

**MASON SITE WETLAND MITIGATION PLAN**

**Hyde County  
USGS Catalog Unit 03020105030010  
EEP Project No 16-D06001  
Design Firm: Albemarle Restorations, LLC**

**Prepared for:**



**NC DENR/ ECOSYSTEM ENHANCEMENT CENTER  
1619 MAIL SERVICE CENTER  
RALEIGH, NC 27699-1619**

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**October 2007  
Revised: November 14, 2007**

# Table of Contents

<b>1.0</b>	<b>Executive Summary.....</b>	<b>ii</b>
<b>2.0</b>	<b>As-Built Report.....</b>	<b>1</b>
2.1	Project Background.....	1
2.2	Pre-existing Site Conditions.....	1
2.3	Construction and Planting.....	1
2.4	Post Construction Conditions.....	2
<b>3.0</b>	<b>Monitoring Plan.....</b>	<b>3</b>
3.1	Hydrology Monitoring.....	3
3.2	Vegetation Monitoring.....	4
<b>4.0</b>	<b>Maintenance and Contingency.....</b>	<b>5</b>
<b>5.0</b>	<b>References .....</b>	<b>5</b>

## Tables:

Table 1. Mitigation Summary Table.....	iii
Table 2. Project History.....	1
Table 3. Tree/Shrub Planting Schedule.....	2

## Appendices:

- Appendix A. Photographs
- Appendix B. As-Built Plans
- Appendix C. Vicinity Map

## 1. EXECUTIVE SUMMARY

This report is submitted by Albemarle Restorations, LLC to document the completion of construction and planting of 16-acres of riverine and 20 acres of non-riverine wetlands on the Mason Property located just north of U. S. Route 264 near Rose Bay, in Hyde County, North Carolina. This report will also serve as a baseline for future monitoring reports submitted pursuant to the requirements set forth in the Mason Site wetland restoration report.

Prior to construction, the 36.0 acre easement area was used entirely for row crop agriculture, primarily soy beans and cotton. A drainage ditch, known locally as the Mason Ditch, divided the project area and provided drainage of the seasonally high water table to allow the agricultural uses. No natural plant communities of any biological value were found within the project area, and all ditches were actively maintained to remove vegetation and debris.

The goal of the restoration plan was to create a diverse wetland system with riverine and non-riverine wetlands adjacent to a narrow meandering very low gradient stream. Construction activities, in accordance with the approved Restoration Plan, began March 14, 2007, and were completed on May 14, 2007. Grading consisted of filling ditches, creating the narrow meandering channel surrounded by wide seasonally saturated riverine wetlands, with non-riverine wetlands with varying hydrology adjacent to the riverine wetlands. Tree and shrub planting on the project site occurred on May 15 and 16, 2007 using bare-root seedlings and containerized stock. The emergent wetland seed mixture was applied concurrent with the finish grading. All planting was done in accordance with the approved restoration plan. Although rainfall amounts this spring have been below average, the site and our planted vegetation continue to do well and the site grading has successfully restored wetland hydrology to the entire 36-acre easement area.

The proposed ecological benefits of the project are numerous. Improvements to water quality will include nutrient, toxicant and sediment retention and reduced surface water temperatures in receiving waters from shading in shrub/scrub and forested wetland areas. Wildlife habitat will be greatly improved by adding to the existing adjacent forested areas and providing a wide range of habitat areas (open water, emergent, shrub/scrub and forested) for amphibians, reptiles, birds, insects and mammals. Other functions and values provided by the project include flood flow attenuation and opportunities for passive recreation. Wildlife utilization of the site has been considerable since construction was completed. During a site visit in June, 2007, white tailed deer, wild turkey, and black bear tracks were seen.

Four water level monitoring wells were installed on May 16, 2007 at varying elevations throughout the site to measure subsurface water elevations. On September 27, 2007 two backup monitoring wells were installed at similar elevations to ensure accurate and uninterrupted monitoring. Four vegetative monitoring plots will be installed and permanently monumented, one coincident with each of the original four monitoring wells, to ensure that typical vegetative communities planted on the site are represented.

Each plot is to be a 10m X 10m square, as recommended by the CVS-EEP Protocol for recording vegetation. These quadrants will be monitored for a minimum five-year period, or until success of the project can be validated.

Monitoring Reports will be submitted to EEP by December 31 of the year in which the monitoring was conducted. Wetland hydrology will be deemed successful if a range of conditions including inundated, saturated, seasonally saturated, and upland hummock areas are found. The monitoring wells will be checked four times per year, at which time a visual assessment of inundated areas will be made. Monitoring reports will include all water elevation data as well as approximate assessments of inundated areas. The targeted plant community shrub/scrub wetland, forested wetland, and shallow open water habitats. Monitoring reports will include the CVS-EEP Protocol vegetation information as well as estimates of aerial coverage of each vegetative community planned for the site. Approximate acreages for each wetland vegetative community are shown on Sheet M-1 of the As-Built Plan Sheets. The site will be deemed successful if the acreages of each regime falls within a reasonable range related to the design during normal climatic conditions. Site hydrology during years of excessive rainfall or extreme drought will be assessed with climatic conditions in mind.

**Table 1. Mitigation Summary Table**

<b>Restoration Type</b>	<b>Pre-Existing Acreage</b>	<b>Post Construction Acreage</b>	<b>Credit Ratio (Restoration : WMU)</b>	<b>Total WMU's</b>
Riverine Wetland	0.0	16.0	1:1	16.0
Non-Riverine Wetland	0.0	20.0	1:1	20.0

## 2. AS-BUILT REPORT

### 2.1. Project Background

The Mason Site consists of 36 acres located within the central portion of the larger Mason farm. This area is bisected by a deep drainage ditch acting as a stream (The “Mason” ditch) that runs north to south from the property boundary to Route 264. The site was selected by Albemarle Restorations because of the ability to add to the extensive downstream wetlands. On January 10, 2006, Albemarle Restoration, LLC entered into a contract with NCEEP for the procurement of 16 riverine Wetland Mitigation Units (WMU’s) and 20 non-riverine WMU’s on the Mason site. Construction and planting of the site occurred in early 2007. **Table 2** below summarizes the project history.

**Table 2. Project History**

June 2006	Reference Wetland Studied
November 30, 2006	Restoration Plan Approved
March 14, 2007 – May 14, 2007	Construction
May 15 and 16, 2007	Planting
May 16, 2007	Monitoring Wells Installed
December 2007 (Scheduled)	First Monitoring Report (Year 1)

### 2.2. Pre-existing Site Conditions

The Mason farm consists of approximately 99 +/- acres, 36 of which are designated for this project site. These 36 acres are located within the central portion of the farm. This area is bisected by a deep drainage ditch acting as a stream (The “Mason” ditch) that runs north to south from the property boundary to Route 264, and is currently bordered by agricultural fields to the north and east, and timberland to the west and south of Route 264. Degradation to the channel and surrounding areas by past agricultural activities, including channel straightening and planting of row crops up to the channel edges has eliminated any significant natural habitat on the site and allowed excessive nutrient and sediment accumulation in the channel. These past activities also served to reduce the flood flow attenuation capabilities of the historic undisturbed channel. **Appendix A** contains photographs taken during a pre-construction site visit, showing the degradation of the channel and the proximity of tilled ground.

