Martin O'Malley
Governor

Anthony G. Brown
Lt. Governor

Margaret G. McHale
Chair

Ren Serey
Executive Director

STATE OF MARYLAND
CRITICAL AREA COMMISSION
CHESAPEAKE AND ATLANTIC COASTAL BAYS
1804 West Street, Suite 100, Annapolis, Maryland 21401
(410) 260-3460 Fax: (410) 974-5338
www.dnr.state.md.us/criticalarea/

November 18, 2008

Mr. Tom Smith
City of Annapolis
Department of Planning and Zoning
145 Gorman Street
Annapolis, Maryland 21401

Re: Clay Street Redevelopment
City of Annapolis

Dear Mr. Smith:

The purpose of this letter is to officially notify you of the Critical Area Commission's action on the above referenced project. On May 7, 2008, the Critical Area Commission unanimously approved the Housing Authority of the City of Annapolis' proposal and site plan to redevelop the existing public housing units at the intersection of Clay Street and Obery Court. This approval included the following condition:

> The City of Annapolis shall obtain the necessary stormwater management and sediment and erosion control permits prior to the initiation of any construction activities on the site, including demolition activities. Copies of these permits shall be provided to Commission staff once obtained.

The approval was also on the mitigation package provided by the applicant which consisted of 21 trees to address the removal of seven trees in the Buffer, and 104 trees to address the 31 trees removed outside the Buffer. I am enclosing a copy of the signed planting agreement that confirms the mitigation described above. Please notify me once the planting plan has been implemented.

Please note that should any changes to the site plan be proposed in the future, additional review and approval by the full Commission will be required. Should you have any questions, please feel free to contact me at 410-260-3481.

Sincerely,

Amber Widmayer
Natural Resources Planner

cc: AN 87-08
Vernon Hustead, Sigma Engineering

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March 6, 2008

Mr. Tom Smith
City of Annapolis
Department of Planning and Zoning
145 Gorman Street
Annapolis, Maryland 21401

Re: Clay Street Redevelopment
City of Annapolis

Dear Mr. Smith:

Thank you for forwarding the above-referenced project proposal for the Clay Street redevelopment project. The 6.12 acre property is in the Critical Area with 0.17 acres designated as a Resource Conservation Area (RCA) and 2.62 acres designated as an Intensely Developed Area (IDA). The project proposes the removal of several existing multi-family housing buildings, and construction of new multifamily housing buildings and single family attached homes. Due to the extent of the proposed disturbance from grading within the Buffer, the proposed project will need to be presented to the Critical Area Commission for conditional approval.

The City may seek a conditional approval from the Critical Area Commission for approval of a project on City lands under Code of Maryland Regulations 27.02.06 'Conditional Approval of State or Local Agency Programs in the Critical Area'. Under this section, if development proposed by a State or local agency located in the Critical Area is prohibited from occurring then the agency proposing the development may seek conditional approval for the project.

In order for the Critical Area Commission to process this request as a conditional approval, the applicant must submit information demonstrating how the proposed project meets the following criteria.

In order to qualify for consideration by the Commission for conditional approval, it shall be shown by the proposing or sponsoring agency that the project or program has the following characteristics:

B.(1) That there exist special features of the site or there are other special circumstances such that the literal enforcement of these regulations would prevent a project or program from being implemented;

B.(2) That the project or program otherwise provides substantial public benefits to the Chesapeake Bay Critical Area Program;

B.(3) That the project or program is otherwise in conformance with this subtitle;

The conditional approval request shall, at a minimum, contain the following:

C.(1) A showing that the literal enforcement of the provisions of this subtitle would prevent the conduct of an authorized State of local agency program or project;

C.(2) A proposed process by which the program or project could be so conducted as to conform, insofar as possible, with the approved local Critical Area program or if the development is to occur on State-owned lands, with the criteria set forth in COMAR 27.02.05;

C.(3) Measures proposed to mitigate adverse effects of the project or program or an approved local Critical Area program or, if on State-owned lands, on the criteria set forth in COMAR 27.02.05.

In addition to providing the information above, a complete application will include any necessary State or local agency permits, a letter from Maryland Department of Natural Resources, Wildlife and Heritage Service stating that the proposed project will not impact rare, threatened or endangered species, and a letter from the Maryland Historical Trust that the proposed project will not impact any historic resources.

As soon as we receive your complete application, we will be able to schedule the presentation of your proposed project on the agenda for a Critical Area Commission meeting. Projects must be received at least one month prior to the next scheduled Commission meeting in order to be included on that meeting agenda. The Commission meets on the first Wednesday of each month, and the schedule is posted at ***http://www.dnr.state.md.us/criticalarea/aboutthecommission.***

This office has reviewed the submitted project plans and we have provided comments and recommendations below:

1) Please provide drainage maps for the site and more detailed information about the best management practices, including a cross section of the proposed infiltration trenches. Also, please provide a drainage map and a description of the offsite area that will be treated by one of the proposed infiltration trenches as described on page 23 of the applicant's stormwater management computations. If treatment of

offsite areas will be provided in order to address the pollutant reduction requirement, this should be shown on worksheet B, which is available at the Commission's website, at the following web address: http://www.dnr.state.md.us/criticalarea/guidancepubs/10percent_rule.html.

