND ATTACHED THE ORIGINAL LETTER OF CREDIT.

TELEPHONE INQUIRIES MAY BE MADE TO NITA MCMILLAN  
AT 1-800-951-7847, PRESS OPTION 3, THEN PRESS OPTION 2  
REGARDING OUR LETTER OF CREDIT OR ANY AMENDMENTS THERETO.

PLEASE ADDRESS ALL CORRESPONDENCE TO:

SUNTRUST BANK  
25 PARK PLACE, 16TH FLOOR  
STANDBY LETTERS OF CREDIT DEPT. - 3706  
ATLANTA, GA 30303



## NOTICE TO COMPLY

April 4, 2006

St Bede Parish – Catholic Diocese of Richmond  
P.O. Box 5400  
Williamsburg, Virginia 23188

Re: E&S issues present at The St Bede's Rectory and Parking Expansion located at 3686 Ironbound Road.

An inspection of the above referenced project on 3/31/06 revealed that the following violations are present:

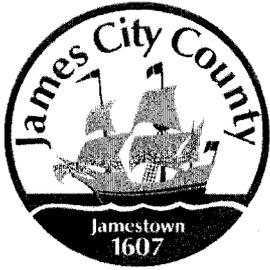
- Silt fence is necessary around the perimeter of the project as outlined in approved plans.
- The in place tree protection needs to be repaired and the remainder of the tree protection needs to be installed according to approved project plans.

Notice is hereby given that these deficiencies shall be corrected in accordance with the approved Erosion and Sediment Control Plan and the Virginia Erosion and Sediment Control Handbook on or before 4/6/06. The site will be reinspected at that time and you are invited to accompany the inspector on that date.

Failure to comply with this notice may result in civil penalties of \$100 per day per violation or any legal action necessary, including drawing on the project surety by the County to effect the implementation of the approved plan. Please contact me at (757) 253-6743, if there are any questions.

Tina Cooke  
Environmental Inspector  
James City County Environmental Division  
101 Mounts Bay Road, P.O. Box 8784  
Williamsburg, VA 23187-8784  
(757) 253-6743

Comp  
1/10/02



# JAMES CITY COUNTY ENVIRONMENTAL DIVISION

P.O. BOX 8784  
WILLIAMSBURG, VIRGINIA 23187-8784  
(757) 253-6670

## INSPECTION REPORT – EROSION AND SEDIMENT CONTROL

**Date:** 11/16/2006  
**Project:** ST. Bedes Dam  
Improvement  
**Phone:** 757-220-2874  
**Fax:** 757-229-2542

**Permittee: Busch Construction**

An inspection of the above-referenced project was conducted on 1/09/2007 the following represents an evaluation of that project's compliance with James City County's Environmental Regulations. Items identified below as "Needs Repair" are deficiencies that must be corrected.

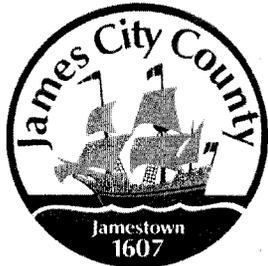
IN COMPLIANCE	NEEDS REPAIR	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Denatured area on dam and area at emergency spill way needs to be stabilized.
<input type="checkbox"/>	<input type="checkbox"/>	

Notice is hereby given that those deficiencies listed shall be corrected in accordance with James City County's Environmental Requirements *on or before* 1/10/2007. The site will be reinspected at that time and you are invited to accompany the inspector on that date. Failure to comply with this report will result in Enforcement Actions.

Gregory B. Johnson  
JCC Environmental Division Inspector

Joe D. Martone  
Project Representative Notified

Comp  
01/10/07



JAMES CITY COUNTY  
ENVIRONMENTAL DIVISION  
P.O. BOX 8784  
WILLIAMSBURG, VIRGINIA 23187-8784  
(757) 253-6670

INSPECTION REPORT – EROSION AND SEDIMENT CONTROL

**Date:** 11/16/2006  
**Project:** ST. Bede's Rectory and  
Parking Lot Expansion  
**Phone:** 757-220-2874  
**Fax:** 757-229-2542

**Permittee: Busch Construction**

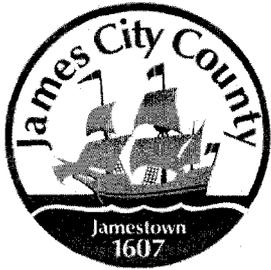
An inspection of the above-referenced project was conducted on 1/09/2007 the following represents an evaluation of that project's compliance with James City County's Environmental Regulations. Items identified below as "Needs Repair" are deficiencies that must be corrected.

IN COMPLIANCE	NEEDS REPAIR	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Repair and renew SF per site plan.
<input type="checkbox"/>	<input type="checkbox"/>	

Notice is hereby given that those deficiencies listed shall be corrected in accordance with James City County's Environmental Requirements *on or before* 1/10/2007. The site will be reinspected at that time and you are invited to accompany the inspector on that date. Failure to comply with this report will result in Enforcement Actions.

Gregory B. Johnson  
JCC Environmental Division Inspector

Joe D. Martone  
Project Representative Notified



**JAMES CITY COUNTY  
ENVIRONMENTAL DIVISION**

P.O. BOX 8784  
WILLIAMSBURG, VIRGINIA 23187-8784  
(757) 253-6670

**INSPECTION REPORT – EROSION AND SEDIMENT CONTROL**

<b>Date:</b>	3/31/2009	<b><u>Permittee: Busch Construction</u></b>
<b>Project:</b>	St Bedes Road Expansion	
<b>Phone:</b>	220-0856	
<b>Fax:</b>	229-0916	

An inspection of the above-referenced project was conducted 3/31/2009 on the following represents an evaluation of that project's compliance with James City County's Environmental Regulations. Items identified below as "Needs Repair" are deficiencies that must be corrected.

IN COMPLIANCE	NEEDS REPAIR	
	X	Ditch between Ironbound Road and the rip rap check dam needs to be stabilized.

Notice is hereby given that those deficiencies listed shall be corrected in accordance with James City County's Environmental Requirements 4/07/2009. The site will be reinspected at that time and you are invited to accompany the inspector on that date. Failure to comply with this report will result in Enforcement Actions.

Gregory B. Johnson  
JCC Environmental Division Inspector

Linwood Burton  
Project Representative Notified

James City County  
Environmental Division  
P.O. BOX 8784  
Williamsburg, Virginia 23187-8784  
(757) 253-6670

**INSPECTION REPORT- EROSION AND SEDIMENT CONTROL**

Date: March 28, 2006

Project: St Bede's Rectory and Parking  
Expansion

Permittee: St Bede Parish – Catholic Diocese of Richmond

Phone/Fax: 229-3631 Fax 229-7845

An inspection of the above-referenced project was conducted on 3/28/06; the following represents an evaluation of that projects compliance with James City County's Environmental Regulations. Items identified below as "Needs Repair" are deficiencies that must be corrected.

IN COMPLIANCE	NEEDS REPAIR	
<input type="checkbox"/>	<input type="checkbox"/>	SEDIMENT BASIN
<input type="checkbox"/>	<input type="checkbox"/>	SEDIMENT TRAP
<input type="checkbox"/>	<input type="checkbox"/>	CONSTRUCTION ENTRANCE-
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SILT FENCE- Install silt fence around perimeter of project as outlined in approved plans.
<input type="checkbox"/>	<input type="checkbox"/>	INLET PROTECTION
<input type="checkbox"/>	<input checked="" type="checkbox"/>	OTHER ITEMS- Repair damaged tree protection and install the remainder of tree protection as outlined in project plans.

Notice is hereby given that those deficiencies listed shall be corrected in accordance with James City County's Environmental Requirements *on or before* 3/31/06. The site will be re-inspected at that time and you are invited to accompany the inspector on that date. Failure to comply with this report will result in Enforcement Actions

Tina Cooke

Fred Mone

\_\_\_\_\_  
JCC Environmental Division Inspector

\_\_\_\_\_  
Project Representative Notified



# JAMES CITY COUNTY ENVIRONMENTAL DIVISION

P.O. BOX 8784  
WILLIAMSBURG, VIRGINIA 23187-8784  
(757) 253-6670

## INSPECTION REPORT – EROSION AND SEDIMENT CONTROL

**Date:** 11/16/2006  
**Project:** ST. Bedes Dam  
Improvement  
**Phone:** 757-220-2874  
**Fax:** 757-229-2542

**Permittee: Busch Construction**

An inspection of the above-referenced project was conducted on 1/09/2007 the following represents an evaluation of that project's compliance with James City County's Environmental Regulations. Items identified below as "Needs Repair" are deficiencies that must be corrected.

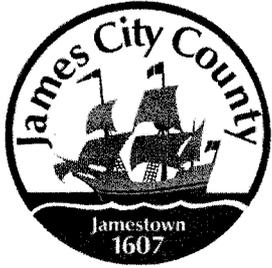
IN COMPLIANCE	NEEDS REPAIR	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Denatured area on dam and area at emergency spill way needs to be stabilized.
<input type="checkbox"/>	<input type="checkbox"/>	

ST Bedes  
fil

Notice is hereby given that those deficiencies listed shall be corrected in accordance with James City County's Environmental Requirements *on or before* 1/10/2007. The site will be reinspected at that time and you are invited to accompany the inspector on that date. Failure to comply with this report will result in Enforcement Actions.

Gregory B. Johnson  
JCC Environmental Division Inspector

Joe D. Martone  
Project Representative Notified



JAMES CITY COUNTY  
ENVIRONMENTAL DIVISION

P.O. BOX 8784  
WILLIAMSBURG, VIRGINIA 23187-8784  
(757) 253-6670

INSPECTION REPORT – EROSION AND SEDIMENT CONTROL

**Date:** 11/16/2006  
**Project:** ST. Bede's Rectory and  
Parking Lot Expansion  
**Phone:** 757-220-2874  
**Fax:** 757-229-2542

**Permittee: Busch Construction**

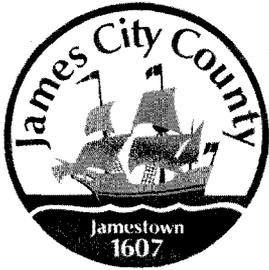
An inspection of the above-referenced project was conducted on 1/09/2007 the following represents an evaluation of that project's compliance with James City County's Environmental Regulations. Items identified below as "Needs Repair" are deficiencies that must be corrected.

IN COMPLIANCE	NEEDS REPAIR	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Repair and renew SF per site plan.
<input type="checkbox"/>	<input type="checkbox"/>	

Notice is hereby given that those deficiencies listed shall be corrected in accordance with James City County's Environmental Requirements *on or before* 1/10/2007. The site will be reinspected at that time and you are invited to accompany the inspector on that date. Failure to comply with this report will result in Enforcement Actions.

Gregory B. Johnson  
JCC Environmental Division Inspector

Joe D. Martone  
Project Representative Notified



**JAMES CITY COUNTY  
ENVIRONMENTAL DIVISION**

P.O. BOX 8784  
WILLIAMSBURG, VIRGINIA 23187-8784  
(757) 253-6670

**INSPECTION REPORT – EROSION AND SEDIMENT CONTROL**

<b>Date:</b>	8/20/2007	<b><u>Permittee:</u> Busch Construction 4029 Ironbound Rd Williamsburg, VA 23188</b>
<b>Project:</b>	St Bedes Rectory	
<b>Phone:</b>	220-2874	
<b>Fax:</b>	229-2542	

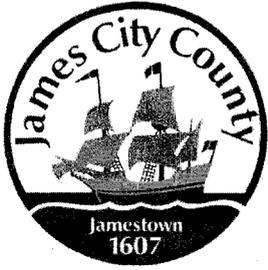
An inspection of the above-referenced project was conducted **8/20/2007** on the following represents an evaluation of that project's compliance with James City County's Environmental Regulations. Items identified below as "Needs Repair" are deficiencies that must be corrected.

IN COMPLIANCE	NEEDS REPAIR	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	SF has failed sediment has washed into conservation area. SF needs to be renewed and sediment removed from Conservation Area.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Repair and stabilize erosion on slopes at the edge of the parking lot by dumpster pad,
<input type="checkbox"/>	<input type="checkbox"/>	

Notice is hereby given that those deficiencies listed shall be corrected in accordance with James City County's Environmental Requirements **8/24/2007**. The site will be reinspected at that time and you are invited to accompany the inspector on that date. Failure to comply with this report will result in Enforcement Actions.

Gregory B. Johnson  
JCC Environmental Division Inspector

Linwood Burton  
Project Representative Notified



**JAMES CITY COUNTY  
ENVIRONMENTAL DIVISION**

P.O. BOX 8784  
WILLIAMSBURG, VIRGINIA 23187-8784  
(757) 253-6670

**INSPECTION REPORT – EROSION AND SEDIMENT CONTROL**

<b>Date:</b>	8/15/2007	<b><u>Permittee:</u> Busch Construction 4029 Ironbound Rd Williamsburg, VA 23188</b>
<b>Project:</b>	St Bedes Rectory	
<b>Phone:</b>	220-2874	
<b>Fax:</b>	225-2542	

An inspection of the above-referenced project was conducted **8/15/2007** on the following represents an evaluation of that project's compliance with James City County's Environmental Regulations. Items identified below as "Needs Repair" are deficiencies that must be corrected.

IN COMPLIANCE	NEEDS REPAIR	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Area where stock pile was located needs to be stabilized with seed and straw.
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Renew SF in front of the stock pile.
<input type="checkbox"/>	<input type="checkbox"/>	

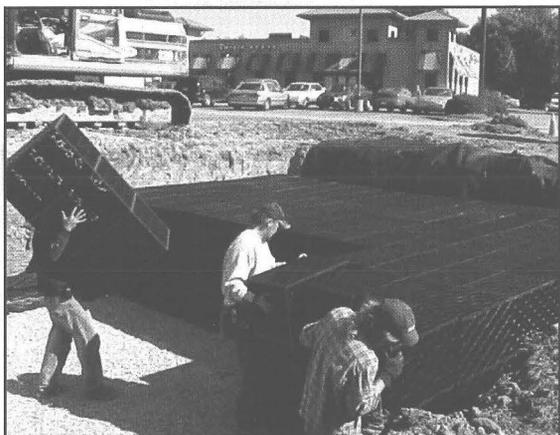
Notice is hereby given that those deficiencies listed shall be corrected in accordance with James City County's Environmental Requirements **8/22/2007**. The site will be reinspected at that time and you are invited to accompany the inspector on that date. Failure to comply with this report will result in Enforcement Actions.

Gregory B. Johnson  
JCC Environmental Division Inspector

Linwood Burton  
Project Representative Notified

# Atlantis Water Management Solutions

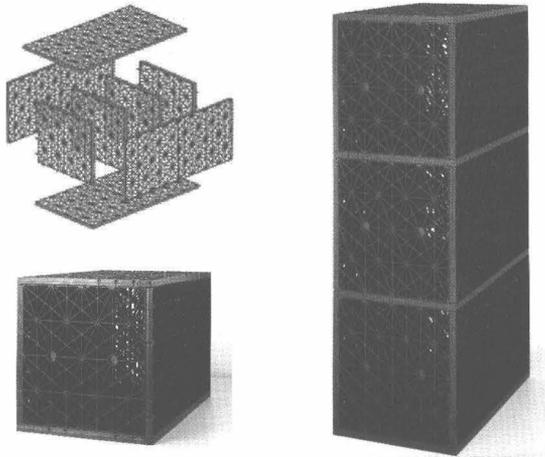
Storm Water Detention/Retention/Harvesting



# Storm Water Management

## RainTank

D-RainTank™ storm water detention and infiltration systems provide underground storage of storm water. After a rain event fills the RainTank, storm water will either infiltrate into the ground, drainage system, or be recycled for irrigation. This system provides an alternative to storm water basins and a more efficient alternative to other underground systems.



### Applications

RainTank can be used for a variety of applications including:

- Storm Water Retention/Infiltration
- Storm Water Detention
- Dry Wells
- Leach Fields
- Bioretention
- Storm Water Recycling/Harvesting

### Benefits

- High Capacity
  - ♦ 95% void internal area yields 90% void surface area
- Modular Design
  - ♦ Can be placed in any shape to efficiently use space
  - ♦ Stack to depths of more than 7 feet
- High Strength
  - ♦ May be used under parking lots and roads
- Increased Infiltration
  - ♦ Reduces post-construction runoff
- Easy to Transport
  - ♦ Can be supplied unassembled for reduced delivery costs
- Lightweight and Quick to Install
  - ♦ Can be put in place by hand; no cranes required
  - ♦ Reduces site access delays

RainTank is a modular system and can be assembled to a variety of heights from 1 1/2' to over 7'. It is extremely strong and can be placed beneath a variety of surfaces including:

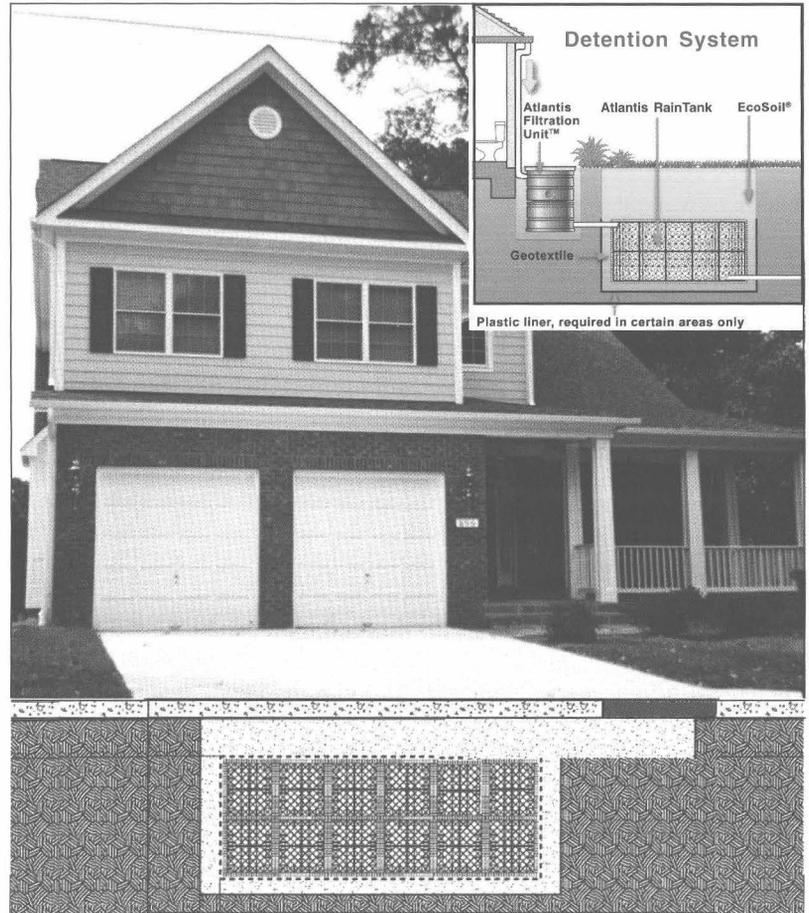
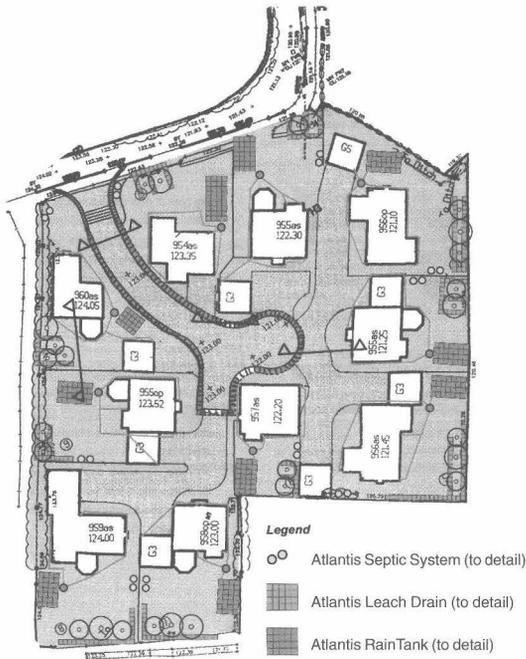
- Parking Lots
- Streets and Access Roads
- Driveways
- Landscaping
- Athletic Fields/Playgrounds
- Swales and Channels

# Storm Water Management

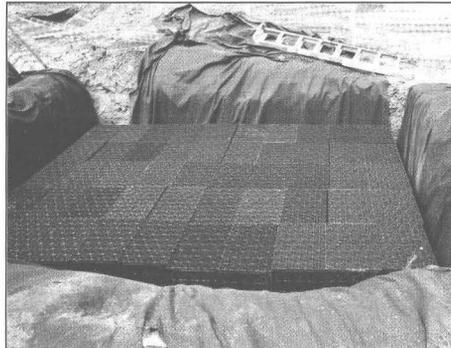
## RainTank - Solving Tough Problems

**Arlington, Virginia - Residential Area**  
 10 residential homes...each house includes approximately  
 1,000cf of storm water storage volume.

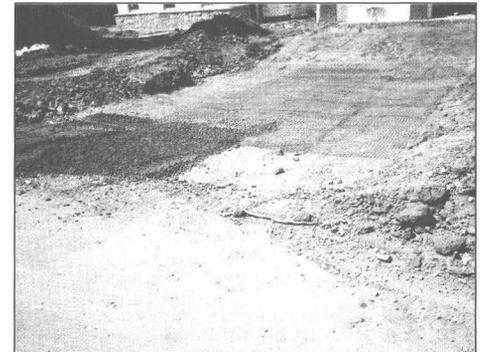
**L**arge homes on small lots created enough storm water runoff to threaten the permitting of this Northern Virginia development. Changing the design to incorporate RainTanks beneath all the driveways solved the runoff problem without affecting the affordability of the homes.



Minimum excavation was required to prepare the area for the RainTank system.



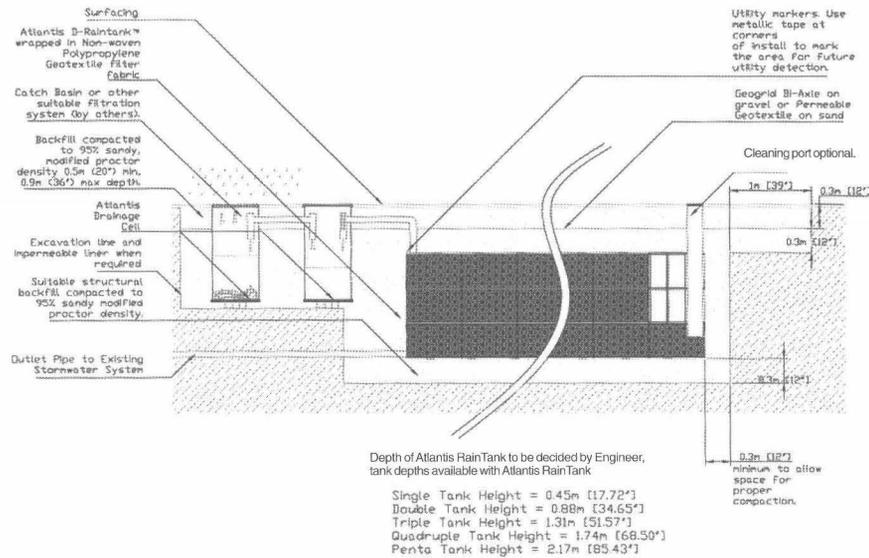
Approximately 1,000 cf of RainTank was installed at each residence.



With only two feet of cover above the RainTank, a geogrid helps disperse the traffic load.

# Storm Water Management

## RainTank - Design Considerations

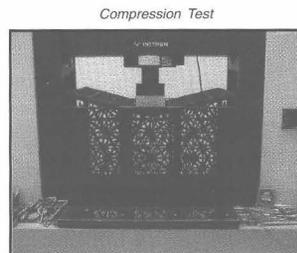


There are many factors that will determine the depth of the RainTank System and the corresponding amount of cover material, including:

1. RainTank Strength
2. Backfill Materials
3. Outlet Elevation
4. Depth of Water Table / Hardpan
5. Static & Dynamic Surface Loads
6. Construction Loads
7. Lateral Loads

### 1. RainTank Strength

Independent testing has shown RainTank can withstand up to 34 psi. By considering the full range of factors used to design a project, the system will easily support H2O loads with an adequate factor of safety.



### 2. Backfill Materials

If the area above the RainTank will be used for vehicular traffic, then the fill materials should be of granular nature and should be reinforced with Tensar BX-1200 (or a performance equivalent) to spread point load impact. Otherwise, cover material should be free flowing clean sand or granular material. SOIL THAT CAN ABSORB LARGE QUANTITIES OF WATER SUCH AS CLAY SHOULD NOT BE USED.

Backfill materials should be compacted to at least 90% for each 12 – 20" layer.

### 3. Outlet / Overflow Elevation

Many designs incorporate an Outlet to drain the system at a controlled rate and/or an Overflow to prevent flooding in an extreme event. The elevation of these elements may be restricted, and should be considered when determining the elevation of the RainTank.

