



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.

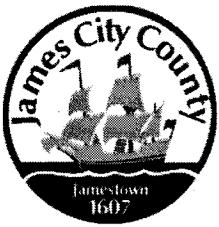
BMP NUMBER: JR025

DATE VERIFIED: June 12, 2012

QUALITY ASSURANCE TECHNICIAN: Leah Hardenbergh

Leah Hardenbergh

LOCATION: WILLIAMSBURG, VIRGINIA



Stormwater Division

MEMORANDUM

DATE: March 11, 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: JR025

PIN: 4410600001A

Subdivision, Tract, Business or Owner

Name (if known):

Governors Land

Property Description:

Open Space Block B Nathaniels Green

Site Address:

(For internal use only)

Box 16

Drawer: 7

Agreements: (in file as of scan date)

N

Book or Doc#:

Page:

Comments

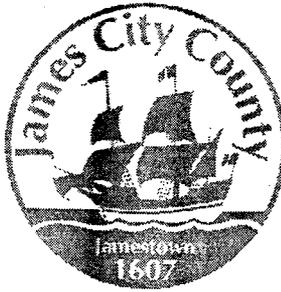
Located adjacent to 3116 Nathaniels Green

JR-025

Contents for Stormwater Management Facilities As-built Files

Each file is to contain:

- ① As-built plan
2. Completed construction certification
3. Construction Plan
4. Design Calculations
5. Watershed Map
6. Maintenance Agreement
7. Correspondence with owners
- ⑧ Inspection Records
9. Enforcement Actions



James City County, Virginia
Environmental Division

Stormwater Management / BMP Facilities
Record Drawing and Construction Certification Forms

(Note: In accordance with the requirements of the Chesapeake Bay Preservation Ordinance, Chapter 23, Section 23-10(4), BMP's shall be designed and constructed in accordance with the manual entitled James City County Guidelines for Design and Construction of Stormwater Management BMP's. Erosion and sediment control policy and approved plans generally require that at the completion of the project and prior to release of surety, an "as-built" plan prepared by a registered Professional Engineer or Certified Land Surveyor must be provided for the drainage system for the project, including any Best Management Practice (BMP) facilities. In addition, for BMP facilities involving the constructor of an impounding structure or dam embankment, certification is required by a Professional Engineer who has inspected the structure during its construction. Currently there are over 20 water quality type BMP's accepted by the County.)

Section 1 - Site Information:

Project Name: GOVERNOR'S LAND - PHASE I
Structure/BMP Name: DRY DETENTION POND #2
Project Location: ROUTE 5
BMP Location: END OF PRIVATE DRIVE AT END OF WEST ISLAND ROAD
County Plan No.: S - 7 - 90

Project Type: Residential Business Tax Map/Parcel No.: 4410100007
 Commercial Office BMP ID Code (if known): JR025
 Institutional Industrial Zoning District: R-4
 Public Roadway Land Use: RESIDENTIAL
 Other Site Area (sf or acres): _____

Brief Description of Stormwater Management/BMP Facility: EARTHEN EMBANKMENT
APPROXIMATELY 10 FEET HIGH WITH CONCRETE PIER STRUCTURE
AND ANTI-VORTEX COLLAR

Nearest Visible Landmark to SWM/BMP Facility: JCSA LIFT STATION 6L-2

Nearest Vertical Ground Control (if known):
 JCC Geodetic Ground Control USGS Temporary Arbitrary Other
Station Number or Name: 336
Datum or Reference Elevation: 78.20
Control Description: _____
Control Location from Subject Facility: 8000' ± NORTHEAST OF FACILITY

Section 2 - Stormwater Management / BMP Facility Construction Information:

PreConstruction Meeting Held for Construction of SWM/BMP Facility: Yes No Unknown
Approx. Construction Start Date for SWM/BMP Facility: 1990
Facility Monitored by County Representative during Construction: Yes No Unknown
Name of Site Work Contractor Who Constructed Facility: C. LEWIS WALTERS, INC.
Name of Professional Firm Who Routinely Monitored Construction: UNKNOWN
Date of Completion for SWM/BMP Facility: UNKNOWN
Date of Record Drawing/Construction Certification Submittal: OCTOBER 18, 2001

(Note: Record Drawing and Construction Certifications are required within thirty (30) days of the completion of Stormwater Management and/or BMP facility construction. Record Drawings and Construction Certifications must be reviewed and approved by the James City County Environmental Division prior to final inspection, acceptance and bond or surety release.)

Section 3 - Owner / Designer / Contractor Information:

Owner/Developer: *(Note: Site Owner or Applicant responsible for development of the project.)*
Name: GOVERNORS LAND ASSOCIATES % STONEHOUSE REAL CO.
Mailing Address: 9701 MILL POND RUN
TOWNSHIP, VA
Business Phone: 734-5000 Fax: 734-5111
Contact Person: JAMES H. BENNETT Title: VICE PRESIDENT - DEVELOPMENT

Design Professional: *(Note: Professional Engineer or Certified Land Surveyor responsible for the design and preparation of plans and specifications for the Stormwater Management / BMP facility.)*

Firm Name: AES CONSULTING ENGINEERS
Mailing Address: 5249 OLDE TOWNE ROAD, SUITE 1
WILLIAMSBURG, VIRGINIA 23188
Business Phone: 757-253-0040
Fax: 757-220-8994
Responsible Plan Preparer: JAMES H. BENNETT
Title: PROJECT MANAGER
Plan Name: GOVERNOR'S LAND - PHASE 1
Firm's Project No. 7173
Plan Date: FEBRUARY 1990
Sheet No.'s Applicable to SWM/BMP Facility: 31 / 1 / 1 / 1 / 1

BMP Contractor: *(Note: Site Work Contractor directly responsible for construction of the Stormwater Management / BMP facility.)*

Name: C. LEWIS WALTERS II INC.
Mailing Address: 1554 PENNINGTON ROAD
WILLIAMSBURG, VA 23135
Business Phone: 253-1883
Fax: 220-0916
Contact Person: SEAN DUKSTON
Site Foreman/Supervisor: UNKNOWN
Specialty Subcontractors & Purpose (for BMP Construction Only): UNKNOWN

Section 4 - Professional Certifications:

Certifying Professionals: (Note: A Registered Professional Engineer or Certified Land Surveyor is responsible for preparation of a Record Drawing, sometimes referred to as an As-Built plan, for the drainage system for the project including any Stormwater Management/BMP Facilities. A Registered Professional Engineer is responsible for the inspection, monitoring and certification of Stormwater Management / BMP facilities during its construction.)

Record Drawing and Construction Certifications for Stormwater Management / BMP Facilities

Record Drawing Certification

Firm Name: AES Construction Engineers
Mailing Address: 5245 Old Towne Road, Suite 1
Williamsburg, Va 23183
Business Phone: 757-253-0000
Fax: 757-220-8994
Name: V. Marc Bennett
Title: Project Manager
Signature: [Signature]
Date: 10/16/01

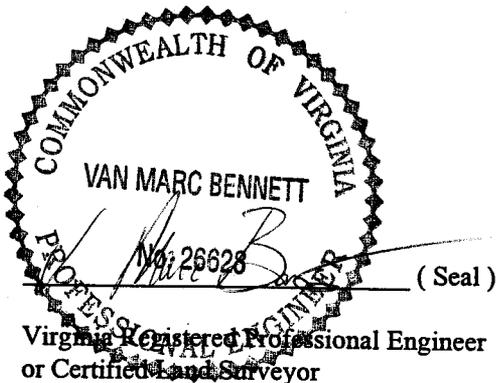
Construction Certification

Firm Name: _____
Mailing Address: _____
Business Phone: _____
Fax: _____
Name: _____
Title: _____
Signature: _____
Date: _____

I hereby certify to the best of my knowledge and belief that this record drawing represents the actual condition of the Stormwater Management / BMP facility. The facility appears to conform with the provisions of the approved design plan, specifications and stormwater management plan, except as specifically noted.

I hereby certify to the best of my knowledge and belief that this Stormwater Management/BMP facility was monitored and constructed in accordance with the provisions of the approved design plan, specifications and stormwater management plan, except as specifically noted.

EXCEPT FOR SUBSURFACE EXPLORATION BY ELS IS ATTACHED



(Seal)

Virginia Registered Professional Engineer

Section 5 - Record Drawing and Construction Certification Requirements and Instructions:

- PreConstruction Meeting - Provides an opportunity to review SWM / BMP facility construction, maintenance and operation plans and address any questions regarding construction and/or monitoring of the structure. The design engineer, certifying professionals (if different), Owner/Applicant, Contractor and County representative(s) are encouraged to attend the preconstruction meeting. Advanced notice to the Environmental Division is requested. Usually, this requirement can be met simultaneously with Erosion and Sediment Control preconstruction meetings held for the project.
- A fully completed ***STORMWATER MANAGEMENT / BMP FACILITIES, RECORD DRAWING and CONSTRUCTION CERTIFICATION FORM*** and ***RECORD DRAWING CHECKLIST***. All applicable sections shall be completed in their entirety and certification statements signed and sealed by the registered professional responsible for individual record drawing and/or construction certification.
- The Record Drawing shall be prepared by a Registered Professional Engineer or Certified Land Surveyor for the drainage system of the project including any Best Management Practices.
- Construction Certification. Construction of Stormwater Management / BMP facilities which contain impoundments, embankments and related engineered appurtenances including subgrade preparation, compacted soils, structural fills, liners, geosynthetics, filters, seepage controls, cutoffs, toe drains, hydraulic flow control structures, etc. shall be visually observed and monitored by a Registered Professional Engineer or his/her authorized representative. The Engineer must certify that the structure, embankment and associated appurtenances were built in accordance with the approved design plan, specifications and stormwater management plan and standard accepted construction practice and shall submit a written certification and/or drawings to the Environmental Division as required. Soil and compaction test reports, concrete test reports, inspection reports, logs and other required construction material or installation documentation may be required by the Environmental Division to substantiate the certification, if specifically requested. The Engineer shall have the authority and responsibility to make minor changes to the approved plan, in coordination with the assigned County inspector, in order to compensate for unsafe or unusual conditions encountered during construction such as those related to bedrock, soils, groundwater, topography, etc. as long as changes do not adversely affect the integrity of the structure(s). Major changes to the approved design plan or structure must be reviewed and approved by the original design professional and the James City County Environmental Division.
- Record Drawing and Construction Certifications are required within **thirty (30) days** of the completion of Stormwater Management / BMP facility construction. Submittals must be reviewed and accepted by James City County Environmental Division prior to final inspection, acceptance and bond/surety release.

Dual Purpose Facilities - Completion of construction also includes an interim stage for Stormwater Management / BMP facilities which serve dual purpose as temporary sediment basins during construction and as permanent stormwater management / BMP facilities following construction, once development and stabilization are substantially complete. For these dual purpose facilities, construction certification is required once the temporary sediment basin phase of construction is complete. Final record drawing and construction certification of additional permanent components is required once permanent facility construction is complete.

Interim Construction Certification is required for those dual purpose embankment-type facilities that are generally ten (10) feet or greater in dam height (*) and may not be converted, modified or begin function as a permanent SWM / BMP structure for a period generally ranging from six (6) to eighteen (18) months or more from issuance of a Land Disturbance permit for construction.

Interim or final record drawing and construction certifications are not required for temporary sediment basins which are designed and constructed in accordance with current minimum standards and specifications for temporary sediment basins per the Virginia Erosion and Sediment Control Handbook (VESCH); have a temporary service life of less than eighteen (18) months; and will be removed completely once associated disturbed areas are stabilized, unless a distinct hazard to the public's health, safety and welfare is determined by the Environmental Division due to the size or presence of the structure or due to evidence of improper construction.

(*Note: Dam Height as referenced above is generally defined as the vertical distance from the natural bed of the stream or waterway at the downstream toe of the embankment to the top of the embankment structure in accordance with 4VAC50-20-30, Virginia Impoundment Structure Regulations and the Virginia Dam Safety Program.)

- Record Drawings shall provide, at a minimum, all information as shown within these requirements and the attached **RECORD DRAWING CHECKLIST** specific to the type of SWM/BMP facility being constructed. Other additional record data may be formally requested by the James City County Environmental Division. *(Note: Refer to the current edition of the James City County Guidelines for Design and Construction of Stormwater Management BMP's manual for a complete list of acceptable BMP's. Currently there are over 20 acceptable water quality type BMP's accepted by the County.)*
- Record Drawings shall consist of blue/black line prints and a reproducible (mylar, sepia, diazo, etc.) set of the approved stormwater management plan including applicable plan views, profiles, sections, details, maintenance plans, etc. as related to the subject SWM / BMP facility. The set shall indicate "**RECORD DRAWING**" in large text in the lower right hand corner of each sheet with record elevations, dimensions and data drawn in a clearly annotated format and/or boxed beside design values. Approved design plan values, dimensions and data shall not be removed or erased. Drawing sheet revision blocks shall be modified as required to indicate record drawing status. Elevations to the nearest 0.1' are sufficiently accurate except where higher accuracy is needed to show positive drainage. Certification statements as shown in Section 4 of the Record Drawing and Construction Certification Form, *or similar forms thereof*, and professional signatures and seals, with dates matching that of the record drawing status in the revision or title block, are also required on all associated record drawing plans, prints or reproducibles.
- Submission Requirements. Initial and subsequent submissions for review shall consist of a minimum of one (1) blue/black line set for record drawings and one copy of the construction certification documents with appropriate transmittal. Under certain circumstances, it is understood that the record drawing and construction certification submissions may be performed by different professional firms. Therefore, record drawing submission may be in advance of construction certification or vice versa. Upon approval and prior to release of bond/surety, final submission shall include one (1) reproducible set of the record drawings, one (1) blue/black line set of the record drawings and one (1) copy of the construction certification. Also for current and/or future incorporation into the County BMP database and GIS system, it is requested that the record drawings also be submitted to the Environmental Division on a diskette or CD-ROM in an acceptable electronic file format such as *.dxf, *.dwg, etc. or in a standard scanned and readable format. The electronic file requirement can be discussed and coordinated with Environmental Division staff at the time of final submission.

**STORMWATER MANAGEMENT / BMP FACILITIES
RECORD DRAWING CHECKLIST**

(Key for Checklist is as follows: XX Acceptable N/A Not Applicable Inc Incomplete)

I. Methods and Presentation: (Required for all Stormwater Management / BMP facilities.)

- XX 1. All constructed facilities meet approved design plans, unless otherwise shown. Record information or deviations from approved design plan shown in clearly annotated format and/or boxed beside design values.
- XX 2. Elevations to the nearest 0.1' unless higher accuracy is needed to show positive drainage.
- XX 3. All plan sheets labeled with "RECORD DRAWING" in large text in lower right hand corner (Approved County Plan Number and BMP ID Code can be included if known).
- XX 4. All plan sheet revision blocks modified to indicate date and record drawing status.
- XX 5. All plan sheets have certification statements and certifying professional's signature and seal.