2) According to our records, it appears that there may be a small area of tidal wetlands along the shoreline of the property. If so, please include this feature on future plans and confirm that the 100-foot Buffer has been mapped from the edge of the tidal wetlands based on a field delineation.

3) COMAR 27.01.02.03.D(4) requires that if practicable, permeable areas within IDA shall be established in vegetation. It appears that more plantings could be located in the Buffer that is within IDA on this property. Please provide a revised landscape plan demonstrating that this requirement has been addressed, or an explanation for why more plantings are not practicable in the Buffer within the IDA.

4) A portion of the 40-foot right of way for proposed Road A is located within the 100-foot Buffer. Please clarify how much of the proposed right of way will be paved road or sidewalk, as opposed to pervious surface.

5) Please quantify the total area of disturbance within the Buffer for grading, clearing, and the footprint of structures such as the proposed road.

6) With the exception of the proposed Buffer plantings, many of the proposed plant species for the project are non-native. We recommend that the applicant revise the proposed planting list to include more native species of plantings. A list of such native plants can be found in the U.S. Fish and Wildlife Service's Native Plants for Wildlife Habitat and Conservation Landscaping: Chesapeake Bay Watershed document which is available at http://www.nps.gov/plants/pubs/chesapeake/.

Please feel free to contact me at 410-260-3481 if you have any questions.

Sincerely,

Amber Widmayer
Natural Resources Planner

cc: AN 87-08

City of Annapolis
Planning and Zoning Department
145 Gorman Street, 3rd Floor
Annapolis, Maryland 21401

FOR CITY USE ONLY

COMPLETED

Phone 410-263-7961 · Fax 410-263-1129 · TDD 410-263-7943 · www.annapolis.gov

CRITICAL AREA MINOR BUFFER MANAGEMENT PLAN

As Required by the State of Maryland Critical Area Commission

Property Information

Owner of property: Housing Authority City of Annapolis

Address: 1217 Madison STreet, Annapolis, MD 21403

Phone number: 410-267-8000

Other contact: Vernon Hustead c/o Sigma Engineering, Inc.

Address: 43 Old Solomons Island Rd., #201, Annapolis, MD 21401

Phone number: 410-266-5599

Project address (if different): 112 Clay Street

Critical Area designation: IDA & RCA Zoning: R4-R

Expected start date of project: June 2010 Expected planting date: May 2011

Proposed Project

The Minor Buffer Management Plan is applicable to Buffer Establishment or Buffer Mitigation of less than 5,000 square feet. Provide a brief explanation of your proposed project and the methods and or equipment to be used in the space below.

See Attached Documents

Justification of Project

Provide justification for the proposed project and its intended purpose in the space below.

See Attached Documents

Long-term Management Plan

Provide a description of the management plan to be utilized. The plan is required to control invasive species, pests and predation. Monitoring and replacement of plants that do not survive is required for two years.

See Attached Documents

STEP 1: DETERMINE ESTABLISHMENT AND/OR MITIGATION REQUIREMENTS.

Scenario A: For work outside of the 100' buffer on waterfront property

Buffer Establishment (required for development or redevelopment activity located outside the 100 foot buffer)

A development or redevelopment activity that occurs on a lot or parcel that includes a buffer to tidal waters, a tidal wetland or a tributary stream must establish the buffer based on the chart below if the buffer is not fully forested or fully established in woody or wetland vegetation (Lot coverage is any material or structure that is not pervious. This includes but is not limited to the footprint of homes and accessory structures, walkways, steps, patios, garden ponds, and pools).

DEVELOPMENT CATEGORY	LOT CREATED BEFORE 1987	LOT CREATED AFTER 1987
New development on a vacant lot	Establish the buffer based on total lot coverage	Fully establish the buffer
New subdivision or new lot	Fully establish the buffer	
New lot with an existing dwelling	Establish the buffer based on total lot coverage	
Conversion of a land use on a parcel or lot to another land use	Fully establish the buffer	
Addition or accessory structure	Establish the buffer based on net increase in lot coverage	
Substantial alteration	Establish the buffer based on total lot coverage	

Calculation of Buffer Establishment

The following process is used to compute the amount of buffer establishment required for development or redevelopment activity. Follow the steps below to calculate the buffer establishment planting requirements:

1. Determine the development category from the table above. _____
2. Determine the extent of buffer establishment per the table above. _____
3. Calculate the square footage of planting required based on the answers provided in numbers 1 and 2 of this buffer establishment section. This is the establishment required for Scenario A. Place this amount in Step 2, line #1. _____

SCENARIO B: For work inside the 100' buffer or expanded buffer. Mitigation is required for the number of trees removed and the amount of disturbance within the buffer.