### 4. Elevation of Water Table or Hardpan

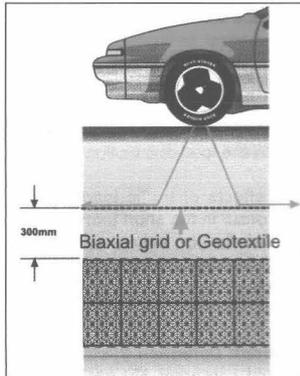
While placing the RainTank below the water table will not cause the system to fail, it will limit its ability to function by reducing the space available to store stormwater. In these situations the RainTank may be placed at a shallow depth, or a liner may be used to prevent groundwater from entering the tanks. A shallow hardpan will limit the depth of excavation that is practical, which will also limit the designer's options for RainTank elevations.

# Storm Water Management

## RainTank - Design Considerations

### 5. Surface Loads

The RainTank must be able to safely support the static and dynamic loads placed on the tanks. Excessive deflection must be prevented or surfacing materials (asphalt, concrete, or block paving) will be damaged.



The primary static load to consider is the saturated weight of the fill above the tanks. This will vary with the type of soil used (see Backfill Materials).

Dynamic loads are the weight and movement of traffic at the surface. First, consider the ground pressure exerted by the vehicle.

$$\sigma_{vs} = W F_d / A$$

W=Wheel Load  
F<sub>d</sub>=Dynamic Factor for Moving Wheel Load  
A=Tire Contact Area

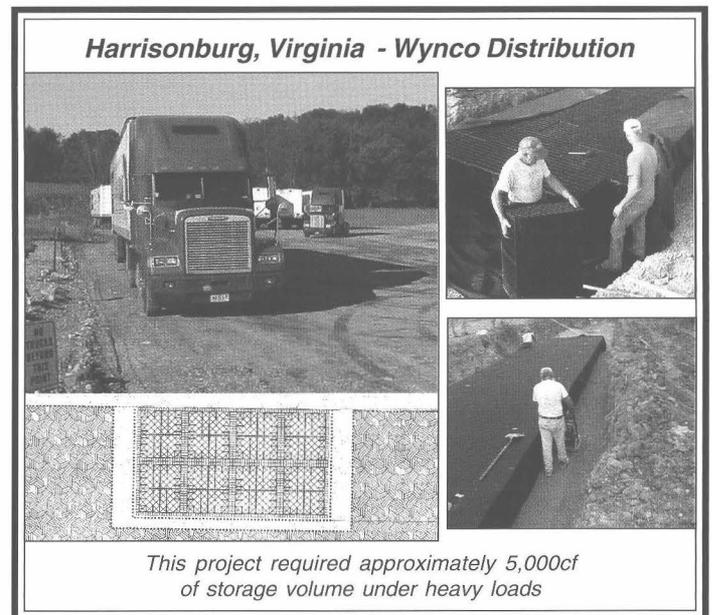
This load will be spread by the cover materials as it is applied to the RainTank. The spread of the load depends on the type and compaction of the fill. For well compacted Type 1 base a load distribution angle of 45 degrees may be suitable, but for poorly compacted overfill the load distribution could be as low as 15 degrees.

The effects of traffic loads are temporary and only occur in the short-term. Therefore short-term load / deflection values are used in design with an appropriate factor of safety to allow for fatigue.

The resulting pressure on the RainTank can be determined (including the weight of the fill), along with the deflection of the units.

$$s_{va} = W F_d / A + dy$$

W=Wheel Load  
F<sub>d</sub>=Dynamic Factor for Moving Wheel Load  
A=Area of Applied Load on RainTanks  
dy=Total Weight of Fill Materials



### 6. Construction Loads

While achieving proper compaction of the fill materials is critical, the type of compaction equipment used must be carefully considered to avoid localized high impact and penetration of the fill and/or RainTanks. Whenever possible, LIGHT WEIGHT EQUIPMENT SHOULD BE USED.

### 7. Lateral Loads

The pressure acting on the sides of the units should also be considered, particularly when the bottom elevation of the RainTanks is more than 9½ feet below final grade.

# Storm Water Management

## RainTank - Installation

*Villa Riva Condominiums - Jacksonville, Florida*



# Storm Water Management

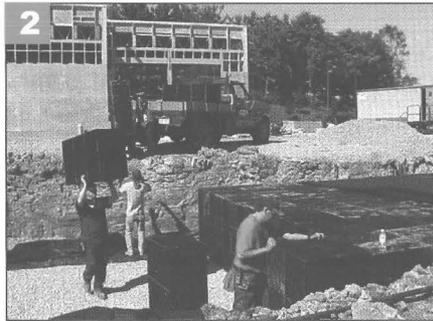
## RainTank - Installation Procedures

Wendy's Restaurant - Morgantown, West Virginia  
4,700 cubic feet of storage

Minimum excavation was required to prepare the area for the RainTank system. 3" to 4" of stone was placed on the excavated floor. A footprint of the system was marked to determine the geotextile boundaries.



One person can easily handle a 4' deep tank module. Approximately 4,700cf of RainTank was installed in this project.



This design incorporated a multi-level discharge system.



The installed modules were wrapped with a geotextile and then proper backfill and compaction were performed.



An initial 1' of cover was placed. Next the geogrid reinforcement along with a final 1' of cover were placed.



Completed job.

### Installation of Atlantis Tank Modules

1. Excavate the site to the proper depth (accounting for 3"-4" of base and specified depth of cover material), length and width, allowing adequate room to compact backfill around the perimeter (typically 12" – 24"). If using a liner (optional) to reuse water in the system, install that now. Mark the footprint of the RainTank in the excavation to allow placement of Geotextile and the tanks.
2. Put the geotextile in place and begin installing tanks in the excavation over the filter fabric, butting them tightly against each other. After placement of the tanks, bring geotextile up the sides and over the top of the structure, connecting joints as recommended. Fold excess fabric at corners to lay flat against the structure and secure using tape.
3. Identify locations of inlet, outlet, inspection ports, and any other penetrations. To secure pipe to system, cut X into geotextile, and secure fabric to the pipe with a band clamp. If butting the pipe to the RainTank is not satisfactory, the exterior plate of the RainTank may be cut with a reciprocating saw and the pipe inserted into the tank.
4. Place backfill around RainTanks carefully, and use a powered mechanical compactor to compact backfill around perimeter, being careful to avoid damage to geotextile and (optional) liner. Support pipe in trenches to prevent damage to the pipe.
5. Place a sandy gravel backfill material over wrapped tank (typically between 1' and 3', with 2' typical for traffic applications), compacting with lightweight equipment to a minimum of 90%. Take care when placing backfill on top of the structure to avoid damage to the fabric and tanks.
6. Geogrids should be installed on traffic areas. The geogrid layer is preferably placed 12 inches over the top of the structure, so that it extends beyond the edge of the structure for at least 1 1/2 ft. Joints must be overlapped by a minimum of 1 ft.
7. Place surfacing materials, such as groundcovers, shrubs (do not plant trees above the tank), or paving material over the structure with care.

# Horizontal & Vertical Drainage

## Ecological Road

The Atlantis philosophy is to resolve water management at the source. That's the concept behind the Ecological Road. This holistic system captures surface runoff from roads and, instead of transporting it to a central storage pond, provides short-term localized storage so that stormwater can be either infiltrated to recharge groundwater, released at a controlled rate, or recycled for irrigation. RainTank provides benefits for everyone, including the developer, the municipality, and the community.

### Benefits for the Developer – Economic

- Less expensive than traditional techniques
- Replaces curb & gutter, inlet structures, drainage pipe, and stormwater ponds
- Frees up valuable space

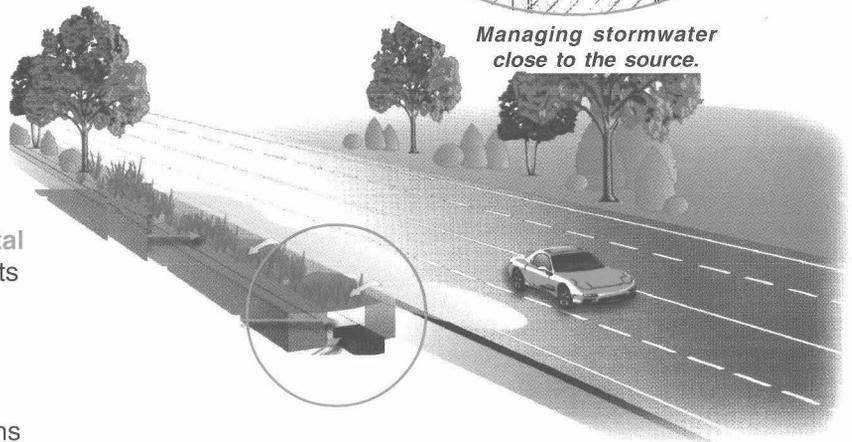
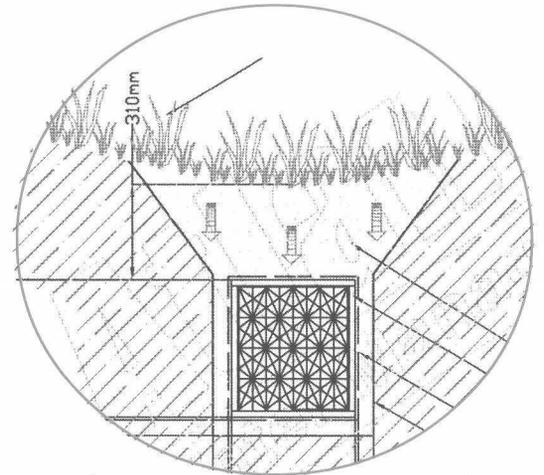
### Benefits for the Municipality – Environmental

- Removes a variety of pollutants and nutrients from hydrocarbons to phosphorous
- Encourages infiltration
- Reduces total runoff in detention applications

### Benefits to the Community – Quality of Life

- Eliminates breeding grounds for mosquitoes and other vermin
- Completely maintenance-free

Economically sensible, environmentally friendly, and completely sustainable, the Ecological Road is a better way to manage storm water.



## Design Options

*Santa Monica, CA - Installation of 750cf of RainTanks installed*

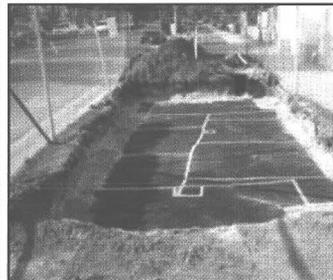
*There are many ways to incorporate the principles of the ecological road into a project design, as demonstrated by this project.*



*Excavation of the area.*



*Placement of tanks.*



*Backfill on top of structure.*



*Completed job.*

# Horizontal & Vertical Drainage

## Ecological Road



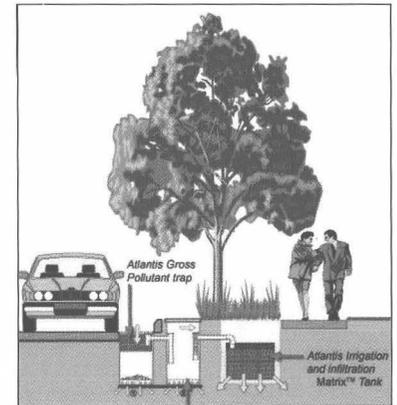
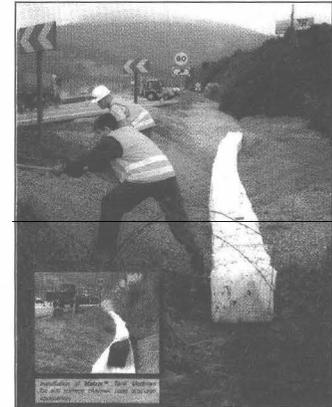
**Safety** - A RainTank channel could have prevented this accident.

**RainTank solves three major issues.**

1. Safety
2. Environmental...eliminating water contamination
3. Aesthetic



**Environmental** - Standing water can lead to poisonous green algae or other environmental hazards in road drainage.



**Aesthetic** - Replacing concrete ditches with shallow grass swales beautifies the landscape.

## LEED™ Points

**Using RainTank in a project design can earn as many as 12 LEED credits for your project.**

### Sustainable Sites – 4 Credits

By temporarily storing large volumes of water in a small footprint, RainTank allows you to maximize open space (credit 5.1) while minimizing the development footprint (credit 5.2). This will also reduce the total quantity of stormwater runoff (credit 6.1). Incorporating RainTank as part of a bioretention system can help remove pollutants from runoff, as well (credit 6.2).

### Water Efficiency – 5 Credits

RainTank can be wrapped with a liner, allowing rain water or gray water stored in the system to be reused to irrigate the landscaping (credits 1.1, 1.2 and 2), resulting in reduced demand on the building's potable water resources (credits 3.1 and 3.2).

### Materials and Resources – 3 Credits

RainTanks are always made from recycled plastics (credits 4.1 and 4.2). A completely modular system, RainTank can be shipped to the jobsite fully assembled from Richmond, VA, or can be shipped flat and assembled on site (credit 5.1).

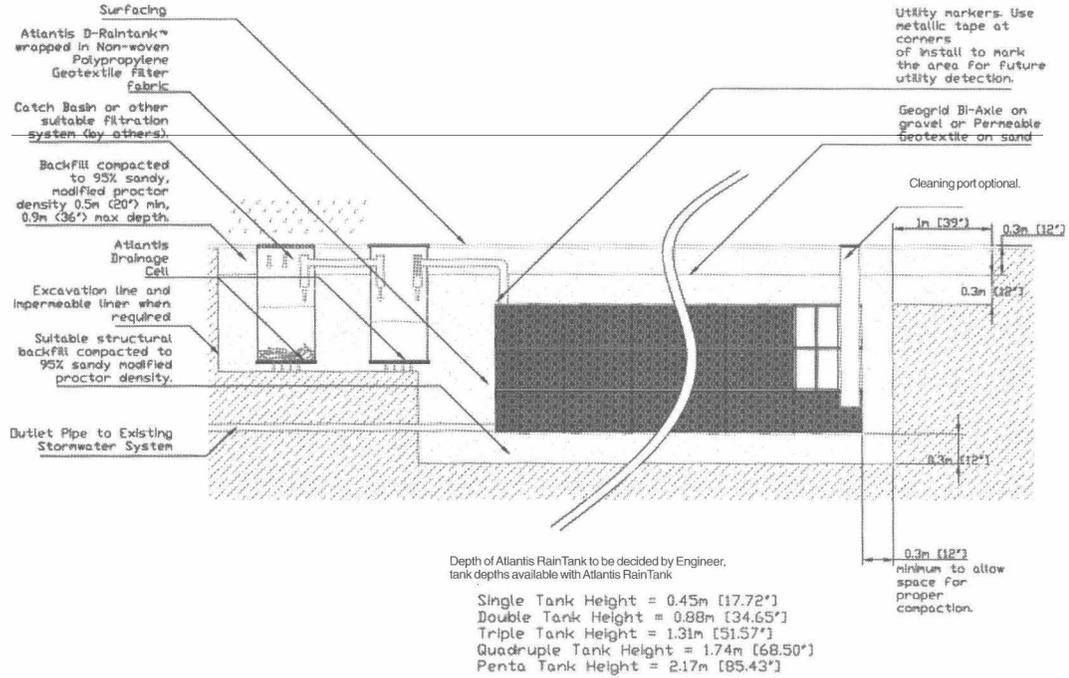
### Innovation & Design Process – 1 Credit

There are many ways to incorporate RainTank into a project design. From basic underground storage to bioretention and water recycling, RainTank presents many opportunities to earn credits towards getting your project LEED Certified.

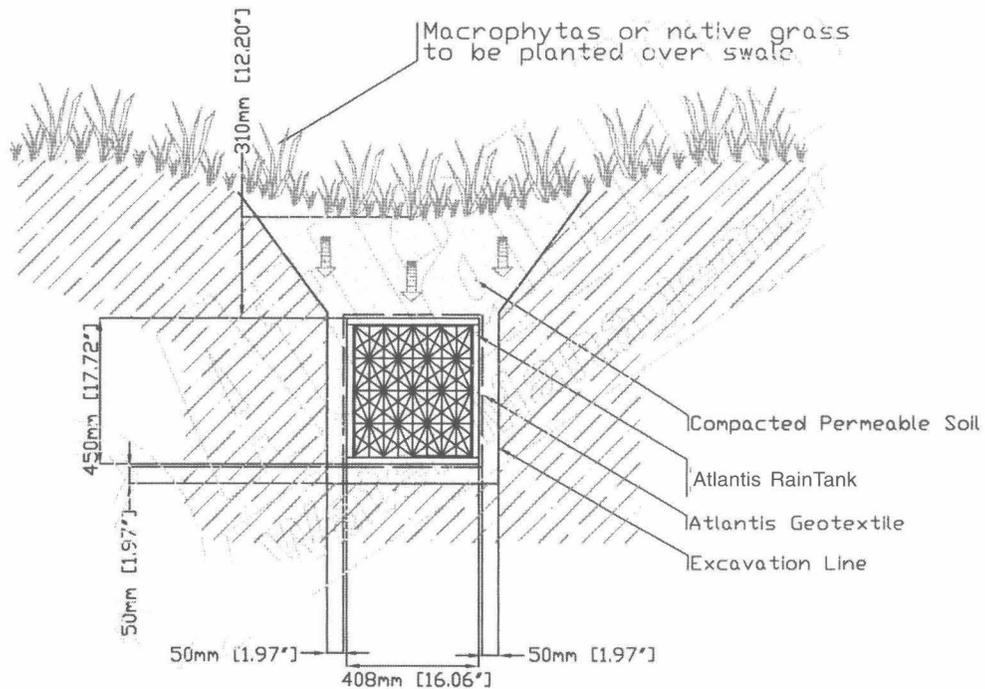
# Typical Design



## Typical parking lot design



## Typical Swale Infiltration design



*Additional CAD Drawings Available*

# Specifications

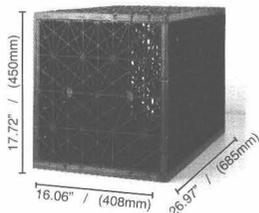
## Atlantis Dimensions

Module (Units)	Width (mm)	Width (inches)	Length (mm)	Length (inches)	Height (mm)	Height (inches)
Single (1)	408	16.06	685	26.97	450	17.72
Double (2)	408	16.06	685	26.97	880	34.65
Triple (3)	408	16.06	685	26.97	1310	51.57
Quad (4)	408	16.06	685	26.97	1740	68.50
Pent (5)	408	16.06	685	26.97	2170	85.43

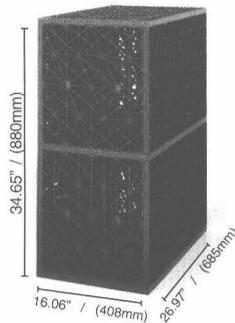
  

Module (Units)	Tank Volume (cf)	Tank Volume (gal)	Water Storage Volume (cf)	Water Storage Volume (gal)	# of Large Plates	# of Small Plates
Single (1)	4.44	33.22	4.22	31.56	4	4
Double (2)	8.69	64.97	8.25	61.72	7	8
Triple (3)	12.93	96.72	12.28	91.88	10	12
Quad (4)	17.17	128.47	16.31	122.03	13	16
Pent (5)	21.42	160.21	20.35	152.19	16	20

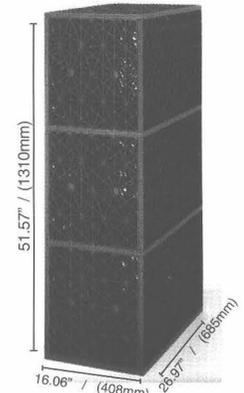
**Conversions**  
 1 cf = 7.4805195 gallon  
 1 liter = 0.2641721 gallon  
 1 mm = 0.0393701 inches  
 1 cf = 0.0283168 cm



**Single Module**



**Double Module**



**Triple Module**

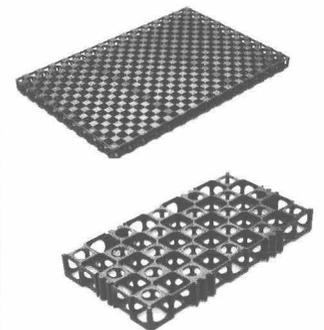
## Turf / Gravel Cell Specification

### 1.18" Cell

### 2.05" Cell

Size	(H) 1.18" / 30mm (W) 15.94" / 405mm (L) 23.9" / 607mm	(H) 2.05" / 52mm (W) 10.24" / 260mm (L) 18.9" / 480mm
Ultimate Load	*116.7 psi	*166.0 psi
Flow Rate	21.13 gals / min (80 l / min)	37.51 gals / min (142 l / min)

\*Recommended maximum loading



## Strip Filter Pipe™ Specification

Size	(H) 3.94" / 100mm (W) 3.15" / 80mm (L) 10.24' / 3125mm
Ultimate Load	*24.8 psi
Flow Rate	21.13 gals / min (80 l / min)

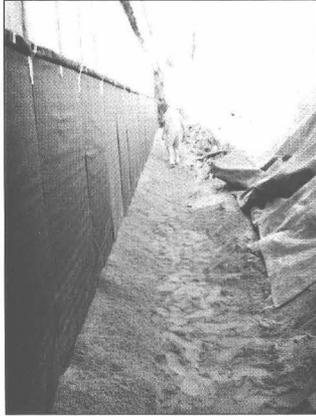
\*Recommended maximum loading



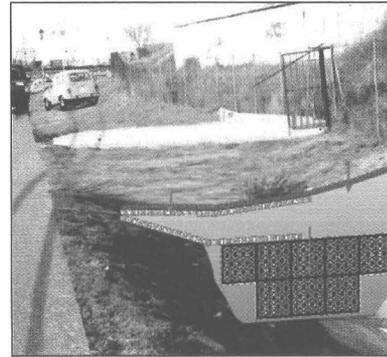
# Atlantis Water Management Solutions

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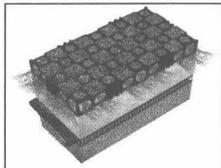
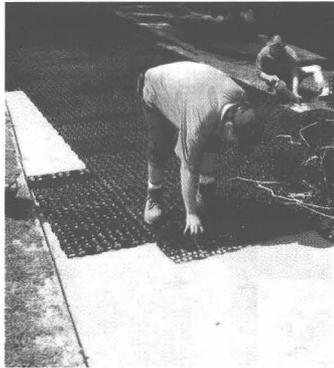
*Wall Panel Installation*



*Road Edge Drainage*



*Turf / Gravel Cell*



*Strip Filter Pipe™*



*Drainage Swales*



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## Wynco Distribution Center - Detention System

Harrisonburg, VA - August 2003

### The Problem

After expanding the building, space was tight in this distribution facility's dock area. Backing large trucks in and out was hard enough, but a large storm water detention ditch on the outer edge of the lot added grave consequences to the slightest wrong turn. Any solution to handle the storm water and enlarge the lot would not only need to stand up to the heavy truck loads, but work within the constraints of an inflexible outlet elevation.

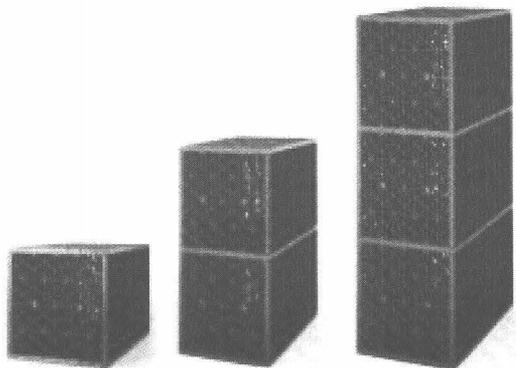


### The Solution

Using RainTank to store 4,000 cf of storm water below the parking lot in the same footprint as the ditch added 15' to the lot. RainTank's ability to stand up to H<sub>2</sub>O loads was critical to its selection, and a double tank was used to meet the requirements of the outlet invert.



RainTank not only fit into the project parameters, but it fit in the budget, too. Freight costs were minimized by shipping the units flat and constructing them on-site. By using RainTank's 90% void surface area to infiltrate water, the three acre parking lot drains quickly with no expensive inlet structures.



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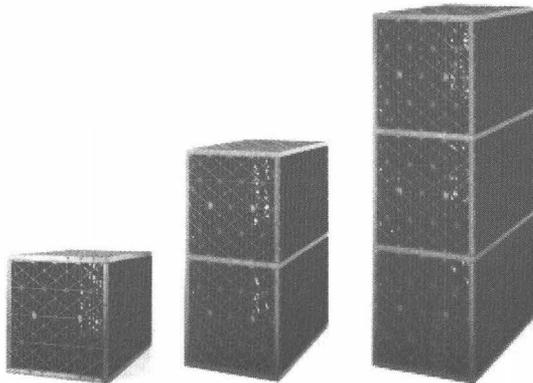
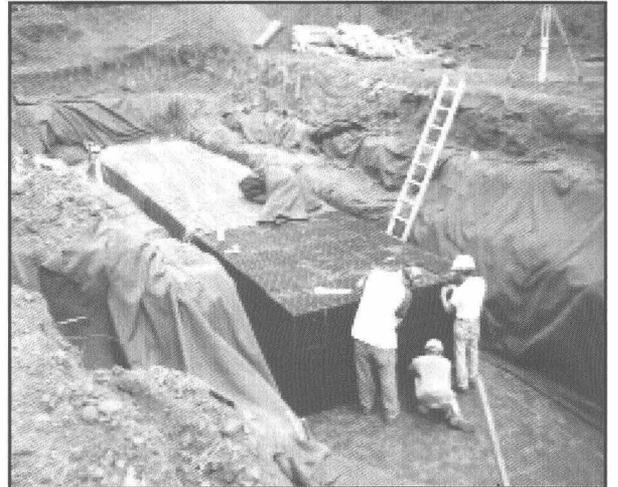
## Pottstown Memorial Medical Center - Storm Water Detention Pottstown, PA - July 2004

### The Problem

Growth at the Hospital was creating parking problems. The existing lot could easily be expanded into an adjacent field, but the additional storm water runoff had to be managed in such a way that didn't interfere with future expansion. Creating the detention area underground below the new lot seemed ideal. Dealing with a shallow hardpan meant finding a way to provide maximum storage in the limited available area.