### 2.3. Construction and Planting

Construction activities, in accordance with the approved Restoration Plan, began on March 14, 2007 with the installation of recommended erosion control practices and grading of the wetland areas. Where necessary, topsoil was stockpiled for redistribution after completion of rough grading. After wetlands were graded, the meandering channel was created, with spoils used to fill the existing ditch. Finally, the outlet was constructed of riprap on filter cloth, just upstream from the existing floodgate. Project grading was completed on May 14, 2007.

Tree and shrub planting on the project site occurred during the third week of May using bare-root seedlings and containerized stock. The emergent wetland seed mixture was planted just after grading was completed. All planting was done in accordance with the approved restoration plan, and **Table 3** below summarizes the species planted.

**Table 3. Tree/Shrub Planting Schedule**

TREE/SHRUB PLANTING SCHEDULE- 36.0 Acres						
	Quantity	Botanical Name	Common Name	Size	Condition	Spacing
Trees:	2025	<i>Taxodium distichum</i>	Bald Cypress	2-5'	Bare Root	12' Random Spacing
	675	<i>Acer rubrum var. Trilobum</i>	Red Maple	2-5'	Bare Root	12' Random Spacing
	675	<i>Nyssa aquatica</i>	Water tupelo	2-5'	Bare Root	12' Random Spacing
	675	<i>Nyssa biflora</i>	Swamp Black Gum	2-5'	Bare Root	12' Random Spacing
	675	<i>Quercus phellos</i>	Willow Oak	2-5'	Bare Root	12' Random Spacing
	675	<i>Quercus bicolor</i>	Swamp White Oak	2-5'	Bare Root	12' Random Spacing
	328	<i>Salix nigra</i>	Black Willow	2-5'	Bare Root	12' Random Spacing
Total:	4,508					
Shrubs:	982	<i>Baccharis halimifolia</i>	High Tide Bush	1/4" Cal.	Bare Root	12' Random Spacing
	328	<i>Cyrilla racemiflora</i>	Swamp Cyrilla	1/4" Cal.	Bare Root	12' Random Spacing
	328	<i>Clethera alnifolia</i>	Sweet Pepperbush	1/4" Cal.	Bare Root	12' Random Spacing
	328	<i>Itea virginica</i>	Virginia Sweetspire	1/4" Cal.	Bare Root	12' Random Spacing
	328	<i>Cephalanthus occidentalis</i>	Button Bush	1/4" Cal.	Bare Root	12' Random Spacing
	328	<i>Alnus serrulata</i>	Tag Alder	1/4" Cal.	Bare Root	12' Random Spacing
	328	<i>Myrica cerifera</i>	Wax Myrtle	1/4" Cal.	Bare Root	12' Random Spacing
	328	<i>Magnolia virginiana</i>	Sweetbay Magnolia	1/4" Cal.	Bare Root	12' random Spacing
Total	3,278					

#### 2.4. Post Construction Site Conditions

As of June 2007, approximately 95 percent of the installed plant material on the site was viable, and the emergent wetland seed had germinated in most areas. The meandering channel and proposed open water/emergent areas were inundated during each site visit since the project was completed. Photographs of the site taken in May 2007 are found in **Appendix A**.

### 3. Monitoring Plan

Monitoring of the site is to be completed per NCEEP *Content, Format and Data Requirements for EEP Monitoring Reports* for a five year period, with monitoring beginning in late fall 2007 (Year 1) and commencing in 2011. Photographs of the site will be included in each year's monitoring report. Monitoring will consist of vegetative and hydrology monitoring as outlined below.

#### 3.1. Hydrology Monitoring

Monitoring of hydrology on the site will be completed using six continuous recording water level loggers suspended in four-inch PVC monitoring wells. Four of the wells were installed on the site on May 16, 2007 and two backup monitoring wells were installed on September 7, 2007. The Mitigation Plan (**Appendix B**) shows locations of the monitoring wells on the site. The wells have been located to assess subsurface water levels at various elevations on the site planned as seasonally saturated or temporarily flooded. Data will be downloaded from each monitoring well four times per year, and during each site visit hand measurements will be taken to ensure the accuracy of the water level loggers. Additional backup water level loggers were installed in case of malfunctions which occur from time to time with the data loggers. Data from the backup loggers will be utilized if any of the four original loggers malfunctions.

Groundwater elevation data collected from each monitoring well will be presented relative to the ground surface elevation at the well location in graph form to demonstrate whether wetland hydrology, defined as inundation or saturation to within 12 inches of the ground surface for a minimum of 21 consecutive days during the growing season, has been attained. The determination will be listed in the Wetland Criteria Attainment Table in each report. Raw data will also be supplied in an appendix to the report.

In addition to measurements of sub-surface water elevations, rainfall data will be collected on site through an event rainfall logger. This gauge, installed in October 2007 and placed at the edge of the site, will record rainfall intensity, duration, time, and quantity. A visual estimate of the extent of inundation will also be made and documented on site mapping for inclusion into the monitoring report. Rainfall data from two other sites, one in Washington, North Carolina, approximately 31 miles from the project site and another in Ocracoke, North Carolina, approximately 40 miles from the site will be used as references to determine the deviation from climatologically normal rainfall in the area. The rainfall data will be assessed to determine degree to which climatologic extremes (i.e. drought or excessive rainfall) affect subsurface water elevations.

To further gauge the affect of seasonal and annual variations in precipitation and to set a target hydrologic range for the restored wetlands, hydrologic success of the site will be assessed in relation to a reference wetland located adjacent to the restoration area. Per the recommendation of EEP, two reference hydrologic monitoring wells will be installed in close proximity to the project area within a reference wetland. These wells will be

located at a similar position in the landscape, and installed and monitored in the same manner as the project monitoring wells. Hydrologic success of the project will be correlated to conditions documented at the reference wetland site in assessing wetland hydrology. The project site will be deemed successful in maintaining wetland hydrology similar to that of the reference site if the following conditions are met:

**Years one through three** – the restored wetland maintains continuous inundation or saturation for a period equal to or greater than 50 percent of the period of inundation or saturation of the reference wetland site.

**Years four and five** – the restored wetland maintains continuous inundation or saturation for a period equal to or greater than 80 percent of the period of inundation or saturation of the reference wetland site, provided that wetland hydrology, as defined above, has been achieved for a minimum of five percent of the growing season in normal rainfall years. One accepted method for determining how precipitation relates to a normal rainfall year can be found at [http://www.wcc.nrcs.usda.gov/climate/wets\\_doc.html](http://www.wcc.nrcs.usda.gov/climate/wets_doc.html).

### **3.2. Vegetation Monitoring**

Four vegetation monitoring plots have been established, one at each original monitoring well location, to provide a representative sample of both shrub/scrub and forested wetland communities. Plots will be 10 meter by 10 meter square plots, with one corner of each plot coinciding with the location of the associated monitoring well. The initial plot sampling will occur in November 2007 (Year 1), with successive vegetative monitoring occurring once per year for 5 years, or until the site is deemed successful. Vegetation plot sampling will consist of Level 1: Planted stem inventory plots for the first year, and Level 2: Total woody stem inventory lots for remaining years, as defined in the *CVS-EEP Protocol for Recording Vegetation Version 4.0*.

