

Dixie Plantation Development – Phase One

October 2-3, 2006



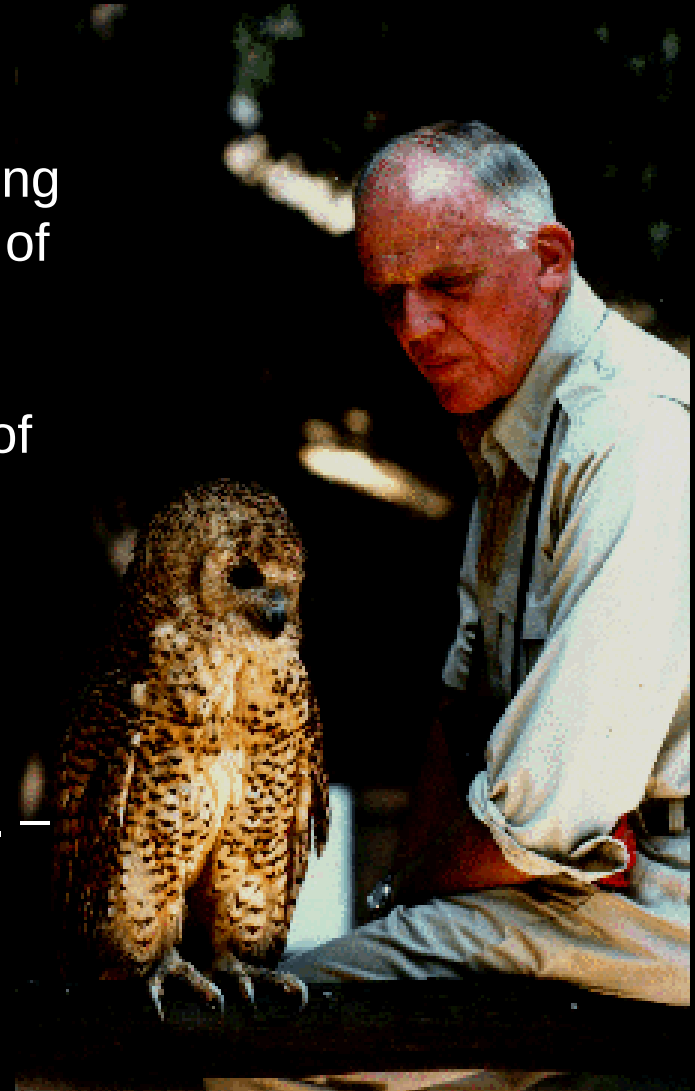
DIXIE PLANTATION DEVELOPMENT – PHASE ONE



John Henry Dick

I have spent much of my life seeking other Edens--the wilderness, the wonders of nature, the peaceable kingdom. Perhaps I found it in the magnificence of Antarctica or looking into the amber eyes of a lion. Maybe it was hearing the evening chorus of thrushes in northern forests. Perhaps it exists beyond the pollutions of man, or lies only in his dreams. As long as I live I will pursue it--for to me here is where God reaffirms His presence. —

John Henry Dick
Other Edens



DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

AYERS
SAINT
GROSS
ARCHITECTS • PLANNERS

Biohabitats
Incorporated

Goals and Objectives

1. Be a model for natural resource management both locally and nationally.
2. Be a good neighbor; show others how “development” can be done well.
3. Be a good steward.
4. Balance cost with stewardship.
5. Enhance what is unique about the College of Charleston and capitalize on it academically.
6. Fit the buildings to the property; they should be part of the habitat. Create a stand out field station.
7. Change the paradigm of our lifestyle and make us more accountable environmentally.
8. Model the long term costs of decision making. (LTER – Long Term Environmental Research.)
9. Create opportunities for grant applications through excellence in design.
10. Be practical and support the academic programs successfully.
11. Be a fun place where every bend in the path offers something interesting and entertaining.
12. Out top deliverable in five years is to have academic programs.
13. Achieve a Platinum equivalent LEED Rating.
14. Conceal power lines.



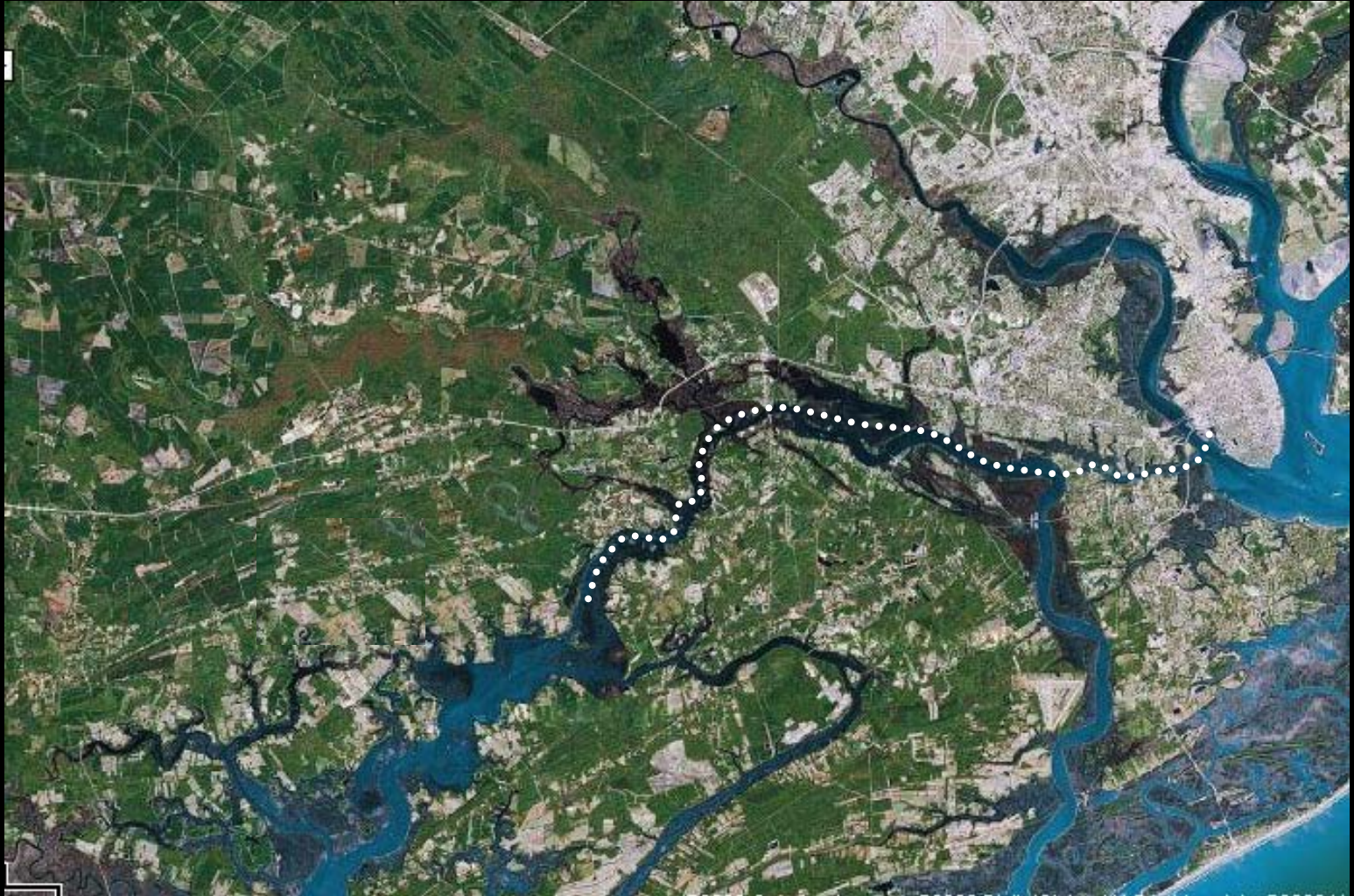
DIXIE PLANTATION DEVELOPMENT – PHASE ONE



