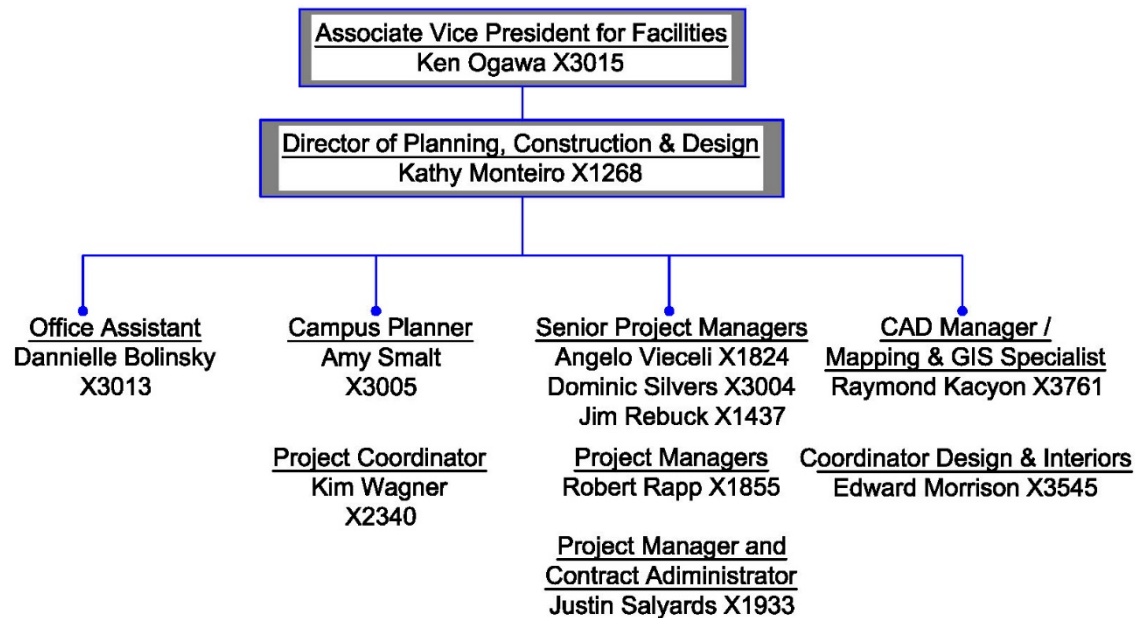




# Planning, Design & Construction Group Overview

## Bucknell University Facilities Planning, Design & Construction Group Organization

June 2017



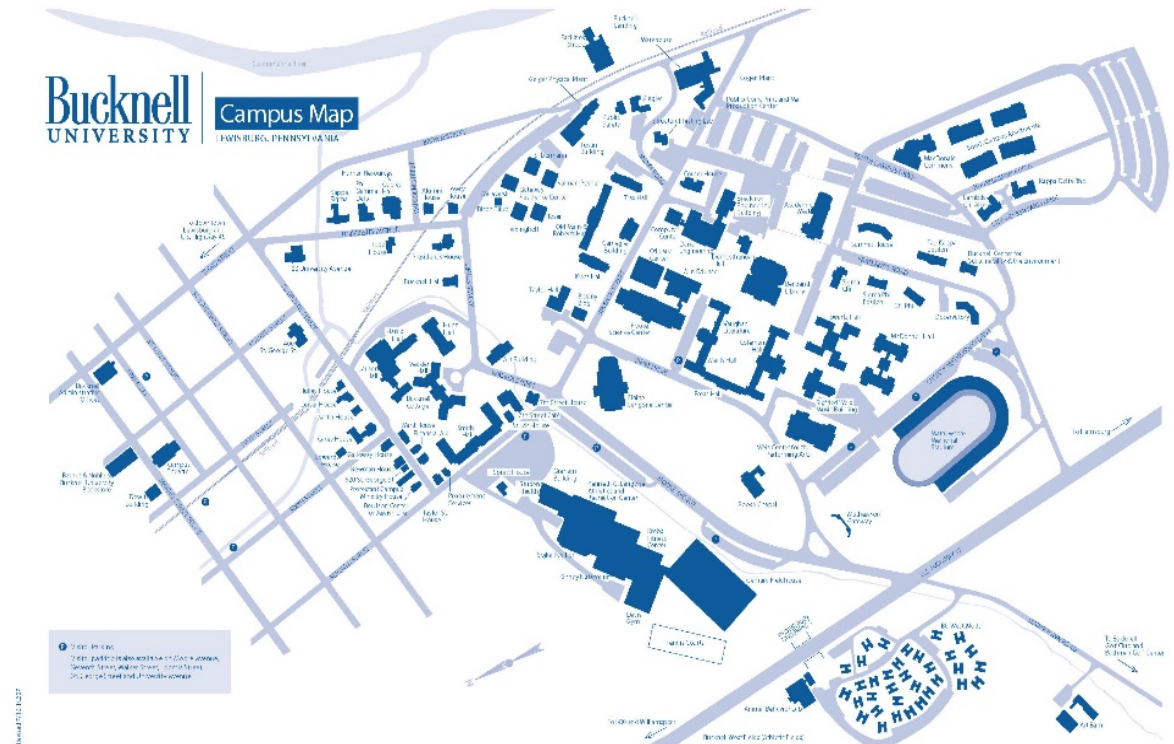
- Our Planning, Design and Construction Group is comprised of professional individuals on staff who are stewards of Bucknell providing various in-house expertise including architectural, structural and engineering services. We are responsible for over 500 acres of campus property and over 150 buildings with the first building being built in 1840. Our team leads the campus through the budget approval process, space planning, design, bidding and construction phases for renovation and new construction; infrastructure, landscape and geographic Information System (GIS) mapping.