In addition to plot sampling, the aerial coverage of each type of wetland community (forested, shrub/scrub, emergent, and open water) will be visually estimated during the site visit. The approximate coverage of each vegetative community will be mapped and included with each year's monitoring report. If non-native invasive species are seen, the approximate coverage will also be mapped.

In accordance with the *US Army Corps of Engineers, Stream Mitigation guidelines, April 2003*, Albemarle Restorations will maintain survivability of planted woody species planted to a minimum of 320 stems/acre thru year three. A ten percent mortality rate will be accepted in year four (288 stems/acre) and another ten percent in year five resulting in a required minimum survival rate of 260 trees/acre through year five. The vegetation component of the project will be considered successful if the planted wetland species dominate the tree and shrub layers in the planted wetland areas. It is expected that volunteer species will colonize the site from adjacent and nearby wetland areas. If these species become dominant, the wetland indicator status of each species will be assessed, and the site will be deemed successful if the dominant species in each layer are FAC or wetter. Non-native invasive species will not be included in this assessment.



#### **4. Maintenance and Contingency**

Maintenance of the site is expected to be minimal, as the site is proposed to function as a natural system. Periodic visual site inspections (two or three times per year) will be conducted to check for any issues of concern. If any of the following contingencies or issues arises during monitoring, Albemarle Restorations will take the necessary maintenance or corrective actions.

The main concern for the site is the introduction of non-native invasive species. No invasive species were encountered during construction, and the site will be monitored to ensure that such species do not become established. If invasive species are found, corrective action including spraying, mowing, or removing such species will be conducted.

If installed woody plant material is seen having a survival rate of less than 320 stems/acre, replanting will occur to maintain the required percent survival rate during the first three years of monitoring. In year four, replanting will occur if the planted species survival rate falls below 288 stems/acre. If necessary, replanting will occur in the fifth and final year to insure the required survival rate of 260 trees/acre.

If well data shows that wetland hydrology has not been achieved, the well data will be analyzed in relation to the reference rainfall data to determine if drought or drier than normal conditions have existed in coincidence with periods of non-attainment of wetland hydrology. If this is found to be the case, Albemarle Restorations will ask that the site be evaluated during normal climatic conditions. If it is determined that wetland hydrology has not been achieved, corrective action will be taken to enhance wetland hydrology to the site.

Other potential issues including animal damage, disease or pest infestation, or damage from extreme weather events will be noted during monitoring, with any apparent problem areas mapped for inclusion into the monitoring report. The monitoring will also include any corrective actions taken or proposed.

#### **5. References**

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# **Appendix A**

## **-Photographs-**



**Photo 1. “Mason Ditch” near downstream limits of project area prior to construction.**



**Photo 2. Typical lateral ditch between crop fields in project area prior to construction.**



**Photo 3. “Mason Ditch” with crops planted to edge pre-construction.**



**Photo 4. Deep organically rich soils encountered throughout the site during construction.**



**Photo 5. Wetland hydrology evident during construction. April, 2007**



**Photo 6. Rough grading of meandering channel shows minimal grading required to restore wetland hydrology to site. April, 2007**



**Photo 7. Riverine wetlands (foreground) and non-riverine wetlands just after completion of construction. Pin flags mark locations of woody stock. May, 2007**



**Photo 8. Successful wetland hydrology evident just after completion of construction. May, 2007**



**Photo 9. Downstream limits of project area post construction. May, 2007**



**Photo 10. Emergent seed beginning to germinate in riverine wetland areas two weeks after construction completed. May, 2007**



## **Appendix B**

**-As-Built Plans-**

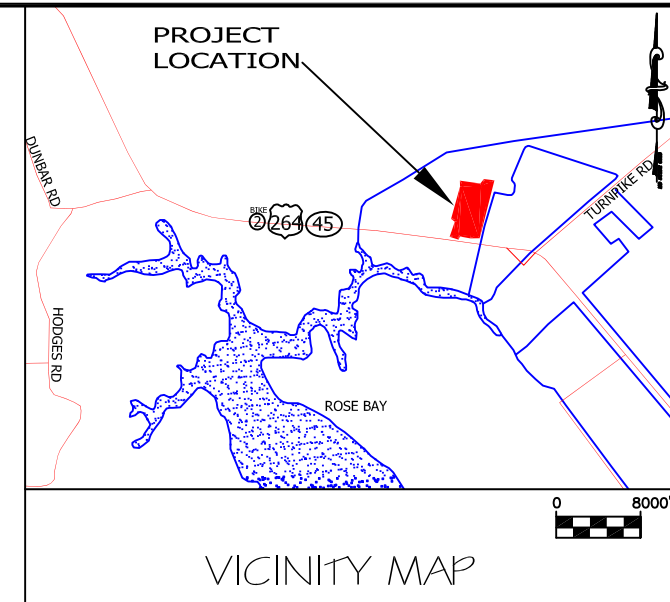
INDEX OF SHEETS

T-1.....	TITLE SHEET
G-1.....	AS-BUILT GRADING OVERVIEW
G-2.....	AS-BUILT GRADING
G-3.....	AS-BUILT GRADING
D-1.....	AS-BUILT SECTIONS
M-1.....	MONITORING PLAN