Regional Area

Boat Trip

45 Minutes



DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

AYERS
SAINT
GROSS
ARCHITECTS • PLANNERS

 Biohabitats
Incorporated

Dixie from the Water



DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL a Member of
THE GEL GROUP, INC.

**AYERS
SAINT
GROSS**
ARCHITECTS • PLANNERS



Biohabitats
Incorporated

Open Land Trust Easement

Plantation Tract

Subject to the provisions of paragraphs 6 and 8, the rights within the Plantation tract:

To repair, remodel and expand existing buildings and structures, including docks

To replace existing or permitted buildings or docks destroyed after the effective date of this easement

To construct barns and other buildings as are customarily appurtenant to plantation residences in the South Carolina Lowcountry

To construct no more than two additional single-family residences provided such residences are only one-story in height and contain no more than 3,500 square feet of heated space

To construct one one-story education conference center having a footprint which contains no more than 3,500 square feet. The location for any new construction within the Plantation Tract shall be carefully selected so that any new structure will not detract from the beauty of the avenue of live oaks of the present main house.



Open Land Trust Easement

Education Tract

Notwithstanding any provision or implication to the contrary, any activity that is permitted within the Plantation Tract shall be permitted within the Education Tract and until such time as the Education Tract is used for educational purposes, the Education Tract shall have the same restrictions as the Plantation Tract.



DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

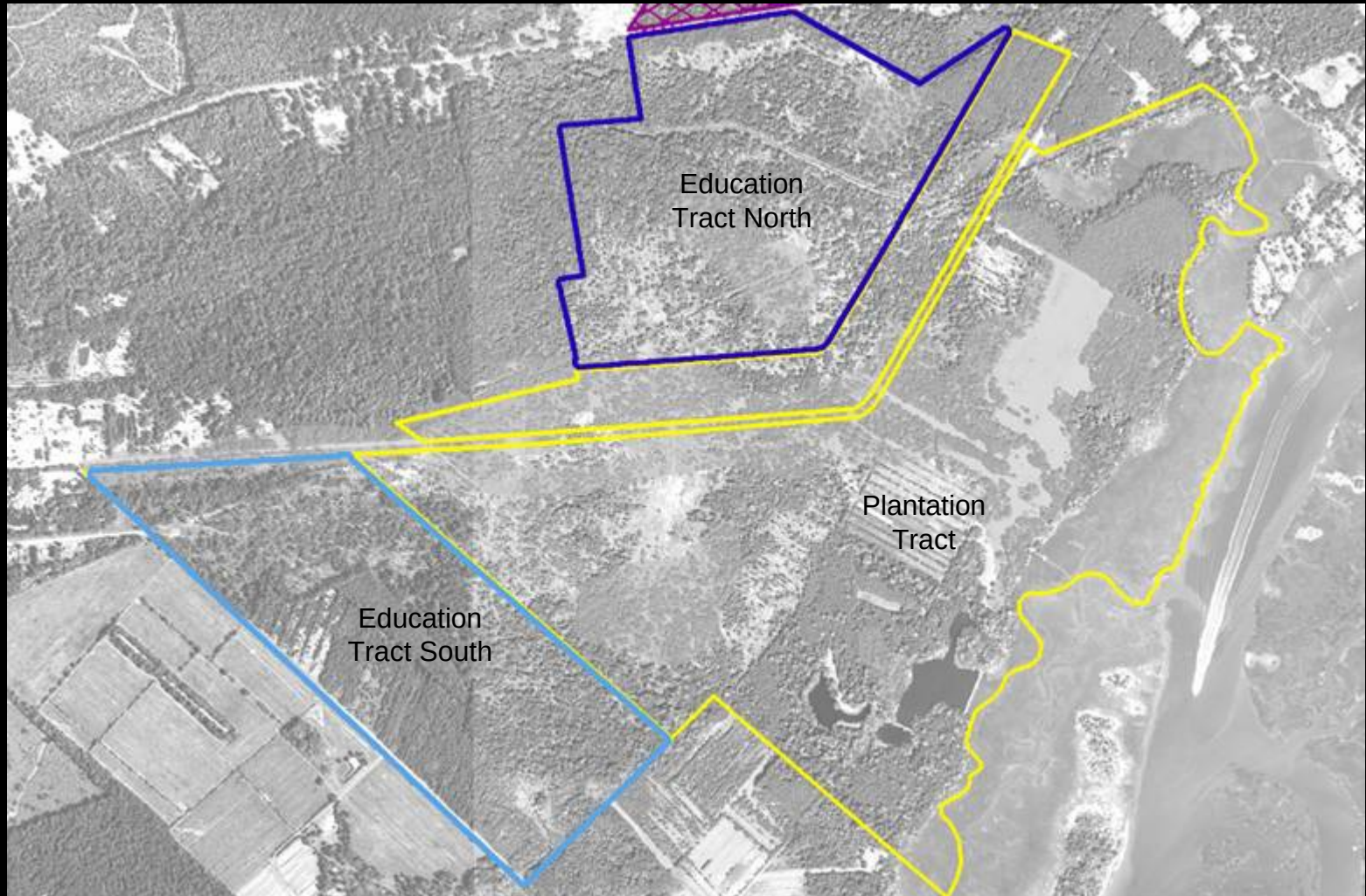
AYERS
SAINT
GROSS
ARCHITECTS • PLANNERS

Biohabitats
Incorporated

Existing Conditions

Plantation
Tract

3,500 gsf
3,500 gsf
3,500 gsf
10,500 gsf



Education
Tract North

Plantation
Tract

Education
Tract South



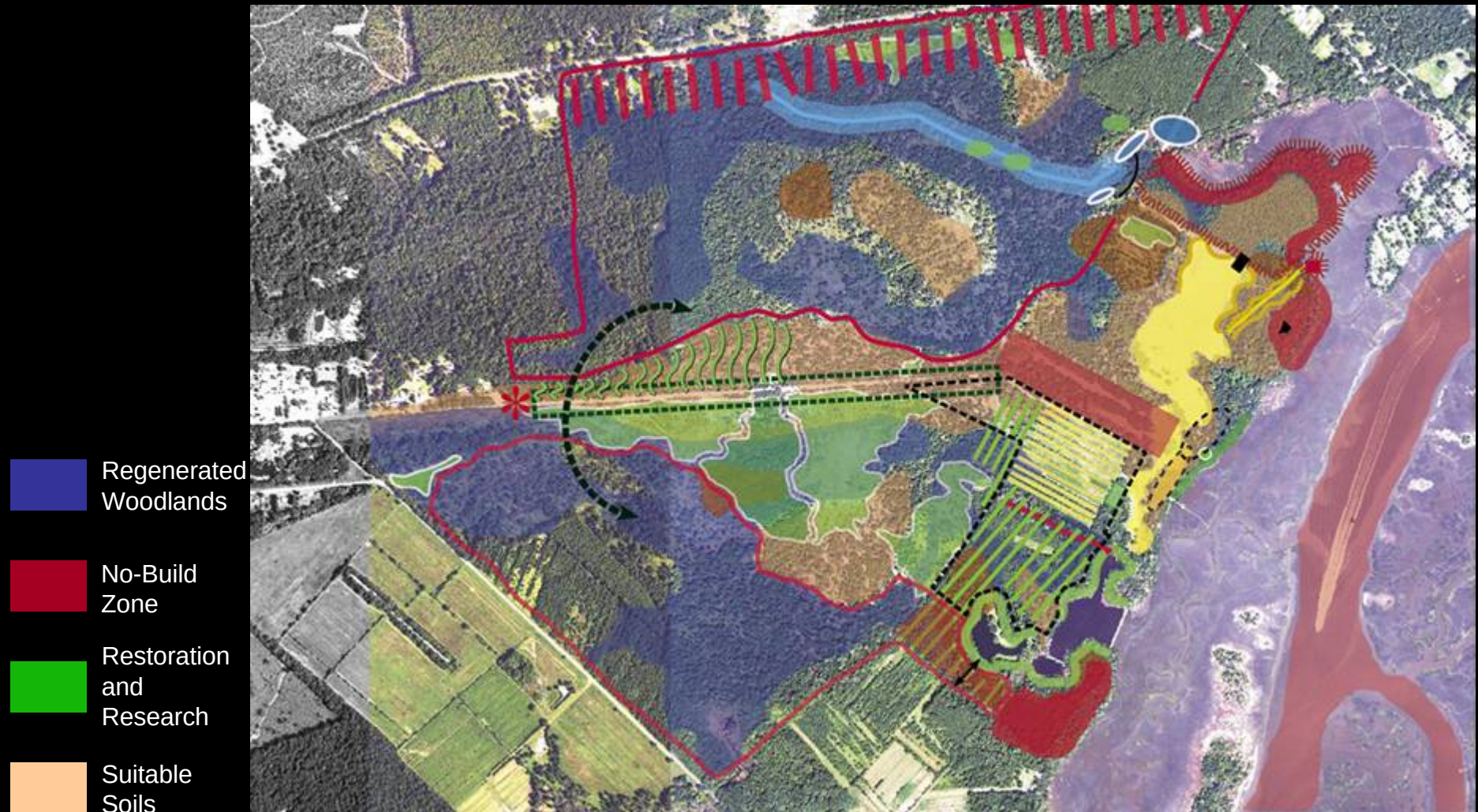
DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

AYERS
SAINT
GROSS
ARCHITECTS • PLANNERS

Biohabitats
Incorporated

Ecological Analysis and Opportunities- Biohabitats Report



DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

AYERS
SAINT
GROSS
ARCHITECTS • PLANNERS

 Biohabitats
Incorporated

Ecological Analysis and Opportunities- Biohabitats Report



DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

AYERS
SAINT
GROSS
ARCHITECTS • PLANNERS

 Biohabitats
Incorporated

Ecological Analysis and Opportunities- Biohabitats Report



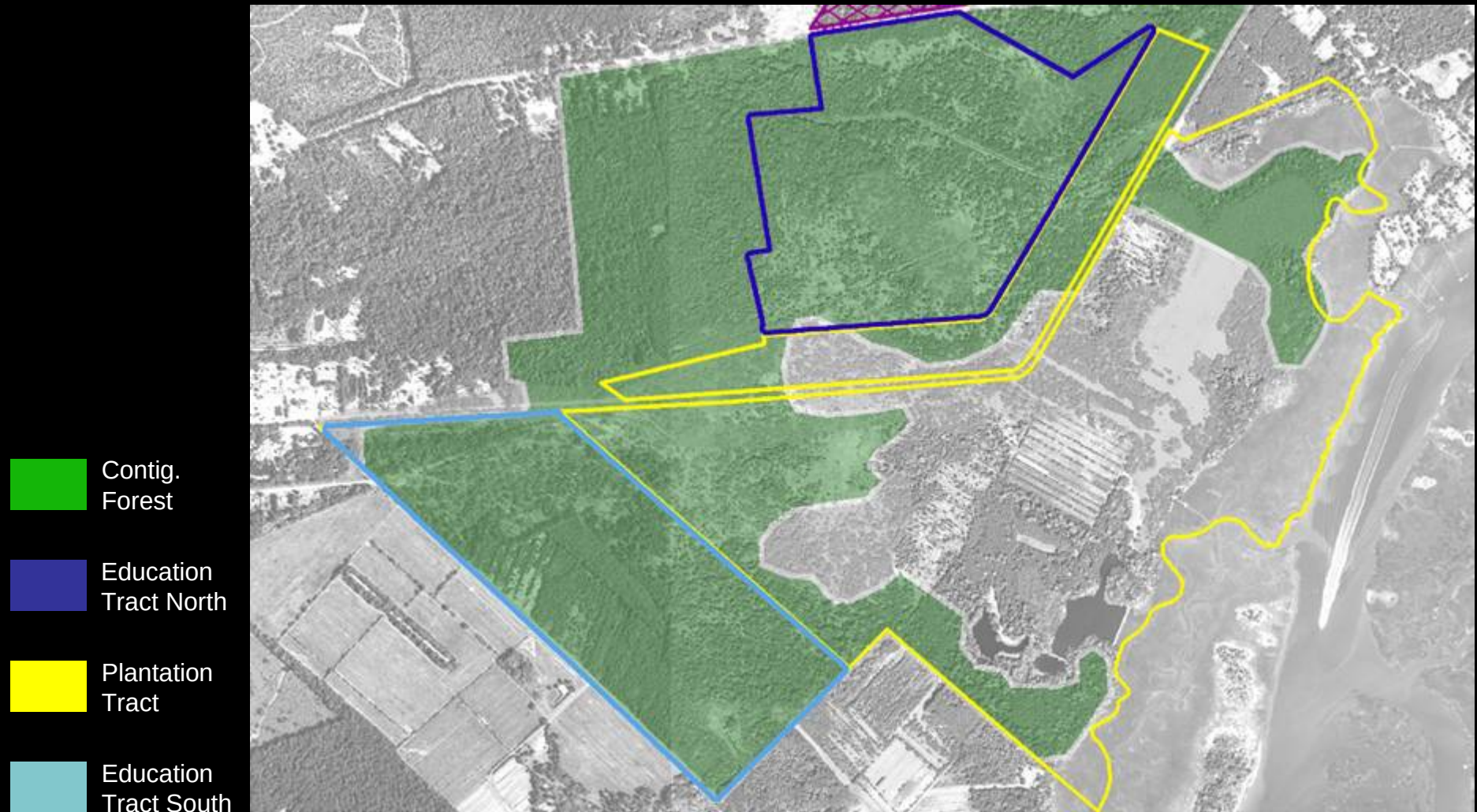
DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

