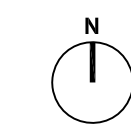


**SITE PLAN**  
SCALE 1" = 30'-0"



**LEGEND**

	FOREST EDGE
	EXISTING TREE
	DEVELOPMENT WITHIN BUFFER = 900 SF
	STREAM
	LOT LINE
	EXISTING TREE TO BE REMOVED
	EXISTING FOREST COVER

**LANDSCAPE LEGEND**

<b>CANOPY TREE</b> 2" CAL. 8' HT.	
<b>CANOPY TREE</b> 1" CAL. 6' HT.	
<b>UNDERSTORY TREE</b> 1" CAL. 6' HT.	
<b>LARGE SHRUB</b> 1 GAL. 4' HT.	
<b>SMALL SHRUB</b> 1 GAL. 18" HT.	

**GENERAL NOTES**

- THE PURPOSE OF THIS BUFFER MANAGEMENT PLAN IS TO COMPLY WITH THE BUFFER MITIGATION AND ESTABLISHMENT REQUIREMENTS FOR THE CONSTRUCTION OF A 2100 SQUARE FOOT ADDITION TO AN EXISTING DWELLING. THE EXISTING DWELLING IS LOCATED WITHIN THE BUFFER ON A GRANDFATHERED LOT AND THE APPLICANT HAS OBTAINED A VARIANCE.
- THE PROPERTY SHOWN HEREON IS LOCATED ENTIRELY WITHIN THE CHESAPEAKE BAY CRITICAL AREA.
- THE CHESAPEAKE BAY CRITICAL AREA DESIGNATION IS - RCA.
- FOR CURRENT DEED REFERENCE SEE LIBER 123, FOLIO 123.
- FOR PLAT REFERENCE SEE PLAT BOOK 123, FOLIO 234.
- ACCESS TO LOTS 15 IN GOODNECK DOWNS SUBDIVISION IS FROM SOUTH DOWNS DRIVE.
- THIS PLAT WAS PREPARED WITHOUT BENEFIT OF REVIEW OF AN ABSTRACT OF TITLE.

**SEQUENCE OF IMPLEMENTATION**

- CONTRACTOR SHALL ARRANGE PRE-PLANTING MEETINGS WITH COUNTY PLANNING & ZONING DEPARTMENT STAFF. AT LEAST 5 DAYS IN ADVANCE OF DISTURBANCES OF ANY LAND ON SITE.
- REMOVE 1' ELIMINATE TURF GRASS AND TILL AREAS TO BE PLANTED TO A DEPTH OF 12 INCHES.
- USE TREE SHELTER TUBES WITH MESH TOPS FOR SEEDLINGS PLANTING TO REDUCE ANIMAL DAMAGE.
- MULCH AROUND LANDSCAPING STOCK TO REDUCE COMPETITION FROM INVASIVE SPECIES.
- MONITOR THE PLANTINGS OFTEN TO REDUCE PLANT STRESS SUCH AS WATER DEFICIENCY, NUTRIENT DEFICIENCY, INVASIVE SPECIES COMPETITION, PEST DAMAGE, AND DISEASE.
- THE CONTRACTOR TO OBSERVE MINIMAL SITE PREPARATION/DISTURBANCE. PROTECTION OF PLANTS AFTER DELIVERY UNTIL THEY ARE PLANTED, PROPER DIGGING AND HANDLING OF PLANT MATERIALS, PROPER EXCAVATION OF PLANTING AREAS, PLANTING OPERATIONS, STABILIZATION OF THE PLANTING AREAS WITH MULCH AFTER PLANTING, STAKING AND PRUNING, AND INSTALLATION OF BUFFER PROTECTION SIGNAGE.

**MAINTENANCE PLAN**

- MONITOR THE PLANTINGS OFTEN TO REDUCE PLANT STRESS SUCH AS WATER DEFICIENCY, NUTRIENT DEFICIENCY, INVASIVE SPECIES COMPETITION, PEST DAMAGE, AND DISEASE.
- WATER ONLY AS NECESSARY BUT AT LEAST ONCE EVERY 10 DAYS WITHOUT RAINFALL FROM MAY THROUGH SEPTEMBER, DEPENDING ON SOIL MOISTURES LEVELS. MONITOR TO ENSURE THAT OVER-WATERING DOES NOT FREQUENTLY OCCUR.
- USE LOW NITROGEN AND SLOW RELEASE FERTILIZERS AND APPLY IN LATE FALL OR EARLY SPRING.
- AT THE END OF THE 2-YEAR MONITORING PERIOD, THE SURVIVAL OF THE PLANTINGS SHALL BE ASSESSED TO DETERMINE THE NEED FOR REPLACEMENT PLANTINGS.