II. Minimum Standards: (Required for all Stormwater Management / BMP facilities, as applicable.)

- XX 1. All requirements of Section I (Methods and Presentation) apply to this section.
- XX 2. Plan Views: Show general location, arrangement and dimensions. ~~Location and alignment shall generally match approved design plans.~~
- XX 3. Profile or elevations along top or berm of the facility. At a minimum, elevations are required at each end, at intervals not to exceed 50 feet and where low spots may be present. Top of embankment or berm elevations must be no less than design elevation plus any settlement allowances.
- XX 4. Top widths, berm widths and embankment side slopes.
- XX 5. Show length, width and depth of facility or grading, contours or spot elevations as required to verify permanent pool and design storage volumes were met or were reasonably close to the approved design. Evaluation of as-built grading, contours, spot elevations, or cross-sections, may be necessary by the professional to ensure approved design configurations, depths and volumes were closely maintained. If grading or elevations are significantly different from the approved plan, the Environmental Division shall be contacted immediately to determine whether the variation is acceptable or whether further evidence will be required. Facilities which do not closely resemble approved plan grades, elevations or configurations may require regrading by the Contractor; ~~check volumetric computations; and/or a check hydraulic routing to ensure approved design water surface elevations, discharges or freeboard were closely maintained.~~
- XX 6. Cross-section of the embankment through the principal spillway or outlet barrel. ~~Must extend at least 100 ft. downstream of the pipe outlet or to recorded site property line, whichever is closer.~~ Proper correlation is required between principal spillway (control structure) crest, emergency spillway crest, orifice and weirs and the top of the dam or facility. All elevations and dimensions must reasonably match the design plan or be sequentially relative to each other and the facility must reflect the required design storage volume(s) and/or design depth.
- N/A 7. Profile or elevations along the entire centerline of the emergency spillway. Emergency spillway may be steeper, but no flatter or narrower than design.
- XX 8. Elevation of the principal spillway crest or outlet crest of the structure.

- XX 9. Primary control structure (riser) diameter or dimensions, height, type of material and base size. ~~Indicate provisions for access that are present such as steps, ladders, etc.~~
- XX 10. Dimensions, locations and elevations of outlet orifices, weirs, slots and drains.
- XX 11. Type and size of anti-vortex and trash rack device. Height, diameter, dimensions, bar spacings (if applicable) and elevations relative to the principal spillway crest. Indicate if lockable hatch is present or not.
- INC 12. Type, location, size and number of anti-seep collars or documentation of other methods utilized for seepage control. **May need to obtain this information during construction.**
- INC 13. Top of impervious core embankment, core trench limits and elevation of cut-off trench bottom. **May need to obtain this information during construction.**
- XX 14. Elevation of the principal spillway barrel (outlet pipe) inlet and outlet invert.
- XX 15. Outlet barrel diameter, length, slope, type and thickness class of material and type of flared end sections, headwall or endwall.
- INC 16. Outfall protection dimension, type and depth of rock and if underlain filter fabric is present.
- N/A 17. BMP interior and periphery landscaping zones conform with arrangements and requirements of the approved design plan.
- N/A 18. Maintenance plan taken from approved design plan transposed onto record drawing set.
- N/A 19. Fencing location and type, if applicable to facility.
- XX 20. BMP vicinity properly cleaned of stockpiles and construction debris.
- INC 21. No visual signs of erosion or channel degradation immediately downstream of facility.
- INC 22. Any other information formally requested by the Environmental Division specific to the constructed SWM/BMP facility.

**STORMWATER MANAGEMENT / BMP FACILITIES
RECORD DRAWING CHECKLIST**

(Key for Checklist is as follows: XX Acceptable N/A Not Applicable Inc Incomplete)

III. Group A - Wet Ponds (Includes A-1 Small Wet Ponds; A-2 Wet Ponds; A-3 Wet Ext Det Ponds.)

- N/A A1. All requirements of Section II, Minimum Standards, apply to Group A facilities.
- N/A A2. Principal spillway consists of reinforced concrete pipe with O-Ring gaskets for watertight joint construction.
- N/A A3. Sediment forebays or pretreatment devices provided at inlets to pond. Generally 4 to 6 ft. deep.
- N/A A4. Access for maintenance and equipment is provided to the forebay(s). Access corridors are at least 12 ft. wide, have a maximum slope of 15 percent and are adequately stabilized to withstand heavy equipment or vehicle use.
- N/A A5. Adequate fixed vertical sediment depth markers installed in the forebay(s) for future sediment monitoring purposes.
- N/A A6. Pond liner (if required) provided. Either clay liners, polyliners, bentonite liners or use of chemical soil additives based on requirements of the approved plan.
- N/A A7. Minimum 6 percent slope safety bench extending a minimum of 15 feet outward from normal pool edge and/or an aquatic bench extending a minimum of 10 feet inward from the normal shoreline with a maximum depth of 12 inches below the normal pool elevation, if applicable, per the approved design plans. (Note: Safety benches may be waived if pond side slopes are no steeper than 4H:1V).
- N/A A8. No trees are present within a zone 15 feet around the embankment toe and 25 feet from the principal spillway structure.
- N/A A9. Wet permanent pool, typically 3 to 6 feet deep, is provided and maintains level within facility.
- N/A A10. Low flow orifice has a non-clogging mechanism.
- N/A A11. A pond drain pipe with valve was provided.
- N/A A12. Pond side slopes are not steeper than 3H:1V, unless approved plan allowed for steeper slope.
- N/A A13. End walls above barrels (outlet pipe) greater than 48 inch in diameter are fenced to prevent a fall hazard.

**STORMWATER MANAGEMENT / BMP FACILITIES
RECORD DRAWING CHECKLIST**

(Key for Checklist is as follows: XX Acceptable N/A Not Applicable Inc Incomplete)

IV. Group B - Wetlands (Includes B-1 Shallow Marsh; B-2 Ext Det Shallow Wetlands; B-3 Pond Wetland System and B-4 Pocket Wetland)

- N/A B1. Same requirements as Group A Wet Ponds.
- N/A B2. Minimum 2:1 length to width flow path provided across the facility.
- N/A B3. Micropool provided at or around outlet from BMP (generally 3 to 6 ft. deep).
- N/A B4. Wetland type landscaping provided in accordance with approved plan. Includes correct pondscaping zones, plant species, planting arrangements, wetland beds, etc. Wetland plants include 5 to 7 emergent wetland species. Individual plants at 18 inches on center in clumps.
- N/A B5. Adequate wetland buffer provided (Typically 25 ft. outward from maximum design water surface elevation and 15 ft. setback to structures).
- N/A B6. No more than one-half (1/2) of the wetland surface area is planted.
- N/A B7. Topsoil or wetland mulch provided to support vigorous growth of wetland plants.
- N/A B8. Planting zones staked or flagged in field and locations subsequently established by appropriate field surveying methods for record drawing presentation.

**STORMWATER MANAGEMENT / BMP FACILITIES
RECORD DRAWING CHECKLIST**

(Key for Checklist is as follows: XX Acceptable N/A Not Applicable Inc Incomplete)

V. Group C - Infiltration Practices

(Includes C-1 Infiltration Trench; C-2 Infiltration Trench;
C-3 Infiltration Basin; and C-4 Infiltration Basin)

- N/A C1. All requirements of Section II, Minimum Standards, apply to Group C facilities as applicable.
- N/A C2. Facility is not located on fill slopes or on natural ground in excess of six (6) percent.
- N/A C3. Pretreatment devices provided prior to entry into the infiltration facility. Acceptable pretreatment devices include sediment forebays, sediment basins, sediment traps, sump pits or inlets, grass channels, plunge pools or other acceptable measures.
- N/A C4. Three (3) or more of the following pretreatment devices provided to protect long term integrity of structure: grass channel; grass filter strip; bottom sand layer; upper filter fabric layer; use of washed bank run gravel aggregate.
- N/A C5. Sides of infiltration practice lined with filter fabric.
- N/A C6. Facility was not used for erosion and sediment control purposes and sediment was prevented from entering the facility to the greatest extent possible during construction.
- N/A C7. Stabilization and acceptable vegetative cover established over contributing drainage area prior to conveyance of stormwater to the facility.
- N/A C8. Minimum one hundred (100) foot separation horizontally from any known water supply well and minimum one hundred (100) foot separation upslope from any building.
- N/A C9. Minimum twenty-five (25) foot separation down gradient from any structure.
- N/A C10. Stormwater outfalls provided for overflow associated with larger design storms.
- N/A C11. No visual signs of erosion or channel degradation immediately downstream of facility.
- N/A C12. Facility does not currently cause any apparent surface or subsurface water problems to downgrade properties.
- N/A C13. Observation well provided.
- N/A C14. Adequate, direct access provided to the facility for future maintenance, operation and inspection.

**STORMWATER MANAGEMENT / BMP FACILITIES
RECORD DRAWING CHECKLIST**

(Key for Checklist is as follows: XX Acceptable N/A Not Applicable Inc Incomplete)

VI. Group D - Filtering Systems (Includes D-1 Bioretention Cells; D-2 Surface Sand Filters; D-3 Underground Sand Filters; D-4 Perimeter Sand Filters; D-5 Organic Filters; and D-6 Pocket Sand Filters)

- N/A D1. All requirements of Section II, Minimum Standards, apply to Group D facilities.
- N/A D2. Sediment pretreatment devices provided.
- N/A D3. For D-1 BMPs (Bioretention Cells), pretreatment consisting of a grass filter strip below level spreader (deflector); a gravel diaphragm; and mulch and planting soil layers were provided.
- N/A D4. For D-1 BMPs (Bioretention Cells), plantings consist of native plant species; vegetation provided was based on zones of hydric tolerances; trees and understory of shrubs and herbaceous materials were provided; woody vegetation is absent from inflow locations; and trees are located around facility perimeter.
- N/A D5. Facility was not used for erosion and sediment control purposes and sediment was prevented from entering the facility to the greatest extent possible during construction.
- N/A D6. No visible signs of accumulated silt/sediment were present in the facility following construction or alternately, accumulated silt/sediment was properly removed .
- N/A D7. Filtering system is off-line from storm drainage conveyance system.
- N/A D8. Overflow outlet has adequate erosion protection.
- N/A D9. Deflector, diversion, flow splitter or regulator structure provided to divert the water quality volume to the filtering structure.
- N/A D10. Minimum four (4) inch perforated underdrain provided in a clean aggregate envelope layer beneath the facility.
- N/A D11. Minimum fifty (50) foot separation from any slope fifteen (15) percent or greater. Minimum one hundred (100) foot separation horizontally from any known water supply well. Minimum one hundred (100) foot separation upslope and twenty-five (25) foot separation downslope from any building.
- N/A D12. Stabilization and acceptable vegetative cover established over contributing drainage area prior to conveyance of stormwater to the facility.
- N/A D13. No visual signs of erosion or channel degradation immediately downstream of facility.
- N/A D14. Adequate, direct access provided to the pretreatment area and/or filter bed for future maintenance.

**STORMWATER MANAGEMENT / BMP FACILITIES
AS-BUILT PLAN CHECKLIST**

(Key for Checklist is as follows: XX Acceptable N/A Not Applicable Inc Incomplete)

VII. Group E - Open Channel Systems (Includes E-1 Wet Swales (Check Dams); E-2 Dry Swales; and E-3 Biofilters)

- N/A E1. All requirements of Section II, Minimum Standards, apply to Group E facilities as applicable.
- N/A E2. Open channel system has constructed longitudinal slope of less than four (4) percent.
- N/A E3. No visual signs of erosion in the open channel system's soil and/or vegetative cover.
- N/A E4. Open channel side slopes are no steeper than 2H:1V at any location. Preferred channel sideslope is 3H:1V or flatter.
- N/A E5. No visual signs of ponding are present at any location in the open channel system, except at rock check dam locations for E-1 systems (Wet Swales).
- N/A E6. For E-2 BMPs (Dry Swales), an underdrain system was provided.
- N/A E7. Treated timber or rock check dams provided as pretreatment devices for the open channel system.
- N/A E8. Gravel diaphragm provided in areas where lateral sheet flow from impervious surfaces are directly connected to the open channel system.
- N/A E9. Grass cover/stabilization in the open channel system appears adaptable to the specific soils and hydric conditions for the site and along the channel system.
- N/A E10. Open channel system areas with grass covers higher than four (4) to six (6) inches were properly mowed.
- N/A E11. Facility was not used for erosion and sediment control purposes and sediment was prevented from entering the facility to the greatest extent possible during construction.
- N/A E12. No visible signs of accumulated silt/sediment were present in the facility following construction or alternately, accumulated silt/sediment was properly removed and no adverse affects to the function of the facility are anticipated.
- N/A E13. For E-3 BMPs (Biofilters), the bottom width is six (6) feet maximum at any location.
- N/A E14. For E-3 BMPs (Biofilters), sideslopes are 3H:1V maximum at any location.
- N/A E15. For E-3 BMPs (Biofilters), the constructed channel slope is less than or equal to three (3) percent at any location.
- N/A E16. For E-3 BMPs (Biofilters), the constructed grass channel is approximately equivalent to the constructed roadway length.

**STORMWATER MANAGEMENT / BMP FACILITIES
RECORD DRAWING CHECKLIST**

(Key for Checklist is as follows: **XX** Acceptable **N/A** Not Applicable **Inc** Incomplete)

VIII. Group F - Extended Dry Detention (*Includes F-1 Timber Walls; and F-2 Dry Extended Detention with Forebay*)

- XX F1. All requirements of Section II, Minimum Standards, apply to Group F facilities.
- XX F2. Basin bottom has positive slope and drainage from all basin inflow points to the riser (or outflow) location.
- N/A F3. Timber wall BMP used in intermittent stream only. (ie. Prohibited in perennial streams.)
- N/A F4. Forebay provided approximately 20 ft. upstream of the facility. Forebays generally 4 to 6 feet in depth.
- N/A F5. A reverse slope pipe, vertical stand pipe or mini-barrel and riser was provided to prevent clogging.
- INC F6. Principal spillway and outlet barrel provided consisting of reinforced concrete pipe with O-Ring gaskets for watertight joint construction.
- N/A F7. Mini-barrel and riser, if used, contains a removable trash rack to reduce clogging.
- N/A F8. Low flow orifice, if used, has a minimum diameter of three (3) inches or two (2) inches if internal orifice control was utilized and a small, cage type external trash rack.
- N/A F9. Timbers properly reinforced or concrete footing provided if soil conditions were prohibitive.
- N/A F10. Timber wall cross members extended to a minimum depth of two (2) feet below ground elevation.
- N/A F11. Protection against erosion and scour from the low flow orifice and weir-flow trajectory provided.
- XX F12. Stilling basin or standard outlet protection provided at principal spillway outlet.
- XX F13. Adequate, direct access provided to the facility. Access corridor to facility is at least ten (10) feet wide, slope is less than twenty (20) percent and appropriate stabilization provided for equipment and vehicle use. Access extends to forebay, standpipe and timber wall, as applicable.
- N/A F14. No visual signs of undercutting of timber walls or clogging of the low orifice were present.
- INC F15. No visual signs of erosion or channel degradation immediately downstream of facility.
- XX F16. No visible signs of accumulated silt/sediment were present in the facility following construction or alternately, accumulated silt/sediment was properly removed and no adverse affects to the function of the facility are anticipated.

**STORMWATER MANAGEMENT / BMP FACILITIES
RECORD DRAWING CHECKLIST**

(Key for Checklist is as follows: XX Acceptable N/A Not Applicable Inc Incomplete)

IX. Group G - Open Spaces (Includes All Open Space Types G-1; G-2; and G-3)

- N/A G1. All requirements of Section II, Minimum Standards, apply to Group G facilities as applicable.
- N/A G2. Constructed impervious areas appear to conform with locations indicated on the approved plan and appear less than sixty (60) percent impervious in accordance with the requirements of the James City County Chesapeake Bay Preservation Ordinance.
- N/A G3. Dedicated open space areas are in undisturbed common areas, conservation easements or are protected by other enforceable instruments that ensures perpetual protection.
- N/A G4. Provisions included to clearly specify how the natural vegetated areas utilized as dedicated open space will be managed and field identified (marked).
- N/A G5. Adequate protection measures were implemented during construction to protect the defined dedicated open space areas.
- N/A G6. Dedicated open space areas were not disturbed during construction (ie. cleared, grubbed or graded).