AYERS
SAINT
GROSS
ARCHITECTS • PLANNERS

 Biohabitats
incorporated

Ecological Analysis and Opportunities- Biohabitats Report



DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

AYERS
SAINT
GROSS
ARCHITECTS • PLANNERS

 Biohabitats
Incorporated

Ecological Analysis and Opportunities- Biohabitats Report

Phase 1

1,500 gsf
1,500 gsf
4,500 gsf
7,500 gsf

-  Contig. Forest
-  Education Tract North
-  Plantation Tract
-  Education Tract South



DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

**AYERS
SAINT
GROSS**
ARCHITECTS • PLANNERS

 **Biohabitats**
Incorporated

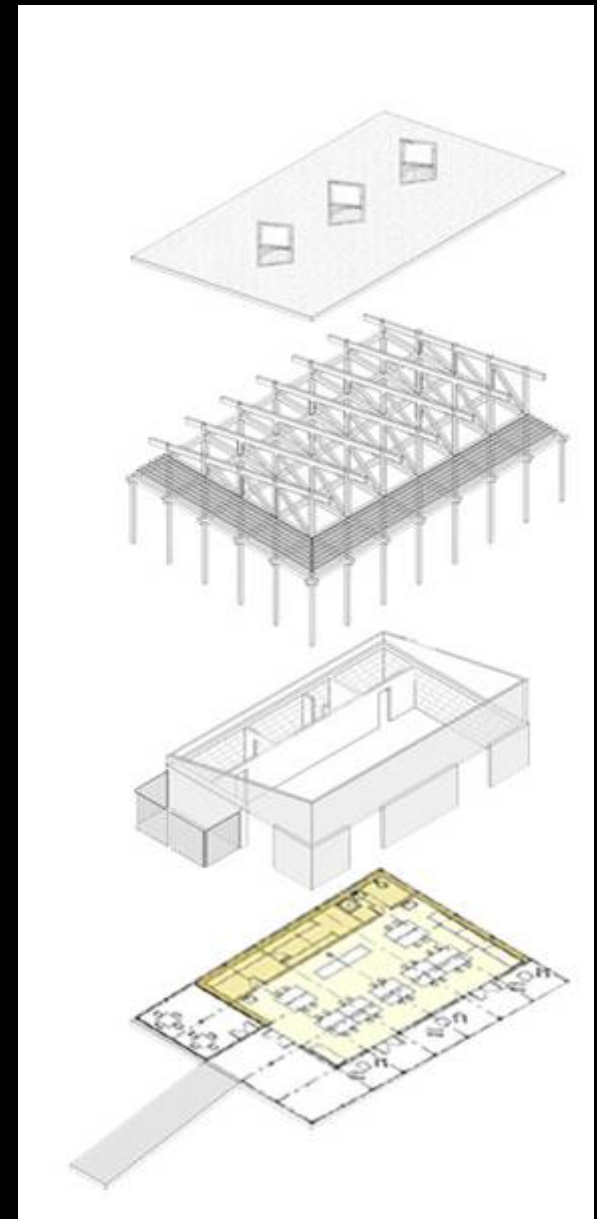
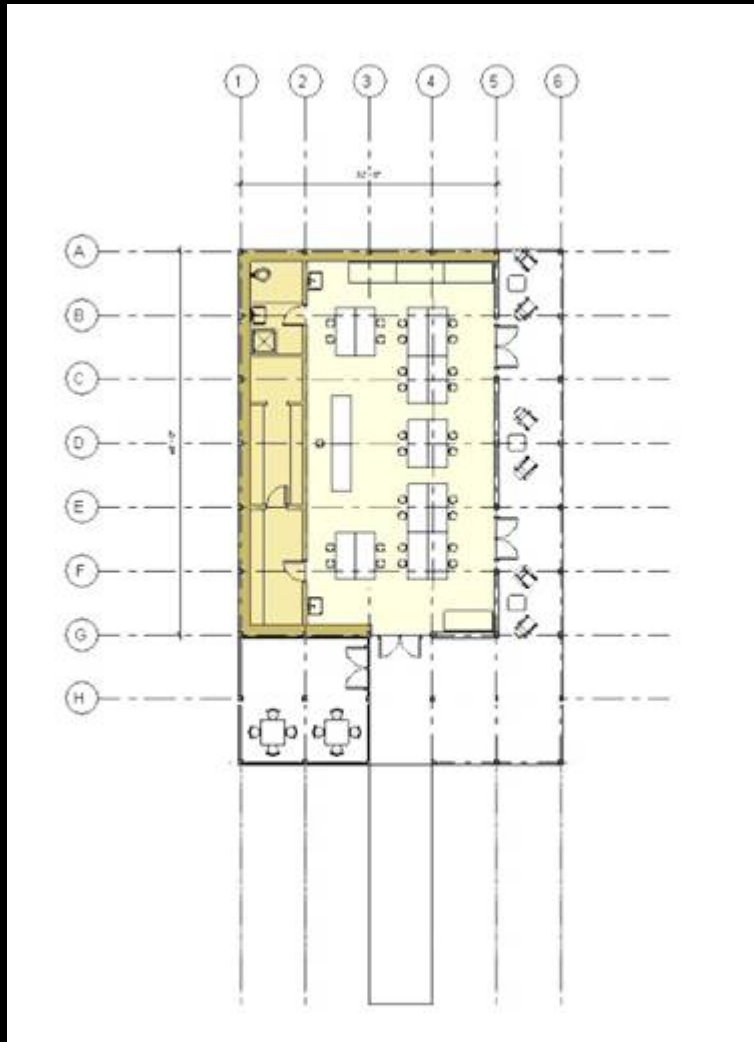
LEED: Summary of Prerequisites and Credits