Section I – Tree Removal due to development or redevelopment

Buffer Mitigation for Tree Removal (required for development or redevelopment activity located inside the buffer)

A development or redevelopment activity that occurs on a lot or parcel that includes a buffer to tidal waters, a tidal wetland or a tributary stream must mitigate for tree removal. The amount of planting mitigation is based on the area of the tree measured 4.5 feet above the surrounding ground for trees that are a minimum of 2" in diameter. (For trees that are dead, dying or hazardous see Section III)

TREE SIZE MEASURED 4.5 FEET FROM GROUND SURFACE	MITIGATION REQUIREMENT
Every 1" of tree diameter	100 sq. ft. of mitigation

Calculation of Buffer Mitigation for Tree Removal

The following process is used to compute the amount of buffer mitigation required for tree removal in the buffer. Follow the steps below to calculate the replacement planting mitigation requirements:

1. Determine the number of trees to be removed for development or redevelopment activity _____

2. List the diameters of each tree and multiply by 100 sq. ft. per 1" diameter

	Diameter	x 100 s.f. per 1" =	Mitigation sq. ft.
Tree 1	_____		_____
Tree 2	_____		_____
Tree 3	_____		_____
Tree 4	_____		_____

3. Add together the mitigation square footages. This is the amount of planting mitigation required for tree removal due to development or redevelopment for Section I. Place this amount in Step 2, line #2.

Area of Mitigation = _____

SECTION II - Disturbance

Buffer Mitigation for Disturbance (required for development or redevelopment activity located inside the buffer)

A development or redevelopment activity that occurs on a lot or parcel that includes a buffer to tidal waters, a tidal wetland or a tributary stream must mitigate for tree removal. The amount of planting mitigation is based on the area of disturbance the activity.

ACTIVITY	MITIGATION RATIO
Shore erosion control	1:1
Riparian water access	2:1
Development or redevelopment of water-dependent facilities	2:1
Variance	3:1
Violation	4:1

Calculation of Mitigation for Disturbance to the Buffer

The following process is used to compute the amount of mitigation for development or redevelopment activity. Follow the steps below to calculate the buffer mitigation planting requirements:

1. State the development category from the table above. Tot Lot
2. List the corresponding mitigation ratio for the activity. 3:1
3. List the total square footage of area disturbed within the buffer. 204
4. Calculate the area of mitigation required (multiply the sq. ft. from number 3 above by the appropriate activity ratio from number 2 above). This is the planting mitigation required for disturbance in the buffer for Section II. Place this amount in Step 2, line #3. 612

Section III – Removal of Dead, Dying or Hazardous Trees

Buffer Mitigation for Tree Removal (required for removal of trees in the 100' buffer)

This section is to be used for the removal of a tree that is in imminent danger of falling and causing damage or acceleration shore erosion.

TREES REMOVED	MITIGATION REQUIREMENT
For each 1" or greater caliper dead, dying or hazardous tree	Replacement with minimum 1" caliper canopy tree

Calculation of Mitigation for Removal of Dead Dying or Hazardous Trees

The following process is used to compute the amount of mitigation for dead, dying or hazardous trees. Follow the steps below to calculate the buffer establishment planting requirements:

1. State the number of dead, dying or hazardous trees to be removed. 4
2. State the number or replacement trees required at a 1:1 ratio. This is the tree replacement mitigation required for Section III. Place this amount in Step 2, line #5. 4

STEP 2

Total Buffer Establishment and Buffer Mitigation Required

The total buffer planting requirements are based on the cumulative total of the Buffer Establishment and Buffer Mitigation. The following process is used to compute the amount of mitigation. Follow the steps below to calculate the total area of planting required.

1. List the square footage of buffer establishment from Scenario A. N/A
2. List the square footage of mitigation for tree removal from Scenario B, Section I. N/A
3. List the square footage of mitigation for disturbance from Scenario B, Section II. 612
4. Add the square footage from steps 1, 2 and 3 above. Total sq. ft. = 612
5. List the number of replacement trees required for tree removal from Section III. 4

STEP 3

Buffer Planting Plan and Schematic Drawing

All Minor Buffer Management Plan applications must include a schematic drawing identifying the areas of impact to the Critical Area. The schematic drawing must show the proposed activity, the limit of disturbance, existing lot coverage features, existing trees and shrubs, and the 100' buffer or expanded buffer area. Vegetation to be removed and the replacement plantings are to be shown and labeled. A listing of the vegetation that will be used for establishment and mitigation and the amount of planting credit for each type must be provided. The list of vegetation should include the species type, quantity of plants, and sizes of plants. All plants must be native.