**STORMWATER MANAGEMENT / BMP FACILITIES
RECORD DRAWING CHECKLIST**

(Key for Checklist is as follows: XX Acceptable N/A Not Applicable Inc Incomplete)

X. Storm Drainage Systems (Associated with BMP's Only)

(Includes all incidental stormwater drainage conveyance systems associated with SWM/BMP facilities such as onsite or offsite storm drains, open channels, inlets, manholes, junctions, outlet protections, deflectors, etc. These facilities are external to the treatment function of, but are directly associated with drainage to and/or from a constructed SWM/BMP facility. The intent of this portion of the certification is to accurately identify the type and quantity of inflow or outflow points associated with the facility for future reference. The Professional may use his/her own discretion to determine inclusive facilities to meet the intent of this section. As a general rule, storm drainage systems would include incidental facilities to the nearest access structure upslope or downslope from the normal physical limits of the facility or 800 feet of storm drainage conveyance system length, whichever is less.)

- N/A SD1. All requirements of Section II, Minimum Standards, apply to Storm Drainage Systems.
- N/A SD2. Horizontal location of all pipe and structures relative to the SWM/BMP facility.
- N/A SD3. Type, top elevation and invert elevation of all access type structures (inlets, manholes, etc.).
- N/A SD4. Material type, size or diameter, class, invert elevations, lengths and slopes for all pipe segments.
- N/A SD5. Class, length, width and depth of riprap and outlet protections or dimensions of special energy dissipation structures.

XII. Other Systems

(Includes any non-typical, specialty, manufactured or innovative stormwater management/BMP practices or systems generally accepted for use as or in conjunction with other acceptable stormwater management / BMP practices. Requires evidence of prior satisfactory industry use and prior Environmental Division approval, waiver or exception .)

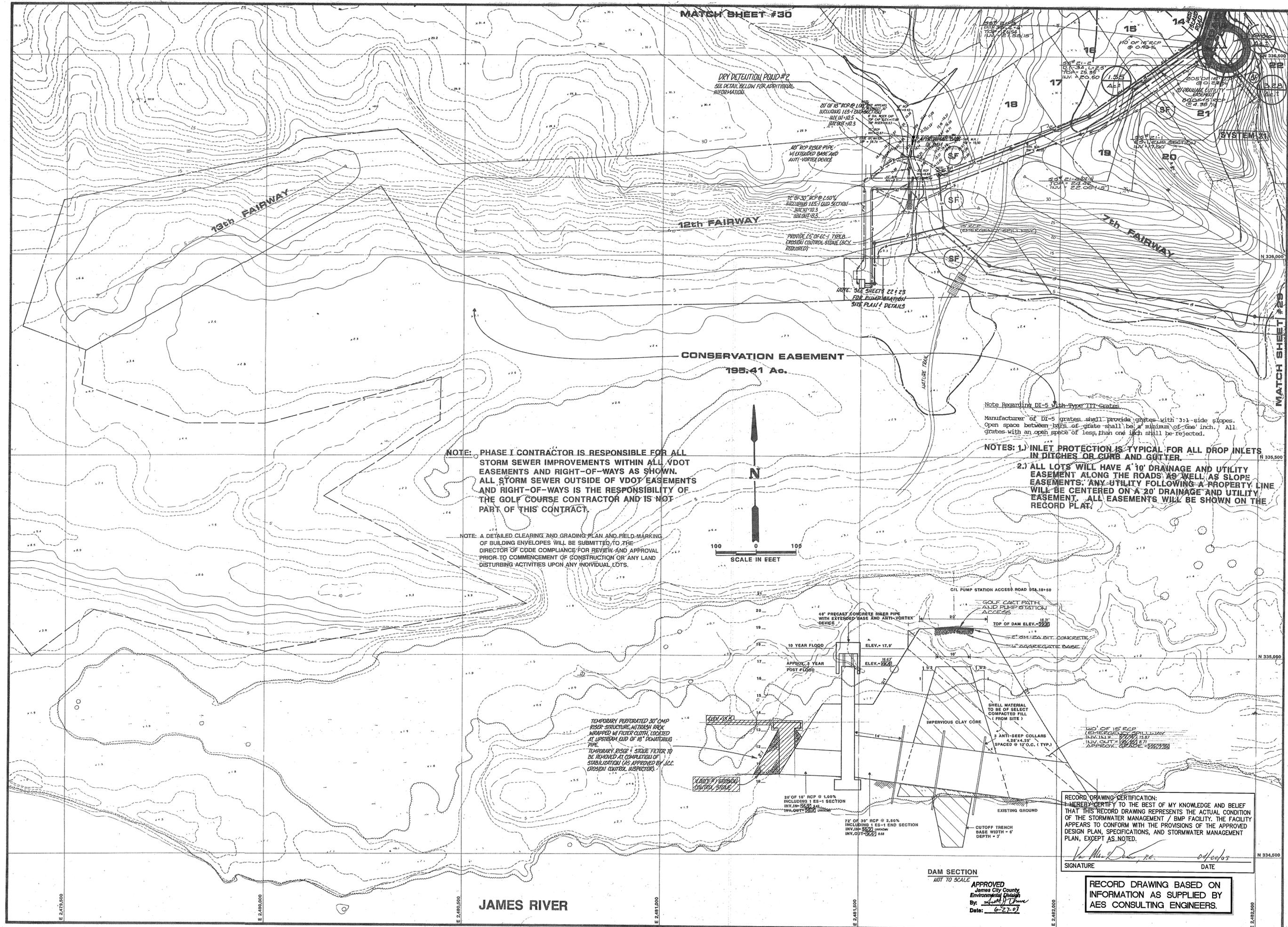
- N/A O1. All requirements of Section II, Minimum Standards, apply to this section.
- N/A O2. Certification criteria to be determined on a case-by-case basis by the Environmental Division specific to the proposed SWM/BMP facility.

**STORMWATER MANAGEMENT / BMP FACILITIES
RECORD DRAWING CHECKLIST**

XIII. References *(The James City County Record Drawing and Construction Certification Forms and Checklists for Stormwater Management / BMP facilities were developed using the following sources and references.)*

- Baltimore County, Maryland Soil Conservation District, As-Built Stormwater Management Pond Checklist.
- James City County, Virginia, Guidelines for Design and Construction of Stormwater Management BMP's (October 1999).
- James City County, Virginia, Stormwater Detention/Retention Basin Design Checklist and Erosion and Sediment Control and Stormwater Management Design Plan Checklists.
- James City County Stormwater Policy Framework, Final Report of the James City County BMP Policy Project, October 1998, The Center for Watershed Protection.
- Prince Georges County, Maryland, As-Built Requirements Retention or Detention Pond/Basin.
- Prince William County, Virginia, Stormwater Management Fact Sheet.
- Stafford County, Virginia, As-Built Plan Checklist.
- Stormwater Management Design Manual, NRCS Maryland Code No. 378, Pond Standards and Specifications.
- USEPA/Watershed Management Institute, Stormwater Management Inspection Forms.
- Virginia Impounding Structure Regulations (Dam Safety), Department of Conservation & Recreation, 1997.
- Virginia Erosion and Sediment Control Handbook, Third Edition 1992, Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation.
- Virginia Stormwater Management Handbook, 1999 edition, Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation.

File: Shared\SWMPProg\BMP\Certif\RDCC.wpd



MATCH SHEET #30

MATCH SHEET #29

DRY DETENTION POND #2
SEE DETAIL BELOW FOR ADDITIONAL INFORMATION

20" OF 18" RCP @ 1.00%
INCLUDING 125' END SECTION
INV. IN 102.00
INV. OUT 102.00

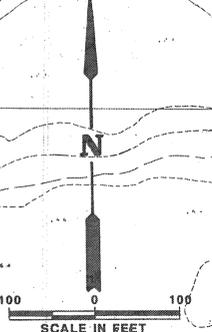
48" RCP RISER PIPE
W/ EXTENDED BASE AND
ANTI-VORTEX DEVICE

12" OF 30" RCP @ 2.50%
INCLUDING 125' END SECTION
INV. IN 102.00
INV. OUT 102.00

PROVIDE 25' OF EC-1 TYPE B
EROSION CONTROL STONE (BCK
REQUIRED)

NOTE: SEE SHEETS 22 & 23
FOR BUILDING AND
SHA PLAN & DETAILS

CONSERVATION EASEMENT
195.41 Ac.



NOTE: PHASE I CONTRACTOR IS RESPONSIBLE FOR ALL STORM SEWER IMPROVEMENTS WITHIN ALL VDOT EASEMENTS AND RIGHT-OF-WAYS AS SHOWN. ALL STORM SEWER OUTSIDE OF VDOT EASEMENTS AND RIGHT-OF-WAYS IS THE RESPONSIBILITY OF THE GOLF COURSE CONTRACTOR AND IS NOT PART OF THIS CONTRACT.

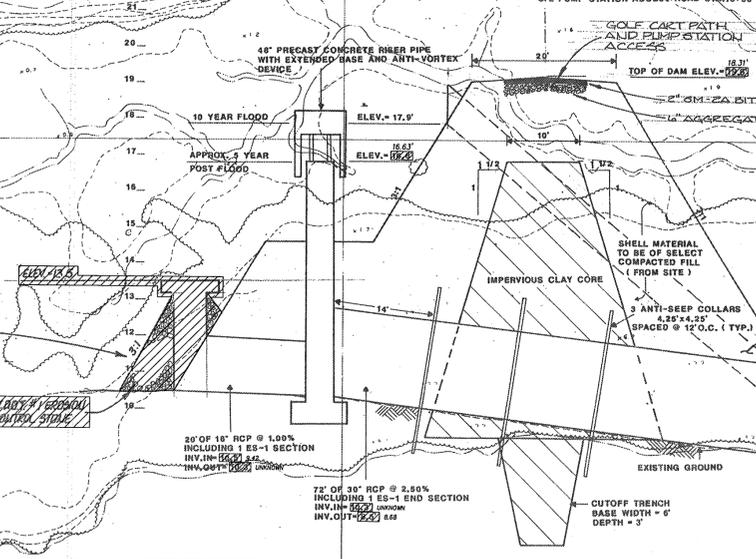
NOTE: A DETAILED CLEARING AND GRADING PLAN AND FIELD-MARKING OF BUILDING ENVELOPES WILL BE SUBMITTED TO THE DIRECTOR OF CODE COMPLIANCE FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF CONSTRUCTION OR ANY LAND DISTURBING ACTIVITIES UPON ANY INDIVIDUAL LOTS.

Note Regarding DI-5 With Type III Grates

Manufacturer of DI-5 grates shall provide grates with 3:1 side slopes. Open space between tops of grates shall be a minimum of one inch. All grates with an open space of less than one inch shall be rejected.

NOTES: 1) INLET PROTECTION IS TYPICAL FOR ALL DROP INLETS IN DITCHES OR CURB AND GUTTER.
2) ALL LOTS WILL HAVE A 10' DRAINAGE AND UTILITY EASEMENT ALONG THE ROADS AS WELL AS SLOPE EASEMENTS. ANY UTILITY FOLLOWING A PROPERTY LINE WILL BE CENTERED ON A 20' DRAINAGE AND UTILITY EASEMENT. ALL EASEMENTS WILL BE SHOWN ON THE RECORD PLAT.

TEMPORARY PERFORATED 30" CMP RISER STRUCTURE WITH BRUSH ROCK WRAPPED IN FILTER FABRIC LOCATED AT UPSTREAM END OF 18" DENITRIFYING PIPE.
TEMPORARY RISER & STONE FILTER TO BE REMOVED AT COMPLETION OF STABILIZATION AS APPROVED BY H.C.C. EROSION CONTROL INSPECTOR.



DAM SECTION
NOT TO SCALE

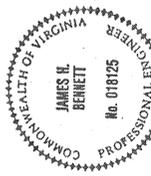
APPROVED
James City County
Environmental Division
By: *[Signature]*
Date: 6-27-07

RECORD DRAWING CERTIFICATION:
I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS RECORD DRAWING REPRESENTS THE ACTUAL CONDITION OF THE STORMWATER MANAGEMENT / BMP FACILITY. THE FACILITY APPEARS TO CONFORM WITH THE PROVISIONS OF THE APPROVED DESIGN PLAN, SPECIFICATIONS, AND STORMWATER MANAGEMENT PLAN, EXCEPT AS NOTED.

[Signature] 04/06/07
SIGNATURE DATE

RECORD DRAWING BASED ON INFORMATION AS SUPPLIED BY AES CONSULTING ENGINEERS.

NO.	DATE	REVISION / COMMENT / NOTE	BY
1	10/01	RECORD DRAWING	
2	07/04	REVISED PER FINAL COMMENTS	
3	07/04	REVISED PER OWNER / DEVELOPER	
4	07/04	REVISED PER J.C.C. REVIEW / LOT CHANGES	
5	07/04	REVISED PER J.C.C.	

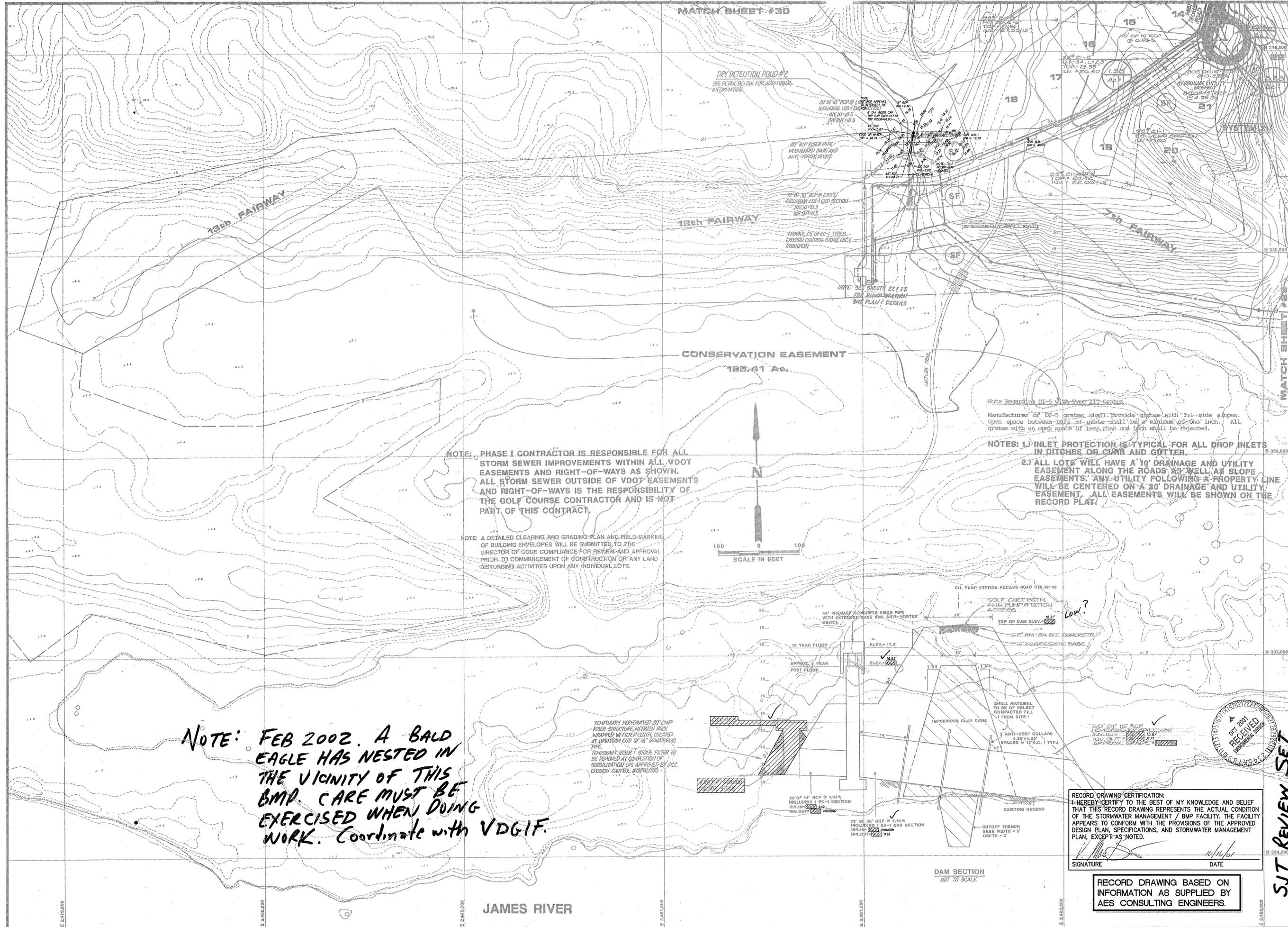


AES, a professional corporation
5248 Old Towne Road, Suite 1
Williamsburg, Virginia 23185
804-253-0040
Engineering, Planning, Surveying



DRAINAGE AND EROSION CONTROL PLAN
GOVERNOR'S LAND
OWNER DEVELOPER: GOVERNOR'S LAND PARTNERS
JAMES CITY COUNTY, VIRGINIA

Designed AES	Drawn AES
Scale 1" = 100'	Date JAN, 1999
Project No. 7173	
Drawing No. 31	Count



MATCH SHEET #30

MATCH SHEET #28

NOTE: PHASE I CONTRACTOR IS RESPONSIBLE FOR ALL STORM SEWER IMPROVEMENTS WITHIN ALL VDOT EASEMENTS AND RIGHT-OF-WAYS AS SHOWN. ALL STORM SEWER OUTSIDE OF VDOT EASEMENTS AND RIGHT-OF-WAYS IS THE RESPONSIBILITY OF THE GOLF COURSE CONTRACTOR AND IS NOT PART OF THIS CONTRACT.