Sustainable Sites 14 Possible Points	PTS.	\$	Y	N	M
Prerequisite 1: Erosion and Sedimentation Control Required					
Credit 1: Site Selection	1			1	
Credit 2: Urban Redevelopment	1			1	
Credit 3: Brownfield Redevelopment	1			1	
Credit 4: Alternative Transportation	4	\$	2	2	
Credit 5: Reduced Site Disturbance	2		1	1	
Credit 6: Stormwater Management	2		1	1	
Credit 7: Reduced Heat Island Effect	2	\$	2		
Credit 8: Light Pollution Reduction	1		1		
Water Efficiency 5 Possible Points					
Credit 1: Water Efficient Landscaping	2		2		
Credit 2: Innovative Wastewater Technologies	1	\$	1		
Credit 3: Water Use Reduction	2		2		
Energy and Atmosphere 17 Possible Points					
Prerequisite 1: Fundamental Building Systems Commissioning Required					
Prerequisite 2: Minimum Energy Performance Required					
Prerequisite 3: CFC Reduction in HVAC&R Equipment Required					
Credit 1: Optimize Energy Performance	10		10		
Credit 2: Renewable Energy	3	\$	3		
Credit 3: Additional Commissioning	1				1
Credit 4: Ozone Protection	1		1		
Credit 5: Measurement and Verification	1			1	
Credit 6: Green Power	1	\$	1		
Materials and Resources 13 Possible Points					
Prerequisite: Storage and Collection of Recyclables Required					
Credit 1: Building Reuse	3			3	
Credit 2: Construction Waste Management	2	\$	2		
Credit 3: Resource Reuse	2		2		
Credit 4: Recycled Content	2		1	1	
Credit 5: Local/Regional Materials	2		2		
Credit 6: Rapidly Renewable Materials	1				1
Credit 7: Certified Wood	1		1		
Indoor Environmental Quality 15 Possible Points					
Prerequisite 1: Minimum IAQ Performance Required					
Prerequisite 2: Environmental Tobacco Smoke (ETS) Control Required					
Credit 1: Carbon Dioxide (CO2) Monitoring	1	\$	1		
Credit 2: Ventilation Efficiency	1		1		
Credit 3: Construction IAQ Management Plan	2		2		
Credit 4: Low-Emitting Materials	4		4		
Credit 5: Indoor Chemical and Pollutant Source Control I	1		1		
Credit 6: Controllability of Systems	2		1		1
Credit 7: Thermal Comfort	2				2
Credit 8: Daylighting and Views	2		2		
Innovation and Accredited Professional Points 5 Possible Points					
Credit 1: Innovations in Design	4		4		
Credit 2: LEED Existing Building Accredited Professional	1		1		

Certified: 26-32 Pts
Silver: 33-38 Pts
Gold: 39-51 Pts
Platinum: 52-69 Pts

TOTAL POINTS
69
52
14
5

Building Concepts



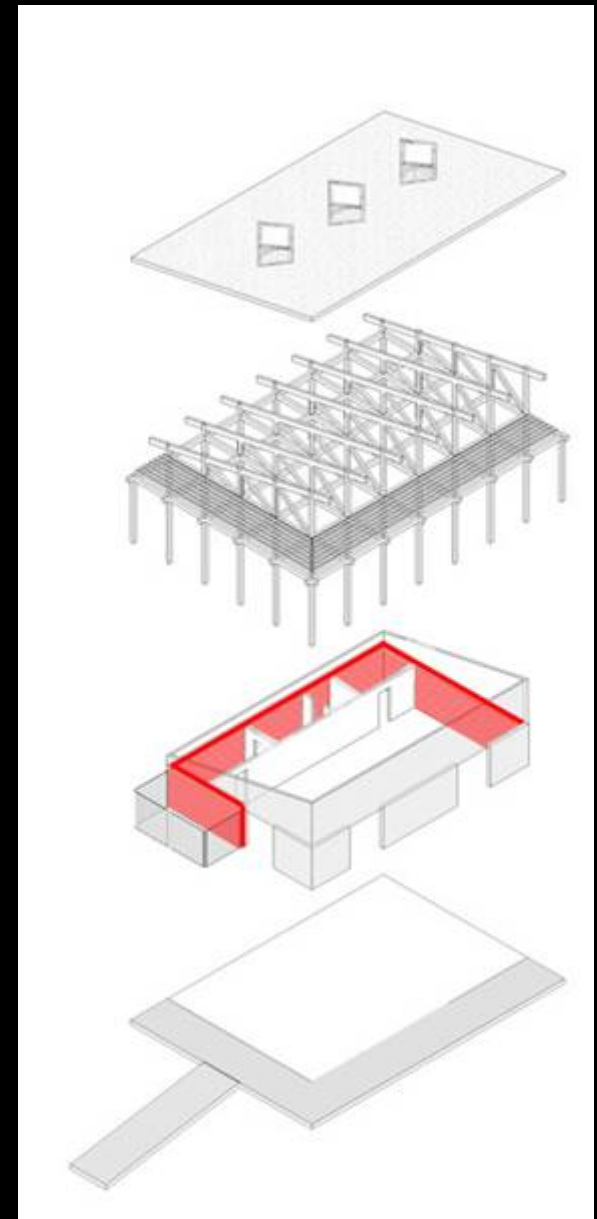
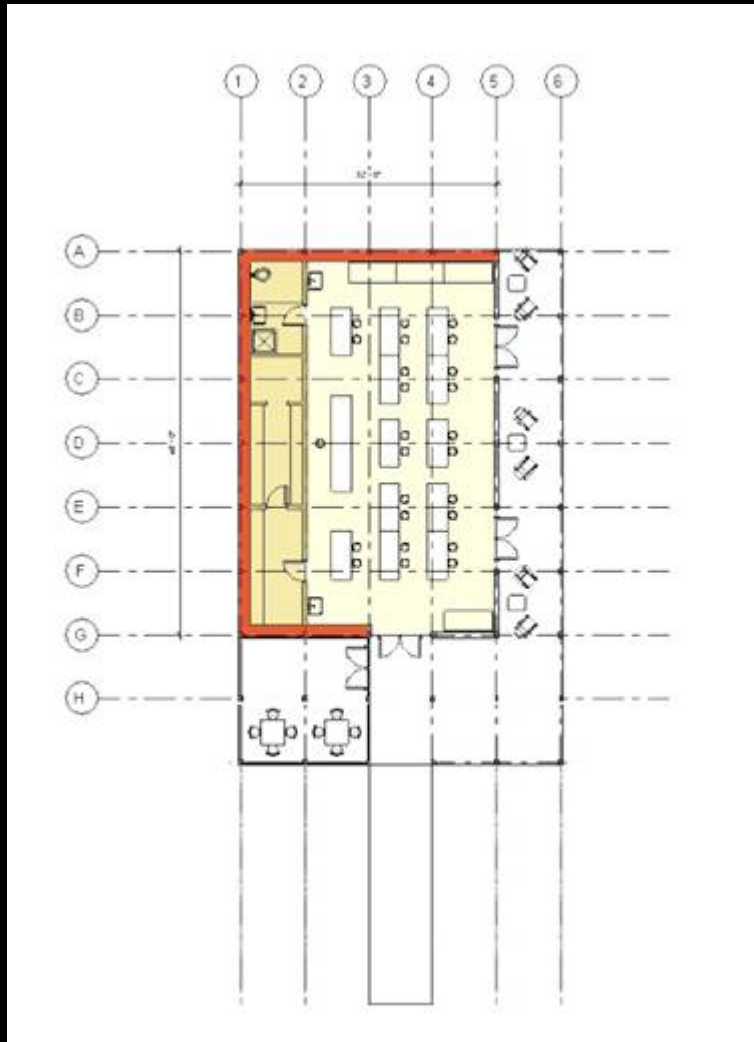
DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

