

**Chesapeake Bay Critical Area Commission**  
Department of Housing and Community Development  
Crownsville, Maryland  
June 5, 1996  
**AGENDA**

**SUBCOMMITTEES**

**PROJECT**

**MEMBERS:** Schoeplein, Langner, Bourdon, Cooksey, Phillips, Foor, Corkran, Blake, Goodman, Shepherd, Hearn, Thomas

|              |   |                         |
|--------------|---|-------------------------|
| 10:00 a.m. - | Ponds in the Buffer                           | Staff                   |
|              | Tiger Beetles                                 | Claudia Jones, Planner  |
|              | Football Stadium (Maryland Stadium Authority) | Dawnn McCleary, Planner |
|              | Cliff Stabilization (Calvert County)          | Dawnn McCleary, Planner |
|              | Greenwell State Park-Phase I Development Plan | Mary R. Owens, Planner  |

**PROGRAM**

**MEMBERS:** Whitson, Evans, Janey, Moxley, Robinson, Myers, Barker, Williams, Curry, Foor, Pinto, Johnson, Lawrence, Taylor-Rogers, Duket

11:30 a.m.      Forest Interior Bird Guidance Paper      Claudia Jones, Science Advisor

12:00 p.m. - 1:00 p.m. - LUNCH

**PLENARY MEETING**

1:00 p.m. - 1:05 p.m.      Approval of Minutes of May 1, 1996      John C. North, II, Chair

**SPECIAL TOPICS**

1:05 p.m. - 1:25 p.m.      Current Approaches to Controlling Stormwater Runoff & Erosion in Maryland      Greg Schaner, Planner

1:25 p.m. - 1:35 p.m.      Report of the Chesapeake Bay Commission's Riparian Buffer Panel      Claudia Jones, Sci. Advisor

1:35 p.m. - 1:45 p.m.      Local Government Assistance Grants and Projects      Paul Ticco, Chief Comp. Plng. Division

**PROGRAM IMPLEMENTATION**

1:45 p.m. - 2:05 p.m.      REFINEMENT Growth Allocation Queen Anne's County - Kent Island Golf      Theresa Corless, Planner  
Christina Pompa, QA

**OVER**

**PROJECT**

|                       |  |  |
|-----------------------|--|--|
| 2:05 p.m. - 2:20 p.m. | VOTE Football (Baltimore) Stadium  | Dawnn McCleary, Planner<br>Kim McCalla, (MSA)  |
| 2:20 p.m. - 2:30 p.m. | VOTE Greenwell State Park Phase I<br>Development Plan  | Mary Owens, Planner  |
| 2:30 p.m. - 3:00 p.m. | OLD BUSINESS<br>Status of Comprehensive Reviews<br><br>Critical Area Commission Member<br>Questionnaire Results<br><br>10% Offset Fees | John C. North, II, Chairman<br>Patricia Pudelkewicz, Chief<br>Program Implementation<br>Patricia Pudelkewicz, Chief<br>Program Implementation<br><br>Susan McConville, Planner |
| 3:00 pm. - 3:15 p.m.  | NEW BUSINESS   | John C. North, II, Chairman  |

# Chesapeake Bay Critical Area Commission



Chesapeake Bay Maritime Museum  
Propulsion Building  
St. Michaels, Maryland

May 1, 1996

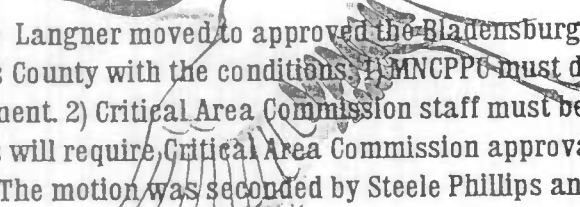
The Chesapeake Bay Critical Area Commission met at the Propulsion Building, Chesapeake Bay Maritime Museum, St. Michael's, Maryland. The meeting was called to order by John C. North, II, Chairman, with the following Members in attendance:

Barker, Philip, Harford County  
Blake, Russell, Worcester County  
Bourdon, Dave, Calvert County  
Clark, Terry for Hearn, J. L., MDE  
Cooksey, David, Charles County  
Corkran, Bill, Talbot County  
Greenfield, Victoria for Curry, Wayne K., Prince George's County  
Duket, Larry, Maryland Office of Planning  
Foor, James, C., DVM, Queen Anne's County  
Goodman, Robert, DHCD  
Johnson, Samuel Q., Wicomico County  
Langner, Kathryn, Cecil County  
Myers, Andrew, Caroline County  
Phillips, G. Steele, Dorchester County  
Pinto, Robert, Somerset County  
Robinson, Edward, Kent County, MAL  
Schoeplein, Bob, DBED  
Hall, Charles for Shepherd, Dr. Gloria, State Highway Administration  
Williams, W. Roger, Kent County

The Minutes of April 3, 1996 were approved as read.

Mary Owens, Planner, CBCAC, presented for concurrence with the Chairman's determination of Refinement the Worcester County Growth Allocation Mason Property Map Change Refinement. The request is for a 56.88 parcel with 47.48 acres within the Critical Area. The change request is from RCA to IDA for 27.47 acres. The 20 acres residue will remain RCA. The Commission supported the Chairman's determination.

Theresa Corless, Planner, CBCAC, presented for VOTE the project proposal of Maryland-National Capital Park and Planning Commission (MNCPPC) for the Bladensburg Marina Revitalization and Waterfront Park in Prince George's County. Ms. Corless presented the details of the project which will be accomplished in five phases over the next 5-6 years. Phase I of the project will include general improvements such as: removing old piers and pilings and replacing them with new piers and floating docks, replacing the existing deteriorated bulkhead, improving the brick work around the visitors center, building a new boat ramp, storm channel improvements, and landscaping. MNCPPC has received a grant for this year with the requirement that construction begin by the summer of 1996. Construction of Phase I will commence this spring. Ms. Anne Agee from MNCPPC gave an overview of the project's five phases. She also explained that MNCPPC is required to reapply for grant funds annually. The Commission staff recommendation is for approval with conditions.



Ms. Kay Langner moved to approved the Bladensburg Marina Revitalization Waterfront Part project in Prince George's County with the conditions: 1) MNCPPG must develop a plan to meet the 10% pollutant loading requirement. 2) Critical Area Commission staff must be notified of any changes to the approved plan. Major changes will require Critical Area Commission approval. 3) The amphitheater stage must be out of the 100 foot Buffer. The motion was seconded by Steele Phillips and carried unanimously.

Lisa Hoerger, Environmental Specialist, CBCAC, presented for VOTE the Sandy Point State Park Wetland Enhancement Project in Anne Arundel County proposed by the Watershed Restoration Division of the Department of Natural Resources. The purpose of the project is to restore this wetland area to provide habitat for both terrestrial and aquatic species and to promote Bay conservation. This one and a half acre site project will also serve as a demonstration for National Wetlands Month and is a cooperative effort between DNR, MDE and CBF. The Commission staff recommendation is for approval with conditions. Kay Langner moved to approve the Sandy Point State Park project with the condition that "no activity shall commence without a letter from the Heritage Division of DNR that states no threatened or endangered species or species in need of conservation will be impacted." The motion was seconded by Steele Phillips and carried unanimously.

Dawnn McCleary, Planner, CBCAC presented for VOTE the Seagirt Marine Terminal Phase II. This first phase contract, Phase 2, Berth IV Development, will convert 8.2 acres of undeveloped area in addition to the 8.6 acres of redeveloped area to total 16.8 acres for container storage and access roadway. Several issues arise concerning this development Phase: 1) new paving (7.14 acres) within the Critical Area; 2) Repaving (8.22 acres); 3) surcharging of 17.18 acres to accelerate consolidation of underlying soft compressible soils; 4) 2.4 acres behind the existing cofferdam structure will be excavated to about 1.0 deep and reserved as three wet ponds; 5) establishment of several offset projects to meet the pollutant removal requirements. Ms. McCleary recommended approval of the project with conditions. Kay Langner moved to approve the Seagirt Marina Terminal Berth IV Development Phase 2 Construction with the conditions: 1) A letter from the Maryland Department of the Environment to Maryland Port Administration (MPA) and the Chesapeake Bay Critical Area Commission approving the three wet ponds. 2) Approval of the site's sediment and erosion control plans by MDE before construction occurs 3) comments from Baltimore City regarding consistency of the project with the City's Critical Area Program. The motion was seconded by Steele Phillips and carried unanimously.

Mary Owens, Planner, CBCAC, presented for VOTE the Department of Natural Resources' shore erosion control project at Martinak State Park. This project involves four sites. The first site, identified as Area 4 involves the construction of 520 feet of riprap revetment in Watts Creek with none of the work extending more than 25 feet channelward of mean high water. The second and third sites, identified as Area 2 and Area 3 involve the construction of 528 linear feet of stone sill and the placement of sand behind the sill for marsh planting. At the final site, there will be 225 square feet of riprap outfall protection installed in order to reconstruct and improve an existing stormwater outfall. She said that approximately five trees within the 100 Foot Buffer will need to be removed in order to access the construction site. One-to-one mitigation will be required for the removal of these trees. Kay Langner moved for approval of the project with the condition that all live, standing trees that are removed shall be replaced on a 1:1 basis. The motion was seconded by Steele Phillips and carried unanimously.

#### NEW BUSINESS

Patricia Pudelnkewicz informed the Commission that she had received a synopsis of project activity to-date with regard to Baltimore County's new BEA Program (termed Buffer Management Area in the County). Pat stated that this BEA Policy was approved by the Commission on a 2-year trial basis last January, and that Commission staff and County staff were following its application very closely. There have been 18 projects so far, including 5 pools, 4 of which were approved and one denied. All of the pools were existing violations prior to the new policy inception. There were also 4 additions, 2 pavilions, 3 sheds/garages, 2 individual houses, 1 grading in the Buffer,

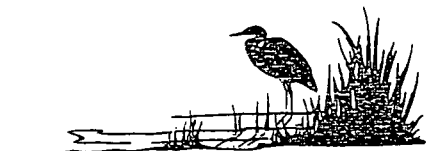
and 1 pervious deck. Pat stated that Dr. Foor is very interested in working with the Staff to monitor the implementation of this policy, and she asked that if any other Commission members were interested in working on a small subcommittee to follow the implementation of this policy to please let her know.

#### OLD BUSINESS

Ms. Pudelkewicz reported that she had mailed to each Commission member a questionnaire to obtain their input on ways in which Commission staff could better assist them in their duties as Commission members, and in gaining additional knowledge of the Law and criteria and background on the Program. She asked that members please return the questionnaire to her as soon as possible, and that she will report on the results at the June meeting.

There being no further business, the meeting adjourned.

