This presentation contains a conceptual rendering of the Dining and Community Commons. All designs are subject to change.





Architecture Engineering Planning Interiors

# Town Hall Project Update

Swarthmore College Dining & Community Commons Project

October 30 + 31, 2019

### Agenda:



Planning

3

4

1

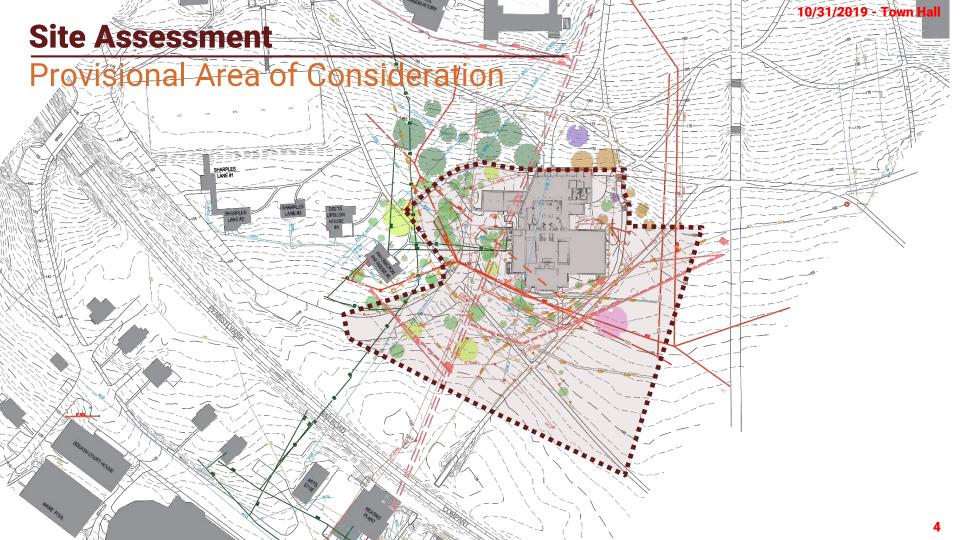
2

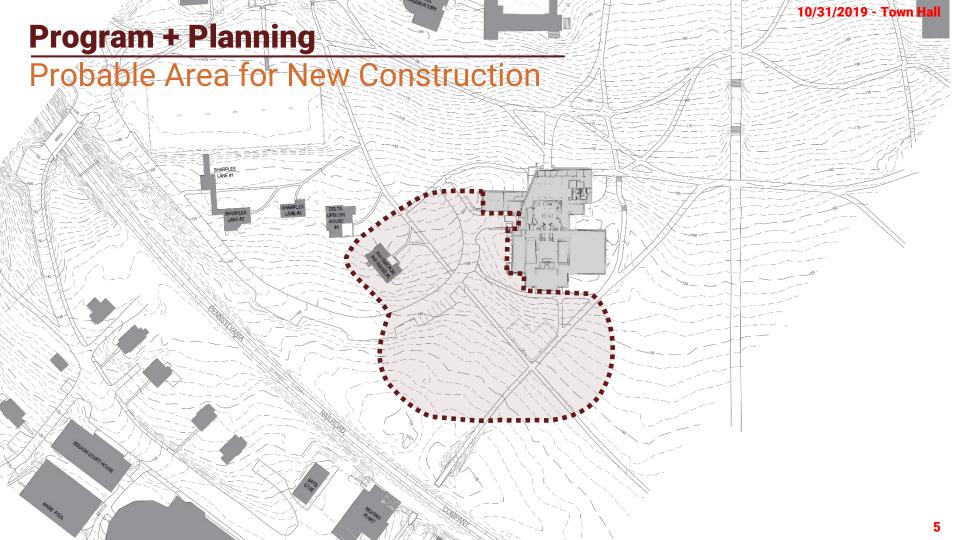
**Interior Program** 

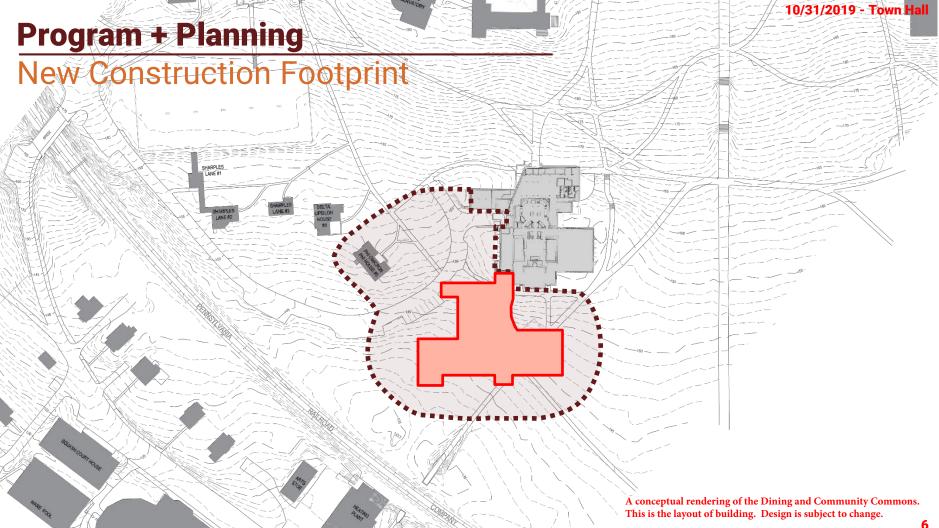
Sustainability

\*\* This presentation contains a conceptual rendering of the Dining and Community Commons. All designs are subject to change.









### Site + Landscape

### **Preliminary Massing**

A conceptual rendering of the Dining and Community Commons. This is a potential south view of the building. Design is subject to change.

### Site + Landscape

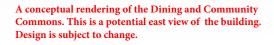
### **Preliminary Massing**

A conceptual rendering of the Dining and Community Commons. This is a potential southeast view of the building. Design is subject to change.

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### Site + Landscape