NOTE: A DETAILED CLEARING AND GRADING PLAN AND FIELD-MARKING OF BUILDING ENVELOPES WILL BE SUBMITTED TO THE DIRECTOR OF CODE COMPLIANCE FOR REVIEW AND APPROVAL PRIOR TO COMMENCEMENT OF CONSTRUCTION OR ANY LAND DISTURBING ACTIVITIES UPON ANY INDIVIDUAL LOTS.

Note Regarding DI-5 With Type TIT Grates
 Manufacturer of DI-5 grates shall provide grates with 3:1 side slopes. Open space between bars of grate shall be a minimum of one inch. All grates with an open space of less than one inch shall be rejected.

NOTES: 1.) INLET PROTECTION IS TYPICAL FOR ALL DROP INLETS IN DITCHES OR CURB AND GUTTER.
 2.) ALL LOTS WILL HAVE A 10' DRAINAGE AND UTILITY EASEMENT ALONG THE ROADS, AS WELL AS SLOPE EASEMENTS. ANY UTILITY FOLLOWING A PROPERTY LINE WILL BE CENTERED ON A 20' DRAINAGE AND UTILITY EASEMENT. ALL EASEMENTS WILL BE SHOWN ON THE RECORD PLAN.

NOTE: FEB 2002. A BALD EAGLE HAS NESTED IN THE VICINITY OF THIS BMP. CARE MUST BE EXERCISED WHEN DOING WORK. Coordinate with VDGIF.

TEMPORARY PERFORATED 20" CMP RISER STRUCTURE WITH TRASH RACK WRAPPED IN FILTER CLOTH, LOCATED AT UPSTREAM END OF 18" DIAMETER PIPE.
 TEMPORARY RISER + STONE FILTER TO BE REMOVED AT COMPLETION OF STABILIZATION (AS APPROVED BY EROSION CONTROL INSPECTOR).

RECORD DRAWING CERTIFICATION:
 I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS RECORD DRAWING REPRESENTS THE ACTUAL CONDITION OF THE STORMWATER MANAGEMENT / BMP FACILITY. THE FACILITY APPEARS TO CONFORM WITH THE PROVISIONS OF THE APPROVED DESIGN PLAN, SPECIFICATIONS, AND STORMWATER MANAGEMENT PLAN, EXCEPT AS NOTED.

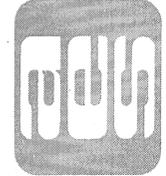
SIGNATURE: [Signature] DATE: 10/16/01

RECORD DRAWING BASED ON INFORMATION AS SUPPLIED BY AES CONSULTING ENGINEERS.

NO.	DATE	REVISION / COMMENT / NOTE	BY
3	10/01	RECORD DRAWING	
4	10/01	REVISED PER FINAL CHANGES	
5	10/01	REVISED PER OWNER / DEVELOPER	
6	10/01	REVISED PER J.C.C. REVIEW / A LOT CHANGES	
7	10/01	REVISED PER J.C.C.	



AES, a professional corporation
 5248 Olde Teweae Road, Suite 1
 Williamsburg, Virginia 23185
 804-253-0040
 Engineering, Planning, Surveying



DRAINAGE AND EROSION CONTROL PLAN
GOVERNOR'S LAND
 OWNER: DEVELOPER: GOVERNOR'S LAND PARTNERSHIP
 PROJECT NO. 7173
 DESIGNED: AES
 DRAWN: AES
 SCALE: 1" = 100'
 DATE: JAN, 1999

Designed	Drawn
AES	AES
Scale	Date
1" = 100'	JAN, 1999
Project No.	Count
7173	
Drawing No.	Sheet
31	

SJT REVIEW SET

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

DATE <i>October 17, 2001</i>	JOB NO. <i>7173</i>
ATTENTION <i>MIKE NOORSEN</i>	
RE: <i>GOVERNOR'S LAND PHASE 1</i>	
<i>JR025</i>	

TO *JAMES CITY COUNTY ENVIRONMENTAL*

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
<i>1</i>			<i>RECORD DRAWING CHECKLIST FOR DRUG DETECTION POND #2</i>
<i>1</i>			<i>EXCEPT FOR GEO-TECHNICAL INVESTIGATIONS</i>
<i>2</i>			<i>BLUELINE COPIES OF RECORD DRAWINGS</i>



THESE ARE TRANSMITTED as checked below:

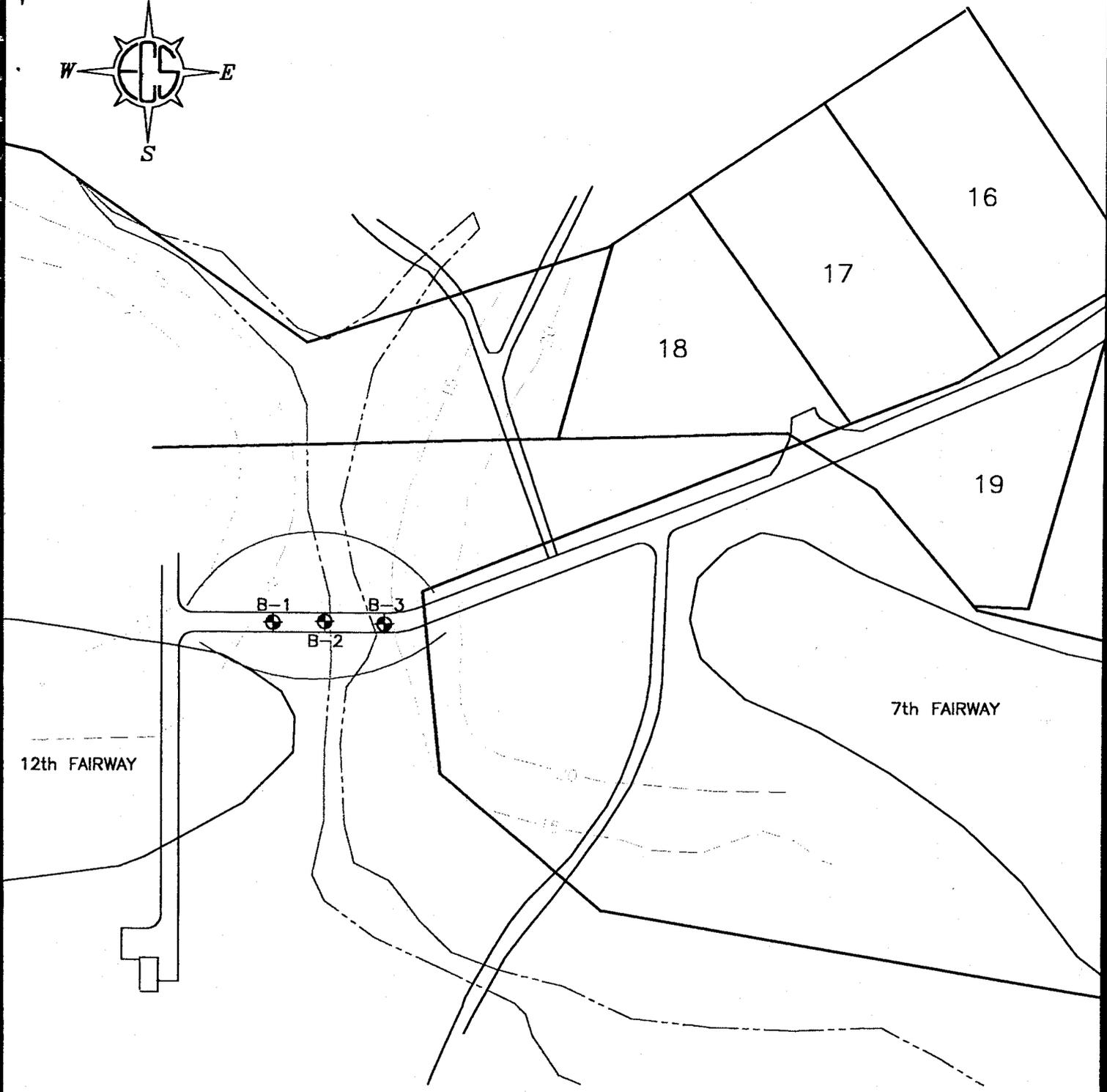
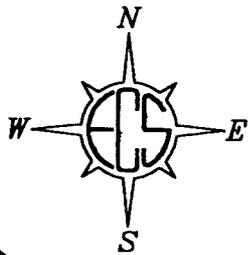
- For approval Approved as submitted Resubmit _____ copies for approval
 For your use Approved as noted Submit _____ copies for distribution
 As requested Returned for corrections Return _____ corrected prints
 For review and comment _____
 FOR BIDS DUE _____ PRINTS RETURNED AFTER LOAN TO US

REMARKS

MIKE,
 WHEN AND IF THESE DOCUMENT MEET YOUR APPROVAL,
 A DIGITAL FILE OF THE RECORD DRAWINGS WILL BE
 PROVIDED.
 (REMEMBER, THESE FACILITIES ARE SEVERAL
 YEARS OLD (UP TO 10 YEARS), PRIOR TO NEWER DESIGN
 GUIDELINES.) ~~A~~

COPY TO _____

SIGNED: *V. Marc B...*



⊕ - Approximate Boring Location

Scale: 1"=100'

PREPARED FOR:

DOMINION LAND MANAGEMENT



BORING LOCATION DIAGRAM

GOVERNOR'S LAND

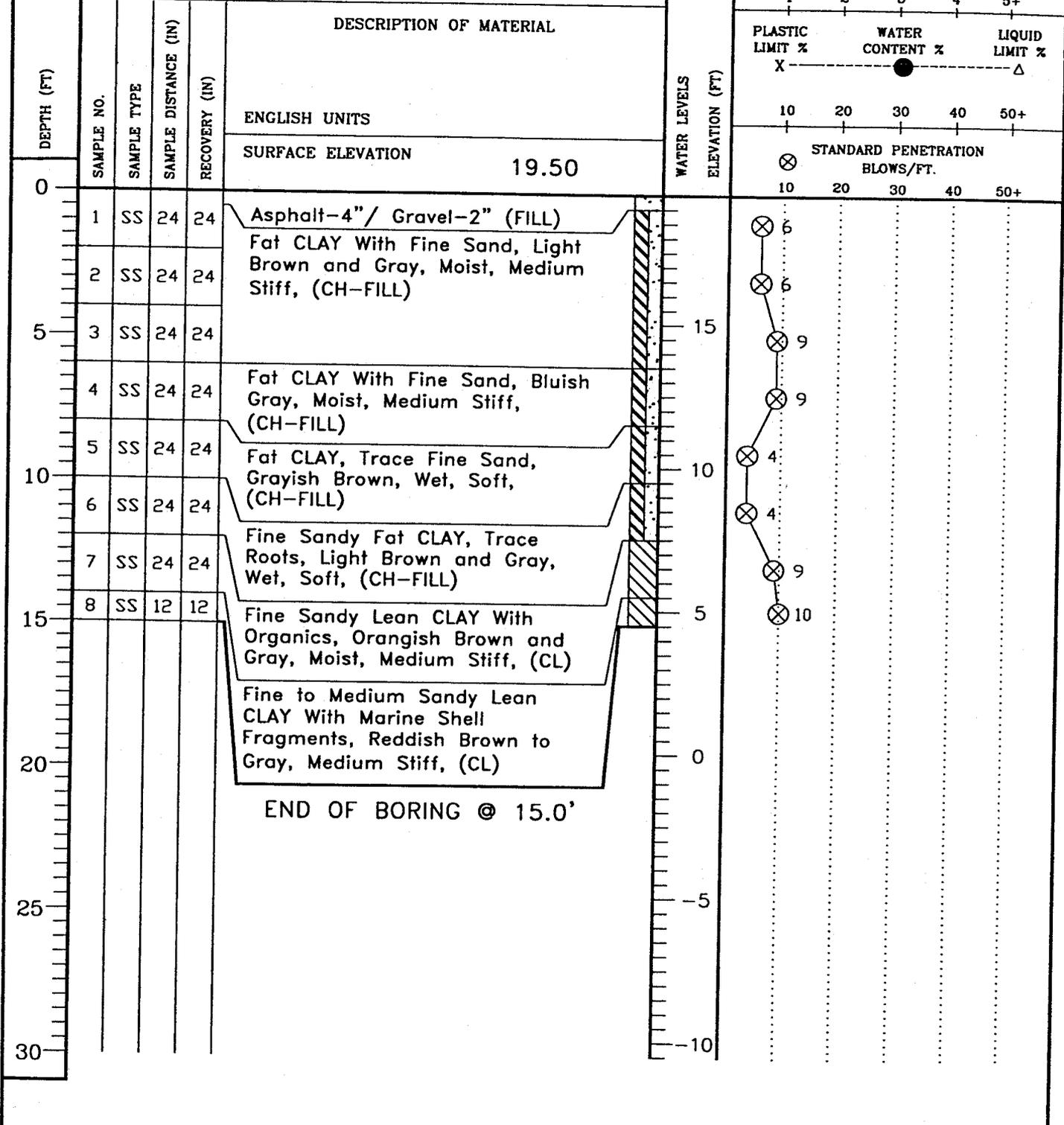
#12 TEE BOX

JAMES CITY COUNTY, VIRGINIA

ECS, LTD. PROJECT NO. 6221

CLIENT DOMINION LAND MANAGEMENT CO.	JOB # 6221	BORING # B-1	SHEET 1 OF 1	ECS LTD
PROJECT NAME GOVERNOR'S LAND DAMS (EMBANKMENT EVAL.)	ARCHITECT-ENGINEER AES, INC.			