Submitted by: Peggy Mickler  
Commission Secretary



| <b>Stormwater Program</b>                      | <b>Objective</b>  | <b>Regulated Activities</b>  | <b>Control Mechanism</b>   | <b>Requirements</b>   |
|--|---|--|--|---|
| <i>Stormwater Management Act</i>               | "Maintain after development, as nearly as possible, the predevelopment runoff characteristics"  | Any development that disturbs more than 5,000 square feet and less than 2 acres  | Each local jurisdiction implements separate stormwater management ordinance; applicant files proposed stormwater management plan to local jurisdiction for review; MDE retains enforcement authority | Requires implementation of stormwater BMPs to control runoff; established hierarchical list of preferred BMPs beginning with infiltration practices; emphasize controlling "first flush"  |
| <i>Erosion &amp; Sediment Control Law</i>      | Prevent or minimize the erosion or sedimentation on developing sites  | Clearing or grading activities that disturb more than 5,000 square feet  | Each local jurisdiction implements separate soil erosion and sediment control ordinance; applicant files soil erosion and sediment control plan; MDE retains enforcement authority                   | Requires implementation of soil erosion and sediment control plan which includes: limits of clearing/grading; delineation of natural drainage area; vegetative controls; structural controls; and site management   |
| <i>NPDES Stormwater Management Regulations</i> | Minimize the discharge of pollutants to waters of the State from stormwater runoff industrial facilities and municipal storm sewer systems  | <i>Phase I:</i> 11 categories of industry, including construction of > 5 acres; discharges from large and medium-sized municipal storm sewer systems<br><i>Phase II:</i> Remaining industries and municipalities will likely be subject to a permit approach for stormwater; specifics are being negotiated at EPA at present time | Applicants must obtain State NPDES permit  | <i>Municipal:</i> source identification; discharge characterization; proposed management program; assessment of controls; and fiscal analysis<br><i>Industrial (construction):</i> area of site excavation; proposed BMPs for stormwater pollutants during and after construction; runoff coefficient and impervious surface increase   |
| <i>Chesapeake Bay Critical Area Program</i>    | "To establish a Resource Protection Program for the Chesapeake Bay and its tributaries by fostering more sensitive development activity for certain shoreline areas so as to minimize damage to water quality and natural habitats" | <i>10 % Rule:</i> All development activity within IDA<br><i>15 % Impervious Surface Limit:</i> All development activity within RCA or LDA<br><i>100-Foot Buffer:</i> All non-agricultural areas of the Critical Area   | Local subdivision and/or building application  | <i>10 % Rule:</i> New development and redevelopment activities should demonstrate a 10% reduction in pollutant loadings from predevelopment levels utilizing BMPs<br><i>15% Impervious Surface Limit:</i> For development activities in RCA and LDA, impervious surfaces must be limited to 15% of the site<br><i>100-Foot Buffer:</i> New development activities not permitted in Buffer |
| <i>Tributary Strategies</i>                    | To develop a comprehensive strategy to reduce the point and nonpoint source loadings of phosphorus and nitrogen to the Bay by 40 %  | Activities to be addressed by individual tributary teams include sewage treatment plants, construction, agriculture, boaters/anglers, industry, homeowners, and other sources of nutrient loadings to the Bay  | Stakeholders will develop "tributary strategies" for each of Maryland's 10 tributaries; strategies will consist of a series of regulatory and voluntary pollution reduction measures                 | Required 40 % reduction in nutrient loadings; no requirements established to date   |

> 1970: Erosion & Sediment Control Law

- > 1982: SWM Act
- > 1983: SWM Regs
- > 1984: Local govts. implem. SWM ordinances
- > 1984: Critical Area Law
- > 1986: Critical Area Criteria
- > 1987: 10% Rule Guidance
- > 1987 - 89: Local govts. implem. Critical Area programs
- > 1989: Ches. Bay Nutrient Reduction Strategy

- > 1991: Large Maryland Jurisdictions applications for State SWM permits
- > 1992: Industrial applications for State SWM permits
- > 1992 - 93: Medium-sized Jurisdictions applications for State SWM permits
- > 1993: Revisions to 10% Rule Guidance
- > 1993 - 96: MDE issues State SWM permits to Large jurisdictions
- > 1994: State Standards for Soil Erosion & Sediment Control
- > 1995: Tributary Strategy Teams commence activities

> 2000: State meets 40% nut. reduction goal

*State of Maryland Stormwater Management Activities*

1970's

1980's

1990's

*Federal Government Stormwater Management Activities*

- > 1972: Clean Water Act
- > 1976: Congress directs EPA to study Ches. Bay impacts

- > 1981 - 82: EPA publishes Ches. Bay assessment report
- > 1983: EPA publishes NURP data on stormwater runoff
- > 1987: 1987 Amendments to Clean Water Act - Stormwater point source program created
- > 1987: Executive Council of Ches. Bay Commission commits to 40% reduction in nutrient loadings

- > 1990: EPA Promulgates regs. for National SWM Permit Program (Phase I)
- > 1995: EPA initiates negotiations on unregulated sources of stormwater runoff

> 2000: Exec. Council States Meet 40% Goal

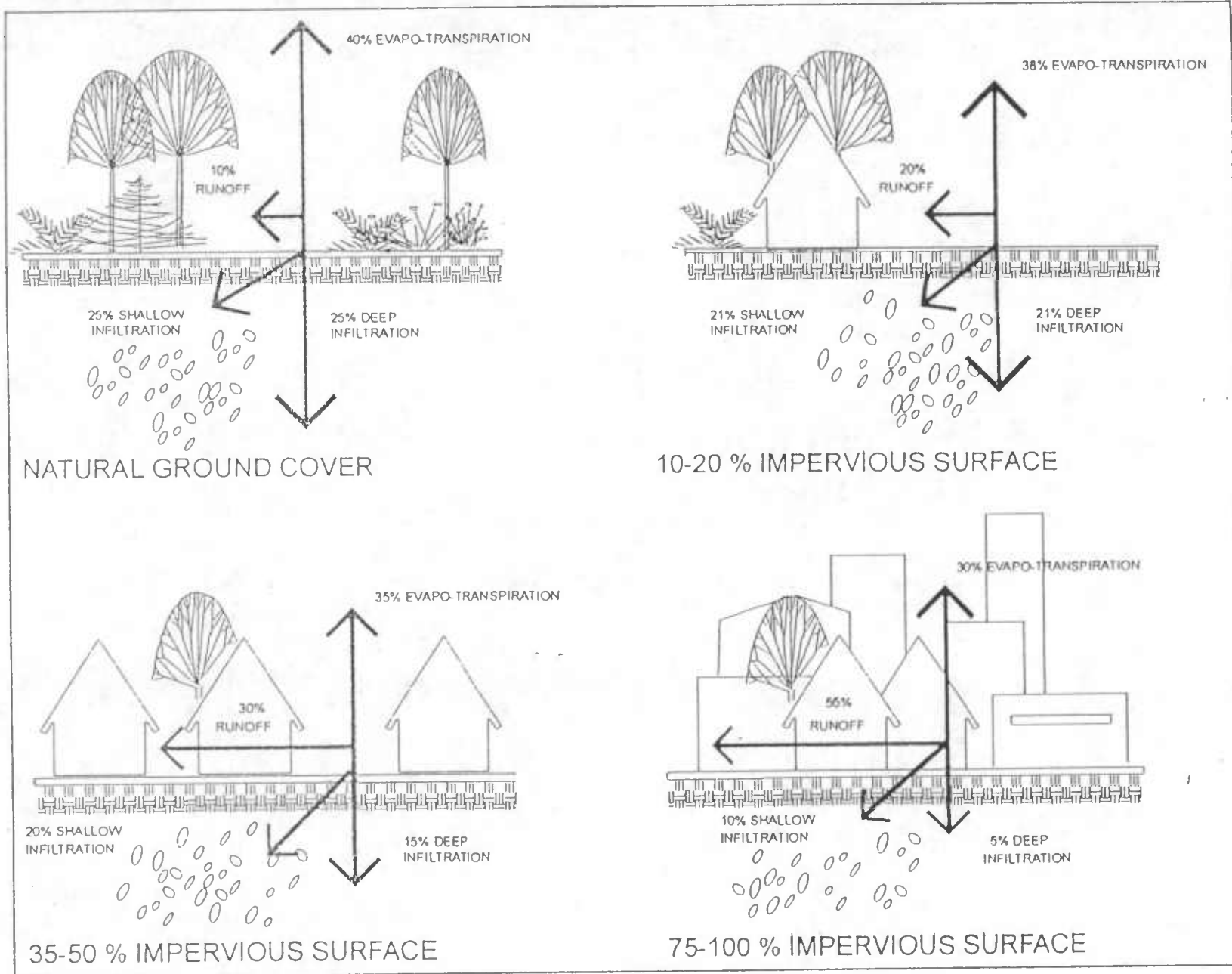
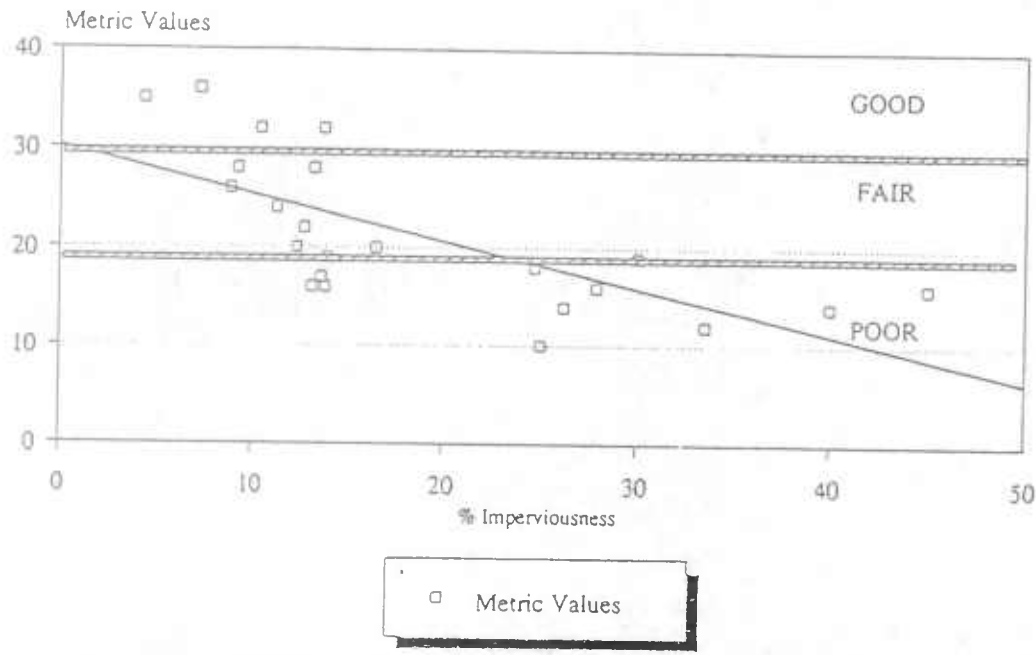


FIGURE 1. Water cycle changes associated with urbanization  
 Source: Environmental Protection Agency 1993a