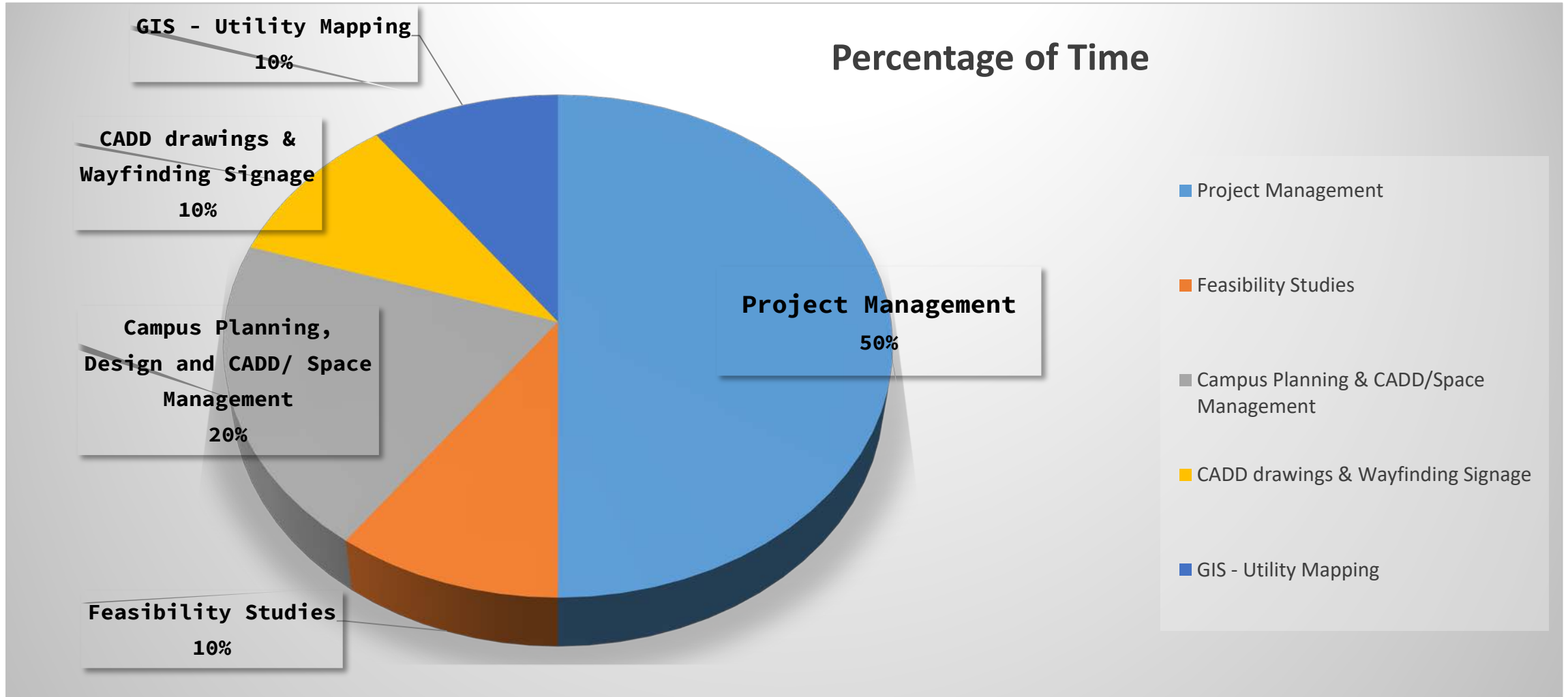
- **42 acres Cowan Conference Center**
- **67 acres Chillisquaque Natural Area**
- **1 acre Downtown properties**
- **25 acres Melberger/Chillisquaque Creek Farm**