WETLAND MITIGATION PROJECT  
ALBERMARLE RESTORATIONS, INC.  
MASON SITE

HYDE COUNTY

LOCATION: OFF ROUTE 264, NEAR ROSE BAY  
TYPE OF WORK: MITIGATION  
USGS CATALOG UNIT 03020105030010



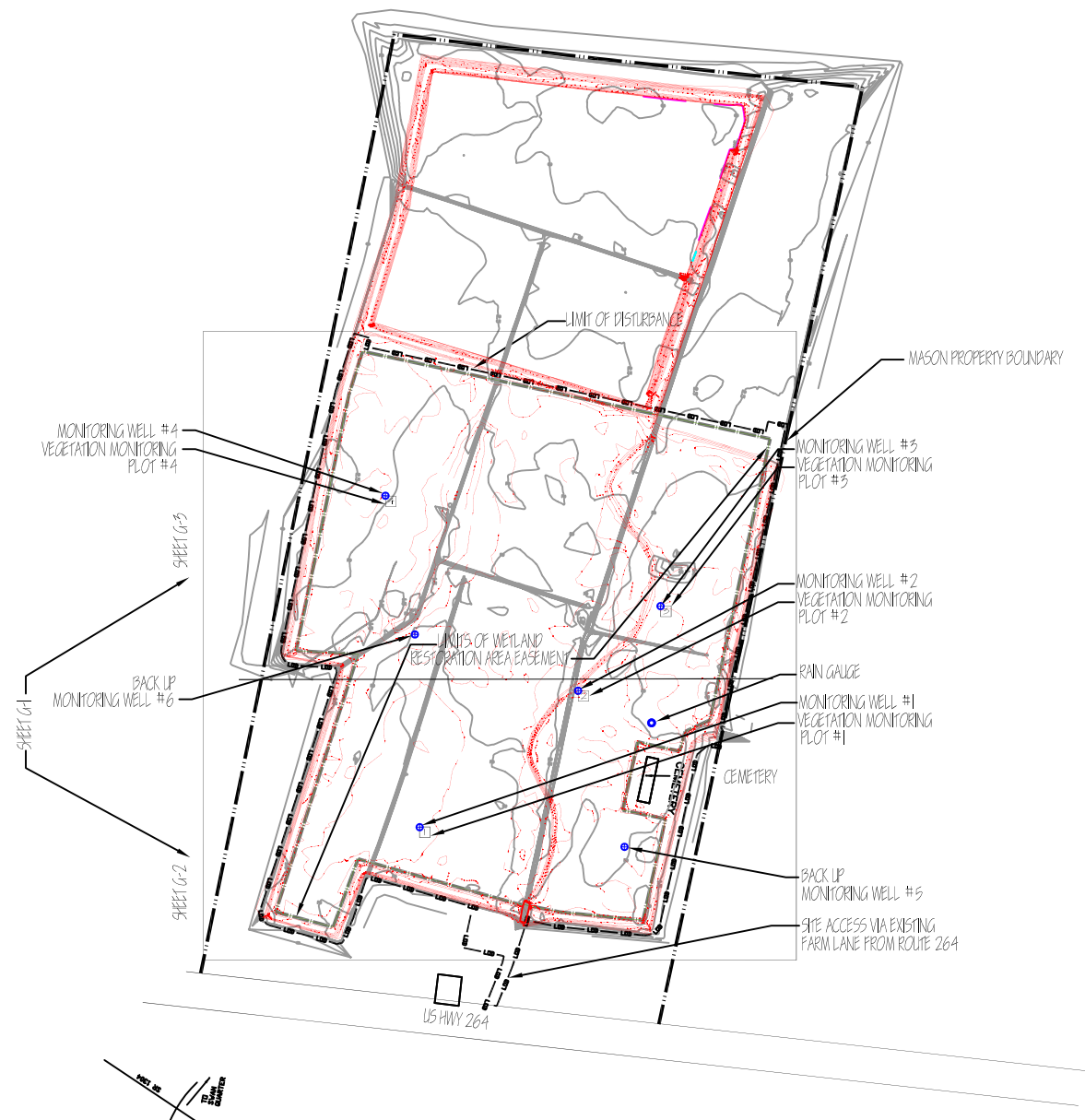
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DATE:	DATE:
BY: JRM	BY: JRM
CHECKED BY: JRM	CHECKED BY: JRM

MASON PROPERTY  
RIVERINE WETLAND MITIGATION AS-BUILT 16.0 ACRES  
NON-RIVERINE WETLAND MITIGATION AS-BUILT 20.0 ACRES  
HYDE COUNTY, NORTH CAROLINA  
EEP CONTRACT #: F06001



PLAN PREPARED BY:  
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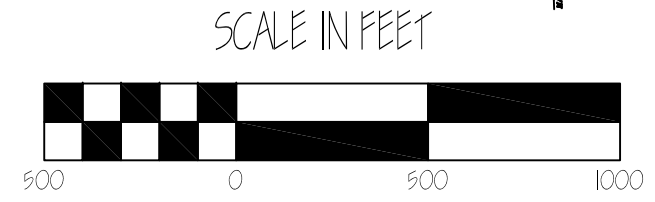


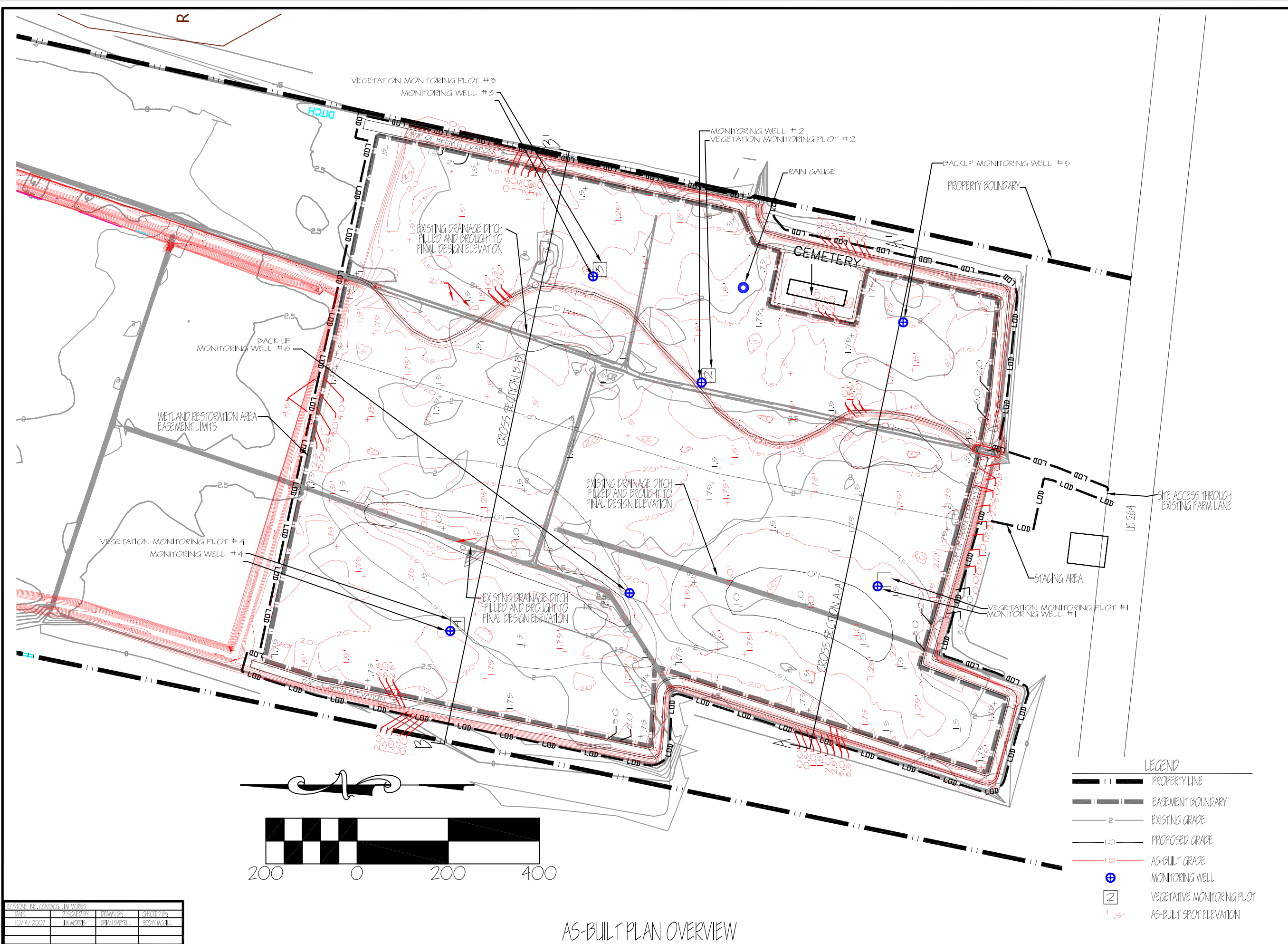
AS-BUILT CONDITIONS

AS-BUILT NOTES

1. This as-built wetland restoration plan has been prepared for the North Carolina Ecosystem Enhancement Program for the purpose of documenting the restoration of approximately 16.0 acres riverine wetlands and 20.0 acres of non-riverine wetlands on the Mason property, located within the Tar-Pamlico River Basin.
2. On site grading completed between March 14, 2007 and May 14, 2007.
3. Installation of woody plant material was completed May 16, 2007.
4. As-built topographic survey completed in August 2007.