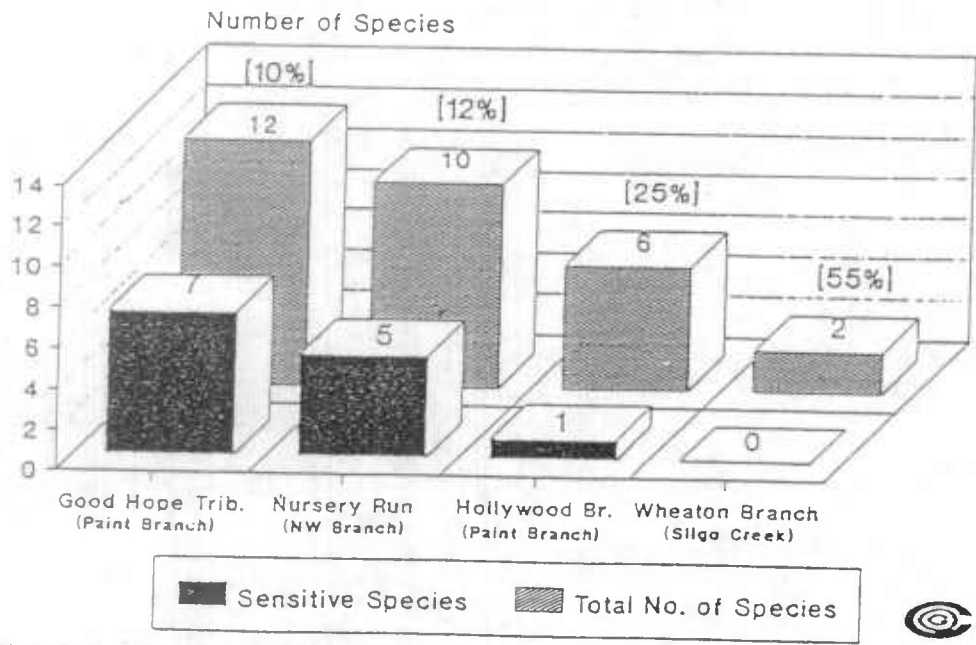


Figure 5: Impacts of imperviousness on macroinvertebrate communities in the headwater streams of the Anacostia River (Schueler and Galli, 1992)



Metric Values are based upon the sum of scores assigned for the following categories: EPTC balance, EPT Index, Average Generic Diversity, Chironomid Abundance, Taxonomic Richness (Family and Generic)

Figure 6: Fish diversity as a function of watershed imperviousness in four subwatersheds in the Maryland Piedmont (Schueler and Galli, 1992)



Numbers in brackets represent levels of watershed imperviousness.

Sources: 1) MdDNR, 1983 2) MdDNR, 1986 3) ICPRB, 1989

# **Stormwater Management Programs: Bottom-Line**

## Stormwater Management Act

*"The management of stormwater runoff is necessary to reduce stream channel erosion, pollution, siltation, and sedimentation, and local flooding, all of which have adverse impacts on the water and land resources of Maryland. The General Assembly intends ... to reduce as nearly as possible the adverse effects of stormwater runoff and to safeguard life, limb, property, and public welfare."*

## Erosion and Sediment Control Act

*"Lands and waters comprising the watersheds of the State are great natural assets and resources. As a result of erosion and sediment deposit ... within the watersheds of the State, these waters are being polluted and despoiled to such a degree that fish, marine life, and recreational use of the waters are being affected adversely."*

*"To protect the natural resources of the State ... [MDE and DNR] shall adopt criteria and procedures for the counties and the local soil conservation districts to implement soil erosion control programs."*

## State Clean Water Act

*Control municipal and industrial sources of stormwater runoff from point source conveyances to waters of the State of Maryland*

*Part of goal to achieve zero discharge of pollutants into State waters and to have water quality which is "swimmable and fishable"*

## Chesapeake Bay Critical Area Act/Program

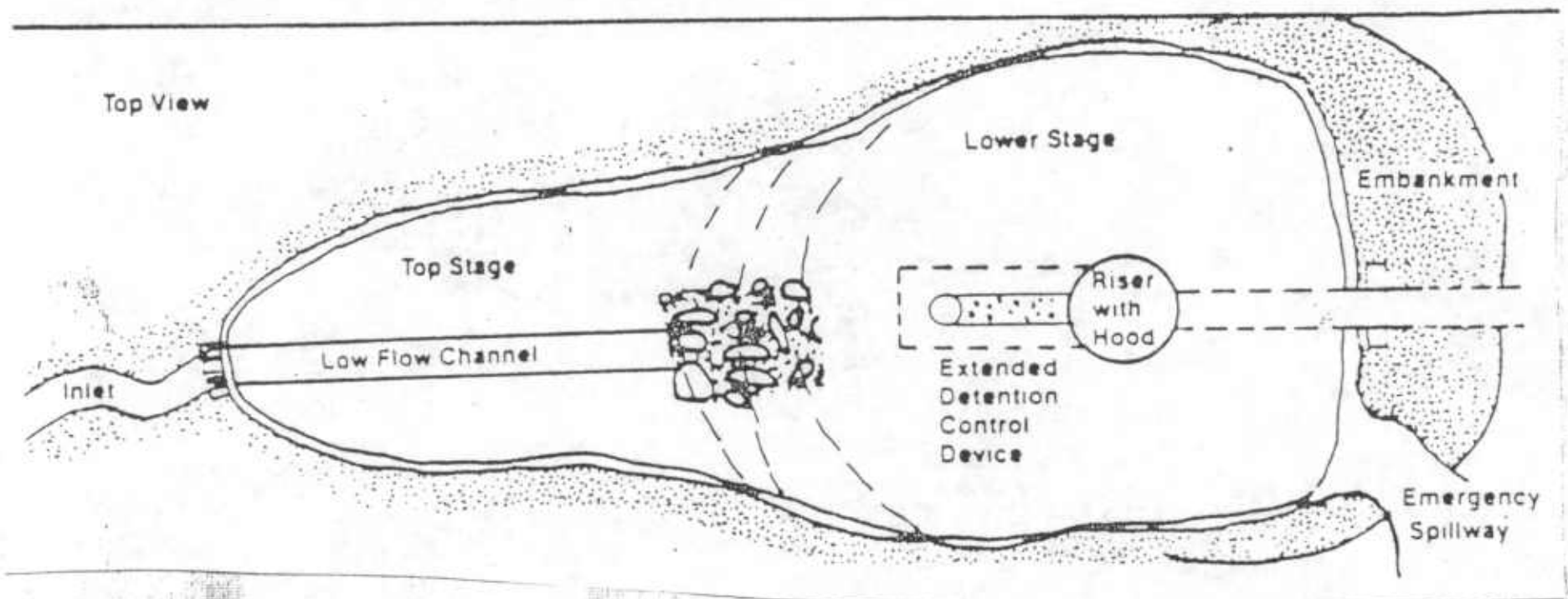
*"National studies have documented that ... the Chesapeake Bay and its tributaries have declined due to the cumulative effects of human activity that have caused increased levels of pollutants, nutrients, and toxics in the Bay system ..."*

*"The restoration of the Chesapeake Bay and its tributaries is dependent, in part, on minimizing further adverse impacts to water quality ... of the shoreline and adjacent lands."*

# ***Maryland Stormwater Management Act***

- ***Adopted in 1982 by General Assembly***
  - *Administered by the Water Management Administration of the Maryland Department of the Environment*
- ***Primary goal “to maintain after development, as nearly as possible, the predevelopment runoff characteristics”***
- ***Quantity control: Management of increased runoff should maintain pre-development peak discharge rates***
- ***Quality control to prevent delivery of sediments, heavy metals, and other pollutants to State waters:***
  - *Installation of stormwater BMPs in order of State of preference: (1) infiltration; (2) pollutant attenuation (i.e., vegetated swale); (3) retention (i.e., wet ponds); (4) detention (i.e., extended detention ponds)*
  - *Treatment of first one-half inch of stormwater runoff from impervious surfaces prior to delivery of runoff to natural aquatic system*
- ***Future quality control determined by a Statewide Stormwater BMP Design Manual (being developed)***