### The Solution

Barry Islet & Associates in Norristown, PA used RainTank to make the design work. With its 95% void space and minimal cover requirements, RainTank maximized the efficiency of the excavation and provided 4,800 cubic feet of storage in an 1168 square foot area (8' x 146'). Since RainTank can be put in place by hand and there's very little stone to compact, the installation was a snap. That allowed the contractor, Scott Contractors, Inc. of Norristown, PA, to quickly move on to building the parking lot and resolve the parking problems.



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## New England Water Works Assn - Storm Water Recycling Holliston, MA - September 2004

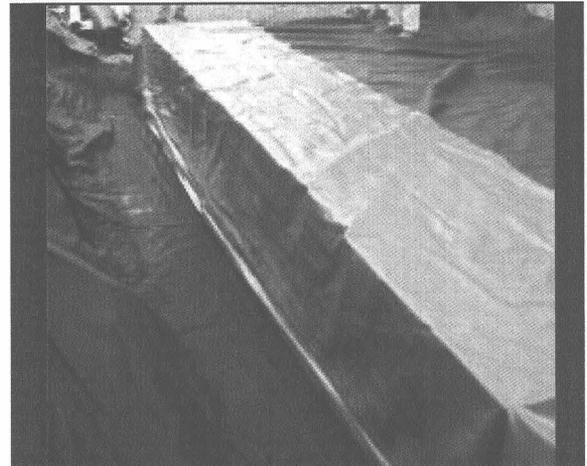
### The Problem

Expansion of the New England Water Works Association Headquarters created both problems and opportunities. Runoff created by the building addition had to be managed on the relatively small site, but the association wanted to go a step further. They wanted to create an example for the community by turning their expansion into a demonstration project using the latest technologies available.

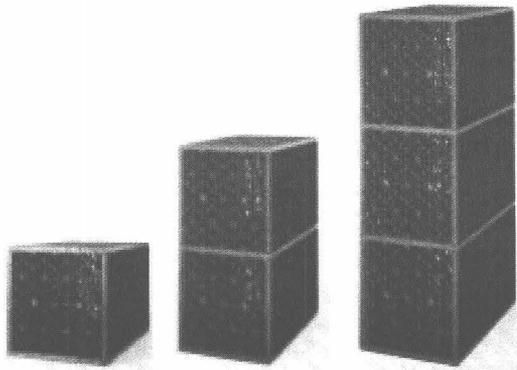
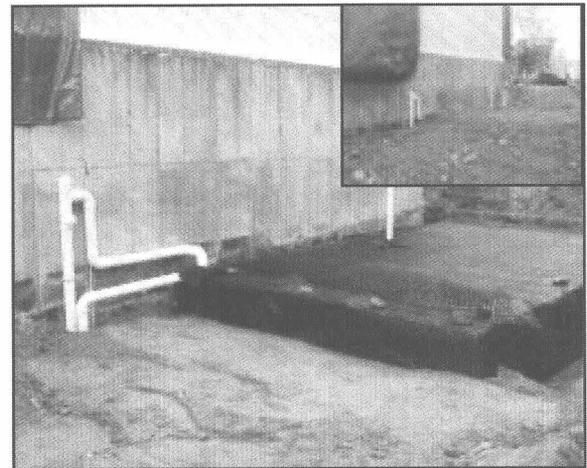


### The Solution

Phil Reidy of RainWater Recovery Systems, LLC in Waltham, MA ([www.RainwaterRecovery.com](http://www.RainwaterRecovery.com)) helped the Association convert the storm water from a waste product to a resource. Using RainTank and a liner to build an underground reservoir, water from the roof that normally dumped into a drywell was diverted into the RainTank.



Additional plumbing and pump works were installed to pull water from the 6,000 gallon RainTank to feed the property's irrigation system. This innovative design both reduced runoff to solve the storm water issue and provided water for landscaping to mitigate irrigation costs. The Association hopes the project will serve as a model for reducing demands on strained municipal water supplies.



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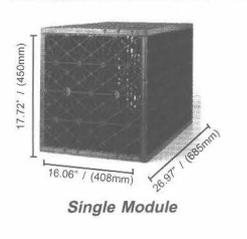
## RainTank™

### Water Management Solutions

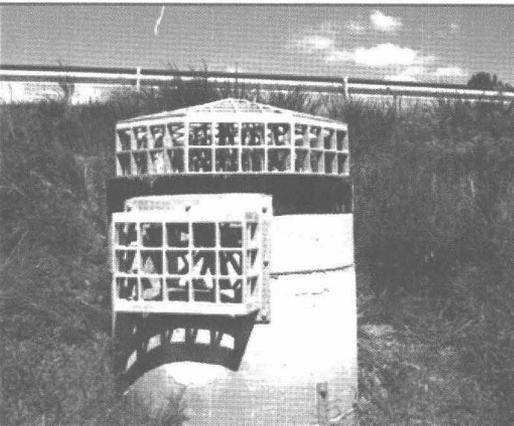
RainTank™ storm water detention/retention and infiltration systems provide underground storage of storm water. After a rain event fills the RainTank, storm water will either infiltrate into the ground, drainage system, or be recycled for irrigation. This system provides an alternative to storm water basins and a more efficient alternative to other underground systems.

Key features include:

- Lightweight and Quick to Install. Can be put in place by hand; no cranes required
- High Strength. May be used under parking lots and roads
- Modular Design. Can be placed in any shape to efficiently use space
- Easy to Transport. Can be supplied unassembled for reduced delivery costs



Catalog No.	Description	Width (inches)	Length (inches)	Height (inches)
RAUASING1	Single	16.06	26.97	17.72
RAUADoub2	Double	16.06	26.97	34.65
RAUATrip3	Triple	16.06	26.97	51.57
RAUAQUAD4	Quad	16.06	26.97	68.50
RAUAPENT5	Pent	16.06	26.97	85.43



## Trash Racks

### Water Screening Device For concrete, plastic & metal pipe

Corrosion free racks are designed to withstand the conditions of pond structures - rough handling, high/low temperatures and long term weather exposure. Structural plastic racks are a great alternative to painted and galvanized steel racks for use in storm water management ponds and general water screening.

Key features include:

- Elimination of Corrosion
- Strong, light
- Light Weight = Installation Savings
- 100% Maintenance Free
- UV Resistant - per ASTM D2565-99
- Easily Customized - Call with your needs

Description	Size
Trash Rack - Pyramid Style	Call for sizes
Trash Rack - Peak Roof Style	Call for sizes
Trash Rack - Flat Roof Style	Call for sizes

Custom and standard sizes are available. Call for sizes and availability. Anti-vortex plates available.

# Pavement Preservation

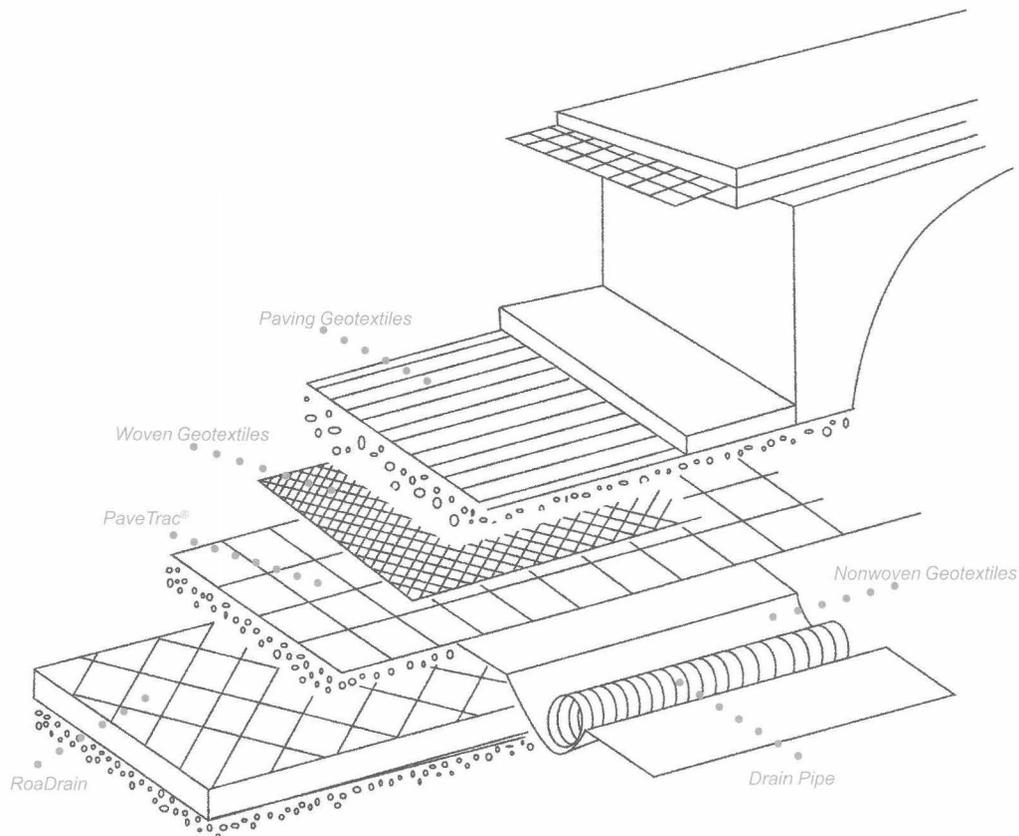
- *Asphalt Reinforcement*

*Asphalt Overlay Reinforcement.*

*Crack Repair*

- *Drainage*

*Subsurface drainage.*



# RainTank Maintenance

## Installing the Maintenance System

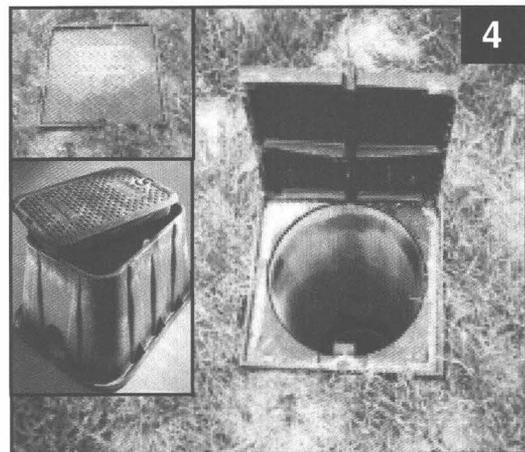
To install the PCV Pipe, the RainTank can be easily cut with a reciprocating saw (see image 3). Whenever possible cut between the interior baffles of the Tank.

Both types of penetrations of the RainTank system should be capped at the surface. In landscaped areas, this may be accomplished with a simple pipe cap or plastic valve box (see image 4 lower inset). In paved areas, metal lids are more appropriate (see image 4).



## Maintenance Intervals

Maintenance Schedules for the RainTank System are a function of the contributing area and the type of pre-treatment specified. A standard maintenance schedule may include quarterly inspections through the first year of use, with yearly inspections thereafter. Flushing should be performed if sediment should reach a pre-determined depth or volume of the storage capacity which reduces performance of the system to unacceptable levels.



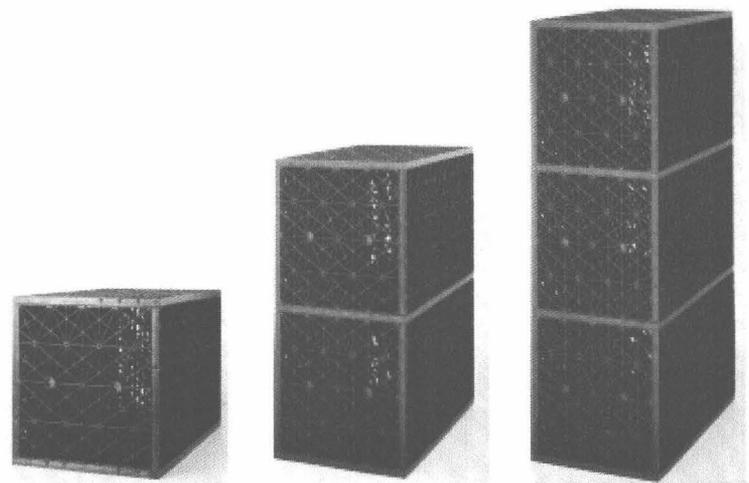
## Availability

All system components, including caps, lids, and valve boxes are available from ACF Environmental. Contact your local sales representative or our Sales Office at 800-448-3636 for assistance.



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# Rain Tank Maintenance

With adequate pre-treatment of storm water before it enters the RainTank, heavy sediments, trash, and other debris will not enter the system. Therefore, most maintenance efforts should be directed at the pre-treatment structures to ensure they are functioning properly.

To monitor the accumulation of fine sediments that may enter the detention/retention area, RainTank systems may include a monitoring well, flush ports, or both (see image 2).

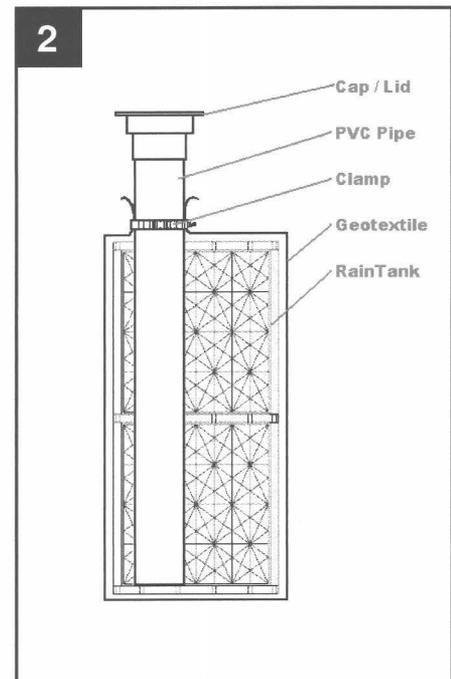
## Monitoring Wells

Typically made from perforated 6" PVC Pipe that runs from the bottom of the RainTank up to ground level, these are typically used to visually inspect the system and take simple measurements to gauge the depth of accumulated sediments (see image 1).

## Flush Ports

Running from the bottom of the RainTank up to ground level, flush ports are made from solid PVC Pipe with notches cut into the bottom. As water is pumped into the port the notches will direct water down to the bottom of the system to create turbulence, thereby re-suspending accumulated sediments.

After pumping water into the tanks, flushing is completed by vacuuming sediment laden water out of the system either through the inlet structure or through the flush port. The diameter of the flush port is determined by a number of factors including the rate at which water will be pumped into the system, the number of flush ports incorporated, and the possible requirement of vacuuming through the port. Experience has shown that an 18" port is more than adequate for virtually any required use, with 6" – 12" ports more common when vacuuming will be performed at the inlet structure.



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## Atlantis Matrix D-RainTank® Installation Specifications

### Technical Specification:

#### PART 1 - GENERAL

##### 1.01 General Provisions

- A. The Conditions of the Contract and all Sections of Division 1 are hereby made a part of this Section.

##### 1.02 Description of Work

###### A. Work Included:

1. Provide excavation and base preparation per Geotechnical Engineer's recommendations and/or as shown on drawings, to provide adequate support for project design loads and safety from excavation sidewall collapse. See 2.02 Materials.
2. Provide Atlantis Matrix D-RainTank® Modular system products including RainTank Module, geotextiles, geogrids, inlet and outlet pipe with connections and installation per the manufacturer's instructions furnished under this section.

###### B. Related Work:

1. Subgrade excavation and preparation under Section 02300 - Earthwork.
2. Subsurface drainage materials - Section 02700 - Subsurface Drainage and Structures, as needed.

##### 1.03 Quality Assurance

- A. Follow Section 01340 requirements.
- B. Installation: Performed only by skilled work people with satisfactory record of performance on bulk earthworks, pipe, chamber, or pond/landfill construction projects of comparable size and quality.

##### 1.04 Submittals

- A. **Submit manufacturer's product data and installation instructions.**
- B. Submit Atlantis Matrix D-RainTank Module® product for review. Reviewed and accepted samples will be returned to the Contractor.
- C. Submit material certificates for geotextile, geogrid, base course and backfill materials.

##### 1.05 Delivery, Storage, and Handling

- A. Protect Atlantis Matrix D-RainTank Modules® from damage during delivery and store under tarp to protect from sunlight when time from delivery to installation exceeds one week. Storage should occur on smooth surfaces, free from dirt, mud and debris.
- B. Handling is to be performed with equipment appropriate to the size (height) of cells and site conditions, and may include hand, handcart, forklifts, extension lifts, etc.

### **Atlantis Corporation Pty Ltd**

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#### 1.06 Project Conditions

- A. Review installation procedures and coordinate RainTank installation with other work affected, such as grading, excavation, utilities, construction access and erosion control to prevent all non-installation related construction traffic over the completed Matrix D-RainTank Module installation, especially with loads greater than design loads.
- B. Cold weather:
  - 1. Do not use frozen materials or materials mixed or coated with ice or frost.
  - 2. Do not build on frozen ground or wet, saturated or muddy subgrade.
  - 3. Care must be taken when handling Atlantis Matrix D-RainTank Modules® when air temperature is at 40 degrees or below as plastic becomes brittle.
- C. Protect partially completed RainTank installation against damage from other construction traffic when work is in progress and following completion of backfill by establishing a perimeter with highly visible construction tape, fencing, or other means until construction is complete.
- D. Protect adjacent work from damage during RainTank installation.

#### PART 2 - PRODUCTS

##### 2.01 Availability

- A. Manufacturer: Atlantis Corporation Pty Ltd, Unit 3, 19-21 Gibbes Street, Chatswood, NSW -2067 Australia. (T) +61 02-9419 6000. (Fax) +61 02-9419 6710  
Contact e-mail: [oscar@atlantiscorp.com.au](mailto:oscar@atlantiscorp.com.au)
- B. Distributor: ACF Environmental, 2831 Cardwell Road, Richmond, VA 23234; 800-448-3636; Fax 804-743-7779; e-mail [sales@acfenvironmental.com](mailto:sales@acfenvironmental.com); Website [www.acfenvironmental.com](http://www.acfenvironmental.com)

##### 2.02 Materials

- A. (Base of Excavation) Shall be smooth, level and free of lumps or debris. Compact to at least 95% or as required by Engineer. Structural fill material and/or geogrid may be used to amend the structural capacity of the soil. A thin layer (3") of material (See Section D) is recommended to establish a level working platform.
- B. Geotextile: Use SI 801 or equivalent nonwoven geotextile with a weight of at least 8 oz per square yard, appropriate for the soil type and depth conditions, placed on the floor of the excavation, the sides of the module, and top of the module.
- C. Atlantis Matrix D-RainTank Module®: Injection moulded plastic units 408mm x 685 mm x 20mm (16.06" x 26.97" x 0.78") and 408mm x 430mm x 20mm (16.06" x 16.92" x 0.78"). Plates can be pre-assembled and shipped to the site or assembled on site to make the modules. They can also be assembled into multiple stacked modules in vertical cell structures of variable height (17.2", 34.65" 51.57", 68.5", or 85.43" as required), volume=5% solid. Note that when placing cells into the excavated area, the tank should be installed as per detail for maximum strength.
- D. Side Backfill: Structural fill, sand or other free-draining materials compactable to 95%, free from lumps and debris or any other sharp materials to backfill along the sides of the cellular structure. Must be compacted with powered mechanical compactor in lifts that do not exceed 12" to provide a settlement-free surface over the top and sides of the structure.
- E. Top Backfill: Use Side Backfill material for first 12" above the RainTank. Top backfill should be between 12" (300mm) minimum and 36" (500mm) maximum depth compacted in 6" lifts. To support H20 loads, top cover should be 18" minimum depth (24" recommended), reinforced with a geogrid 12" above the RainTank. Above the geogrid use 3/4" or smaller sandy/gravel road base

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material with fines less than 3%. (A top backfill cover of up to 9' is possible by using a second layer of geogrid after the next 4' of cover.) If backfill mixture must be custom mixed, use a ratio of 2 parts clean 3/4" drainage rock to 1 part clean sharp sand.

- F. Geogrid: Use Tensar BX-1200 or equivalent to reinforce backfill above RainTanks to support H2O loads (otherwise, not required). Geogrid should extend 3 feet beyond the excavation footprint.
- G. Utility Marker: Use metallic tape at corners of install to mark the area for future utility detection.

### PART 3 - EXECUTION

#### 3.01 Inspection

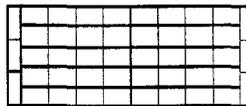
- A. Examine prepared excavation for smoothness, compaction and level. Do not start installation of Atlantis Matrix® D-RainTank until unsatisfactory conditions are corrected. Check for presence of high water table, which must be kept at levels below the bottom of the RainTank structure at all times.
- B. Installation constitutes acceptance of existing conditions and responsibility for satisfactory performance. If existing conditions are found unsatisfactory, contact Project Manager for resolution.

#### 3.02 Preparation

- A. Using Side Backfill Material (Section 2.02 D) level the base of the excavated area as per engineering detail to establish a working platform for the RainTanks.
- B. It is helpful to identify the outline of the structure on the floor of the excavation, using spray paint or chalk line, to ensure squareness during module placement.

#### 3.03 Installation of Atlantis Matrix D-RainTank Module®:

- A. If a liner is being used in the system to harvest stormwater or prevent groundwater intrusion, install per manufacturers recommendations and per engineering detail.
- B. Lay geotextile on the base of the excavation and sidewalls with extra material on side to wrap the tank modules from the top. If engineering drawings do not require geotextile on the base of the excavation, place fabric a minimum of 20" (500mm) inside the outer perimeter of the RainTank footprint.
- C. Install Atlantis Matrix D-RainTank Modules® by placing units side-by-side. Whenever possible, the large side plate of the tank should be placed on the perimeter of the system. This will typically require that the two ends of the tank area will have a row of tanks placed perpendicular to all other tanks.



- D. Wrap the Tank modules in geotextile fabric from the sides and the top to prevent soil entry into the RainTank modules. Overlap geotextile 12" or as recommended by manufacturer. Take great care to avoid damage to (optional) liner during placement.
- E. Identify locations of inlet, outlet, inspection ports, and any other penetrations of the geotextile and (optional) liner, securing pipe into boots with stainless steel pipe clamps. Support pipe in trenches during backfill operations to prevent

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Email: [oscar@atlantiscorp.com.au](mailto:oscar@atlantiscorp.com.au) Web Site: [www.atlantiscorp.com.au](http://www.atlantiscorp.com.au)

- damage to geotextile, (optional) liner or pipe.
- F. Start backfilling with recommended backfill, compacting in 12" maximum lifts. Place backfill CAREFULLY to avoid shoving or damaging tanks. Use a powered mechanical compactor to compact backfill on structure sides with care to avoid damage to geotextile or (optional) liner.
  - G. With modules greater than 1.2 meters (4 feet) deep, place piles of cover material on top of the enclosed system's outer edge to provide vertical load on perimeter modules. This will ensure compression of the top of the system and aid in resistance to side pressures from backfill operations. Backfill above system should be compacted in 6" lifts. When backfill reaches an elevation 12" above the RainTank units, place a layer of geogrid directly over the top of the backfill (required only when there will be traffic loads (H2O loads) above the tanks), extending 3' beyond the excavation walls.
  - H. Place sufficient sandy gravel backfill (Section 2.02 E) material over geogrid to ensure support of design loads. Place cover backfill in 6" lifts and compact with vibrating plates or walk-behind rollers (do not use drivable rolling compactors) to a minimum of 95%, with a minimum depth of 6" (12" is recommended) and a maximum depth of 36" or as specified on engineering drawings. Take care to PLACE backfill on top of structure to avoid damage to structure, geotextile or (optional) liner, using low pressure tire or track vehicles.
  - I. **Ensure that all unrelated construction traffic be kept away from the limits of excavation until the project is complete and final surface materials are in place.**
  - J. Place surfacing materials, such as groundcovers (no shrubs or trees), or paving materials over the structure with care to avoid displacement of cover fill and damage to surrounding areas.

#### 3.04 Cleaning

- A. Perform cleaning during the installation of work and upon completion of the work. Remove from site all excess materials, debris, and equipment. Repair any damage to adjacent materials and surfaces resulting from installation of this work.