SITE LOCATION
#12 TEE BOX, JAMES CITY COUNTY, VIRGINIA

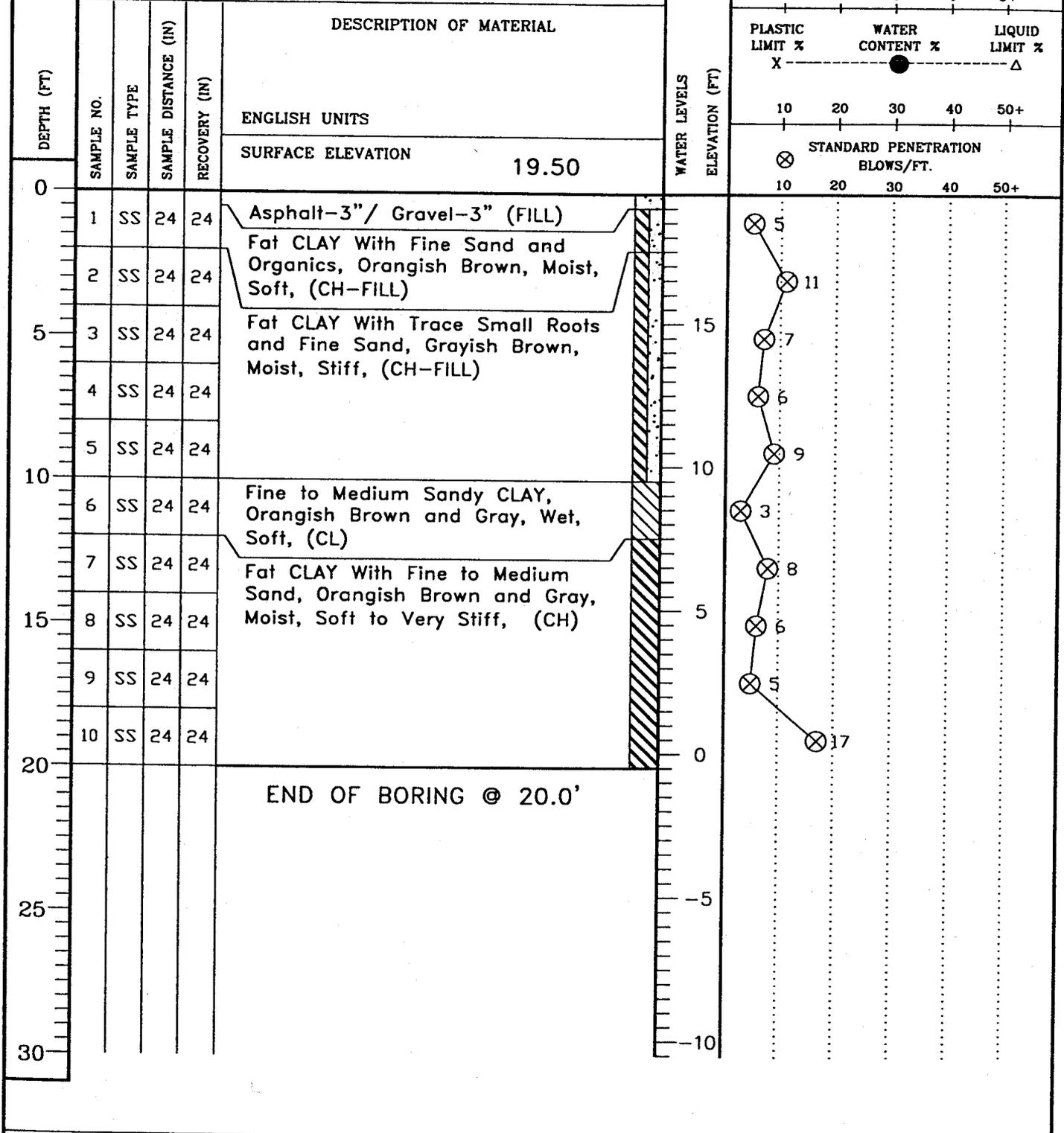


THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

▽ WL DRY	WS OR (D)	BORING STARTED	10-23-00	ASPHALT DEPTH 4" / GRAVEL DEPTH 2"
▽ WL(AB)	▽ WL(AC)	BORING COMPLETED	10-23-00	CAVE IN DEPTH ●
▽ WL		RIG FISHBURNE FOREMAN	SONNY	DRILLING METHOD HOLLOW STEM AUGER

CLIENT DOMINION LAND MANAGEMENT CO.	JOB # 6221	BORING # B-2	SHEET 1 OF 1	
PROJECT NAME GOVERNOR'S LAND DAMS (EMBANKMENT EVAL.)	ARCHITECT-ENGINEER AES, INC.			

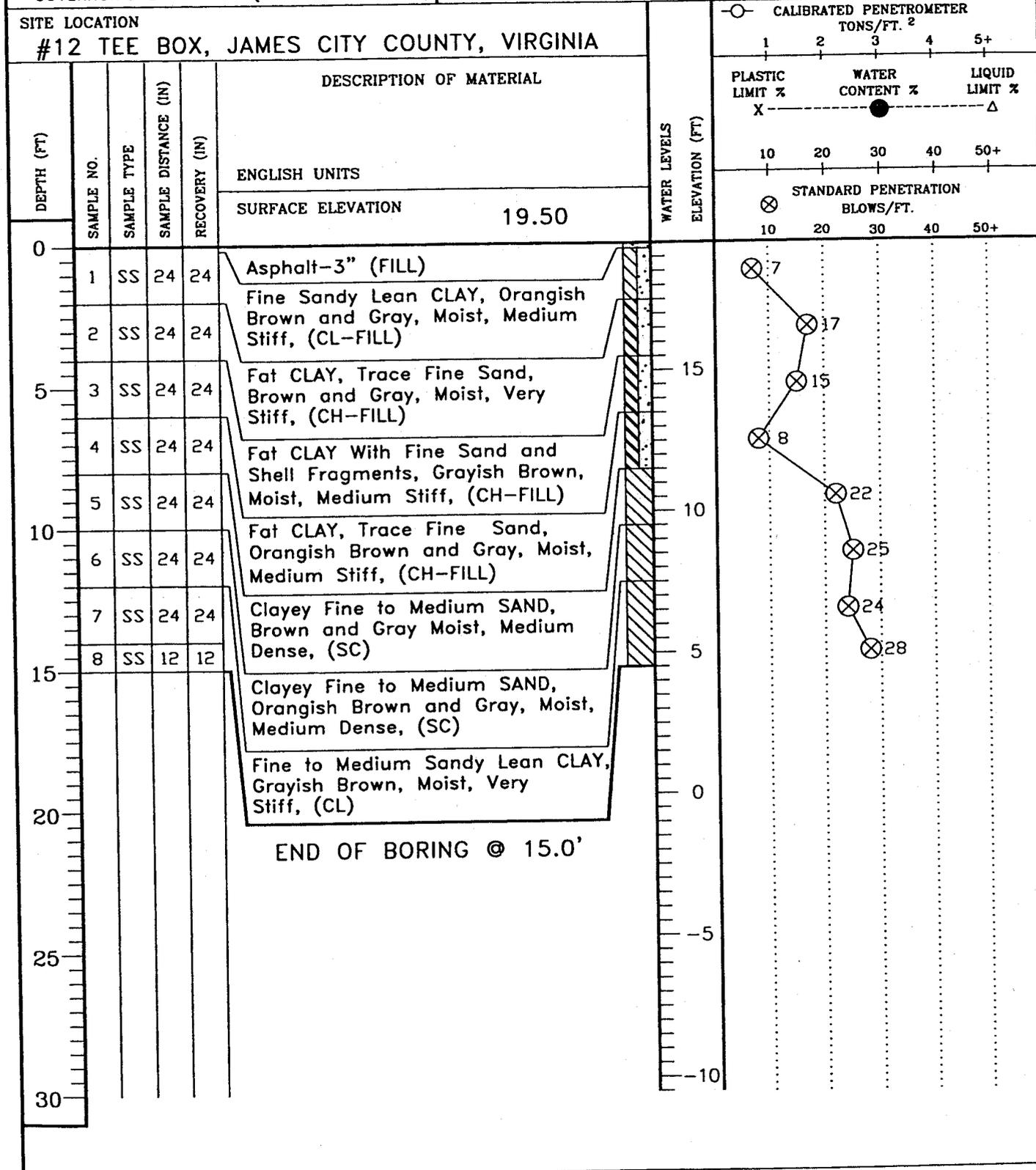
SITE LOCATION
#12 TEE BOX, JAMES CITY COUNTY, VIRGINIA



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL.

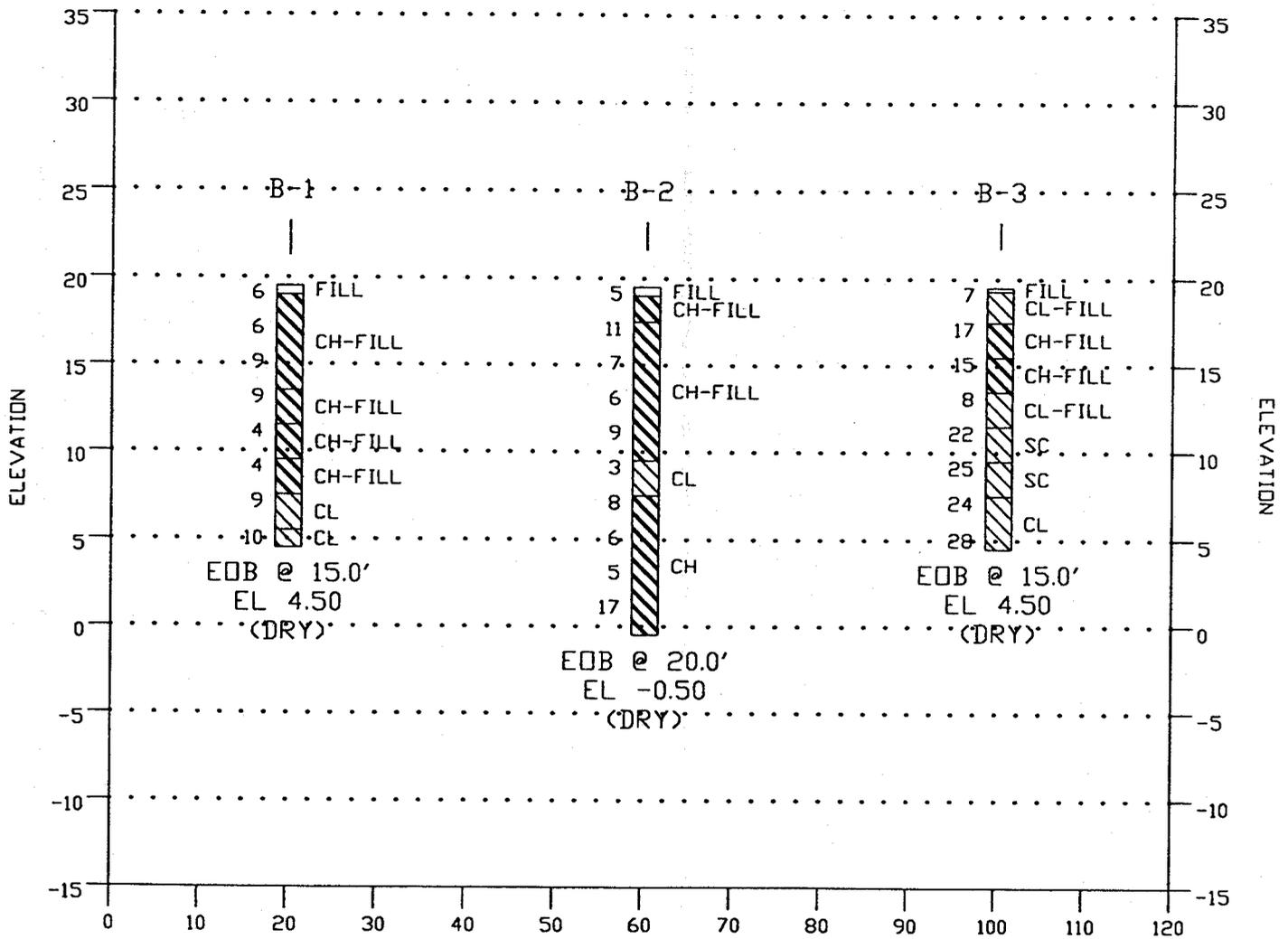
▽WL DRY	WS OR (D)	BORING STARTED	10-23-00	ASPHALT DEPTH 3" / GRAVEL DEPTH 3"
▽WL(AB)	▽WL(AC)	BORING COMPLETED	10-23-00	CAVE IN DEPTH ●
▽WL		RIG FISHBURNE FOREMAN	SONNY	DRILLING METHOD HOLLOW STEM AUGER

CLIENT DOMINION LAND MANAGEMENT CO.	JOB # 6221	BORING # B-3	SHEET 1 OF 1	ECS LTD
PROJECT NAME GOVERNOR'S LAND DAMS (EMBANKMENT EVAL.)	ARCHITECT-ENGINEER AES, INC.			



THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES IN-SITU THE TRANSITION MAY BE GRADUAL

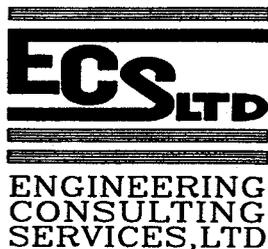
▽ WL DRY	WS OR (D)	BORING STARTED	10-23-00	ASPHALT DEPTH 3"
▽ WL(AB)	▽ WL(AC)	BORING COMPLETED	10-23-00	CAVE IN DEPTH ●
▽ WL		RIG FISHBURNE FOREMAN	SONNY	DRILLING METHOD HOLLOW STEM AUGER



SCALE
 VERTICAL SCALE 1"=10'
 HORIZONTAL SCALE 1"=20'

PREPARED FOR:

DOMINION LAND MGMNT. CO.

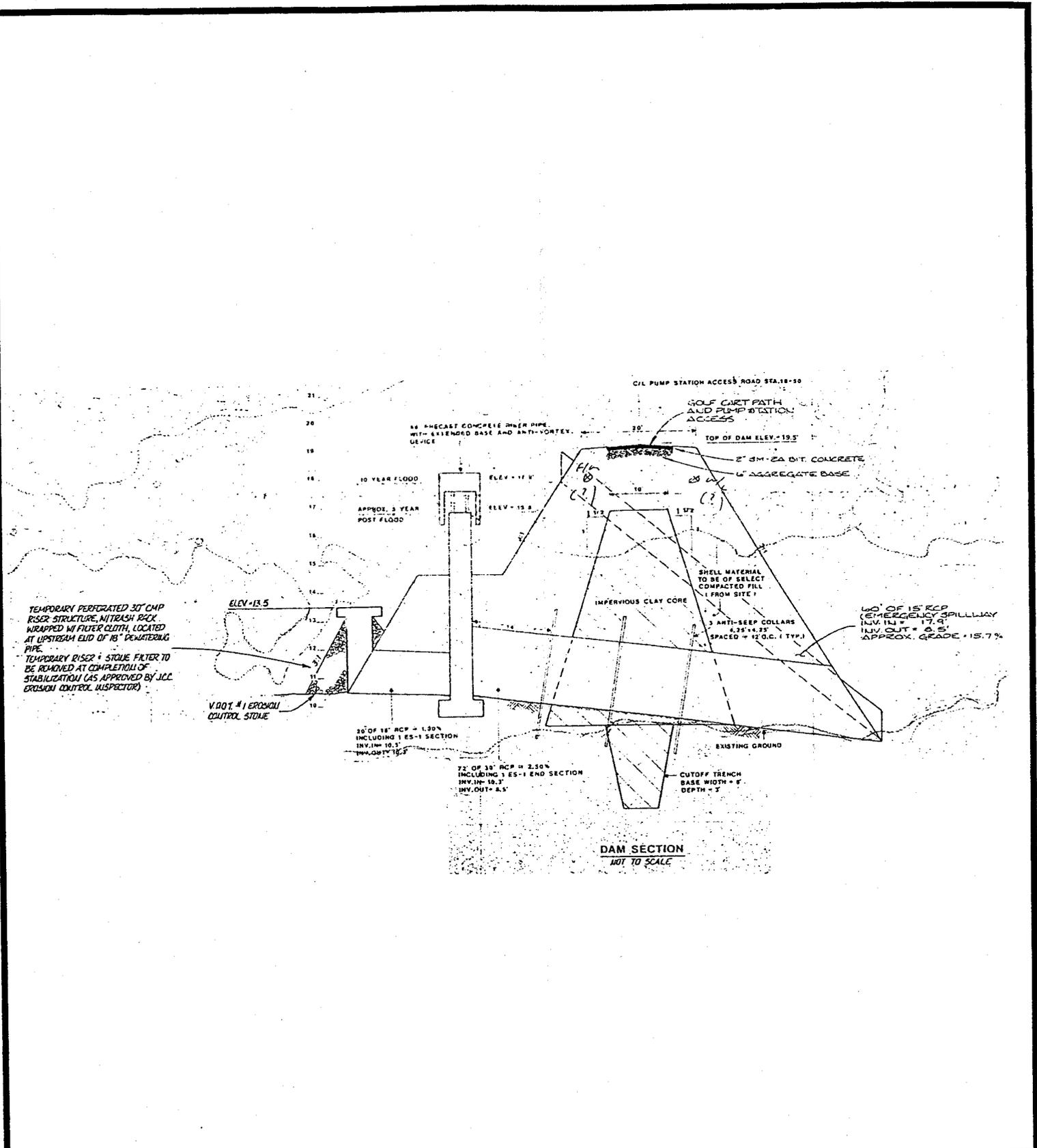


GENERALIZE CROSS SECTION

#12 TEE BOX

GOVERNOR'S LAND DAMS
 JAMES CITY COUNTY, VIRGINIA

ECS, LTD. PROJECT NO. 6221



PREPARED FOR:

DOMINION LAND MANAGEMENT



DAM SCHEMATIC

GOVERNOR'S LAND

#12 TEE BOX

JAMES CITY COUNTY, VIRGINIA

ECS, LTD. PROJECT NO. 6221

Scott Thomas

From: Scott Thomas
Sent: Monday, March 10, 2003 1:08 PM
To: 'Victoria Bains'
Subject: RE: Travis Pond Dry Detention Pond # 2 (JR025)

3:00 tomorrow is ok. I am working some more on the Governor's Land BMPs. By the end of today I will be issuing a letter for this BMP(JR 025). The record drawing and construction certification is ok. The construction related items (from our end) will be as follows.

