

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

General File ID or BMP ID: WC083

PIN: 1330800001C

Subdivision, Tract, Business or Owner

Name (if known):

Wellington

Property Description:

Open Space Section 2

Site Address:

(For internal use only)

Box 22

Drawer: 9

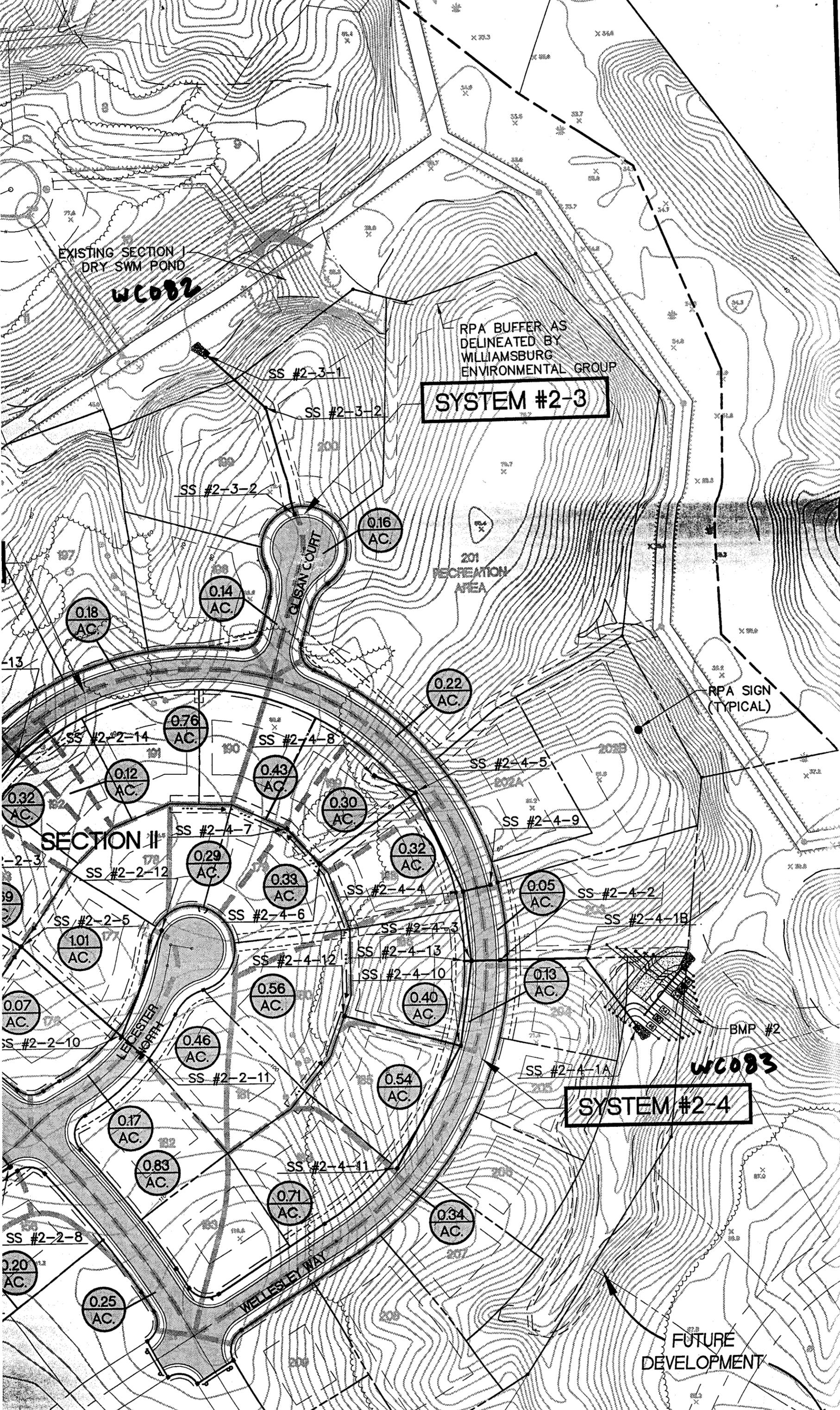
Agreements: (in file as of scan date)

N

Book or Doc#:

Page:

Comments



EXISTING SECTION I
DRY SWM POND

WC082

RPA BUFFER AS
DELINEATED BY
WILLIAMSBURG
ENVIRONMENTAL GROUP

SYSTEM #2-3

SS #2-3-1

SS #2-3-2

SS #2-3-2

GLISAN COURT

201
RECREATION
AREA

RPA SIGN
(TYPICAL)

SECTION II

SS #2-2-14

SS #2-4-8

SS #2-4-5

SS #2-4-9

SS #2-2-12

SS #2-4-7

SS #2-4-4

SS #2-4-2

SS #2-4-1B

SS #2-2-10

SS #2-4-6

SS #2-4-3

SS #2-4-12

SS #2-4-13

SS #2-4-10

SS #2-2-10

SS #2-2-11

SS #2-4-11

SS #2-4-1A

WC083

SYSTEM #2-4

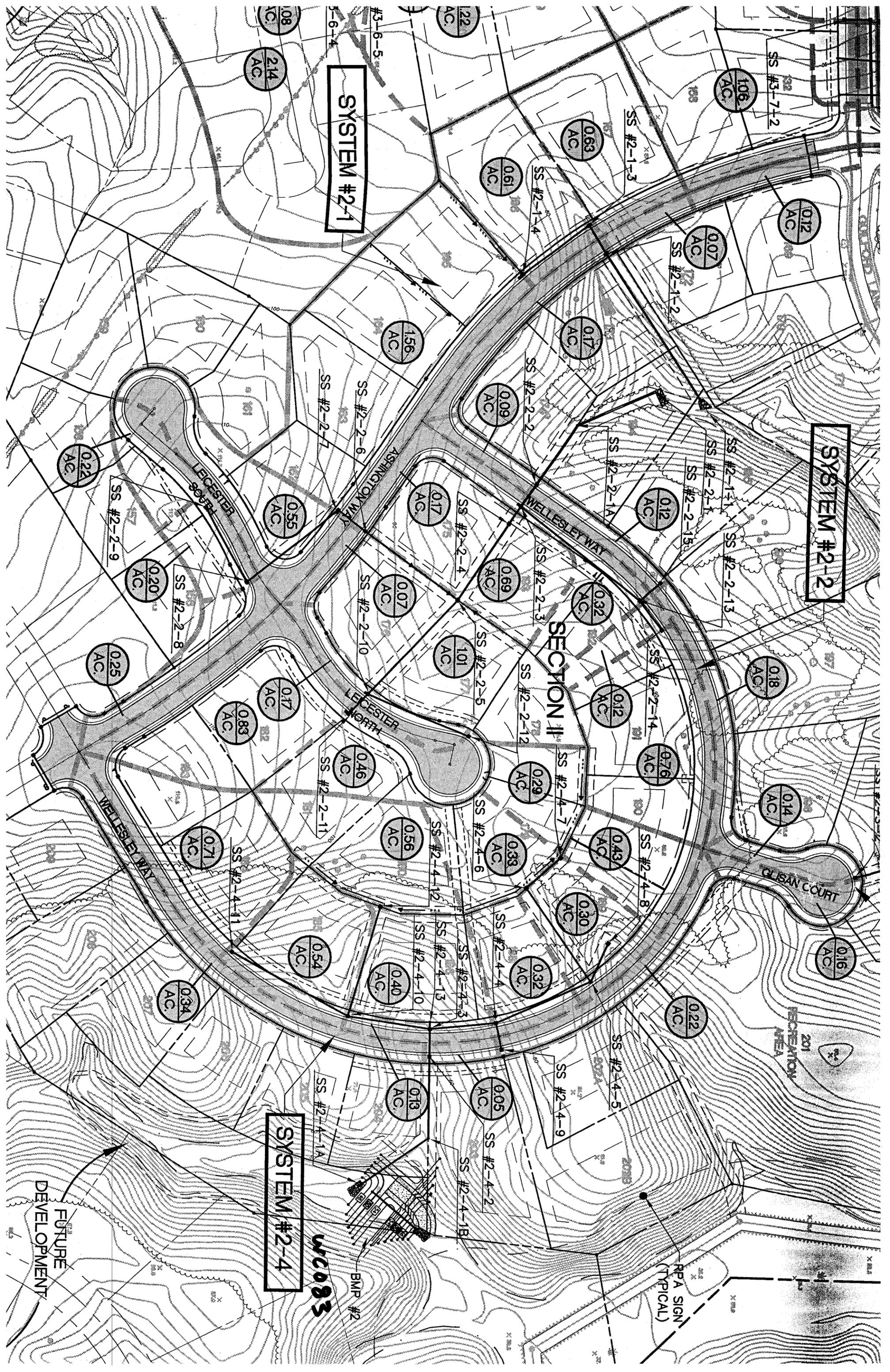
BMP #2

SS #2-2-8

SS #2-2-10

SS #2-2-11

FUTURE
DEVELOPMENT



SYSTEM #2-1

SYSTEM #2-2

SECTION II

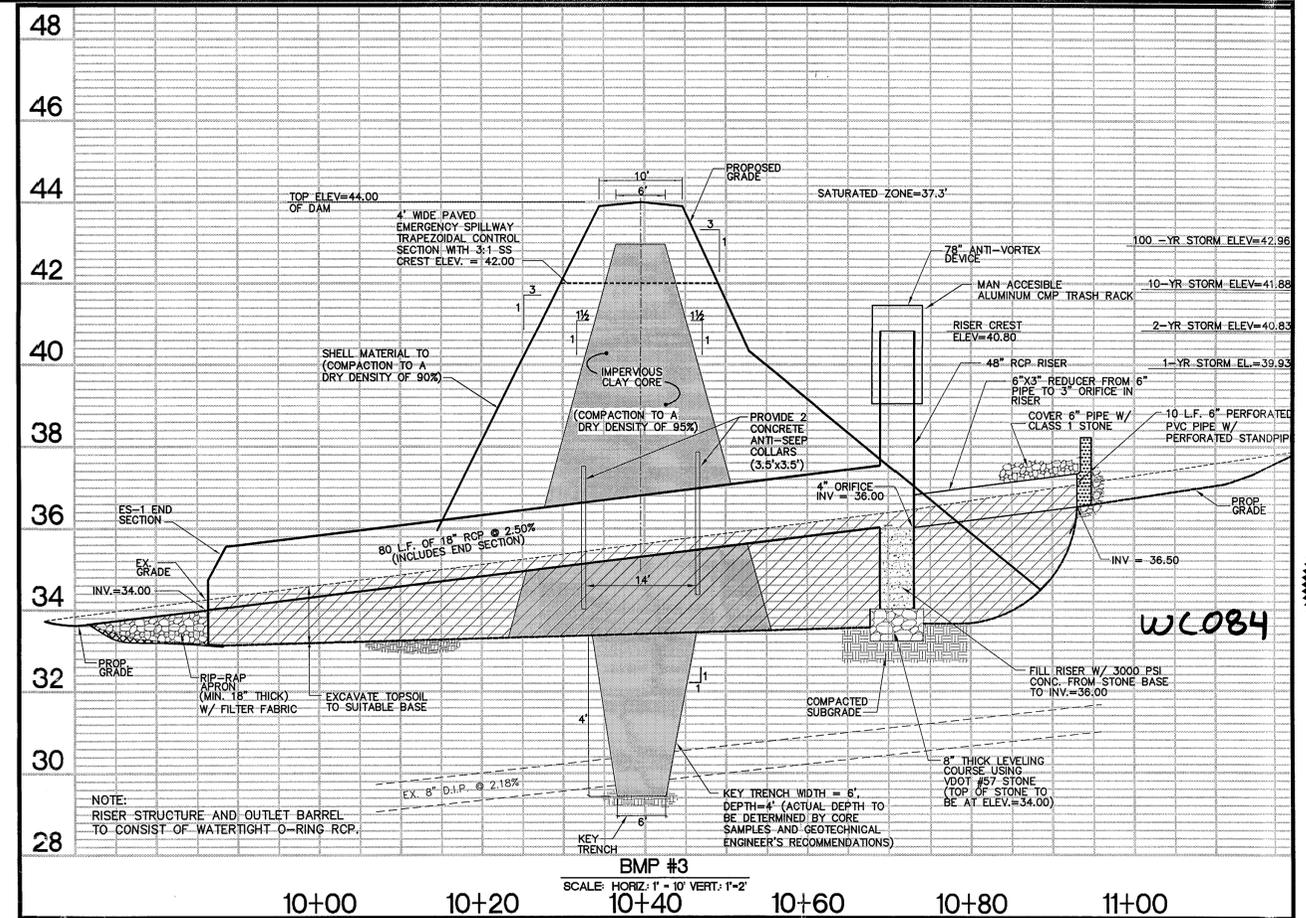
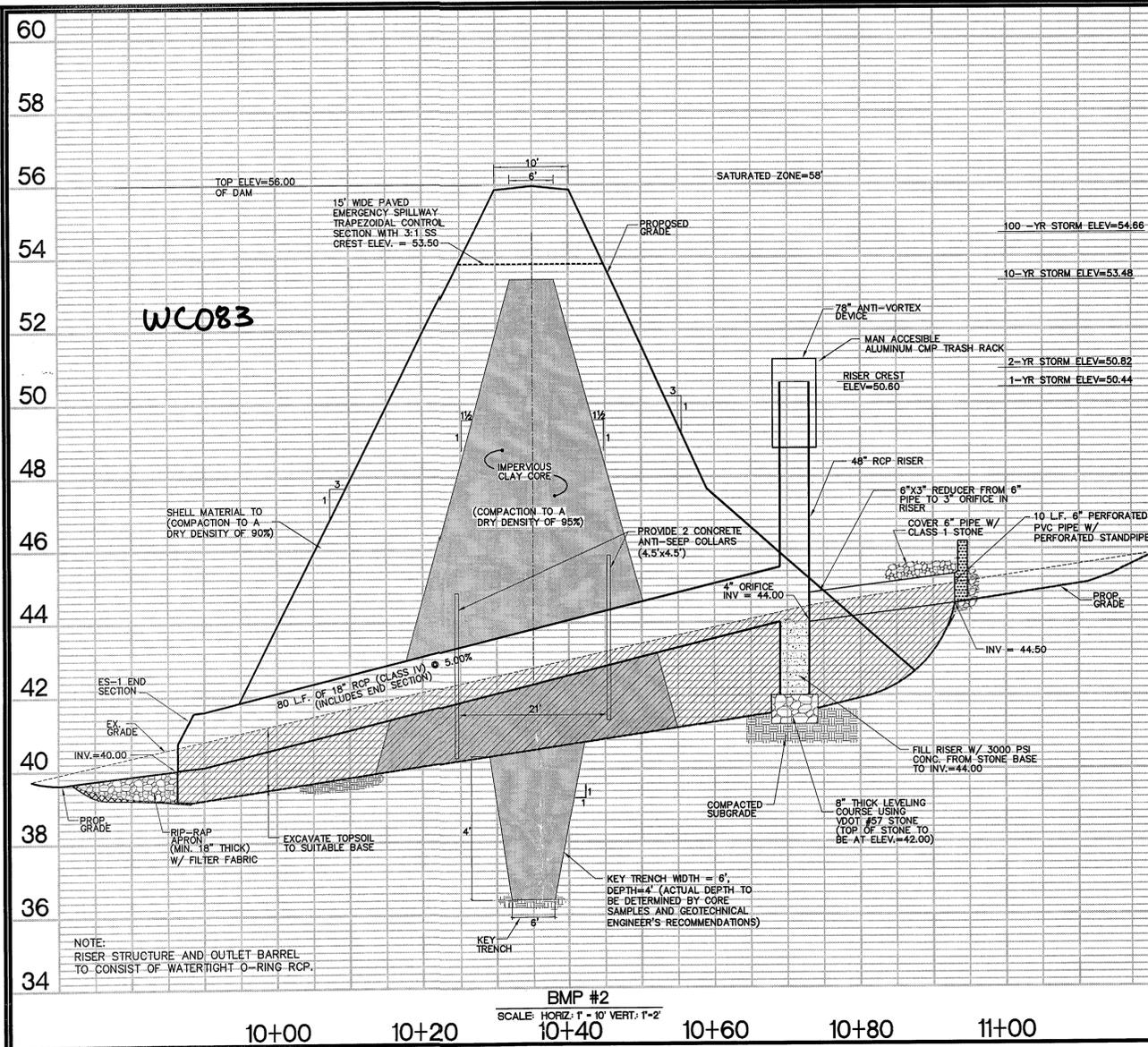
SYSTEM #2-4

WC083

FUTURE DEVELOPMENT

RPA SIGN (TYPICAL)

BMP #2



STORMWATER MANAGEMENT/ BMP FACILITY MAINTENANCE PLAN

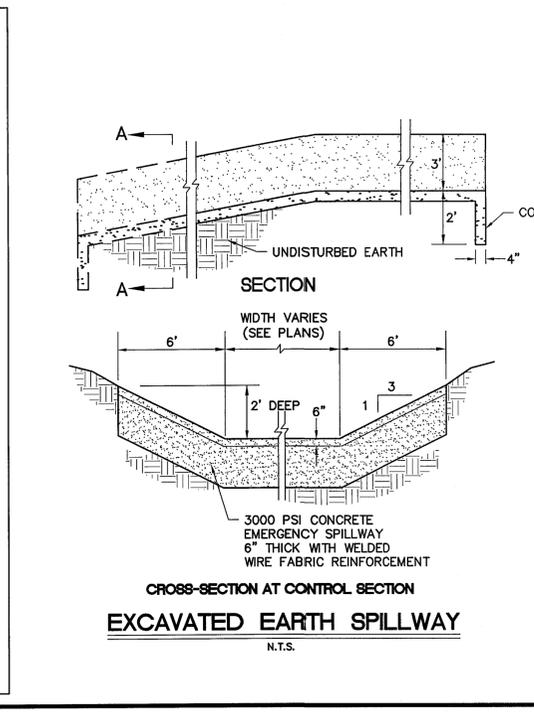
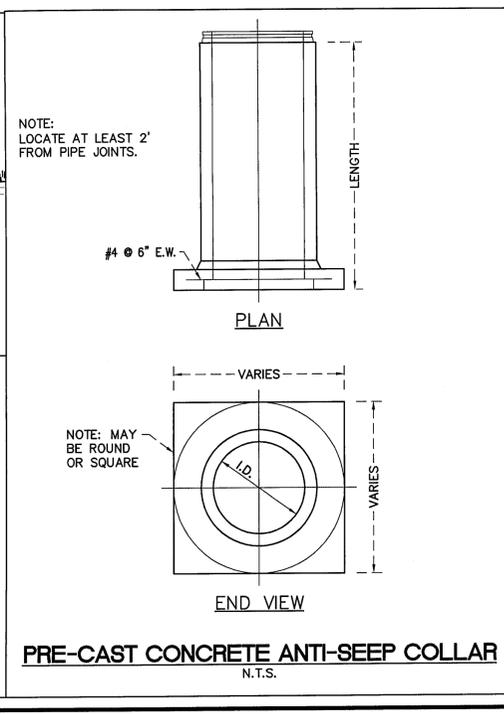
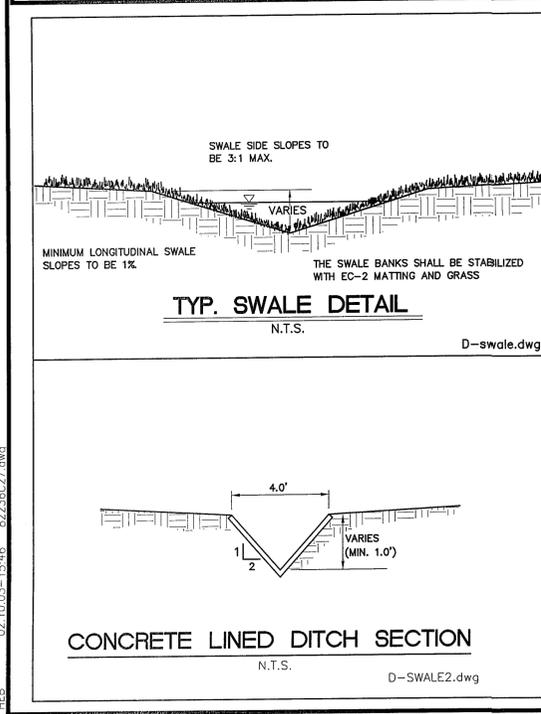
PROPER MAINTENANCE OF THIS FACILITY IS ENCOURAGED TO PREVENT THE INTRODUCTION OF DEBRIS AND SEDIMENT IN TO THE FACILITY, SPILLWAYS) AND DOWNSTREAM WATERWAYS. FOLLOWING INSTALLATION OF THE FACILITY AND ESTABLISHMENT OF VEGETATION IN DISTURBED AREAS, INSPECTIONS FOR SEDIMENT BUILDUPS WILL BE PERFORMED AT LEAST QUARTERLY. IT IS ANTICIPATED THAT UNDER NORMAL CONDITIONS, SEDIMENT REMOVAL FROM THE FACILITY WILL BE REQUIRED ONCE EVERY 10 YEARS. IF OTHER CONSTRUCTION OR RELATED ACTIVITIES ARE PERFORMED ON UPSLOPE PARCELS, ADEQUATE PROTECTION SHOULD BE PROVIDED AND INSPECTIONS PERFORMED AT LEAST ONCE WEEKLY OF THESE NEWLY DISTRIBUTED AREAS AS WELL AS INSPECTIONS FOR ACCUMULATED SEDIMENTS AT THE BMP FACILITY.