AYERS
SAINT
GROSS
ARCHITECTS • PLANNERS

Biohabitats
Incorporated

Building Concepts



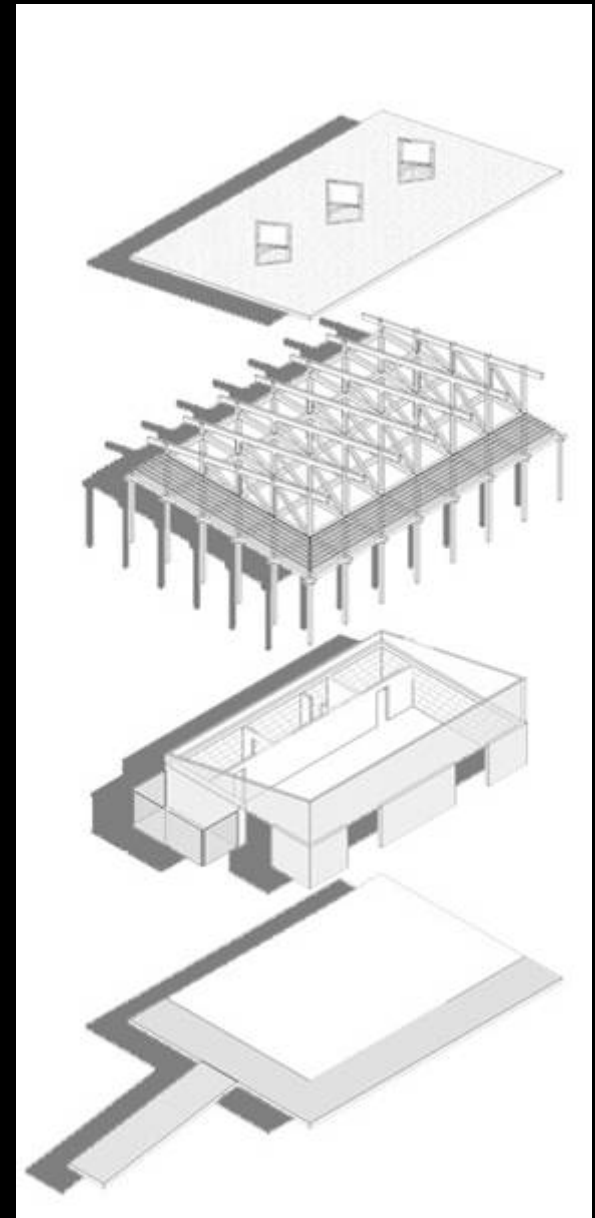
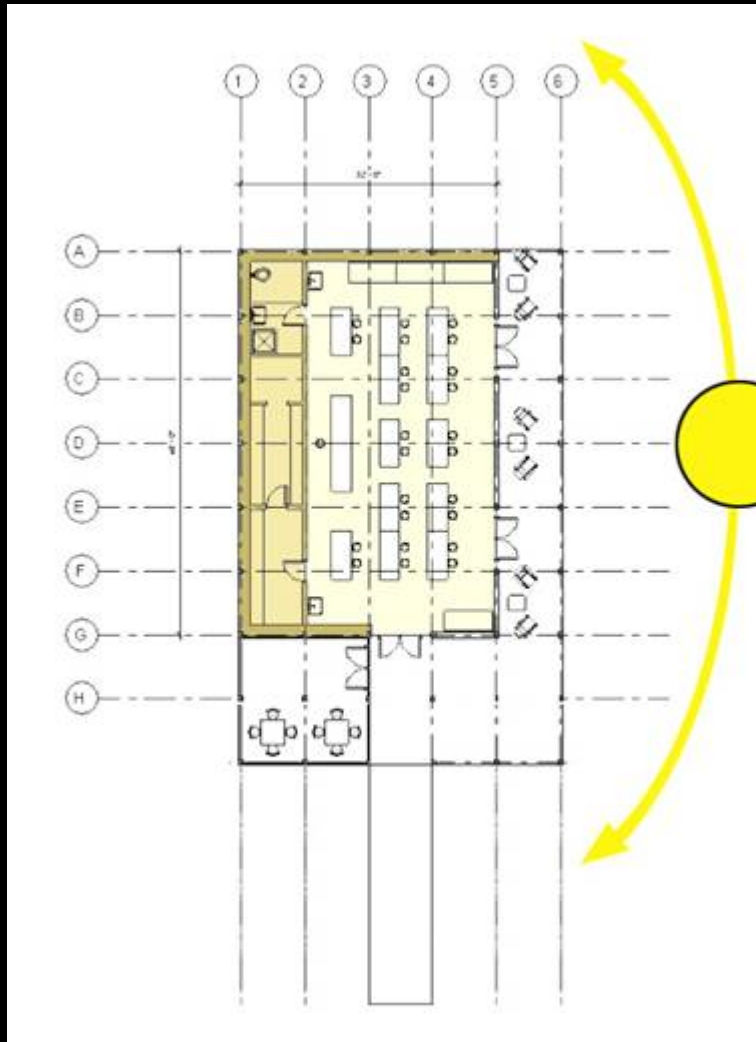
DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