ECOTONE INC. CONTACT: JRM	DATE: 10/4/07	DESIGNED BY: JRM	DRAWN BY: JRM	CHECKED BY: JRM





AS-BUILT PLAN OVERVIEW

ECOTONE INC. CONTACT: IN WORKS	DATE: 10/4/2007	DESIGNED BY: IN WORKS	DRAWN BY: BEVAL SHEPHERD	CHECKED BY: SCOTT MCULL
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AS-BUILT GRADING PLAN OVERVIEW	
OCTOBER 4, 2007	
DESIGNED BY:	IN WORKS
DRAWN BY:	BEVAL SHEPHERD
CHECKED BY:	SCOTT MCULL

MASON PROPERTY  
 RIVERINE WETLAND MITIGATION AS-BUILT  
 16.0 ACRES  
 NON-RIVERINE WETLAND MITIGATION AS-BUILT  
 20.0 ACRES  
 HAYES COUNTY, NORTH CAROLINA  
 EEP CONTRACT #: P06001



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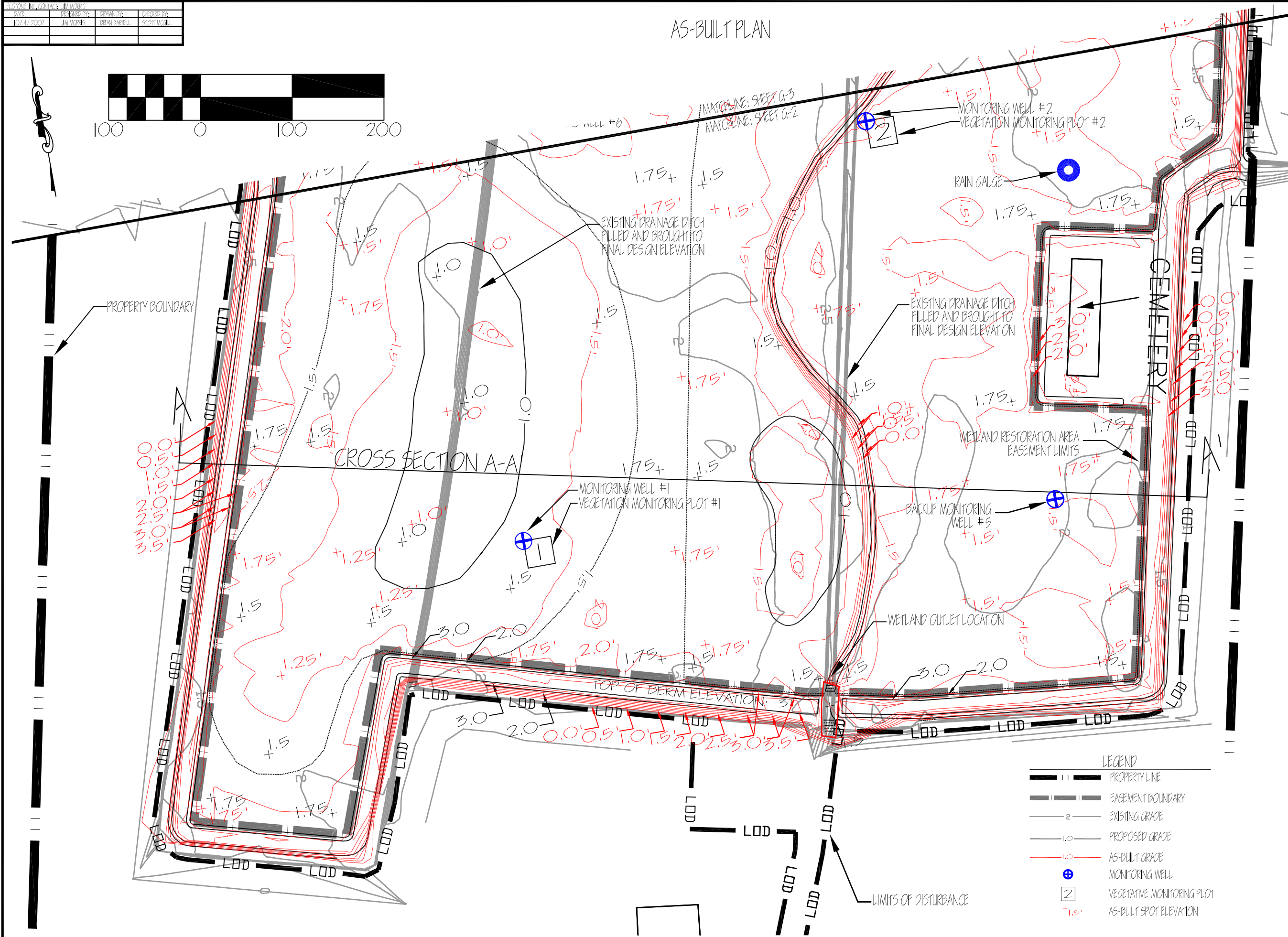
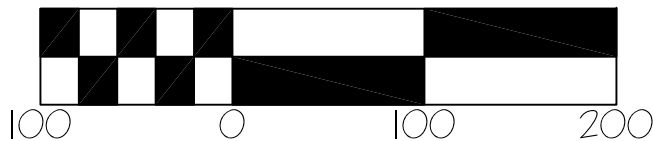
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LEGEND

	PROPERTY LINE
	EASEMENT BOUNDARY
	EXISTING GRADE
	PROPOSED GRADE
	AS-BUILT GRADE
	MONITORING WELL
	VEGETATIVE MONITORING PLOT
	AS-BUILT SPOT ELEVATION

ECOTONE, INC. CONTACT: JIM MCCREFF	DESIGNED BY: JIM MCCREFF	DRAWN BY: BRIAN BARRELL	CHECKED BY: SCOTT MCCOLL
DATE: 10/4/2007			

# AS-BUILT PLAN



LEGEND

	PROPERTY LINE
	EASEMENT BOUNDARY
	EXISTING GRADE
	PROPOSED GRADE
	AS-BUILT GRADE
	MONITORING WELL
	VEGETATIVE MONITORING PLOT
	AS-BUILT SPOT ELEVATION