END OF SECTION

### **Atlantis Corporation Pty Ltd**

Page 4 of 4

Unit 3/19-21 Gibbes Street, Chatswood NSW, 2067 Australia

Phone + 61 2 9419 6000 Fax +61 2 9419 6710

Email: [oscar@atlantiscorp.com.au](mailto:oscar@atlantiscorp.com.au) Web Site: [www.atlantiscorp.com.au](http://www.atlantiscorp.com.au)

# Specifications

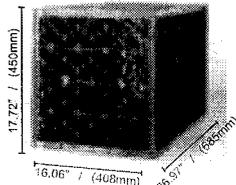
## Atlantis Dimensions

Module (Units)	Width (mm)	Width (inches)	Length (mm)	Length (inches)	Height (mm)	Height (inches)
Single (1)	408	16.06	685	26.97	450	17.72
Double (2)	408	16.06	685	26.97	880	34.65
Triple (3)	408	16.06	685	26.97	1310	51.57
Quad (4)	408	16.06	685	26.97	1740	68.50
Pent (5)	408	16.06	685	26.97	2170	85.43

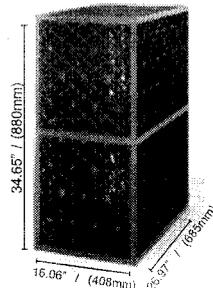
  

Module (Units)	Tank Volume (cf)	Tank Volume (gal)	Water Storage Volume (cf)	Water Storage Volume (gal)	# of Large Plates	# of Small Plates
Single (1)	4.44	33.22	4.22	31.56	4	4
Double (2)	8.69	64.97	8.25	61.72	7	8
Triple (3)	12.93	98.72	12.28	91.88	10	12
Quad (4)	17.17	128.47	16.31	122.03	13	16
Pent (5)	21.42	160.21	20.35	152.19	16	20

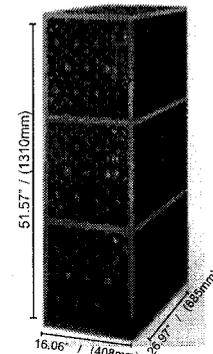
Conversions 1 cf = 7.4805195 gallon  
 1 liter = 0.2641721 gallon  
 1 mm = 0.0393701 inches  
 1 cf = 0.0283168 cm



Single Module



Double Module

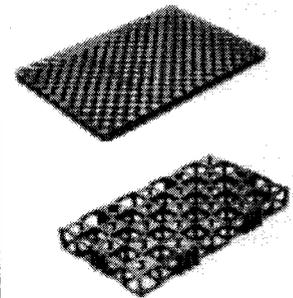


Triple Module

## Turf / Gravel Cell Specification

	1.18" Cell	2.05" Cell
Size	(H) 1.18" / 30mm (W) 15.94" / 405mm (L) 23.9" / 607mm	(H) 2.05" / 52mm (W) 10.24" / 260mm (L) 18.9" / 480mm
Ultimate Load	*116.7 psi	*166.0 psi
Flow Rate	21.13 gals / min (80 l / min)	37.51 gals / min (142 l / min)

\*Recommended maximum loading



## Strip Filter Pipe™ Specification

Size	(H) 3.94" / 100mm (W) 3.15" / 80mm (L) 10.24' / 3125mm
Ultimate Load	*24.8 psi
Flow Rate	21.13 gals / min (80 l / min)

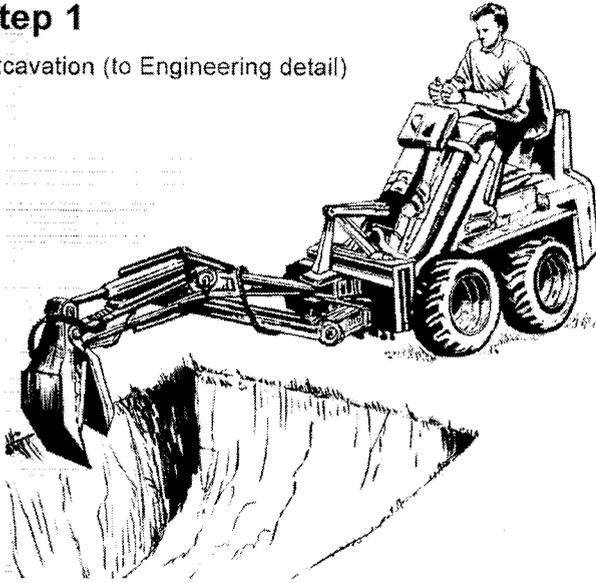
\*Recommended maximum loading



Order Line 1-800-448-3636 • www.aefenvironmental.com

**Step 1**

Excavation (to Engineering detail)



**Step 2**

Utilise sand to level base of excavated area



**Step 3**

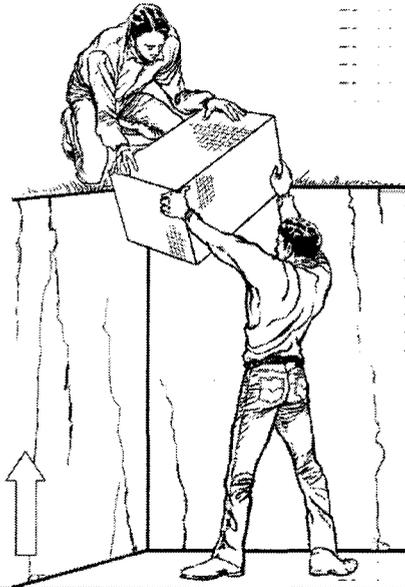
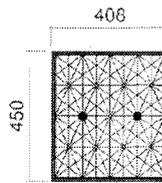
Lay geotextile along base and walls of excavated area.



**Step 4**

Install Atlantis **D-Raintank™** modules in the excavation.

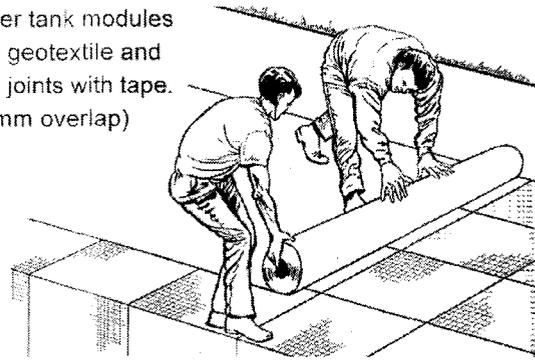
**Note:**  
Correct orientation of tank modules.



**Step 5**

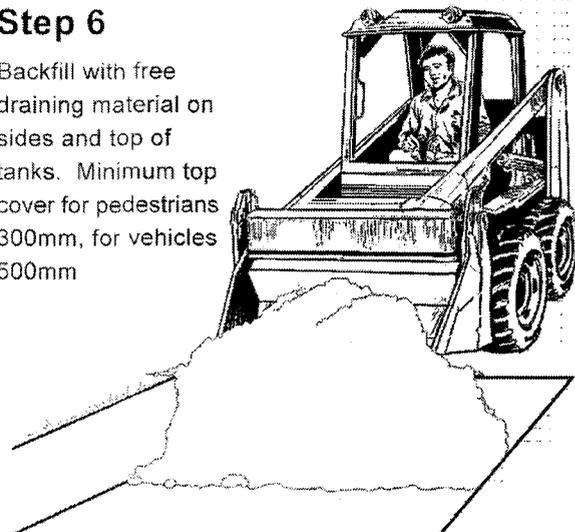
Tank should be completely sealed

Cover tank modules with geotextile and seal joints with tape. (30mm overlap)



**Step 6**

Backfill with free draining material on sides and top of tanks. Minimum top cover for pedestrians 300mm, for vehicles 500mm



Disclaimer: The details given in this brochure are intended only as a general guide. Rebirth Pty Ltd, Atlantis Water Management, Atlantis Corporation Pty Ltd assumes no responsibility for improper reliance upon, or misuse of the data herein. Product design and specification are subject to change without further notice. All material contained within this brochure is Copyright, and belongs to Rebirth Pty Ltd, Atlantis Water Management, Atlantis Corporation Pty Ltd. No part of this brochure may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of Rebirth Pty Ltd, Atlantis Water Management, Atlantis Corporation. Copyright © by Rebirth Pty Ltd, Atlantis Water Management, Atlantis Corporation Pty Ltd.

**Atlantis Water Management**

Rebirth Pty Ltd trading as Atlantis Water Management  
Suite 402/781 Pacific Highway Chatswood NSW, 2067 Australia  
phone • (02) 9419 6000 fax • (02) 9419 6710  
email • info@atlantiscorp.com.au web • www.atlantiscorp.com.au

**ENVIRONMENTAL DIVISION PROJECT REVIEW and COMMENTS - TRACKING SLIP**

Plan Type:  C (Concept Plan)  M (Master Plan)  Other, Specify: \_\_\_\_\_  
 SP (Site Plan)  SUP (Special Use Permit)  
 S (Subdivision)  Z (Rezoning)

EXPEDITED REVIEW STATUS (TOP PRIORITY)  
 DRC Case REVIEW STATUS

**Project Information:**

Case No.: SP - 132 - 04  
 Project Name: ST. BEDES CATHOLIC CHURCH RECTORY BUILDING  
 Planner: CHRIS JOHNSON Extension: 6689  
 Original Plan (1<sup>st</sup> Submission, 1<sup>st</sup> Plan Review)  
 Revised Plan 1 (2<sup>nd</sup> Submission, 2<sup>nd</sup> Plan Review)  \*Slip-Sheet to Env. Div.  
 Revised Plan 2 (3<sup>rd</sup> Submission, 3<sup>rd</sup> Plan Review)  Amendment to Prev. Approved Plan  
 Revised Plan 3 (4<sup>th</sup> Submission, 4<sup>th</sup> Plan Review)

**Date Tracking:**

Transmittal Date: \_\_\_\_\_ Date: MAR 21 '05 (from Planning)  
 Received Environmental Division: MAR 22 '05 (Date Stamped Env Div)  
 Due / Return Date (Planning): APR 04 '05 (Planning Return Date)  
 21 days from Transmittal Date: APR 11 '05 (Env Div Goal Date)  
 Erosion & Sediment Control Plan Review Complete: APR 01 '05 (E&SC Review Complete)  
 Stormwater Management/Drainage Review Complete: APR 06 '05 (SWM Review Complete)  
 Environmental Division Completion Date: APR 06 '05 (All Personnel)

Forwarded to Planning  
 Email  Fax to Professional  
Chris Johnson  
NA

**Environmental Review Computer File Setup:**

Old Files (Previous Reviews, Old Files) File: \_\_\_\_\_  
 Original Plan (1<sup>st</sup> Submission, 1<sup>st</sup> Review) File: \_\_\_\_\_ .0  
 Revised Plan 1 (2<sup>nd</sup> Submission, 2<sup>nd</sup> Review) File: \_\_\_\_\_ .1  
 Revised Plan 2 (3<sup>rd</sup> Submission, 3rd Review) File: NA .2  
 Revised Plan 3 (4<sup>th</sup> Submission, 4<sup>th</sup> Review) File: \_\_\_\_\_ .3

JJB  
 Erosion & Sediment Control Plan Review (William A. Cain / Mike D. Woolson)  
 Date Received: MAR 22 '05 (Received for E&SC Plan Review)  
 Review Complete: APR 01 '05 (E&SC Plan Review Complete)

Stormwater Management / Drainage Plan Review (Scott J. Thomas)  
 Date Received: APR 02 '05 (Received for SWM Plan Review)  
 Review Complete: APR 06 '05 (SWM Plan Review Complete)

Comments: All previous comments addressed.  
∴ OK FOR LAND-DISTURBING & FINAL SITE PLAN APPROVAL!!

And  
04-06-05

**Land Disturbance & Final Site Plan Review Approved**  
 No EIS and No additional comments.  
Joe

File Under St. Bede's Church

ENVIRONMENTAL DIVISION PROJECT REVIEW and COMMENTS - TRACKING SLIP

Plan Type:  C (Concept Plan)  M (Master Plan)  Other, Specify: \_\_\_\_\_
 SP (Site Plan)  SUP (Special Use Permit)
 S (Subdivision)  Z (Rezoning)

EXPEDITED REVIEW STATUS (TOP PRIORITY)
 DRC Case REVIEW STATUS

Project Information:

Case No.: SP-132-04
Project Name: St. Bede's Catholic Church Rectory Building
Planner: Chris Johnson Extension: 6639
Original Plan (1st Submission, 1st Plan Review)
Revised Plan 1 (2nd Submission, 2nd Plan Review)
Revised Plan 2 (3rd Submission, 3rd Plan Review)
Revised Plan 3 (4th Submission, 4th Plan Review)
Slip-Sheet to Env. Div.
Amendment to Prev. Approved Plan C-111-04

Date Tracking:

Transmittal Date: NOV 15 04 (from Planning)
Received Environmental Division: NOV 18 04 (Date Stamped Env Div)
Du / Return Date (Planning): NOV 30 04 (Planning Return Date)
21 days from Transmittal Date: DEC 9 04 (Env Div Goal Date)
Erosion & Sediment Control Plan Review Complete: DEC 6 04 (E&SC Review Complete)
Stormwater Management/Drainage Review Complete: JAN 10 04 (SWM Review Complete)
Environmental Division Completion Date: JAN 10 04 (All Personnel)

Forwarded to Planning
 Email  Fax to Professional

Chris Johnson
A. RANSON LANDMACK

Environmental Review Computer File Setup:

Old Files (Previous Reviews, Old files) File:
Original Plan (1st Submission, 1st Review) File: SP-132-04.00
Revised Plan 1 (2nd Submission, 2nd Review) File: .1
Revised Plan 2 (3rd Submission, 3rd Review) File: .2
Revised Plan 3 (4th Submission, 4th Review) File: .3

Erosion & Sediment Control Plan Review (William A. Cain / Mike D. Woolson)

Date Received: NOV 18 04 (Received for E&SC Plan Review)
Review Complete: DEC 6 04 (E&SC Plan Review Complete)

Stormwater Management / Drainage Plan Review (Scott J. Thomas)

Date Received: DEC 6 04 (Received for SWM Plan Review)
Review Complete: JAN 10 04 (SWM Plan Review Complete)

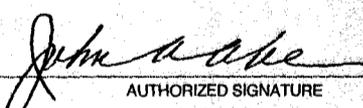
Comments: E&SC / SWM issues
1-10-04

MEMORANDUM

DATE: October 28, 2008  
TO: Ann Davis, Treasurer  
FROM: Melanie Davis, Senior Engineering Assistant *myd*  
SUBJECT: Escrow Account

Forwarded for deposit to the Escrow Account is a check issued by St Bede Catholic Church in the amount of \$8,000. The surety is posted to guarantee the Public Improvements for ST. BEDE CATHOLIC CHURCH - ROAD WIDENING IMPROVEMENTS SP-080-08 FOR SUP-015-00.

Thank you for your assistance.

<b>ST. BEDE CATHOLIC CHURCH</b> BUILDING FUND 10 HARRISON AVENUE WILLIAMSBURG, VA 23185		<b>SUNTRUST BANK</b> 68-2/510	<b>2157</b>
PAY <b>Eight Thousand and 00/100 Dollars</b>		DATE <b>Oct 24, 2008</b>	AMOUNT <b>\$8,000.00</b>
TO THE ORDER OF	<b>Treasurer James City County P O Box 8784 Williamsburg, VA 23187-8784</b>	 AUTHORIZED SIGNATURE	
⑈002157⑈ ⑆051000020⑆ 201639548⑈			

ST. BEDE CATHOLIC CHURCH BUILDING FUND

2157

Treasurer James City County

Check Number: 2157  
Check Date: 10/24/08  
Check Amount: \$8,000.00

Description	Amount Paid
Bond for SUP-0015-2000 Ironbound Road Side Walk	8,000.00

**JAMES CITY COUNTY - ENVIRONMENTAL DIVISION**

Office - 757-253-6670

DATE: 10/27/08

RECEIPT# 1407

RECEIVED FROM: St Bede Catholic

PROJECT NAME: SUP-0015-2000 Ironburg Rd Side Walk

**001-303-0375** Erosion & Sedimentation Control Plan Review & Inspection Fee  
Non-Residential Site Plan \$600 per acre for first 15 acres \$ \_\_\_\_\_  
plus \$400 for each additional acre over 15 acres \$ \_\_\_\_\_

Residential Site Plan \$840 per acre for first 15 acres \$ \_\_\_\_\_  
plus \$560 for each additional acre over 15 acres \$ \_\_\_\_\_

Residential Subdivisions:  
\$70.00 per lot \$ \_\_\_\_\_  
Bldg Permit for SFD:  
\$100.00 per lot \$ \_\_\_\_\_

**001-303-0340** Wetlands Board/Chesapeake Bay Board  
\$100 per case to Board \$ \_\_\_\_\_  
\$25 all cases

**001-308-0780** Administrative \$ \_\_\_\_\_

001-309-0920 Streetlight Fee (\$7.76 ea x 12 mo)  
**002-192-6815** (Fee Reimbursement to County) \$ \_\_\_\_\_

**001-309-0915** Xerox Copies:  
8.5 x 11 \$ .15 each \$ \_\_\_\_\_  
8.5 x 14 \$ .20 each \$ \_\_\_\_\_  
11 x 17 \$ .30 each \$ \_\_\_\_\_  
Labor \$8.00 hr \$ \_\_\_\_\_  
Sales Tax (\$.05 per \$1.00) \$ \_\_\_\_\_  
  
BMP Manual - Book = \$25.00 \$ \_\_\_\_\_  
SalesTax = \$1.25 \$ \_\_\_\_\_  
  
CD = \$10.00 \$ \_\_\_\_\_  
SalesTax = \$0.50 \$ \_\_\_\_\_

**013-309-0100** General Fund  
Civil Penalties \$ \_\_\_\_\_

**ESCROW ACCOUNT**  
Surety Public Improvements \$ 8,000.00

**TOTAL RECEIVED:** \$ 8,000.00

JCC ENVIRONMENTAL ROUTING S.

TO: Adam      DATE: 10/27/08

FROM: TC

For Your Comments

For Your Approval

Note & Return

Note & File

Reply & Send Me a Copy

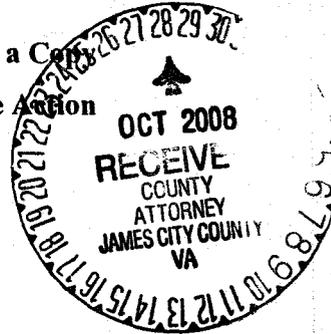
Take Appropriate Action

Call Me

See Me

FYI

Signature



COMMENTS:

OK Adam 10/28/08

OK Aunt 11/03/08

**JAMES CITY COUNTY - ENVIRONMENTAL DIVISION**  
Office - 757-253-6670

DATE: 10/27/08

RECEIPT# 1407

RECEIVED FROM: St Bede Catholic

PROJECT NAME: Sup-0015-2000 Ironbound Rd Side Work

**001-303-0375** Erosion & Sedimentation Control Plan Review & Inspection Fee  
Non-Residential Site Plan \$600 per acre for first 15 acres \$ \_\_\_\_\_  
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Residential Site Plan \$840 per acre for first 15 acres \$ \_\_\_\_\_  
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\$70.00 per lot \$ \_\_\_\_\_  
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\$100 per case to Board \$ \_\_\_\_\_  
\$25 all cases

**001-308-0780** Administrative \$ \_\_\_\_\_

**001-309-0920** Streetlight Fee (\$7.76 ea x 12 mo) \$ \_\_\_\_\_  
**002-192-6815** (Fee Reimbursement to County) \$ \_\_\_\_\_

**001-309-0915** Xerox Copies:  
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CD = \$10.00 \$ \_\_\_\_\_  
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**013-309-0100** General Fund  
Civil Penalties \$ \_\_\_\_\_

**ESCROW ACCOUNT**  
Surety Public Improvements \$ 8,000.00

**TOTAL RECEIVED:** \$ 8,000.00

ST. BEDE CATHOLIC CHURCH  
BUILDING FUND  
10 HARRISON AVENUE  
WILLIAMSBURG, VA 23185

SUNTRUST BANK  
68-2/510

2157

DATE  
Oct 24, 2008

AMOUNT  
\$8,000.00

PAY Eight Thousand and 00/100 Dollars

TO THE ORDER OF Treasurer James City County  
P O Box 8784  
Williamsburg, VA 23187-8784



AUTHORIZED SIGNATURE

⑈002157⑈ ⑆051000020⑆ 201639548⑈

ST. BEDE CATHOLIC CHURCH BUILDING FUND

2157

Treasurer James City County

Check Number: 2157  
Check Date: 10/24/08  
Check Amount: \$8,000.00

Description	Amount Paid
Bond for SUP-0015-2000 Ironbound Road Side Walk	8,000.00

LMP40 M/P CHECK

51N320 (7A01 50024)

JAMES CITY COUNTY ENVIRONMENTAL DIVISION

Surety Tracking Sheet

Date: 10/24/08

Due Date: \_\_\_\_\_

Project Name: St. Beld's Catholic Church Sidewalks

Requested By: Linwood Burton Busch Const. Phone #: \_\_\_\_\_

Date Notified: \_\_\_\_\_

Case Number: SUP-0015-2000

Siltation Surety: Original \$ \_\_\_\_\_ Current \$ \_\_\_\_\_ Needed \$ 8,000.00

\*maximum reduction of 80% of original bond amount unless project is to be released

- Calculate Evaluate/Reduce Release

Work to be completed for SILTATION Surety

- Stabilization of all disturbed areas
Removal of temporary erosion control measures
Submission of as-built drawings for stormwater management facility
Submission of construction certification for the stormwater management facility
Completion of field-related BMP items
Other -
Comments-

PE Agreement

Subdivision Surety: Original \$ \_\_\_\_\_ Current \$ \_\_\_\_\_ Needed \$ \_\_\_\_\_

\*maximum reduction of 80% of original bond amount unless project is to be released

- Calculate Evaluate/Reduce Release

Work to be completed for SUBDIVISION Surety

- Paving of streets
Dedication of streets to Virginia Dept of Transportation
Completion of water and sewer systems
Completion of water and sewer punchlist items
Submission of as-built drawings for water and sewer systems
Installation of street lights and street signs
Other -
Comments-

INDICATE YOUR APPROVAL BY INITIALING THE APPROPRIATE BLANK:

MEMORANDUM

DATE: November 19, 2009  
 TO: Ann Davis, Treasurer  
 FROM: Scott J Thomas, Environmental Director  
 SUBJECT: Escrow Account



The purpose of this memo is to authorize release of the remaining \$2,500 surety that was received from St. Bede Catholic Church. The surety was posted to guarantee the installation of erosion control measures for the project ST. BEDE CATHOLIC CHURCH - ROAD WIDENING IMPROVEMENTS – SP-080-08. Please make a check payable to **St. Bede Catholic Church** in the amount of **\$ 2,500** and return it to my attention.

Thank you for your assistance.

THIS DOCUMENT CONTAINS A COLORED BACKGROUND, FLUORESCENT FIBERS, AND A WATERMARK.