Figure 4.1: Schematic of a Dry Extended Detention Pond



### Plan View

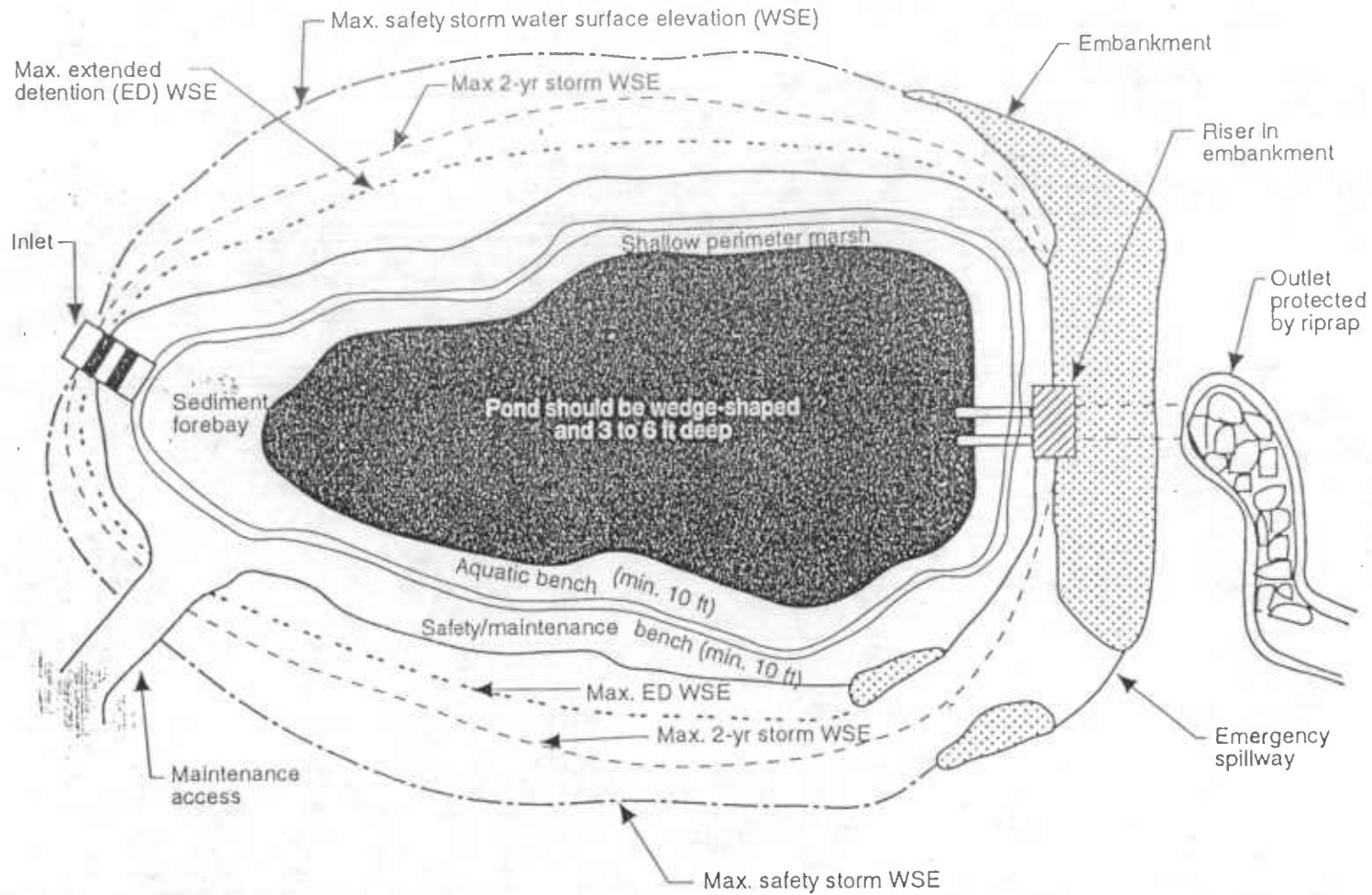
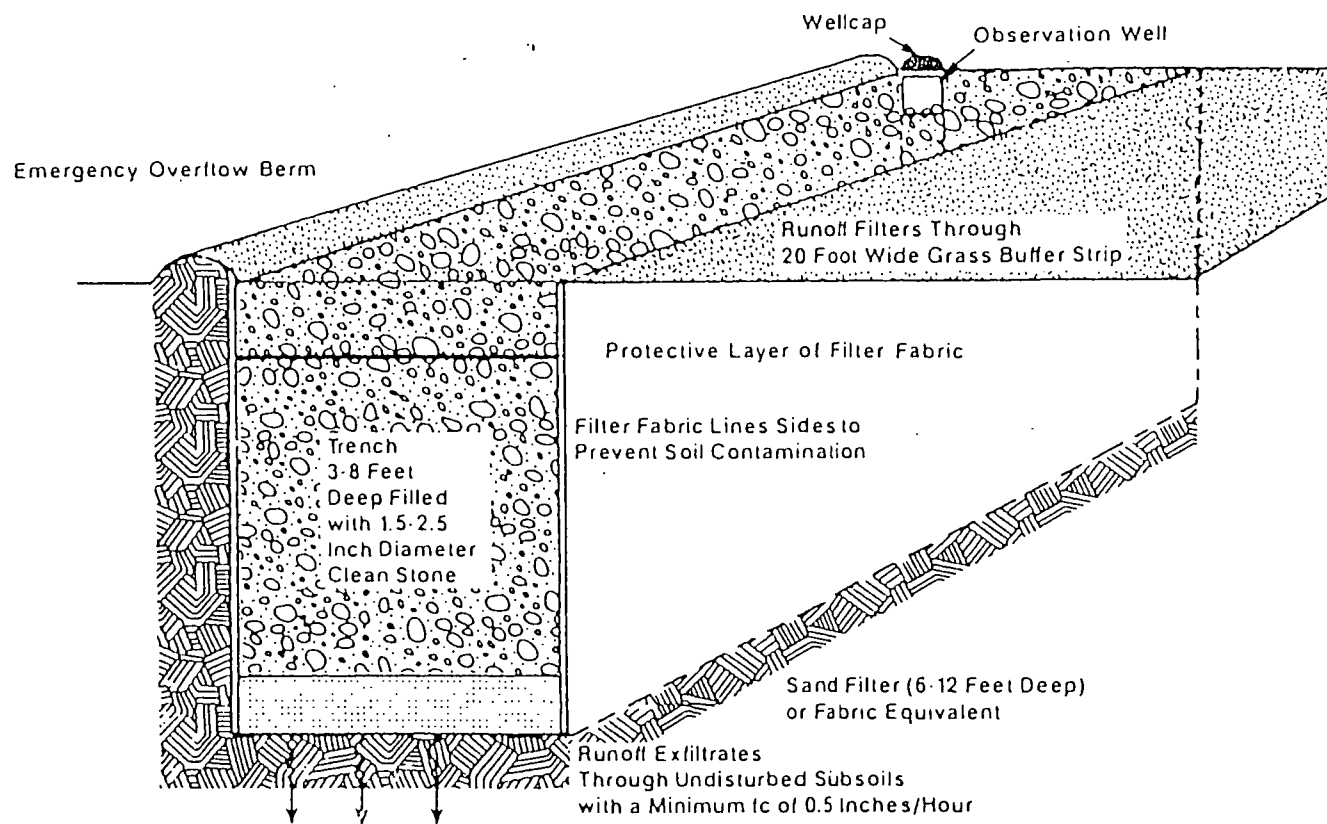


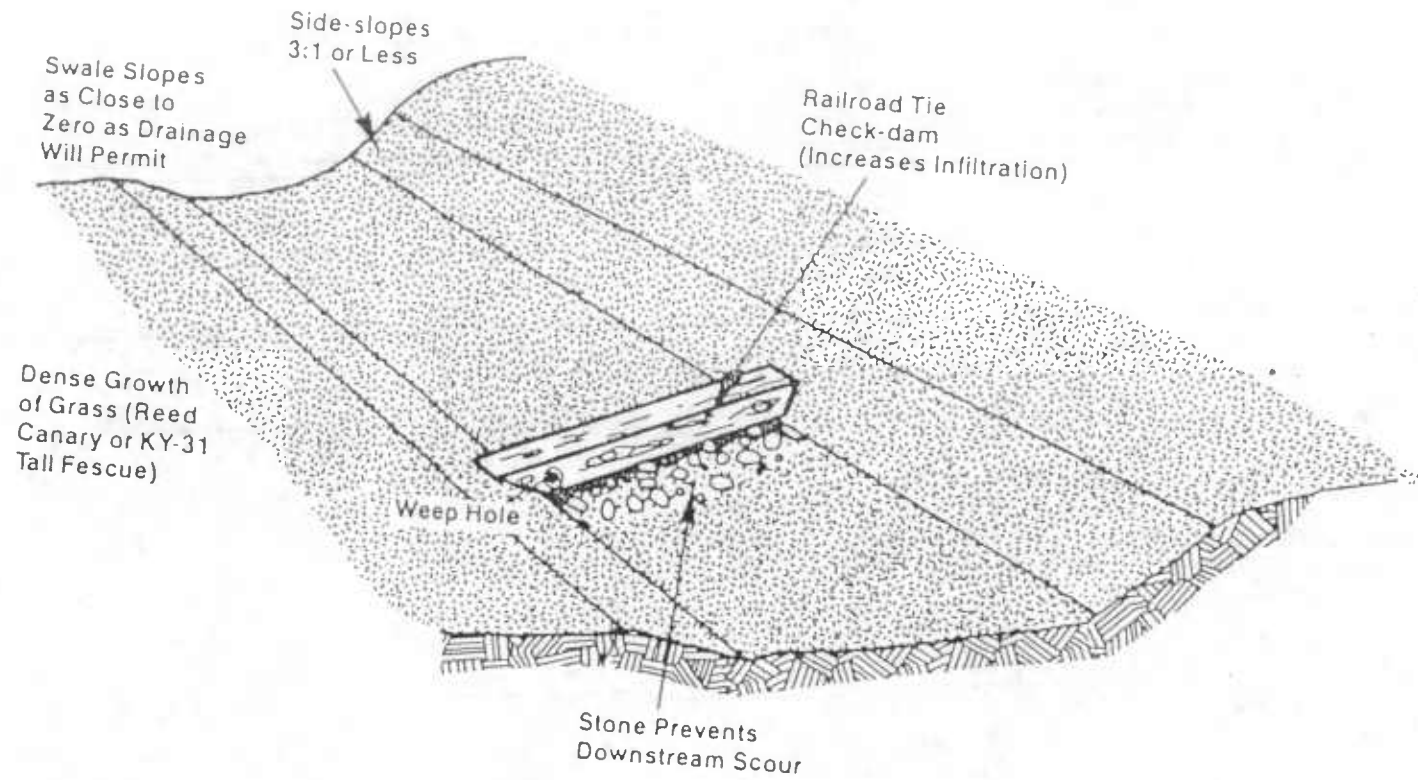
Figure 7-3. Wet detention system (Roesner et al., 1988).

## Schematic Design of a Conventional Infiltration Trench



Source: Schueler, 1987.

*Schematic Design of an Enhanced Grassed Swale*



Source: Schueler, 1987.

# **Maryland Clean Water Act**

- **National program under authority of the Clean Water Act to control stormwater runoff from industry and municipalities**
  - 11 categories of industry regulated including: hazardous waste treatment or storage facilities; landfills; open dumps receiving industrial waste; vehicle maintenance facilities; and construction activity with 5 or > acres disturbance
  - Storm sewer systems serving "large jurisdictions" (250,000 or >) and "medium jurisdictions" (between 100,000 and 250,000)
    - **Large systems: Anne Arundel, Baltimore, Montgomery, Prince George's Counties, and Baltimore City**
    - **Medium systems: Harford, Howard, Charles, Carroll, and Frederick Counties**
- **Key Issues:**
  - (1) **EPA's 1990 regulations recognized national scale of impact to water quality from stormwater runoff**
  - (2) **SW runoff pollution regulated as a "point source" discharge if released from an outfall or conveyance (not regulated if NPS)**
  - (3) **Required monitoring**
  - (4) **Required elimination of non-stormwater releases through drainage system**
  - (5) **Required permittees to design acceptable SW runoff management programs to minimize polluted runoff and achieve compliance with Water Quality Standards and numerical water quality criteria of the Clean Water Act**
- **Strategy for regulating remaining stormwater runoff sources is unresolved**
  - Key stumbling block to Clean Water Act debate (i.e., the "Dirty Water Bill") - President Clinton threatened veto
  - Universe of remaining sources uncertain
  - Real impact of stormwater runoff for remaining sources
  - Fairness to already regulated sources
  - Economies of scale for small municipalities



## **Critical Area Program: Stormwater Management Components**

- **All development (regardless of size) must abide by Critical Area criteria**
- **Cornerstones of Critical Area program**
  - Minimizing further adverse impacts to water quality
  - Minimizing further adverse impacts to wildlife habitat
  - Fostering sensitive development activity
- **Critical Area program expected to reduce nutrient and sediment loadings to Bay by 20 to 30 %**
- **Water quality protected through three major tools:**
  - (1) **100-Foot Buffer**
    - Maintain existing vegetation for filtration/pollutant removal
    - Establish vegetation if none exists
    - Replace cleared vegetation at strict ratios
    - No disturbance area
  - (2) **15 % Impervious Surface Limitations (RCA and LDA)**
    - Impervious surfaces - a reliable environmental indicator of stream health
    - Promotes future growth and preserves site's natural infiltration
    - Prevent significant runoff
    - Creates incentive for innovative site design
  - (3) **10 % Stormwater Rule (IDA only)**
    - Recognized impacts from new development in areas already intensely developed
    - Promotes low-impact growth
    - Encouraged creative use of BMPs on site to achieve reduction
    - Targets phosphorus as major indicator

## **STAFF REPORT**

June 5, 1996

**JURISDICTION:** Queen Anne's County

**REQUEST:** Two Growth Allocation Refinements

### **COMMISSION**

**ACTION:** Concurrence with Chairman's Determination

### **DISCUSSION:**

Queen Anne's County has submitted two proposed growth allocations, and has requested that they be handled as refinements. They are both part of the Kent Island Golf Club/Luther Gregory property on Kent Island off Route 50. The majority of the property will be used for the golf club. The commercial aspects of the golf club will be handled in existing buildings on part of the property to be designated LDA.