**REQUIRED SURVIVAL**

AT THE END OF THE 2-YEAR MONITORING PERIOD FOR PLANTED LANDSCAPE STOCK, ALL OF THE PLANTS ARE REQUIRED TO SURVIVE PER COMAR 27.01.09.01-21. ANY LANDSCAPE STOCK PLANT OR PLANTS THAT DID NOT SURVIVE SHALL BE REPLACED.

IF THE COUNTY DETERMINES THAT SURVIVAL IS NOT ADEQUATE, THE MONITORING PERIOD MAY BE EXTENDED AND ADDITIONAL INSPECTIONS MAY BE REQUIRED AT THE DISCRETION OF THE COUNTY.

**PLANTING PLAN AND LANDSCAPE SCHEDULE**

**STEP 1**

**ESTABLISHMENT OR MITIGATION**

DISTURBANCE TO THE 100-FOOT AND/OR EXPANDED BUFFER? (YES) (NO)

IF YES, MITIGATION IS REQUIRED. PROCEED TO STEP 2. OTHERWISE, SKIP TO STEP 5.

SELECT	ACTIVITY	MITIGATION RATIO	ACTION
	PROJECT COMPLETELY OUTSIDE BUFFER, NO BUFFER IMPACTS		ESTABLISHMENT
	DISTURBANCE TO BUFFER OR VEGETATION REMOVAL IN BUFFER		MITIGATION
X	SOME DISTURBANCE IN BUFFER AND SOME OUTSIDE BUFFER		ESTABLISHMENT & MITIGATION

**STEP 2**

**MITIGATION FOR WORK IN THE BUFFER**

SELECT	ACTIVITY	MITIGATION RATIO
	SHORE EROSION CONTROL	1:1
	RIPARIAN WATER ACCESS	2:1
	WATER-DEPENDENT FACILITIES	2:1
X	VARIANCE	3:1
	VIOLATION	4:1

BUFFER DISTURBANCE MITIGATION:  
AREA DISTURBED (SF) 900 X MITIGATION RATIO 3 = 2700 SF

**STEP 3**

**MITIGATION FOR CLEARING TREES**

2" DIAMETER TREES (1 TOTAL) = 1 X 2 = 2'  
TOTAL INCHES = 2'

2 X 100 = 200 SF

0 DEAD TREES TO BE REMOVED = 0 NEW TREES PLANTED  
0 INVASIVE SPECIES/ TREES REMOVED = 0 NEW TREES PLANTED

**STEP 4**

**TOTAL MITIGATION**

BUFFER DISTURBANCE MITIGATION (STEP 2) + 2700 SF  
TREE CLEARING MITIGATION (STEP 3) + 200 SF  
TOTAL MITIGATION = 2900 SF

**STEP 5**

**ESTABLISHMENT FOR DEVELOPMENT OUTSIDE THE BUFFER**

SELECT	DEVELOPMENT CATEGORY	BEFORE PROGRAM DATE	AFTER PROGRAM DATE
	NEW DEVELOPMENT ON VACANT LOT	TOTAL LOT COVERAGE	FULL ESTABLISHMENT
	NEW SUBDIVISION OR NEW LOT	FULL ESTABLISHMENT	FULL ESTABLISHMENT
	NEW LOT WITH EXISTING DWELLING UNIT	ESTABLISHMENT = TOTAL LOT COVERAGE	
	CONVERSION OF LAND USE TO ANOTHER LAND USE	FULL ESTABLISHMENT	
X	ADDITION OR ACCESSORY STRUCTURE	ESTABLISHMENT = INCREASE IN LOT COVERAGE	
	SUBSTANTIAL ALTERATION	ESTABLISHMENT = TOTAL LOT COVERAGE	