A DESIGNATED REPRESENTATIVE OF THE OWNER WILL INSPECT THE BMP STRUCTURE AFTER EACH SIGNIFICANT RAINFALL EVENT OR THE FOLLOWING WORKING DAY IF A WEEKEND OR HOLIDAY OCCURS. A SIGNIFICANT RAINFALL FOR THIS STRUCTURE IS DEFINED AS ONE (1) INCH OR MORE OF GAUGED RAINFALL WITHIN A 24-HOUR PERIOD. ONCE PER YEAR, A REPRESENTATIVE OF THE COUNTY MAY JOINTLY INSPECT THE STRUCTURE. APPROPRIATE ACTION, PERFORMED AT THE COST OF THE OWNER, WILL BE TAKEN TO ENSURE APPROPRIATE MAINTENANCE. KEYS TO LOCKED ACCESS POINTS SHALL BE MADE AVAILABLE TO COUNTY INSPECTION PERSONNEL UPON REQUEST. INSPECTION AND MAINTENANCE OF THE FACILITY WILL CONSIST OF THE FOLLOWING ADDITIONAL MEASURES:

1. THE INSPECTION FOR SEDIMENT BUILDUP WILL BE PERFORMED BY VISUAL INSPECTION AND A PHYSICAL DETERMINATION OF SEDIMENT DEPTH WITHIN THE STORAGE AREA. SEDIMENT REMOVAL IS REQUIRED USING A RUBBER-WHEELED BACKHOE, AT THE SAME TIME, OR AT LEAST ONCE PER YEAR, THE RISER BOTTOM AND OUTLET PIPE SHALL BE CLEANED OF ACCUMULATED SEDIMENTS. DISPOSE OF SEDIMENTS REMOVED FROM THE FACILITY AT AN ACCEPTABLE DISPOSAL AREA. SEDIMENT SHALL NOT BE ALLOWED TO ACCUMULATE IN DEPTHS GREATER THAN 1-FOOT, NO SEDIMENT SHALL BE ALLOWED TO ACCUMULATE TO PREVENT THE PROPER FUNCTION OF ANY PIPE OR CULVERT.
2. PERFORM MAINTENANCE MOWING OF GRASSED AREAS AT LEAST TWICE EACH YEAR. GRASSES SUCH AS TALL FESCUE SHOULD BE MOWED IN EARLY SUMMER AFTER EMERGENCE OF THE HEADS ON COOL SEASON GRASSES AND IN LATE FALL TO PREVENT SEEDS OF ANNUAL WEEDS FROM MATURING. MOWING OF LEGUMES CAN BE LESS FREQUENT. TREES AND SHRUBS SHOULD NOT BE PERMITTED TO GROW ON ANY PART OF THE GRADED EMBANKMENT.
3. PERFORM SOIL SAMPLING ON STABILIZED BMP SOIL AREAS ONCE EVERY FOUR (4) YEARS. SOIL SAMPLING AND TESTING SHOULD BE PERFORMED BY A QUALIFIED INDEPENDENT TESTING LABORATORY. APPLY ADDITIONAL LIME AND FERTILIZER IN ACCORDANCE WITH TEST RECOMMENDATIONS.
4. IN STABILIZED BMP AREAS, IF VEGETATION COVERS LESS THAN 40% FERTILIZE AND SEED IN ACCORDANCE WITH RECOMMENDATIONS FOR NEW SEEDLINGS, AS LISTED IN DAM CONSTRUCTION NOTES. IF VEGETATION COVERS MORE THAN 40% SURFACES, LIME FERTILIZER AND OVERSEED IN ACCORDANCE WITH CURRENT SEEDLING RECOMMENDATIONS.
5. PERFORM QUARTERLY INSPECTIONS OF THE RELEASE STRUCTURES, RISER SECTION AND CREST OF SPILLWAY FOR THE OBSERVANCE OF COLLECTED DEBRIS. IMMEDIATELY REMOVE ANY DEBRIS TO MAINTAIN THE INTEGRITY OF THE STRUCTURE AND PROVIDE AN ATTRACTIVE APPEARANCE. DURING QUARTERLY INSPECTIONS, THE POND DRAIN VALVE, USUALLY LEFT IN THE VALVE "CLOSED" POSITION, SHALL BE INSPECTED AND OPERATED THROUGH TWO COMPLETE FULL-OPEN TO FULL-CLOSE TO FULL-OPEN CYCLES.
6. PERFORM YEARLY STRUCTURAL INSPECTIONS OF THE GRADED SIDE SLOPES OF THE FACILITY FOR SIGNS OF ANIMAL/ RODENT BORROWS OR SLOPE EROSION. IMMEDIATELY PERFORM NECESSARY REPAIRS, REFILLING OR RESEEDING AS APPROPRIATE.
8. RECORD KEEPING. THE LANDOWNER OR DESIGNATED REPRESENTATIVE SHALL KEEP REASONABLE, ACCURATE WRITTEN RECORDS OR INSPECTIONS PERFORMED FOR THE STRUCTURE. RECORDS SHALL DOCUMENT ROUTINE MAINTENANCE AND/OR REPAIRS PERFORMED. COPIES SHALL BE PROVIDED TO THE COUNTY UPON REQUEST.
9. THE FACILITY SHALL NOT BE MODIFIED IN ANY WAY WITHOUT PRIOR CONSENT/APPROVAL OF THE COUNTY.

GENERAL NOTES FOR CONSTRUCTION OF STORMWATER BASINS

1. THE CONTRACTOR SHALL PROVIDE ALL WORK AND MATERIALS NEEDED TO CONSTRUCT THE STORMWATER BASIN, STORMWATER MANAGEMENT PONDS, BEST MANAGEMENT PRACTICES, SEDIMENT BASINS AND SEDIMENT TRAPS. THE WORK SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NEEDED FOR THE COMPLETION OF GRADING AND EARTHWORK ASSOCIATED WITH THE CONSTRUCTION.
2. THE CONTRACTOR SHALL CONSULT AND PROVIDE FOR THE SERVICES OF A GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER SHALL PROVIDE TEST RESULTS ON PLACED DAM MATERIALS, IDENTIFYING SOIL CLASSIFICATION, PERMEABILITY, PLASTICITY INDEX, AND COMPACTION. ALL TESTS SHALL BE IN CONFORMANCE WITH ASTM STANDARDS. THE COST OF THE SERVICES OF THE GEOTECHNICAL ENGINEER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SATISFACTORY GEOTECHNICAL RESULTS ARE NEEDED PRIOR TO FINAL APPROVAL.
3. ALL INSPECTIONS REQUIRED FOR THE WORK SHALL BE PERFORMED BY A GEOTECHNICAL ENGINEER AT THE EXPENSE OF THE GENERAL CONTRACTOR.
4. ON-SITE EXCAVATED MATERIAL, IF DETERMINED SUITABLE FOR USE IN DAM CONSTRUCTION BY A GEOTECHNICAL ENGINEER, MAY BE USED FOR DAM CONSTRUCTION. SHOULD ADDITIONAL MATERIAL BE REQUIRED, THE CONTRACTOR SHALL IDENTIFY THE NEED FOR MATERIAL TO THE OWNER, AS ADDITIONAL BORROW MATERIAL MAY BE AVAILABLE ON-SITE. ALL EXCAVATED MATERIAL DETERMINED BY THE GEOTECHNICAL ENGINEER TO BE UNSUITABLE SHALL BE DISPOSED OF PROPERLY AT THE CONTRACTOR'S EXPENSE. ALL EXCAVATED MATERIAL NOT REQUIRED FOR BACKFILLING SHALL EITHER BE DEPOSITED ON SITE AND SPREAD BY THE CONTRACTOR, OR SHALL BE DEPOSITED IN ANOTHER AREA ON THE SITE AS DIRECTED BY THE OWNER. THE CONTRACTOR SHALL PROVIDE PROPER STABILIZATION, AND EROSION AND SEDIMENT CONTROL MEASURES AS MAY BE REQUIRED TO CONTROL EROSION AND SEDIMENTATION AT EARTHWORK AND STOCKPILE LOCATIONS PER THE VESCH THIRD EDITION.
5. UNDERCUT FOR THE FOUNDATION OF THE DAM EMBANKMENT SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATION. THE FOUNDATION SHALL BE BACKFILLED WITH SOILS CLASSIFIED AS SM, SC, OR CL UNDER THE UNIFIED SOIL CLASSIFICATION SYSTEM. SOILS SHALL HAVE A MINIMUM OF 15% BY WEIGHT FINES, HAVING A PLASTICITY INDEX OF 30% AND A PERMEABILITY OF 0.0004 IN./SEC. OR LESS. FILL SHALL BE COMPACTED IN 12-INCH LIFTS, OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER, TO A DRY DENSITY OF 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D-698). EXCAVATION FOR THE DAM KEY SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATION. HEIGHT, DEPTH, AND WIDTH OF THE KEY SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. THE KEY SHALL BE FORMED USING SOILS CLASSIFIED AS SC OR CL WITH A PERMEABILITY OF 0.0004 IN./SEC. OR LESS.
6. THE DAM CORE SHALL BE AS CONSTRUCTED WITH NON-EXPANSIVE SC OR CL CLAYEY MATERIAL WITH PERMEABILITY OF 0.0004 IN./SEC. OR LESS. THE FILL OF THE CORE SHALL BE MADE IN 12-INCH LIFTS, OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER, TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D-698). EXCAVATION FOR THE DAM KEY SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATION. HEIGHT, DEPTH, AND WIDTH OF THE KEY SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. THE KEY SHALL BE FORMED USING SOILS CLASSIFIED AS SC OR CL WITH A PERMEABILITY OF 0.0004 IN./SEC. OR LESS.
7. UPON COMPLETION, THE CONSTRUCTION OF THE DAM WILL BE CERTIFIED BY A GEOTECHNICAL ENGINEER WHO HAS INSPECTED THE STRUCTURE DURING CONSTRUCTION.
8. A RECORD DRAWING (AS-BUILT) SHALL BE SUBMITTED, REVIEWED, AND APPROVED PRIOR TO RELEASE OF THE POSTED BOND / SURETY.



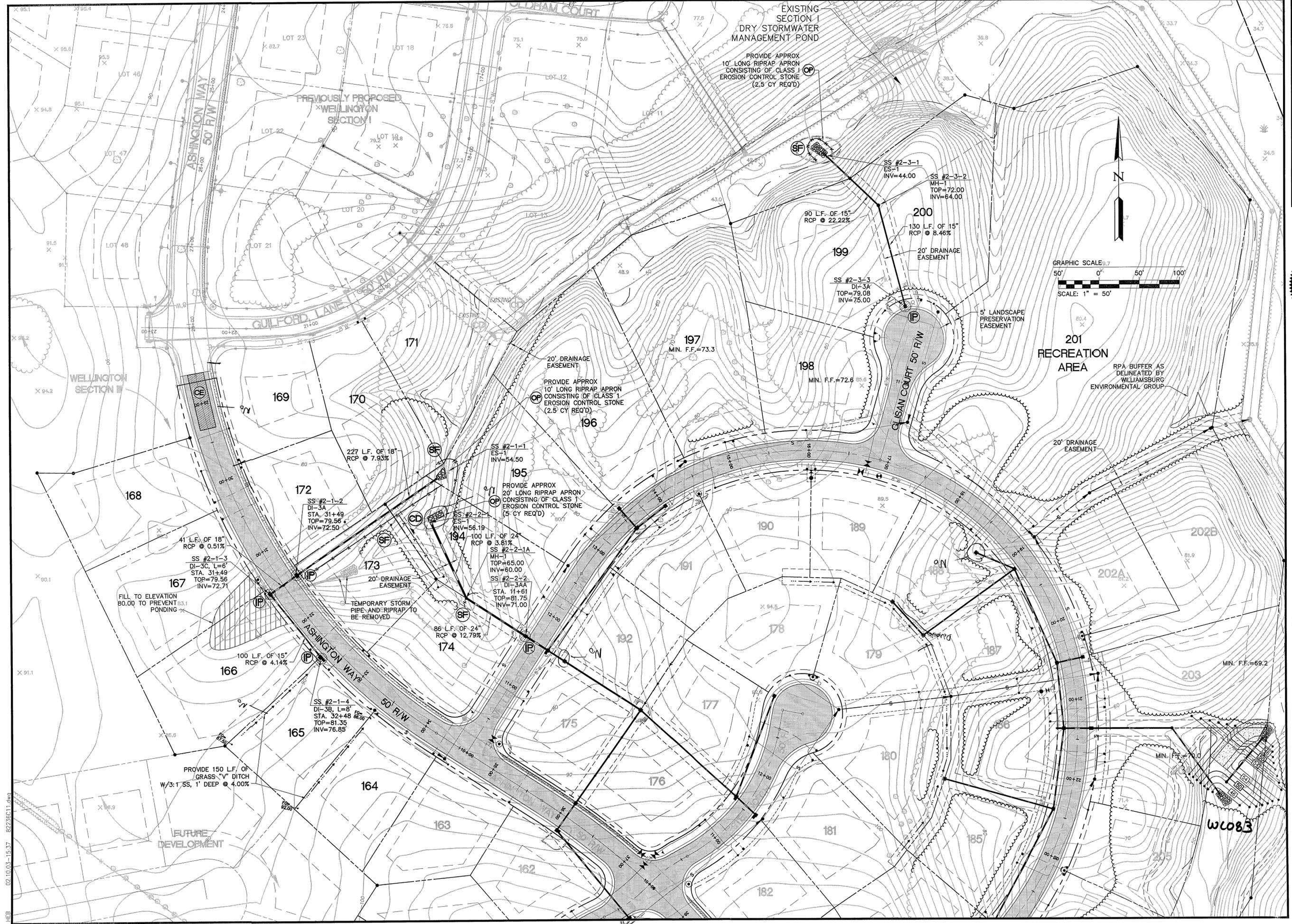
NO.	DATE	REVISION / COMMENT / NOTE
3	2/7/03	REVISED PER J.C.C. COMMENTS
2	1/1/03	REVISED PER J.C.C. COMMENTS
1	9/20/02	REVISED PER J.C.C. COMMENTS



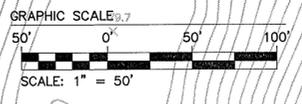
5248 Olde Towne Road, Suite 1
 Williamsburg, Virginia 23188
 (757) 253-0040
 Fax (757) 220-8994



DESIGNED	DRAWN
HWP/CWG	CWG/HBK
SCALE	DATE
1"=100'	3/28/01
Project No. 8223-06	
Drawing No. 27	



NO.	DATE	REVISION / COMMENT / NOTE	BY
3	2/7/03	REVISED PER J.C.C. COMMENTS	HWP
2	1/7/03	REVISED PER J.C.C. COMMENTS	HWP
1	9/20/02	REVISED PER J.C.C. COMMENTS	HWP



5248 Olde Towne Road, Suite 1
 Williamsburg, Virginia 23188
 (757) 253-0040
 Fax (757) 220-8994



CONSULTING ENGINEERS
 JAMES CITY COUNTY STONEHOUSE DISTRICT VIRGINIA

Designed HWP/CWG	Drawn RMS/HBK
Scale 1"=50'	Date 3/28/01
Project No. 8223-06	
Drawing No. 11	

HEB 02.10.03-15.37 B2216C11.dwg

AES CONSULTING ENGINEERS
 Engineering, Surveying and Planning
 5248 Olde Towne Road, Suite 1
 WILLIAMSBURG, VIRGINIA 23188

LETTER OF TRANSMITTAL

(757) 253-0040
 FAX (757) 220-8994

TO American Eastern
632 Hampton Highway
Yorktown, Va 23693

DATE <u>MARCH 30, 2004</u>	JOB NO. <u>0223-06</u>
ATTENTION <u>DICK ASHE</u>	
RE: <u>WELLINGTON, SECTION 2</u>	

WE ARE SENDING YOU Attached Under separate cover via _____ the following items:

- Shop drawings Prints Plans Samples Specifications
 Copy of letter Change order _____

COPIES	DATE	NO.	DESCRIPTION
2			STORM SEWER EXTENSION PLAN

THESE ARE TRANSMITTED as checked below:

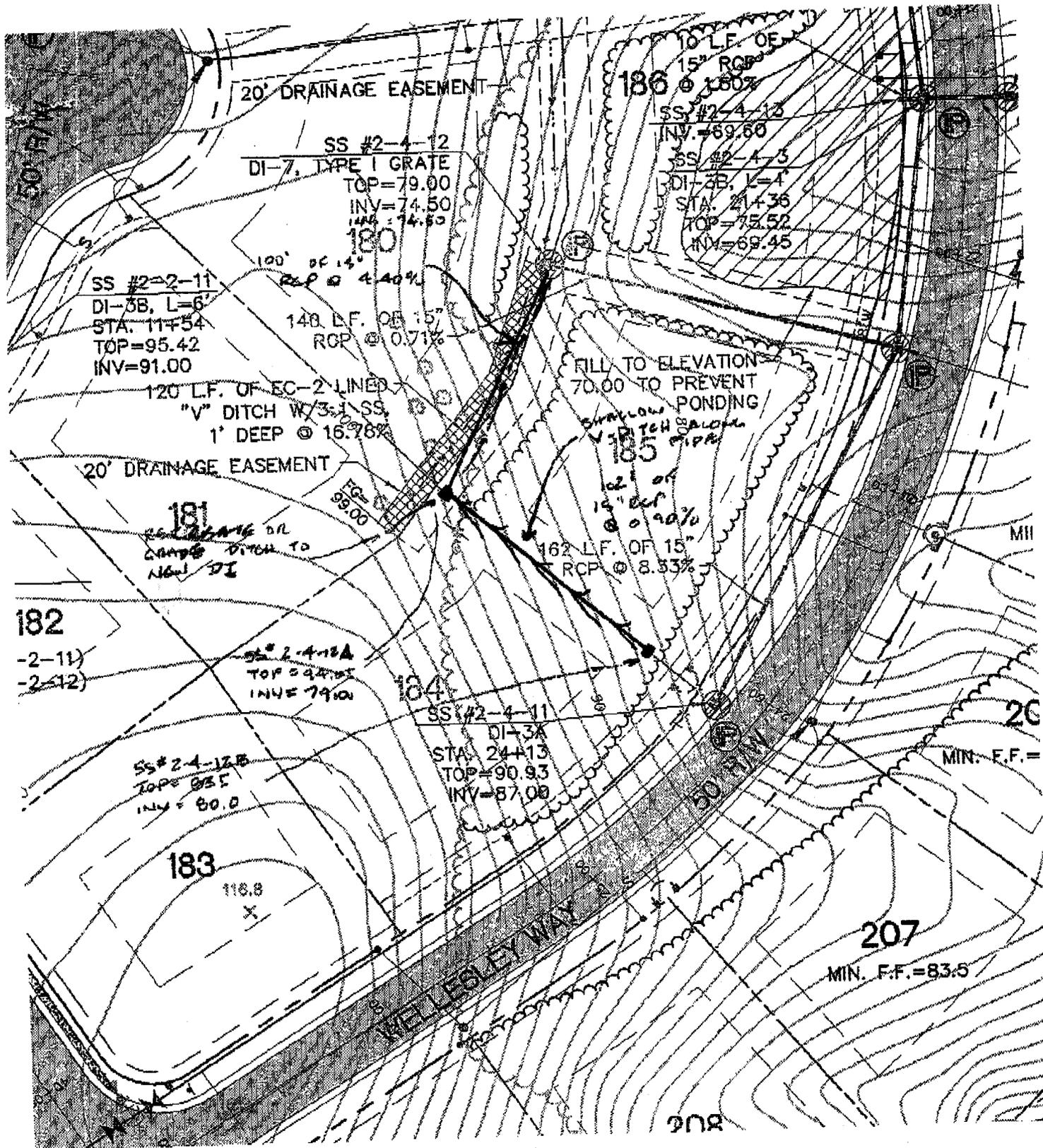
- For approval Approved as submitted Resubmit _____ copies for approval
 For your use Approved as noted Submit _____ copies for distribution
 As requested Returned for corrections Return _____ corrected prints
 For review and comment _____
 FOR BIDS DUE _____ PRINTS RETURNED AFTER LOAN TO US

REMARKS

THIS WAS DEVELOPED TO RESOLVE
LOT TO LOT DRAINAGE ISSUES BETWEEN
LOTS 184 AND 185

COPY TO [Signature] JIM PUNICKY JCC ENVIRONMENTAL V. [Signature]
 SIGNED: _____

If enclosures are not as noted, kindly notify us at once.



Wellesley Street
Sewer Catch Basin

Hydraflow Storm Sewer Tabulation

Station	Line	To Line	Len (ft)	Drng Area		Rinoff coeff (C)	Area x C		Tc		Rain (in/hr)	Total flow (cfs)	Cap full (cfs)	Vel (ft/s)	Pipe		Invert Elev		HGL Elev		Grnd / Rlm Elev		Line ID
				Incr (ac)	Total (ac)		Incr	Total	Inlet (min)	Syst (min)					Size (in)	Slope (%)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	Up (ft)	Dn (ft)	
1	End		100.0	0.00	4.72	0.00	0.00	2.13	0.0	18.7	4.7	9.94	25.72	5.82	18	6.00	60.00	44.00	54.35	53.65	60.50	48.00	SS 24-18 TO 2-
2	1		100.0	0.39	4.72	0.60	0.23	2.13	5.0	18.4	4.7	10.00	48.01	6.11	18	19.20	69.20	50.00	70.41	54.91	75.52	60.50	SS 24-2 TO 24-
3	2		30.0	0.13	4.33	0.60	0.08	1.89	5.0	18.3	4.7	8.92	9.69	5.72	18	0.83	69.45	69.20	70.63	70.61	75.52	75.52	SS 24-3 TO 24-
4	3		82.0	0.32	1.89	0.35	0.11	0.82	10.0	14.9	5.2	4.26	7.33	2.41	18	0.49	69.85	69.45	71.31	71.19	74.54	75.52	SS 24-4 TO 24-
5	4		128.0	0.43	1.35	0.60	0.28	0.58	10.0	14.1	5.3	3.06	4.04	2.49	15	0.39	70.35	69.85	71.69	71.40	76.16	76.16	SS 24-4 TO 24-
6	5		140.0	0.33	0.62	0.35	0.12	0.22	10.0	11.9	6.6	1.22	16.42	2.07	15	6.46	79.40	70.35	79.84	71.79	86.00	86.00	SS 24-7 TO 24-
7	6		56.0	0.29	0.29	0.35	0.10	0.10	10.0	10.0	6.0	0.61	5.11	1.78	15	0.62	79.75	79.40	80.06	80.00	84.00	86.00	SS 24-8 TO 24-
8	5		52.0	0.30	0.30	0.35	0.11	0.11	10.0	10.0	6.0	0.63	5.45	0.54	15	0.71	70.72	70.35	71.79	71.79	74.00	76.16	SS 24-8 TO 24-
9	4		30.0	0.22	0.22	0.60	0.13	0.13	5.0	5.0	7.1	0.94	4.57	0.77	15	0.50	70.00	69.85	71.41	71.40	74.54	74.54	SS 24-9 TO 24-
10	3		100.0	0.54	1.91	0.35	0.19	0.85	10.0	17.9	4.8	4.05	13.00	4.07	15	4.06	73.50	69.45	74.31	71.19	79.40	75.52	SS 24-10 TO 24-
11	10		162.0	0.20	0.20	0.35	0.07	0.07	10.0	10.0	5.0	0.42	18.64	1.31	15	8.33	87.00	79.50	87.26	74.67	90.93	79.40	SS 24-11 TO 24-
12	10		140.0	0.56	1.17	0.35	0.20	0.59	10.0	10.0	6.0	3.54	5.46	3.77	15	0.71	74.50	73.50	75.26	74.67	79.00	79.40	SS 24-12 TO 24-
13	3		10.0	0.40	0.40	0.35	0.14	0.14	10.0	10.0	6.0	0.84	7.91	0.68	15	1.50	69.60	69.45	71.19	71.19	69.60	75.52	SS 24-13 TO 24-
14	12		100.0	0.30	0.61	0.65	0.20	0.40	5.0	6.5	6.7	2.87	13.70	3.24	15	4.50	79.00	74.50	79.65	75.88	94.00	78.00	SS 24-12 TO S
15	14		102.0	0.31	0.31	0.65	0.20	0.20	5.0	5.0	7.1	1.44	6.39	2.40	15	0.98	80.00	79.00	80.48	79.92	93.00	94.00	SS 24-12A TO

Project File: B223-6-2-4.slm

IDF File: JCCStormsewer.IDF

Total number of lines: 15

Run Date: 03-30-2004

NOTES: Intensity = 143.72 / (inlet time + 19.20)^0.94; Return period = 10 Yrs.; Initial rainfallwater elevation = 53.65 (ft)

632 HAMPTON HWY, YORKTOWN, VA 23693
757-867-8800, FAX = 757-867-7188

AMERICAN EASTERN, INC.