- **Aerial of Campus**

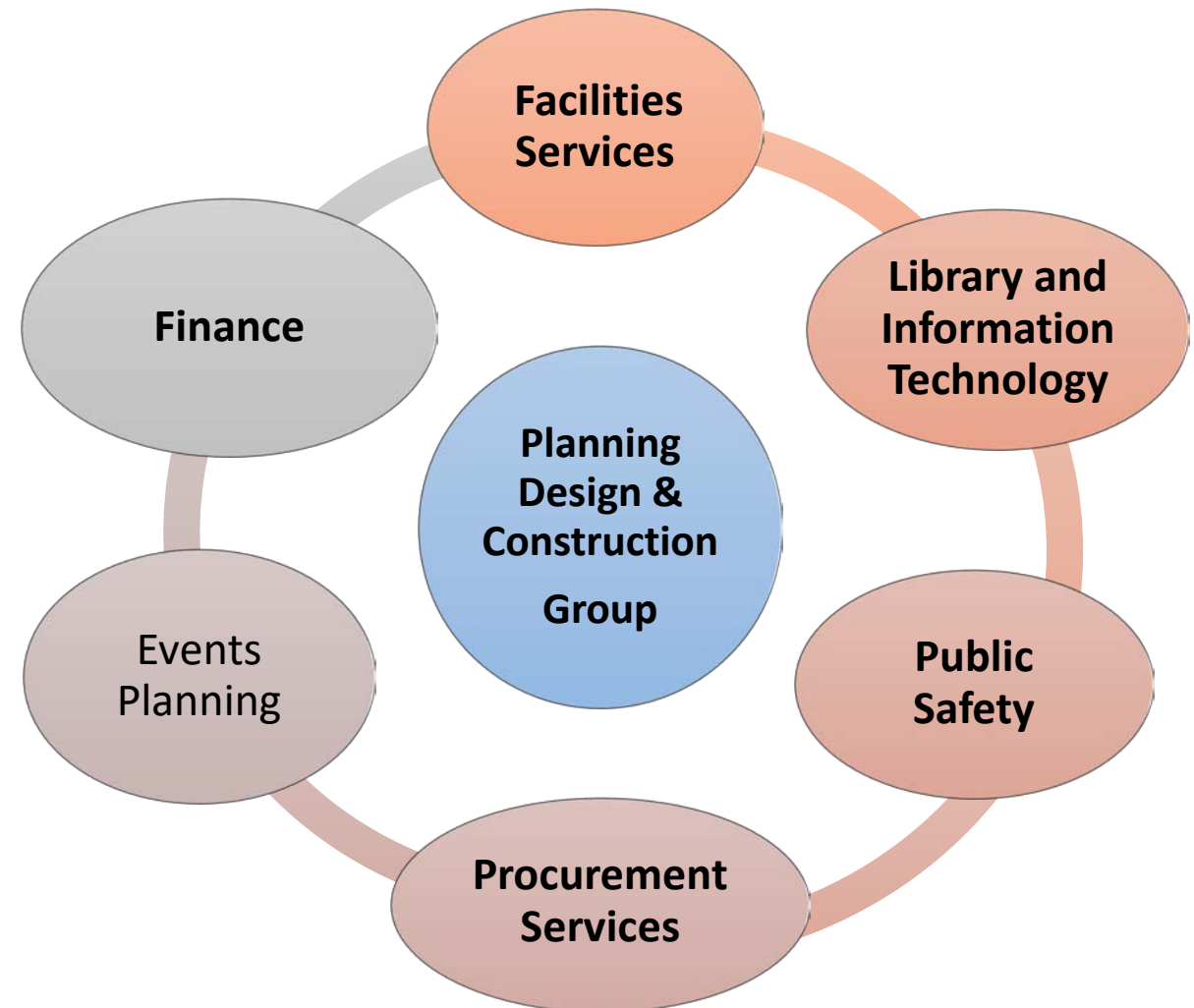


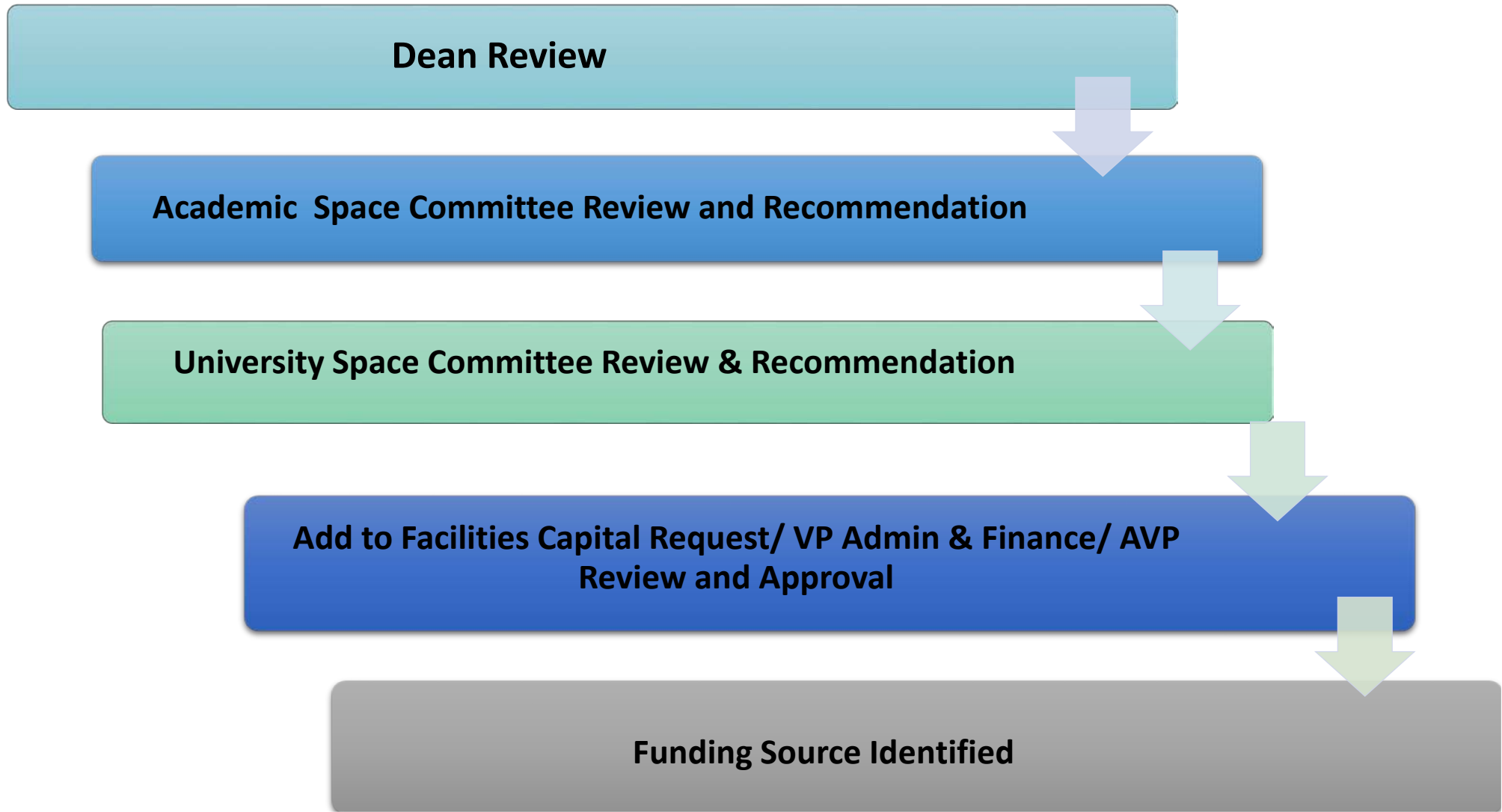
- **88 Academic, Administrative & Support Buildings**
- **36 Residence Halls (counting 35-unit mods as one unit)**
- **6 + 2 Fraternity Houses (BU and non-BU owned)**
- **2 Leased Properties**
- **143 Total**
- **5 Buildings at Cowan**
- **3 Melberger**