### **Preliminary Massing**



### Site + Landscape

### **Preliminary Massing**

A conceptual rendering of the Dining and Community Commons. This is a potential ariel view of the building. Design is subject to change.

### **Planting Design**



### **Planting Design**

### Landscape Types: Lawn

### **Planting Design**

### Landscape Types: Meadow



### **Planting Design**

### Landscape Types: Permaculture



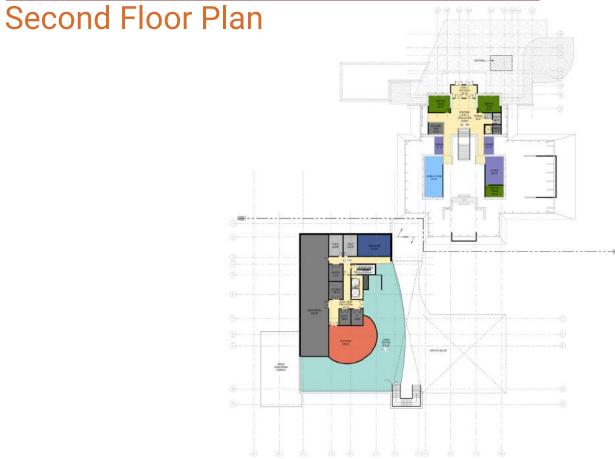


# **Basement Plan** DADA. MACU B. 91 TANK TAN TAN TAN

A conceptual rendering of the Dining and Community Commons. This is a potential floor plan of the basement. Design is subject to change.

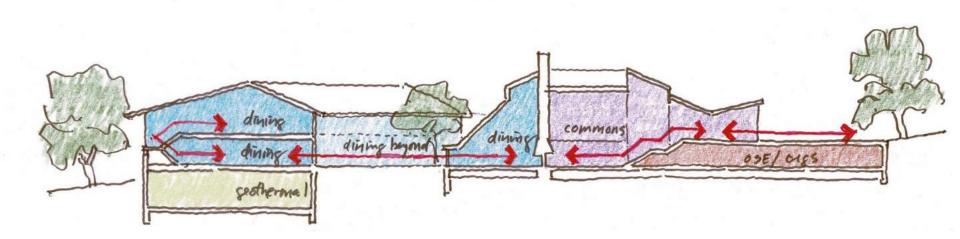


A conceptual rendering of the Dining and Community Commons. This is a potential floor plan of the first floor. Design is subject to change.



A conceptual rendering of the Dining and Community Commons. This is a potential floor plan of the second floor. Design is subject to change.

### **Building Section**



A conceptual rendering of the Dining and Community Commons. This is a potential layout of the building sections. Design is subject to change.

### New Sharples Stair

A conceptual rendering of the Dining and Community Commons. Potential design for a new staircase. Design is subject to change.