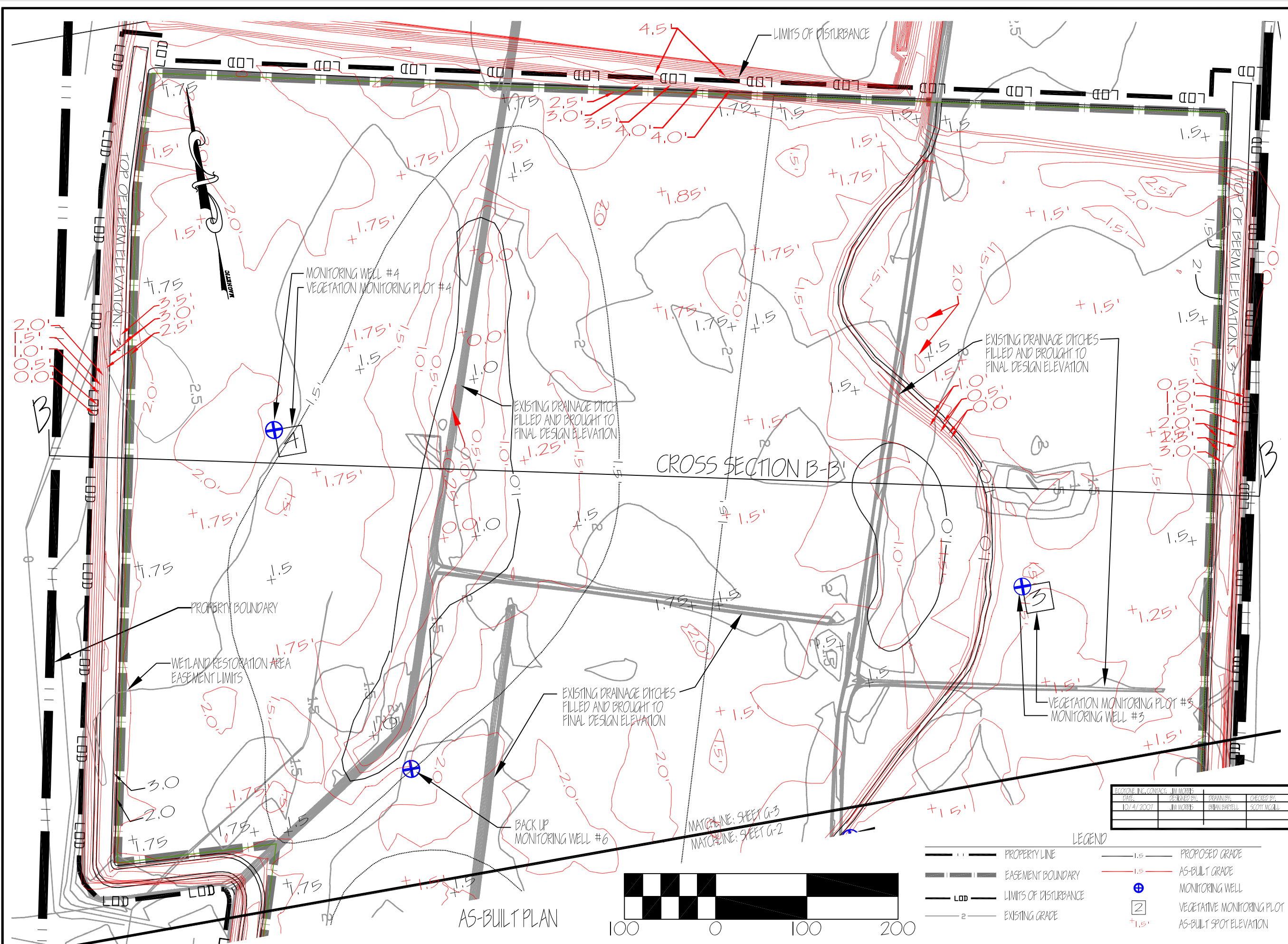
AS-BUILT GRADING PLAN  
OCTOBER 4, 2007

MASON PROPERTY  
RIVERNE WETLAND MITIGATION AS-BUILT  
16.0 ACRES  
NON-RIVERNE WETLAND MITIGATION AS-BUILT  
20.0 ACRES  
HAYE COUNTY, NORTH CAROLINA  
EEP CONTRACT #: P06001

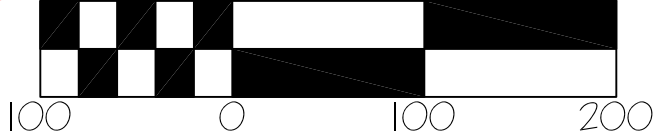
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SHEET G-2



AS-BUILT PLAN



LEGEND

	PROPERTY LINE		1.5' PROPOSED GRADE
	EASEMENT BOUNDARY		1.5' AS-BUILT GRADE
	LIMITS OF DISTURBANCE		MONITORING WELL
	EXISTING GRADE		VEGETATIVE MONITORING PLOT
			AS-BUILT SPOT ELEVATION

ECOTONE, INC. CONTACT: IN NOBE:	DATE:	DESIGNED BY:	TRANSMIT:	CHECKED BY:
	10/4/2007	IN NOBE:	BRIAN BARELL	SCOTT NICOLL

AS-BUILT GRADING PLAN  
OCTOBER 4, 2007

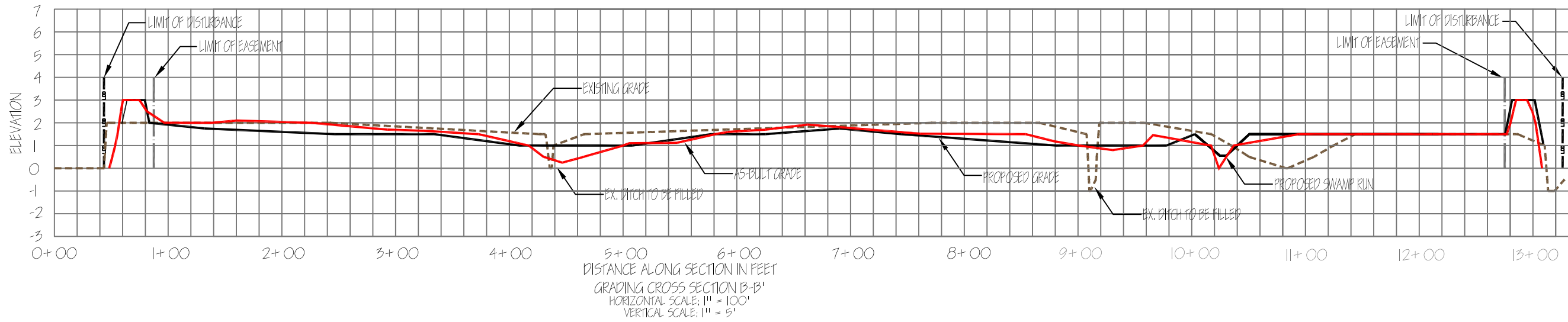
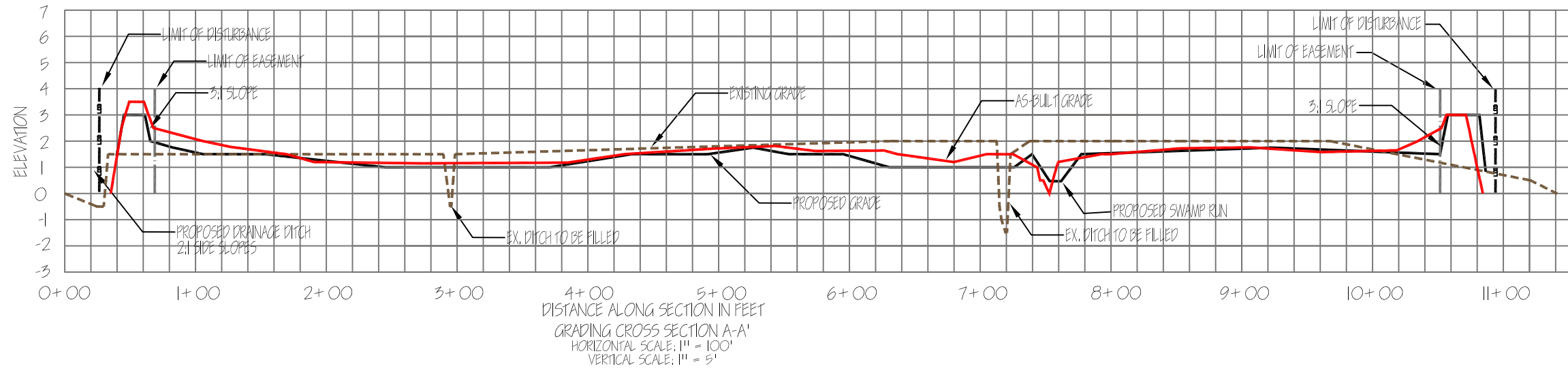
MASON PROPERTY  
RIVERINE WETLAND MITIGATION AS-BUILT  
16.0 ACRES  
NON-RIVERINE WETLAND MITIGATION AS-BUILT  
20.0 ACRES  
HAYE COUNTY, NORTH CAROLINA  
EFP CONTRACT #: F066001