AYERS
SAINT
GROSS
ARCHITECTS + PLANNERS

Biohabitats
Incorporated

Building Concepts



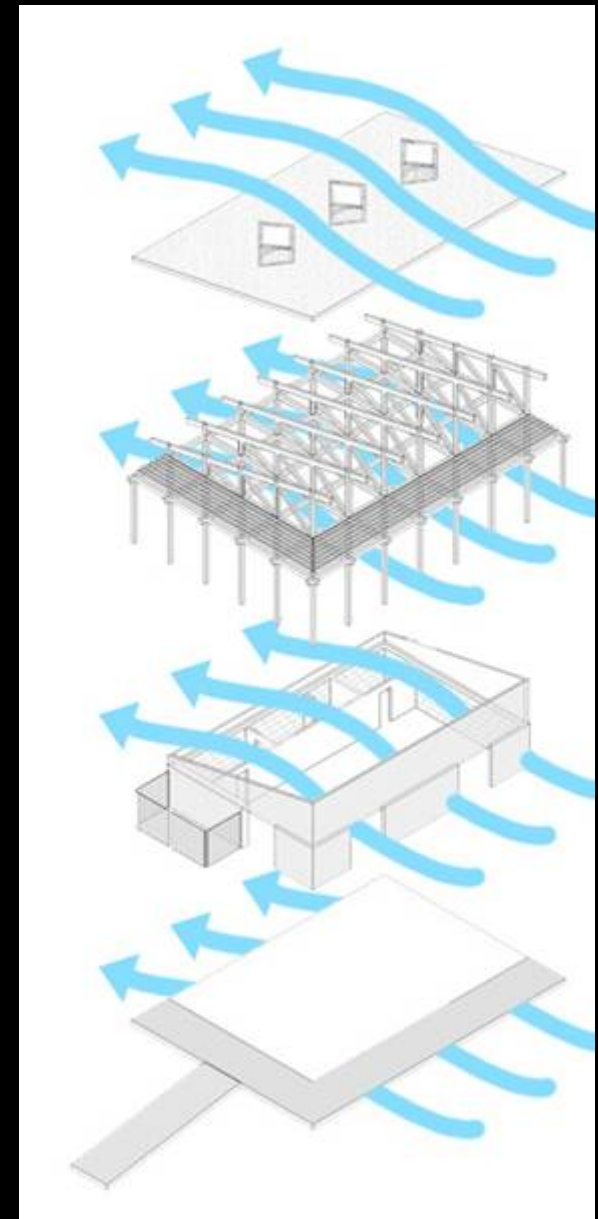
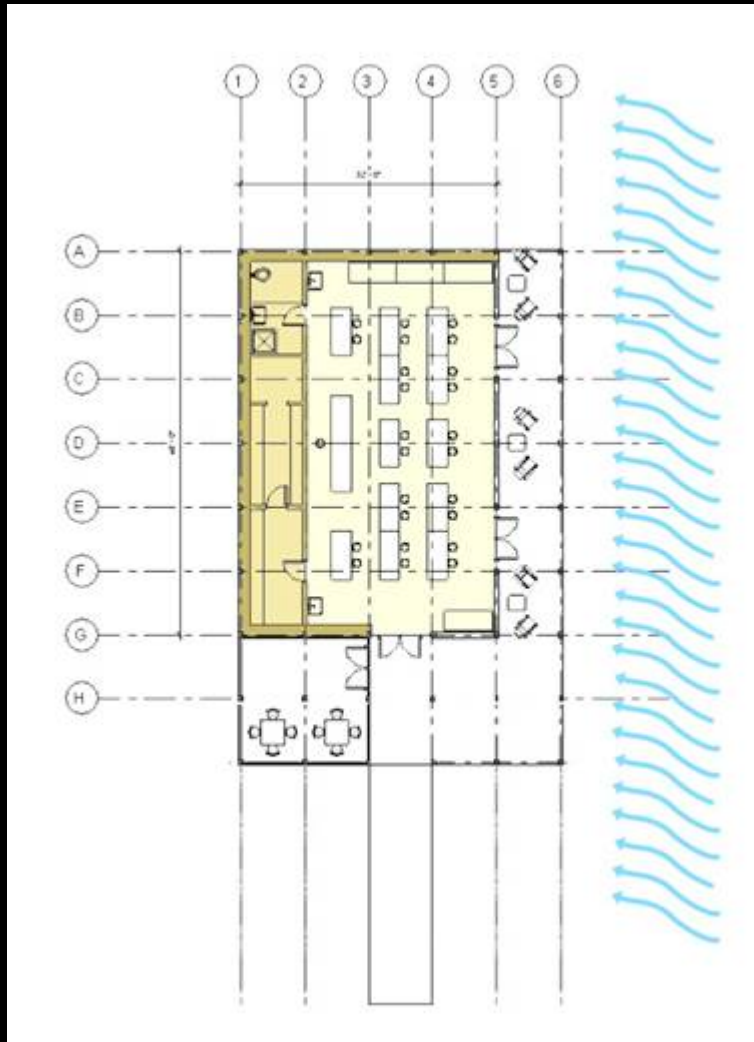
DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

AYERS
SAINT
GROSS
ARCHITECTS + PLANNERS

Biohabitats
Incorporated

Building Concepts



DIXIE PLANTATION DEVELOPMENT – PHASE ONE

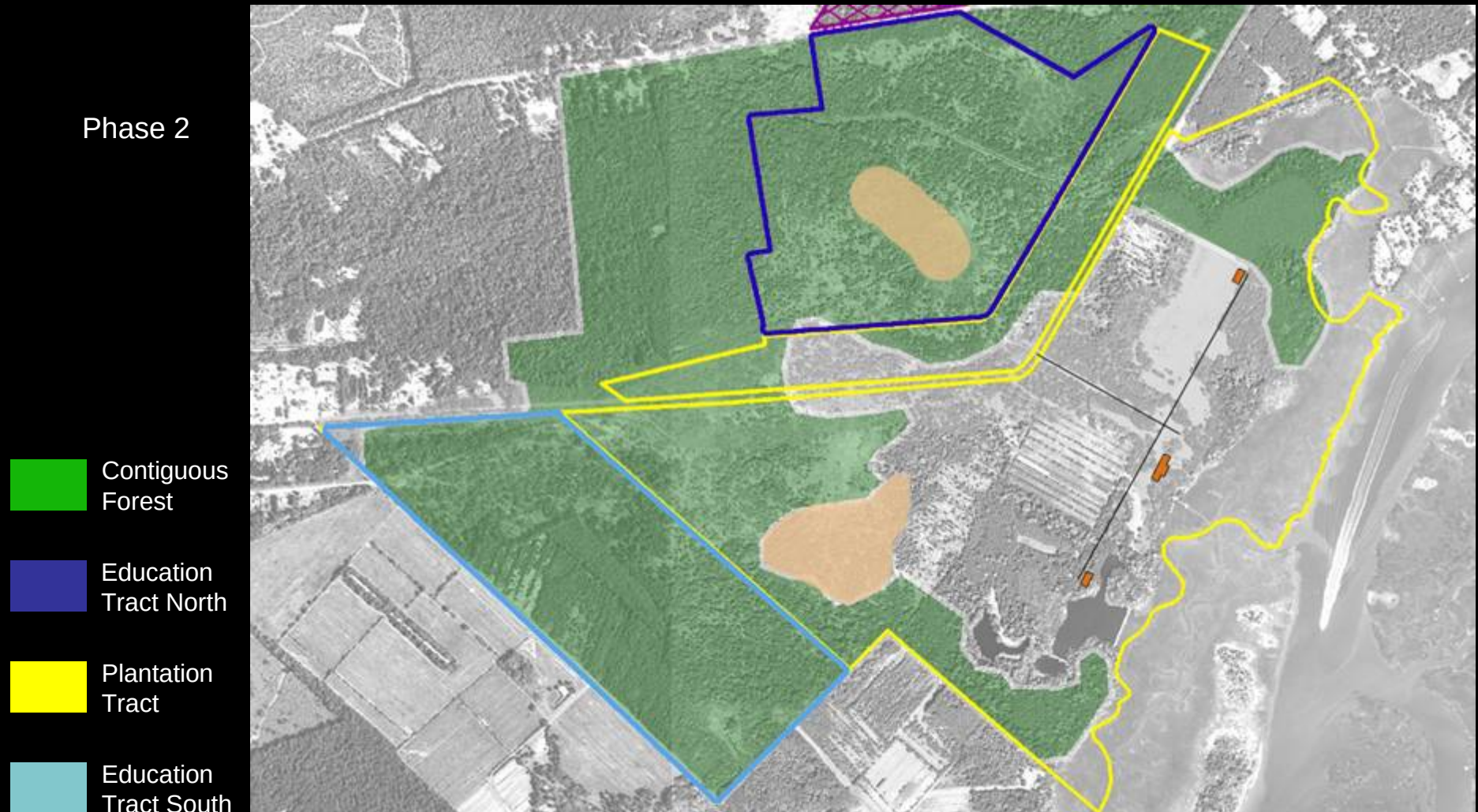
GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