PROGRAM DATE IS THE ADOPTION DATE OF THE LOCAL CA PROGRAM

ESTABLISHMENT REQUIRED (DATE LOT CREATED): (YES) (NO) JUNE 1, 2002

ESTABLISHMENT REQUIRED (FULL BUFFER/TOTAL LOT COVERAGE) (NET INCREASE IN LOT COVERAGE) (YES) (NO) 2900 SF / 900 SF / ACRES

TOTAL AREA OF BUFFER REQUIRING ESTABLISHMENT = 2900 SF / ACRES

**STEP 6**

**ADJUST FOR EXISTING FOREST COVER**

FULL ESTABLISHMENT OF BUFFER REQUIRED? (YES) (NO)

TOTAL AREA OF BUFFER = N.A. SF/ACRES  
TOTAL AREA OF BUFFER IN EXISTING FOREST = N.A. SF/ACRES  
MODIFIED AREA OF BUFFER REQUIRED TO BE PLANTED = N.A. SF/ACRES

IF NO:  
GO TO STEP 7

NOTE: ONCE BUFFER IS FULLY FORESTED, NO FURTHER ESTABLISHMENT IS REQUIRED

**BUFFER MANAGEMENT AND PROTECTION STANDARDS**

- REMOVAL OF NATURAL VEGETATION WITHIN THE 100-FOOT BUFFER AND EXPANDED BUFFER IS PROHIBITED. CUTTING AND CLEARING OF NATURAL VEGETATION WITHIN THE BUFFER AND EXPANDED BUFFER SHALL BE AS SHOWN ON THIS BUFFER MANAGEMENT PLAN AS SUBMITTED AND OR AS SUBSEQUENTLY AMENDED. SUBJECT TO APPROVAL BY THE COUNTY PLANNING AND ZONING OFFICE. ADDITIONAL INFORMATION CAN BE OBTAINED BY CONTACTING THE PLANNING AND ZONING OFFICE AT \_\_\_\_\_.
- THE 100-FOOT BUFFER ON THIS LOT SHALL BE PLANTED IN ACCORDANCE WITH THIS PLAN. ALL EXISTING AND PLANTED VEGETATION WITHIN THE BUFFER SHALL BE MAINTAINED AND SURVIVAL OF PLANTED AND NATURALLY REGENERATED AREAS OF THE BUFFER SHALL BE AS DESCRIBED IN THIS PLAN.
- NEW LAWN AREAS SHALL NOT BE CREATED WITHIN THE BUFFER AND EXPANDED BUFFER UNLESS SPECIFICALLY ADDRESSED IN THIS BUFFER MANAGEMENT PLAN.

**INSPECTION AGREEMENT**

I, JANE DOE, THE OWNER OF THE SUBJECT PROPERTY, SHOWN HEREON, DO HEREBY GRANT PERMISSION TO THE APPROVING AUTHORITY TO INSPECT THE PLANTINGS AT APPROPRIATE TIMES AT THE ADDRESS PROVIDED BELOW.

STREET ADDRESS: \_\_\_\_\_  
TAX MAP SECTION: \_\_\_\_\_  
PARCEL # \_\_\_\_\_  
LOT # \_\_\_\_\_

OWNER: \_\_\_\_\_ DATE: \_\_\_\_\_

**BUFFER MANAGEMENT PLAN APPROVAL**

THIS MAJOR BUFFER MANAGEMENT PLAN HAS BEEN REVIEWED AND APPROVED FOR CONSISTENCY WITH THE LOCAL CRITICAL AREA PROGRAM AND THE PROVISIONS OF COMAR 27.01.09.01-1-7

STAFF NAME: \_\_\_\_\_ STAFF TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

**STEP 7**

**CLUSTER PLANTING EVALUATION**

VEGETATION TYPE	MINIMUM SIZE ELIGIBLE FOR CREDIT	MAXIMUM CREDIT ALLOWED (SF)	MAXIMUM PERCENT OF CREDIT	QUANTITY
PLANTING CLUSTER 1	1 CANOPY TREE W/ 3 LARGE SHRUBS OR 1 CANOPY TREE W/ 6 SMALL SHRUBS	300	N/A	N/A
PLANTING CLUSTER 2	2 UNDERSTORY TREES W/ 1 LARGE SHRUB OR 2 UNDERSTORY TREES W/ 6 SMALL SHRUBS	350	N/A	N/A

TOTAL ESTABLISHMENT/MITIGATION = 1 ACRES? (YES) (NO)