# **3 Interior Program**

### **Interiors - Social**



### Interiors

### Social

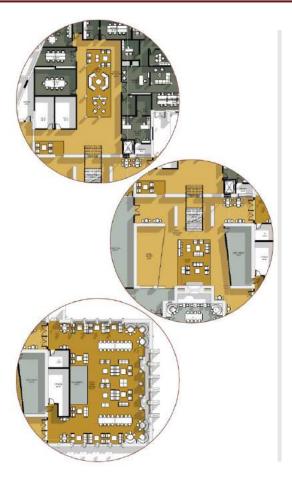
### FURNITURE TYPOLOGIES



CASUAL GROUP SEATING SMALL 1-3 PERSON SEATING SOCIALLY WORKING

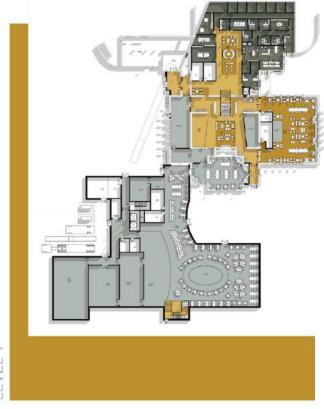


### **Interiors - Social**

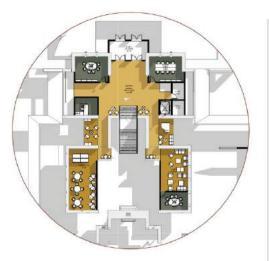


LEVEL 1

A conceptual rendering of the Dining and Community Commons. This is a potential floor plan of the first floor. Design is subject to change.



### **Interiors - Social**

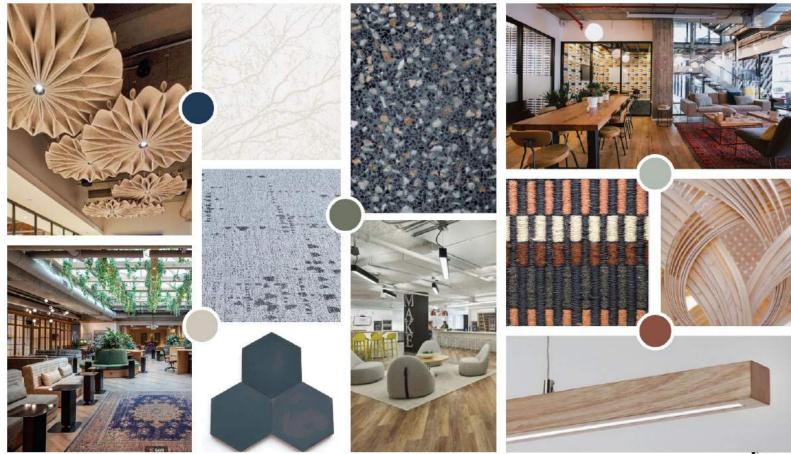


-EVEL 2

A conceptual rendering of the Dining and Community Commons. This is a potential floor plan of the second floor. Design is subject to change.