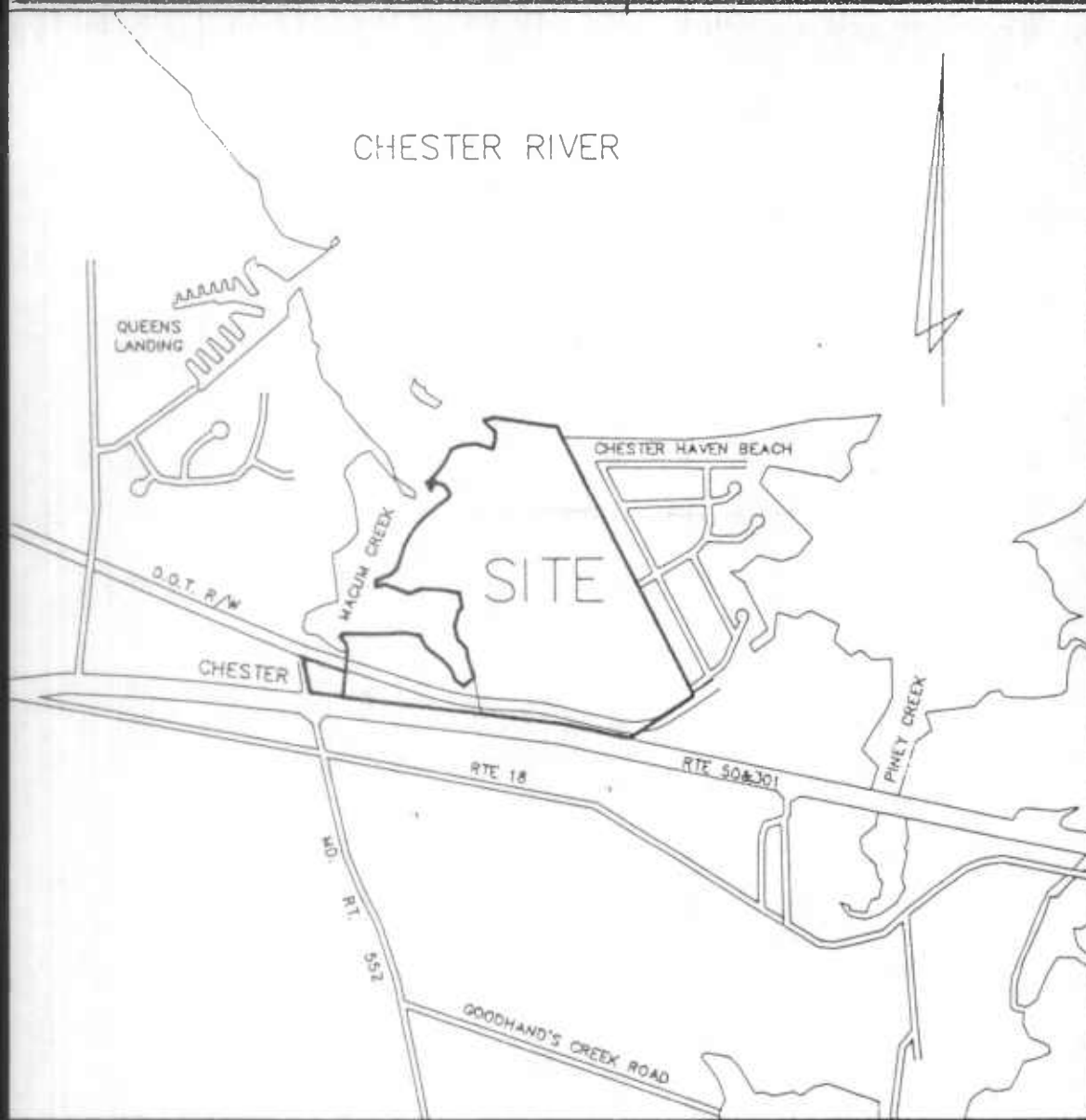
The first request is to change the critical area designation of 20.0753 acres on tax map 57 parcel 45 from RCA to LDA. This request is in accordance with the Commission's growth allocation policy: twenty acres of RCA are being deducted; it is adjacent to other LDA; and the property is located in a County designated growth area.

The second request is to change the critical area designation of 4.66 acres on tax map 57, parcel 495 from LDA to IDA. This request is in accordance with the Commission's policy on growth allocation: the property is adjacent to IDA; and is located in a County designated growth area.

Staff is reviewing the site plan for critical area resource impacts separately.

**STAFF CONTACT:** Theresa Corless

# QUEEN ANNE'S COUNTY KENT ISLAND GOLF CLUB



## GENERAL NOTES

138.155 AC. OF ACTIVELY TILLED FARM LAND KNOWN AS WHITE'S HERITAGE.  
 THE OWNER'S RESIDENCE AND TENANT HOUSE WITH VARIOUS OUT BUILDINGS.  
 TO BE DEVELOPED INTO AN 18-HOLE CHAMPIONSHIP GOLF COURSE WITH CLUB  
 SHOP. THE ADJACENT PARCEL OF 11.07 AC. (CHESTER STATION JOINT VENTURE),  
 BY LUTHER GREGORY IS PROPOSED TO BE ADDED TO THE 138.155 AC. FARM SITE  
 TO COMPLETE LAYOUT OF THE PLAYING COURSE. IT IS A VACANT, FORMER SPOILS SITE.  
 THE OWNER IS PRESENTED TO INITIATE THE GROWTH ALLOCATION REQUEST AS DEPICTED.  
 A PLAN FOR THE PARTIAL SITE PLAN TO BE SUBMITTED AFTER GROWTH ALLOCATION,  
 COMMENTS ON SUITABILITY OF PHASE PLAN AREA FOR INTENDED USE. A REDUCTION  
 SHORE BUFFER TO 100' IS SOUGHT PER SECTION 6106 B.2.

THE EXISTING IMPROVEMENTS IS DESCRIBED BELOW:  
 THE MAIN HOUSE WILL SERVE AS THE GOLF CLUBHOUSE WHICH SHALL INCLUDE THE FOLLOWING  
 KENT ISLAND GOLF CLUB GOLFERS.  
 THE CLUBHOUSE WILL BE OPEN DURING REGULAR GOLFING HOURS AND MADE AVAILABLE FOR USE BY  
 MEMBERS OF THE KENT ISLAND GOLF CLUB.

A FULL TYPE OF MENU SHALL BE AVAILABLE FOR PATRONS OF K.I.G.C. THE CLUBHOUSE WILL  
 CHARGE A FEE, SOBA AND BEER/WINE FOR ITS CUSTOMERS. ALCOHOL WILL ONLY BE SERVED IN  
 THE CLUBHOUSE AND WILL NOT BE ALLOWED ON THE GOLF COURSE.

AWARD CEREMONIES WILL BE HELD IN THE CLUBHOUSE ON A RESERVED BASIS AND  
 CATERED BY AN OUTSIDE CATERER.

VICINITY MAP

SCALE: 1" = 240'

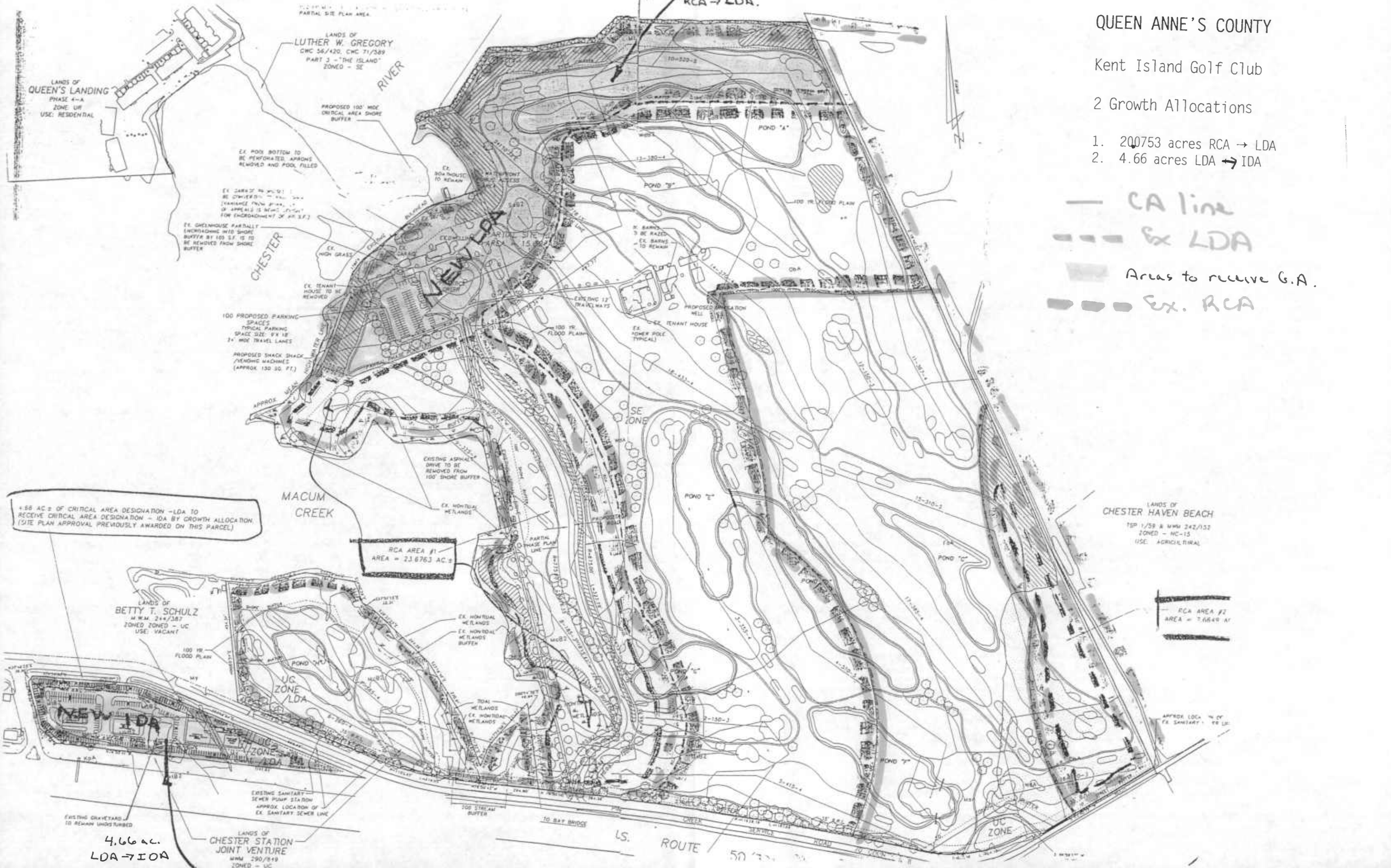
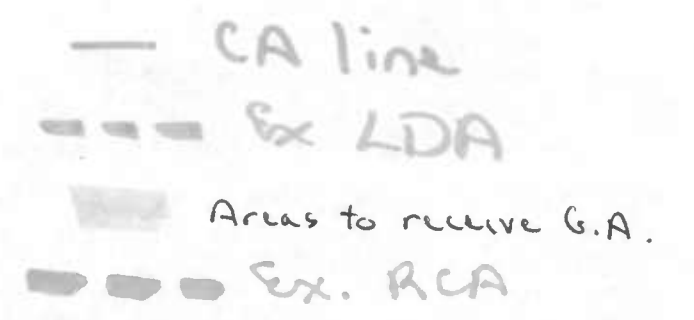
20 0753 W.  
RCA → LDA.

