Integrated Science Center College of William & Mary Williamsburg, Virginia Meghan Graber Construction Management Dr. Riley March 23, 2009

Presentation Outline

Introduction and Outline (2 slides)

- Meghan Graber, Construction Management, Integrated Science Center, College of William & Mary, Williamsburg, Virginia
- Presentation Outline

Project Overview (3 slides)

• Building Statistics

Design Goals (2 slides)

• Laboratories for the 21st Century (Labs21) background information and approach

Energy Conservation through Retrofitting Depth (12 slides)

- Retrofitting Research
- Existing Systems in Rogers Hall
- Applying Retrofits to Rogers Hall
- Energy and Operating Cost Comparison
- Construction Cost and Schedule Considerations
- Recommendations

Analysis 1: Incorporation of Daylighting (Electrical Breadth) (16 slides)

- Natural Light Research/Benefits
- Current Laboratory Configuration Analysis
- Proposed Lighting Layout and Analysis
- Energy and Operating Cost Comparison
- Construction Cost and Schedule Considerations
- Recommendations

Analysis 2: Centrifugal versus Vane-axial Fans (Mechanical Breadth) (8 slides)

- Background Information on AHU Fans Research
- Current Centrifugal Fan versus Proposed Vane-axial Fan
- Energy and Operating Cost Comparison
- Construction Cost and Schedule Considerations
- Recommendations

Conclusion/Recommendations (3 slides)

• Summary of each analysis and my recommendations

Acknowledgements (1 slide)

Questions/Comments (1 slide)