Planting Location

All mitigation should be located within the Critical Area in the following order preference:

1. On-site within the Buffer
2. On-site adjacent to the Buffer
3. On-site within the Critical Area

4. Off-site (follow order of preference 1-3 above)
5. Fee-in-lieu payment (only if options 1-4 cannot be met)

Buffer Establishment and Mitigation Credits for Various Vegetation

Planting requirements can be met by utilizing the following credit tables:

LANDSCAPING STOCK PLANTING CREDIT TABLE			
VEGETATION TYPE	MINIMUM SIZE ELIGIBLE FOR CREDIT	MAXIMUM CREDIT ALLOWED (SQUARE FOOTAGE PER PLANT)	MAXIMUM PERCENT OF CREDIT (PER TYPE OF VEGETATION)
Canopy tree	2-inch caliper and 8 feet high	200	Not applicable
Canopy tree	1-inch caliper and 6 feet high	100	Not applicable
Understory tree	1-inch caliper and 6 feet high	75	Not applicable
Large shrub	1 gallon and 4 feet high	50	30
Small shrub	2 gallon and 18 inches high	25	20
Herbaceous Perennial	1 quart	2	10
Planting Cluster 1*	1 canopy tree; and 3 large shrubs or 6 small shrubs	300	Not applicable
Planting Cluster 2*	2 understory trees; and 3 large shrubs or 6 small shrubs	350	Not applicable

* These options are available only for buffer establishment or buffer mitigation of less than 1 acre.

Alternative planting standards may be permitted based on the following table below. Financial Assurance is required.

REQUIREMENT TYPE	AMOUNT OF PLANTING	OPTIONS
Establishment	Less than ¼ acre	Landscaping stock for the entire required area according to the planting credit table (shown above)
Establishment	¼ acre to less than or equal to 1 acre	At least 50% of the entire required area in landscaping stock according to the planting credit table (shown above) and the remainder according to the optional planting table (shown below)
Establishment	Greater than 1 acre to less than or equal to 5 acres	At least 25% of the entire required area in landscaping stock according to the planting credit table and the remainder according to the optional planting table
Establishment	Greater than 5 acres	At least 10% of the entire required area in landscaping stock according to the planting credit table and the remainder according to the optional planting table
Mitigation	Less than 1 acre	Landscaping stock for the entire required area according to the planting credit table (shown above)
Mitigation	1 acre or greater	At least 50 percent of the entire required area in landscaping stock according to the planting credit table (shown above) and the remainder according to the optional planting table (shown below)

OPTIONAL FLEXIBLE STOCKING SIZE PLANTING CREDIT TABLE			
STOCK SIZE OF TREES ONLY	REQUIRED NUMBER OF STEMS PER ACRE	SURVIVABILITY REQUIREMENT	MINIMUM FINANCIAL ASSURANCE PERIOD AFTER PLANTING
Bare-root seedling or whip	700	50 percent	5 years
½-Inch to 1-inch container grown	450	75 percent	2 years
More than 1-inch container grown	350	90 percent	2 years

Authorization

I certify these statements to be true and accurate and that any trees to be removed are on my property. I hereby grant the City of Annapolis officials permission to enter my property for inspections of the Buffer Management Plan.

Owner signature _____ Date 5/20/2010

Planting Agreement for State/Local Projects

State/Local Agency: City of Annapolis

Project Number: AN 87-08

Agency Contact: Tom Smith

Phone Number: 410-263-7961

Commision Approval Date: May 7th, 2008

CAC Planner: Amber Widmayer

Project Name: Clay Street Redevelopment

Project Location: Intersection of Clay St. and Obery Street

~~Square Feet Cleared~~ # of trees removed Outside 100ft Buffer: 31 trees removed

Mitigation Ratio for ~~Clearing~~ trees removed Outside Buffer: Ratios vary see attached (Exhibit A)

Mitigation Calculation Outside Buffer: 104 req. replacement trees, See attached (Exhibit A)

~~Square Feet Disturbed/Cleared~~ # of trees removed Within Buffer*: 8 trees removed

Mitigation Ratio for Disturbance/Clearing Within Buffer*: 3:1 ratio

15% Afforestation Requirement Met?: 11,377s.f. of existing forest to remain.

Mitigation Calculation Within Buffer: 8 x 3 = 24 req. replacement trees

Total Mitigation Requirement: 128 req. replacement trees.

Planting and Natural Regeneration Plan (attach additional sheets if necessary)

See attached tree preservation mitigation plans for locations of proposed replacement trees.

Planting Date

Year

First Site Visit Date

Completed by

Second Site Visit Date

Completed By

Date Mitigation Complete

Ivy Dench-Carter — Responsible Contact for Mitigation (Print)

Ivy Dench-Carter — Signature — Date 8/21/08

*See reverse for details

Revised 10/22/04

Clay Street Redevelopment – Exhibit A

Mitigation Calculations for Trees Removed Inside 100 ft. Buffer

Plant Mat. Size	Quantity	Mitigation Ratio	Req. Replacement Trees
4 to < 12" dbh	5	3:1	15
12 to < 18" dbh	2	3:1	6
18 to 24" dbh	0	3:1	0
Trees > 24" dbh	1	3:1	+3
		Total Req. Replacement Trees = 24	

Mitigation Calculations for Trees Removed Outside 100 ft. Buffer

Plant Mat. Size	Quantity	Mitigation Ratio	Req. Replacement Trees
4 to < 12" dbh	6	2:1	12
12 to < 18" dbh	4	3:1	12
18 to 24" dbh	8	4:1	32
Trees > 24" dbh	8	6:1	+48
		Total Req. Replacement Trees = 104	

Total Req. Replacement Trees = 128

Note: There are 5 trees being removed outside of the 100 ft. Buffer that are exceptions and are not subject to the replacement tree requirements because they are either being removed for the construction of roads and public utilities or are already dead or in dying condition.