### Interiors - Support



### Interiors

### Support

### FURNITURE **TYPOLOGIES**

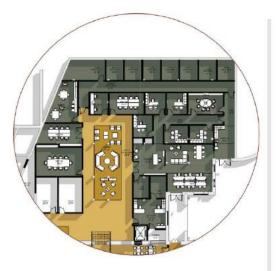




SMALL WORK GROUPS MEETING SPACES TASK AREAS

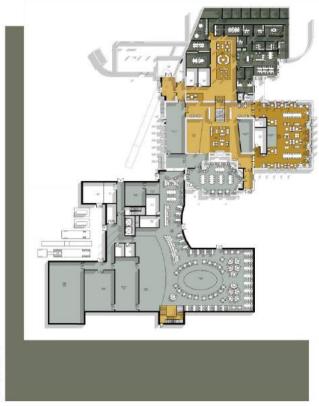


### **Interiors -** Support

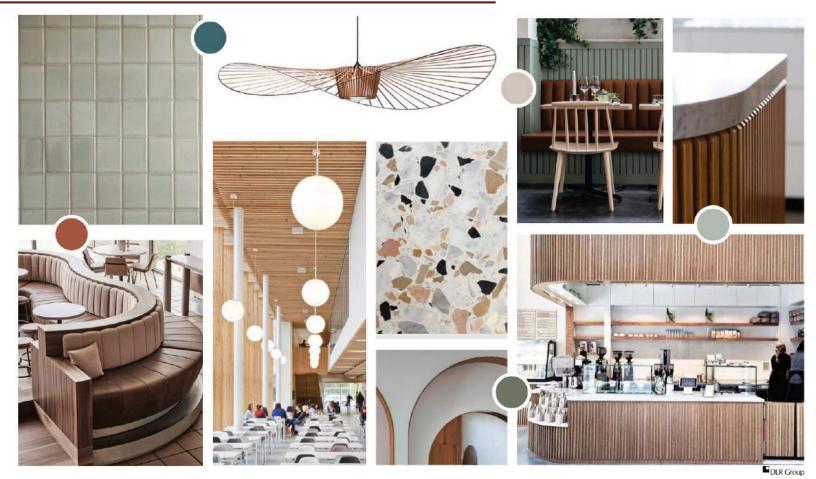


LEVEL 1

A conceptual rendering of the Dining and Community Commons. This is a potential floor plan of the first floor. Design is subject to change.



### **Interiors -** Nourish



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### Interiors

### Nourish

### FURNITURE **TYPOLOGIES**

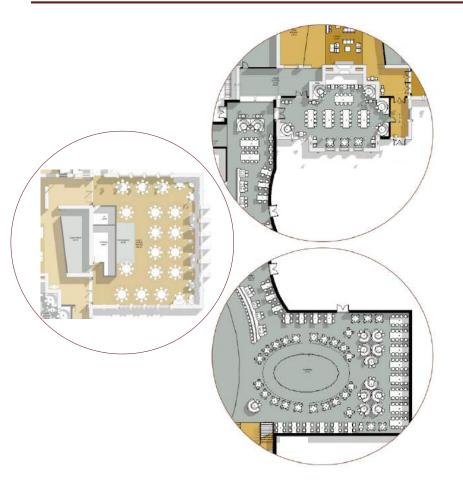




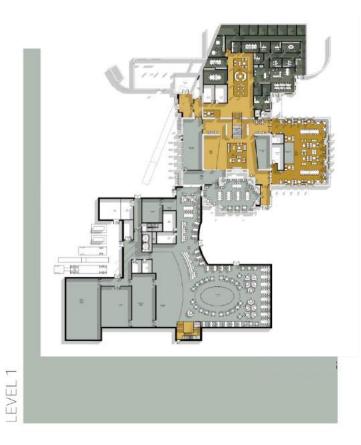
SMALL GROUP SEATING, 4-8 1-3 PERSON SEATING CLUB/TEAM SEATING



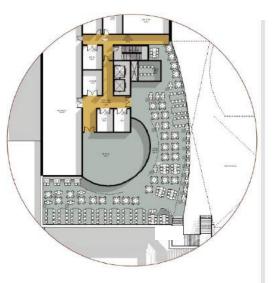
### **Interiors - Nourish**



A conceptual rendering of the Dining and Community Commons. This is a potential floor plan of the first floor. Design is subject to change.



### **Interiors - Nourish**



LEVEL 2

A conceptual rendering of the Dining and Community Commons. This is a potential floor plan of the second floor. Design is subject to change.



### **Food Service -** Servery



### Food Service - Servery



### Food Service - Servery



## 4 Sustainability

### **Building Rating System evaluation**



- From prescriptive to performance based
- "Burden of Trust"

"Burden of Proof"

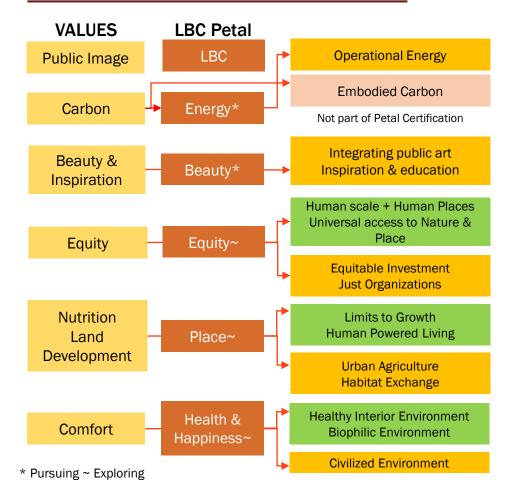
- Alignment with VALUES and Project Goals
- Pre-requisites
- Feasibility of major criteria