Ecosystem Enhancement  
E.P. COLEMAN

PLAN PREPARED BY:  
**ECOTONE, INC.**  
ENVIRONMENTAL CONSULTING, PERMITTING & DESIGN,  
FOREST & WETLAND CREATION & DESIGN,  
STREAM RESTORATION.  
P.O. Box 5 • 1204 BALDWIN MILL ROAD • JARRETTSVILLE, MARYLAND 21084  
(410) 692-7500 • FAX (410) 692-7503 • EMAIL INFO@ECOTONE.COM

ALBERMARLE RESTORATIONS, LLC  
WETLAND RESTORATION,  
STREAM RESTORATION,  
& WILDLIFE HABITAT CREATION  
404 COURT STREET • GATESVILLE, NC 27938  
(850) 333-0248 • FAX (850) 357-4892

SHEET G-3



LEGEND

- PRE-EXISTING GRADE
- PROPOSED GRADE
- AS-BUILT GRADE

ECOTONE INC. CONTACT INFORMATION			
DATE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:
10/4/2007	JM MORRIS	BENJAMIN BELL	SCOTT MCALL

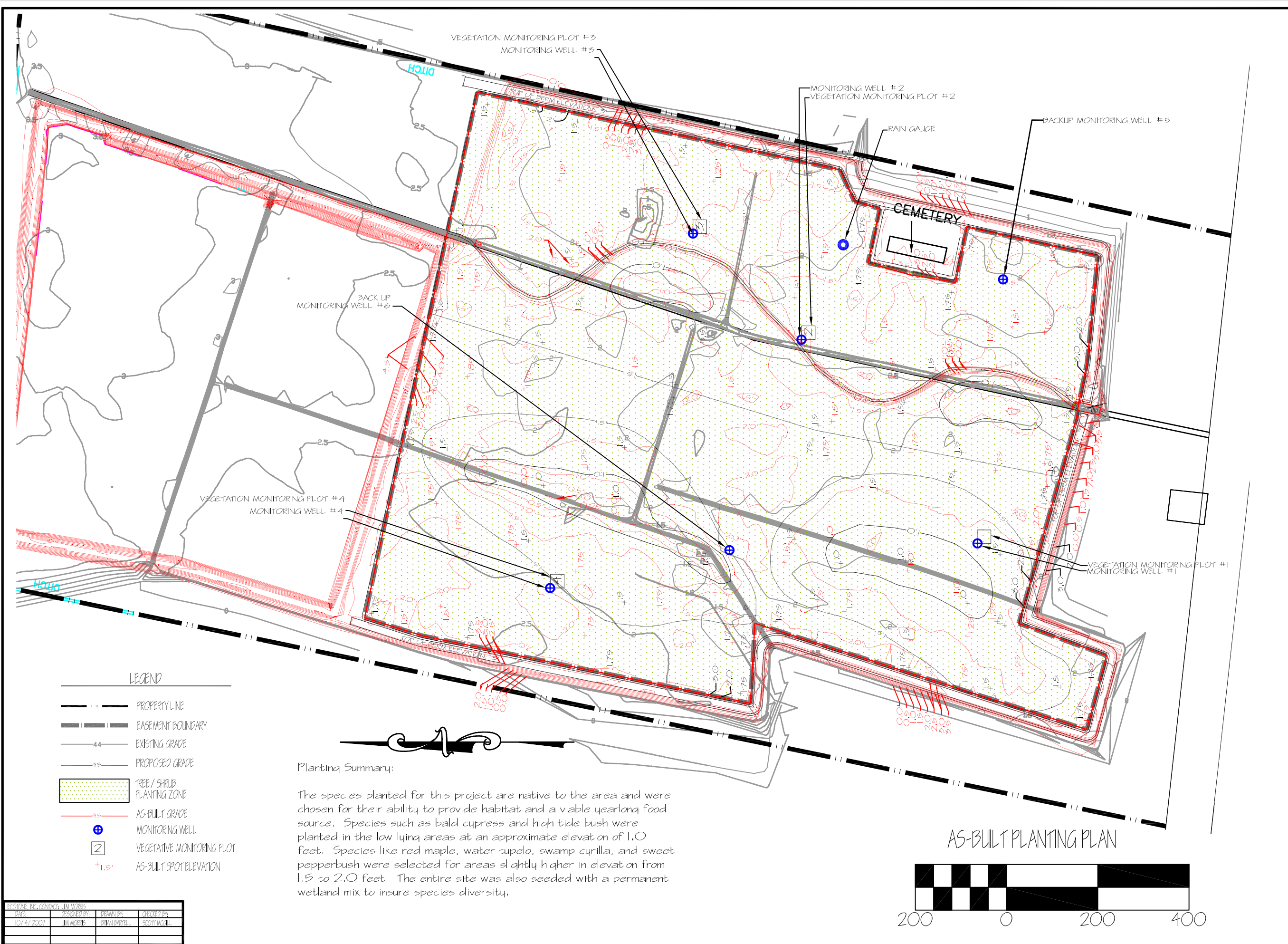
AS-BUILT SECTIONS	
OCTOBER 4, 2007	
DATE:	BY:
10/17/07	JM MORRIS

MASON PROPERTY  
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 16.0 ACRES  
 NON-RIVERINE WETLAND MITIGATION AS-BUILT  
 20.0 ACRES  
 HAYES COUNTY, NORTH CAROLINA  
 EEP CONTRACT #: 606001



PLAN PREPARED BY:  
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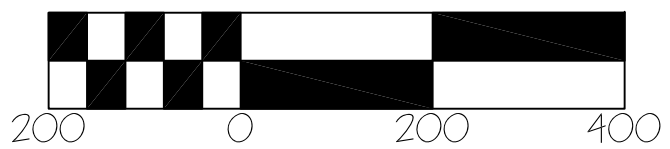
LEGEND

- PROPERTY LINE
- EASEMENT BOUNDARY
- EXISTING GRADE
- PROPOSED GRADE
- TREE / SHRUB PLANTING ZONE
- AS-BUILT GRADE
- MONITORING WELL
- VEGETATIVE MONITORING PLOT
- AS-BUILT SPOT ELEVATION

Planting Summary:

The species planted for this project are native to the area and were chosen for their ability to provide habitat and a viable yearlong food source. Species such as bald cypress and high tide bush were planted in the low lying areas at an approximate elevation of 1.0 feet. Species like red maple, water tupelo, swamp cypress, and sweet pepperbush were selected for areas slightly higher in elevation from 1.5 to 2.0 feet. The entire site was also seeded with a permanent wetland mix to insure species diversity.