James City County  
 Miscellaneous Escrow  
 PO Box 8701  
 Williamsburg, VA 23187-8701  
 757-253-6636



Citizens and Farmers Bank  
 Established 1927  
 Norge, Virginia 23127

Check No. 1698  
 Date: 08-Jan-10  
 68-490/514

Pay Two Thousand Five Hundred Dollars and No Cents

To The Order Of **ST BEDE CATHOLIC CHURCH**

CHECK AMOUNT  
 \$\*\*\*\*\*2500.00

*M. Ann Davis*  
 Bureau Street

VOID after 180 days

⑈000001698⑈ ⑆051404901⑆ 5000734301⑈

Invoice	PO	Date	Amt Paid
REFUND-A	MISC. ESCROW	15-Dec-09	\$2,500.00
Check Total:			\$2,500.00

JAMES CITY COUNTY ENVIRONMENTAL DIVISION

Surety Tracking Sheet

Date: 11/10/2009

Due Date: \_\_\_\_\_

Project Name: Saint Bedes Catholic Church Road Widening Improvements

Requested By: Linwood Barton Phone #: \_\_\_\_\_

Date Notified: \_\_\_\_\_ Case Number: SP-080-00

Siltation Surety: Original \$ \_\_\_\_\_ Current \$ 2,500 Needed \$ 0

- Calculate Evaluate/Reduce Release

Work to be completed for SILTATION Surety

- Stabilization of all disturbed areas
Removal of temporary erosion control measures
Submission of as-built drawings for stormwater management facility
Submission of construction certification for the stormwater management facility
Completion of field-related BMP items
Other - No BMP for project - All E and S measures removed - Site stabilized.
Comments - This phase of project complete. ok to release siltation surety still holding \$8,000.00 for sidewalks

Subdivision Surety: Original \$ \_\_\_\_\_ Current \$ \_\_\_\_\_ Needed \$ \_\_\_\_\_

\*maximum reduction of 80% of original bond amount unless project is to be released

- Calculate Evaluate/Reduce Release

Work to be completed for SUBDIVISION Surety

- Paving of streets
Dedication of streets to Virginia Dept of Transportation VDOT Amount Needed \$
Completion of water and sewer systems JCSA Amount Needed \$
Completion of water and sewer punchlist items
Submission of as-built drawings for water and sewer systems
Installation of street lights and street signs
Other -
Comments -

INDICATE YOUR APPROVAL BY INITIALING THE APPROPRIATE BLANK

11/10/09 INSP SURV CHF ENG WTSHD PLNR ENV DIR 11-18-09 RELEASE PROJECT

Needs Folder LDP Fee  
Pd AS of  
6/26/08  
Do not issue  
permit until \$18,000.00  
for sidewalks are  
paid in addition to  
the bond for this



JAMES CITY COUNTY ENVIRONMENTAL DIVISION

Surety Tracking Sheet

Date: 10/15/2008

Due Date: \_\_\_\_\_

Project Name: St. Bel's Catholic Church Road Widening

Requested By: Linwood Burton Phone #: \_\_\_\_\_

Date Notified: \_\_\_\_\_ Case Number: SP-11070-008

Siltation Surety: Original \$ \_\_\_\_\_ Current \$ \_\_\_\_\_ Needed \$ 8,500.00

\*maximum reduction of 80% of original bond amount unless project is to be released

[X] Calculate [ ] Evaluate/Reduce [ ] Release

Stormwater Fee \$36.00

Work to be completed for SILTATION Surety

- [ ] Stabilization of all disturbed areas
[ ] Removal of temporary erosion control measures
[ ] Submission of as-built drawings for stormwater management facility
[ ] Submission of construction certification for the stormwater management facility
[ ] Completion of field-related BMP items
[ ] Other -
[ ] Comments-

\$336.00 LDP

Subdivision Surety: Original \$ \_\_\_\_\_ Current \$ \_\_\_\_\_ Needed \$ \_\_\_\_\_

\*maximum reduction of 80% of original bond amount unless project is to be released

[ ] Calculate [ ] Evaluate/Reduce [ ] Release

Work to be completed for SUBDIVISION Surety

- [ ] Paving of streets
[ ] Dedication of streets to Virginia Dept of Transportation Amount Needed \$ \_\_\_\_\_
[ ] Completion of water and sewer systems Amount Needed \$ \_\_\_\_\_
[ ] Completion of water and sewer punchlist items
[ ] Submission of as-built drawings for water and sewer systems
[ ] Installation of street lights and street signs
[ ] Other -
[ ] Comments-

INDICATE YOUR APPROVAL BY INITIALING THE APPROPRIATE BLANK:

INSP SUPV CHF ENG DIR RELEASE PROJECT

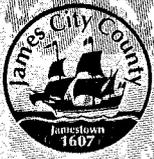
MEMORANDUM

DATE: September 21, 2009  
 TO: Ann Davis, Treasurer  
 FROM: Scott J Thomas, Environmental Director *SJT/myd*  
 SUBJECT: Escrow Account

The purpose of this memo is to authorize a reduction in the surety that was received from St. Bede Catholic Church from \$8,500 to \$2,500. The surety was posted to guarantee the installation of erosion control measures for the project ST. BEDE CATHOLIC CHURCH - ROAD WIDENING IMPROVEMENTS - SP-080-08. Please make a check payable to **St. Bede Catholic Church** in the amount of **\$ 6,000** and return it to my attention.

Thank you for your assistance.

THIS DOCUMENT CONTAINS A COLORED BACKGROUND, FLUORESCENT FIBERS, AND A WATERMARK.



James City County  
 Miscellaneous Escrow  
 PO Box 8701  
 Williamsburg, VA 23187-8701  
 757-253-6636



Citizens and Farmers Bank  
 Established 1927  
 Norge, Virginia 23127

Check No. 1684  
 Date: 09-Oct-09  
 68-490/514

Pay Six Thousand Dollars and No Cents

To The  
 Order Of

ST BEDE CATHOLIC CHURCH

CHECK AMOUNT  
 \$\*\*\*\*\*6000.00

*M. Ann Davis*  
*Bureau Street*

Void after 180 days

⑈000001684⑈ ⑆051404901⑆ 5000734301⑈

Invoice	PO	Date	Amt Paid
REFUND	ESCROW	29-Sep-09	\$6,000.00
Check Total:			\$6,000.00

JAMES CITY COUNTY ENVIRONMENTAL DIVISION

~~SP-80-08~~  
Check

Surety Tracking Sheet

Date: 9/16/09

Due Date: \_\_\_\_\_

Project Name: St. Bede Catholic Church - Road Widening Improvements

Requested By: \_\_\_\_\_ Phone #: \_\_\_\_\_

Date Notified: \_\_\_\_\_ Case Number: SP-80-08

Siltation Surety: Original \$ \_\_\_\_\_ Current \$ 8,500 Needed \$ 2,500.00

Calculate  Evaluate/Reduce  Release

Work to be completed for SILTATION Surety

- Stabilization of all disturbed areas
- Removal of temporary erosion control measures
- Submission of as-built drawings for stormwater management facility
- Submission of construction certification for the stormwater management facility
- Completion of field-related BMP items
- Other - More stabilization needed on slopes of swale  
Clean debris from channel leading into BMP
- Comments - Stabilize slopes or place more stone on side slopes

Subdivision Surety: Original \$ \_\_\_\_\_ Current \$ 8,000 Needed \$ 8,000.00

\*maximum reduction of 80% of original bond amount unless project is to be released

Calculate  Evaluate/Reduce  Release

Check

Work to be completed for SUBDIVISION Surety

- Paving of streets
- Dedication of streets to Virginia Dept of Transportation VDOT  
Amount Needed \$ \_\_\_\_\_
- Completion of water and sewer systems JCSA  
Amount Needed \$ \_\_\_\_\_
- Completion of water and sewer punchlist items
- Submission of as-built drawings for water and sewer systems
- Installation of street lights and street signs
- Other -
- Comments - Sidewalks Not Installed

INDICATE YOUR APPROVAL BY INITIALING THE APPROPRIATE BLANK:

9/16/09  
 INSP \_\_\_\_\_ SUPV \_\_\_\_\_ CHF \_\_\_\_\_ WTSHD \_\_\_\_\_ ENV \_\_\_\_\_  
 ENG \_\_\_\_\_ PLNR \_\_\_\_\_ DIR \_\_\_\_\_

Revised 12/11/08

9/17/09

RELEASE PROJECT \_\_\_\_\_



109

108

118

110

112

114

111

113

115

116

Whistle Walk

119

121

114

123

116

Trees Cut

120

X X X

Trees Marked to cut (?)

112

124

122

118

107

155

105

Gladys Dr

103

104

154

Cobley Rd

101

**ENVIRONMENTAL DIVISION REVIEW COMMENTS**  
**SAINT BEDES CATHOLIC CHURCH RECTORY & PARKING LOT AMENDMENT**  
**COUNTY PLAN NO. C - 111 - 04**

*October 1, 2004*

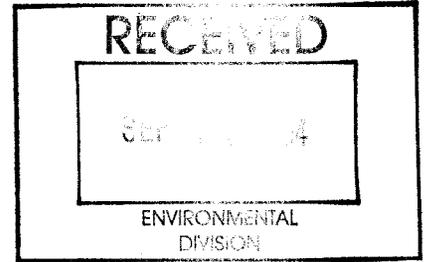
**General Comments:**

1. This case was discussed in detail at the Concept Plan Roundtable meeting held on September 27<sup>th</sup> 2004. All comments offered at that meeting apply to the proposed development.
2. The concept plan should show a rough approximation for site area and impervious cover associated with the Rectory & Parking Area amendment. This information should be shown on overall plan Sheet C-2.
3. Conservation Easement. Sheet C-2 shows 0.32 acres of impact to existing conservation easement. As this area was previously given natural open space point credit for stormwater purposes (using the 0.10 points per 1 percent site area method), one of the following options must be pursued for this plan amendment:
  - Avoid impacts to the conservation easement;
  - Provide an equal compensatory natural open space area elsewhere on the site of equal or better quality. The conservation easement plat for the site will need to be amended to show the location of the compensatory area. Contact the County Engineer for proper procedure associated with this option;
  - In addition to that required to meet the traditional 10-point requirements for the site, provide additional onsite structural BMPs to compensate for natural open space points lost for proposed impact to the easement. The conservation easement plat would also need to be amended. *(Note: Reduction of NOS area from 20.45 acres to 20.13 acres equates to 0.075 points using the 0.10 points per 1 percent of site area method. To obtain 0.075 structural BMP points using the previously approved BMP Worksheet, this would be result in the need to provide another 10-point BMP which would serve about 0.25 acres on the new site, in addition to that already needed to meet traditional quality/quantity control. Given space and other restraints, this scenario may difficult to achieve.)*
4. Master Plan. A master plan Sheet C-1 was attached to the concept plan application. This master plan shows an update (Revision 3) to the "Master Plan for Special Use Permit". A note on the plan indicates that Revision 3 is for an update to the plan to reflect existing conditions including the parking lot arrangement, the prayer garden and the proposed rectory. It is unclear how the master plan was amended without Environmental review or if the attached plan as forwarded thereof is for review. Although we had and currently have no concerns about amendment of the master plan for the prayer garden and the parking lot next to the rectory (which was on the previously approved master plan), the master plan amendment for the rectory itself would have raised issue for the potential for perennial stream and RPA issues associated with the wetland system next to the existing pond, west of the rectory site. *(Note: Although a site plan amendment may vest or grandfather the rectory from current RPA regulations, this would only happen if the feature was part of the approved master plan. In this case, the site plan amendment is showing a feature which was not part of the approved master plan. Therefore, the master plan needs revised by proper procedure through the Planning Division, not just as a supplementary attachment to this concept plan. Although the "amended" master plan shows a revision date of September 19<sup>th</sup>*

*2004 it is unclear if this is official. The reason why this is such an important issue is that perennial stream/RPA may be an issue that would have pertained to an amendment to the master plan.)*

5. Final Plan. The following comments are offered as guidance for preparation of the final plan of development for the project.
  - 5a) The conservation easement area which will be impacted at this location was used to comply with stormwater management requirements. If any other water quality option other than NOS "equal swapping" is used, the master plan Worksheet for BMP Point System will need to be updated to show that 10- BMP points are still achieved for the site
  - 5b) Provide an erosion and sediment control plan for proposed activities, including the forcemain. Installation of the forcemain should not impact delineated RPA on the south side of the St. Bede's site.
  - 5c) Clearly show limits of work and provide an Environmental Inventory. Previous file information indicates that the existing pond near the site was considered to be jurisdictional wetlands. If these wetlands are impacted a wetland permit may be necessary. RPA buffer may apply if the segment of natural stream contributory to the existing pond is a perennial feature.
  - 5d) All site grading must be shown on the plan.
  - 5e) Use of onsite infiltration/filtration practices is encouraged for stormwater management; otherwise, analyses of the existing farm pond (west of the site) may be required to show that the existing pond has capacity or can adequately handle increased runoff from the site.
  - 5f) As there are no natural receiving channel facilities at the proposed onsite storm drainage outfalls, the outfalls will need to be extended to the existing pond (outside wetland).

TRANSMITTAL



DATE: September 14, 2004

TO: JCSA  
Environmental

FROM: Christopher Johnson, Senior Planner

SUBJECT: C-111-04. St. Bede Catholic Church, Rectory Bldg. & Parking Amendment

ITEMS ATTACHED: Conceptual Site Development Plan  
Amended Master Plan  
Applicant Letter

INSTRUCTIONS: Please review and comment. This project will be reviewed at the  
September 27, 2004, Roundtable Meeting.

RECEIVED SEP 29 2004  
Due Sept 27TH

## Greg Johnson

---

**From:** Darryl Cook  
**Sent:** Friday, October 30, 2009 3:37 PM  
**To:** Greg Johnson  
**Subject:** St Bedes Road Widening

I went out and looked at the ditches this afternoon. While there is one place holding water near the check dam is where the two ditches come together, it's a pretty minor issue – they could correct it with hand work. So as far as I'm concerned, it's done and I don't need anything from them in the way of an as-built.

*Darryl E. Cook*

James City County - County Engineer  
287 McLaws Circle, Suite 1  
Williamsburg, VA 23185  
Phone: 757-259-1442  
Fax: 757-259-5833  
email: [decook@james-city.va.us](mailto:decook@james-city.va.us)

**JCC ENVIRONMENTAL ROUTING: P**

TO: Adam DATE: 10/27/08

FROM: TC

For Your Comments

For Your Approval

Note & Return

Note & File

Reply & Send Me a Copy

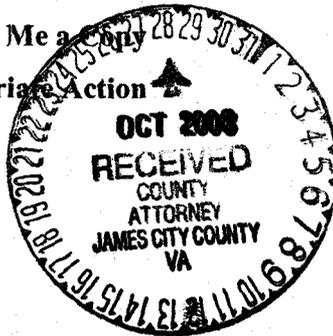
Take Appropriate Action

Call Me

See Me

FYI

Signature



COMMENTS:

OK Angela 10/29/08

OK Aunt 11/03/08

ST. BEDE CATHOLIC CHURCH  
BUILDING FUND  
10 HARRISON AVENUE  
WILLIAMSBURG, VA 23185

DATE  
Oct 24, 2008  
AMOUNT  
\$8,500.00

PAY Eight Thousand Five Hundred and 00/100 Dollars

TO THE ORDER OF  
Treasurer James City County  
P O Box 8784  
Williamsburg, VA 23187-8784

*John R. Ake*  
\_\_\_\_\_  
AUTHORIZED SIGNATURE MP

⑈002156⑈ ⑆051000020⑆ 201639548⑈

ST. BEDE CATHOLIC CHURCH BUILDING FUND

2156

Treasurer James City County

Check Number: 2156  
Check Date: 10/24/08  
Check Amount: \$8,500.00

Description	Amount Paid
Bond for SP-0080-2008 St Bede Road Widening	8,500.00

LMP40 MP CHECK

51N320 (7495) 060941

**JAMES CITY COUNTY - ENVIRONMENTAL DIVISION**  
Office - 757-253-6670

DATE: 10/27/08

RECEIPT# 1406

RECEIVED FROM: JOHN McCORMACK

PROJECT NAME: ST. BEDE CATHOLIC CHURCH ROAD WIDENING  
SP-080-08

**001-303-0375** Erosion & Sedimentation Control Plan Review & Inspection Fee  
Non-Residential Site Plan \$600 per acre for first 15 acres \$ \_\_\_\_\_  
plus \$400 for each additional acre over 15 acres \$ \_\_\_\_\_

Residential Site Plan \$840 per acre for first 15 acres \$ \_\_\_\_\_  
plus \$560 for each additional acre over 15 acres \$ \_\_\_\_\_

Residential Subdivisions:  
\$70.00 per lot \$ \_\_\_\_\_  
Bldg Permit for SFD:  
\$100.00 per lot \$ \_\_\_\_\_

**001-303-0340** Wetlands Board/Chesapeake Bay Board  
\$100 per case to Board \$ \_\_\_\_\_  
\$25 all cases

**001-308-0780** Administrative \$ \_\_\_\_\_

**001-309-0920** Streetlight Fee (\$7.76 ea x 12 mo) \$ \_\_\_\_\_

**002-192-6815** (Fee Reimbursement to County) \$ \_\_\_\_\_

**001-309-0915** Xerox Copies:  
8.5 x 11 \$ .15 each \$ \_\_\_\_\_  
8.5 x 14 \$ .20 each \$ \_\_\_\_\_  
11 x 17 \$ .30 each \$ \_\_\_\_\_  
Labor \$8.00 hr \$ \_\_\_\_\_  
Sales Tax (\$.05 per \$1.00) \$ \_\_\_\_\_  
  
BMP Manual - Book = \$25.00 \$ \_\_\_\_\_  
SalesTax = \$1.25 \$ \_\_\_\_\_  
  
CD = \$10.00 \$ \_\_\_\_\_  
SalesTax = \$0.50 \$ \_\_\_\_\_

**013-309-0100** General Fund  
Civil Penalties \$ 36.00

**001-303-3375** Stormwater fee \$ 8500.00  
ESCROW ACCOUNT  
Surety ck 2159 \$ ~~8000.00~~  
ck 2150

**TOTAL RECEIVED:** \$ 8536.00

ST. BEDE CATHOLIC CHURCH  
BUILDING FUND  
10 HARRISON AVENUE  
WILLIAMSBURG, VA 23185

SUNTRUST BANK  
68-2/510

2159

DATE  
Oct 24, 2008

AMOUNT  
\$36.00

PAY Thirty-Six and 00/100 Dollars

TO THE ORDER OF  
Treasurer James City County  
P O Box 8784  
Williamsburg, VA 23187-8784

  
AUTHORIZED SIGNATURE

⑈002159⑈ ⑆051000020⑆ 201639548⑈

ST. BEDE CATHOLIC CHURCH BUILDING FUND

2159

Treasurer James City County

Check Number: 2159  
Check Date: 10/24/08  
Check Amount: \$36.00

Description	Amount Paid
Storm Water Fee SP-0080-2008	36.00

LMP40 MP CHECK

51N320 (7/08) 560041



# STORMWATER FACILITIES

## Data Sheet and Application for Certificate to Construct

Date of Application: 10/15/08 JCC CASE: SP-0080-2008

### I. GENERAL INFORMATION:

- a. Project Name: St. Bedes Catholic Church Road Widening
- b. Project Address: 3686 Ironbound Rd
- c. Developer: Busch Construction
- d. Submitted By: L. Burton
- e. Contact Person: 871-5579
- f. Address: \_\_\_\_\_
- g. Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ Email: \_\_\_\_\_

### II. STORMWATER CONVEYANCE SYSTEM

TYPE OF CONVEYANCE	LENGTH (FT)	FEE AMOUNT (\$0.90/LF)
STORM DRAIN		
OPEN CHANNEL	40	\$ 36.00
TOTALS		

### III. BEST MANAGEMENT PRACTICE

COUNTY BMP TYPE	BMP DESCRIPTION	NUMBER of BMPs	FEE AMOUNT (\$900/BMP)
<b>TOTAL</b>			

IV. TOTAL FEE: TABLE II: 36.00 + TABLE III: 0 = TOTAL FEE 36.00

Appr. Reviewed by: Daryl E Cook Inspection fee of: \$ 36.00 Paid on: \_\_\_\_\_

Certificate issued on \_\_\_\_\_

Revised: 08/2008

MEMORANDUM

DATE: October 28, 2008  
TO: Ann Davis, Treasurer  
FROM: Melanie Davis, Senior Engineering Assistant  
SUBJECT: Escrow Account

*mgd*

Forwarded for deposit to the Escrow Account is a check issued by St Bede Catholic Church in the amount of \$8,500. The surety is posted to guarantee the Erosion and Sediment Control measures for ST. BEDE CATHOLIC CHURCH - ROAD WIDENING IMPROVEMENTS SP-080-08.

Thank you for your assistance.

ST. BEDE CATHOLIC CHURCH  
BUILDING FUND  
10 HARRISON AVENUE  
WILLIAMSBURG, VA 23185

SUNTRUST BANK  
68-2/510

2156

DATE  
Oct 24, 2008

AMOUNT  
\$8,500.00

PAY Eight Thousand Five Hundred and 00/100 Dollars

TO THE ORDER OF Treasurer James City County  
P O Box 8784  
Williamsburg, VA 23187-8784

*John A. Ahe*  
AUTHORIZED SIGNATURE

⑈002156⑈ ⑆051000020⑆ 201639548⑈

Details on Back  
Security Features Included

ST. BEDE CATHOLIC CHURCH BUILDING FUND

2156

Treasurer James City County

Check Number: 2156  
Check Date: 10/24/08  
Check Amount: \$8,500.00

Description	Amount Paid
Bond for SP-0080-2008 St Bede Road Widening	8,500.00



# Land Disturbing Permit Application

James City County  
Environmental Division  
P.O. Box 8784  
Williamsburg, VA 23187-8784  
Telephone: (757) 253-6670

SP-080-08  
LR-10/30/08  
CP-10/30/08  
MC-138

Landowner

Name: ST BEDE CATHOLIC CHURCH JOHN MCCORMACK Date: 10 27 08

Mailing Address: 10 HARRISON AVE Phone: 757 229 3700  
WILLIAMSBURG VA 23185 Fax: 757 229 5361

Project: ST BEDE CATHOLIC CHURCH ROAD WIDENING

Project Street Address: 3086 IRONBOUND RD

Total Size of Tract or Lot: 42.5 acres

Total Area to Be Disturbed: 0.56 acres

Description of Land Disturbing Activity:

LAND DISTURBANCE TO INCLUDE WIDENING TURN LANE,  
GRADING, STRIPPING TOP SOIL.

Right of Entry

I, John McCormack, (Signature) hereby grant designated officials of James City County,  
JOHN J MCCORMACK DIR OF FINANCE (Print Name and Title)

Virginia, the right to enter my property for the purpose of inspection or monitoring for compliance with the approved erosion and sediment plan on the above-referenced project.

**Tina R. Cantwell**

---

**From:** Leanne Reidenbach  
**Sent:** Thursday, October 30, 2008 12:25 PM  
**To:** Tina R. Cantwell  
**Subject:** RE: SP-0080-2008 - St. Bede Road Widening

Tina-  
Planning is ok with LDP. We've already granted preliminary approval.  
Thanks-  
Leanne

---

**From:** Tina R. Cantwell  
**Sent:** Thursday, October 30, 2008 12:05 PM  
**To:** Leanne Reidenbach  
**Cc:** Christy Parrish  
**Subject:** SP-0080-2008 - St. Bede Road Widening

Hello Leanne and Christy,

Any problems preventing an Land Disturbance Permit (LDP) to be issued for St. Bede Catholic Church Road Widening – SP-0080-2008?

*Thanks,*  
*TC Cantwell*  
*Engineering Assistant*  
*James City County*  
*Environmental Division*  
*email: [tcantwell@james-city.va.us](mailto:tcantwell@james-city.va.us)*  
*Phone: 757-253-6670*  
*Fax: 757-259-4032*

**Tina R. Cantwell**

---

**From:** Christy Parrish  
**Sent:** Thursday, October 30, 2008 12:50 PM  
**To:** Tina R. Cantwell; Leanne Reidenbach  
**Subject:** RE: SP-0080-2008 - St. Bede Road Widening

I'm fine with the LDP as long as Leanne has no issues. My only issue is the sidewalk but I understand it is now bonded. Correct?

Thanks.

---

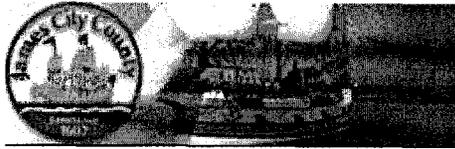
**From:** Tina R. Cantwell  
**Sent:** Thursday, October 30, 2008 12:05 PM  
**To:** Leanne Reidenbach  
**Cc:** Christy Parrish  
**Subject:** SP-0080-2008 - St. Bede Road Widening

Hello Leanne and Christy,

Any problems preventing an Land Disturbance Permit (LDP) to be issued for St. Bede Catholic Church Road Widening – SP-0080-2008?

*Thanks,*  
TC Cantwell  
Engineering Assistant  
James City County  
Environmental Division  
email: [tcantwell@james-city.va.us](mailto:tcantwell@james-city.va.us)  
Phone: 757-253-6670  
Fax: 757-259-4032

*band for sidewalk,  
public improvements  
collected concurrently.  
Aunt J  
11-03-08*



Production Instance

# CaseTrak 2.0

Logout

- Account ▾
- Cases ▾
- Actions ▾
- Help ▾

## Case Details

To view each section you can expand or collapse the sections.

[Perform New Search](#)

**BASIC DATA...** (Click to Hide)



Title	St Bede Road Widening
Case Number	SP-0080-2008,St Bede Road Widening
Applicant Name	Milissa England
Applicant Company	DJG, Inc.
Applicant Fax	(757)253-2319
Applicant Address	449 McLaws Circle
Applicant Address	
Applicant City	Williamsburg
Applicant Zip	23188
Applicant Phone	(757)253-0673
Applicant Email	mengland@djginc.com
Planner Name	Leanne Reidenbach
Application Date	26-Jun-2008
Last Updated	26-Jun-2008
Internal Comments	Amends SP-28-01. See SUP-15-08 for conditions. DRC on 7/30/08 for master plan consistency per conditions.
External Comments	Plan adds 8,414 square feet of additional pavement to the access driveway and loop of the St. Bede entrance to improve traffic circulation and drop-off area.
Acres	0
Applying for Cluster	No
Building Sqft.	0
Lots	0
Units	0
Proposed Zoning	Select One...
HouseType	NA No Housing Units
Affordable Housing Units	No
In a Cluster?	No
Closed Out?	<input type="checkbox"/>

**ACTIONS...** (Click to Hide)



Action Group	Action Type	Date
County Engineer	Transmittal Sent	06/26/2008
Environmental	Transmittal Sent	06/26/2008
James City Service Authority	Transmittal Sent	06/26/2008
Fire	Transmittal Sent	06/26/2008
Landscape Planner	Transmittal Sent	06/26/2008
Landscape Planner	Comm. Rcd.	06/27/2008
Fire	Approved	06/30/2008

County Engineer	Approved	06/30/2008
Planning Division	Comment Letter	07/09/2008
James City Service Authority	Comm. Rcd.	07/09/2008
Environmental	Approved	07/16/2008
Development Review Committee	Approved	07/30/2008
Development Review Committee	Approved	08/06/2008
Applicant	Resubmittal	09/25/2008
James City Service Authority	Transmittal Sent	09/26/2008
Landscape Planner	Transmittal Sent	09/26/2008
Landscape Planner	Approved	09/26/2008
Planning Division	Comment Letter	10/09/2008
Planning Division	Preliminary Approval	10/09/2008
James City Service Authority	Approved	10/08/2008

COMMENTS... (Click to Hide) 

Action Group	Action Type	Review Date	Doc.
Landscape Planner	Comm. Rcd.	06/27/2008	
Fire	Approved	06/30/2008	
County Engineer	Approved	06/30/2008	
Planning Division	Comment Letter	07/09/2008	
James City Service Authority	Comm. Rcd.	07/09/2008	
Environmental	Approved	07/16/2008	
Development Review Committee	Approved	08/06/2008	
Landscape Planner	Approved	09/26/2008	
Planning Division	Comment Letter	10/09/2008	
James City Service Authority	Approved	10/08/2008	

PROPERTIES... (Click to Hide) 

TaxMapID	Address	Sub Division	District	Property Owner	PSA	Water Type	Sewage Type	Land Use	Zones
3830100018	3686 IRONBOUND ROAD		3-Berke	CATHOLIC DIOCESE OF RICHMOND % ST BEDE CATHOLIC CHU	Yes	James City Service Authority	James City Service Authority	Low Density Residential	

PROFFERS... (Click to Hide) 

There is no data found.