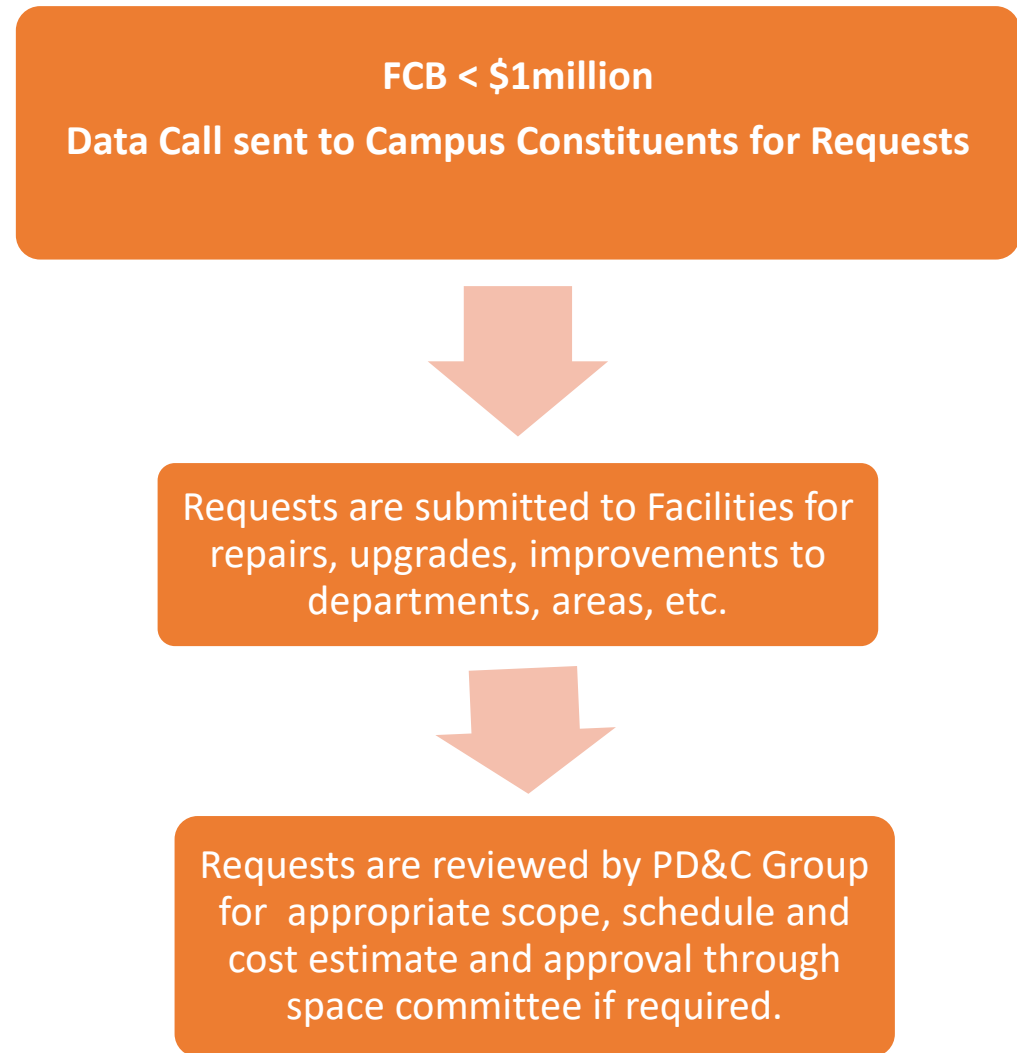


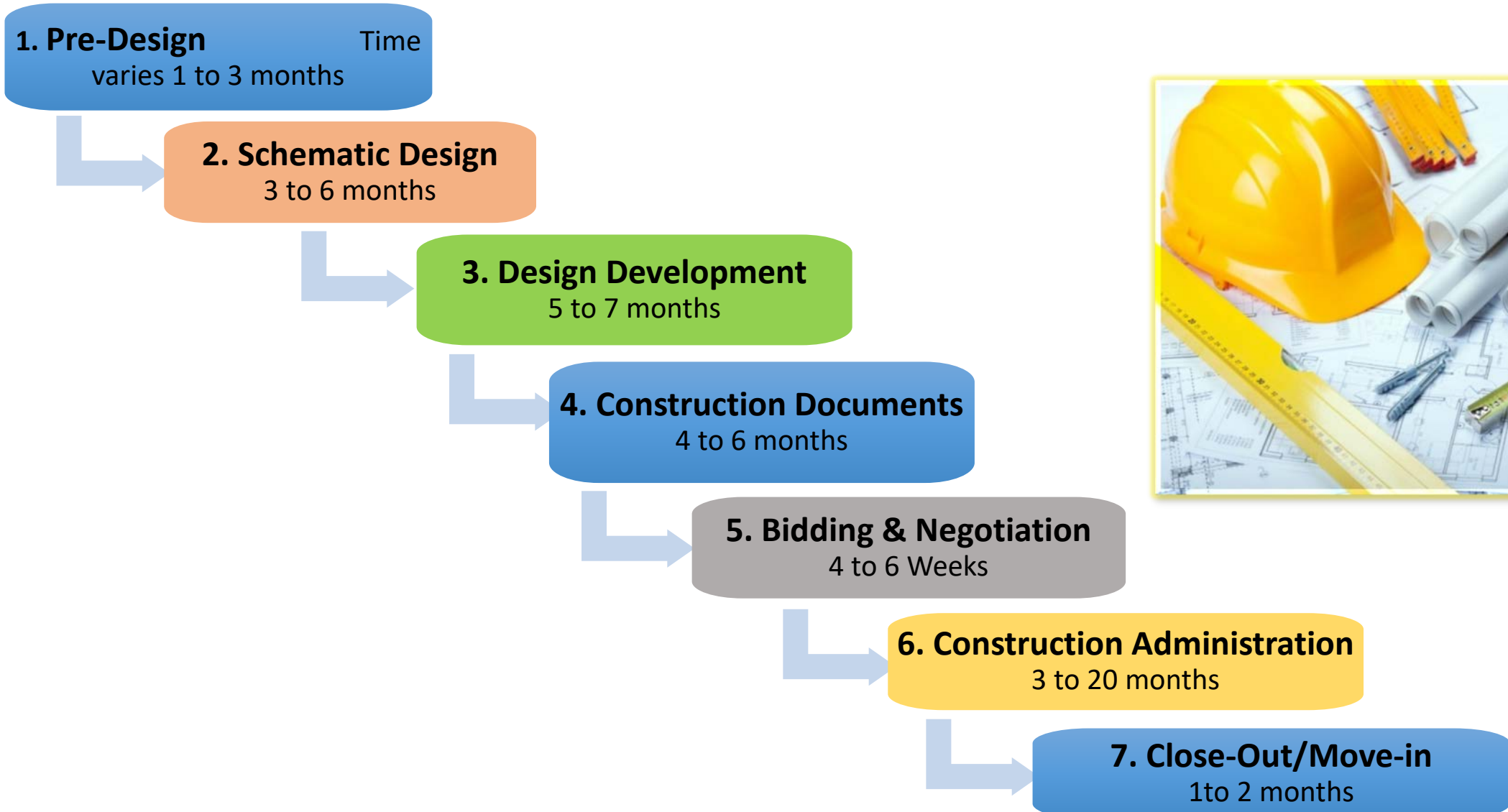
The primary Function of the Planning, Design & Construction Group (PD&CG) is to support the University's building program; its operations in the Planning, Design, Construction, and Renovations throughout the campus with our University cross-functional departmental teams.