AYERS
SAINT
GROSS
ARCHITECTS • PLANNERS

Biohabitats
Incorporated

Ecological Analysis and Opportunities- Biohabitats Report

Phase 2



DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

AYERS
SAINT
GROSS
ARCHITECTS • PLANNERS

 Biohabitats
Incorporated

Phase 1



* Note: Buildings are not to scale and are drawn larger than actual size



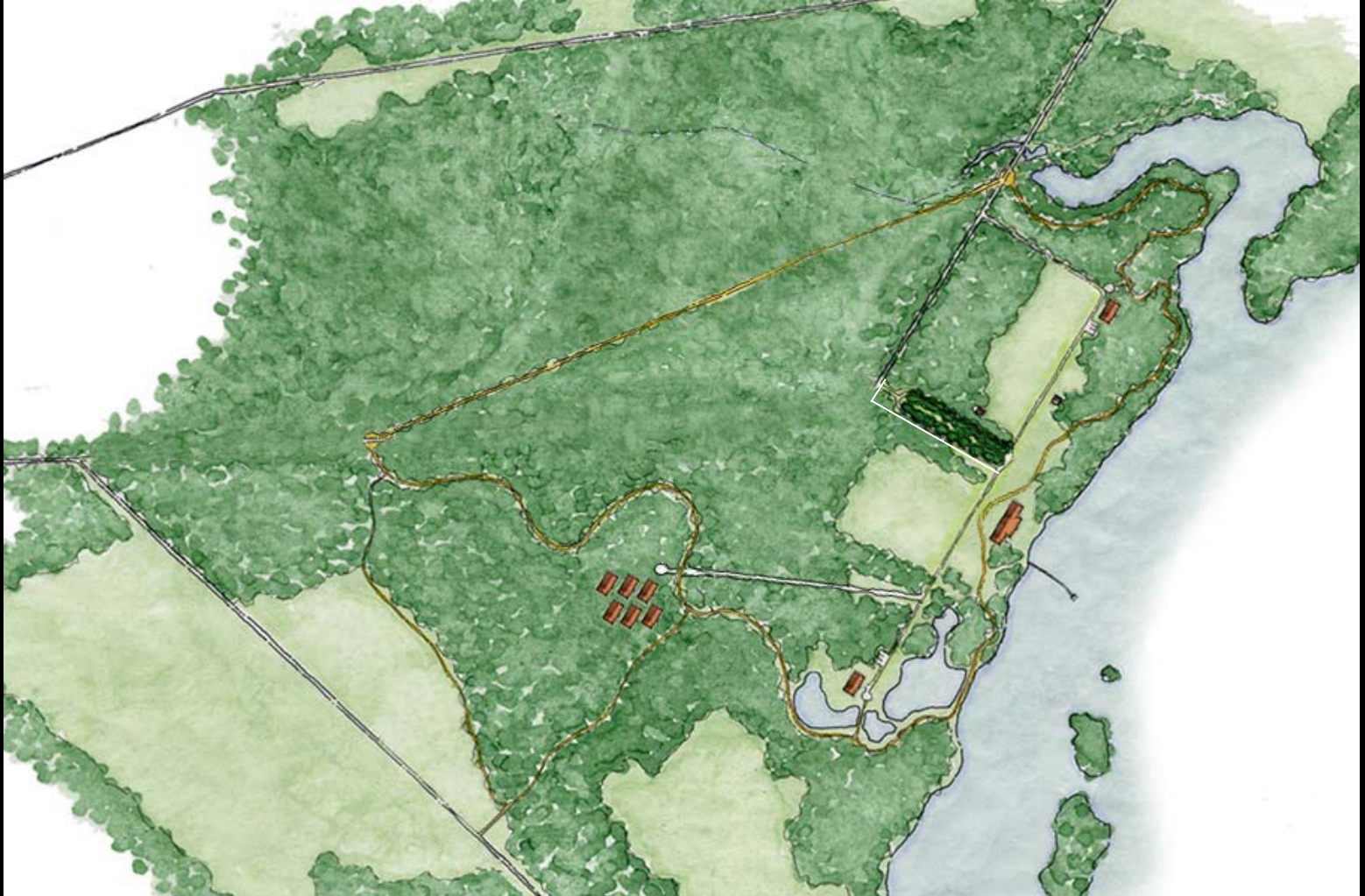
DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

AYERS
SAINT
GROSS
ARCHITECTS • PLANNERS

Biohabitats
Incorporated

Phase 2



* Note: Buildings are not to scale and are drawn larger than actual size



DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

AYERS
SAINT
GROSS
ARCHITECTS • PLANNERS

Biohabitats
Incorporated

Phase 2



* Note: Buildings are not to scale and are drawn larger than actual size



DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

AYERS
SAINT
GROSS
ARCHITECTS • PLANNERS

Biohabitats
Incorporated

Dixie Plantation Development – Phase One

October 2-3, 2006



DIXIE PLANTATION DEVELOPMENT – PHASE ONE

GENERAL ENGINEERING
& ENVIRONMENTAL, LLC
GEL
a Member of
THE GEL GROUP, INC.

**AYERS
SAINT
GROSS**
ARCHITECTS • PLANNERS



Biohabitats
incorporated