Fax

To: James Rudnicky
JCC Environmental Division

From: AMERICAN EASTERN
H. R. Ashe

Fax: 757-259-4032

Pages: 4 INCLUDING COVER

Phone:

Date: 4/1/2004

Re:

CC:

Urgent For Review Please Comment Please Reply Please Recycle

• **Comments:**



File - Wellington
Sections 2+3

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

W. Tayloe Murphy, Jr.
Secretary of Natural Resources

5636 Southern Boulevard
Virginia Beach, VA 23462
www.deq.state.va.us

Robert G. Burnley
Director

Francis L. Daniel
Tidewater Regional Director
(757) 518-2000

STATE WATER CONTROL BOARD ENFORCEMENT ACTION

SPECIAL ORDER BY CONSENT WITH WELLINGTON, L.L.C. Registration No. VAR103223

SECTION A: Purpose

This is a Consent Special Order issued under the authority of §62.1-44.15(8a) and §62.1-44.15(8d) of the Code of Virginia, between the State Water Control Board and Wellington, L.L.C. for the purpose of resolving certain violations of environmental law and regulations.

SECTION B: Definitions

Unless the context clearly indicates otherwise, the following words and terms have the meaning assigned to them below:

1. "Code" means the Code of Virginia (1950), as amended.
2. "Board" means the State Water Control Board, a permanent citizens' board of the Commonwealth of Virginia as described in the Code §§ 10.1-1184 and 62.1-44.7.
3. "Department" or "DEQ" means the Department of Environmental Quality, an agency of the Commonwealth of Virginia as described in the Code § 10.1-1183.
4. "Director" means the Director of the Department of Environmental Quality.
5. "Order" means this document, also known as a Consent Special Order.
6. "TRO" means the Tidewater Regional Office of DEQ, located in Virginia Beach, Virginia.
7. "VPDES Regulation" means 9 VAC 25-31-10 *et seq.* - Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulation.
8. "VPDES General Permit Regulation" means 9 VAC 25-180-10 *et seq.* - General Virginia Pollutant Discharge Elimination System Permit Regulation for Discharges of Storm Water from Construction Activities.

9. "VPDES Permit" means General VPDES Permit No. VAR10.
10. "VWP Regulation" means 9 VAC 25-210-10 *et seq.* – Virginia Water Protection (VWP) Permit Program Regulation.
11. "VAC" means the Virginia Administrative Code.

SECTION C: Findings of Fact and Conclusions of Law

1. Wellington, L.L.C. owns and is constructing a residential and mixed use/commercial development located in James City County known as Wellington (hereinafter known as the "Subdivision"). Reportedly, the Subdivision will be constructed in ten phases. The Subdivision has a total land area of approximately 490 acres and total disturbed area of approximately 400 acres.
2. In response to a complaint, DEQ staff inspected the Subdivision on November 19, 2003 and observed that land disturbance activities were occurring at the site in Sections II and III of the Wellington Subdivision, as depicted on development plans dated March 28, 2001, and titled "Project No. 8223-06." DEQ records indicate that at the time of the inspection, Wellington, L.L.C. had not submitted a registration statement for coverage under the VPDES General Permit Regulation for land disturbances at the Subdivision.
3. DEQ received a registration statement from Wellington, L.L.C. for coverage under the VPDES General Permit Regulation on November 24, 2003. The registration statement indicated that construction activity at the Subdivision started in 2003. Coverage under the VPDES Permit became effective on December 9, 2003.
4. During the November 19, 2003 site visit DEQ staff also observed that substantial erosion had occurred at the Subdivision in association with land disturbing activities, resulting in discharges of measurable sediment deposits in the adjacent wetlands and in an unnamed tributary of France Swamp. The noted sediment areas were located in the vicinity of Wellesley Way and Attleborough Way.
5. DEQ conducted additional site visits on December 5, 2003, April 26, 2004, and June 1, 2004. During these site visits DEQ staff observed the extent of sediment deposition in the wetlands and the unnamed tributary that had occurred at the Subdivision.
 - a. On December 5, 2003 DEQ staff estimated that 1-3 inches of sediment had been discharged and deposited in the channel of the unnamed tributary in the vicinity of Wellesley Way. Inspection of the second impact area in the vicinity of Attleborough Way revealed that sediment was running off the construction site and discharging into neighboring wetlands. DEQ staff estimated that approximately 12 inches of sediment covered 15,000 square feet of wetlands in this area.
 - b. On April 26, 2004 DEQ staff observed sediment laden water in the unnamed tributary approximately 200 ft. downstream from the Subdivision's sediment basin, in the vicinity of Wellesley Way. In the vicinity of Attleborough Way, several silt fences were observed with accumulated sediments exceeding half the height of the silt fence. In this area,

DEQ staff estimated that approximately 12 inches of sediment had discharged into and nearly filled the unnamed tributary channel and approximately 6 inches of sediment had been distributed on the adjacent floodplain. Where the small unnamed tributary joined a larger tributary section, approximately 36 inches of sediment was observed in the unnamed tributary channel bottom. This channel was filled with sediment for a distance measuring a minimum of 100 feet.

c. On June 1, 2004 DEQ staff observed that sediment originating in part from the rear yard of Lot #62 (in the vicinity of Penzance Place and Downpatrick Way) had migrated across the sediment basin access road, over several rows of silt fence and straw bales and discharged into an area of wetlands. Sediment accumulation in front of the silt fences exceeded half the height of the barriers, and in several instances, overtopped the silt fence. Approximately 8-12 inches of sediment was observed in wetlands for a distance of approximately 250 feet downstream of the silt fence barriers. A soil sample taken approximately 200 feet downstream of the silt fences revealed approximately 8 inches of recently deposited sandy material over hydric soils.

6. DEQ staff estimates a total of 0.699 acres of wetlands and perennial stream channels were impacted by the sediment deposits at the Subdivision (0.349 acres in the vicinity of Attleborough Way, 0.156 acres in the vicinity of Downpatrick and Penzance Place, and 0.194 acres in the vicinity of Wellsley Way).

7. DEQ did not issue Wellington, L.L.C. a permit to fill wetlands at the Subdivision.

8. Wellington, L.L.C. did not notify DEQ of the above listed discharges and/or filling of wetlands.

9. DEQ staff conducted a VPDES Permit inspection at the Subdivision on May 12, 2004. The inspection revealed several deficiencies in compliance with the VPDES Permit requirements, including Wellington's failure to develop a Storm Water Pollution Prevention Plan and implement its associated operational controls (failure to document major grading activities, inspect disturbed areas of construction at least once every 14 calendar days, and identify contractors and subcontractors) and failure to construct and maintain erosion and sediment controls properly (silt fencing down or containing sediment exceeding half the height of the fence, curb inlet protection requiring sediment removal, slope drains without outlet protection, and stockpiles not properly stabilized).

10. DEQ issued Wellington, L.L.C. NOV No. W2003-01-TRO-002 dated February 2, 2004 advising of the observed wetland impacts and NOV No. W2004-05-T-0003 dated May 27, 2004 advising of the deficiencies in compliance with VPDES General Permit Regulation requirements.

11. Section 62.1-44.5.A of the Code prohibits discharges to State waters except in compliance with a certificate issued by the Board. Section 9 VAC 25-180-70 of the VPDES General Permit Regulation and Part III.F. of the VPDES Permit prohibit discharges to State waters except in compliance with the VPDES Permit. Wellington, L.L.C. violated § 62.1-44.5.A of the Code by discharging sediment into State waters under conditions not authorized by the

Board. After the effective date of coverage under the VPDES Permit, Wellington, L.L.C. violated 9 VAC 25-180-70 of the VPDES General Permit Regulation and Part III.F. of the VPDES Permit by discharging to surface waters at the Subdivision without complying with the storm water pollution prevention plan requirements of the VPDES Permit.

12. Section 62.1-44.5.B of the Code, Section 9 VAC 25-180-70 of the VPDES General Permit Regulation, and Part III.G. of the VPDES Permit require that any permittee who discharges or causes or allows a discharge of pollutants to State waters, that is not authorized by a certificate issued by the Board, notify the DEQ of the discharge promptly. Wellington, L.L.C. violated § 62.4-44.5.B of the Code, Section 9 VAC 25-180-70 of the VPDES General Permit Regulation, and Part III.G. of the VPDES Permit by failing to immediately notify DEQ of the discharges at the Subdivision.

13. Section Sections 62.1-44.5.A and 62.1-44.15:5.D. of the Code prohibit filling in a wetland except in compliance with a Virginia Water Protection Permit. Wellington violated Sections 62.1-44.5 and 62.1-44.15:5.D. of the Code by discharging into and filling wetlands at the Subdivision without a permit issued by the Board.

14. Section 9 VAC 25-180-60.A.1. of the VPDES General Permit Regulation requires facilities to submit a registration statement at least two days prior to commencing construction activities. Wellington, L.L.C. violated 9 VAC 25-180-60.A.1. by commencing construction activities at the Subdivision prior to submitting a registration statement to DEQ.

15. Section 9 VAC 25-180-70 of the VPDES General Permit Regulation and Part II of the VPDES Permit require that the permittee develop and implement a storm water pollution prevention plan ("SWP3"). Section 9 VAC 25-180-70 of the VPDES General Permit Regulation and Part II.D of the VPDES Permit require that the permittee construct and maintain erosion and sediment controls, document major grading activities, implement temporary stabilization practices, and inspect disturbed areas of construction at least once every 14 calendar days as provided for in the SWP3. Section 9 VAC 25-180-70 of the VPDES General Permit Regulation and Part II.E. of the VPDES Permit require that the permittee identify contractors and subcontractors in the SWP3. Wellington, L.L.C. violated Section 9 VAC 25-180-70 of the VPDES General Permit Regulation and Part II of the VPDES Permit by failing to develop and implement a SWP3 for the construction activity at the Subdivision.

16. Wellington, L.L.C. reports the problems associated with erosion at the construction site were acerbated due to the frequent, often times intense, rain events, and the highly erodible sandy soils at the Subdivision.

17. Wellington, L.L.C. has implemented erosion and sediment control measures at the Subdivision including hiring personnel dedicated to install/maintain erosion and sediment control devices, placing sod on Wellington, L.L.C. owned home sites, encouraging builders and buyers to place sod on home sites, and offering home owners fiber matting at contractor's costs, among other things.

SECTION D: Agreement and Order

Accordingly, the Board, by virtue of the authority granted it in Va. Code §§ 62.1-44.15(8a) and (8d), orders Wellington, L.L.C., and Wellington, L.L.C. voluntarily agrees, to perform the actions described in Appendix A of this Order. In addition, the Board orders Wellington, L.L.C., and Wellington, L.L.C. voluntarily agrees, to pay a civil charge \$20,000 within 30 days of the effective date of the Order in settlement of the violations cited in this Order. The payment shall include Wellington, L.L.C.'s Federal Identification Number and shall note on its face that the payment is being made in accordance with the requirements of this Order. Payment shall be made by check, certified check, money order, or cashier's check payable to the "Treasurer, Commonwealth of Virginia," delivered to:

Receipts Control
Department of Environmental Quality
Post Office Box 10150
Richmond, Virginia 23240

SECTION E: Administrative Provisions

1. The Board may modify, rewrite, or amend the Order with the consent of Wellington, L.L.C., for good cause shown by Wellington, L.L.C. or on its own motion after notice and opportunity to be heard.
2. This Order only addresses and resolves those violations specifically identified herein, including those matters addressed in the Notices of Violation issued to Wellington, L.L.C. by DEQ on February 2, and May 27, 2004. This Order shall not preclude the Board or the Director from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law regarding any additional, subsequent, or subsequently discovered violations; (2) seeking subsequent remediation of the facility as may be authorized by law; or (3) taking subsequent action to enforce the Order. This Order shall not preclude appropriate enforcement actions by other federal, state, or local regulatory authorities for matters not addressed herein.
3. This Order is made by agreement and with the consent of the parties, and does not constitute a finding, adjudication or admission of violation of any federal, state or local law, rule, or regulation or any allegations contained herein.
4. Wellington, L.L.C. consents to venue in the Circuit Court of the City of Richmond for any civil action taken to enforce the terms of this Order.
5. Wellington, L.L.C. declares it has received fair and due process under the Administrative Process Act, Va. Code §§2.2 - 4000 *et seq.*, and the State Water Control Law and it waives the right to any hearing or other administrative proceeding authorized or required by law or regulation, and to any judicial review of any issue of fact or law contained herein. Nothing herein shall be construed as a waiver of the right to any administrative proceeding for, or to judicial review of, any action taken by the Board to enforce this Order.
6. Failure by Wellington, L.L.C. to comply with any of the terms of this Order shall constitute a violation of an order of the Board. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by

- the Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.
7. If any provision of this Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.
 8. Wellington, L.L.C. shall be responsible for failure to comply with any of the terms and conditions of this Order unless compliance is made impossible by earthquake, flood, other acts of God, war, strike, or such other occurrence. Wellington, L.L.C. shall show that such circumstances were beyond its control and not due to a lack of good faith or diligence on its part. Wellington, L.L.C. shall notify the DEQ Regional Director in writing when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of the Order. Such notice shall set forth:
 - a. the reasons for the delay or noncompliance;
 - b. the projected duration of any such delay or noncompliance;
 - c. the measures taken and to be taken to prevent or minimize such delay or noncompliance; and
 - d. the timetable by which such measures will be implemented and the date full compliance will be achieved.Failure to so notify the Regional Director within three (3) days of learning of any condition above, which Wellington, L.L.C. intends to assert will result in the impossibility of compliance, shall constitute a waiver of any claim to inability to comply with a requirement of this Order.
 9. This Order is binding on the parties hereto; their successors in interest, designees and assigns, jointly and severally.
 10. This Order shall become effective upon execution by both the Director or his designee and Wellington, L.L.C. Notwithstanding the foregoing, Wellington, L.L.C. agrees to be bound by any compliance date, which precedes the effective date of this Order.
 11. This Order shall continue in effect until:
 - a. Wellington, L.L.C. petitions the Director or his designee to terminate the Order after it has completed all of the requirements of the Order and the Director or his designee approves the termination of the Order; or
 - b. The Director or the Board terminates this Order in his or its whole discretion upon 30 days written notice to Wellington, L.L.C.Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve Wellington, L.L.C. from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.

12. By its signature below, Wellington, L.L.C. voluntarily agrees to the issuance of this Order.

And it is so ORDERED this day of _____, 2004.

Francis L. Daniel, Tidewater Regional Director for
Robert G. Burnley, Director
Department of Environmental Quality

Wellington, L.L.C. voluntarily agrees to the issuance of this Order.

By: [Signature]
Date: 11-19-04

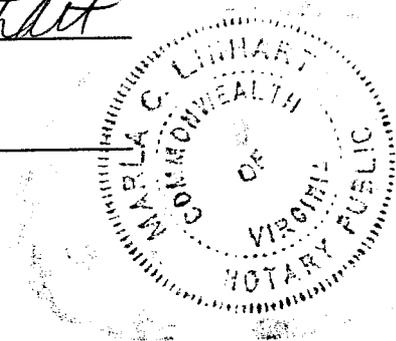
Commonwealth of Virginia
City/County of YORK, VA

The foregoing document was signed and acknowledged before me this 19 day of
November, 2004, by H. K. Ashe, who is

Pres. of Wellington, L.L.C., on behalf of the Company.
(title)

[Signature]
Notary Public

My commission expires: May 31, 2004



APPENDIX A

Wellington, L.L.C.

1. By January 1, 2005 Wellington, L.L.C. shall submit a storm water pollution prevention plan as required by Section 9 VAC 25-180-70 of the VPDES General Permit Regulation and Part II of the VPDES Permit - *Can we get copy?*
2. By January 1, 2005 Wellington, L.L.C. shall evaluate and clearly flag all areas of sediment deposition in wetlands and other surface waters in the Subdivision, resulting from erosion and sediment transport due to construction activities, including but not limited to the deposits in the vicinity of Attleborough Way, Downpatrick and Penzance Place, and Wellsley Way as described in Section C. of this Order. Wellington, L.L.C. shall notify DEQ once flagging is completed and shall coordinate a site visit to review and obtain agreement from DEQ of the flagging of the deposition areas.
3. Within 30 days of obtaining DEQ approval of the flagged sediment deposition areas addressed in Item 1. above, Wellington, L.L.C. shall submit to DEQ a professional survey of the flagged sediment deposition areas. The survey shall overlay the Subdivision site development plan and shall depict the extent of sedimentation and existing elevations determined on 1-foot contours. The survey shall include a calculation of the actual square footage of the flagged wetlands and surface waters impacted by sediment deposits at the Subdivision.
4. Within 30 days of obtaining DEQ approval of the flagged sediment deposit areas addressed in Item 1. above, Wellington, L.L.C. shall submit to DEQ an approvable Site Monitoring Plan developed to monitor site conditions at all sediment deposition areas identified in Item 1. above. The plan shall provide, at minimum, for periodic photographic monitoring from permanent photographic monitoring stations and permanent sediment depth gauges as needed to monitor wetland and instream erosion and sediment transport and deposition in all impacted wetland and stream channel sections in areas depicted in the approved survey pursuant to Item 2. above. The DEQ shall approve, or modify and approve the Site Monitoring Plan.
5. Within 15 days of approval by DEQ, Wellington, L.L.C. shall implement the Site Monitoring Plan.
6. Within 30 days of DEQ approval of the Site Monitoring Plan and by the first day of each month thereafter, until stabilization of the surveyed sediment deposition areas is achieved, Wellington, L.L.C. shall submit to DEQ a report of the Site Monitoring Plan findings. This report shall also include the status of upland stabilization and construction activities potentially impacting the surveyed sediment deposition areas. For the purposes of this Order, DEQ shall determine when satisfactory stabilization of the surveyed sediment deposition areas is achieved at the Subdivision.
7. Within 60 days of receipt of written notification from DEQ, Wellington, L.L.C. shall submit to DEQ an approvable stabilization plan addressing excessive instream erosion and sediment transport in areas identified in the survey submitted pursuant to Item 2. above. Said stabilization

plan shall take into consideration expected post-development flow conditions and shall recommend corrective actions to establish a stable low-flow channel with floodplain connectivity and dissipate erosive forces. The DEQ shall approve, or modify and approve, the Stabilization Plan. Within 15 days of approval, Wellington, L.L.C. shall implement the Stabilization Plan.