1. Clear and remove trees from the dam embankment.
2. Clean and remove fallen trees and dead wood debris from the interior of the basin.
3. Repair the disconnections in 18-inch pipe (to the riser)
4. Fill settlement area around the riser.
5. Repair the outlet barrel through the dam if seepage (piping) has damaged the outlet barrel. I will be visually inspecting the conditions of the barrel to ensure the problems on the 18-inch pipe (leading to the riser) and settlement around the riser are not indicative of piping along the outlet barrel.
6. Re-establish outlet protection rock per the approved plans.

This information should help in advance of the meeting. At a minimum, I would hope these have been performed already prior to our reinspection. I will fax the letter to you and Marc's attention by the end of today so you have it.

Scott

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

From: Victoria Bains [mailto:vbains@aesva.com]
Sent: Monday, March 10, 2003 10:10 AM
To: Scott Thomas (E-mail)
Subject: Travis Pond Dry Detention Pond # 2 (JR025)

Scott,

Due to the weather the contractor has finally gotten back to the dry detention pond by the eagle's nest. He told me that he should finish up today with the heavy equipment and tomorrow will be making sure everything is completed, cleaned up, and stabilized. Can you meet at the site tomorrow afternoon around 3:00 or 3:30 pm. Please let me know when you can meet at the site. Thank you.

Tory

Victoria A. (Tory) Bains
Project Engineer
AES Consulting Engineers
5248 Olde Towne Road, Suite 1
Williamsburg, Virginia 23188
(757) 253-0040
Fax: (757) 220-8994

Memorandum

DATE: April 23, 2003
TO: Scott Thomas
FROM: Victoria Bains
SUBJECT: Travis Pond Dry Pond #2, County BMP ID Code: JR025

In response to your letter dated March 10, 2003 AES Consulting Engineers has taken several actions.

Construction Certification:

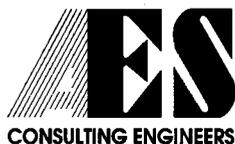
No further action required.

Record Drawings:

No further action required.

Construction – Related Items:

Small trees and woody vegetation have been removed from dam area. All fallen trees and dead log debris have been removed from interior of basin area. 18-inch RCP has been repaired and reconnected to the riser and the area has been back filled then seeded and mulched after completed work. 30-inch RCP outflow pipe was inspected and some minor repairs were needed to stop undermining of flared end. Outflow protection was reestablished per approved plans.



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



DEVELOPMENT MANAGEMENT

101-E MOUNTS BAY ROAD, P.O. BOX 8784, WILLIAMSBURG, VIRGINIA 23187-8784
(757) 253-6671 Fax: (757) 253-6850 E-MAIL: devtman@james-city.va.us

CODE COMPLIANCE
(757) 253-6626
codecomp@james-city.va.us

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

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

COUNTY ENGINEER
(757) 253-6678
INTEGRATED PEST MANAGEMENT
(757) 253-2620

March 10, 2003

Mr. James H. Bennett
Governors Land Associates
9701 Mill Pond Run
Toano, Va. 23168

Reinspect 3-11-03

Re: Governor's Land - Halfway House BMP
County Plan No. S-7-90
Stormwater Management Facility
County BMP ID Code: JR 025

Dear Mr. Bennett:

The Environmental Division has reviewed a record drawing and a postconstruction geotechnical report (ECS #6221 dated December 31st 2000) as submitted to our office for the above referenced BMP. The record drawing provides as-built information for Dry Detention Pond # 2 situated near the sewage pump station and the 12th fairway to the west of the cul-de-sac at the end of West Island Road.

Based on our review of the project and a concurrent field inspection as performed on February 25th 2003, the following items must be addressed prior to release of the developer's surety instrument for the stormwater management/BMP facility at the site and to proceed with closing out the project:

Construction Certification:

- ✓
OK 1. Based on a review of the approved plan, there appears to be no construction certification requirement imposed on this facility. However, the portion of the post-construction geotechnical report (ECS dated 12/31/2000, # 6221) for the #12 Tee Box Dry Detention Pond would address any construction certification concerns related to this facility.

Record Drawing:

- ✓
6-22-03 2. The record drawing set dated June 8th 2001 is **satisfactory**. Please forward one reproducible and one blue/black line set of the record drawings to our office.

Construction - Related Items:

- ✓
3-11-03 3. Remove small trees and woody vegetation from the dam embankment, especially the downstream face of the dam.
- 4. Clean and remove all fallen tree and dead log debris from the interior of the basin area.

*DEAD LOGS
STILL PRESENT*

OK 5-11-03
3-11-03

5. Repair the 18-inch low flow orifice concrete pipe situated to the north of the riser structure. It appears that this pipe has separated joints.

OK 3-11-03

6. Fill settlement areas as observed around the riser structure with compacted soil material. Seed and mulch disturbed areas associated with this activity.

OK 3-11-03

7. Disconnection of the inflow pipe into the riser and settlement around the riser as outlined above is indicative of a possible piping (seepage) problem along the barrel through the dam. Inspect the 30-inch pipe barrel through the dam and repair as necessary. Any major repairs to the barrel pipe such as sliplining, grouting or total replacement would require construction certification by a professional engineer.

8.

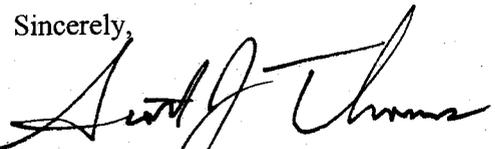
Reestablish outlet protection rock per the approved plan specifications.

NEED OF ROCK
8x8 AREA
BOTTOM STONE

It has recently come to our attention that a bald eagle has apparently taken refuge in the general vicinity of this BMP. It is the owners responsibility to exercise care in performing routine maintenance activities associated with this BMP and to contact and follow all applicable federal and state regulatory requirements as appropriate. Our division can be flexible as it pertains to construction-related items as outlined above to ensure adequate protection of this RTE species. Contact the Virginia Department of Game and Inland Fisheries for additional information and keep the Environmental Division informed of any special requirements or precautions necessary.

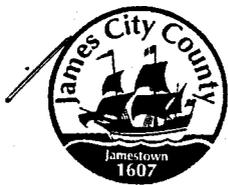
Once this work is satisfactorily completed, contact our office appropriately for reinspection. We can then proceed with final release of the surety and/or closing out the project. One reproducible and one blue/black line set of the record drawings will be required once the above items are adequately addressed.

Please contact me at 757-253-6639 or the assigned Environmental Division inspector, Joe Buchite at 757-253-6643 if you have any further comments or questions.

Sincerely,

Scott J. Thomas, P.E.
Civil Engineer
Environmental Division

cc: Marc Bennett, AES - via fax

G:\AsBuilts\S790.jr025



**James City County Environmental Division
Stormwater Management / BMP Inspection Report
Detention and Retention Pond Facilities**

5-7-90

County BMP ID Code (if known): JR025
 Name of Facility: GOVERNORS LAND BMP No.: _____ of _____ Date: 2/25/03
 Location: HALFWAY HOUSE BMP - FAIRWAY #6 + #11 (#12)
 Name of Owner: _____
 Name of Inspector: TRICK HALL
 Type of Facility: DRY POND
 Weather Conditions: SUNNY - C/W Type: Final Inspection County BMP Inspection Program Owner Inspection

If an inspection item is not applicable, mark NA, otherwise mark the appropriate column.

- O.K. - The item checked is in adequate condition and the maintenance program is currently satisfactory. No action required.
- Routine - The item checked requires attention, but does not present an immediate threat to the function/integrity of the BMP.
- Urgent - The item checked requires immediate attention to keep the BMP operational and to prevent damage to the facility.

Provide an explanation and details in the comment column, if routine or urgent are marked.

Facility Item	O.K.	Routine	Urgent	Comments
Embankments and Side Slopes:				
Grass Height	✓			
Vegetation Condition	✓			
Tree Growth		✓		<i>A few small trees and vines in process of being cleared</i>
Erosion	✓			
Trash & Debris	✓			
Seepage	✓			
Fencing or Benches				
Interior Landscaping/Planted Areas: <input type="checkbox"/> None <input type="checkbox"/> Constructed Wetland/Shallow Marsh <input checked="" type="checkbox"/> Naturally Established Vegetation				
Vegetated Conditions	✓			
Trash & Debris	✓			
Floating Material	✓			
Erosion	✓			
Sediment	✓			
Dead Plant		✓		<i>ARE dead GRASSES AND LOSS FROM FALLEN TREES -</i>
Aesthetics	✓			
Other				
Notes:				

Facility Item	O.K.	Routine	Urgent	Comments
Water Pools: <input type="checkbox"/> Permanent Pool (Retention Basin) <input type="checkbox"/> Shallow Marsh (Detention Basin) <input checked="" type="checkbox"/> None, Dry (Detention Basin)				
Shoreline Erosion				
Algae				
Trash & Debris				
Sediment				
Aesthetics				
Other				
Inflows (Describe Types/Locations): <i>RCP culverts from fairways</i>				
Condition of Structure	✓			
Erosion	✓			
Trash and Debris	✓			
Sediment	✓			
Outlet Protection	✓			
Other				
Principal Flow Control Structure - Riser, Intake, etc. (Describe Type): <i>RCP - Riser + cap</i>				
Condition of Structure	✓			
Corrosion	✓			
Trash and Debris	✓			<i>Riser situated in slope of embankment -</i>
Sediment	✓			<i>settlement around</i>
Vegetation	✓			<i>Riser is apparent.</i>
Other	✓	✓		<i>settlement along inlet pipe.</i>
Principal Outlet Structure - Barrel, Conduit, etc. : <i>RCP</i>				
Condition of Structure	✓			
Settlement	✓			
Trash & Debris	✓			
Erosion/Sediment	✓			
Outlet Protection		✓		<i>More stone could be added.</i>
Other				
Emergency Spillway (Overflow): <i>None</i>				
Vegetation				
Lining				
Erosion				
Trash & Debris				
Other				
Notes:				

Facility Item	O.K.	Routine	Urgent	Comments
Nuisance Type Conditions:				
Mosquito Breeding	✓			
Animal Burrows	✓			
Graffiti	✓			
Other				
Surrounding Perimeter Conditions:				
Land Uses	✓			
Vegetation	✓			
Trash & Debris	✓			
Aesthetics	✓			
Access /Maintenance Roads or Paths	✓			
Other				
Remarks:				
<p>BASIN HAS STREAM CHANNEL THAT HAS BEEN RECENTLY RE-CUT BY HAND - DEAD LEAVES, PLANTS, LOGS AND MUD OCCUPY MAIN AREA OF DRY POND -</p> <p>STREAM FLOWS DIRECTLY THROUGH RISER TO BARREL OUTLET.</p> <p>SETTLEMENT AROUND PIPE INTO RISER AND RISER ITSELF - DEEP HOLES UNPROTECTED</p>				
Overall Environmental Division Internal Rating: <u>2</u>				
Signature: <u><i>[Signature]</i></u>		Date: <u>2/25/03</u>		
Title: <u>ENVIR. SPEC</u>				

SWMPProg\BMP\CoInspProg\DetRet.wpd

AES



James City County Environmental Division
Stormwater Management / BMP Inspection Report
Detention and Retention Pond Facilities

County BMP ID Code (if known): JR025

Name of Facility: TRAVIS POND DRY POND #2 BMP No.: 9 of 25 Date: 2/16/03

Location: GOVERNOR'S LAND (HALFWAY HOUSE BMP)

Name of Owner: DOMINION LAND MANAGEMENT CO.

Name of Inspector: VICTORIA BAINS

Type of Facility: DRY DETENTION

Weather Conditions: CLEAR Type: Final Inspection County BMP Inspection Program Owner Inspection



If an inspection item is not applicable, mark NA, otherwise mark the appropriate column.

- O.K. - The item checked is in adequate condition and the maintenance program is currently satisfactory. No action required.
- Routine - The item checked requires attention, but does not present an immediate threat to the function/integrity of the BMP.
- Urgent - The item checked requires immediate attention to keep the BMP operational and to prevent damage to the facility.

Provide an explanation and details in the comment column, if routine or urgent are marked.