FEES... (Click to Hide) 

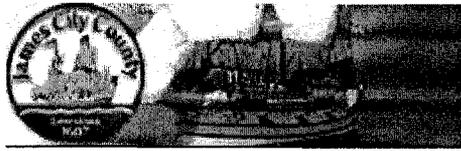
FeeDesc	FeeDate	Receipt	Amount
Planning Fee	06/26/2008	3165	\$600.00
JCSA Fee	06/26/2008	3165	\$200.00
E&S Fee	06/26/2008	3165	\$336.00

All site material is exclusive property of James City County.

© 2006, James City County, VA

P.O. Box 8784 Williamsburg, VA 23187-8784

Hours of Operation 8:00 a.m. - 5:00 p.m. Monday-Friday



Production Instance

# CaseTrak 2.0

[Logout](#)

[Account](#) ▶ [Cases](#) ▶ [Actions](#) ▶ [Help](#) ▶

## Case Details

To view each section you can expand or collapse the sections.

[Perform New Search](#)

**BASIC DATA...** (Click to Hide) 

Title	St. Bede Catholic Church
Case Number	SUP-0015-2000, St. Bede Catholic Church
Applicant Name	Doug White
Applicant Company	Landmark Design Group
Applicant Fax	(757)229-0049
Applicant Address	4029 Ironbound Road
Applicant Address	Suite 100
Applicant City	Williamsburg
Applicant Zip	23188
Applicant Phone	(757)253-2975
Applicant Email	
Planner Name	Chris Johnson
Application Date	22-Mar-2000
Last Updated	25-Mar-2008
Internal Comments	4203-HW-1-00 filed concurrently. Originally scheduled for the 7-25-00 BOS hearing; the applicant has requested deferral of both the SUP and Height Waiver applications until the Sept. 8 BOS meeting (at the earliest). The property is in the Casey AFD and must be withdrawn before the BOS can take action on this application.
External Comments	
Acres	0
Applying for Cluster	No
Building Sqft.	0
Lots	0
Units	
Proposed Zoning	Select One...
HouseType	NA No Housing Units
Affordable Housing Units	Unknown
In a Cluster?	No
Closed Out?	<input checked="" type="checkbox"/>

**ACTIONS...** (Click to Hide) 

Action Group	Action Type	Date
--------------	-------------	------

Planning Commission	Deferred	05/01/2000
Planning Commission	Approved	06/05/2000
Board of Supervisors	Hearing	08/08/2000
Board of Supervisors	Approved	12/19/2000
Planning Division	Public Hearing Ad	04/12/2000
Planning Division	Applicant Letter	04/14/2000
Planning Division	APO Letters	04/14/2000
Planning Division	PC Action Letter	05/02/2000
Planning Division	Resubmittal	04/20/2000
Planning Division	PC Action Letter	06/06/2000
Planning Division	Resubmittal	05/24/2000
Planning Division	Resubmittal	12/07/2000
Health	Trans.Rcd.	04/24/2000
County Engineer	Trans.Rcd.	04/19/2000
Fire	Trans.Rcd.	04/10/2000
James City Service Authority	Trans.Rcd.	04/17/2000
VA Dept. of Transportation	Trans.Rcd.	06/30/2000
Planning Division	Final Approval	12/19/2000

COMMENTS... (Click to Hide) 

There is no data found.

PROPERTIES... (Click to Hide) 

TaxMapID	Address	Sub Division	District	Property Owner	PSA	Water Type	Sewage Type	Land Use	Zones
3830100018	3686 IRONBOUND ROAD	St. Bede Catholic Church	3-Berke	CATHOLIC DIOCESE OF RICHMOND % ST BEDE CATHOLIC CHU	Yes	Unknown	Unknown	Low Density Residential	R8

PROFFERS... (Click to Hide) 

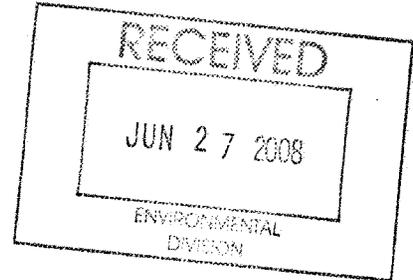
Satisfied	Description	BOS Approval Date	Expire Date	Recordation #
<input checked="" type="checkbox"/>	Roads: Condition 7. Applicant shall implement the road improvements recommended by the traffic study, prepared by Landmark Design Group.	12/19/2000	12/04/2001	000000000
<input type="checkbox"/>	Sidewalks: Condition 4. Applicant shall construct a 4 foot wide paved sidewalk along Ironbound road adjacent to any turn lanes.	12/19/2000	06/01/2009	000000000
<input checked="" type="checkbox"/>	Signs: Condition 10. Free standing signs within 50 feet of the Ironbound Road ROW, as may exist from time to time, shall be ground mounted, monument style and shall be approved by the Planning Director or his designee prior to final site plan approval.	12/19/2000	12/04/2001	000000000
<input checked="" type="checkbox"/>	Land Disturbing: Condition 12 A land disturbing permit shall be obtained by the developer within 36 months of approval of this SUP.	12/19/2000	08/13/2001	000000000
<input checked="" type="checkbox"/>	Bike Lane: Condition 5. Applicant shall construct a VDOT standard 5 foot shoulder bike lane adjacent to Ironbound Road.	12/19/2000	05/29/2003	000000000

FEES... (Click to Hide) 

FeeDesc	FeeDate	Receipt	Amount
JCSA Fee	03/22/2000	1421	\$50.00
Planning Fee	03/22/2000	1421	\$1,456.00

**TRANSMITTAL**

**DATE:** June 26, 2008  
**TO:** Environmental  
Fire  
JCSA  
Darryl Cook, County Engineer  
Scott Whyte, Senior Landscape Planner  
**FROM:** Leanne Reidenbach, Senior Planner  
**SUBJECT:** SP-0080-2008, St. Bede Road Widening  
**ITEMS**  
**ATTACHED:** Plan  
**ACTION:** Please review and return comments by July 9, 2008.  
**NOTES:** Plan amends SP-0028-2001. See SUP-0015-2000 for conditions.



**This case is scheduled for DRC on July 30, 2008 for  
master plan consistency**

*Plan is approved by the Environmental  
Division. A Land-Disturbing permit,  
with surety, is required for this  
project.*

*Scott J. Thomas*  
07-15-08

EROSION AND SEDIMENT CONTROL BOND ESTIMATE

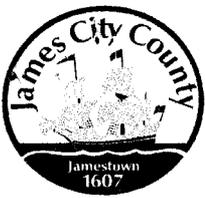
Vesch	Item	Unit	Unit Cost	Estimated Quatity	Estimated Cost
1	<b>Access Stabilization</b>				
	a. Construction Entrance	EA	\$500.00		
	b. Road Stabilization	Inch/SY	\$0.75		
2	<b>Straw Bale Barrier</b>	LF	\$7.00		
3	<b>Silt Fence</b>	LF	\$7.00	<u>800</u>	<u>\$5,600.00</u>
4	<b>Super Silt Fence</b>	LF	\$10.00		
5	<b>Tree Protection</b>	LF	\$2.00		
6	<b>Storm Drain Inlet Potection</b>				
	a. Straw Bale Filter	Inet	\$53.00		
	b. Filter Fabric and Mesh Wire	Inlet	\$37.00		
	c. Gravel and Filter Fabric	Inlet	\$37.00	<u>3</u>	<u>\$111.00</u>
	d. Block andGravel	Inlet	\$31.00		
	e. Excavated Drop Inlet	CY	\$4.70		
	f. Gravel Curb Inlet	Inlet	\$25.00		
	g. Block and Gravel Curb Inlet	Inlet	\$25.00		
	h. Gutter Buddy	Inlet	\$60.00		
	i. Silt Sack	Inlet	\$54.00		
7	<b>Temporary Diversion Dike</b>	LF	\$2.35		
8	<b>Temporary Right of Way Diversion, Stone or Earthen</b>	LF	\$2.35		
9	<b>Diversion</b>	LF	\$11.70		
10	<b>Temporary Fill Diversion</b>	LF	\$0.47		
11	<b>Temporary Sediment Trap</b>				
	a. No Excavation Required	LF	\$11.70		
	b. Excavation Required	CY	\$7.00		
	c. Stone Filter	LF	\$10.00		
12	<b>Temporary Sediment Basin</b>				
	a. Earthwork	CY	\$7.00		
	b. Outlet Structure 18" Barrel/24" Riser	EA	\$1,265.00		
	c. Anti-seep collars	EA	\$600.00		
	d. Non-typical structure	EA	\$10,000.00		
13	<b>Bio-retention</b>	SF	\$20.00		
14	<b>Underground BMPs</b>				
	a. Atlantis Matrix Quad Raintank BMP PC-036	CF	\$6.50		
	b. Snout				

## EROSION AND SEDIMENT CONTROL BOND ESTIMATE

	1. 18F	EA	\$340.00		
	2. 24F	EA	\$540.00		
	<b>c. Filtera</b>				
	1. 6x12	EA	\$24,000.00		
	2. 6x6	EA	\$12,000.00		
	<b>3. CDS-PMSU 20-15</b>	EA	\$10,000.00		
	<b>4. Cul-tec</b>	cf	\$8.00		
15	<b>Stormwater Conveyance Channel</b>				
	a. Grass Lined-Seeded	SY	\$5.85		
	b. Grass Lined Sodded	SY	\$11.70		
	c. Riprap	SY	\$41.00		
	d. Concrete/ Bit. Concrete	SY	\$35.10		
	e. Filter Fabric	SY	\$10.00		
16	<b>Outlet Protection</b>				
	a. Non-Grouted Riprap	SY	\$41.00		
	b. Grouted Riprap	SY	\$52.65		
	C. Concrete	SY	\$35.10		
17	<b>Rock Check Dams</b>				
	a. No. 1 Stone	CY	\$27.00	10	<b>\$270.00</b>
	b. Riprap	CY	\$75.00		
	c. VDOT Foam Check	EA	\$44.00		
18	<b>Structural Protection</b>				
	a. Gabions	CY	\$70.20		
	b. Grid Pavers	SY	\$52.75		
19	<b>Temporary Stream Crossing</b>	SY	\$52.65		
	a. 12-24" Pipe Diameter	LF	\$31.60		
	b. 29-48" Pipe Diameter	LF	\$31.60		
	c. 48-72" Pipe Diameter	LF	\$63.20		
20	<b>Surface Stabilization</b>	LF	\$105.30		
	a. Temporary Mulching	Acre	\$1,000.00		
	b. Permanent; topsoil, seed, fertilizer, lime, and mulch	Acre	\$5,000.00	0.5	<b>\$2,500.00</b>
	c. Crimping / Tacking	Acre	\$1,200.00		
	d. Hydroseeding	Acre	\$2,000.00		
	e. EC-2 Matting	Acre	\$3.50		
	f. EC-3 Matting	SY	\$5.00		
21	<b>Infiltration</b>	SF	\$10.00		
	a. Excavation	CY	\$7.00		

## EROSION AND SEDIMENT CONTROL BOND ESTIMATE

	b. Filter Cloth	CY	\$7.00		
	c. Sand barrier	SY	\$10.00		
	d. Washed Aggregate	Ton	\$12.00		
22	<b>Pervious Concrete with Under Drain</b>				
	a. Stone	Ton	\$12.00		
	b. Pipe (30" perforated HDPE)	CY	\$19.20		
	c. Pervious concrete	SF	\$22.40		
23	<b>Level Spreader</b>	LF	\$5.50		
24	<b>Storm Pipe</b>				
	a. 12" RCP	LF	\$15.00		
	b. 15" RCP	LF	\$12.00		
	c. 18" RCP	LF	\$20.00		
	d. 24" RCP	LF	\$25.00		
	e. 30" RCP	LF	\$33.00		
	f. 42" RCP	LF	\$42.00		
	g. 24" Steel Pipe	LF	\$59.00		
25	<b>Dewatering Devices</b>				
	a. 6x6x3 pit	EA	\$150.00		
	b. Dirtbag				
	1. 4x6	EA	\$70.00		
	2. 10x15	EA	\$127.00		
	3. 15x15	EA	\$138.00		
26	<b>Mitigation</b>				
	a. Canopy Tree	each	\$150.00		
	b. Understory Tree	each	\$100.00		



# JCC Environmental Division

## Preconstruction Meeting

Project: Saint Bedes Street Widening

Date: November 6, 2008

1. Is the person who will be designated as the Responsible Land Disturber for implementation of the approved Erosion Control Plan present?

YES  NO

Representative Name: Alan Youngblood

2. Does the person who has been identified above possess a certificate of competence issued by the Department of Conservation and Recreation in Erosion and Sediment Control or are they a licensed Professional Engineer, Land Surveyor, Landscape Architect, or Architect?

YES  NO

Certificate or License No. 30546

3. The person designated above is required by the Virginia Erosion and Sediment Control Regulations to insure the installation and daily maintenance of the erosion and sediment control measures.

4. A copy of the Virginia Erosion and Sediment Control Handbook (VESCH) is required to be on the project site daily.

5. A copy of the approved site plan is required to be on the project site daily.

6. Are there any proposed revisions to the approved plan pending?

YES  NO

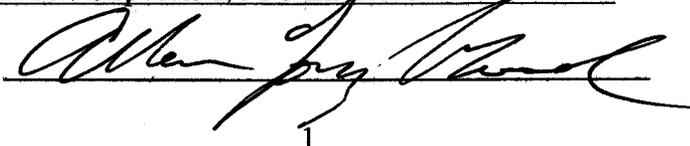
7. Any proposed changes to the approved plan must be submitted to James City County for review and approval prior to implementation.

8. Is the person designated above aware of any discrepancies, errors or deficiencies with the approved plan? YES  NO

9. James City County is authorized under the Virginia Erosion and Sediment Control Law to require project monitoring and inspection reports to insure compliance with the approved plan. If James City County determines that inspection reports are required, they shall be submitted to the Environmental Division for review at intervals determined by the Division.

County Agent: Gregory B. Johnson Inspector I, JCC Environmental Division

Responsible Land Disturber



**Project:** Saint Bedes Street Widening Project

Date: November 6, 2008 Time: 10:30  AM  PM

Permittee: Saint Bedes Catholic Church

Contractor: Busch Construction

Phone No: 757-220-2874 Fax No: \_\_\_\_\_

Address: 4029 Ironbound Road Williamsburg, Va 23188

**Phasing of Erosion and Sediment Control Practices**

- A. Narrative Plan
- B. Contractor-Developed Sequence of Construction

**2. Installation Procedure for Primary Erosion and Sediment Control Practices-**

- |   |   |
|---|---|
| <input type="checkbox"/> Construction Entrance                  | <input type="checkbox"/> Sediment Basins                      |
| <input checked="" type="checkbox"/> Silt Fence                  | <input type="checkbox"/> Stormwater Management/BMP Facilities |
| <input checked="" type="checkbox"/> Rock Check Dams             | <input type="checkbox"/> Diversions                           |
| <input type="checkbox"/> Culvert & Storm Drain Inlet Protection | <input checked="" type="checkbox"/> Soil Blanket & Matting    |
| <input type="checkbox"/> Stormwater Conveyance Channels         | <input checked="" type="checkbox"/> Mulching                  |
| <input checked="" type="checkbox"/> Temporary Seeding           | <input checked="" type="checkbox"/> Permanent Seeding         |
| <input type="checkbox"/> Outlet Protection                      | <input type="checkbox"/> Storm Drainage System                |
| <input type="checkbox"/> Sediment Traps                         | <input checked="" type="checkbox"/> Tree Protection           |

**3. Inspection and Enforcement Procedures**

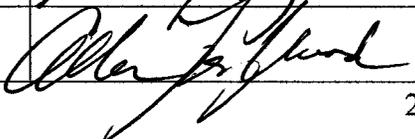
- A. Permittee/Contractor Inspections: \_\_\_\_\_
- B. County Inspections: \_\_\_\_\_
- C. Enforcement Actions: \_\_\_\_\_
  - 1. Inspection Report & Informal Contact: \_\_\_\_\_
  - 2. Notice to Comply: \_\_\_\_\_
  - 3. Stop Work Order: \_\_\_\_\_
  - 4. Legal Proceedings: \_\_\_\_\_

**4. Limits of Clearing, Tree and Other Critical Areas Protection Measures Inspection**

- A. Clearing limits properly flagged? Yes  No
- B. Color of Flagging: Green Paint
- C. Tree Preservations/Critical Areas protected adequately? Yes  No
- D. Color of Flagging: Orange SF
- E. Tree Preservation Critical Areas Protection Measures, Type: —

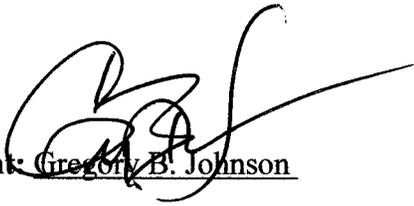
5. Issuance of Stormwater Management/BMP, Record Drawing and Construction Certification, Standard Forms and Instructions (If Applicable to Project)

6. Attendees - Identify Contract Person for Erosion Control:

Printed Name	<u>Allen Langford</u>	<u>Busch Const. 880-2850</u>
Signature		

<b>Affiliation</b>		
<b>Address</b>		
<b>Phone Number</b>		
<b>Email Address</b>		

**7. Comments:**



**County Agent:** Gregory B. Johnson

**Date:** October 24, 2008

**Title:** Environmental Inspector I  
James City County

VACANT LOT - 122 Whistle Walk

Several Trees marked  
with white X

Trees cut along ROADWAY  
and on Slope

Dwner - Thomas W. Liberty (?)



# JCC Environmental Division

## Preconstruction Meeting

Project St Bede Catholic Church Date 8/21/06

Rectory & Parking Expansion

1. Is the person who will be designated as the *Responsible Land Disturber* for implementation of the approved Erosion Control Plan present?

YES  NO  Name Alan Youngblood

2. Does the person who has been identified above possess a certificate of competence issued by the Department of Conservation and Recreation in Erosion and Sediment Control or are they a licensed Professional Engineer, Land Surveyor, Landscape Architect, or Architect?

YES  NO  Certificate or License No. 22434

3. The person designated above, is required by the Virginia Erosion and Sediment Control Regulations to insure the installation and daily maintenance of the erosion and sediment control measures.

4. A copy of the Virginia Erosion and Sediment Control Handbook (VESCH) is required to be on the project site daily.

5. A copy of the approved site plan is required to be on the project site daily.

6. Are there any proposed revisions to the approved plan pending?

YES  NO  Clearing & stabilize entire area but will not start rectory yet.

7. Any proposed changes to the approved plan must be submitted to James City County for review and approval prior to implementation.

8. Is the person designated above aware of any discrepancies, errors or deficiencies with the approved plan?

YES  NO

9. James City County is authorized under the Virginia Erosion and Sediment Control Law to require project monitoring and inspection reports to insure compliance with the approved plan. If James City County determines that inspection reports are required, they shall be submitted to the Environmental Division for review at intervals determined by the Division.

County Agent Jim Cook

Responsible Land Disturber Alan Youngblood

Preconcover

Rev. 1/05



# Erosion and Sediment Control Preconstruction Meeting Checklist

Project: St Bede Catholic Church - Rectory & Parking Expansion  
 Date: 8/21/06 Time: 8:00  AM  PM  
 Permittee: St Bede Parish - Catholic Diocese of Richmond Address: PO Box 5400 Williamsburg VA 23185  
 Contractor: Bush Construction  
 Phone No.: 220-2874 Fax No.: 564-8960  
 Address: 4029 Ironbend Rd

### 1. Phasing of Erosion and Sediment Control Practices

- A. Narrative Plan
- B. Contractor-Developed Sequence of Construction

### 2. Installation Procedure for Primary Erosion and Sediment Control Practices

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Construction Entrance                  | <input checked="" type="checkbox"/> Sediment Basins (underground tanks)   |
| <input checked="" type="checkbox"/> Silt Fence <u>SSP</u>                  | <input type="checkbox"/> Stormwater Management/BMP Facilities             |
| <input checked="" type="checkbox"/> Rock Check Dams                        | <input type="checkbox"/> Diversions                                       |
| <input checked="" type="checkbox"/> Culvert & Storm Drain Inlet Protection | <input checked="" type="checkbox"/> Soil Blankets & Matings               |
| <input type="checkbox"/> Stormwater Conveyance Channels                    | <input type="checkbox"/> Mulching   |
| <input checked="" type="checkbox"/> Temporary Seeding                      | <input checked="" type="checkbox"/> Permanent Seeding <u>Hydroseeding</u> |
| <input checked="" type="checkbox"/> Outlet Protection                      | <input type="checkbox"/> Storm Drainage System                            |
| <input type="checkbox"/> Sediment Traps                                    | <input checked="" type="checkbox"/> Other <u>Tree Protection</u>          |

### 3. Inspection and Enforcement Procedures

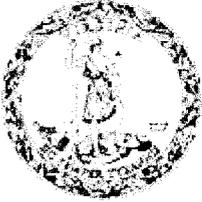
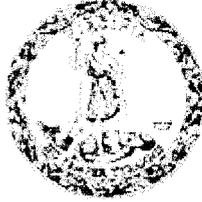
- A. Permittee/Contractor Inspections:
- B. County Inspections:
- C. Enforcement Actions: 
  - 1. Inspection Report & Informal Contact:
  - 2. Notice to Comply:

# Erosion and Sediment Control Preconstruction Meeting Checklist

- 3. Stop Work Order:  \_\_\_\_\_
- 4. Legal Proceedings:  \_\_\_\_\_
- 4. Limits of Clearing, Tree and Other Critical Areas Protection Measures Inspection
  - A. Clearing limits properly flagged?  Yes  No
  - B. Color of Flagging: white \_\_\_\_\_
  - C. Tree Presservations/Critical Areas protected adequately?  Yes  No
  - D. Color of Flagging: \_\_\_\_\_
  - E. Tree Preservation/Critical Areas Protection Measures, Type: \_\_\_\_\_
- 5. Issuance of Stormwater Management/BMP, Record Drawing and Construction Certification, Standard Forms and Instructions (If Applicable to Project)
- 6. Attendees - Identify Contract Person for Erosion Control
  - Signature: LA Burton II \_\_\_\_\_ Allen Youngblood \_\_\_\_\_
  - Printed Name: LA BURTON II \_\_\_\_\_ Allen Youngblood \_\_\_\_\_
  - Affiliation: BUSH CONSTRUCTION \_\_\_\_\_ S/A \_\_\_\_\_
  - Address: 4029 IRONBOARDS RD \_\_\_\_\_ S/A \_\_\_\_\_  
WILLIAMSBURG VA \_\_\_\_\_ S/A \_\_\_\_\_
  - Phone No. 871-5579 FAX 564 8900 880-2850
- 7. Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

County Agent: Vina Cooke \_\_\_\_\_ Date: 8/6/06 \_\_\_\_\_  
Title: Environmental Inspector \_\_\_\_\_

**COMMONWEALTH OF VIRGINIA**  
 Soil and Water Conservation Board  
 203 Governor Street, Suite 206, Richmond,  
 Virginia 23219  
 Telephone (804) 786-2064

**EROSION AND SEDIMENT CONTROL  
 RESPONSIBLE LAND DISTURBER**

Expires **07/19/2008**                      **Allen D. Youngblood**                      Certificate Number **22434**

 **DCR**  
Division of Soil & Water Conservation

*Jack E. Frye*  
 Director  
 Division of Soil & Water Conservation

**COMMONWEALTH OF VIRGINIA**  
 Soil and Water Conservation Board  
 203 Governor Street, Suite 206  
 Richmond, Virginia 23219  
 Telephone (804) 786-2064




**EROSION AND SEDIMENT CONTROL  
 RESPONSIBLE LAND DISTURBER**

Expires **07/19/2008**                      **Allen D. Youngblood**                      Certificate **22434**

*Joseph H. Maroon*  
 Secretary of the Board                      *David L. Moyer*  
 Chairman of the Board

## Scott Thomas

---

**From:** Scott Thomas  
**Sent:** Wednesday, March 16, 2005 2:09 PM  
**To:** Christopher Johnson; John Horne  
**Subject:** RE: St. Bede rectory

I agree with Chris's assessment about the roundtable meeting on September 27, 2004

We also made comment about the conservation easement issue under the review of the concept plan for the rectory C-11-04 on October 1, 2004.