# QUEEN ANNE'S COUNTY

## Kent Island Golf Club

### 2 Growth Allocations

1. 200753 acres RCA → LDA
2. 4.66 acres LDA → IDA



4.66 AC ± OF CRITICAL AREA DESIGNATION - LDA TO RECEIVE CRITICAL AREA DESIGNATION - IDA BY GROWTH ALLOCATION. (SITE PLAN APPROVAL PREVIOUSLY AWARDED ON THIS PARCEL)

RCA AREA #1  
AREA = 23,676.3 AC ±

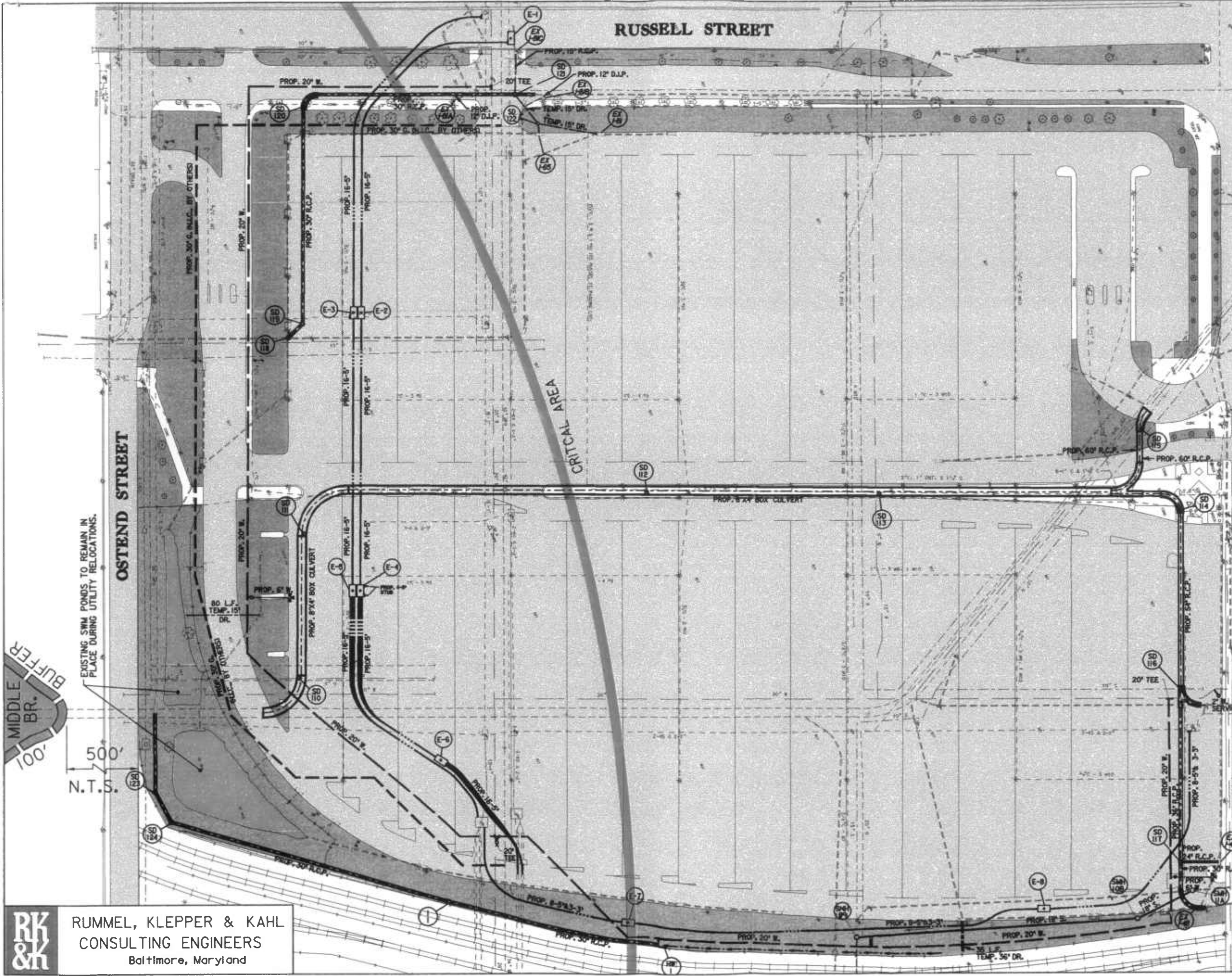
RCA AREA #2  
AREA = 7,664.0 AC ±

4.66 ac.  
LDA → IDA

CHESTER STATION JOINT VENTURE  
M.M. 290/819  
ZONED - UC

LS. ROUTE 50





**LEGEND**

|   |  |
|---|--|
| EXISTING GRASS                          |  |
| EXISTING SWM POND (TO REMAIN IN PLACE)  |  |
| PROPOSED STORM DRAIN (BID PACKAGE 1A)   |  |
| PROPOSED SANITARY LINE (BID PACKAGE 1A) |  |
| PROPOSED ELEC. CONDUIT (BID PACKAGE 1B) |  |
| PROPOSED WATER LINE (BID PACKAGE 1B)    |  |
| PROPOSED GAS LINE (NIC BY OTHERS)       |  |

- NOTES:**
- WORK ACTIVITIES:
    - INSTALL EROSION/SEDIMENT CONTROLS
    - EXCAVATE APPROX. 8000 LF OF TRENCHES
    - INSTALL UTILITIES
    - BACKFILL TRENCHES WITH SELECT MATERIAL AND CR-6
  - SCHEDULE:
    - JUNE 24, 1996 : BEGIN UTILITY RELOCATIONS
    - OCTOBER, 1996 : END UTILITY RELOCATIONS
  - TOTAL AREA OF DISTURBANCE = 6.0 AC.  
AREA OF DISTURBANCE IN CRITICAL AREA = 3.6 AC.
  - EROSION/SEDIMENT CONTROL PLANS SUBMITTED TO MDE FOR FINAL APPROVAL ON MAY 21, 1996.  
PERMIT ANTICIPATED BY JUNE 12, 1996.

MIDDLE BR. BUFFER  
100'  
500'  
N.T.S.

**RK & K**  
RUMMEL, KLEPPER & KAHL  
CONSULTING ENGINEERS  
Baltimore, Maryland

PRESENTATION TO CRITICAL AREA  
COMMISSION: JUNE 5, 1996

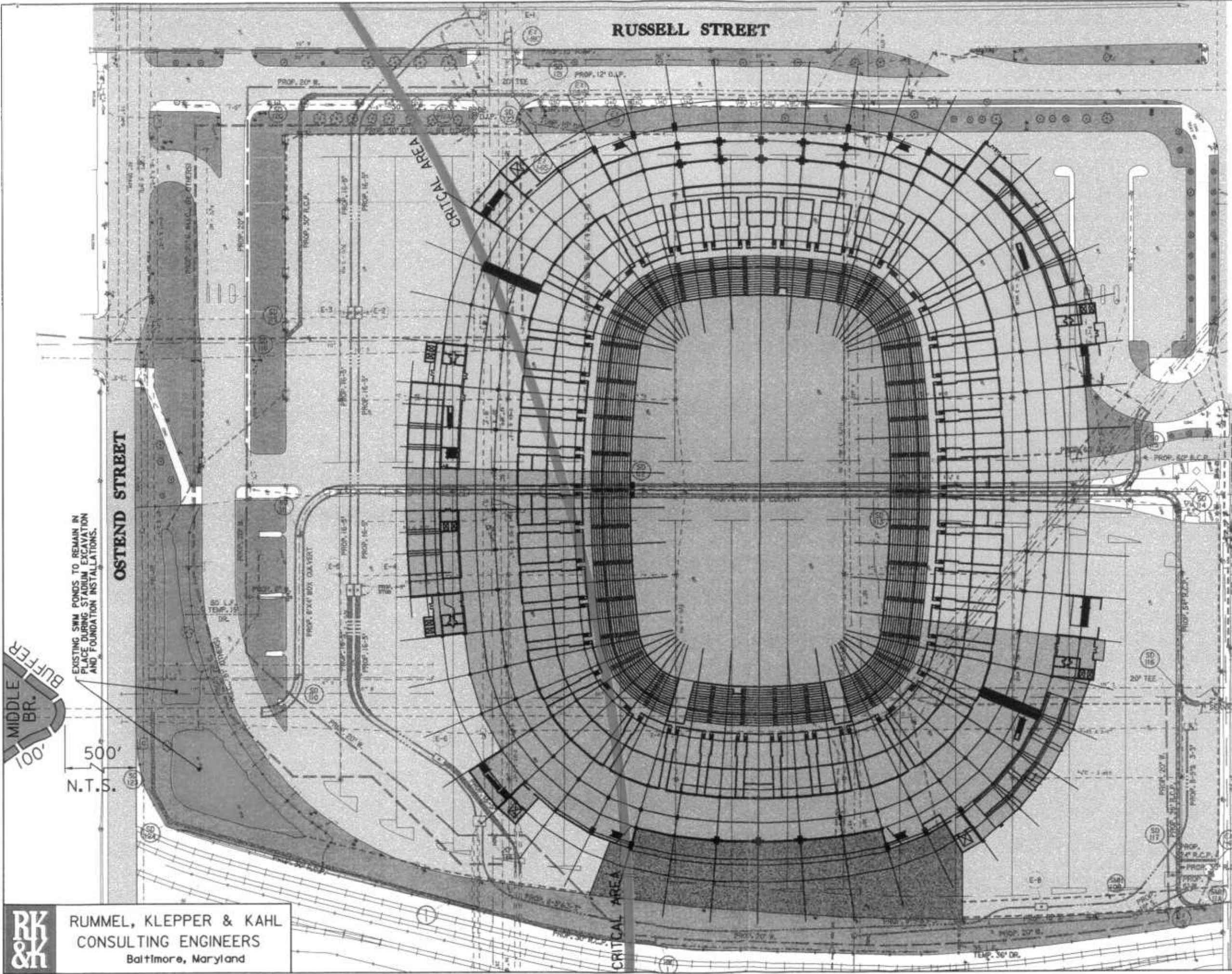
MARYLAND STADIUM AUTHORITY

**BALTIMORE  
FOOTBALL STADIUM**

UTILITY RELOCATIONS  
BID PACKAGES 1A & 1B

SCALE: 1"=100'  
DATE: JUNE 5, 1996  
SHEET UR-1 OF 1





**LEGEND**

- EXISTING GRASS
- EXISTING SWM POND (TO REMAIN IN PLACE)
- PROPOSED STORM DRAIN (BID PACKAGE 1A)
- PROPOSED SANITARY LINE (BID PACKAGE 1A)
- PROPOSED ELEC. CONDUIT (BID PACKAGE 1B)
- PROPOSED WATER LINE (BID PACKAGE 1B)
- PROPOSED GAS LINE (NIC BY OTHERS)
- PILES/PILE CAPS (BID PACKAGE 6)
  
- EXCAVATE TO ELEV. 6± (BID PKG. 2)
- EXCAVATE TO ELEV. 10± (BID PKG. 2)
- EXCAVATION VARIES: ELEV. 10± TO 24± (BID PKG. 2)

**NOTES:**

1. WORK ACTIVITIES:
  - A. INSTALL EROSION/SEDIMENT CONTROLS
  - B. EXCAVATE AS SHOWN
  - C. INSTALL PILES, PILE CAPS
  - D. EROSION/SEDIMENT CONTROLS WITHIN EXCAVATION LIMITS TO REMAIN.
2. SCHEDULE:
  - A. SEPTEMBER, 1996 : BEGIN STADIUM EXCAVATION
  - B. NOVEMBER, 1996 : END STADIUM EXCAVATION
  - C. OCTOBER, 1996 : BEGIN FOUNDATIONS
  - D. FEBRUARY, 1997 : END FOUNDATIONS
3. TOTAL AREA OF EXCAVATION = 11.8 AC.  
AREA OF EXCAVATION IN CRITICAL AREA = 1.7 AC
4. EROSION/SEDIMENT CONTROL PLANS TO BE SUBMITTED TO MDE FOR REVIEW IN JUNE, 1996.