Facility Item	O.K.	Routine	Urgent	Comments
Embankments and Side Slopes:				
Grass Height	✓			
Vegetation Condition			✓	ON INFLOW SIDE OF DAM BROKEN PIPE CAUSING SINK HOLES
Tree Growth	✓			
Erosion			✓	INFLOW PIPE NEEDS TO BE REPAIRED, HAS COME AWAY FROM RISE
Trash & Debris	✓			
Seepage				
Fencing or Benches	N/A			
Interior Landscaping/Planted Areas: <input type="checkbox"/> None <input type="checkbox"/> Constructed Wetland/Shallow Marsh <input checked="" type="checkbox"/> Naturally Established Vegetation				
Vegetated Conditions	✓			
Trash & Debris	✓			
Floating Material	N/A			
Erosion	✓			
Sediment			✓	SEDIMENT IS GETTING CARRIED DOWNSTREAM DUE TO INFLOW PIPE
Dead Plant	✓			
Aesthetics	✓			
Other				
Notes:				

Facility Item	O.K.	Routine	Urgent	Comments
Water Pools: <input type="checkbox"/> Permanent Pool (Retention Basin) <input type="checkbox"/> Shallow Marsh (Detention Basin) <input checked="" type="checkbox"/> None, Dry (Detention Basin)				
Shoreline Erosion				
Algae				
Trash & Debris				
Sediment				
Aesthetics				
Other				
Inflows (Describe Types/Locations):				
Condition of Structure			✓	PIPE HAS BROKEN OR COME AWAY FROM RISER
Erosion			✓	PIPE IS CAUSING GROUND TO WASH AWAY
Trash and Debris	✓			
Sediment			✓	SEDIMENT IS BEING WASHED DOWNSTREAM
Outlet Protection	N/A			
Other				
Principal Flow Control Structure - Riser, Intake, etc. (Describe Type):				
Condition of Structure			✓	STRUCTURE IS OKAY FOR NOW, GROUND AROUND RISER IS ERODING AWAY
Corrosion	✓			
Trash and Debris	✓			
Sediment			✓	THE AREA AROUND RISER IS ERODING
Vegetation			✓	EXPOSED SOIL DUE TO EROSION
Other				
Principal Outlet Structure - Barrel, Conduit, etc. :				
Condition of Structure				
Settlement	✓			
Trash & Debris	✓			
Erosion/Sediment		✓		NEED TO REPLACE RIP RAP
Outlet Protection			✓	STILLING BASIN NEEDS TO BE INSTALLED
Other				
Emergency Spillway (Overflow):				
Vegetation	✓			
Lining	✓			
Erosion	✓			
Trash & Debris		✓		NEEDS TO BE CLEANED OUT
Other				
Notes:				

Facility Item	O.K.	Routine	Urgent	Comments
Nuisance Type Conditions:				
Mosquito Breeding	✓			
Animal Burrows	✓			
Graffiti	✓			
Other			✓	EAGLE'S NEST APPROX 65 FT FROM ACCESS
Surrounding Perimeter Conditions:				
Land Uses	✓			
Vegetation	✓			
Trash & Debris	✓			
Aesthetics	✓			
Access /Maintenance Roads or Paths	✓			
Other				

Remarks:

18" RCP INFLOW PIPE IS IN URGENT NEED OF REPAIR OR REPLACEMENT. THE PIPE LOOKS AS IF IT HAS BECOME DISCONNECTED W/ RISER AND/OR HAS BROKEN APART. ALSO DUE TO THIS THE GROUND IS ERODING AROUND THE RISER AND HAS CREATED A HOLE IN THE GROUND BETWEEN ENTRANCE OF PIPE AND RISER. ● THE OUTFALL PROTECTION NEEDS TO BE IMPROVED. THERE IS SCOURING OCCURRING DUE TO THE REASON THERE WAS NO FILTER FABRIC PLACED UNDER RIPRAP. FOR OUTFALL PROTECTION THE EXISTING RIPRAP NEEDS TO BE REMOVED AND FILTER FABRIC PLACED IN AREA OF RIP RAP AND USE EXISTING RIP RAP IN DOWNSTREAM AREA TO PLACE ON FILTER FABRIC. 15" RCP EMERGENCY SPILLWAY NEEDS TO BE CLEANED OUT.

Overall Environmental Division Internal Rating: 1

Signature: Victoria Bains
 Title: PROJECT ENGINEER

Date: 2/6/03

Significant moisture was not observed within the dam fill material. Groundwater, however, was encountered in boring B-3 at a depth of about 24 feet below top of the dam surface. The presence of water at this depth does not present a problem with regard to the stability of the dam.

- ~~Horne's Lake Dam~~

The results of our soil test borings and laboratory testing indicates that the existing dam, at the areas and depths sampled, is generally comprised of fill material to depths of about 12 to 16 feet below top of dam surface. The fill layers, which comprise the top shell and the inner core, are classified as Sandy Lean CLAY (CL), Sandy Fat CLAY with organics (OH) and Fat CLAY (CH). The clayey soils are soft to very stiff in consistency. The transitions from the fill material (clay core) into the natural original soils were relatively clean. In this regard, it appears that proper steps were taken to remove heavy topsoil and/or thick vegetation prior to fill placement. The transition between the fill and the original ground surface in boring B-2, which was performed near the center of the dam, was marked by the presence of a layer of orangish brown and gray, Clayey SAND (SC). This stratum was observed between the approximate depths of 16 feet and 20 feet, and appears to represent the original ground surface.

The natural soils underlying the fill material generally consist of erratic deposits of loose to medium dense Silty and Clayey SANDS (SM and SC) and stiff Fat CLAY (CH).

Significant moisture was not observed within the dam fill material.

- #12 Tee Box Dry Detention Pond

The results of our soil test borings and laboratory testing indicates that the existing dam, at the areas and depths sampled, is generally comprised of fill material to depths of about 8 to 12 feet below top of dam surface. An asphalt golf cart path traversed the centerline of the dam consisting of 4 inches of asphalt and 2 inches of stone. The fill layers, which comprise the top shell and the inner core, are classified as Fat CLAY (CH). The clay soils are soft to stiff in consistency. The transitions from the fill material (clay core) into the natural original soils were relatively clean along the shoulders of the dam (borings B-1 and B-3), although some organic material was encountered in the natural soil in B-1. Overall, it appears that proper steps were taken to remove heavy topsoil and/or thick vegetation prior to fill placement. The transition between the fill and the original ground surface in boring B-2, which was performed near the center of the dam, was marked by the presence of a layer of orangish brown and gray, Sandy Lean CLAY (CL). This stratum was observed between the approximate depths of 10 feet and 14 feet, and appears to represent the original ground surface.

The natural soils underlying the fill material generally consist of erratic deposits of medium dense Clayey SANDS (SC), soft to very stiff Sandy Lean CLAY (CL) and stiff Fat CLAY (CH).

Significant moisture was not observed within the dam fill material.

- ~~Travis Pond Dam~~

The results of our soil test borings and laboratory testing indicates that the existing dam, at the areas and depths sampled, is generally comprised of fill material to depths of about 15 to 18 feet below top of dam surface. The fill layers, which comprise the top shell and the inner core, are classified as Fat CLAY (CH) and clayey SAND (SC). The clay soils are soft to very stiff in consistency. The sand soils are loose in density. The transitions from the fill material (clay core) into the natural original soils were not determined along the shoulders of the dam (borings B-1 and B-3). With regard to the center boring (B-2), it appears that proper steps were taken to remove heavy topsoil and/or thick vegetation prior to fill placement. The transition between the fill and the original ground surface in boring B-2, which was performed near the center of the dam, was marked by the presence of a layer of orangish brown and gray, Clayey SAND (SC). This stratum was observed between the approximate depths of 13 feet and 28 feet, and appears to represent the original ground surface.

The natural soils underlying the fill material generally consist of erratic deposits of medium dense Clayey SANDS (SC) and Silty SAND with Gravel (SP-SM).

Significant moisture was not observed within the dam fill material. Groundwater was encountered in boring B-2 at a depth of about 23 feet below top of the dam surface. The presence of water at this depth does not present a problem with the stability of the dam.

- ~~Whittaker's Lake Dam~~

The results of our soil test borings and laboratory testing indicates that the existing dam, at the areas and depths sampled, is generally comprised of fill material to depths of about 15 to 28 feet below top of dam surface. The fill layers, which comprise the top shell and the inner core, are classified as Fat CLAY (CH) and Sandy Lean CLAY (CL). The clay soils are soft to very stiff in consistency. The transitions from the fill material into the natural original soils were not determined along the shoulders of the dam (borings B-1 and B-3). With regard to the center boring (B-2), it appears that proper steps were taken to remove heavy topsoil and/or thick vegetation prior to fill placement. The transition between the fill (clay core) and the original ground surface in boring B-2, which was performed near the center of the dam, was marked by the presence of a layer of orangish brown and tan, Poorly-Graded SAND (SP). This stratum was observed between the

ENGINEERING EVALUATION AND CONCLUSIONS:

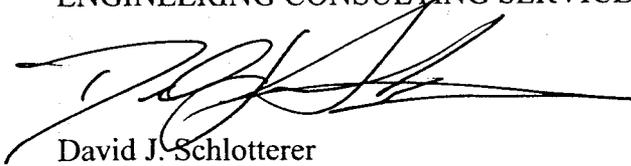
Based on the results of our soil test borings and laboratory testing, it is our opinion that the existing dams *satisfy* the current state dam design criteria, and/or other commonly accepted dam design criteria, with regard to embankment composition (material type and density) and overall stability. In general, the dams are classified as Zoned Earthen Dam structures, comprised predominantly of an impervious clay core with clayey and sandy soils comprising the shell.

General maintenance, however, should be provided for each dam on a routine basis. This should include annual inspections for surface erosion or vertical and horizontal cracking in the embankment. In addition, the toe drain and stilling basin should be inspected for erosion and loss of rip-rap, seepage beyond the toe drain, or increased flow or movement of fines through the drains. All large bushes and trees should be removed from the embankment face (both front and back sides), and animal burrows or other holes/cavities along the embankment should be thoroughly inspected and filled as appropriate.

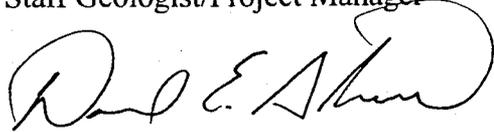
ECS, Ltd. has appreciated the opportunity to be of service to you on this project. Please contact this office should you have any questions or need further assistance.

Respectfully,

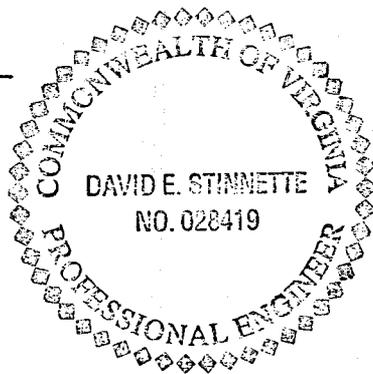
ENGINEERING CONSULTING SERVICES, LTD.



David J. Schlotterer
Staff Geologist/Project Manager



David E. Stinnette, P.E.
Engineering Services Manager



Copies: (3) Jim Bennett (Dominion Land Management Co.)

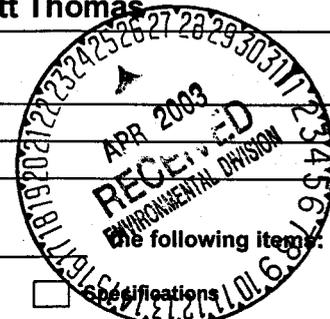
GEOTECH/REPORTS/6221

AES CONSULTING ENGINEERS

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

LETTER OF TRANSMITTAL

DATE: 23-Apr-03	JOB NO. 7173-09
ATTENTION: Scott Thomas	
RE : Governor's Land	



**TO : James City County
 Environmental Division
 101 Mounts Bay Road
 Williamsburg, VA 23187**

WE ARE SENDING YOU:

Attached Under separate cover via _____

Shop drawings Prints Plans Samples Specifications

Copy of letter Change order Other Construction Certification

COPIES	DATE	NO.	DESCRIPTION
1	4-23-03		As-Built drawing (Mylar) - Wingfield Lake JR017
1	4-23-03		As-Built drawing (Black line) - Wingfield Lake JR017
1	4-23-03		Memo responding to letter from County - Wingfield Lake JR017
1	4-23-03		As-Built drawing (Mylar) - Cypress Isle JR041
1	4-23-03		As-Built drawing (Black line) - Cypress Isle JR041
1	4-23-03		Memo responding to letter from County - Cypress Isle JR041
1	4-23-03		Routing computations using As-Built information JR041
1	4-23-03		As-Built drawing (Mylar) - Barrett's Point Pond JR042
1	4-23-03		As-Built drawing (Black line) - Barrett's Point Pond JR042
1	4-23-03		Memo responding to letter from County - Barrett's Point Pond JR042
1	4-23-03		As-Built drawing (Mylar) - Wythe-Hamlet Dry Pond JR040
1	4-23-03		As-Built drawing (Black line) - Wythe-Hamlet Dry Pond JR040
1	4-23-03		Memo responding to letter from County - Wythe-Hamlet Dry Pond JR040
1	4-23-03		As-Built drawing (Mylar) - Travis Pond Dry Pond #2 JR025
1	4-23-03		As-Built drawing (Black line) - Travis Pond Dry Pond #2 JR025
1	4-23-03		Memo responding to letter from County - Travis Pond Dry Pond #2
1	4-23-03		As-Built drawing (Mylar) - Two Rivers Point Timber Structure JR036
1	4-23-03		As-Built drawing (Black line) - Two Rivers Point Timber Structure JR036
1	4-23-03		Memo responding to letter from County - Two Rivers Point Timber JR036
1	4-23-03		As-Built drawing (Mylar) - Wingfield Lake Timber Structure JR031
1	4-23-03		As-Built drawing (Black line) - Wingfield Lake Timber Structure JR031
1	4-23-03		Memo responding to letter from County - Wingfield Lake Timber JR031

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 Signature

FOR BIDS DUE _____ PRINTS RETURNED AFTER LOAN TO US

REMARKS:

If you have any questions please contact me. Thank you.

COPIES TO: file

SIGNED: Victoria Bains
 Victoria Bains

Phase 1, 2, 3
BOND

James City County, Virginia
Environmental Division

Stormwater Management/BMP Facilities
Record Drawing/Construction Certification
Review Tracking Form

County Plan No.: GOVERNORS LAND S-7-90
Project Name: HALFWAY HOUSE BMP
Stormwater Management Facility: DRY POND #2
Phase: I II III

Information Received. Date: OCT 18 2001 AES
 Administrative Check.
 Record Drawing. Date: OCT 16 2001
 NO Construction Certification. Date: POST CONST GUTTERS #12 TREE BOX DRY POND
 RD/CC Standard Forms (Required after Feb 1st 2001 Only) NO CC REQUIREMENT.
 Insp/Maint Agreement. Info: YES
 Other: _____

Standard E&SC Note on Approved Plan Requiring RD/CC or County comment in plan review file.
 Yes No Note/Sheet: _____

Assign County BMP ID Code Code: JR 025

Log into Division's "As-Built" Tracking Log

Add Location to GIS Database Map. Obtain GIS site information (GPIN, Owner, Site Area, Address, etc.)

Preliminary Log into BMP Database (BMP ID #, Site Plan #, GPIN, Project Name)

Active Project File Review (correspondence, H&H, etc.). LIMITED INFO FOUND.

Initial As-Built File setup (label, copies of hydraulics, etc.)

Inspector Check of RD/CC. MM JB DEC 2001

Pre-Inspection Drawing Review (Quick look prior to field inspection).

Final Inspection (FI) Date: PH 2/25/03. Reinspect 3/1/03

Record Drawing (RD) Review Date: 1/8/03 R.H.

Construction Certification (CC) Review Date: SIT 3-6-03.

Actions:
 No comments.
 Comments. Letter Forwarded. Date: _____
 Record Drawing (RD) OK
 Construction Certification (CC) OK
 Construction-Related (CR)
 Site Issues (SI)
 Other: _____

Second Submission: 4/25/03 AES (RD)

Third Submission: _____

Acceptable for stormwater management facility purposes (RD/CC/CR/Other). Proceed with bond release.

Notify Darryl & Joan of acceptability using email (preferred) or verbal.

Clean active file of all stormwater management related material and finish/establish "As-Built" file.

Add to County BMP Inventory/Inspection schedule (Phase I, II or III).

Copy Final Inspection Report into County BMP Inspection Program file.

Digital Photographs obtained.

NO Add to JCC Hydrology & Hydraulic database (optional).