8. All submittals and reports required by this Appendix A shall be mailed to:
Francis L. Daniel, Regional Director
DEQ, Tidewater Regional Office
5636 Southern Blvd.
Virginia Beach, VA 23462

Circulate:

Darryl. ✓

Gerry. ✓

—
—

RTE

PROJ

10366105700

DATE

3/5/97

INLET	NUMBER	TYPE	LENGTH (ft)	STATION	DRAINAGE AREA (AC)	C	CA	CA	I IN/HR	Q INCR (CFS)	Q CARRY-OVER (CFS)	Q _T GUTTER FLOW	S GUTTER SLOPE (FT/FT)	S _X CROSS SLOPE (FT/FT)	T (SPREAD)	W (FT)	W/T	Sw (FT/FT)	Sw/S _X	E _o (#10)	Sw-a/(12W)	S _a (FT/FT) - S _X + SwE _o	L _T (FT) 15 P EFFEC LENGTH FT	L/L _T	d (FT)	E (#16)	h (FT)	Q _i INTERCEPTED CFS	Q _b CARRY-OVER CFS	T SPREAD @ SAG FT	REMARK		
	2	SE 4'	14.165		0.35	0.40	0.14		3.5	0.49	0	0.49	0.0080	0.00208	3.17	2'	0.63	0.0833	4.0	0.98	3.5	0.208	0.167	3.7				0.39	0.49				
	3	SE 4'	11.53.81		0.23		0.11			6.39	0	0.39	0.0099		2.14		0.93			1.00	3.5		0.167	3.7					0.39				
	4	4A 4'	10+60		0.72		0.29			1.02	0	1.02	0.001		9.57					1.00	3.5		0.167	3.7					0.39				
	5	3A 2.5'	10+60		0.35		0.14			0.49	0	0.49	0.001		9.57					1.00	3.5		0.167	3.7					0.39				
	6	3B 6'	13+82.19		0.50		0.20			0.70	0	0.70	0.0099		6.67					1.00	3.5		0.167	3.7					0.39				
	7	3B 6'	13+82.91		0.52		0.21			0.74	0	0.74	0.0099		3.97					1.00	3.5		0.159	4.8					0.70				
	8	3C 6'	12+00		0.66		0.26			0.91	0	0.91	0.0099		4.10					1.00	3.5		0.153	4.9					0.70				
	9	3C 6'	12+00		0.62		0.25			0.85	0	0.85	0.001		9.19					1.00	3.5		0.153	4.9					0.74				
	10	3B 4'	15+97.32		0.39		0.16			0.56	0	0.56	0.0049		8.92					1.00	3.5		0.167	3.7					0.91				
	11	3A 2.5'	10+52.54		0.37		0.15			0.53	0	0.53	0.0049		3.18					1.00	3.5		0.167	3.7					0.98				
	12	3A 2.5'	10+52.54		0.33		0.13			0.46	0	0.46	0.001		7.02					1.00	3.5		0.167	3.7					0.54				
	13	3B 4'	17+26.22		0.28		0.11			0.39	0	0.39	0.0099		6.46					1.00	3.5		0.167	3.7					0.46				
	16	3B 4'	19+61.20		0.29		0.12			0.42	0	0.42	0.0099		2.25					1.00	3.5		0.167	3.7					0.42				
	17	3B 6'	19+93.03		0.67		0.27			0.95	0	0.95	0.0099		4.94					1.00	3.5		0.167	3.7					0.42				
	18	4A 4'	10+56.89		0.58		0.23			0.81	0	0.81	0.001		3.64					1.00	3.5		0.151	5.7					0.95				
	19	4A 4'	10+50.08		0.36		0.14			0.49	0	0.49	0.001		6.78					1.00	3.5		0.151	5.7					0.95				
	20	3B 4'	22+00		0.23		0.09			0.32	0	0.32	0.001		2.94					1.00	3.5		0.167	3.7					0.42				
	21	3A 2.5'	21+80		0.19		0.08			0.25	0	0.25	0.004		2.94					1.00	3.5		0.165	2.6					0.32				
	22	3A 2.5'	22+29.29		0.06		0.02			0.07	0	0.07	0.004		2.34					1.00	3.5		0.167	2.4					0.23				
	23	4A 4'	22+50		0.33		0.15			0.53	0	0.53	0.001		6.98					1.00	3.5		0.167	2.4					0.23				
	24	3B 6'	23+00		0.70		0.23			0.85	0	0.85	0.001		7.21					1.00	3.5		0.167	2.4					0.23				
	25	3A 2.5'	23+10.15		0.14		0.06			0.21	0	0.21	0.004		1.86					1.00	3.5		0.167	2.1					0.21				
	26	3B 6'	25+29.49		0.63		0.23			1.16	0	1.16	0.004		6.39					1.00	3.5		0.167	2.1					0.21				
	27	3B 4'	25+29.49		0.39		0.16			0.56	0	0.56	0.004		3.87					1.00	3.5		0.160	3.8					0.21				
	28	6'	13+12.47				0.32			1.12	0	1.12	0.022		4.16					1.00	3.5		0.158	7.5					0.21				
	29	2.5'	13+12.01				0.14			0.06	0	0.06	0.001		3.63					1.00	3.5		0.158	7.5					0.06				
	30	6'	12+75.17				0.25			0.88	0	0.88	0.033		4.19					1.00	3.5		0.157	5.8					0.25				

2 DRAIN. DATA REVISIONS
FUTURE REVISIONS

SHEET 1 OF 1

MEMORANDUM

To: Marc Bennett
From: Chuck Roadley
Subject: Wellington Non-tidal Wetland Remediation
Date: September 3, 2003
Cc: Pat Menichino, Dick Ashe

This memorandum will serve to follow-up a site visit conducted by Jim Orrell and Mark Eversole, both of Williamsburg Environmental Group (WEG), to the Wellington development. The purpose of the visit was to examine accumulated sediments in two non-tidal wetland areas and explore potential remediation options. The first area in question (Area 1) is along Attleborough Way between lots 72 and 73 (see attached). At the time of the site visit, a series of erosion and sediment control measures were installed along the road slope including; matted side slopes, a sediment trap and silt fence. Downslope of the control structure, an undetermined amount of sediment was observed in the wetland. Accumulated sediment was observed in an area approximately 100-150 feet long by 20-30 feet wide. Sediment deposition within the wetland ranged in depth from a thin veneer to 6-8 inches. The wetland area is well established and is heavily wooded with trees, shrubs and ground cover. Wetland vegetation was still evident and appeared healthy.

Access to Area 1 with mechanized equipment is limited and would require the removal of trees and underbrush on adjacent steep slopes. Such activity would tend to further destabilize the area and potentially involve more damage to the wetland through continued sedimentation and a disruption in the existing tree canopy. Established wetland forest species typically suffer no ill effects from the addition of a few inches of accumulated sediment. It is our opinion that the sediment will be assimilated into the wetlands system and the area will recover naturally. As such, we do not recommend the mechanized removal of sediment but do recommend that the approved Erosion and Sediment Control Plan be reviewed to determine if the measures observed are properly installed and functional.

The second area (Area 2) is located along Wellesley Way between lots 203 and 204, in a steep sided ravine. In this area, it appears that the existing sediment trap was overrun during one of the many large rain events of recent months. It appears that a second trap was constructed downstream of the first in an attempt to prevent additional sediment transport downstream. An undetermined amount of sediment was observed in the wetland downstream of the control structures. The sediment appears to have concentrated in a circular area associated with a previously authorized impact. The sediments in this area ranged in depths up to 12-inches. The stream channel leaving from this circular area of sediment accumulation ranges from 2-4 feet in width and also contains sediments. The first stretch of this stream, approximately 40 linear feet, contains up to 12-inches of sediment. The sediment depth within the channel lessens as the stream meanders through the densely vegetated ravine.

Due to the fact that Area 2 is largely associated with a previously authorized impact, we recommend that actions be taken to further limit sedimentation downstream of this area and that the existing accumulated sediments be stabilized to prevent sediment migration. Again, we recommend that the approved Erosion and Sediment Control Plan be reviewed to ensure that the required measures are in place and functional. We do not recommend the use of any mechanized equipment in the stream channel downstream of the proposed impact area.

Thank you for the opportunity to comment on this matter.

LETTER OF TRANSMITTAL

Attn: Mr. Marc Bennett

Date: September 3, 2003

To: AES
5248 Olde Towne Road
Suite 1
Williamsburg, VA 23188

Project #: 1040

Reference: Wellington Non-tidal Wetland
Remediation

From: Mark Eversole

cc: Pat Menichino, Dick Ashe

WE ARE SENDING YOU:

- Plans
- Prints
- Copies
- Contracts
- Literature
- Report
- Samples
- Letters
- Other: *memo*

REASON:

- As per your request
- For your signature
- For your review/comments
- For your use/files
- Other:

SENT BY:

- Mail
- Overnight Carrier: [type company name]
- Courier: [type company name]
- Other: *hand delivery*

COPIES	DATED	DESCRIPTION

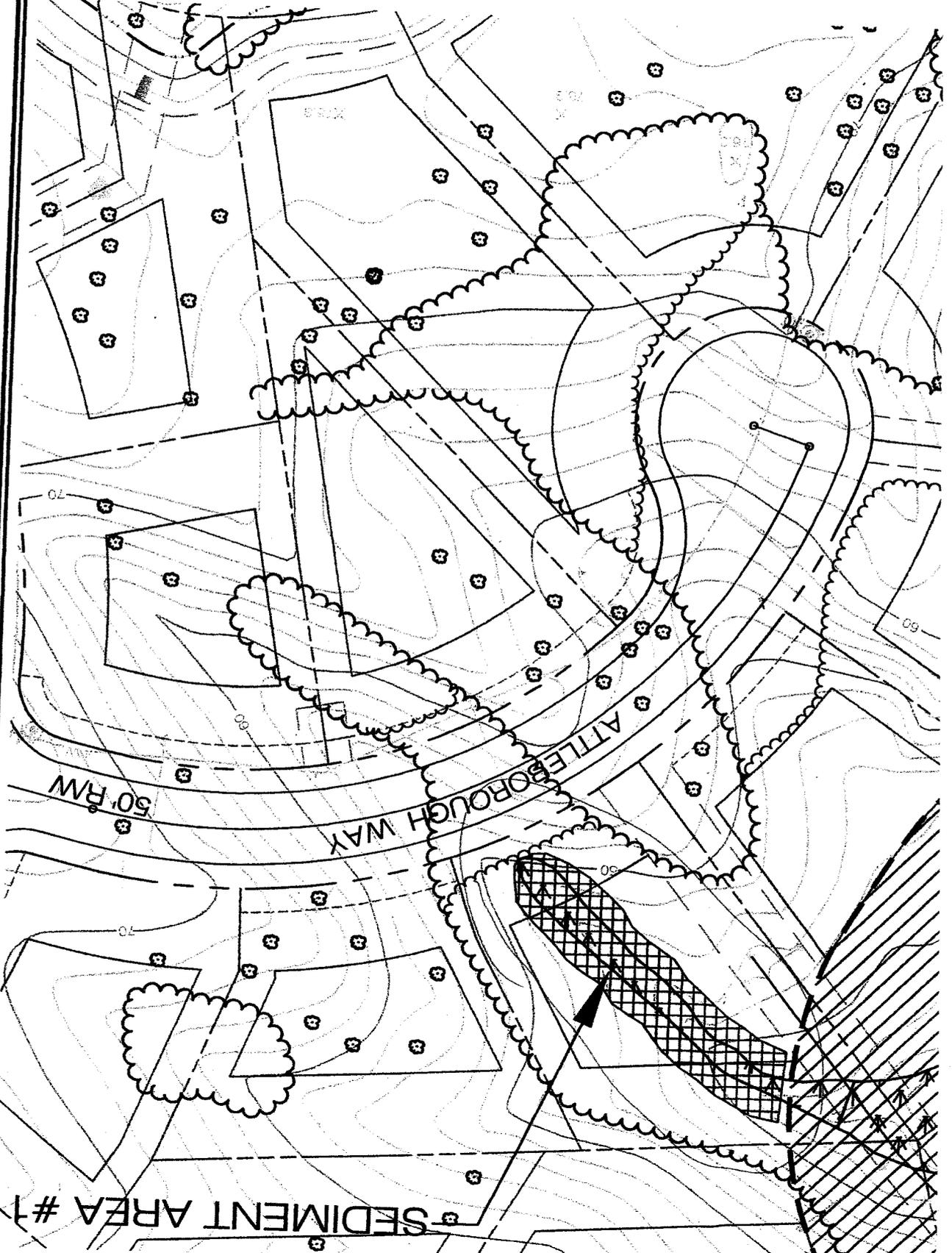
Notes:

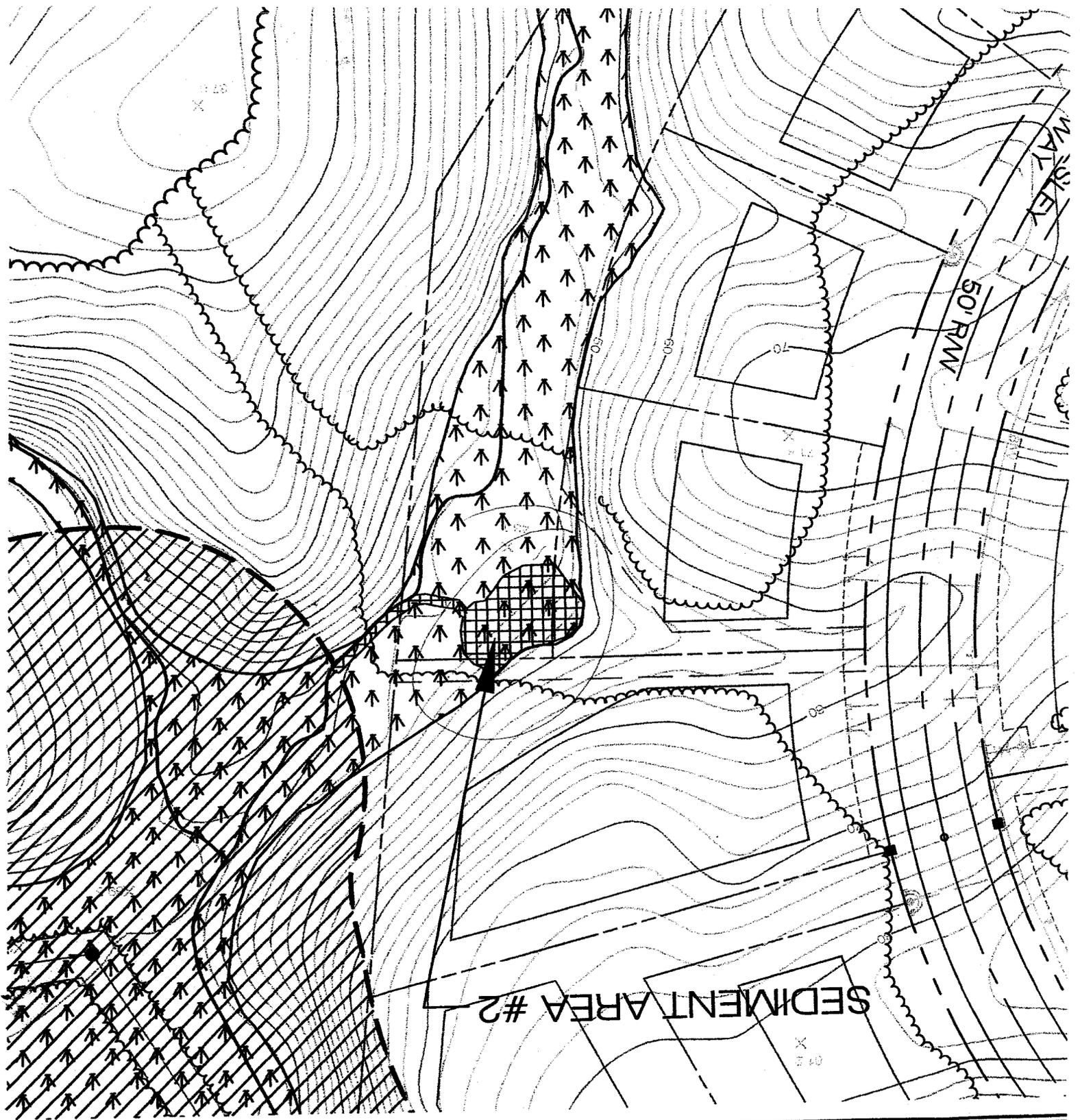
Mark Eversole

Signature



SCALE 1"=60'





SEDIMENT AREA #2

Sheet II
Wilmington

Date Record Created:

Created By:

WS_BMPNO: W083
Print Form

PRINTED ON:
Friday, March 12, 2010
3:45:56 PM

WATERSHED WC
 BMP ID NO 083
 PLAN NO S-37-01
 TAX PARCEL
 PIN NO
 CONSTRUCTION DATE
 PROJECT NAME Wellington Sec 2
 FACILITY LOCATION East of Lot 204
 CITY-STATE
 CURRENT OWNER Wellington LLC
 OWNER ADDRESS 632 Hampton Highway
 OWNER ADDRESS 2
 CITY-STATE-ZIP CODE Yorktown, VA 23693
 OWNER PHONE 757-867-8800
 MAINT AGREEMENT Yes
 EMERG ACTION PLAN No

[Get Last BMP No](#) [Return to Menu](#)

MAINTENANCE PLAN No
 SITE AREA acre 36.75
 LAND USE R1 Limited Resid
 old BMP TYP
 JCC BMP CODE
 POINT VALUE
 SVC DRAIN AREA acres
 SERVICE AREA DESCR
 IMPERV AREA acres 0.00
 RECV STREAM
 EXT DET-WQ-CTRL
 WTR QUAL VOL acre-ft
 CHAN PROT CTRL
 CHAN PROT VOL acre-ft
 SW/FLOOD CONTROL
 GEOTECH REPORT

CTRL STRUC DESC RCP Riser
 CTRL STRUC SIZE inches 48
 OTLT BARRL DESC RCP Barrel
 OTLT BARRL SIZE inch 18

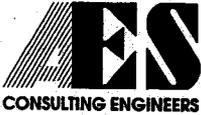
EMERG SPILLWAY Yes
 DESIGN HW ELEV 54.66
 PERM POOL ELEV na
 2-YR OUTFLOW cfs 0.00
 10-YR OUTFLOW cfs 0.00
 REC DRAWING No
 CONSTR CERTIF No

LAST INSP DATE
 INTERNAL RATING
 MISC/COMMENTS
 Dry Pond BMP # 2. Prelim info logged.

Inspected by:

Additional Comments:



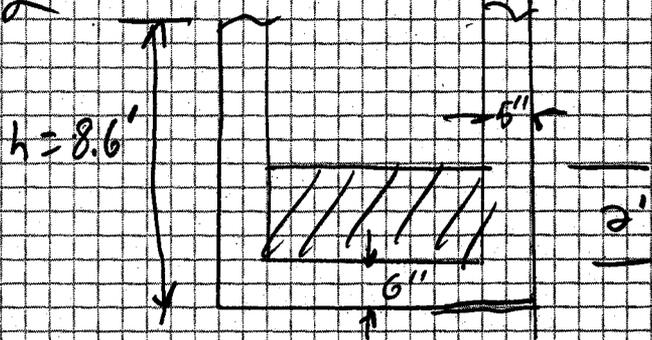


5248 Olde Towne Road, Suite 1
 Williamsburg, Virginia 23188
 (757) 253-0040
 Fax: (757) 220-8994

PROJECT WILLINGTON
 PROJECT NO. 8223-6
 SUBJECT BUOYANCY CALCULATIONS
 SHEET NO. 1 OF 2
 CALCULATED BY GAM DATE 9/20/02

BUOYANCY / FLOTATION CALCULATIONS
FOR BMP'S 2+3

BMP # 2



$$\begin{aligned} \text{Cone IN Walls} &= \left[\left(\frac{4.83}{2} \right)^2 \pi - \left(\frac{4}{2} \right)^2 \pi \right] 8.6 \times 150 \frac{\text{lbs}}{\text{ft}^3} \\ &= [18.32 - 12.57] 1290 \\ &= \underline{7418} \text{ lbs} \end{aligned}$$

$$\begin{aligned} \text{Cone IN BASE AND FILL} &= \frac{1}{2} \pi \times 2.5^2 \times 150 \frac{\text{lbs}}{\text{ft}^3} \\ &= \underline{4712} \text{ lbs} \end{aligned}$$

$$\text{TOTAL weight of Cone.} = \underline{\underline{12130}} \text{ lbs}$$

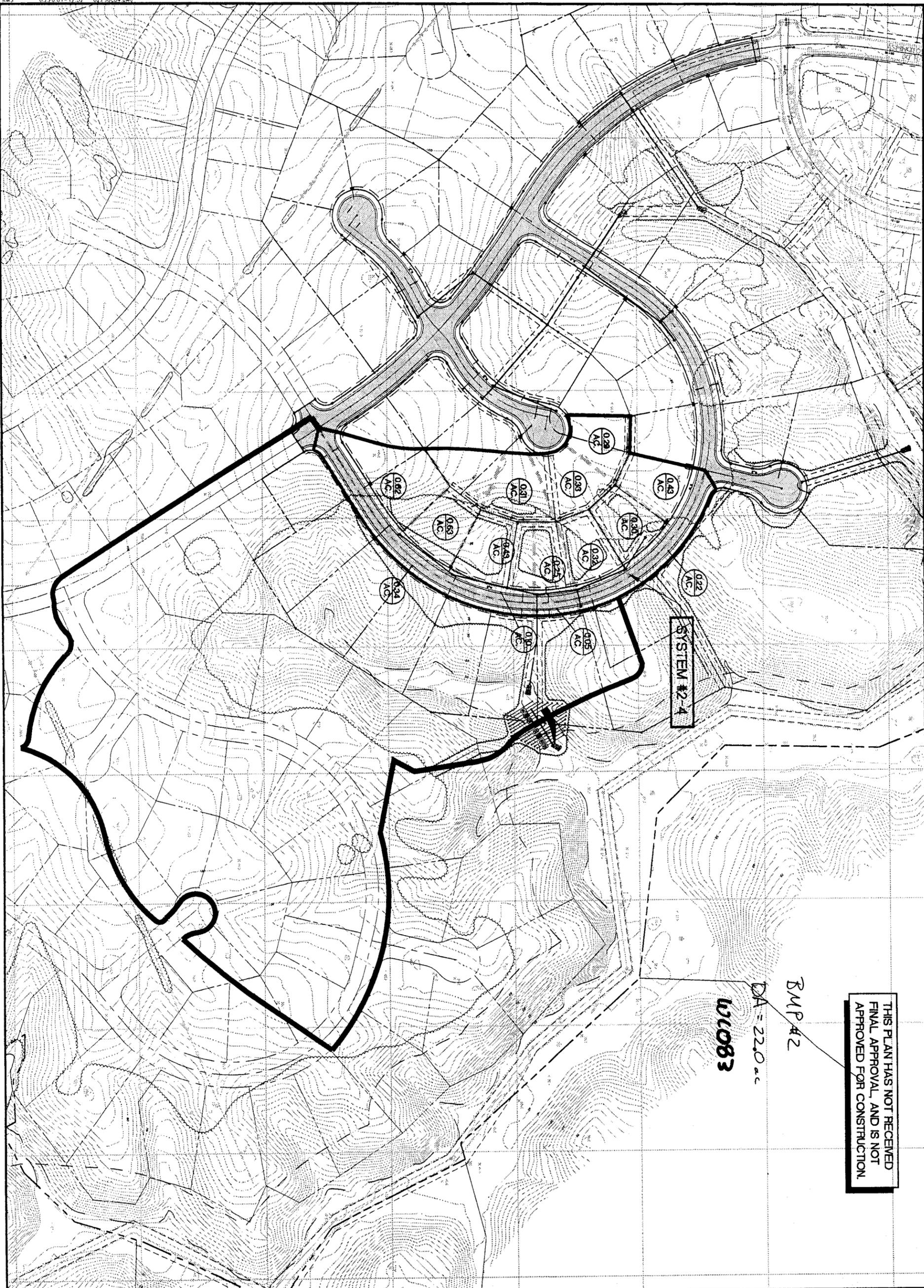
BUOYANCY FORCE

$$\begin{aligned} \text{VOLUME OF STRUCTURE} &= \frac{4.83^2}{2} \pi \times 8.6 \\ &= 157.6 \text{ CF} \end{aligned}$$

$$\begin{aligned} \text{BUOYANCY FORCE} &= \text{Vol} \times 62.4 \\ &= 9834 \text{ lbs} \text{ (up)} \end{aligned}$$

$$\text{SAFE PRODUCTION} = 12,293$$

WILL NOT FLOAT SINCE weight of SOIL AND FILLION WAS IGNORED



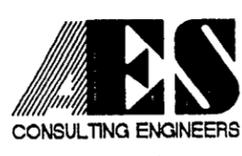
THIS PLAN HAS NOT RECEIVED
FINAL APPROVAL, AND IS NOT
APPROVED FOR CONSTRUCTION.