Planting Agreement for State/Local Projects

State/Local Agency: City of Annapolis - Planning & Zoning

Project Number:

Agency Contact: Tom Smith / CYNTHIA GUDENIUS

Phone Number:

Commision Approval Date:

CAC Planner:

Project Name: Obery Court Phase I

Project Location: 112 Clay Street

Square Feet Cleared Outside 100ft Buffer: 0

Mitigation Ratio for Clearing Outside Buffer: 0

Mitigation Calculation Outside Buffer: 0

Square Feet Disturbed/Cleared Within Buffer*: 1625

Mitigation Ratio for Disturbance/Clearing Within Buffer*: 3:1

15% Afforestation Requirement Met?: N/A

Mitigation Calculation Within Buffer:

Total Mitigation Requirement: 4875

Planting and Natural Regeneration Plan (attach additional sheets if necessary)

SEE ATTACHED DOCUMENT

Planting Date: Spring

Year: 2011

First Site Visit Date

Completed by

Second Site Visit Date

Completed By

Date Mitigation Complete

Responsible Contact for Mitigation (Print)

Signature

Date

*See reverse for details

Revised 10/22/04

Planting Agreement for State/Local Projects

State/Local Agency: City of Annapolis

Project Number: AN 87-08

Agency Contact: Tom Smith

Phone Number: 410 263 7961

Commision Approval Date: May 7th, 2008

CAC Planner: Amber Widmayer

Project Name: Clay Street redevelopment

Project Location: Intersection of Clay Street & Obery Street

~~Square Feet Cleared~~ # of trees removed Outside 100ft Buffer: 31 trees removed

Mitigation Ratio for ~~Clearing~~ trees removed Outside Buffer: Ratios vary see attached Exhibit A.

Mitigation Calculation Outside Buffer: 104 req. replacement trees, See attached Exhibit A.

~~Square Feet Disturbed/Cleared~~ # of trees removed Within Buffer*: 7 trees removed

Mitigation Ratio for Disturbance/Clearing Within Buffer*: 3:1 ratio

15% Afforestation Requirement Met?: 11,377 S.F. of existing forest to remain.

Mitigation Calculation Within Buffer: 7 x 3 = 21 req. replacement trees

Total Mitigation Requirement: 125 req. replacement trees.

Planting and Natural Regeneration Plan (attach additional sheets if necessary)

See attached tree preservation mitigation plans for locations of proposed replacement trees.

Planting Date | Year

First Site Visit Date | Completed by | Second Site Visit Date | Completed By

Date Mitigation Complete

Responsible Contact for Mitigation (Print) | Signature | Date

*See reverse for details

Revised 10/22/04

City of Annapolis
Planning and Zoning Department
145 Gorman Street, 3rd Fl
Annapolis, Maryland 21401

FOR CITY USE ONLY
APPROVED

Phone 410-263-7961 • Fax 410-263-1129 • TDD 410-263-7943 • www.annapolis.gov

CRITICAL AREA BUFFER MANAGEMENT PLAN

Property Information

Owner of property: Housing Authority of the City of Annapolis
Address: 1217 Madison Street Annapolis, M.D. 21403
Phone number: (410) 267-8000
Other contact: Douglas Timbrell
Address: 430 Old Solomons Island Road Annapolis, M.D. 21401
Phone number: (410) 266-5599
Project address (if different):
Critical Area designation: IDA/RCA Zoning: R4-R

Proposed Buffer disturbance

X New development/redevelopment (e.g. new building, addition to home, replacement of structures)

___ Shore erosion control

___ Shore access

___ Other, please explain:

Is the property in a designated Buffer Exemption Area (BEA)? ___ Yes X No

Are there any special plat notes or restrictions concerning your Buffer (e.g., wetlands, habitat protection areas, conservation easements)?