BMP Certification Information Acceptable
Plan Reviewer: [Signature] Date: 6/27/03

James City County, Virginia
Environmental Division

Stormwater Management/BMP
Record Drawing Review Form

County Plan No. 5-7-90
 Project Name: Govs. Land - Halfway House BMP
 Stormwater Management Facility: JR-025 Dry Pond

Component	Approved Plan	Record Drawing	OK
Top of dam (lowest point)	<u>✓</u>	<u>✓</u>	
Top of Dam (reported)	<u>19.5</u>	<u>18.31</u>	
Top width of dam	<u>20.</u>		
Crest of riser	<u>16.6</u>	<u>16.63</u>	
Crest of Emerg. Spillway	<u>NONE</u>		
Low Water elevation	<u>dry</u>		
Normal Water level	<u>dry</u>		
Bottom of pond elevation	<u>NA</u>	<u>NA</u>	
Inflow Pipe size (1)	<u>/</u>	<u>/</u>	
Inflow Pipe size (2)	<u>/</u>	<u>/</u>	
Inflow Pipe size (3)	<u>/</u>	<u>/</u>	
Barrel Diameter (inches)	<u>30" RCP</u>	<u>30" RCP</u>	
10 ^{yr} Storm Elevation	<u>17.9</u>	<u>17.9</u>	
Trash rack/anti-vortex type	<u>CONCRETE</u>	<u>CONCRETE</u>	
Forbay, baffle wall, etc.	<u>NO</u>	<u>NO</u>	
Pond drain elevation			

Date: 1/8/05
 Name: R. Hall

No seal on RD.

Record Drawing/Construction Certification Submittal for a BMP Facility

Date: 12-17-01

Inspector: Pat Menichino
 Gerry Lewis
 Beth Davis
 Mike Woolson
 Joe Buchite
 Other: _____

✓ JB

Project: GOVERNORS LAND
BMP Facility: HALFWAY HOUSE BMP
Plan No. 5-7-90
BMP ID Code: JR025

I have received a transmittal for a Record Drawing and Construction Certification for the above referenced facility on Oct 17 2001. Prior to full engineering review of these items and a field inspection, I am first forwarding the items to you to cursory review in case any major field changes were performed that I should be aware of and/or to ensure the record drawing accurately portrays what you saw in the field. Please review the drawing and return to me promptly so I can proceed with the review for certification purposes.

During my review, I will look at issues related to the BMP and its primary inflow and outflow conveyance systems, and will make comment in the following areas: Record Drawing (RD), Construction Certification (CC) and Construction-Related (CR) punch list items. If you have any other related non-BMP site issues such as erosion, stabilization, removal of erosion & sediment controls, etc. that are not related to the BMP, I can easily add these items to any comment letter that I may forward to the Owner/Engineer. Let me know if any outstanding site issues remain.

If I don't hear from you I will ask you if any other outstanding issues remain before I forward any letters to the Owner/Engineer.

Scott

SWMPProg\BMP\ConInsp\Insp.trans

Date Record Created:

WS_BMPNO:

Print Record

Created By:

JR025

WATERSHED JR
BMP ID NO 025
PLAN NO S-7-90
TAX PARCEL (44-1)(6-1A)
PIN NO 4410600001A
CONSTRUCTION DATE 1/1/1991
PROJECT NAME Governors Land - Halfway House
FACILITY LOCATION Near (west of) 2344 West Island Road
CITY-STATE Williamsburg, Va. 23185
CURRENT OWNER Governors Land Associates
OWNER ADDRESS Two Rivers Road
OWNER ADDRESS 2
CITY-STATE-ZIP CODE Williamsburg, Va. 23185
OWNER PHONE
MAINT AGREEMENT Yes
EMERG ACTION PLAN No

PRINTED ON
Thursday, March 11, 2010
2:34:40 PM

MAINTENANCE PLAN

SITE AREA acre

LAND USE

old BMP TYP

JCC BMP CODE

POINT VALUE

SVC DRAIN AREA acres

SERVICE AREA DESCR

IMPERV AREA acres

RECV STREAM

EXT DET-WQ-CTRL

WTR QUAL VOL acre-ft

CHAN PROT CTRL

CHAN PROT VOL acre-ft

SW/FLOOD CONTROL

GEOTECH REPORT

No

1.14

SF Residential

Dry Pond

F2 Dry ED with forebay

89

SF Lots, Roads & Golf Course

UT of James River

Yes

0

No

0

Yes

No

CTRL STRUC DESC

CTRL STRUC SIZE inches

OTLT BARRL DESC

OTLT BARRL SIZE inch

EMERG SPILLWAY

DESIGN HW ELEV

PERM POOL ELEV

2-YR OUTFLOW cfs

10-YR OUTFLOW cfs

REC DRAWING

CONSTR CERTIF

LAST INSP DATE 2/25/2003

INTERNAL RATING

MISC/COMMENTS

Dry pond #2. GC path and rd to PS GL-2.
Bald eagle nesting area.

RCP Riser

48

RCP Barrel

30

Yes

17.9

na

Yes

Yes

Yes

No

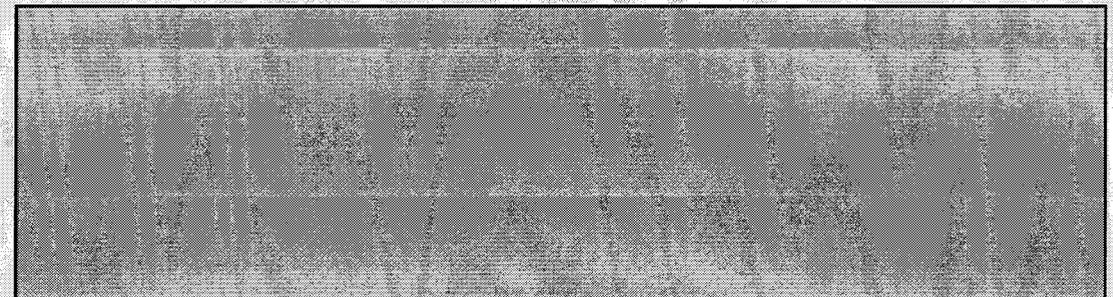
Inspected by:

3

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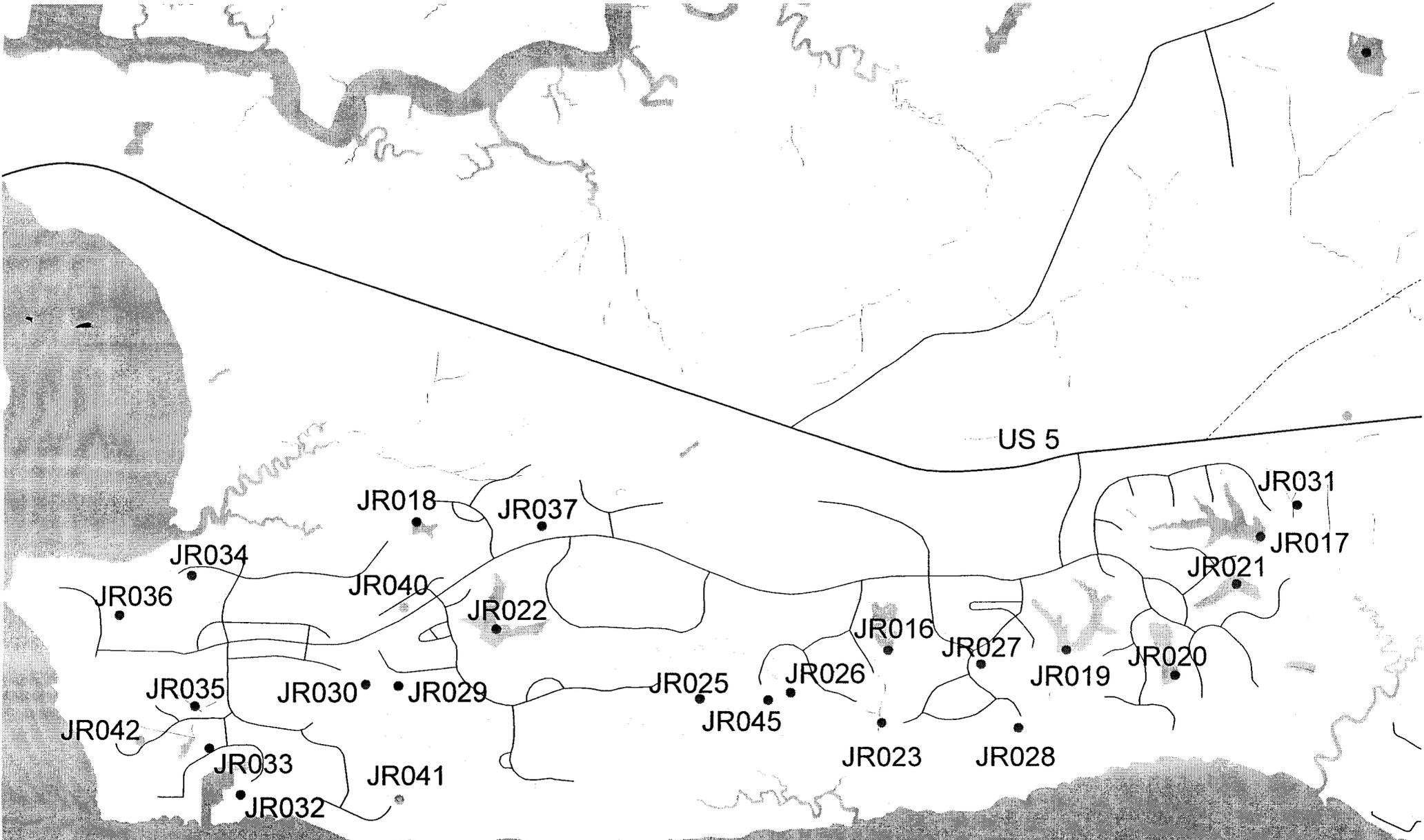
Additional Comments:



WATERSHED	JR	MAINTENANCE PLAN	No	CTRL STRUC DESC	RCP Riser
BMP ID NO	025	SITE AREA acre	1.14	CTRL STRUC SIZE inches	48
PLAN NO	S-7-90	LAND USE	SF Residential	OTLT BARRL DESC	RCP Barrel
TAX PARCEL	(44-01)(06-1A)	old BMP TYP	Dry Pond	OTLT BARRL SIZE inch	30
PIN NO	4410600001A	JCC BMP CODE		EMERG SPILLWAY	No
CONSTRUCTION DATE	1/1/1991	POINT VALUE		DESIGN HW ELEV	
PROJECT NAME	Halfway House BMP (Fairways 6 & 11)			PERM POOL ELE	na
FACILITY LOCATION	Near (west of) 2344 West Island Road			2-YR OUTFLOW cfs	
CITY-STATE	Williamsburg, Va. 23185	SVC DRAIN AREA acres		10-YR OUTFLOW cfs	
CURRENT OWNER	Governors Land Associates			REC DRAWING	Yes
OWNER ADDRESS	Two Rivers Road			CONSTR CERTI	No
OWNER ADDRESS 2		SERVICE AREA DESCRI	SF Lots, Roads & Golf Course	LAST INSP DATE	4/5/2001
CITY-STATE-ZIP CODE	Williamsburg, Va. 23185	IMPERV AREA acres		INTERNAL RATING	4
OWNER PHONE		RECV STREAM	UT of James River	MISC/COMMENTS	Along golf cart path and access rd to JCSA PS GL-2. 18" low flow BMP orifice.
MAINT AGREEMENT	Yes	EXT DET-WQ-CTRL	Yes		
EMERG ACTION PLAN	No	WTR QUAL VOL acre-ft	0		
		CHAN PROT CTRL	No		
		CHAN PROT VOL acre-ft	0		
		SW/FLOOD CONTROL	Yes		
		GEOTECH REPORT	No		

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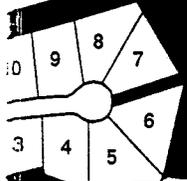
Governors Land BMP's
County BMP Inspection Program

Scale: 1 inch = 2000 feet (approx.)

LAKE - B

TO JAMES RIVER PLANTATIONS

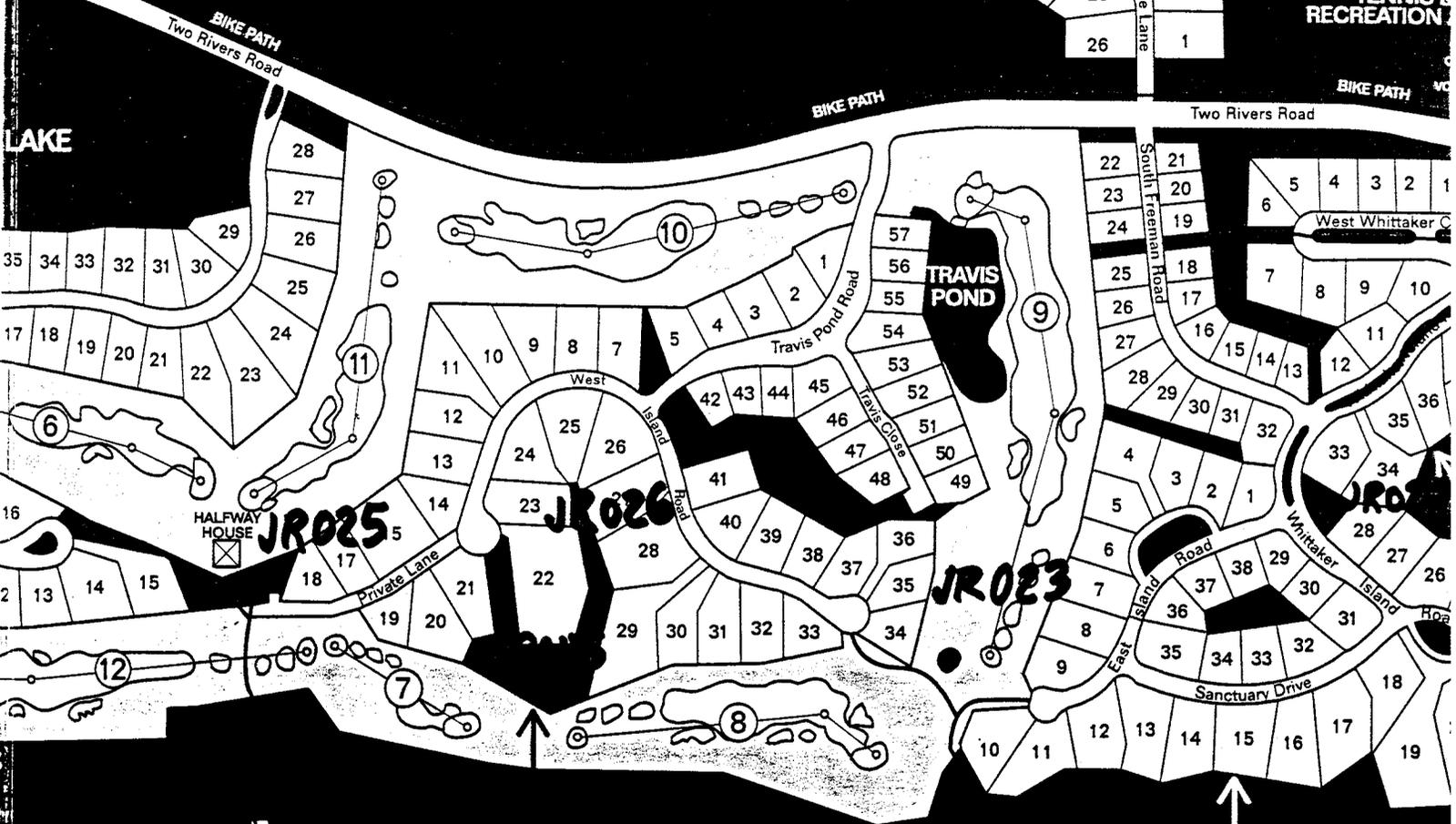
JOHN TYLER MEMORIAL HIGH



HARPER'S MILL

PARKSIDE

PARK EAST TENNIS & RECREATION



BRIDGE

TRAVIS POND

BRIDGE

WHITTAKER ISLAND B

ISLAND

OBSERVATION DECK

ISLAND

BRIDGE AND OBSERVATION PAVILLION

BEACH

ISLAND