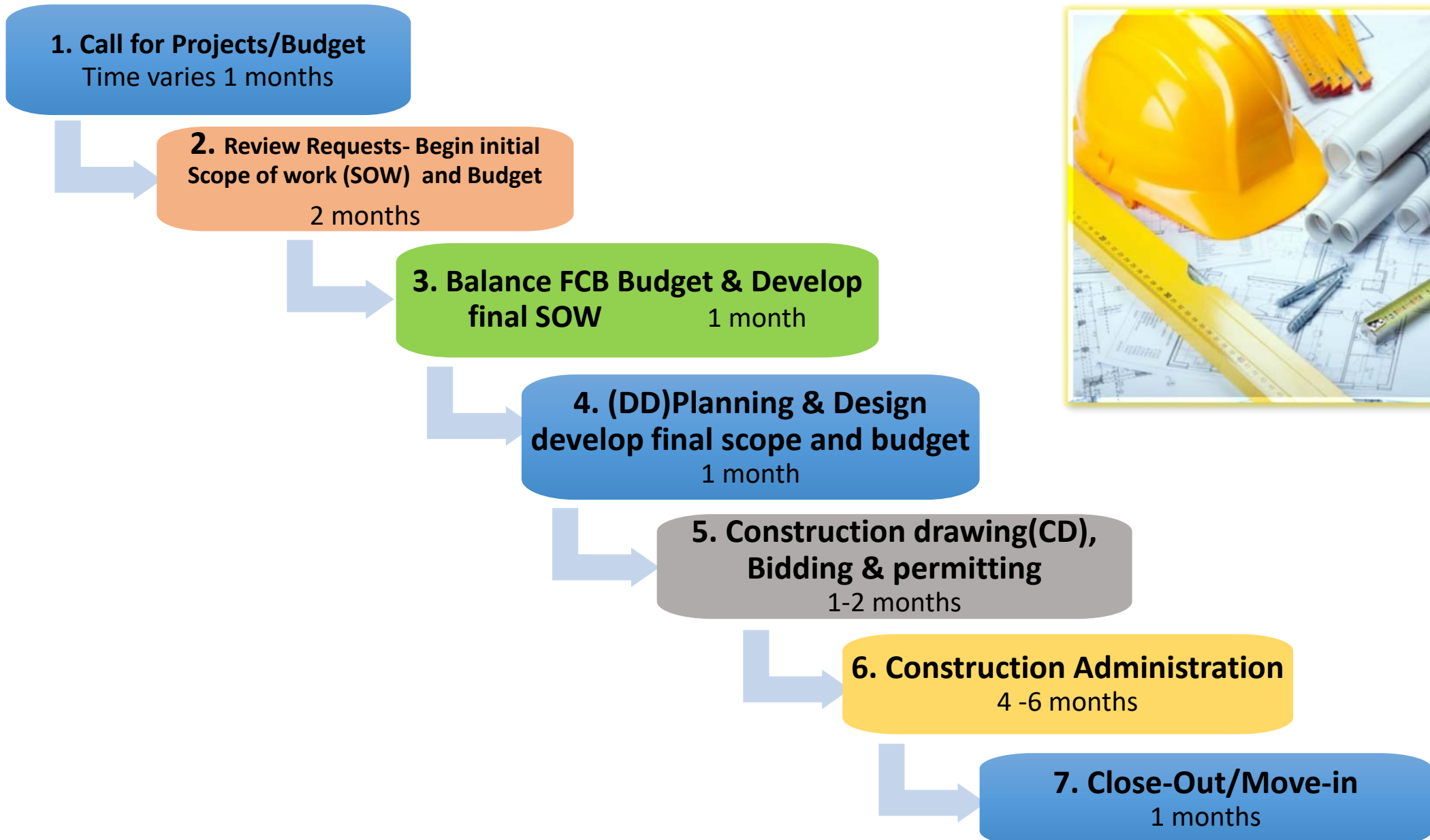




- **Two types of Projects:**
  - **University Capital Projects**
    - Projects over \$1 million
    - Projects Approved by Space Committee
  - **Facilities Capital Budget (FCB)**
    - Projects under \$1 million
    - Projects approved by Space Committee
    - Via Data Call Requests
    - Pre-Data Call Scope of work verification









- Design and Construction projects are reviewed Agencies with Jurisdiction prior to Construction Bid process.
  - East Buffalo Township
  - Lewisburg Borough
  - Central Keystone Council of Governments (CKCoG)
- Collaboration with Other agencies :
  - PA American Water
  - Citizen's Electric
  - Lewisburg Sewer Authority
  - William Cameron Fire Department