BMP #2
DA = 22.0 ac
WU083

SECTION II DRY POND DRAINAGE AREA MAP
WELLINGTON
SECTION II
OWNER/DEVELOPER: WELLINGTON, L.L.C.

JAMES CITY COUNTY STONEHOUSE DISTRICT VIRGINIA

Designed	Drawn
HWP/CWC	RMS/HBK
Scale	Date
1" = 80'	3/28/01
Project No.	Drawing No.
8223-06	M



5248 Old Towne Road, Suite 1
Williamsburg, Virginia 23188
(757) 253-0040
Fax (757) 220-8994



No.	DATE	REVISION / COMMENT / NOTE	BY

...wspaper reports
...nah, Ga., Kusso
...orgia's Superin-
...Year in 1996.
...where he
...adhered a child
...a few years ear-
...e as a surprise
...at employed
...e that was
...ately to the U.S.
...t, he also fired
...em's former
...year for insub-
...refusing to take
...r a marijuana
...ound in her car.
...d a drug test but
...e almost lost his
...nearly \$100,000
...was misspent
...or high SAT
...heaving stu-
...ther hand, were
...it to take the
...g to news
...ers or coun-
...remedial educa-
...had assigned to
...SAT prep class-

...alls, two teenage girls grunted
...while hoisting the tires of a
...jeep.
...Just doing some class work
...Auto mechanics is not usu-
...ally one of the places you envi-
...sion high school girls being —
...willingly. But increasingly,
...girls at Smithfield High are
...enrolling in the class as an
...elective — not because they
...want careers as mechanics,
...they say, but simply to learn



...ou senior, Chelsea, continued.
...She has taken three semesters
...of auto mechanics classes.
...“Learning how to do even the
...smallest things can help you
...out.”
...For students who plan to
...attend college and must take
...certain academic classes, it's
...nearly impossible for them to
...fit a yearlong half-day mechan-
...ics class into their schedules,
...Please see Shop/C2

...separately.
...Last week's discovery set off
...a round of testing and security
...measures in the states that mak
...up the Delmarva Peninsula. The
...poultry industry creates about
...\$1.5 billion a year in sales for
...those states.
...The international communi-
...ty has reacted, too — 27 coun-
...tries have temporarily banned
...all U.S. poultry. This has cause
...Please see Poultry/C2

JCC cites developer for disturbing wetlands

By Fred Carroll
Daily Press

JAMIES CITY

James City County halted earthmoving work last week at Wellington subdivision in the Stonehouse District, after developer Dick Ashe failed to block eroding dirt from spilling into nearby wetlands, officials said.



ASHE

The Virginia Department of Environmental Quality has sent Ashe a violation notice for covering about 15,000 square feet — roughly a quarter of a football field — of wetlands

with sedi- ment. Laws pro- tect wetlands because they filter pollu- tants out of water, soak up floodwa- ters and offer food and shelter to fish, water- fowl and other wildlife.

Ashe, a York County devel- oper who has served on the York County Board of Super- visors and lost a primary elec- tion to become a state delegate,

could not be reached for com- ment. Ashe has feuded with gov- ernment regulators over the years. In 1989, he won a lawsuit against the U.S. Army Corps of Engineers that allowed him to complete the Tabb Lakes subdivision in York County despite concerns about wet- lands.

At Wellington, inspectors have worked to fix ongoing ero- sion-control problems since August, county paperwork shows. “It’s a challenging site,”

said Darryl Cook, county envi- ronmental director. “You have to stay on top of this project.” Ashe needs the land-distur- bance permit to dig roads and bury utility lines at Welling- ton, a subdivision beside Lake Nice with about 150 lots. He still can build houses.

Cook said the county did not renew the permit, which expired Feb. 9, in hopes of forc- ing Ashe to fix the erosion problems. Cook blamed those prob- lems on the erosion-control work.

Why protect wetlands? State and federal laws protect wetlands because they filter pol- lutants, soak up flood- waters and offer food and shelter to wildlife. The state cited devel- oper Dick Ashe for covering about 15,000 square feet of wetlands with sediment.

WILLIAMSBURG

Voting rules

The ACLU asks the city's voter registrar to drop procedures that make it harder for William and Mary students to vote. C6

GENERAL ASSEMBLY

Tax challenges

Democrats join centrist Republicans to preserve a version of Sen. John Chichester's \$3.7 billion omnibus tax bill. C3

Turnaround

A Senate committee kills a proposal to relax home-schooling requirements, but revives it moments later. C3

HAMPTON ROADS

Sailors' raise

As many as 18,000 local sailors who were in the opening phase of the Iraq war will receive an extra \$225. C4

MONEY & WORK

PAGE 67

Smaller is better

Hampton funeral home owners find their personal touch more profitable than a big-business approach.



■ Permit

Continued from C1

lems on loose soil, steep slopes and erosion-control measures, such as a stormwater detention pond, not built to state and county standards.

Also, he said that Ashe worsened erosion by grading house lots before obtaining county-issued building permits. Those lots did not have adequate erosion controls in place.

"There is a lot more disturbed area out there," Cook said, "than was originally envisioned."

The notice also cited Ashe for failing to obtain a stormwater construction permit before beginning earthmoving work.

According to the state violation notice, Ashe faces possible fines worth thousands of dollars. David Gussman, DEQ enforcement coordinator, said Ashe could be ordered to replace or restore the wetlands.

Melissa Nash, of the Army Corps, said she notified Ashe that he has also violated a requirement to comply with the county's erosion-control plan.

Both the Army Corps and DEQ expect to meet with Ashe to talk about ways he can repair the wetlands.

"We want to make sure the problem is fixed," Nash said. "Generally, people comply with us. That's what we're anticipating here."

Fred Carroll can be reached at 247-4756 or by e-mail at fcarroll@dailypress.com

Public Agenda

Monday

POQUOSON CITY COUNCIL MEETING. 7 p.m., Council Chambers, 500 City Hall Ave. Live broadcast on Channel 46. 868-3000

YORK COUNTY SCHOOL BOARD MEETING. 7:30 p.m., board room, York Hall, 301 Main St., Yorktown. **Agenda:** public hearing on the FY05 operating budget. 898-0310

NORTH DISTRICT TOWN HALL MEETING. 6:30 p.m., American Legion Post 368, 368 American Legion Drive, Newport News. **Agenda:** budget process and legislative issues. 265-8714

GLOUCESTER COUNTY CLEAN COMMUNITY COMMITTEE MEETING. 6:30 p.m., Page Middle School, 5628 George Washington Memorial Highway

USS NEWPORT NEWS LIAISON

■ Shop

Continued from C1

said Smithfield Principal Becky Mercer. Academic students should be able to learn life skills too, she said.

"They want to be able to take care of their own cars and be independent," Mercer said. "It's like when you learn things for the joy of learning it."

Other school systems say it's more cost-effective to offer the program at a regional vocational center. In Newport News, fewer students these days are interested in vocational courses, so it's more economical to offer the course regionally, said Michelle Morgan, spokeswoman for the schools.

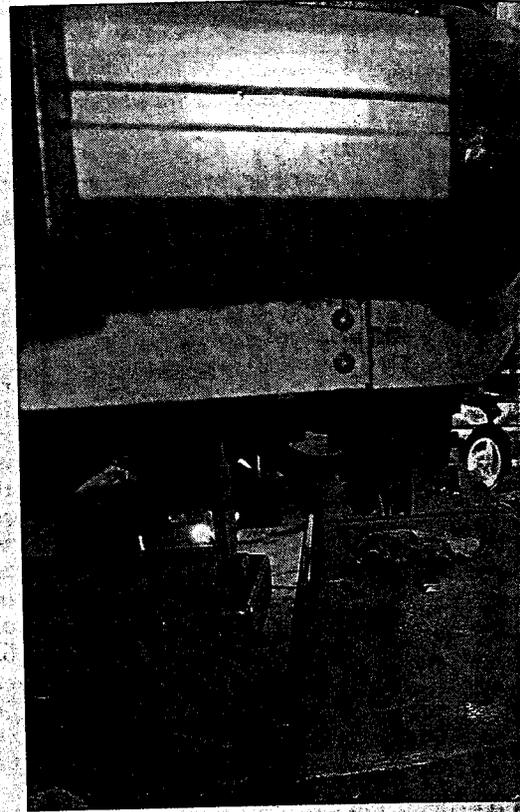
"You can get a quality program and it doesn't require six school divisions to hire teachers for auto technology," she said.

At Smithfield High School, the first auto mechanics class concentrates on basic maintenance and repair. Students can enroll in advanced classes to learn more about the workings of an engine and more advanced car repairs.

Students who take the class should be able to make a basic diagnosis of a car's problems, said Kelce, who has taught the class at Smithfield for 19 years.

"When they take it to a shop," he said, "they know if they're getting run over the coals."

Mallory While, a senior who



Sara Gies, 17, removes the tires on an SUV. Smithfield High class should be able to make a b

took auto mechanics last semester, said more girls should take the class.

"You never know when you're going to be in a situation where you need to do it yourself."

Lesley-Anne Brown said she now knows how to change tires and the oil — skills that will help her when she takes her car to

Lynchburg

"All fer how to do have to dep ice," she s

Brown' class was a

for his da "She kn operation he said. "I

■ Poultry

Continued from C1

officials with the Virginia Port Authority to keep a close eye on the situation.

"It's going to affect us," said Tom Capozzi, senior managing director for marketing services with the authority. "We're hopeful that this thing is going to be resolved soon."

Agriculture officials say everything being done is simply to prevent an outbreak like the one in 2002, which forced farmers in the Shenandoah Valley to destroy 4.7 million chickens and turkeys and caused about \$130 million in losses.

"It's a matter of caution," said Elaine Lindholm, spokeswoman for the Virginia Department of Agriculture and Consumer Services.

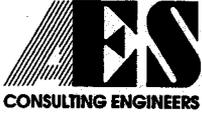
The Delaware strain is simi-



A delivery truck is disinfected Tuesday before a farm. Avian flu has been found on a secor

through the Shenandoah Valley. State officials aren't comparing this outbreak to that situation but say the caution is absolutely necessary.

found in ful to hu contagio es them t makes b usually



5248 Olde Towne Road, Suite 1
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PROJECT WILLINGTON
 PROJECT NO. 8223-6
 SUBJECT DCY POND - BMD II & III
 SHEET NO. 1 OF 1
 CALCULATED BY HWA DATE 9/20/02

BMD II

ANTI-SUCK COLLARS

$$L_s = Y(Z+4) \left(1 + \frac{S}{1.25 - S}\right)$$

$$Y = 6.6'$$

$$Z = 3$$

$$S = 0.05$$

$$L_s = 6.6(3+4) \left(1 + \frac{0.05}{1.25 - 0.05}\right)$$

$$L_s = \underline{\underline{57.75 \text{ FEET}}}$$

PLATE 3.14.12 USE 2 CONCRETE COLLARS 4.5' x 4.5'

SPACING = 14 (PROJECTIONS OF COLLAR)

$$= 14(1.5) = \underline{\underline{21 \text{ FEET}}}$$

BMD III

ANTI-SUCK COLLARS

$$L_s = Y(Z+4) \left(1 + \frac{S}{1.25 - S}\right)$$

$$Y = 4.8'$$

$$Z = 3$$

$$S = 0.025$$

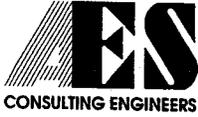
$$L_s = 4.8(3+4) \left(1 + \frac{0.025}{1.25 - 0.025}\right)$$

$$L_s = \underline{\underline{37.3 \text{ FEET}}}$$

PLATE 3.14.12 USE 2 CONCRETE COLLARS 3.5' x 3.5'

SPACING = 14 (PROJECTIONS OF COLLAR)

$$= 14(1) = \underline{\underline{14 \text{ FEET}}}$$



5248 Olde Towne Road, Suite 1
 Williamsburg, Virginia 23188
 (757) 253-0040
 Fax: (757) 220-8994
 E-Mail: aes@aesva.com

PROJECT WILLIAMSBURG SECTIONS II & III

PROJECT NO. 8223-6

SUBJECT DRAINAGE

SHEET NO. 1 OF 1

CALCULATED BY HWP DATE 1/9/03

BMP #2

W1083

P.A. = 19.49 AC

R/W = 3.05 AC

REMAINING LOTS/OOPEN = 16.44 AC

USE FOR IMP FOR LOTS/OOPEN = 6.58 AC

TOTAL IMP. = 3.05 AC + 6.58 AC = 9.63 AC

% IMP. = $\frac{9.63 \text{ AC}}{19.49 \text{ AC}} (100) = \underline{49.41\%}$

$K_v = (0.009)(49.41) + 0.05 = \underline{0.49}$

$WQ_v = 1 + \left(\frac{1}{12}\right) (19.49 \text{ AC}) \left(\frac{43560 \text{ sq ft}}{1 \text{ AC}}\right) (0.49) = \underline{34,667 \text{ CF}}$

DESIGN WQ FOR 24 HRS

@ CLM 49.25

$\frac{34,667 \text{ CF}}{86,400 \text{ SEC}} = \underline{0.40 \text{ CFS}}$

$H = \frac{49.25 - 41.00}{2} = \underline{2.63 \text{ FT}}$

5125 ORIFICE. $Q = CA \sqrt{2gH}$

$0.40 = (0.6) A \sqrt{2(32.2)(2.63)}$

$0.40 = 7.81 A$

$A = 0.05 \text{ SQ. FT}$

$0.05 = \pi r^2$

$r = 0.1277 \text{ FT} = 1.53 \text{ IN}$

DIA = 3.06 IN.

USE 3" DIA ORIFICE

Channel Protection

Channel Protection Volume

Post Development Watershed Data

Area = 19.49 Acres 0.0305sq.mi.
 Runoff Curve No. = 80
 Time of Concentration = 0.255 hr.
 Return Period = 1 Yr.

Runoff Depth = 2.8 in.

Initial Abstraction (From TR55 Equation 2-2)

$$i_a = (200/CN)^{-2}$$

$$i_a = 0.500$$

Unit Peak Discharge (From TR55 Equation for Exhibit 4)

$$\log(Q_u) = C_0 + C_1 \log(T_c) + C_2 (\log(T_c))^2$$

$$Q_u = 725.37 \text{ csm/in}$$

Ratio of Peak Outflow Discharge to Peak Inflow Discharge

(From Maryland Stormwater Design Manual Figure D.11.2)

$$Q_o/Q_i = 0.024$$

Ratio of Volume of Storage to Volume of Runoff (From TR55 Figure 6.1)

$$V_s/V_r = C_0 + C_1(Q_o/Q_i) + C_2(Q_o/Q_i)^2 + C_3(Q_o/Q_i)^3$$

$$V_s/V_r = 0.648$$

$$V_s = 1.160 \text{ Ac-Ft}$$

$$V_s = 50542 \text{ cu.ft.}$$

Table F-2				
Coefficients for the equations used to generate figure 6-1				
Rainfall Dist.	C0	C1	C2	C3
I, IA	0.66	-1.76	1.96	-0.73
II, III	0.682	-1.43	1.64	-0.804

Average Release Rate

$$Q_i = 24.34 \text{ cfs}$$

$$Q_o/Q_i = 0.02$$

$$Q_o = 0.59 \text{ cfs}$$

Reservoir Report

Reservoir No. 1 - PH2 DRY POND

Hydraflow Hydrographs by Intelisolve

Pond Data

Pond storage is based on known contour areas. Average end area method used.

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	44.00	1,378	0	0
2.00	46.00	5,318	6,696	6,696
4.00	48.00	8,800	14,118	20,814
6.00	50.00	13,213	22,013	42,827
8.00	52.00	17,218	30,431	73,258
10.00	54.00	22,088	39,306	112,564
12.00	56.00	28,244	50,332	162,896

Culvert / Orifice Structures

	[A]	[B]	[C]	[D]
Rise in	= 18.0	3.0	0.0	0.0
Span in	= 18.0	3.0	0.0	0.0
No. Barrels	= 1	1	0	0
Invert El. ft	= 44.00	44.00	0.00	0.00
Length ft	= 80.0	10.0	0.0	0.0
Slope %	= 5.00	0.50	0.00	0.00
N-Value	= .013	.013	.000	.000
Orif. Coeff.	= 0.60	0.60	0.00	0.00
Multi-Stage	= n/a	Yes	No	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len ft	= 12.60	15.00	0.00	0.00
Crest El. ft	= 50.60	53.50	0.00	0.00
Weir Coeff.	= 3.33	3.33	0.00	0.00
Weir Type	= Riser	Rect	---	---
Multi-Stage	= Yes	No	No	No

Exfiltration Rate = 0.00 in/hr/sqft Tailwater Elev. = 0.00 ft

Stage / Storage / Discharge Table

Note: All outflows have been analyzed under inlet and outlet control.

Stage ft	Storage cuft	Elevation ft	Civ A cfs	Civ B cfs	Civ C cfs	Civ D cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	Total cfs
0.00	0	44.00	0.00	0.00	---	---	0.00	0.00	---	---	---	0.00
2.00	6,696	46.00	0.35	0.31	---	---	0.00	0.00	---	---	---	0.31
4.00	20,814	48.00	0.48	0.46	---	---	0.00	0.00	---	---	---	0.46
6.00	42,827	50.00	0.56	0.56	---	---	0.00	0.00	---	---	---	0.56
8.00	73,258	52.00	22.83	0.05	---	---	22.76	0.00	---	---	---	22.82
10.00	112,564	54.00	25.87	0.02	---	---	25.76	17.66	---	---	---	43.43
12.00	162,896	56.00	28.53	0.01	---	---	27.99	197.44	---	---	---	225.44

Hydrograph Summary Report

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description	
1	SCS Runoff	15.73	5	725	62,607	---	----	----	EXISTING CONDITIONS	
2	SCS Runoff	26.54	5	720	73,098	---	----	----	PROPOSED CONDITION	
3	Reservoir	0.58	5	1135	73,098	2	50.44	49,557	PH2 DRY POND ROUTED	
Proj. file: 8223-06-PH2.GPW				Return Period: 1 yr			Run date: 01-11-2003			

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Hyd. No. 1

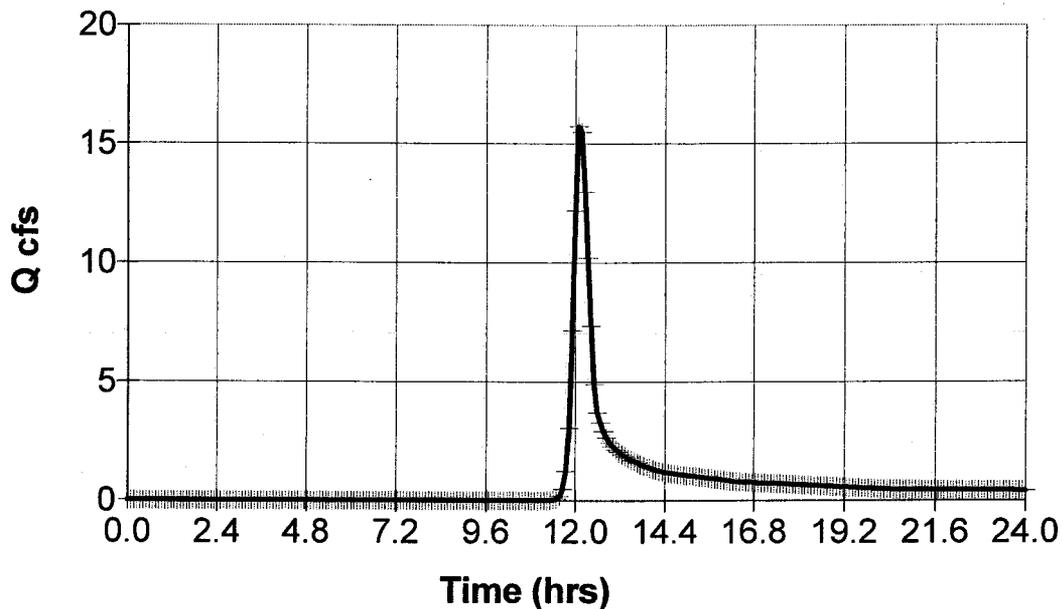
EXISTING CONDITIONS

Hydrograph type = SCS Runoff
Storm frequency = 1 yrs
Drainage area = 22.00 ac
Basin Slope = 5.4 %
Tc method = LAG
Total precip. = 2.80 in
Storm duration = 24 hrs

Peak discharge = 15.73 cfs
Time interval = 5 min
Curve number = 74
Hydraulic length = 1150 ft
Time of conc. (Tc) = 18.3 min
Distribution = Type II
Shape factor = 484