___ Yes X No If yes, please explain:

Please provide a brief explanation of your proposed project in the space below. Include area and/or number of trees cleared as well as the type of equipment that will be used. Three examples follow:

1. *600 square feet partially cleared for shore access with hand tools; canopy will be maintained; disturbance will be limited to three saplings and several shrubs; and path will consist of wood chips.*
2. *Removal of poison ivy from 2,000 square feet area along shore access path; method of removal includes hand-pulling and chemical spraying of individual plants with an approved herbicide; any resulting bare areas will be mulched to prevent soil erosion and to prevent re-establishment of invasives. There will be no removal of trees or shrubs.*
3. *A variance was granted to build a new house on an existing lot in the Buffer. The area permanently impacted in the Buffer will be 4,000 square feet, including the area of the house and a fifteen-foot clearing around the house. The lot is entirely forested. A bulldozer will be used for site preparation.*

Proposed project

There are seven trees to be removed from the 100' stream buffer area. See the tree preservation plans within the landscape & Critical area plans for further detail.

Justification

As a part of the planned development the seven trees are being removed with existing impervious surfaces.

What are the long-term management plans for this area?

The area where the trees are to be removed will be placed within an open space within the subdivision & all existing & proposed forest will be placed within a forest conservation easement.

Calculation of Mitigation

The following three-step process is used to compute the amount of mitigation needed for impacts to the Buffer. For the purposes of this Buffer Management Plan, mitigation is defined as plantings or similar offsets that will help to negate the effect of the Buffer disturbance. To determine the amount of mitigation for your Buffer disturbance you need to determine the following:

1. Amount of Buffer disturbed for clearing, grading, and placement of new structures, etc.

   There are two ways to calculate the amount of disturbance in the Buffer. Buffer disturbance is based on either the area disturbed or the number of individual trees that will be cut. It is recommended that when an area to be disturbed more closely resembles a natural forest (i.e. canopy cover with multi-layer understory) or when structures or other impervious surfaces are placed within the Buffer or a BEA, even if no trees are cleared, you should quantify the disturbance amount in *area cleared*. On the other hand, if your site more closely resembles a park setting (i.e. scattered trees with little or no understory), it is recommended that you count the *number of trees removed*.

   Area of Buffer cleared or disturbed _____ square feet

   OR

   Number of trees cleared 7 trees

2. Mitigation ratio for the type of Buffer impact.

   Different types of Buffer management activities require different mitigation ratios. Higher ratios are used for activities that have a greater impact upon the Buffer. The purpose of the mitigation is to improve the Buffer functions where possible. The table below provides the mitigation ratio for different types of Buffer management activities.

Type of Buffer disturbance	Mitigation Ratio
New development/redevelopment	
Non-BEA	3:1
BEA	2:1
Shore erosion control	1:1
Shore access	2:1
Other: Please contact Planning & Zoning.	

3. Mitigation amount calculated by multiplying the area disturbed or number of trees by the mitigation ratio.

   Square feet _____ by ratio above _____ = 0 square feet

   OR

   Trees 7 by ratio above 3:1 = 21 0 trees

Buffer planting plan

This section is to help you provide more specific details on your mitigation location and plantings.

Planting Location

All mitigation should be located within the Critical Area in the following order of preference:

1. On-site within the Buffer
2. On-site adjacent to the Buffer
3. On-site within the Critical Area
4. Off-site (follow order of preference 1-3 above)
5. Fee-in-lieu payment

Plant Spacings and Mitigation Credits for Various Size Trees and Shrubs

Credit square feet	Plant Size	Plant spacing
100 sq. ft.	1 tree (2-inch caliper)	10 foot center
400 sq. ft.	1 tree (minimum: 2-inch caliper and either balled and burlapped or container grown) and understory vegetation (minimum: 2 small trees or 3 shrubs)	Tree: 20-foot center Understory: 10-foot center
50 sq. ft.	1 tree (seedlings)	7 foot center
50 sq. ft.	1 shrub	3-7 foot center

Schematic Drawing

Please attach a schematic drawing to scale identifying areas of impact to the Buffer, indicate on plan existing trees and shrubs if possible, and the proposed location for replanting within the Buffer. Show the location of the Critical Area Buffer. Indicate on the drawing the specific types of vegetation that will be used for mitigation.

Authorization

I certify these statements to be true and accurate and that any trees to be removed are on my property. I hereby grant City of Annapolis officials permission to enter my property for inspections of this Buffer Management Plan.

Douglas W. Tinkrell
Applicant signature

1-25-08
Date

Consistency Report for Local Government Projects

Project Name: Clay Street Redevelopment	Jurisdiction:
Project Description: 50 rental units & 14 attached single family units.	
Local Agency proposing project: City of Annapolis	
Contact Name and Phone Number: Sally Nash (410) 263-7961	
Project Location (include street address, tax map and parcel number): Clay Street, Annapolis, M.D. 21106, T.M. 51C, Par. 373 & 428	
Critical Area acreage and designation: IDA = 2.62Ac. & RCA = 0.17Ac. Excludes area within the residue parcel	