PRESENTATION TO CRITICAL AREA COMMISSION: JUNE 5, 1996

MARYLAND STADIUM AUTHORITY

**BALTIMORE FOOTBALL STADIUM**

SITE DEMOLITION\EXCAVATION\FOUNDATIONS  
BID PACKAGES 2 & 6

SCALE: 1"=100'

DATE: JUNE 5, 1996  
SHEET 50-1 OF 1

**RK & K**  
**RUMMEL, KLEPPER & KAHL**  
 CONSULTING ENGINEERS  
 Baltimore, Maryland

500'  
N.T.S.

MIDDLE BR. BUFFER 100'

OSTEND STREET

RUSSELL STREET

HAMBURG STREET

CRITICAL AREA

CRITICAL AREA

**Final Staff Report**  
**June 5, 1996**

**APPLICANT:** Maryland Stadium Authority

**PROJECT:** Baltimore NFL Stadium at Camden Yards:  
Utility Relocation, Excavation & Foundations

**JURISDICTION:** Baltimore City

**COMMISSION ACTION:** Vote

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**HISTORY\BACKGROUND  
INFORMATION:**

The new proposed stadium within Baltimore City will be an open-air, natural grass, state-of-the-art facility designed exclusively for playing NFL football. The main streets that border the proposed stadium are: Ostend Street, Russell Street, Hamburg Street, and Howard Street.

**PROPOSED DEVELOPMENT:**

The first proposed phase of development will be for utility relocation,excavation and foundations (e.g. piles, grade beams, slabs, etc.) within the Critical Area on the existing parking lot. Utility relocation will start within the Critical Area in June, 1996 with mass excavation beginning in Sept. 1996 and foundation work beginning sometime in 1996 and continuing through February, 1997.

Utility relocation involves relocation of existing stormdrains, sanitary sewers, electric ducts, etc. before excavation of the playing field and stadium structure. Mass excavation\demolition involves demolition of existing site features and excavation for the playing field and stadium structure. Finally, foundation work involves, construction of deep foundation structures (piles) and shallow foundation structures (grade beams, slabs, etc). No construction is anticipated within the Critical Area 100-foot Buffer.

**Continue, Page Two**  
**Final Staff Report**  
**Propose Utility Relocation**  
**for Football Stadium**  
**June 5, 1996**

Final Design plans for the construction of the stadium will be completed sometime in the Spring, 1997. The second phase will be the review and approval of the design plans by Commission staff and the full Commission.

**STAFF RECOMMENDATION:** Staff recommends approval with a condition that:

1. Maryland Stadium Authority receive sediment and erosion control plan approval from the Maryland Department of the Environment before construction begins in the Critical Area.

**Applicable Law/Regulation:** Chapter 5: State Agency Actions Resulting in Development on State -Owned Lands (COMAR 27.02.05.02)

**Contact Person:** Dawnn McCleary, Natural Resources Planner



## STAFF REPORT

June 5, 1996

**APPLICANT:** Department of Natural Resources  
Greenways and Resource Planning

**PROJECT:** Phase I Development Plan: Greenwell State Park  
(St. Mary's County)

**COMMISSION ACTION:** Vote

**STAFF RECOMMENDATION:** Approval

**DISCUSSION:**

The Department of Natural Resources is seeking approval of the design for the Phase I Development Plan for Greenwell State Park in St. Mary's County. The draft Master Plan was approved by the Critical Area Commission in June, 1994 and the preliminary design for the Phase I Development Plan was reviewed by the Project Evaluation Subcommittee last September. The Phase I Development Plan includes the following projects:

- 1. Entrance Elements**  
This project involves the construction of a gateway, entrance sign, and fencing at the entrance to Greenwell State Park, and landscaping (tree planting) along the primary entrance road.
- 2. Improvements to Rosedale Farm and Stable Area**  
This project involves improvements to the access road, construction of a handicapped accessible bathroom within the existing barn, minor renovations and construction within the barn, and the installation of a septic system.
- 3. Reconstruction of Francis Knott House**  
This project was previously approved by the Commission.
- 4. Construction of Quarter Creek Boating Facility**  
This project involves the construction of an access road, boathouse, several parking areas, a comfort station (bathrooms), and landscaping around these facilities. Installation of a septic system and drainfield is included in this project. All structures and the septic system will be located outside of the 100-Foot Buffer; however, an eight (8) foot wide timber walkway leading from the boathouse to the pier is proposed for handicapped accessibility. Stormwater management will be addressed with bioretention facilities.

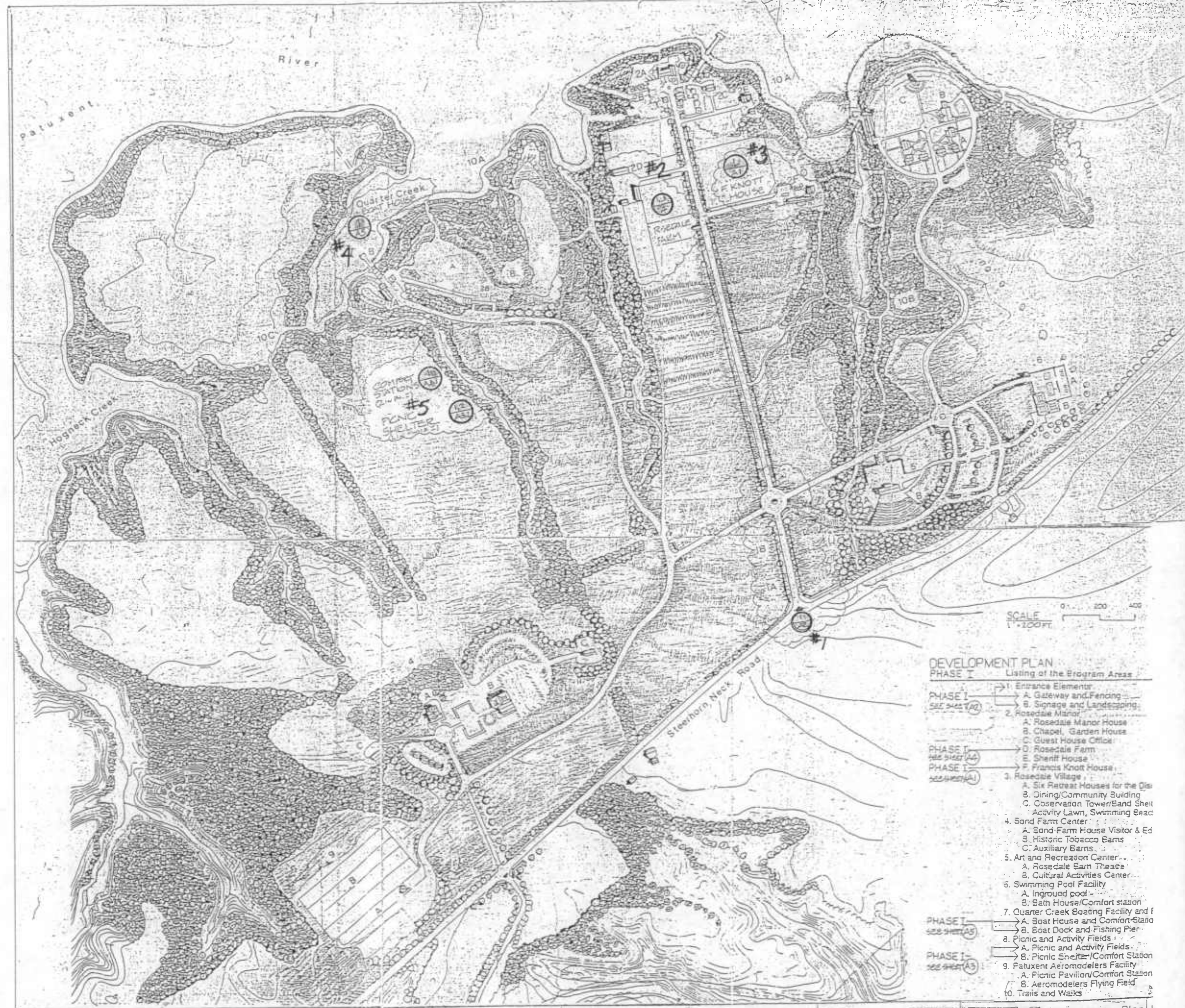
**5. Improvements to Picnic Area Near Quarter Creek**

This project involves the construction of a comfort station and picnic shelter in an open field area south of the boathouse.

These projects are consistent with COMAR 27.02.05, the Commission's regulations for State projects on State lands.