### **VALUES Alignment**

#### Swarthmore College - Dining and Community Commons Project

#### **Building Rating System Evaluation**

VALUES	Swarthmore Environmental Framework	LEED v4.1	WELL Building Standard v2 pilot	Living Building Challenge v4	Sustainable SITES v2	ENERGY STAR
Top priorities of environmental factors that impact User Experience	Project checklist as of June 1, 2015	Certification	Certification	Full Certification or Petal Certification	Certification	Certification
Public Image	-	Value of Certification	Community	Value of Certification		
How do design features and programs in the facility illustrate a commitment to environmental stewardship?						
Beauty & Inspiration			Mind	Beauty		
What drives, motivates, and inspires your community to go to the facility?						
Comfort	Indoor Environmental Quality	Indoor Environmental Quality	Thermal Comfort, Light Air, Sound	Health & Happiness		
Biophilia; Thermal, Acoustic, Visual Comfort; Air Quality; Building Materials						
Nutrition			Nourishment, Movement, Water	Place		
How to promote healthy eating choices and habits?						
Equity				Equity		
How can the facility exemplify inclusion?						
Carbon	Energy	Energy & Atmosphere		Energy		Operational Energy
How important are carbon emissions associated with the design, construction and operation of your facility?						
Land Development	Sustainable Site & Landscaping	Location & Transportation, Sustainable Sites		Place	Site design, construction, operations and maintenance	
How can the site support wellness? Is there a site ecology that needs to be protected or preserved?						



#### **Target: Achieve requirements of 3 Petals**



Registered for this version

Opportunity to upgrade a Petal to this version

LBC Petal

Energy\*

**Operational Energy** 

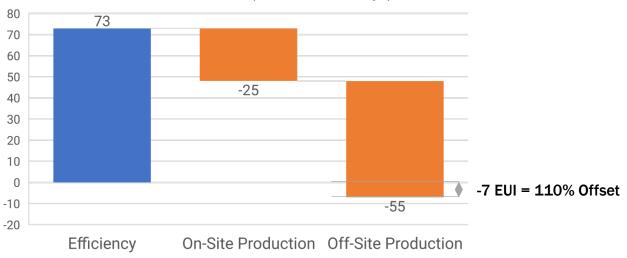
Target: Achieve requirements of 3 Petals

Goal: ZNE | Criteria: 105% of energy produced on-site <u>Net-Positive Building</u>

Produce 105% more than consumption via a combination of on-site and off-site solar



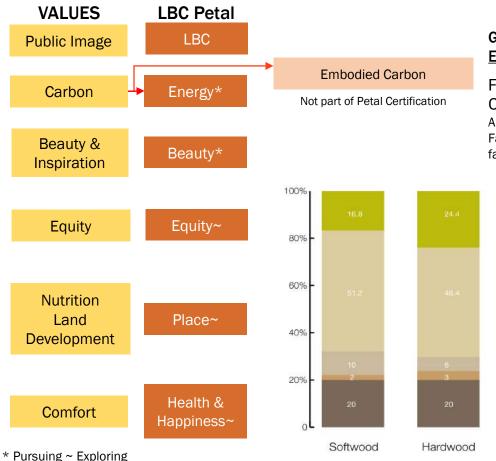
#### Path to Net-Positive (EUI - kBtu/SF/yr)



VALUES

Public Image

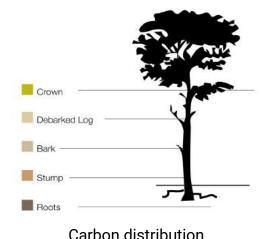
Carbon



#### **Target: Achieve requirements of 3 Petals**

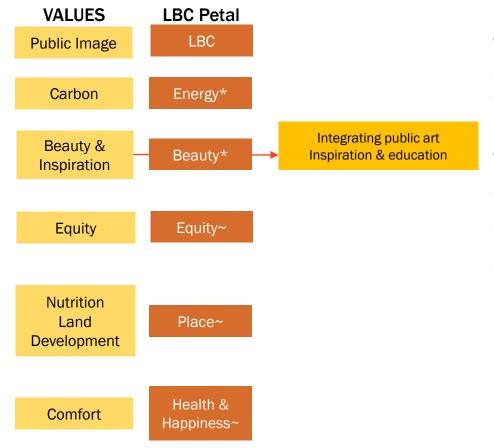
#### Goal: Reduce embodied carbon | Criteria: None Embodied Carbon Analysis

Focus first on structure: Mass Timber vs Steel CLT Species: SmartLam - Southern Yellow Pine coming from our Dothan Alabama facility; SPF- Spruce Pine Fir coming from our corporate Columbia Falls facility; Douglas Fir/Larch coming from our corporate Columbia Falls facility



throughout a tree

Carbon storage life is 100 years in framing 30 years in furniture 6 years in paper 0 when burnt or decays