Team Leader



Communicates across campus constituents



Coordinates with Public Safety and Events Planning



Reviews design and specification in conformance with Bucknell standards



Coordinates the contract execution prior to project commencement

Fiduciary Responsibility



Review of Consultant Invoices



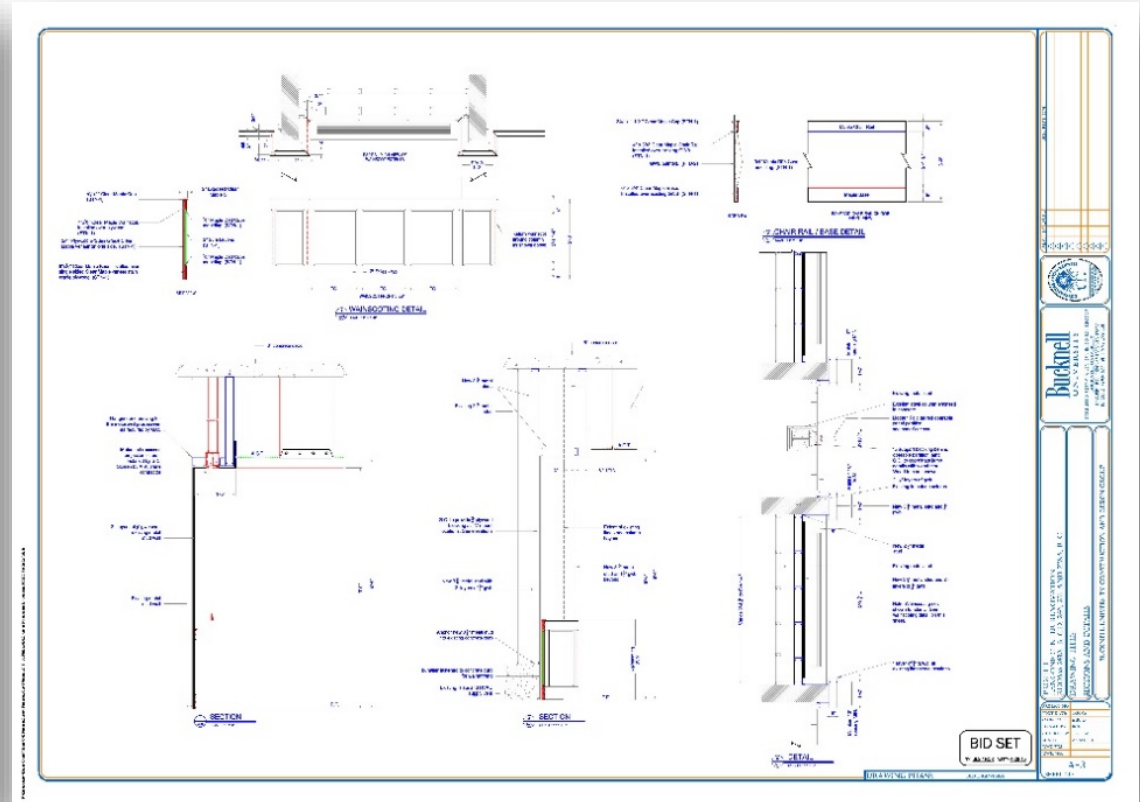
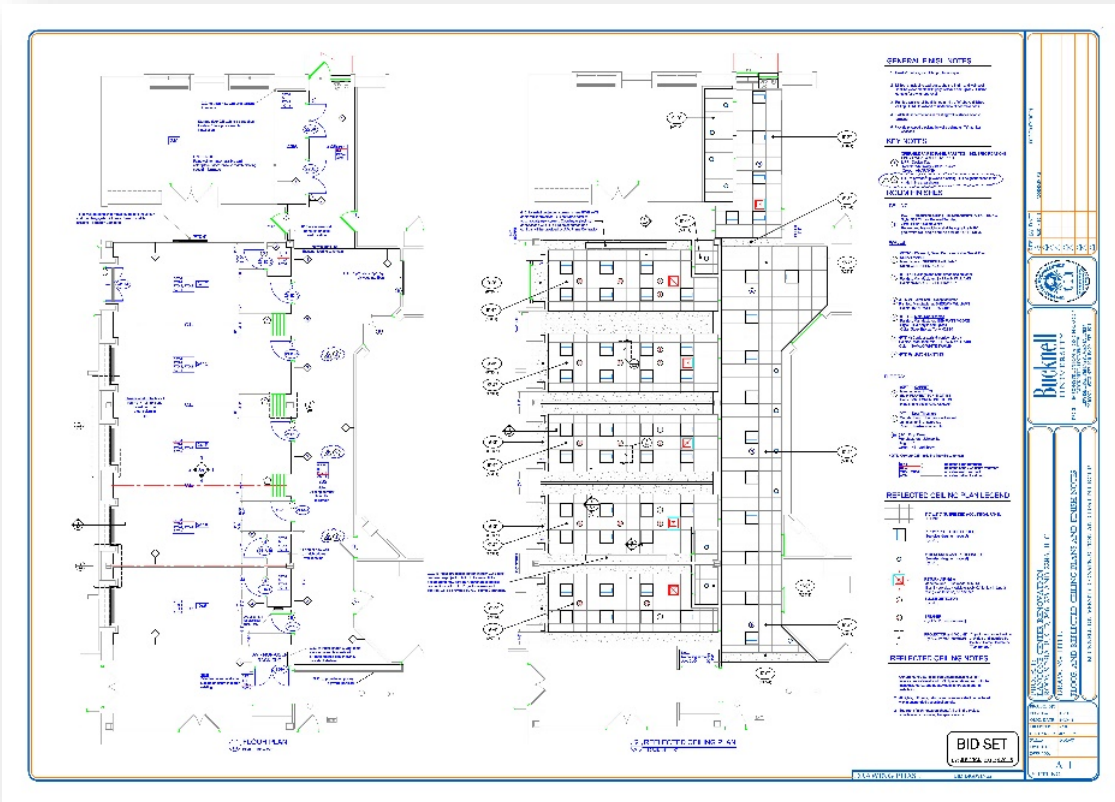
Review of Contractor invoice against percentage completion of work



Coordinates & attends steering committee meetings through completion



Ensure customer satisfaction



These drawings illustrate partial Construction drawing set produced by the C & Design Group for the Elaine Langone Center 214 rooms Renovation in 2015

Facilities Construction & Design Group provides essential design and high quality construction drawings for Bucknell renovations projects.