Project Data
Existing forest/woodland/trees: 11,377 S.F. % of site: 10%
Proposed clearing: 38 Trees % of existing forest: 51% of record trees.
Mitigation to be provided: 78 native trees on site & fee in lieu to be paid for additional 47 req. replacement trees.
Planting location & species (also show on site plan): See attached tree preservation & mitigation plans.
Existing impervious surface: 55,853 S.F. % of site: 49%
Proposed new impervious: 69,869 S.F.
Total impervious surface: 69,869 S.F. % of site: 61.2%
If the % of impervious cover exceeds the permitted amount in the LDA or RCA, the project may need a Conditional Approval from the Critical Area Commission. Please contact your Commission planner for assistance.
Total Area Disturbed: 121,006 S.F.
Stormwater Management: (If site is in the IDA, the 10% worksheets must be attached. Otherwise, local stormwater requirements must be addressed.) See attached stormwater management report.
Has project received local approval of SWM and sediment and erosion control plans? This is 1st submittal.
Buffer impacts? Yes Is project water dependent? No
If there are Buffer impacts proposed and the project is not water dependent, the project may need a Conditional Approval from the Critical Area Commission. Please contact your Commission planner for assistance.
Other Habitat Protection Areas: STILL waiting on DNR to respond to our request. Colonial Nesting Waterbird site? Yes . No . Waterfowl Staging Area? Yes . No . Endangered / threatened species? Yes . No . Forest Interior Dwelling Bird Habitat? Yes . No . Anadromous Fish Propagation Waters? Yes . No .
Non-tidal Wetland Impacts? Yes . (No) . If yes, MDE permit #:
Tidal Wetland Impacts? Yes . (No) If yes, MDE permit #:

In accordance with COMAR 27.02.02, we hereby certify that this local agency project is consistent with the requirements of the local Critical Area Program.

Douglas W. Finlder (Signature)

Please sign above, attach the site plan to this report and submit to the Critical Area Commission at 1804 West St., Suite 100, Annapolis, MD 21401

Clay Street Redevelopment – Exhibit A

Mitigation Calculations for Trees Removed Inside 100 ft. Buffer

Plant Mat. Size	Quantity	Mitigation Ratio	Req. Replacement Trees
4 to < 12" dbh	5	3:1	15
12 to < 18" dbh	1	3:1	3
18 to 24" dbh	0	3:1	0
Trees > 24" dbh	1	3:1	+3
		Total Req. Replacement Trees =	21

Mitigation Calculations for Trees Removed Outside 100 ft. Buffer

Plant Mat. Size	Quantity	Mitigation Ratio	Req. Replacement Trees
4 to < 12" dbh	6	2:1	12
12 to < 18" dbh	4	3:1	12
18 to 24" dbh	8	4:1	32
Trees > 24" dbh	8	6:1	+48
		Total Req. Replacement Trees =	104

Total Req. Replacement Trees = 125

Note: There are 5 trees being removed outside of the 100 ft. Buffer that are exceptions and are not subject to the replacement tree requirements because they are either being removed for the construction of roads and public utilities or are already dead or in dying condition.