Hydrograph Volume = 62,607 cuft

1 - SCS Runoff - 1 Yr - Qp = 15.73 cfs



+ Hyd. 1

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

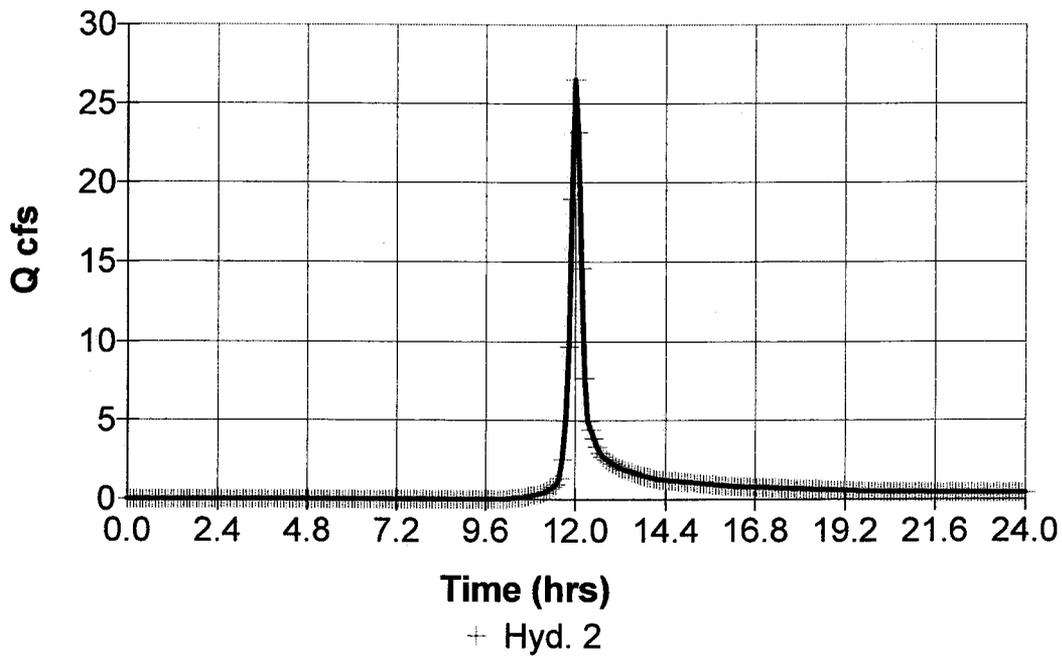
Hyd. No. 2

PROPOSED CONDITION

Hydrograph type	= SCS Runoff	Peak discharge	= 26.54 cfs
Storm frequency	= 1 yrs	Time interval	= 5 min
Drainage area	= 19.49 ac	Curve number	= 80
Basin Slope	= 5.4 %	Hydraulic length	= 1150 ft
Tc method	= LAG	Time of conc. (Tc)	= 15.3 min
Total precip.	= 2.80 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Hydrograph Volume = 73,098 cuft

2 - SCS Runoff - 1 Yr - Qp = 26.54 cfs



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Hyd. No. 3

PH2 DRY POND ROUTED

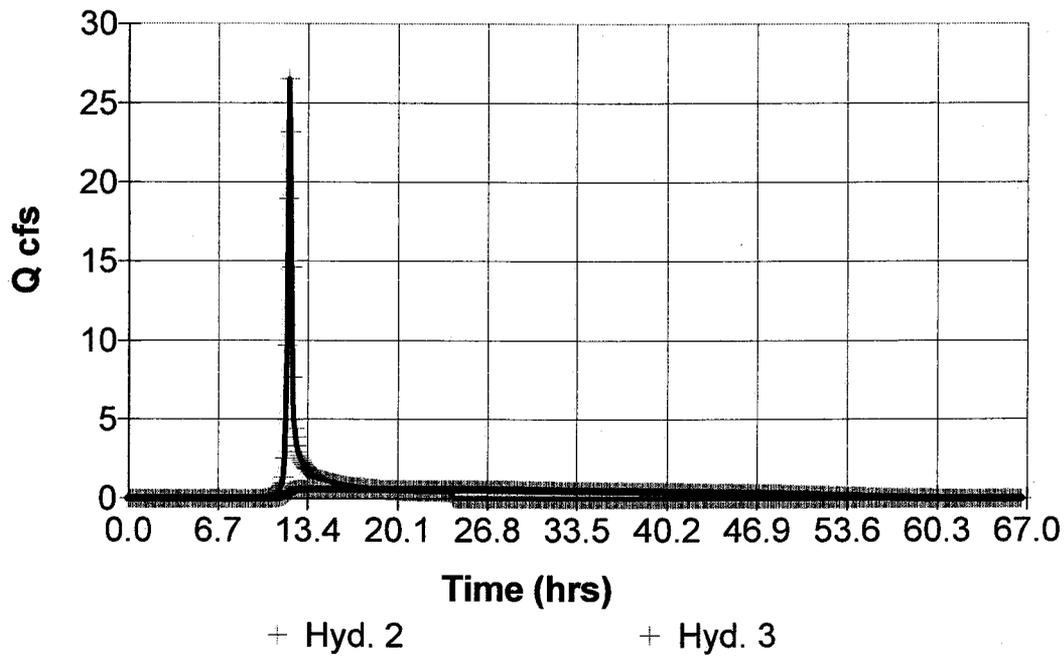
Hydrograph type = Reservoir
Storm frequency = 1 yrs
Inflow hyd. No. = 2
Max. Elevation = 50.44 ft

Peak discharge = 0.58 cfs
Time interval = 5 min
Reservoir name = PH2 DRY POND
Max. Storage = 49,557 cuft

Storage Indication method used.

Hydrograph Volume = 73,098 cuft

3 - Reservoir - 1 Yr - $Q_p = 0.58$ cfs



Hydrograph Summary Report

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description	
1	SCS Runoff	26.55	5	725	99,020	---	----	----	EXISTING CONDITIONS	
2	SCS Runoff	40.03	5	720	108,535	---	----	----	PROPOSED CONDITION	
3	Reservoir	4.84	5	755	108,535	2	50.82	55,231	PH2 DRY POND ROUTED	
Proj. file: 8223-06-PH2.GPW				Return Period: 2 yr			Run date: 01-11-2003			

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

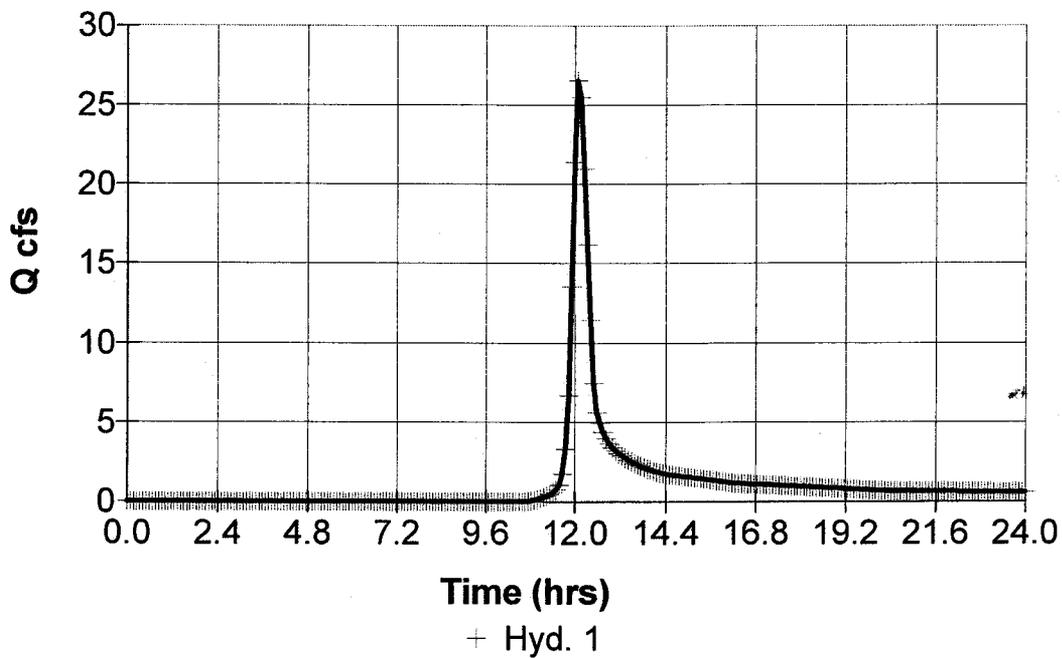
Hyd. No. 1

EXISTING CONDITIONS

Hydrograph type	= SCS Runoff	Peak discharge	= 26.55 cfs
Storm frequency	= 2 yrs	Time interval	= 5 min
Drainage area	= 22.00 ac	Curve number	= 74
Basin Slope	= 5.4 %	Hydraulic length	= 1150 ft
Tc method	= LAG	Time of conc. (Tc)	= 18.3 min
Total precip.	= 3.50 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Hydrograph Volume = 99,020 cuft

1 - SCS Runoff - 2 Yr - Qp = 26.55 cfs



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Hyd. No. 2

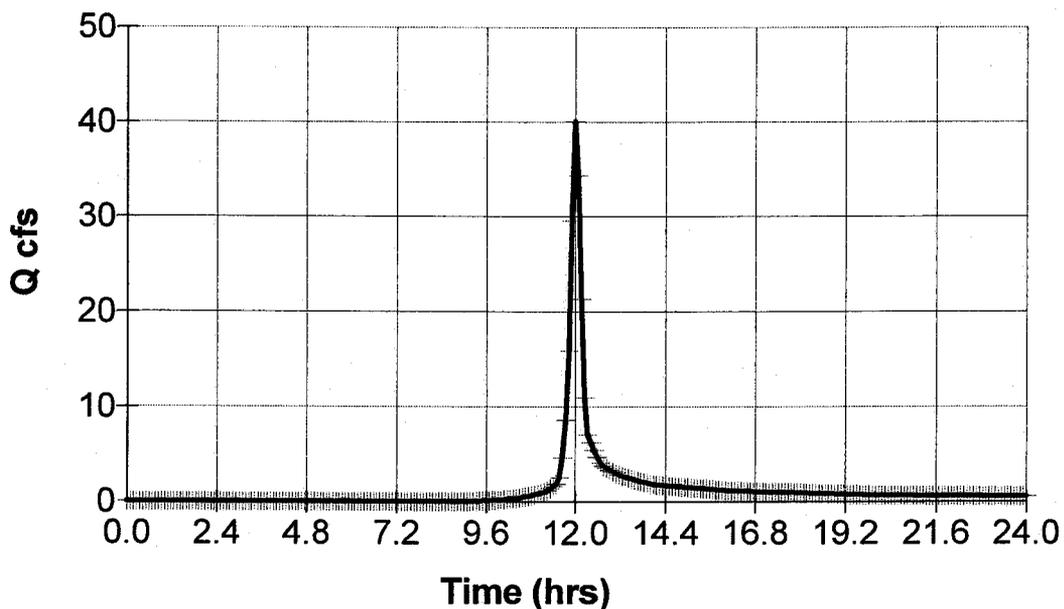
PROPOSED CONDITION

Hydrograph type = SCS Runoff
Storm frequency = 2 yrs
Drainage area = 19.49 ac
Basin Slope = 5.4 %
Tc method = LAG
Total precip. = 3.50 in
Storm duration = 24 hrs

Peak discharge = 40.03 cfs
Time interval = 5 min
Curve number = 80
Hydraulic length = 1150 ft
Time of conc. (Tc) = 15.3 min
Distribution = Type II
Shape factor = 484

Hydrograph Volume = 108,535 cuft

2 - SCS Runoff - 2 Yr - Qp = 40.03 cfs



+ Hyd. 2

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Hyd. No. 3

PH2 DRY POND ROUTED

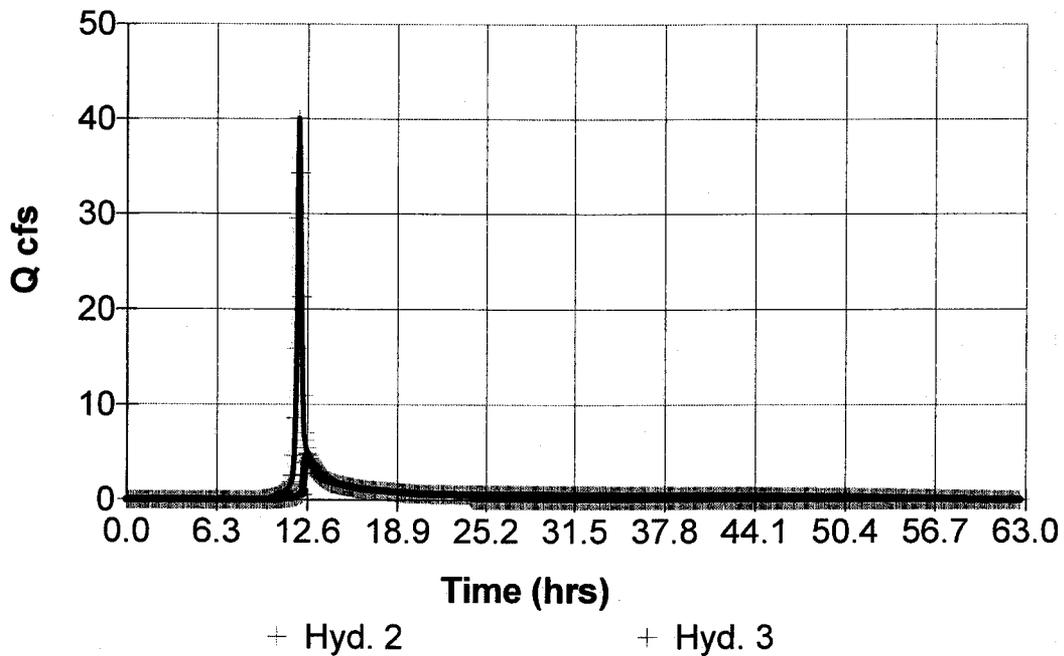
Hydrograph type = Reservoir
Storm frequency = 2 yrs
Inflow hyd. No. = 2
Max. Elevation = 50.82 ft

Peak discharge = 4.84 cfs
Time interval = 5 min
Reservoir name = PH2 DRY POND
Max. Storage = 55,231 cuft

Storage Indication method used.

Hydrograph Volume = 108,535 cuft

3 - Reservoir - 2 Yr - Qp = 4.84 cfs



Hydrograph Summary Report

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description	
1	SCS Runoff	68.07	5	725	240,971	---	----	-----	EXISTING CONDITIONS	
2	SCS Runoff	88.12	5	720	238,862	---	----	-----	PROPOSED CONDITION	
3	Reservoir	25.04	5	735	238,862	2	53.48	102,293	PH2 DRY POND ROUTED	
Proj. file: 8223-06-PH2.GPW				Return Period: 10 yr			Run date: 01-11-2003			

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Hyd. No. 1

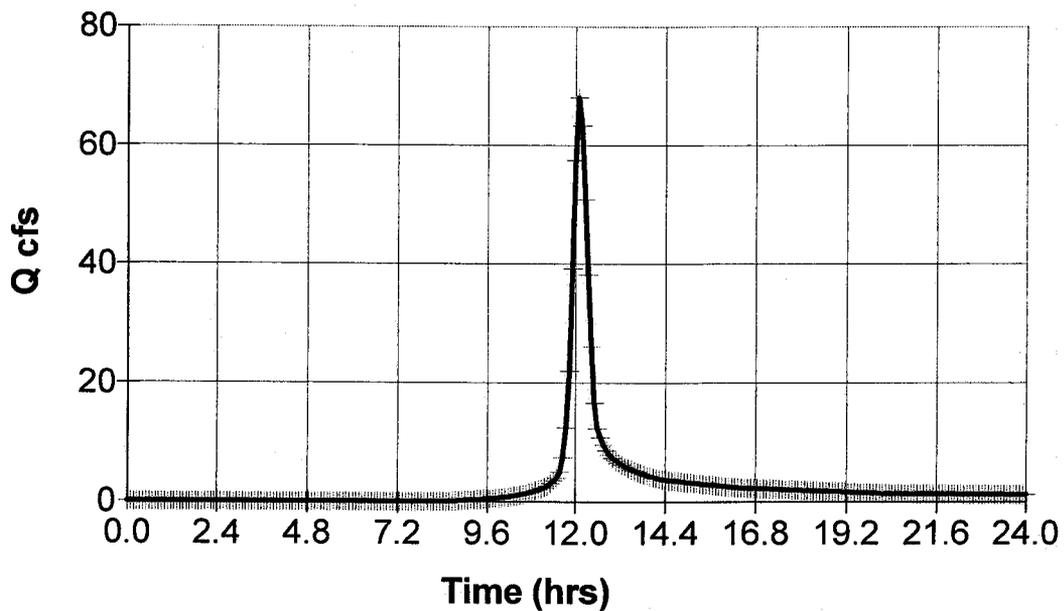
EXISTING CONDITIONS

Hydrograph type = SCS Runoff
Storm frequency = 10 yrs
Drainage area = 22.00 ac
Basin Slope = 5.4 %
Tc method = LAG
Total precip. = 5.80 in
Storm duration = 24 hrs

Peak discharge = 68.07 cfs
Time interval = 5 min
Curve number = 74
Hydraulic length = 1150 ft
Time of conc. (Tc) = 18.3 min
Distribution = Type II
Shape factor = 484

Hydrograph Volume = 240,971 cuft

1 - SCS Runoff - 10 Yr - Qp = 68.07 cfs



+ Hyd. 1

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

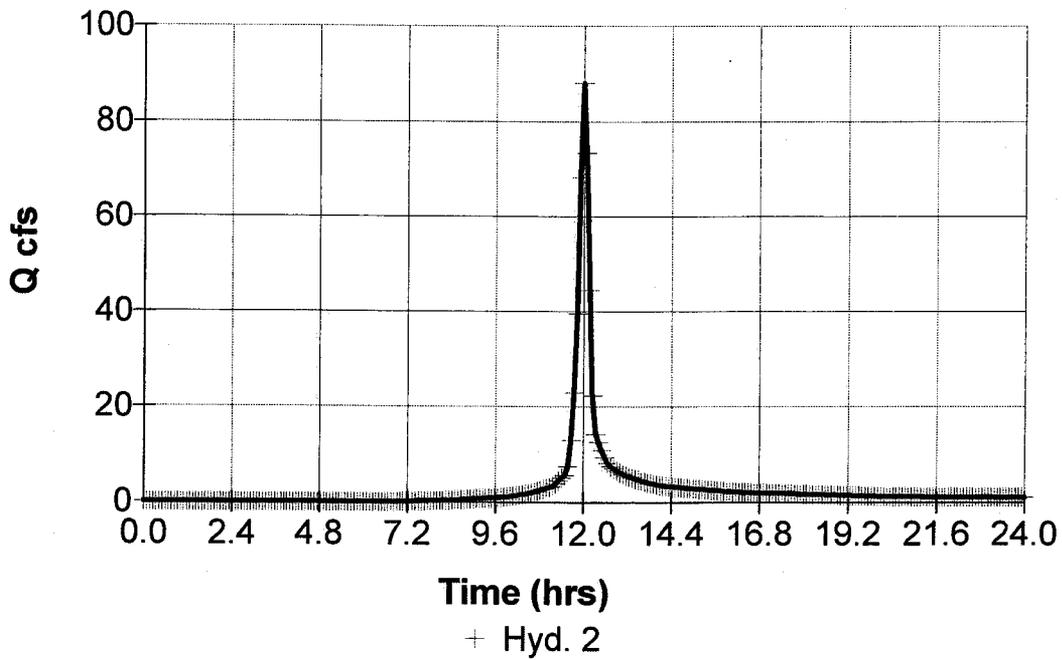
Hyd. No. 2

PROPOSED CONDITION

Hydrograph type	= SCS Runoff	Peak discharge	= 88.12 cfs
Storm frequency	= 10 yrs	Time interval	= 5 min
Drainage area	= 19.49 ac	Curve number	= 80
Basin Slope	= 5.4 %	Hydraulic length	= 1150 ft
Tc method	= LAG	Time of conc. (Tc)	= 15.3 min
Total precip.	= 5.80 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Hydrograph Volume = 238,862 cuft

2 - SCS Runoff - 10 Yr - Qp = 88.12 cfs



Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Hyd. No. 3

PH2 DRY POND ROUTED

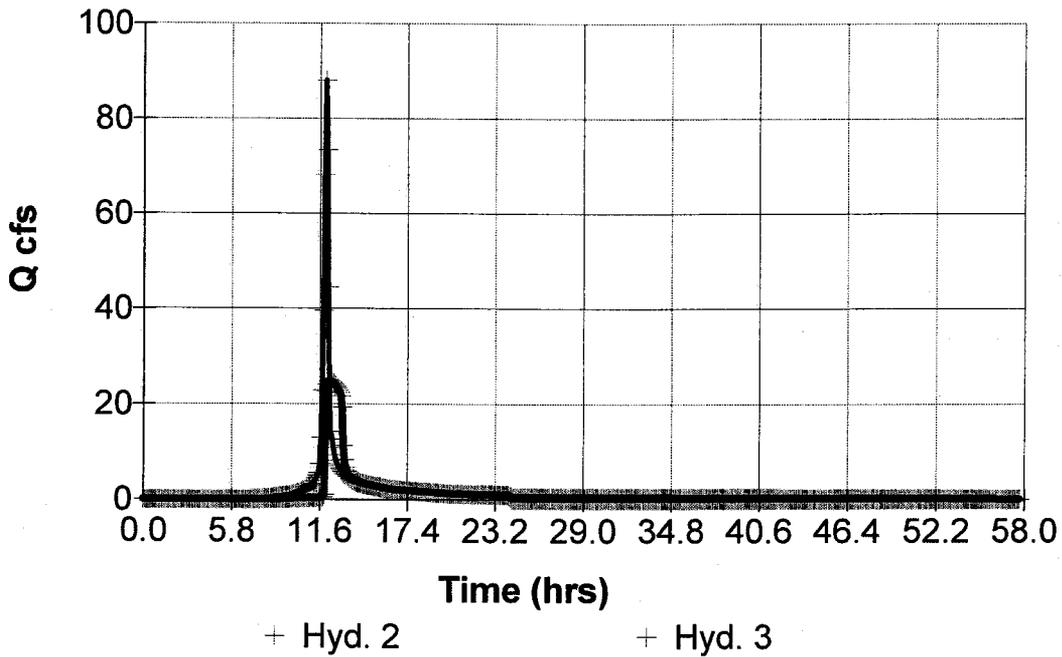
Hydrograph type = Reservoir
Storm frequency = 10 yrs
Inflow hyd. No. = 2
Max. Elevation = 53.48 ft

Peak discharge = 25.04 cfs
Time interval = 5 min
Reservoir name = PH2 DRY POND
Max. Storage = 102,293 cuft

Storage Indication method used.