We also made comment about the conservation easement issue during the first review of the rectory site plan SP-132-04 on January 10, 2005

We also made comment about the conservation easement issue during the second review of the rectory site plan SP-132-04 on March 7, 2005

**Scott J. Thomas, P.E.**  
*James City County  
Environmental Division*

-----Original Message-----

**From:** Christopher Johnson  
**Sent:** Wednesday, March 16, 2005 11:52 AM  
**To:** John Horne  
**Cc:** Scott Thomas  
**Subject:** RE: St. Bede rectory

I spoke with Al Ramsey of Landmark Design Group last week regarding Father Carr's concerns for this project. Al agreed that the remaining issues identified in staff's letter dated 3/7/05 should be able to be addressed in a timely manner or involve any agency approval that would prevent final approval from being issued in the near future. He was not aware of any specific concern that Father Carr had other than a general concern that construction will not be completed by the time the existing rectory must be vacated this summer.

As you may be aware, a portion of the rectory building is proposed to be constructed in an area that was recorded as a conservation easement when the original site plan for the church was approved in 2001. Staff discussed the need for a Deed of Exchange for the conservation easement with the project engineers during a Development Roundtable in September 2004. It should not be viewed as a surprise by anyone involved with the project.

-----Original Message-----

**From:** John Horne  
**Sent:** Monday, March 14, 2005 8:28 AM  
**To:** John J. McGlennon  
**Cc:** Christopher Johnson; Scott Thomas  
**Subject:** RE: St. Bede rectory

I spoke briefly to staff last week but I don't yet have a good answer for you. Let me check some more today and I'll get back to you.

-----Original Message-----

**From:** John J. McGlennon  
**Sent:** Friday, March 11, 2005 2:05 PM  
**To:** John Horne  
**Subject:** St. Bede rectory

John,

Do you have any information for me about the situation with the St. Bede rectory application? I promised that I would get back to Monsignor Carr once I knew what the situation was.

Thanks,  
John

John J. McGlennon  
Jamestown District Supervisor  
James City County Board of Supervisors  
757-221-3034 W  
757-220-0568 H

JWB/SJT

**ENVIRONMENTAL DIVISION REVIEW COMMENTS  
ST. BEDED CATHOLIC CHURCH RECTORY BUILDING  
COUNTY PLAN NO. SP - 132 - 04**

*March 7, 2005*

**General Comments:**

1. Record drawings and construction certification will be required for the manufactured BMP installation in accordance with current County requirements.
2. A Declaration of Covenants, Inspection/Maintenance agreement will be required due to proposed onsite storm drainage piping systems and manufactured BMP associated with this project. This can either be a separate agreement specific to this project or under the global agreement for the property tract which we understand is being prepared by the applicant.

**Erosion & Sediment Control Plan:**

3. E&S Plan. Previous comment # 10 was not fully addressed. Although postdevelopment drainage patterns are acknowledged, there must be proper erosion and sediment control measures for when the site is first denuded (cleared and grubbed and topsoil removed). Perhaps a single, small temporary rock check dam in the "existing stone swale" at the limit of disturbance would be helpful to provide proper perimeter control in addition to the silt fence in this corner.
4. E&S Plan. Previous comment # 11 was not fully addressed. Although tree protection is shown, existing topography is such that disturbed areas associated with the forcemain and private water line construction will be directed to existing forest and RPA buffer in an uncontrolled manner. It would appear an additional 150 ft. of silt fence is required between the forcemain and the limit of work/RPA buffer on the west side of the existing church.
5. Tree Protection. Due to the location of existing conservation easement and pursuant to previous comment # 12 (and the plan preparer's response), keys and symbols must be shown for tree protection along the limit of work to the north of the proposed rectory building.

**Stormwater Management / Drainage:**

6. Conservation Easement. The revised BMP worksheet now shows the 0.10 points per 1 percent tabulation reduced from 20.45 acres to 20.09 acres to account for the 0.36 acres impacted by the rectory plan and based on our review, the site still achieves 10 BMP points even without consideration of the manufactured BMP. *(Note: Response to previous comment # 24 indicates that the manufactured BMP design was not intended to consider infiltration; therefore only detention for quantity control purposes is being provided. Therefore, no structural BMP points can be taken for this measure anyways).* However, a copy of the amended plat was not found in our review packet. In communication with the County Engineer on this issue, there are two outstanding issues. One, the recorded conservation easement plat must be amended to show the loss of the 0.36 acres and the amended plat must show the revised limits of the conservation easement. Second, there are two choices as it applies to amendment of a conservation easement plat which reduces the amount of dedicated area. One is by use of a deed of exchange, by which the 0.36 acres as impacted at the rectory site is equally replaced somewhere else of the site. This is a rather simple administrative process; however, the amended plat must show where the

exchange area is situated. The second way is to reduce the dedicated area without equal replacement. For this option, it is a bit more complicated as it must be scheduled for a Board of Supervisors meeting and be subject to the public input process. It is the applicant's choice on how to proceed with this issue. Both the County Engineer and the Environmental Division should be advised of which choice is made. *(Note: From the Environmental Division perspective, this will be an issue for final site plan approval, not approval of the erosion and sediment control plan and issuance of the Land-Disturbing permit for this project.)*

7. Stream Channel Protection. In addition to stating "the postdevelopment runoff has been reduced to or below the predeveloped runoff rate for both the 2- and 10-year storms", the stormwater management narrative on page 2 of the design report needs to indicate that the manufactured BMP system was sized to meet the County's stream channel protection requirements (ie. 24-hour detention of the postdevelopment 1-year, 24 hour storm).
8. Manufactured BMP. Manufacturer's information was provided to address previous comment # 24. Based on our review of the literature and technical specifications for the proposed unit, a note is required to be placed on BMP section details on Sheet C-4A to indicate that subgrade (base of excavation), geotextile, bedding, compaction, backfill, cover and utility marker installation shall meet manufacturer's specifications and that all unrelated construction traffic shall be kept away from the limits of excavation until the project is complete and final surface materials are in place.

**ENVIRONMENTAL DIVISION REVIEW COMMENTS**  
**ST. BEDED CATHOLIC CHURCH RECTORY BUILDING**  
**COUNTY PLAN NO. SP - 132 - 04**  
*March 7, 2005*

General Comments:

1. ✓ Record drawings and construction certification will be required for the manufactured BMP installation in accordance with current County requirements. *ADDED TO COVER*
2. ✓ A Declaration of Covenants, Inspection/Maintenance agreement will be required due to proposed onsite storm drainage piping systems and manufactured BMP associated with this project. This can either be a separate agreement specific to this project or under the global agreement for the property tract which we understand is being prepared by the applicant. *THIS HAS BEEN PREPARED, APPROVED + RELOADED.*

Erosion & Sediment Control Plan:

3. ✓ E&S Plan. Previous comment # 10 was not fully addressed. Although postdevelopment drainage patterns are acknowledged, there must be proper erosion and sediment control measures for when the site is first denuded (cleared and grubbed and topsoil removed). Perhaps a single, small temporary rock check dam in the "existing stone swale" at the limit of disturbance would be helpful to provide proper perimeter control in addition to the silt fence in this corner.
4. ✓ E&S Plan. Previous comment # 11 was not fully addressed. Although tree protection is shown, existing topography is such that disturbed areas associated with the forcemain and private water line construction will be directed to existing forest and RPA buffer in an uncontrolled manner. It would appear an additional 150 ft. of silt fence is required between the forcemain and the limit of work/RPA buffer on the west side of the existing church.
5. ✓ Tree Protection. Due to the location of existing conservation easement and pursuant to previous comment # 12 (and the plan preparer's response), keys and symbols must be shown for tree protection along the limit of work to the north of the proposed rectory building. *Symbol ADDED*

Stormwater Management / Drainage:

6. Conservation Easement. The revised BMP worksheet now shows the 0.10 points per 1 percent tabulation reduced from 20.45 acres to 20.09 acres to account for the 0.36 acres impacted by the rectory plan and based on our review, the site still achieves 10 BMP points even without consideration of the manufactured BMP. (*Note: Response to previous comment # 24 indicates that the manufactured BMP design was not intended to consider infiltration; therefore only detention for quantity control purposes is being provided. Therefore, no structural BMP points can be taken for this measure anyways*). However, a copy of the amended plat was not found in our review packet. In communication with the County Engineer on this issue, there are two outstanding issues. One, the recorded conservation easement plat must be amended to show the loss of the 0.36 acres and the amended plat must show the revised limits of the conservation easement. Second, there are two choices as it applies to amendment of a conservation easement plat which reduces the amount of dedicated area. One is by use of a deed of exchange, by which the 0.36 acres as impacted at the rectory site is equally replaced somewhere else of the site. This is a rather simple administrative process; however, the amended plat must show where the

exchange area is situated. The second way is to reduce the dedicated area without equal replacement. For this option, it is a bit more complicated as it must be scheduled for a Board of Supervisors meeting and be subject to the public input process. It is the applicant's choice on how to proceed with this issue. Both the County Engineer and the Environmental Division should be advised of which choice is made. *(Note: From the Environmental Division perspective, this will be an issue for final site plan approval, not approval of the erosion and sediment control plan and issuance of the Land-Disturbing permit for this project.)*

*THIS IS NOW OK AS DECD OF TRANSFER + REVISED ESMT PLAN SUBMITTED. COORDINATED WITH WAYLAND ON THIS ISSUE.*

7. ✓ Stream Channel Protection. In addition to stating "the postdevelopment runoff has been reduced to or below the predeveloped runoff rate for both the 2- and 10-year storms", the stormwater management narrative on page 2 of the design report needs to indicate that the manufactured BMP system was sized to meet the County's stream channel protection requirements (ie. 24-hour detention of the postdevelopment 1-year, 24 hour storm).
  
8. ✓ Manufactured BMP. Manufacturer's information was provided to address previous comment # 24. Based on our review of the literature and technical specifications for the proposed unit, a note is required to be placed on BMP section details on Sheet C-4A to indicate that subgrade (base of excavation), geotextile, bedding, compaction, backfill, cover and utility marker installation shall meet manufacturer's specifications and that all unrelated construction traffic shall be kept away from the limits of excavation until the project is complete and final surface materials are in place.

*All previous comments addressed.*



JAMES CITY COUNTY ENVIRONMENTAL DIVISION

Surety Tracking Sheet

Date: 4/16/08

Due Date: \_\_\_\_\_

Project Name: ST BEDES CATHOLIC CHURCH RECTORY Bldg & <sup>Prks</sup> <sub>Expansion</sub>

Requested By: \_\_\_\_\_ Phone #: \_\_\_\_\_

Date Notified: \_\_\_\_\_ Case Number: SP-132-04

Siltation Surety: Original \$ \_\_\_\_\_ Current \$ 49,000.00 Needed \$ 49,000.00

\*maximum reduction of 80% of original bond amount unless project is to be released

Calculate  Evaluate/Reduce  Release

Work to be completed for SILTATION Surety

Stabilization of all disturbed areas *Future site of rectory needs seeded and strawed.*

Removal of temporary erosion control measures

Submission of as-built drawings for stormwater management facility *Needed for under ground storage*

Submission of construction certification for the stormwater management facility *Needed for under ground storage.*

Completion of field-related BMP items

Other - *Install underground storage tanks*

Comments-

Subdivision Surety: Original \$ \_\_\_\_\_ Current \$ \_\_\_\_\_ Needed \$ \_\_\_\_\_

\*maximum reduction of 80% of original bond amount unless project is to be released

Calculate  Evaluate/Reduce  Release

Work to be completed for SUBDIVISION Surety

Paving of streets

Dedication of streets to Virginia Dept of Transportation **VDOT** Amount Needed \$ \_\_\_\_\_

Completion of water and sewer systems **JCSA** Amount Needed \$ \_\_\_\_\_

Completion of water and sewer punchlist items

Submission of as-built drawings for water and sewer systems

Installation of street lights and street signs

Other -

Comments-

INDICATE YOUR APPROVAL BY INITIALING THE APPROPRIATE BLANK:

Surety Tracking Sheet

Date: 3/28/07

Due Date: \_\_\_\_\_

Project Name: St. Bedes Catholic Church Rectory Building + Parking Expansion

Original Surety - \_\_\_\_\_ Current Surety at (full) (reduced) amount \_\_\_\_\_

Requested By: \_\_\_\_\_ Phone #: \_\_\_\_\_

Date Notified: \_\_\_\_\_

Siltation Surety: Original \$ \_\_\_\_\_ Current \$ 97,108 Needed \$ 48,554.00

\*maximum reduction of 80% of original bond amount unless project is to be released

Calculate  Evaluate/Reduce  Release

Work to be completed for SILTATION Surety

Stabilization of all disturbed areas

Removal of temporary erosion control measures Remove from around parking lot

Submission of as-built drawings for stormwater management facility

Submission of construction certification for the stormwater management facility

Completion of field-related BMP items

Other -

Comments-

Subdivision Surety: Original \$ \_\_\_\_\_ Current \$ \_\_\_\_\_ Needed \$ \_\_\_\_\_

\*maximum reduction of 80% of original bond amount unless project is to be released

Calculate  Evaluate/Reduce  Release

Work to be completed for SUBDIVISION Surety

Paving of streets

Dedication of streets to Virginia Department of Transportation VDOT Amount Needed \$ \_\_\_\_\_

Completion of water and sewer systems JCSA Amount Needed \$ \_\_\_\_\_

Completion of water and sewer punchlist items

Submission of as-built drawings for water and sewer systems

Installation of street lights and street signs

Other -

Comments-

INDICATE YOUR APPROVAL BY INITIALING THE APPROPRIATE BLANK:

INSP. [Signature] 3/28/07 SJT SJT 04-02-07 DEC \_\_\_\_\_

Revised 3/24/06

Need AB doc for onsite BMP. Hold out BMP amount.

JB [Signature] 3/29/07

BOND COMPUTATIONS

NAME OF SUBDIVISION: Saint Bede Catholic Church Rectory + Parking Expansion  
SECTION: \_\_\_\_\_  
OWNER/DEVELOPER: Saint Bede Church  
ENGINEER: Landmark Design Group  
SUBDIVISION BOND AMOUNT: \$ \_\_\_\_\_

ESTIMATES (September 1987)

1. Street Construction and Sidewalks	\$ _____
2. Drainage	_____
3. Utilities:	
a. Electrical Service	_____
b. Water	_____
c. Sewer	_____
4. Streetlights	_____
5. Street Signs	_____
Total Subdivision Bond	\$ _____
EROSION AND SEDIMENT CONTROL BOND AMOUNT	\$ <u>97,108</u>

EROSION AND SEDIMENT CONTROL BOND ESTIMATE

<u>No.</u>	<u>Item</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Estimated Quantity</u>	<u>Estimated Cost</u>
1.	a. Construction Entrance	EA	\$ 500.00	<u>1</u>	\$ <u>          </u>
	b. Road Stabilization	Inch/SY	.75	<u>36,541</u>	<u>27,406</u>
2.	<del>Tree Protection</del> <del>Straw Bale Barrier</del>	LF	<del>2.00</del> <del>7.00</del>	<u>1,200</u>	<u>2,400</u>
3.	Silt Fence	LF	7.00	<u>1,200</u>	<u>8,400</u>
4.	Storm Drain Inlet Protection				
	a. Straw Bale Filter	Inlet	53.00	<u>3</u>	<u>          </u>
	b. Filter Fabric & Mesh Wire	Inlet	37.00	<u>          </u>	<u>          </u>
	c. Gravel & Filter Fabric	Inlet	37.00	<u>          </u>	<u>          </u>
	d. Block & Gravel	Inlet	31.00	<u>          </u>	<u>          </u>
	e. Excavated Drop Inlet	CY	4.70	<u>          </u>	<u>          </u>
	f. Gravel Curb Inlet	Inlet	25.00	<u>          </u>	<u>          </u>
	g. Block & Gravel Curb Inlet	Inlet	25.00	<u>          </u>	<u>          </u>
5.	Temporary Diversion Dike	LF	2.35	<u>          </u>	<u>          </u>
6.	Temporary Fill Diversion	LF	.47	<u>          </u>	<u>          </u>
7.	Temporary Right-of-Way Diversion				
	a. Stone	LF	2.35	<u>          </u>	<u>          </u>
	b. Earthen	LF	2.35	<u>          </u>	<u>          </u>
8.	Diversion	LF	11.70	<u>          </u>	<u>          </u>
9.	Temporary Sediment Trap				
	a. No Excavation Required	LF	11.70	<u>          </u>	<u>          </u>
	b. Excavation Required	CY	7.00	<u>          </u>	<u>          </u>
	c. Stone filter	LF	10.00	<u>          </u>	<u>          </u>
10.	Temporary Sediment Basin				
	a. Earthwork	CY	7.00	<u>          </u>	<u>          </u>
	b. Outlet Structure (18" Barrel/24" Riser)	EA	1,265.00	<u>          </u>	<u>          </u>

Page Total \$

<u>No.</u>	<u>Item</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Estimated Quantity</u>	<u>Estimated Cost</u>
11.	Temporary Slope Drain	LF	\$ 5.25	_____	\$ _____
12.	Paved Flume	LF	20.00	_____	_____
13.	Stormwater Conveyance Channel				
	a. Grass lined - Seeded	SY	5.85	_____	_____
	b. Grass lined - Sodded	SY	11.70	_____	_____
	c. Riprap	SY	41.00	_____	_____
	d. Concrete/Bit. Concrete	SY	35.10	_____	_____
	e. Filter Fabric	SY	10.00	_____	_____
14.	Outlet Protection				
	a. Non-Grouted Riprap	SY	41.00	_____	_____
	b. Grouted Riprap	SY	52.65	<u>11.11</u>	<u>585</u>
	c. Concrete	SY	35.10	_____	_____
15.	Rock Check Dams				
	a. No. 1 Stone	CY	27.00	_____	_____
	b. Riprap	CY	75.00	<u>3</u>	<u>225</u>
16.	Structural Protection				
	a. Gabions	CY	70.20	_____	_____
	b. Grid Pavers	SY	52.65	_____	_____
17.	Temporary Stream Crossing				
	a. 12-24" Pipe Diameter	LF	31.60	_____	_____
	b. 29-48" Pipe Diameter	LF	63.20	_____	_____
	c. 48-72" Pipe Diameter	LF	105.30	_____	_____
	d. 72-96" Pipe Diameter	LF	147.40	_____	_____
18.	Surface Stabilization				
	a. Temporary Mulching	Acre	1,000.00	_____	_____
	b. Permanent topsoil, seed, fertilizer, lime and mulch	Acre	5,000.00	_____	_____
	c. Crimping/tacking	Acre	1,200.00	_____	_____
	d. Hydroseeding	Acre	2,000.00	<u>.26</u>	<u>1720</u>

<u>No.</u>	<u>Item</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Estimated Quantity</u>	<u>Estimated Cost</u>
19.	Infiltration				
a.	Excavation	CY	\$ 7.00	_____	_____
b.	Filter Cloth	SY	10.00	_____	_____
c.	Sand Barrier	Ton	12.00	_____	_____
d.	Washed Aggregate	Ton	8.50	_____	_____

Total \$ \_\_\_\_\_

Page 6 Total \_\_\_\_\_

Grand Total \$ \_\_\_\_\_

RE/bkh  
3360c

storm water pipe 15"	20.00/ft	<u>402.5'</u>	<u>\$8,050</u>
Rain tank excavation	7.00/yd	<u>500<sup>cu</sup>/yd</u>	<u>\$3,500</u>
Rain tank	\$5.40/cu/ft	<u>5,944 cu/ft</u>	<u>\$32,097</u>
Brk Gravel (#57 stone)	27.00/cu yd	<u>175 cu/yds</u>	<u>\$4,725</u>
Concrete Rain Structure	4,000/unit	<u>2</u>	<u>\$7,000</u>

**Surety Tracking Sheet**

Date: 4/15/05

**Project Name:**

St. Bedes Rectory Building SP-132-04

**Surety Amount** - at (full) (reduced) amount

Requested By:

Fred Mone

Phone #:

220-1222 / 561-6763

**Siltation Surety:**

Current \$ \_\_\_\_\_

Needed \$ \_\_\_\_\_

- Calculate
- Evaluate/Reduce
- Release

**Work to be completed for SILTATION Surety**

- Stabilization of all disturbed areas
- Removal of temporary erosion control measures
- Submission of as-built drawings for stormwater management facility
- Submission of construction certification for the stormwater management facility
- Completion of field-related BMP items
- Other - Plan was approved April 7, 2005.

**Subdivision Surety:**

Current \$ \_\_\_\_\_

Needed \$ \_\_\_\_\_

- Calculate
- Evaluate/Reduce
- Release

**Work to be completed for SUBDIVISION Surety**

- Paving of streets
- Dedication of streets to Virginia Department of Transportation

**VDOT**  
Amount Needed \$ \_\_\_\_\_

- Completion of water and sewer systems
- Completion of water and sewer punchlist items
- Submission of as-built drawings for water and sewer systems

**JCSA**  
Amount Needed \$ \_\_\_\_\_

- Installation of street lights and street signs
- Other -

INDICATE YOUR APPROVAL BY INITIALING THE APPROPRIATE BLANK:

INSP. \_\_\_\_\_

SJT \_\_\_\_\_

DEC \_\_\_\_\_

PTM \_\_\_\_\_

ENVIRONMENTAL DIVISION REVIEW COMMENTS  
ST. BEDED CATHOLIC CHURCH RECTORY BUILDING  
COUNTY PLAN NO. SP - 132 - 04

January 10, 2004~~5~~

JJB/SJT

**General:**

1. A Land-Disturbing Permit and siltation agreement, with surety, will be required for this project.
2. Water and sewer inspection fees, as applicable, must be paid in full prior to issuance of a Land-Disturbing Permit.
3. Responsible Land-Disturber Notification. Provide the name of an individual who will be in charge of and responsible for carrying out the land-disturbing activity. Permits or plans without this information are deemed incomplete and not approved until proper notification is received.

**Chesapeake Bay Preservation:**

4. An environmental inventory is required for this project and was not provided. Provide an environmental inventory in accordance with Section 23-10(2) of the Chesapeake Bay Preservation ordinance. *(Note: A simple table, showing the components required per the ordinance and whether or not there are impacts, and reference to the "parent" inventory as completed under SP-18-03, can be added to Sheet C-3.)*

**Erosion & Sediment Control Plan:**

5. Design Checklist. A completed *James City County Erosion and Sediment Control and Stormwater Management Design Plan Checklist* was not provided for the project. The intent of the checklist is to ensure the plan preparer has provided all items necessary for a complete and expeditious review.
6. Temporary Stockpile Areas. Show any temporary soil stockpile, staging and equipment storage areas (with required erosion and sediment controls) or indicate on the plans that none are anticipated for the project site.
7. Limits of Work. Show and label a distinct limit of work (clearing and grading) around the entire site periphery, including that associated with the water service and forcemain connections from the main building to the rectory.
8. Sequence of Construction. Provide a sequence of construction outlining installation of erosion and sediment control measures for the project and associated site and utility work. Include perimeter areas required for installation of erosion and sediment control and utility connections.
9. Rock Construction Entrance. Provide a rock construction entrance for the project.
10. E&S Plan. The southeast corner of the project is deficient of erosion and sediment control measures. Runoff from the graded sidewalk may cause problems on the graded fill slope and/or downstream RPA.

11. E&S Plan. The inset map on Sheet C-2 shows the proposed location of the forcemain and water line service connection (from the main building to the rectory) in relation to the RPA buffer. It is not recommended that the forcemain be situated within 6-inches of the RPA buffer as this may cause incidental disturbance to the buffer. However, as it is understood that there are minimum spacing requirements between the forcemain and water line and space restrictions due to the future master planned building location. At a minimum, the plan must show tree protection and proposed erosion and sediment control measures for protection of the RPA buffer as well as erosion and sediment control plan measures for the entire water line and forcemain to their connection with existing facilities. Ensure this disturbed area is included in the disturbed area estimate for the project. *(Note: This was asked for under Comment # 5b for concept review C-111-04).*
12. Tree Protection. Add tree protection measures to the plan, especially along the limit of disturbance along the west side of the project (along the conservation easement) and next to the forcemain alignment.
13. Silt fence. Perimeter silt fence was shown on Sheet C-3 as the primary erosion and sediment control measure for the site. The effectiveness of silt fence in this application is questionable, as slope lengths behind the fence approach 150 ft. at many locations (under existing topography, when the site is first cleared, before mass grading). This exceeds limitations as set forth in Minimum Standard & Spec. 3.05 of the VESCH. It is recommended that the entire west limit of work have super-silt (wire reinforced) fence; otherwise, other structural controls such as perimeter diversion dikes and sediment traps may be necessary to properly protect the conservation easement and existing pond.
14. Inlet Protection. Provide storm drain inlet protection at storm structure A-3A.
15. Outlet Protection. In order to provide a level outlet protection pad at invert out El. 62.0 at pipe outfall structure A-5, the outlet protection pad would be much larger than that shown. Although minimum La may be 6 feet, the actual La dimension would be approximately 12 ft. long. Show class of riprap required at the outfall (Class I recommended).
16. Manufactured BMP. The footprint of the manufactured BMP area (roughly 90 ft. long by 30 ft. wide) should be protected from upland sheet and concentrated flow from the disturbed rectory building area site. Use diversions or other structural measures.
17. Existing Pond. The existing downstream pond is in close proximity (about 75 feet) to the proposed limit of work for the site. As this pond is not to be used as a temporary sediment basin or to control disturbed area runoff from the site, add notes to the plan or sequence of construction that include provisions to monitor the existing offsite pond for signs of sedimentation, specifically during or as a result of construction on this site. The contractor should be aware that additional onsite or offsite controls may be necessary to protect the pond from degradation. This may include additional E&SC measures, cleaning and sediment removal within the basin or connecting pipe systems and coordination with the owner, engineer or the County.