23
30
13
22
88

13 AR
2 IOR
7 IGR
2 QRR
3 BNR
3 VDR
3 BNR
3 AAR
3 MP
3 CRR
4 MPR
9 IOR

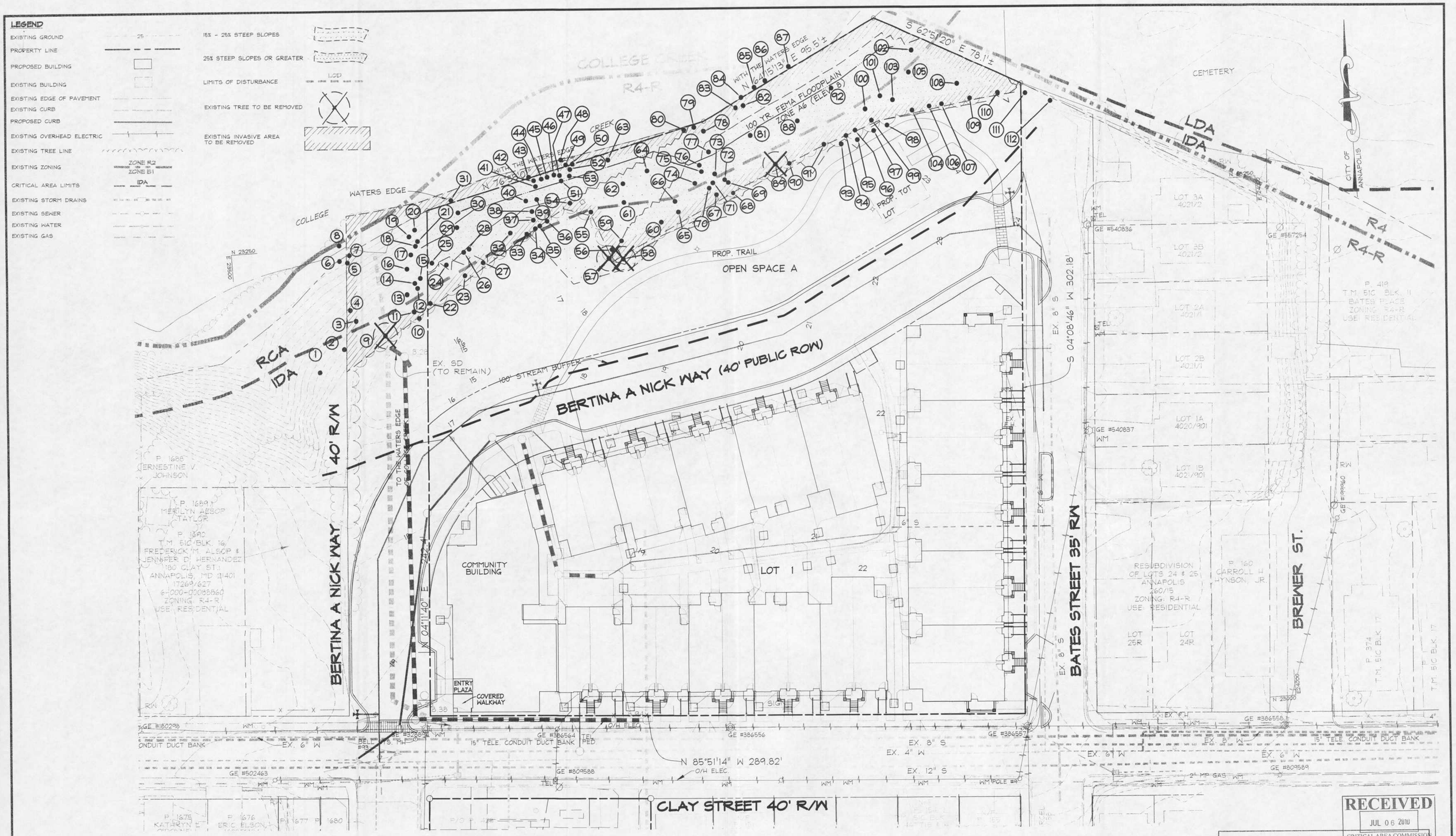
3 CRR
3 QRR
4 IGR
3 VDR
3 CVR
2 PAR
2 RAR

3 MPR
4 IGR
3 QRR
5 VDR
3 IOR
5 IGR

LEGEND

EXISTING GROUND — 25
PROPERTY LINE
PROPOSED BUILDING
EXISTING BUILDING
EXISTING EDGE OF PAVEMENT
EXISTING CURB
PROPOSED CURB
EXISTING OVERHEAD ELECTRIC
EXISTING TREE LINE
EXISTING ZONING — ZONE R2 / ZONE B1
CRITICAL AREA LIMITS — IDA
EXISTING STORM DRAINS
EXISTING SEWER
EXISTING WATER
EXISTING GAS

15% - 25% STEEP SLOPES
25% STEEP SLOPES OR GREATER
LIMITS OF DISTURBANCE — LOD
EXISTING TREE TO BE REMOVED
EXISTING INVASIVE AREA TO BE REMOVED



RECEIVED
JUL 06 2010
CHESAPEAKE BAY CRITICAL AREA COMMISSION
Protecting Maryland's Vital Coastal Bays

NOTE: SEE SHEET 5 FOR TREE DISPOSITION TABLE & TREE REPLACEMENT REQUIREMENTS

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

OWNER
HOUSING AUTHORITY OF THE CITY OF ANNAPOLIS
1217 MADISON STREET
ANNAPOLIS, MD 21403
TEL: 410-267-8000

DEVELOPER
ATTN: IVY DENCH-CARTER
PENNROSE PROPERTIES, LLC
1318 EAST FORT AVENUE, 1ST FLOOR
BALTIMORE, MD 21230
TEL: 443-423-1172
FAX: 443-423-1173

CO-DEVELOPER
HOUSING AUTHORITY OF THE CITY OF ANNAPOLIS
1217 MADISON STREET
ANNAPOLIS, MD 21403
TEL: 410-267-8000

NO.	REVISIONS	APP'D BY	DATE

STATE OF MARYLAND — VINCENT W. HUGHES — No. 2003 — LANDSCAPE ARCHITECT — 7/2/10

SIGMA ENGINEERING
43 OLD SOLOMONS ISLAND ROAD
SUITE 201
ANNAPOLIS, MARYLAND 21401
TELEPHONE (410) 266-5599
FAX (410) 266-3871

SCALE: AS SHOWN	TREE MITIGATION PLAN
DATE: 5-26-10	**OBERY COURT PHASE I**
DRAWN BY: DWT	**LOT 1 & OPEN SPACE**
DESIGNED BY: VWH	A R4-R DEVELOPMENT
CHECKED BY: VHW	CLAY STREET, ANNAPOLIS
JOB NO. 07-26	TAX MAP: 51C BLOCK: 11 PAR: 373
SHEET 2 OF 5	1ST ASSESSMENT DISTRICT
	ANNE ARUNDEL COUNTY, MD 21106
	PROJECTS\07-26\DWG\BUFFER-SHT2.DWG