**Target: Achieve requirements of 3 Petals** 

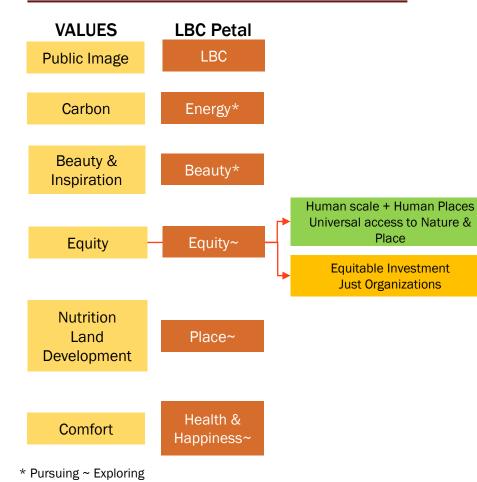
Goal: Integrate Public Art | Criteria: Accessible to public

- · Identify opportunities for public art through a charrette
- Schematic design budget includes \$20,000 allowance for public art to be incorporated

Goal: Inspiration & education | Criteria: None

- A dynamic dashboard for displaying the ZNE performance of the building from various meters
- An allowance of \$20,000 for the development of this dashboard
- An allowance of \$20,000 for interpretive signage to teach the visitors and occupants about the building

Pursue during Design Development



#### **Target: Achieve requirements of 3 Petals**

Goal: Human scale / Universal access | Criteria: programmatic layout and access to social space needs

• Inherent in the design solutions

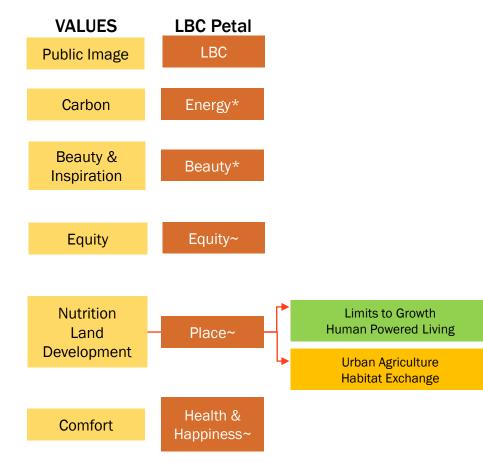
Goal: Equitable Investment | Criteria: Private entities donate for public good

- First option clarifying Swarthmore Need-Based Scholarship program as an alternate
- Second option upgrade this Petal to LBC v4 where no Equitable investment required

Goal: Just Organizations | Criteria: Members of Project Team should be certified before project certification

- First option leverage Integral's Just Label for LBC v3.1
- Second option DLR Group is considering Piloting Just Label and may be able to satisfy the requirements of TWO Just label organizations including Integral

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#### Target: Achieve requirements of 3 Petals

Goal: Limits to Growth / Human Powered Living | Criteria: Site Design metrics

• Inherent in the design solutions

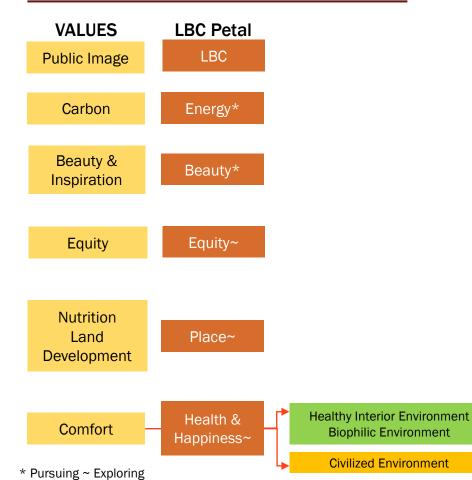
Goal: Urban Agriculture | Criteria: A ratio of site acreage for food production

• Use Swarthmore's plan to have a garden for the whole campus and the community (minimum 0.3 acres) in addition to permaculture solutions as part of design

Goal: Habitat Exchange | Criteria: Expand existing thriving wilderness areas and protect them from destruction

• Use Crum Woods Stewardship Committee's Stewardship Plan as an alternate to meet this requirement

Further exploration during Design Development



#### **Target: Achieve requirements of 3 Petals**

Goal: Healthy Interior & Biophilic Design | Criteria: Site Design, planning, fenestration and interiors metrics

• Inherent in the design solutions

Goal: Civilized Environment | Criteria: Access to daylight and air

- Daylighting inherent in design
- Access to operable windows needs further design refinement
- An allowance of \$20,000 for operable windows control

Further exploration during Design Development