Hydrograph Volume = 238,862 cuft

3 - Reservoir - 10 Yr - $Q_p = 25.04$ cfs



Hydrograph Summary Report

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to peak (min)	Volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Maximum storage (cuft)	Hydrograph description	
1	SCS Runoff	111.50	5	725	393,364	---	----	----	EXISTING CONDITIONS	
2	SCS Runoff	135.75	5	720	373,089	---	----	----	PROPOSED CONDITION	
3	Reservoir	89.03	5	730	373,088	2	54.66	129,145	PH2 DRY POND ROUTED	
Proj. file: 8223-06-PH2.GPW				Return Period: 100 yr			Run date: 01-11-2003			

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

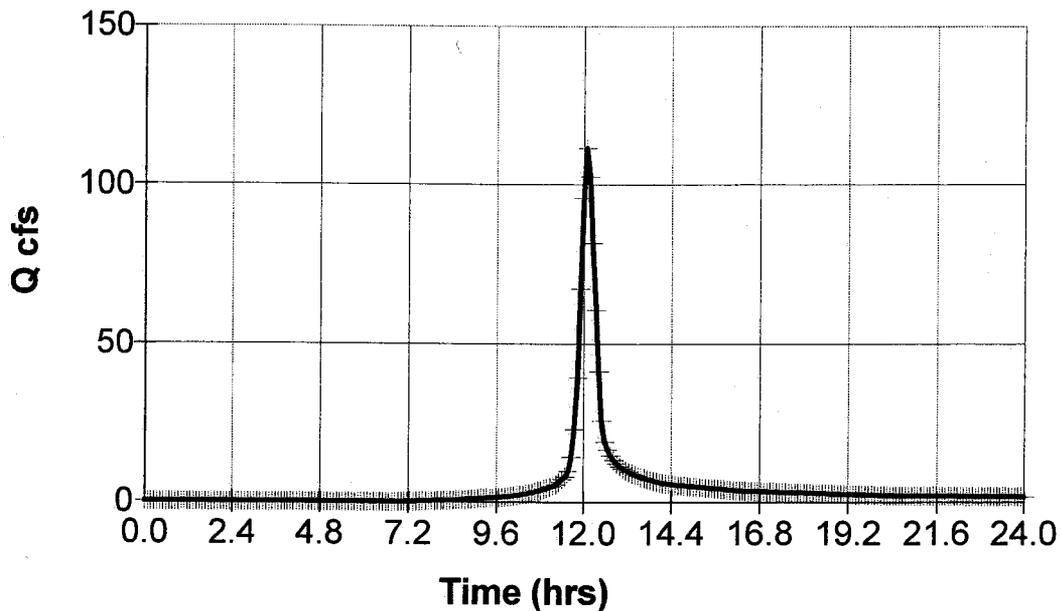
Hyd. No. 1

EXISTING CONDITIONS

Hydrograph type	= SCS Runoff	Peak discharge	= 111.50 cfs
Storm frequency	= 100 yrs	Time interval	= 5 min
Drainage area	= 22.00 ac	Curve number	= 74
Basin Slope	= 5.4 %	Hydraulic length	= 1150 ft
Tc method	= LAG	Time of conc. (Tc)	= 18.3 min
Total precip.	= 8.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Hydrograph Volume = 393,364 cuft

1 - SCS Runoff - 100 Yr - Qp = 111.50 cfs



+ Hyd. 1

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

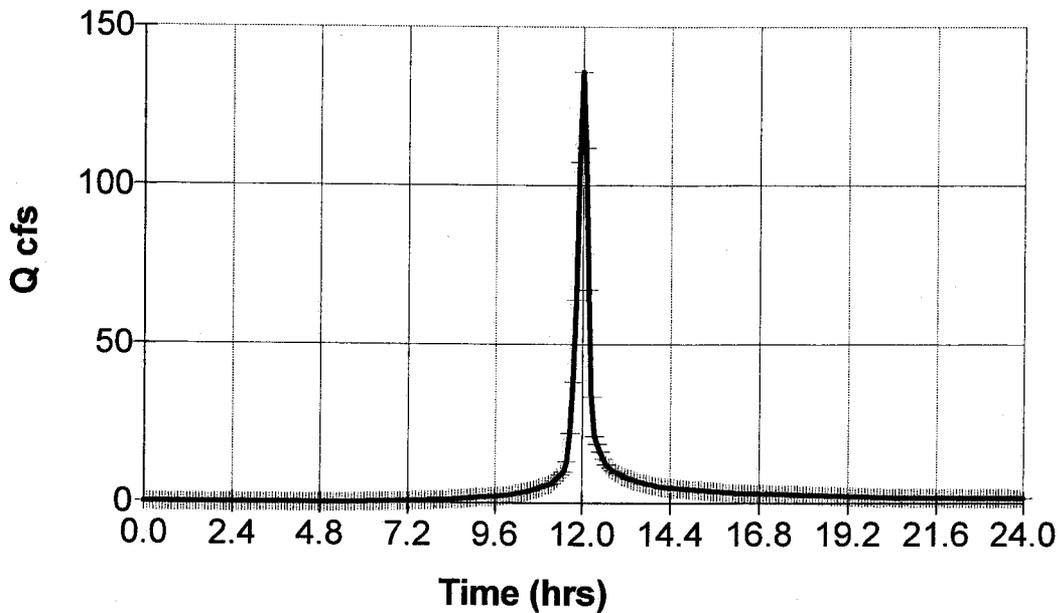
Hyd. No. 2

PROPOSED CONDITION

Hydrograph type	= SCS Runoff	Peak discharge	= 135.75 cfs
Storm frequency	= 100 yrs	Time interval	= 5 min
Drainage area	= 19.49 ac	Curve number	= 80
Basin Slope	= 5.4 %	Hydraulic length	= 1150 ft
Tc method	= LAG	Time of conc. (Tc)	= 15.3 min
Total precip.	= 8.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Hydrograph Volume = 373,089 cuft

2 - SCS Runoff - 100 Yr - Qp = 135.75 cfs



+ Hyd. 2

Hydrograph Plot

Hydraflow Hydrographs by Intelisolve

Hyd. No. 3

PH2 DRY POND ROUTED

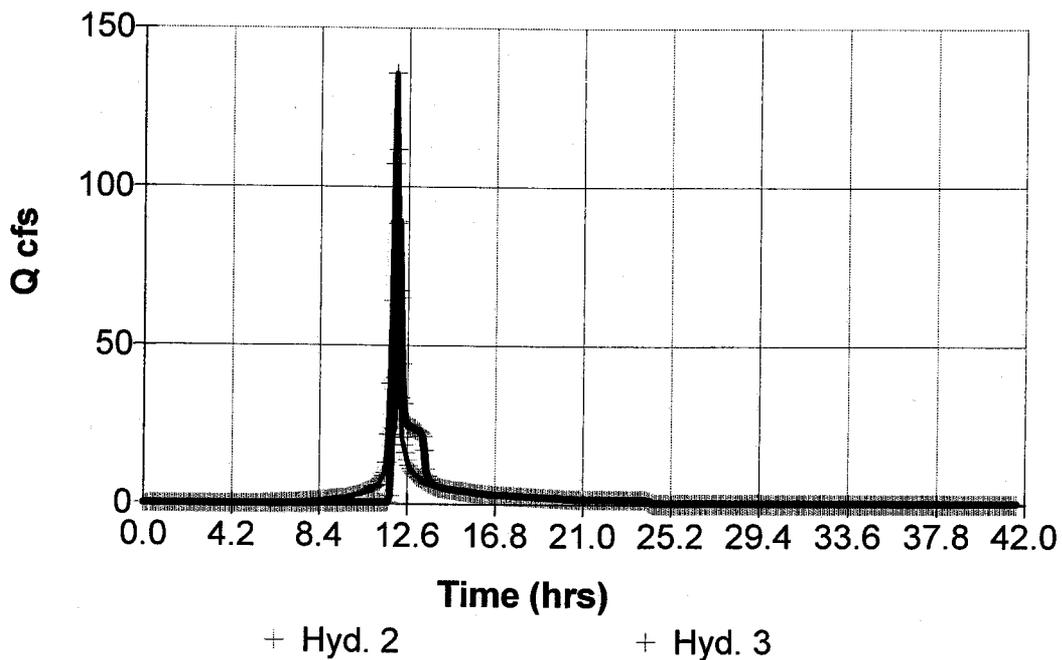
Hydrograph type = Reservoir
Storm frequency = 100 yrs
Inflow hyd. No. = 2
Max. Elevation = 54.66 ft

Peak discharge = 89.03 cfs
Time interval = 5 min
Reservoir name = PH2 DRY POND
Max. Storage = 129,145 cuft

Storage Indication method used.

Hydrograph Volume = 373,088 cuft

3 - Reservoir - 100 Yr - $Q_p = 89.03$ cfs





AMERICAN EASTERN, INC.

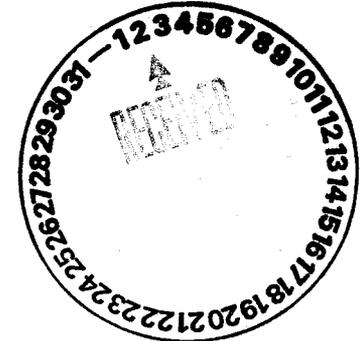
BUILDER • DEVELOPER

632 HAMPTON HWY. • YORKTOWN, VIRGINIA 23693

(757) 867-8800 • Fax (757) 867-7188

February 27, 2004

James Rudnicky
James City County Environmental Division
101 Mounts Bay Road
P. O. Box 8784
Williamsburg, VA 23187-8784



Re: Section II, BMP Inspection Report dated January 23, 2004

Dear Jim,

During the field inspection with Darryl Cook, the first items – The berm was not constructed according to the site plan, were addressed.

The slopes will have additional material added to them at a later date when the growing season gets here. The emergency spillway was reviewed and accepted and covered by a letter of memorandum dated February 18, 2004 from Marc Bennett to Darryl Cook. The berm does not wrap around and connect to the slope of Lot 204. Darryl Cook said that that doesn't matter when he looked at it onsite. What we have is fine.

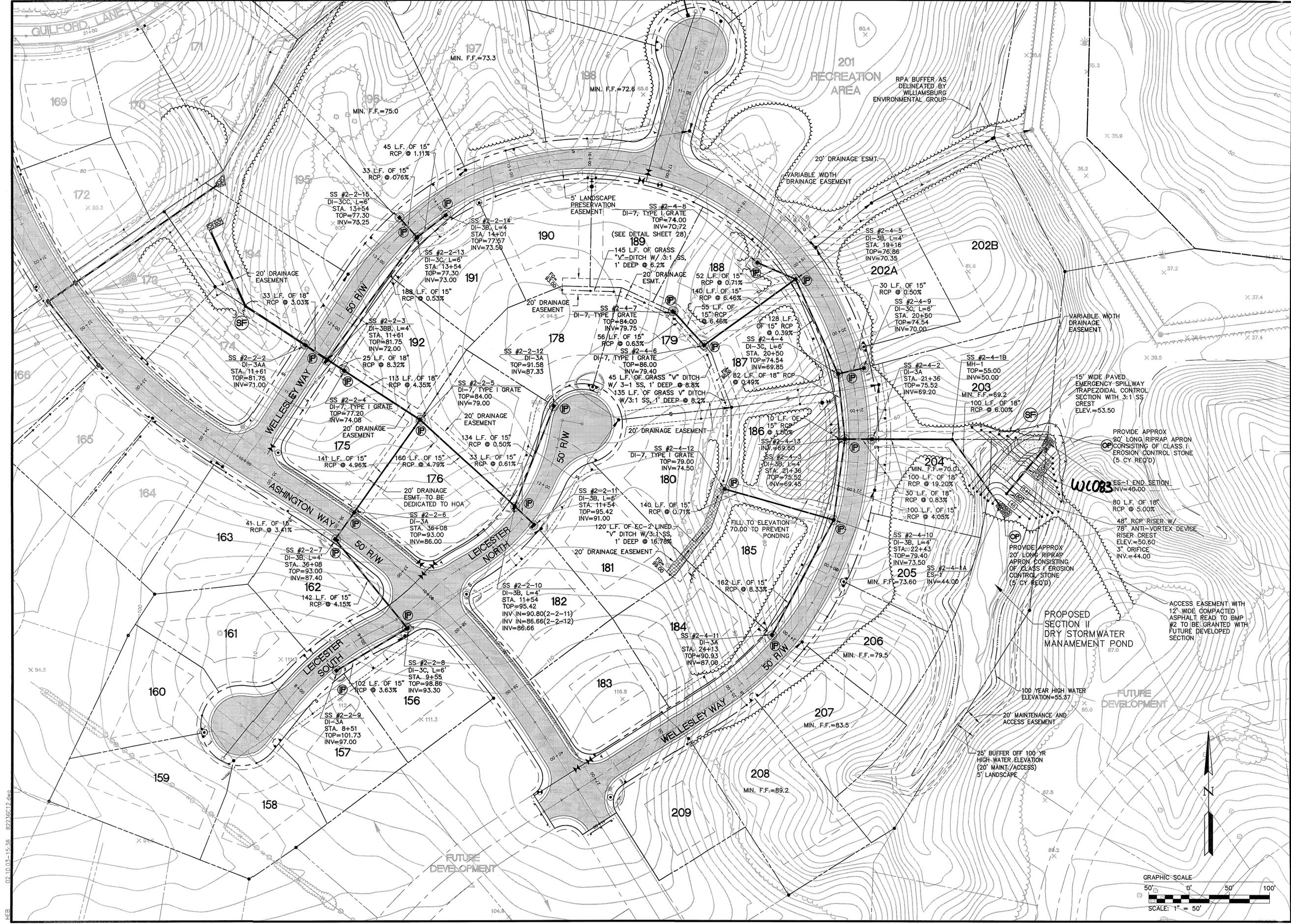
In response to your second item, stabilization will be accomplished when we complete the slopes of the dam. The anti-vortex device has been installed. In response to - Stabilize Lot 204 and repair gullies, we will place mulch in the gullies to try and stop the erosion. The access road will also be mulched to the best of our ability to stop the erosion. As far as the basin holding water – this is a phenomenon that occurs when leaves fall into a basin and the drainage pipe only has ½ inch holes. The clogging of these holes will be an ongoing problem for James City County based upon this design.

Jim, I feel that this answers all of your comments on this report. Should you disagree with any of them or have additional directives, please put them in written detail so we can respond.

Thank You,

H. R. Ashe

HRA/mcl



NO.	DATE	REVISION / COMMENT / NOTE	BY
3	2/7/03	REVISED PER J.C.C. COMMENTS	HWP
2	1/7/03	REVISED PER J.C.C. COMMENTS	HWP
1	9/20/02	REVISED PER J.C.C. COMMENTS	HWP



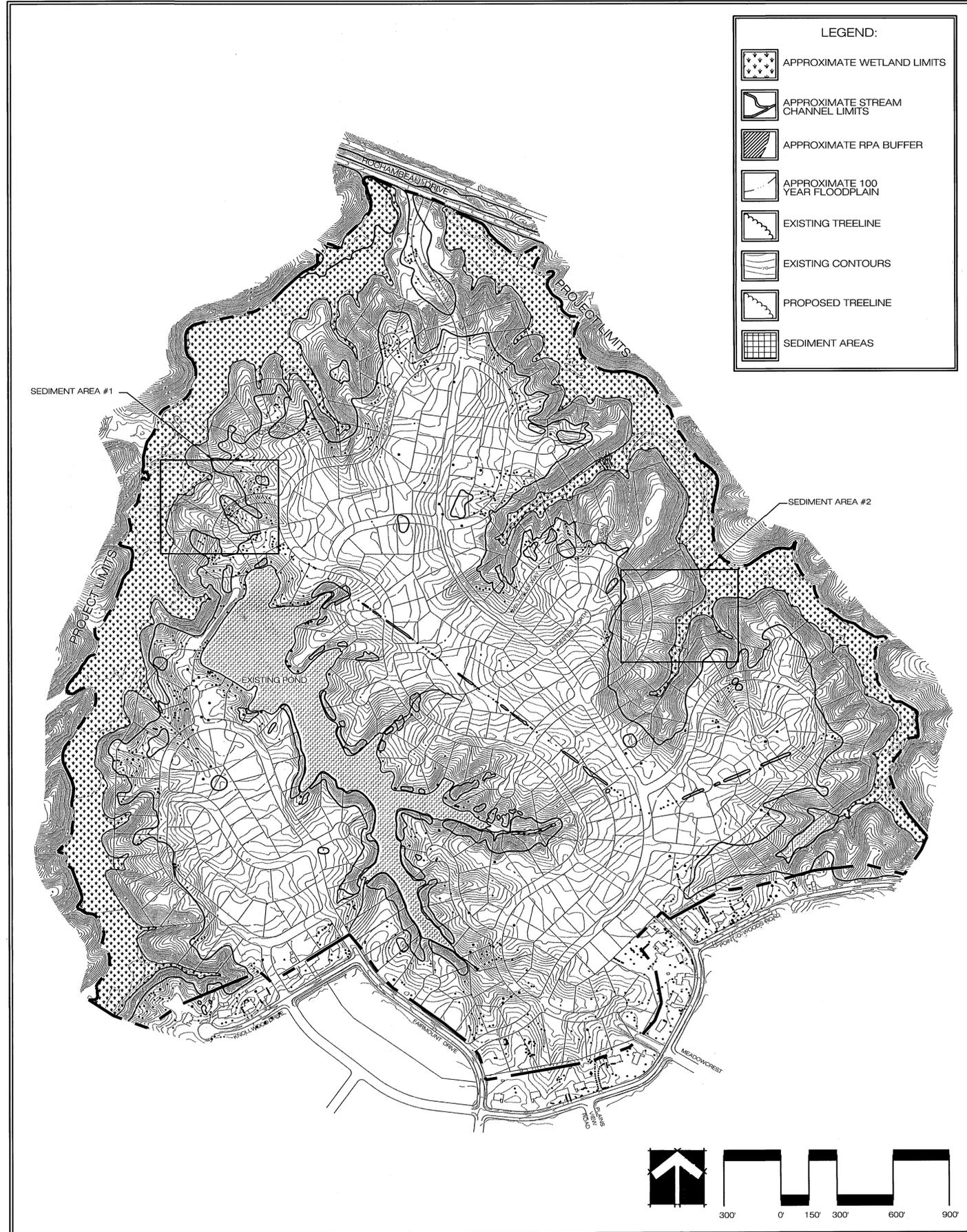
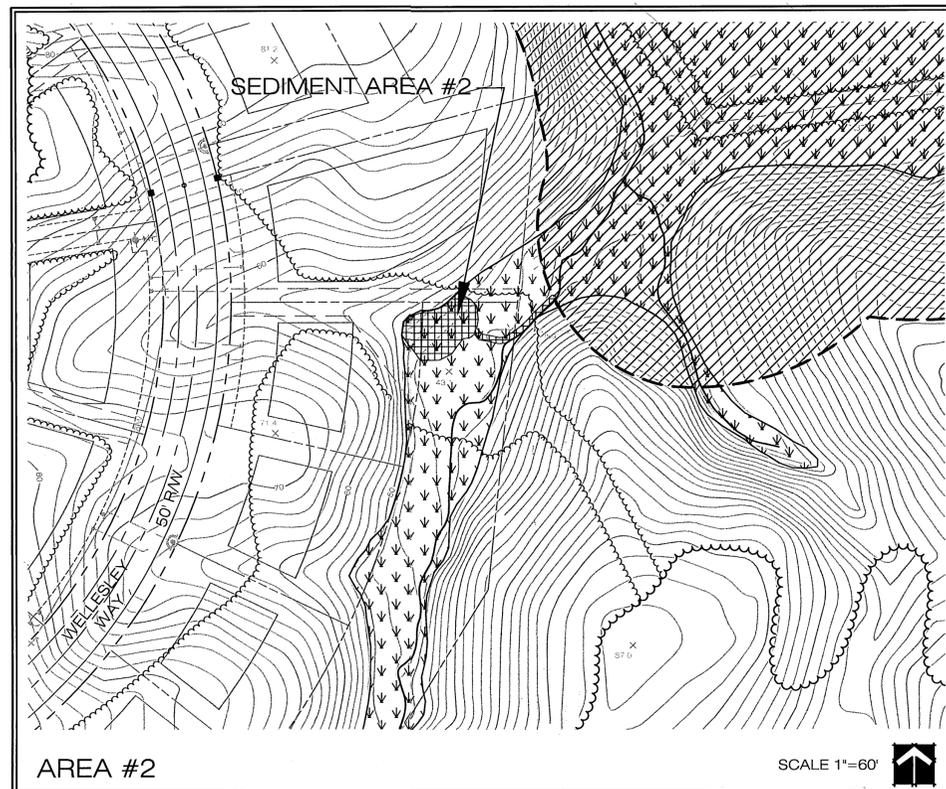
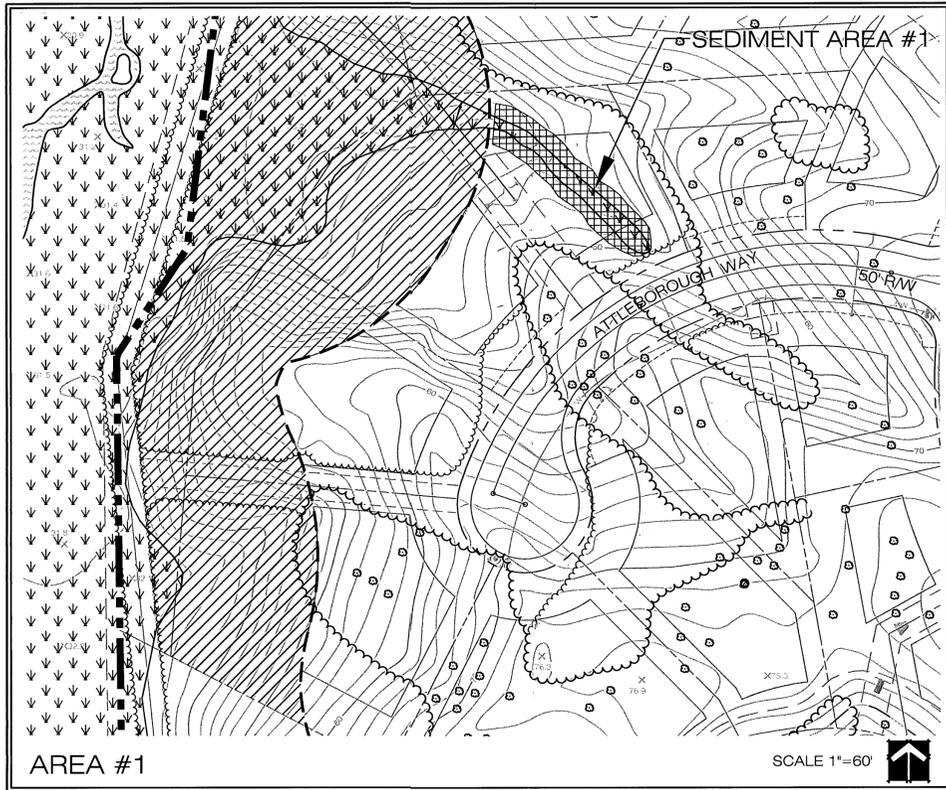
5248 Olde Towne Road, Suite 1
 Williamsburg, Virginia 23188
 (757) 253-0040
 Fax (757) 220-8994