IF YES, THE FOLLOWING CAN APPLY:  
PLANTING CLUSTER 1: N.A. (QUANTITY) X 300 SF = N.A. 90 FT  
ADD PLANTING CLUSTER 2: N.A. (QUANTITY) X 350 SF = N.A. 90 FT  
EQUALS: TOTAL CLUSTER PLANTING = N.A. 90 FT

**STEP 8**

**TOTAL REQUIRED BUFFER PLANTING**

BUFFER DISTURBANCE MITIGATION (STEP 2) 2700 SF  
ADD: TREE MITIGATION (STEP 3) + 200 SF  
ADD: BUFFER ESTABLISHMENT (STEP 5) + 900 SF  
EQUALS: TOTAL PLANTING = 3800 SF

**LANDSCAPE SCHEDULE: SPECIES, STOCK, SIZE, AND QUANTITY**

SYM.	SPECIES	COMMON NAME	QNTY.	CREDIT EACH	CREDIT TOTAL	MAX % ALLOW	% USED
<b>CANOPY TREES - 2" CALIPER, 8'-0" HIGH</b>							
QP	Quercus phellos	Willow Oak	5	200	1000	N.A.	N.A.
<b>CANOPY TREES - 1" CALIPER, 6'-0" HIGH</b>							
AR	Acer rubrum	Red Maple	4	100	400	N.A.	N.A.
NS	Nyssa sylvatica	Black Gum	4	100	400	N.A.	N.A.
<b>UNDERSTORY TREES - 1" CALIPER, 6'-0" HIGH</b>							
MV	Magnolia virginiana	Sweetbay Magnolia	10	75	750	N.A.	N.A.
<b>LARGE SHRUBS - 1 GALLON, 4'-0" HIGH</b>							
CA	Cornus amomum	Silky Dogwood	8	50	400	30%	18%
IT	Itea virginica	Virginia Sweetspire	8	50	400		
<b>SMALL SHRUBS - 1 GALLON, 1'-6" HIGH</b>							
HD	Hypericum densiflorum	Dense St. John's Wort	18	25	450	20%	10%
<b>HERBACEOUS PERENNIAL, 1 QUART</b>							
				N.A.	N.A.	10%	N.A.
<b>TOTAL</b>					3800 SF		

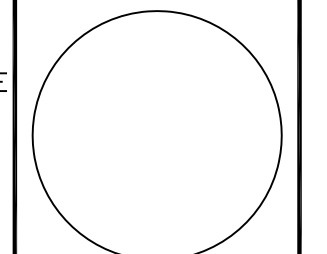
**LANDSCAPE SCHEDULE NOTES**

- ALL PLANT SPECIES SHALL BE NATIVE TO THE CHESAPEAKE AND ATLANTIC COASTAL BAYS REGION BASED ON THE U.S. FISH AND WILDLIFE SERVICE PUBLICATION, NATIVE PLANTS FOR WILDLIFE HABITAT AND CONSERVATION LANDSCAPING.
- SPECIES CLASSIFICATION (CANOPY TREE, UNDERSTORY TREE, ETC.) IS IN ACCORDANCE WITH MATURE HEIGHTS AS SET FORTH IN THE U.S. FISH AND WILDLIFE SERVICE PUBLICATION, NATIVE PLANTS FOR WILDLIFE HABITAT AND CONSERVATION LANDSCAPING.
- SPECIES HAVE BEEN SELECTED BASED ON AN ANALYSIS OF SURROUNDING NATIVE FOREST AND DEVELOPED WOODLAND COVER.
- SHRUB SPECIES COMPRISE 28% PERCENT OF THE PROPOSED PLANTING, WHICH DOES NOT EXCEED 30 PERCENT OF THE OVERALL PLANTING.
- THE QUANTITY OF ANY SINGLE SPECIES DOES NOT EXCEED 20 PERCENT OF THE OVERALL PLANTING.

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STEWARDS OF THE LAND  
LANDSCAPE ARCHITECTS

SAMPLE MINOR BUFFER MANAGEMENT PLAN  
\_\_\_\_\_ COUNTY



Drawing Title

Scale: AS SHOWN  
Project No.: XXXXX  
Date: MARCH 2011  
Drawn By: XXX  
Reviewed By: XXX

REVISIONS  
NO. DATE DESC.

Sheet No.