AS-BUILT PLANTING PLAN



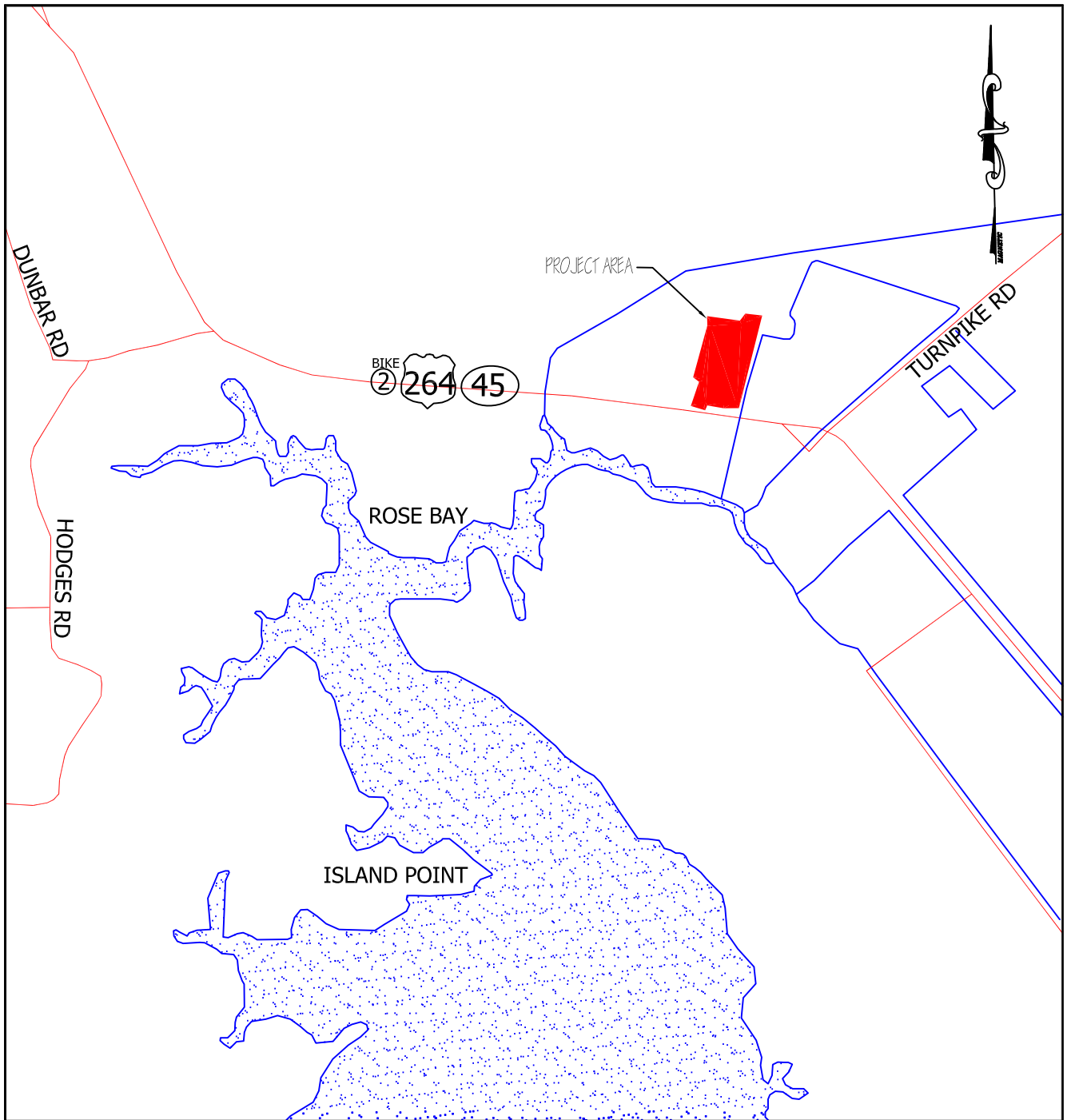
ECOTONE INC. CONTACT: IN 11/2006			
DATE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:
10/4/2007	IN 11/2006	BEHAL/SPEL	SCOTT/MCL

<p>PLANTING PLAN OCTOBER 4, 2007</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="font-size: 8px;">DATE:</td> <td style="font-size: 8px;">DESIGNED BY:</td> <td style="font-size: 8px;">DRAWN BY:</td> <td style="font-size: 8px;">CHECKED BY:</td> </tr> <tr> <td style="font-size: 8px;">10/4/2007</td> <td style="font-size: 8px;">IN 11/2006</td> <td style="font-size: 8px;">BEHAL/SPEL</td> <td style="font-size: 8px;">SCOTT/MCL</td> </tr> </table>	DATE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:	10/4/2007	IN 11/2006	BEHAL/SPEL	SCOTT/MCL
DATE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:						
10/4/2007	IN 11/2006	BEHAL/SPEL	SCOTT/MCL						
<p>MASON PROPERTY RIVERINE WETLAND MITIGATION AS-BUILT 16.0 ACRES NON-RIVERINE WETLAND MITIGATION AS-BUILT 20.0 ACRES HAYE COUNTY, NORTH CAROLINA EFP CONTRACT #: P06001</p>									
<p>PLAN PREPARED BY: <b>ECOTONE, INC.</b> ENVIRONMENTAL CONSULTING, PERMITTING &amp; DESIGN, FOREST &amp; WETLAND CREATION &amp; STREAM RESTORATION. P.O. BOX 5 • 1204 BALDWIN MILL ROAD • JARRITTSVILLE, MARYLAND 21084 (410) 692-7500 • FAX (410) 692-7503 • EMAIL INFO@ECOTONEINC.COM</p>									
<p><b>ALBERMARLE RESTORATIONS, LLC</b> WETLAND RESTORATION, STREAM RESTORATION, &amp; WILDLIFE HABITAT CREATION 404 COURT STREET • GATESVILLE, NC 27938 (850) 333-0248 • FAX (850) 357-4892</p>									
<p>SHEET M-1</p>									

## **Appendix C**

### **-Vicinity Map-**





# VICINITY MAP



Scale: 1" = 4000'

10/2007

Drawn By: CEH

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**ECOTONE, INC.**  
 ENVIRONMENTAL CONSULTING, PERMITTING & DESIGN,  
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 HYDE COUNTY, NORTH CAROLINA  
 EEP CONTRACT # 106001