DRAINAGE, EROSION AND SEDIMENT CONTROL PLAN
WELLINGTON
 SECTION II
 OWNER/DEVELOPER: WELLINGTON, L.L.C.
 JAMES CITY COUNTY STONEHOUSE DISTRICT VIRGINIA

Designed HWP/CWG	Drawn RMS/HBK
Scale 1"=50'	Date 3/28/01
Project No. 8223-06	
Drawing No. 12	

HEB 02.10.03-15:38 B2236C12.dwg



3000 Easter Circle
Williamsburg, Virginia 23188
(757) 220-8869
7401 Beaufort Springs Drive, Suite 205
Richmond, Virginia 23225
(804) 287-3474
46030 Markin Plaza, Suite 160
Sterling, Virginia 20166
(703) 406-1390



Environmental Consultants

SEDIMENT LOCATION MAP
WELLINGTON
JAMES CITY COUNTY, VIRGINIA

DATE: SEPTEMBER 3, 2003
JOB NUMBER: 1040
SCALE: 1 INCH = 60 FEET
SOURCE: BASE MAP PROVIDED BY
AES CONSULTING ENGINEERS

Wellington Estates



WC084
Maintenance Agreement
Dated 12/24/02

WC082
Maintenance Agreement
Dated 12/24/02

WC102
Maintenance Agreement
Dated 3/6/08

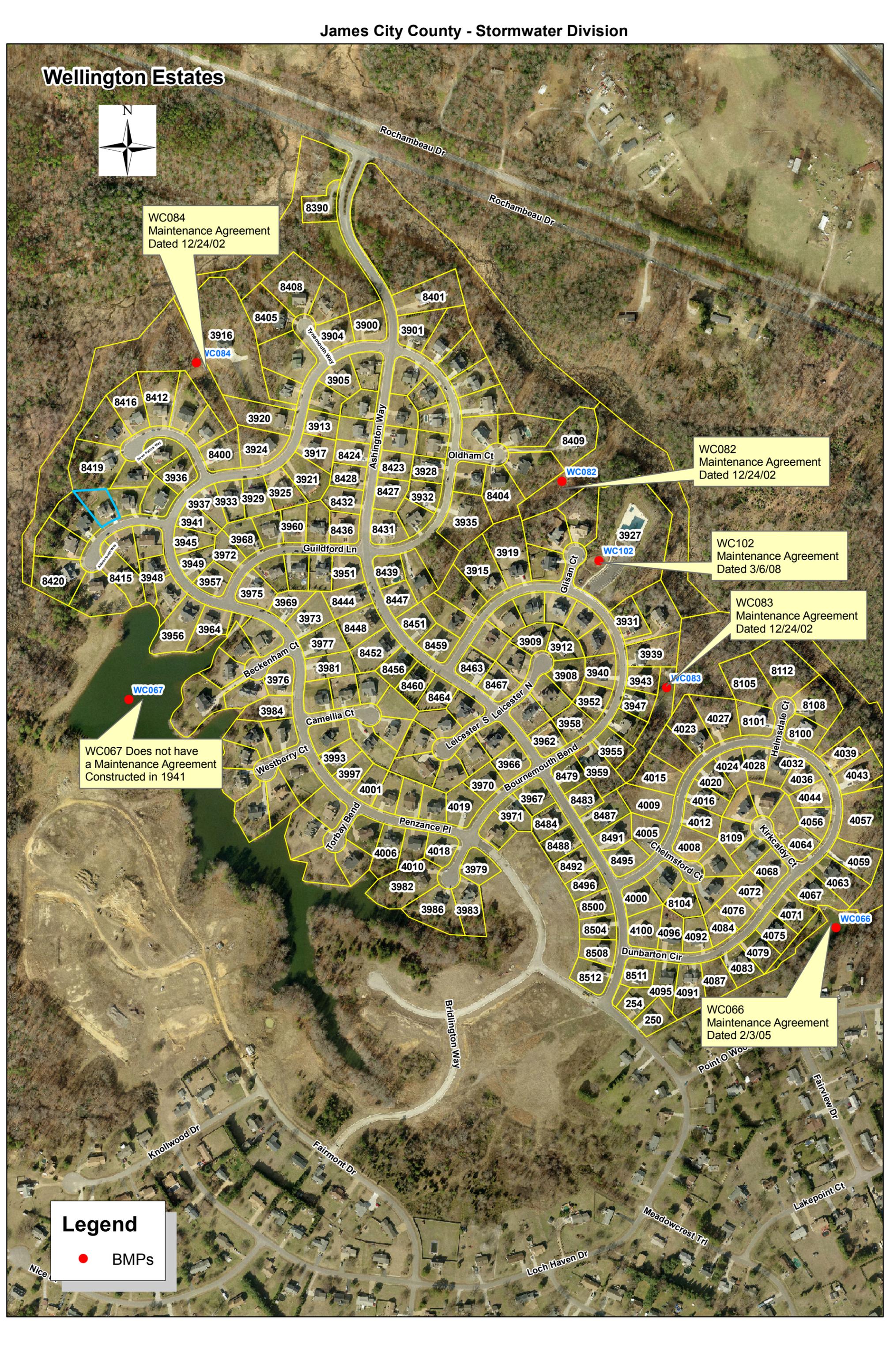
WC083
Maintenance Agreement
Dated 12/24/02

WC067 Does not have
a Maintenance Agreement
Constructed in 1941

WC066
Maintenance Agreement
Dated 2/3/05

Legend

- BMPs



WC066, WC 082, WC083, WC084, WC102, WC 067
James City County - Stormwater Division

Wellington Estates



✓ WC084
Maintenance Agreement
Dated 12/24/02

✗ Sec 1
WC082
Maintenance Agreement
Dated 12/24/02

✓ Clubhouse
WC102
Maintenance Agreement
Dated 3/6/08

✗ Sec 2
WC083
Maintenance Agreement
Dated 12/24/02

✗ Mirror Lake
WC066
Maintenance Agreement
Dated 2/3/05

WC067 Does not have
a Maintenance Agreement
Constructed in 1941

Behind Section 3

Beckham Way
Fairmont Dr
Kroilwood Dr
Nice

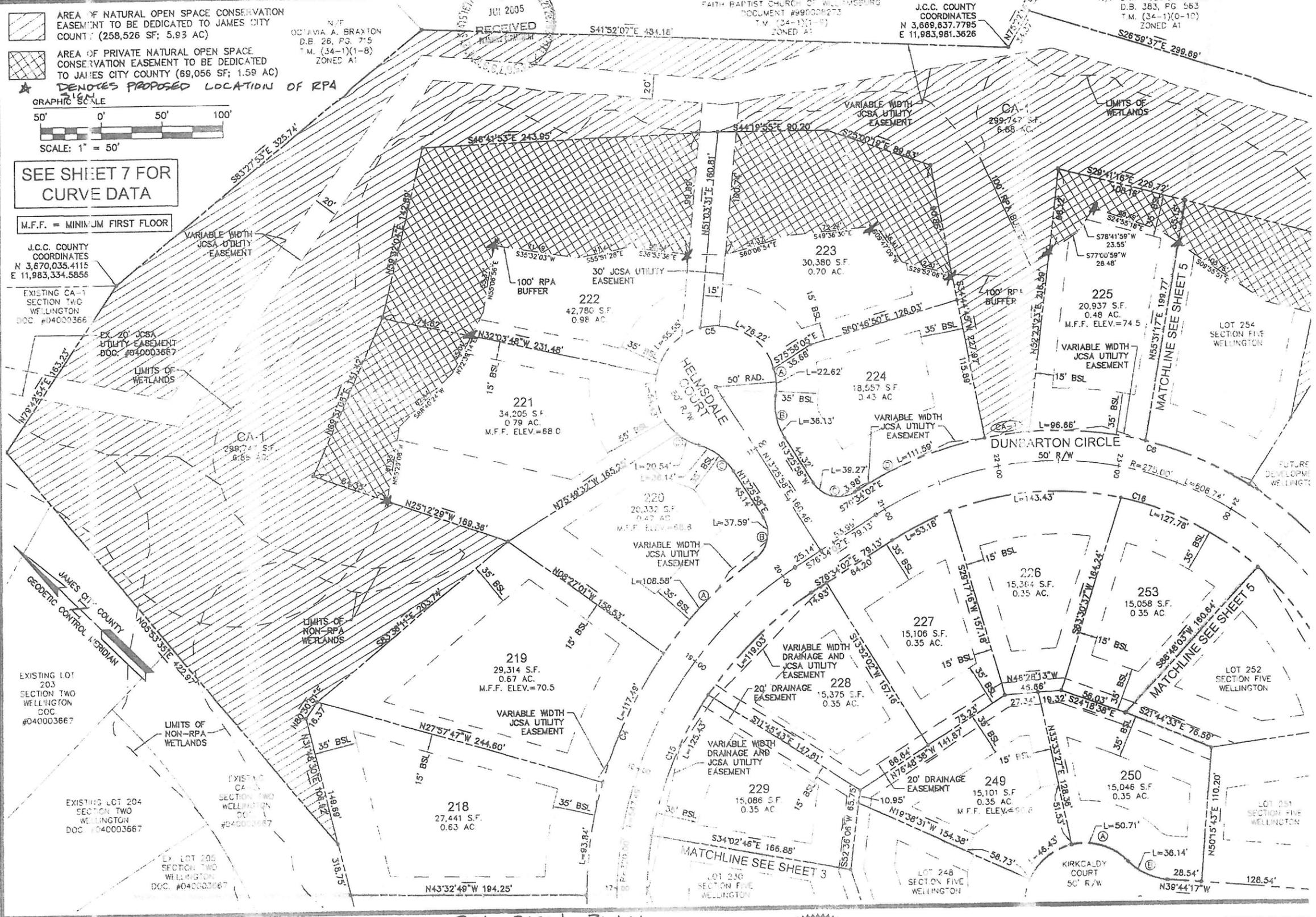
Legend

- BMPs



W.C. 6/6

5-29-05



AREA OF NATURAL OPEN SPACE CONSERVATION EASEMENT TO BE DEDICATED TO JAMES CITY COUNTY (258,526 SF; 5.93 AC)

AREA OF PRIVATE NATURAL OPEN SPACE CONSERVATION EASEMENT TO BE DEDICATED TO JAMES CITY COUNTY (69,056 SF; 1.59 AC)

★ DENOTES PROPOSED LOCATION OF RPA

GRAPHIC SCALE
50' 0' 50' 100'

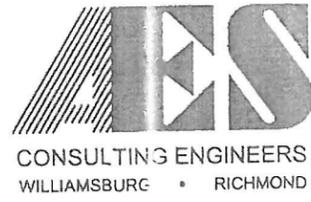
SCALE: 1" = 50'

SEE SHEET 7 FOR CURVE DATA

M.F.F. = MINIMUM FIRST FLOOR

J.C.C. COUNTY COORDINATES
N 3,670,035.4115
E 11,983,334.5856

EXISTING CA-1 SECTION TWO WELLINGTON DOC #040003667



5248 Old Towne Road, Suite 1
Williamsburg, Virginia 23188
(757) 253-0040
Fax (757) 220-8994

RPA SIGN PLAN

PLAT OF SUBDIVISION
WELLINGTON
SECTION FIVE
LOTS 124-131, 210-254, 258-270 (65 LOTS)
BEING THE PROPERTY OF
WELLINGTON, L.L.C.

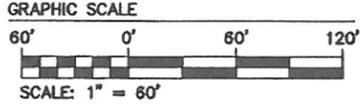
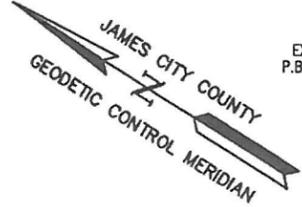
STONEHOUSE DISTRICT JAMES CITY COUNTY VIRGINIA



No.	DATE	REVISION / COMMENT / NOTE	BY
1	5/4/05	REVISED PER J.C.C. COMMENT LETTER DATED 4/27/05	VMB

Designed VMB/JAG	Drawn AJ
Scale 1"=50'	Date 2/2'
Project No. 8223-9	
Drawing No. 4 of 7	

20067



— NATURAL OPEN SPACE EASEMENT HEREBY DEDICATED TO JAMES CITY COUNTY

NOTE: THE PROPERTY IS SUBJECT TO THE DECLARATION OF COVENANTS, CODES, AND RESTRICTIONS MADE ON FEBRUARY 28, 2000

NOTE: JAMES CITY COUNTY COORDINATES REFERENCED ON THIS PLAN ARE BASED UPON JAMES CITY COUNTY CONTROL MONUMENT #302.

NOTE: A FIVE FOOT LANDSCAPE EASEMENT IS HEREBY DEDICATED TO THE HOMEOWNER'S ASSOCIATION ALONG THE RIGHT OF WAY OF ALL ROADS IN SECTION THREE EXCEPT IN THOSE AREAS SHOWN TO BE EASEMENTS DEDICATED TO THE JCSA IN WHICH CASE THE SAID FIVE FOOT IS TO BE ADJACENT TO THE JCSA EASEMENT.

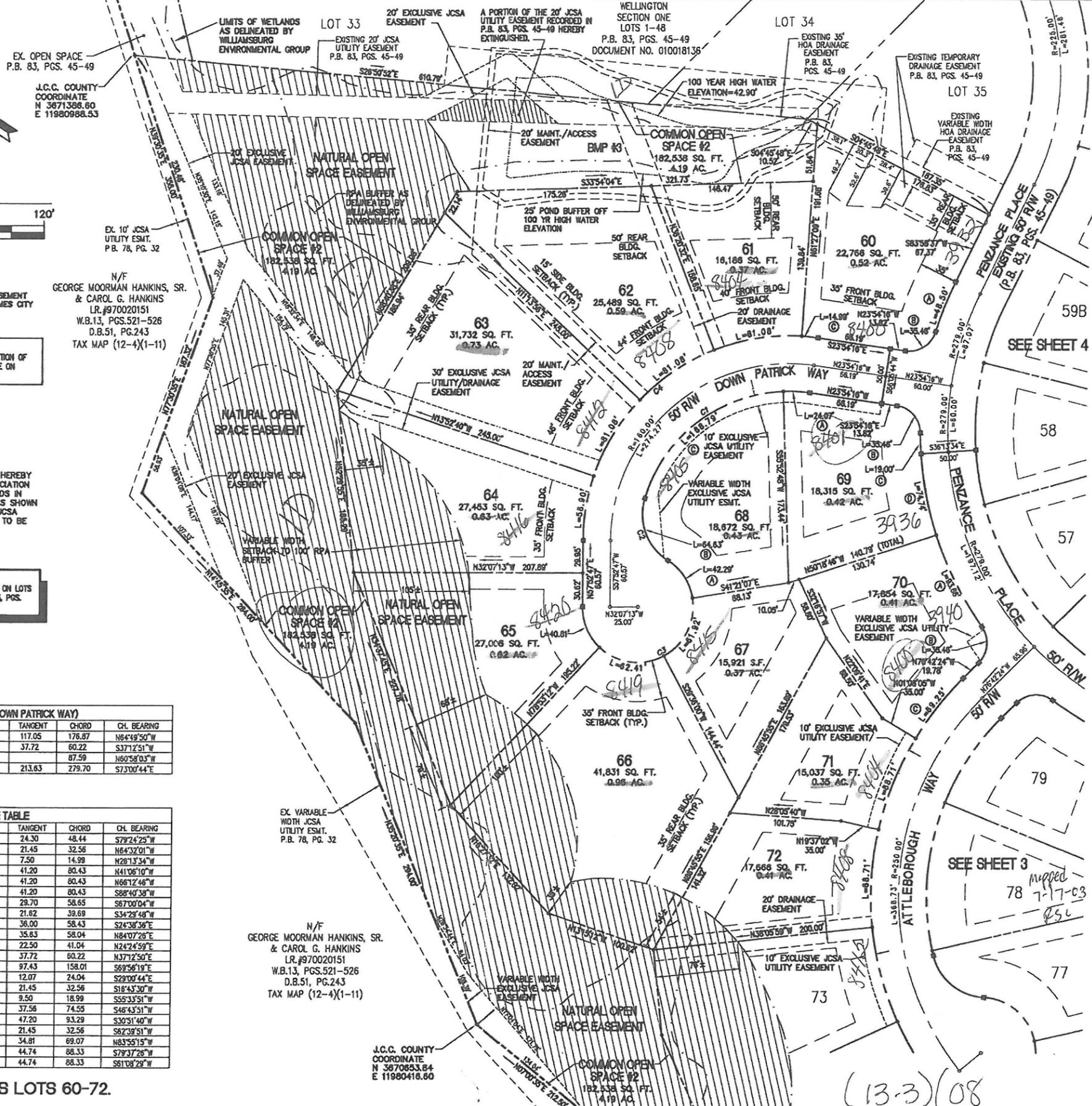
NOTE: ADDITIONAL EASEMENTS HAVE BEEN CREATED ON LOTS 33-35 OF WELLINGTON SECTION ONE, P.B. 83, PGS. 45-19 (DOC. NO. 01001838)

NO.	DELTA	RADIUS	LENGTH	TANGENT	CHORD	CHL. BEARING
C1	81°51'09"	135.00	192.86	117.05	176.87	N64°49'50"W
C2	74°03'29"	50.00	64.63	37.72	60.22	S37°12'51"W
C3	237°41'41"	50.00	207.43	87.59	180°58'03"W	
C4	98°12'56"	185.00	317.13	213.63	279.70	S73°00'44"E

LOT	DELTA	RADIUS	LENGTH	TANGENT	CHORD	CHL. BEARING
60A	9°08'24"	304.00	48.50	24.30	48.44	S79°24'25"W
60B	81°15'31"	25.00	35.46	21.45	32.56	N64°32'01"W
60C	4°38'35"	185.00	14.99	7.50	14.99	N28°13'34"W
61	25°08'36"	185.00	81.08	41.20	80.43	N41°06'10"W
62	25°08'36"	185.00	81.08	41.20	80.43	N66°12'46"W
63	25°08'36"	185.00	81.08	41.20	80.43	S88°40'38"W
64	181°4'33"	185.00	58.90	29.70	58.65	S67°00'04"W
65	48°45'59"	50.00	40.81	21.62	39.69	S34°28'48"W
66	71°30'48"	50.00	62.41	36.00	58.43	S24°38'36"E
67	70°57'07"	50.00	61.92	35.63	58.04	N84°07'28"E
68A	48°27'47"	50.00	42.29	22.50	41.04	N24°24'59"E
68B	74°03'27"	50.00	64.63	37.72	60.22	N37°12'50"E
68C	71°38'13"	135.00	168.79	97.43	158.01	S69°56'19"E
69A	101°2'56"	135.00	24.07	12.07	24.04	S29°00'44"E
69B	81°15'31"	25.00	35.46	21.45	32.56	S18°43'30"W
69C	3°34'49"	304.00	19.00	9.50	18.99	S58°33'51"W
69D	14°05'13"	304.00	74.74	37.56	74.58	S48°43'51"W
70A	17°39'09"	304.00	93.66	47.20	93.28	S30°51'40"W
70B	81°15'31"	25.00	35.46	21.45	32.56	S62°39'51"W
70C	14°25'41"	275.00	69.23	34.81	69.07	N83°55'15"W
71	18°28'57"	275.00	88.71	44.74	88.33	S79°37'28"W
72	18°28'57"	275.00	88.71	44.74	88.33	S61°08'29"W

THIS SHEET ADDRESSES LOTS 60-72.

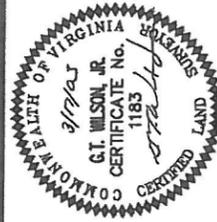
JFS 03.21.03-13:56 822306P02.dwg



N/F
GEORGE MOORMAN HANKINS, SR.
& CAROL G. HANKINS
LR.#970020151
W.B.13, PGS.521-526
D.B.51, PG.243
TAX MAP (12-4)(1-11)

J.C.C. COUNTY
COORDINATE
N 3671388.60
E 11980988.53

No.	DATE	REVISION / COMMENT / NOTE	JFS	BY
1	4/17/03			



CONSULTING ENGINEERS
5248 Old Towne Road, Suite 1
Williamsburg, Virginia 23188
(767) 253-0040
Fax (767) 220-8994

PLAT OF SUBDIVISION
WELLINGTON SECTION THREE
LOTS 49-58, 59A, 59B, 60-89 AND 132-140
BEING THE PROPERTY OF
WELLINGTON, L.L.C.

STONEHOUSE DISTRICT JAMES CITY COUNTY VIRGINIA

Designed HWP	Drawn JFS
Scale 1"=60'	Date 3/17/03
Project No. 8223-6	
Drawing No. 2 OF 4	

(13-3)(08)