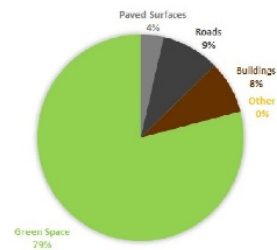
We create, manage and maintain a multi-functional AutoCAD campus mapping file system that covers the entire campus.

- Data including campus utilities.
- This mapping file is used for Bucknell:
  - Site analysis & development
  - Master planning
  - Agency permit and processing
  - Administrative offices
  - GIS, ground surveys
  - Academic research, student classes and projects.



**Bucknell University  
Impervious Features  
Within  
East Buffalo Township**

1 inch = 1,000 feet



86.805 Acres: Impervious Surfaces  
327.22 Acres: Green Space

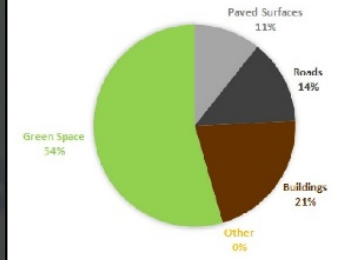
**Legend**

- Bucknell Zoning East Buffalo Boundary
- Impervious Surfaces
- Public Roads (Not Included in Calculations)



**Bucknell University  
Impervious Features  
Within  
Lewisburg Township**

1 inch = 400 feet



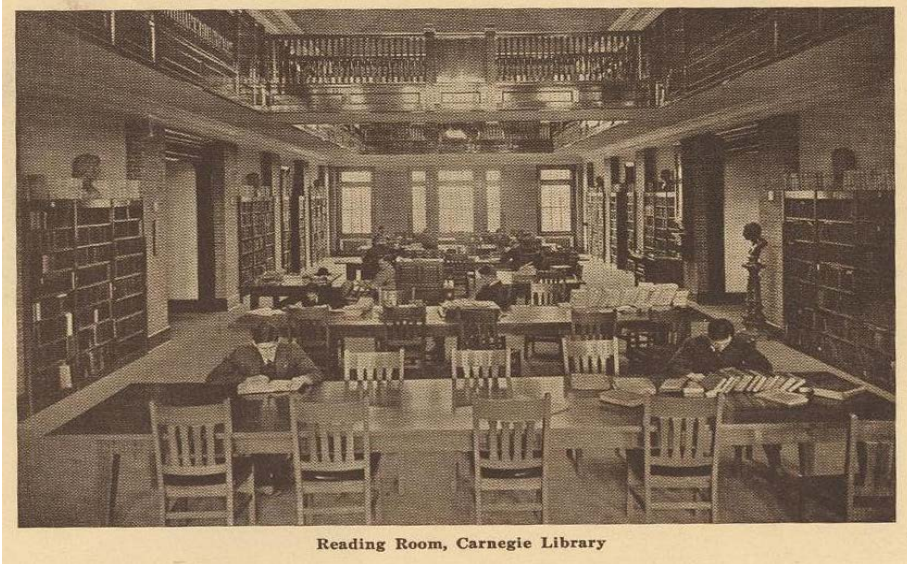
19.96 Acres: Impervious Surfaces  
23.87 Acres: Green Space

**Legend**

- Bucknell Zoning Lewisburg Boundary
- Public Roads (Not Included in Calculations)
- Impervious Surfaces



Facilities Construction and Design Group creates, manages and maintains GIS maps for various constituents on campus.



- Building Renovations:
  - Ergonomics Room (2012)
  - Fieldhouse Squash Courts (2012)
  - Stadium Track & Field (2012)
  - Marts First Floor/HVAC (2015)
  - Elaine Langone Center 241/246 (2015)
  - Seventh Street Niche/Makerspace (2015)
  - Stadium Road (2015)
  - Miller Run (2015)
  - Carnegie (2015)
  - Roberts Hall (2016)
  - Stuck House (2016)

- MacDonald Commons



- Kappa Delta Rho 2012 (old KDR razed 2011)
- Lambda Chi Alpha 2012 (old LCA razed 2013)
- Engineering Storage Building 2012
- Academic West 2013
- Chilled Water Storage Tank Pump House 2013
- Salamander Greenhouse 2014
- South Campus Apartments (4) 2015
- MacDonald Commons Building 2015
- Graham Building 2016



## LED Lighting Positive impacts

- LED bulbs can be 6 to 7 times more energy efficient than conventional incandescent lights and reduce energy use by more than 80 percent.
- LED contains no Mercury and has an edge over compact fluorescent lighting (CFLs) that is expected to grow over the next few years as LED technology continues its steady improvement.
- LED can have a useful life of 25,000 hours or more ( lasting 25 times longer than traditional lightbulbs)
- LED life of more than 3 years if run 24 hours a day, 7 days a week.

## Design & Material Finishes

- All ceilings contain > 50% recycled content
- 25% of carpets installed have a minimum of 40% post-consumer recycled content
- 74% of the carpet has at least 55% recycled content and is NSF/ANSI-140 Platinum and can be recycled.

## LEED CERTIFICATION

- LEED Gold
  - MacDonald Commons Building
- LEED Silver
  - Graham Building, Roberts Hall, Academic West, Kappa Delta Rho, Lambda Chi Alpha
- LEED Certification.
  - Carnegie Building