**APPLICABLE LAW:** COMAR 27.02.05, State Agency Actions Resulting in  
Development on State-Owned Lands

**STAFF:** Mary Owens



- DEVELOPMENT PLAN**  
**PHASE I** Listing of the Program Areas
- PHASE I (SEE SHEET 102)
    - 1. Entrance Element
      - A. Gateway and Fencing
      - B. Signage and Landscaping
    - 2. Rosedale Manor
      - A. Rosedale Manor House
      - B. Chapel, Garden House
      - C. Guest House Office
      - D. Rosedale Farm
      - E. Sheriff House
      - F. Francis Knott House
  - PHASE I (SEE SHEET 104)
    - 3. Rosedale Village
      - A. Six Retreat Houses for the Old
      - B. Dining/Community Building
      - C. Observation Tower/Band Shell
      - Activity Lawn, Swimming Beach
  - PHASE I (SEE SHEET 105)
    - 4. Sand Farm Center
      - A. Sand Farm House Visitor & Ed
      - B. Historic Tobacco Barns
      - C. Auxiliary Barns
    - 5. Art and Recreation Center
      - A. Rosedale Barn Theatre
      - B. Cultural Activities Center
    - 6. Swimming Pool Facility
      - A. Inground pool
      - B. Bath House/Comfort station
    - 7. Quarter Creek Boating Facility and f
      - A. Boat House and Comfort Station
      - B. Boat Dock and Fishing Pier
    - 8. Picnic and Activity Fields
      - A. Picnic and Activity Fields
      - B. Picnic Shelter/Comfort Station
    - PHASE I (SEE SHEET 105)
      - 9. Patuxent Aeromodelers Facility
        - A. Picnic Pavilion/Comfort Station
        - B. Aeromodelers Flying Field
      - 10. Trails and Walks

SCALE  
 1" = 100 FT

CHESAPEAKE BAY CRITICAL AREA COMMISSION  
STATUS OF COMPREHENSIVE REVIEWS  
(As of 5/4/96)

I. Reviews completed and approved by CAC:

Counties:

|                 |                               |
|-----------------|-------------------------------|
| Anne Arundel    | (08/22/92) * (see Note below) |
| Baltimore       | (06/13/92)                    |
| Baltimore City  | (12/31/91)                    |
| Cecil           | (07/05/92)                    |
| Charles         | (06/07/93)                    |
| Dorchester      | (09/02/92)                    |
| Harford         | (06/24/92)                    |
| Kent            | (04/12/92)                    |
| Prince George's | (01/15/92)                    |
| Queen Anne's    | (02/15/93)                    |
| Somerset        | (09/10/92)                    |

Towns:

|                  |            |
|------------------|------------|
| Oxford           | (06/19/92) |
| Vienna (partial) | (12/12/92) |

II. Reviews submitted to us by local jurisdictions in process of being reviewed by Commission:

III. Reviews completed by CAC staff and comments have been sent; in final stages of review at local level; expect submittal to Commission soon:

Counties:

|         |            |
|---------|------------|
| Calvert | (12/20/92) |
|---------|------------|

Towns:

|           |            |
|-----------|------------|
| Betterton | (06/15/92) |
|-----------|------------|

\*Note: Date within parenthesis is the 4-year anniversary date.

IV. Reviews completed by CAC staff and comments have been sent; locals working on reviews:

Counties:

|            |            |
|------------|------------|
| Caroline   | (01/01/94) |
| St. Mary's | (03/27/94) |
| Wicomico   | (10/13/93) |
| Worcester  | (10/09/94) |

Towns:

|                 |            |
|-----------------|------------|
| Annapolis       | (02/13/93) |
| Cambridge       | (10/10/92) |
| Charlestown     | (06/13/92) |
| Chesapeake City | (08/08/92) |
| Easton          | (06/26/92) |
| Elkton          | (03/08/93) |
| Havre de Grace  | (06/27/92) |
| Leonardtown     | (11/14/92) |
| Millington      | (06/29/92) |
| North East      | (06/26/92) |
| Perryville      | (05/26/92) |
| Rock Hall       | (07/21/92) |
| St. Michaels    | (05/31/92) |

V. CAC staff currently reviewing following Programs:

Counties:

|        |            |
|--------|------------|
| Talbot | (08/13/93) |
|--------|------------|

Towns:

|               |            |
|---------------|------------|
| Crisfield     | (12/26/92) |
| Princess Anne | (12/25/92) |

VI. Jurisdictions whose anniversary dates have passed; CAC staff have not sent comments yet and nothing has been submitted by locals:

Towns:

|                  |            |
|------------------|------------|
| Centreville      | (08/23/93) |
| Chesapeake Beach | (01/11/94) |
| Chestertown      | (02/05/93) |
| Church Hill      | (08/14/93) |
| Denton           | (04/23/93) |
| Federalburg      | (03/06/93) |
| Greensboro       | (06/11/94) |
| Hillsboro        | (02/27/93) |

|              |            |
|--------------|------------|
| Indian Head  | (04/03/93) |
| North Beach  | (08/10/93) |
| Port Deposit | (09/04/93) |
| Queen Anne   | (09/12/93) |
| Queenstown   | (01/17/93) |
| Secretary    | (10/16/92) |
| Snow Hill    | (01/02/94) |

VII. Issues that we have found in common as being in need of being addressed and corrected are:

- Bring local Programs into compliance with recently adopted CAC policies:
  - Deduction of Growth Allocation
  - Buffer Exemption Areas/Administrative Variances
  - Uses in the RCA
- COMAR 27.01.02.07D - Habitat Protection Areas (HPAs) and Water-Dependent Facilities criteria must be met on grandfathered lots.
- Buffer expansion due to slope - 20-foot cap is found in some local Programs and needs to be deleted.
- Bring local Programs into compliance with amended legislation:
  - Remove nontidal wetlands section now ( as of October 1, 1993)
  - Structures on Piers
  - Impervious Surface criteria
- Update HPA sections in consultation with Natural Heritage Program at the Department of Natural Resources
- Amendment Process - make sure any proposed Critical Area amendments have been approved at the local level prior to submitting them to the CAC.



## Survey of Critical Area Programs for 10 % Compliance in IDA

Chesapeake Bay Critical Area Commission

June 4, 1996

| County         | Does County collect Fees-in-lieu? | Recommendations for offsets and fees-in-lieu projects.   | How are funds held? | Amount of fees collected to date. | What does the local Critical Area Program allow?  | How is Fee assessed? | How are sites chosen?                                   |
|----------------|-----------------------------------|--|---------------------|-----------------------------------|---|----------------------|---|
| <b>Level I</b> |                                   |  |                     |                                   |   |                      |   |
| Calvert        | No                                | <ul style="list-style-type: none"> <li>• Developers can finance offsite BMPs</li> <li>• stormwater retrofits</li> <li>• Agricultural BMPs</li> <li>• public stormwater improvements</li> <li>• forested buffers</li> </ul> | N/A                 | N/A                               | Allows collection of fees for compliance in the LDA and RCA, but not in the IDA.  | N/A                  | Developers with approval of County and County Engineer. |
| Wicomico       | No                                | <ul style="list-style-type: none"> <li>• tree plantings</li> <li>• removal of impervious surfaces</li> <li>• stormwater runoff control</li> </ul>  | N/A                 | N/A                               | <5,000 ft disturbance, recommends plantings.<br>>5,000 ft disturbance, requires developer to do calculations in technical manual for offsets and do the offset. | N/A                  | Developer   |

| County          | Does County collect Fees-in-lieu? | Recommendations for offsets and fees-in-lieu projects.   | How are funds held?               | Amount of fees collected to date.  | What does the local Critical Area Program allow?  | How is Fee assessed?  | How are sites chosen?  |
|-----------------|-----------------------------------|--|-----------------------------------|--|---|---|--|
| <b>Level II</b> |                                   |  |                                   |  |   |   |  |
| Anne Arundel    | No                                | <ul style="list-style-type: none"> <li>• plantings- single lots</li> <li>• offsite offsets- for subdivisions i.e., stormdrain retrofits</li> <li>• onsite BMPs industrial/ commercial</li> </ul> | N/A                               | N/A  | No provisions to collect fees-in-lieu. County does require offsets.   | N/A   | Developer with advice of County chooses site for offset or retrofit.   |
| Harford         | Yes                               | <ul style="list-style-type: none"> <li>• landscape mitigation, plantings</li> <li>• BMPs</li> <li>• stormwater retrofits</li> <li>• SWM ponds</li> <li>• erosion control</li> </ul>              | Fee-in-lieu Critical Area Account | None. 10%Program adopted October 1995. Most developers have successfully used BMPs | Allows collection of fees-in-lieu to be collected for plantings and stormwater retrofits.   | Fee is based on sq.ft. Required for landscaping. County uses conversion in Technical Guide for 10% Rule for pounds of phosphorus. The fee for planting trees is \$1.20 per sq.ft. | County has list of needed stormwater retrofits and would like to coordinate projects with DPW's erosion control projects and use DPW's prioritization and feasibility studies.       |
| St. Mary's      | (Yes)                             | <ul style="list-style-type: none"> <li>• for cost of planting, volunteers will do the plantings.</li> </ul>  | County                            | Fees have been collected one time.   | Program specifically allows offsets. Fees-in-lieu can be collected and used for plantings on a prioritized list of publicly owned land. | County uses Technical Guide for 10% Rule. When 3 to 1 planting (waterside, downslope) cannot be done onsite, fees collected for the cost of required plantings.                   | County conducted a survey of publicly owned waterfront land in buffer appropriate for plantings. St. Mary's has one project where offset plantings will be done; Piney Point School. |



| County           | Does County collect Fees-in-lieu? | Recommendations for offsets and fees-in lieu projects.   | How are funds held?  | Amount of fees collected to date.  | What does the local Critical Area Program allow?   | How is Fee assessed?   | How are sites chosen?  |
|------------------|-----------------------------------|--|--|--|--|--|--|
| Level III        |                                   |  |  |  |  |  |  |
| Baltimore City   | Yes                               | <ul style="list-style-type: none"> <li>• water quality</li> <li>• stormwater retrofits</li> </ul>  | Capital Improvement Fund in Public Works Depart.                             | approx. \$200,000 collected. Minimum is \$950 per site. Projects funded: Herring Run, Gwinn's Run                          | Fees can be collected under the Runoff Pollution Reduction Program. Dir. of Planning determines if 10% reduction is infeasible onsite.                       | Fee based on cost of install. & maint. of stormwater mgmt facility onsite. Methodologies in City Stormwater Mgmt Design Manual.  | Primarily for water quality improvements. Priorities set by City's Public Works Department.  |
| Baltimore County | (Yes) proposed                    | <ul style="list-style-type: none"> <li>• water quality protection/ restoration</li> <li>• stormwater retrofits</li> <li>• capital projects administered under the County's Waterway Improvement Program</li> </ul> | Proposed IDA Offset Fund in DEPRM  | None collected to date. Program not yet formally approved.   | DEPRM may accept fee compensation only if it is determined that 10% compliance cannot be reasonably accomplished on or offsite.                              | Fee based on cost of hypothetical onsite pollution reduction system & operation/ maint. costs, not on costs of meeting SWM quantity requirements.                        | IDA Offset Program was proposed to supplement the County's Waterway Improvement Program. IDA Offset Fees may be used to initiate projects, i.e., stormwater retrofits. |
| Queen Anne's     | Yes                               | <ul style="list-style-type: none"> <li>• stormwater retrofit</li> <li>• improve quality of runoff from developed areas</li> </ul>  | Fees are put into a fund that will be used for stormwater retrofit projects. | Fee-in lieu policy was just adopted in program. QA's has not yet collected funds needed for a stormwater retrofit project. | Fees in lieu can only be collected for developed sites where QA's public works engineer finds there are no alternatives and project is coordinated with DPW. | \$5,000 per lb. phos. not reduced. Stormwater mgmt projects typically cost @ \$25,000, and typical fee is less than \$3,000. Fees to be combined to fund whole projects. | County hopes to be able to target sites that have the worst storm water problems.  |