**Stormwater Management / Drainage:**

18. Existing Pond. Label the existing pond shown on Sheet C-3 as “MC 055 – Private Dam”. Based on information submitted as part of the St. Bede’s project, our records show that design high water is at El. 61.31 and normal pool at El. 59. Provide labels for design high water and normal

pool. Also, show and label the pond buffer/setback on the rectory (east) side of the pond, which is 25 ft. from design high water. Even though the pond buffer/setback is contained within the conservation easement, it should be shown on plans/plats.

19. BMP Worksheet. The Worksheet for BMP Point System was revised to include the proposed manufactured BMP and reductions in conservation easement due to the rectory. Our records show that the BMP Points for Pond # 1 (Infiltration Basin, 1" per impervious acre) was weighted at 9.3357 points instead of 10 due to the series-treatment train approach for area which drains through the bioretention cells (1.55 acres) and then through the infiltration basin, as drainage area through the bioretention cells cannot take 8 point credit and then again take 10-point credit. Also, due to elimination of the entrance culvert from the original plan, we believe that due to field changes to the plan, total drainage area to Pond # 1 may be reduced from 14 acres to about 13.13 acres (please confirm).

Under the original approved 14 acres drainage area, the weighted BMP point credit value assigned to the County type C-4 infiltration pond # 1 (MC 050) is as follows:

1.55 acres x 4 points (1/2 credit for area through bioretention)  
12.45 acres x 10 points (rest of drainage area to Pond # 1)  
14 acre drainage area

$$1.55 (4) \times 12.45 (10) / 14 = 9.3357 \text{ points} \times 14/32.33 = 4.04 \text{ structural BMP points}$$

Please revise the BMP worksheet accordingly to show 9.3357 points (weighted) in the column for "BMP Points" for Pond # 1 and actual drainage area to Pond # 1 (13.13 acres). The revised worksheet will need to show that the site still achieves 10-points with the rectory addition.

20. Conservation Easement. The recorded conservation easement plat will need to be amended to show the loss of 0.36 acres at the rectory site. This area is the "red" area as shown on the exhibit in the design report. Ensure the plat properly shows the area (approximately 0.38 acres of 0.15 points per 1 percent area) that came to the plan preparer's attention as not being included. This area is behind (south) of the main building area and is shown as "green" area on the exhibit in the design report. The amended plat must be submitted for review prior to recordation.
21. Conservation Easement. Show and label the new conservation easement line on plan Sheets C-3 and L-1.
23. Drainage Map. The design report shows computations for pre- and postdevelopment conditions. Provide a drainage map which corresponds to these analyses. Also, provide a drainage map to support the onsite storm drainage system and manufactured BMP design. The map must delineate drainage divides consistent with drainage areas and C factors as shown in the storm sewer design computations in the design report.
23. Drainage Plan. It is unclear if yard area from along the north side of the proposed rectory (proposed contours El. 78 to El. 70) is to be directed to the manufactured BMP or is bypassed into conservation easement area. If bypassed, some sort of permanent erosion control measure (EC-3, level spreader, etc.) may be necessary to prevent erosion from concentrated drainage.

24. Manufactured BMP. It appears an underground manufactured BMP system (double “raintanks©” or approved equal”) will be used to provide quality and quantity control for this portion of the project. This system was also worked into the master stormwater master plan to show compliance with the 10-point system. The following comments pertain to the manufactured BMP system.
- 24a. Provide manufacturer’s information or links to appropriate websites so that we can perform a general review of information on the proposed manufactured BMP system. It is unclear what type of material the tank units are made from, void space ratios, limitations, etc.
  - 24b. If possible, give available pollutant removal efficiency for P, N and/or SS for the manufactured units so that a comparison can be made on the assignment of BMP points. 4-points may be a reasonable assumption; however, if a pure infiltration type facility higher point values could be assigned.
  - 24c. It is unclear if the manufactured BMP, as a 4-point BMP, is intended to be a pure or partial infiltration-type facility or if purely a temporary detention facility which outlets through a reduced size outfall-orifice pipe.
  - 24d. Provide a maintenance plan on Sheet C-4, consistent with manufacturer’s recommendations.
  - 24e. Show minimum cover required from grade to top of the tank units.
25. BMP Design. If the manufactured BMP system relies on infiltration for water quality or stream channel protection purposes, then the provisions of Appendix E of the County BMP Manual would apply. It would need to be shown that underlying soils beneath the units obtains has at least a 0.5 inch per hour infiltration rate and that the facility draws down within a 48-hour period.
26. BMP Installation. Section A-A shows that the top of the tank units are flat at El. 66.51. A second section would be helpful, in a east to west direction from the pavement curb area toward the pond to show the general arrangement of ground over the footprint and whether manufacturer’s recommendations are met for minimum cover and installation depth.
27. Stream Channel Protection. It is unclear if sizing of the manufactured BMP tank sections (and stone) was performed using current stream channel protection criteria. No required volume versus available volume or drawdown information was provided, only final hydraulic routings.
28. Hydrology. The pre- and postdevelopment analyses compares discharge for predevelopment (area 1.72 acres) versus postdevelopment from the BMP (1.783 acres). If the basis of design is to compare discharge from the BMP to predevelopment conditions for the 2-, 10- and 100-year storm events, this is incorrect methodology. First, this does not meet current County stream channel protection criteria. Secondly, predevelopment conditions shall be based on the actual predevelopment drainage area to the point of analyses, not the entire project area. Based on existing topography, it would appear that there is no more than ½ acre of drainage area (wooded) to the outfall point of analyses under predevelopment conditions.

**ENVIRONMENTAL DIVISION REVIEW COMMENTS**  
**St. Bede Catholic Church, Rectory Building**  
**COUNTY PLAN NO. SP-132-04**  
*November 24, 2004*

**General:**

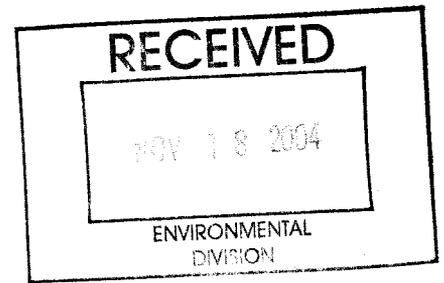
1. A Land-Disturbing Permit and siltation agreement, with surety, will be required for this project.
2. Water and sewer inspection fees, as applicable, must be paid in full prior to issuance of a Land-Disturbing Permit.
3. Responsible Land-Disturber Notification. Effective July 1<sup>st</sup> 2001, the Environmental Division will require, as a prerequisite to approval of an erosion and sediment control plan for land-disturbing activities, that the person responsible for carrying out the plan (Owner/Applicant) provide the name of an individual holding a certificate of competence issued by the Virginia Department of Conservation and Recreation who will be in charge of and responsible for carrying out the land-disturbing activity. Permits or plans without this information are deemed incomplete and will not be approved until proper notification is received.
4. Plan Number. Please reference the assigned County plan number on all subsequent submissions.

**Erosion & Sediment Control Plan:**

5. Design Checklist. Please provide a completed standard James City County Erosion and Sediment Control and Stormwater Management Design Plan Checklist, specific to this project. The intent of the checklist is to ensure the plan preparer has provided all items necessary for a complete and expeditious review.
6. Sequence of Construction. Provide a sequence of construction outlining installation of erosion and sediment control measures for the project and associated site and utility work. Include perimeter areas required for installation of erosion and sediment control and utility connections.
7. Temporary Stockpile Areas. Show any temporary soil stockpile, staging and equipment storage areas (with required erosion and sediment controls) or indicate on the plans that none are anticipated for the project site.
8. Rock Construction Entrance. Provide a rock construction entrance at all access points to paved roadways in accordance with VESCH Minimum Standard 3.02.
9. Silt fence. Use of silt fence is only recommended in areas where sheet or overland flow exists; slope length behind the barrier is less than 100 feet; and across swales where drainage area is minor - less than 1 acre drainage area and flow less than 1 cfs. Silt fence as proposed at the perimeter of the proposed parking lot and Rectory exceeds these limitations and alternate structural control measures will be required.
10. Provide storm drain inlet protection in accordance with VESCH, Minimum Standard 3.07 at storm sewer A-3(A).

11. The south-eastern corner of the project is deficient control measures. Show how the area of proposed sidewalk down slope of the western entrance to the existing structure and associated grading will be controlled to prevent the transport of sediment.
12. Limits of Work. Show and label a distinct limit of work (clearing and grading) around the entire site periphery. The current limits of work are defined to approximately 40 feet past storm sewer A-2. Please continue the bold line placement and adjust limits of work to incorporate the removal of the existing stone swale at the southern most portion of the proposed work.

**TRANSMITTAL**



DATE: November 15, 2004

TO: JCSA (2) Health Department  
Environmental Fire Department  
County Engineer Scott Whyte

FROM: Christopher Johnson, Senior Planner

SUBJECT: SP-132-04. St. Bede Catholic Church, Rectory Building

ITEMS ATTACHED: Site Plan  
Engineering Calculations (Environmental, JCSA)

INSTRUCTIONS: Please review and comment or approve and sign.

RETURN BY: November 30, 2004

RECEIVED DEC 06 2004  
Dve DEC 9

Is this development served by Newport News Waterworks? \_\_\_\_ (JCSA please check if yes)

If checked, planner will fax a copy of preliminary approval letter with Fire Department comments, and the JCSA completed water data sheet to Newport News Waterworks as soon as all three are available.

ENVIRONMENTAL DIVISION REVIEW COMMENTS  
ST. BEDED CATHOLIC CHURCH RECTORY BUILDING  
COUNTY PLAN NO. SP - 132 - 04  
January 10, 2004

General:

1. ✓ A Land-Disturbing Permit and siltation agreement, with surety, will be required for this project.
2. ✓ Water and sewer inspection fees, as applicable, must be paid in full prior to issuance of a Land-Disturbing Permit.
3. ✓ Responsible Land-Disturber Notification. Provide the name of an individual who will be in charge of and responsible for carrying out the land-disturbing activity. Permits or plans without this information are deemed incomplete and not approved until proper notification is received.

Alistair RAMSAY LS (1515-B)

Chesapeake Bay Preservation:

4. ✓ An environmental inventory is required for this project and was not provided. Provide an environmental inventory in accordance with Section 23-10(2) of the Chesapeake Bay Preservation ordinance. (Note: A simple table, showing the components required per the ordinance and whether or not there are impacts, and reference to the "parent" inventory as completed under SP-18-03, can be added to Sheet C-3.)

Sheet C-5 OK.

Erosion & Sediment Control Plan:

5. ✓ Design Checklist. A completed *James City County Erosion and Sediment Control and Stormwater Management Design Plan Checklist* was not provided for the project. The intent of the checklist is to ensure the plan preparer has provided all items necessary for a complete and expeditious review.  
IN DESIGN REPORT
6. ✓ Temporary Stockpile Areas. Show any temporary soil stockpile, staging and equipment storage areas (with required erosion and sediment controls) or indicate on the plans that none are anticipated for the project site.  
NO STOCKPILE, NOTE ON COVER.
7. ✓ Limits of Work. Show and label a distinct limit of work (clearing and grading) around the entire site periphery, including that associated with the water service and forcemain connections from the main building to the rectory.  
Sheet C-3 ✓
8. ✓ Sequence of Construction. Provide a sequence of construction outlining installation of erosion and sediment control measures for the project and associated site and utility work. Include perimeter areas required for installation of erosion and sediment control and utility connections.  
SHEET C-3
9. ✓ Rock Construction Entrance. Provide a rock construction entrance for the project.

2. (10.) E&S Plan. The southeast corner of the project is deficient of erosion and sediment control measures. Runoff from the graded sidewalk may cause problems on the graded fill slope and/or downstream RPA.

not addressed

AND CHECK  
A DAM

?  
Silt fence /  
tree protection /  
force main  
Buffer?  
Realistic?  
Not Addressed

11. E&S Plan. The inset map on Sheet C-2 shows the proposed location of the forcemain and water line service connection (from the main building to the rectory) in relation to the RPA buffer. It is not recommended that the forcemain be situated within 6-inches of the RPA buffer as this may cause incidental disturbance to the buffer. However, as it is understood that there are minimum spacing requirements between the forcemain and water line and space restrictions due to the future master planned building location. At a minimum, the plan must show tree protection and proposed erosion and sediment control measures for protection of the RPA buffer as well as erosion and sediment control plan measures for the entire water line and forcemain to their connection with existing facilities. Ensure this disturbed area is included in the disturbed area estimate for the project. (Note: This was asked for under Comment # 5b for concept review C-111-04).

ADD SF!

Not Addressed

12. Tree Protection. Add tree protection measures to the plan, especially along the limit of disturbance along the west side of the project (along the conservation easement) and next to the forcemain alignment.

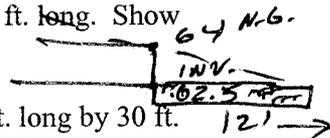
ADD TP - NORTH L.O.W.

13. Silt fence. Perimeter silt fence was shown on Sheet C-3 as the primary erosion and sediment control measure for the site. The effectiveness of silt fence in this application is questionable, as slope lengths behind the fence approach 150 ft. at many locations (under existing topography, when the site is first cleared, before mass grading). This exceeds limitations as set forth in Minimum Standard & Spec. 3.05 of the VESCH. It is recommended that the entire west limit of work have super-silt (wire reinforced) fence; otherwise, other structural controls such as perimeter diversion dikes and sediment traps may be necessary to properly protect the conservation easement and existing pond.

WRST LIMIT SUPER SF!  
DOUBLE ROW

14. Inlet Protection. Provide storm drain inlet protection at storm structure A-3A. C-3

15. Outlet Protection. In order to provide a level outlet protection pad at invert out El. 62.0 at pipe outfall structure A-5, the outlet protection pad would be much larger than that shown. Although minimum La may be 6 feet, the actual La dimension would be approximately 12 ft. long. Show class of riprap required at the outfall (Class I recommended).



16. Manufactured BMP. The footprint of the manufactured BMP area (roughly 90 ft. long by 30 ft. wide) should be protected from upland sheet and concentrated flow from the disturbed rectory building area site. Use diversions or other structural measures.

NOT TO BE CONST  
TILL AFTER SITE GRADED.

17. Existing Pond. The existing downstream pond is in close proximity (about 75 feet) to the proposed limit of work for the site. As this pond is not to be used as a temporary sediment basin or to control disturbed area runoff from the site, add notes to the plan or sequence of construction that include provisions to monitor the existing offsite pond for signs of sedimentation, specifically during or as a result of construction on this site. The contractor should be aware that additional onsite or offsite controls may be necessary to protect the pond from degradation. This may include additional E&SC measures, cleaning and sediment removal within the basin or connecting pipe systems and coordination with the owner, engineer or the County.

Stormwater Management / Drainage:

18. Existing Pond. Label the existing pond shown on Sheet C-3 as "MC 055 - Private Dam". Based on information submitted as part of the St. Bede's project, our records show that design high water is at El. 61.31 and normal pool at El. 59. Provide labels for design high water and normal

pool. Also, show and label the pond buffer/setback on the rectory (east) side of the pond, which is 25 ft. from design high water. Even though the pond buffer/setback is contained within the conservation easement, it should be shown on plans/plats.

- 19. ✓ BMP Worksheet. The Worksheet for BMP Point System was revised to include the proposed manufactured BMP and reductions in conservation easement due to the rectory. Our records show that the BMP Points for Pond # 1 (Infiltration Basin, 1" per impervious acre) was weighted at 9.3357 points instead of 10 due to the series-treatment train approach for area which drains through the bioretention cells (1.55 acres) and then through the infiltration basin, as drainage area through the bioretention cells cannot take 8 point credit and then again take 10-point credit. Also, due to elimination of the entrance culvert from the original plan, we believe that due to field changes to the plan, total drainage area to Pond # 1 may be reduced from 14 acres to about 13.13 acres (please confirm).

LOOKS OK  
DOES NOT RELY ON RAINFALL TO GET 10-PTS.  
NDS ADJUSTED

Under the original approved 14 acres drainage area, the weighted BMP point credit value assigned to the County type C-4 infiltration pond # 1 (MC 050) is as follows:

- 1.55 acres x 4 points (1/2 credit for area through bioretention)
- 12.45 acres x 10 points (rest of drainage area to Pond # 1)
- 14 acre drainage area

$1.55 (4) \times 12.45 (10) / 14 = 9.3357 \text{ points} \times 14/32.33 = 4.04 \text{ structural BMP points}$

Please revise the BMP worksheet accordingly to show 9.3357 points (weighted) in the column for "BMP Points" for Pond # 1 and actual drainage area to Pond # 1 (13.13 acres). The revised worksheet will need to show that the site still achieves 10-points with the rectory addition.

- 20. Conservation Easement. The recorded conservation easement plat will need to be amended to show the loss of 0.36 acres at the rectory site. This area is the "red" area as shown on the exhibit in the design report. Ensure the plat properly shows the area (approximately 0.38 acres of 0.15 points per 1 percent area) that came to the plan preparer's attention as not being included. This area is behind (south) of the main building area and is shown as "green" area on the exhibit in the design report. The amended plat must be submitted for review prior to recordation.

SEE WATLAND

RESPONSE SAYS SEE AMENDED PLAT; NONE FOUND.

NOT RESOLVED.

- 21. ✓ Conservation Easement. Show and label the new conservation easement line on plan Sheets C-3 and L-1.

- 22. ✓ Drainage Map. The design report shows computations for pre- and postdevelopment conditions. Provide a drainage map which corresponds to these analyses. Also, provide a drainage map to support the onsite storm drainage system and manufactured BMP design. The map must delineate drainage divides consistent with drainage areas and C factors as shown in the storm sewer design computations in the design report.

STORM COMPS OK

DRAINAGE MAP OK.

- 23. ✓ Drainage Plan. It is unclear if yard area from along the north side of the proposed rectory (proposed contours El. 78 to El. 70) is to be directed to the manufactured BMP or is bypassed into conservation easement area. If bypassed, some sort of permanent erosion control measure (EC-3, level spreader, etc.) may be necessary to prevent erosion from concentrated drainage.

ALTA PT 69-70, DRAINAGE TO CG-2 TO A-3A OK ✓

24. Manufactured BMP. It appears an underground manufactured BMP system (double "raintanks©" or approved equal") will be used to provide quality and quantity control for this portion of the project. This system was also worked into the master stormwater master plan to show compliance with the 10-point system. The following comments pertain to the manufactured BMP system. *NOW SHOWS SW MASTER PLAN > 10 pts. W/O RAIN TANKS.*
- 24a. ✓ Provide manufacturer's information or links to appropriate websites so that we can perform a general review of information on the proposed manufactured BMP system. It is unclear what type of material the tank units are made from, void space ratios, limitations, etc. *PROVIDED*
- 24b. ✓ If possible, give available pollutant removal efficiency for P, N and/or SS for the manufactured units so that a comparison can be made on the assignment of BMP points. 4-points may be a reasonable assumption; however, if a pure infiltration type facility higher point values could be assigned. *NOT FOR WR, NO SIGNIFICANCE.*
- 24c. ✓ It is unclear if the manufactured BMP, as a 4-point BMP, is intended to be a pure or partial infiltration-type facility or if purely a temporary detention facility which outlets through a reduced size outfall-orifice pipe. *NOT FOR WR.*
- 24d. ✓ Provide a maintenance plan on Sheet C-4, consistent with manufacturer's recommendations. *C-4A*
- 24e. ✓ Show minimum cover required from grade to top of the tank units. *1/2" DETAILS*
25. ✓ BMP Design. If the manufactured BMP system relies on infiltration for water quality or stream channel protection purposes, then the provisions of Appendix E of the County BMP Manual would apply. It would need to be shown that underlying soils beneath the units obtains has at least a 0.5 inch per hour infiltration rate and that the facility draws down within a 48-hour period. *NOT FOR WR, NO SIGNIFICANCE*
26. ✓ BMP Installation. Section A-A shows that the top of the tank units are flat at El. 66.51. A second section would be helpful, in a east to west direction from the pavement curb area toward the pond to show the general arrangement of ground over the footprint and whether manufacturer's recommendations are met for minimum cover and installation depth. *SECTION PROVIDED*
27. ✓ Stream Channel Protection. It is unclear if sizing of the manufactured BMP tank sections (and stone) was performed using current stream channel protection criteria. No required volume versus available volume or drawdown information was provided, only final hydraulic routings. *SCPV APPEARS CONSIDERED C=0.6, USED C=0.85 V=0.14 AC-FT.*
28. ✓ Hydrology. The pre- and postdevelopment analyses compares discharge for predevelopment (area 1.72 acres) versus postdevelopment from the BMP (1.783 acres). If the basis of design is to compare discharge from the BMP to predevelopment conditions for the 2-, 10- and 100-year storm events, this is incorrect methodology. First, this does not meet current County stream channel protection criteria. Secondly, predevelopment conditions shall be based on the actual predevelopment drainage area to the point of analyses, not the entire project area. Based on existing topography, it would appear that there is no more than 1/2 acre of drainage area (wooded) to the outfall point of analyses under predevelopment conditions. *DA=0.50 AC.*



# Land Disturbing Permit Application

MC-139

SP 132-04

James City County  
Environmental Division  
P.O. Box 8784  
Williamsburg, VA 23187-8784  
Telephone: (757) 253-6670

Landowner

Name: ST BEDE PARISH - CATHOLIC DIOCESE <sup>OF RICHMOND</sup> Date: 5-19-05

Mailing Address: PO BOX 5400 Phone: 229-3631

WILLIAMSBURG, VA 23188 Fax: 229-7845

Project: PLAN OF DEVELOPMENT ST BEDE'S RECTORY AND PARKING  
EXPANSION - AMENDMENT TO SP-28-01

Project Street Address: 3686 IRONBOUND ROAD

Total Size of Tract or Lot: 42.9 ACRES

Total Area to Be Disturbed: 1.8 ACRES (2.8% OF PROPERTY)

Description of Land Disturbing Activity:

LAND DISTURBING ACTIVITIES IN ACCORDANCE WITH  
SITE PLAN TO ADD A RECTORY, CORRESPONDING  
UTILITIES AND ADDITIONAL PARKING.

Right of Entry

I, , (Signature) hereby grant designated officials of James City County,  
(WILLIAM H CARR, PASTOR) (Print Name and Title)

Virginia, the right to enter my property for the purpose of inspection or monitoring for compliance with the approved erosion and sediment plan on the above-referenced project.



Project Number: 00-R0219

Waterway: Mill Creek

1. Participant:  
St. Bede Church

2. Authorized Agent:  
LandMark Design Group  
ATTN: John Lowenthal  
429 Ironbound Road, Suite 100  
Williamsburg, VA 23188

3. Address of Job Site:  
James City County on Ironbound Road, north of Route 5 on the east side of Ironbound Road (Jamestown Farms area)

4. Project Description:  
42 acre project site, of which the applicant is seeking to fill .18 +/- acre (in a recently excavated depression) of wetlands to construct the St. Bede Catholic Church of the Catholic Diocese of Richmond...seeks authorization of NW-26

5. Findings

This is regarding your request for verification of a jurisdictional wetlands delineation. The limits of the jurisdictional wetlands regulated under Section 404 of the Clean Water Act (33 C.F.R. 1344) on the St. Bede Church site in James City County, Virginia are shown on the drawing entitled "St. Bede", submitted to the Corps by LandMark Design Group and have been flagged in the field. Nontidal, headwater wetlands have been identified on the site. This jurisdictional determination is valid for a period of five years from the date of this letter.

Please be advised that work in the jurisdictional areas may require a Department of Army permit and possibly authorization by State and local authorities. Please note that this is simply a jurisdictional determination for the subject property. This letter does not authorize the placement of dredged or fill material or mechanized land clearing in wetlands or waters of the United States. Proposed work on the property, which would potentially result in the placement of dredged or fill material into wetlands or waters of the United States, would be subject to review by the Corps and any appropriate State and local agencies prior to the start of any fill activities. The term *discharge of dredged material* is defined as "any addition, including any redeposit, of dredged material, including excavated material, into waters of the United States which is incidental to any activity including mechanized landclearing, ditching, channelization, or other excavation (33 CFR Part 232.2(1)(iii)).

6. Corps Contact: Lesley Leonard (757) 441-7652

J. Robert Hume, III  
Chief, Western Virginia Regulatory Section

NAO FL 13 REVISED DEC 90

