



# AIT Complex

## Facility Design Team

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OACSIM (Co-Chair)

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IMCOM (Housing)

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TRADOC, G-4

### **Goldie Bailey**

ACES

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USACE, Architecture Section  
(Fort Worth District)

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(Norfolk District)



**5-STORY AIT B/COF – Ft. Lee, VA**

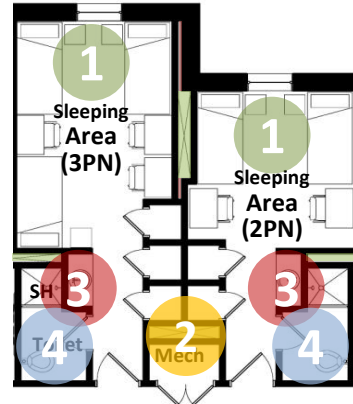
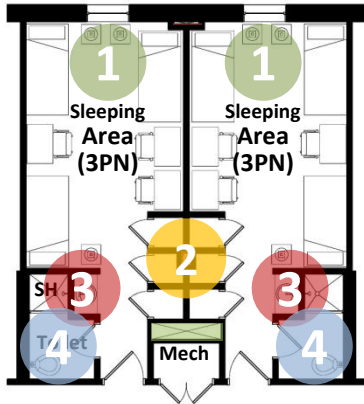


**1300 PN DFAC – Fort Jackson, SC**



# AIT Complex

## B/COF Living Quarters



Current Floor Plan

Proposed Floor Plan

### Design Criteria

- **Base Design Capacity (BDC)**  
BDC = 2 Occupants per Sleeping Area in 50% of the Living Quarters
- **Peak Design Capacity (PDC)**  
PDC = 3 Occupants per Sleeping Area in 50% of the Living Quarters
- **Allocated Space per Occupant**  
Base Design Capacity (BDC): 90 NSF  
Peak Design Capacity (PDC): 72 NSF

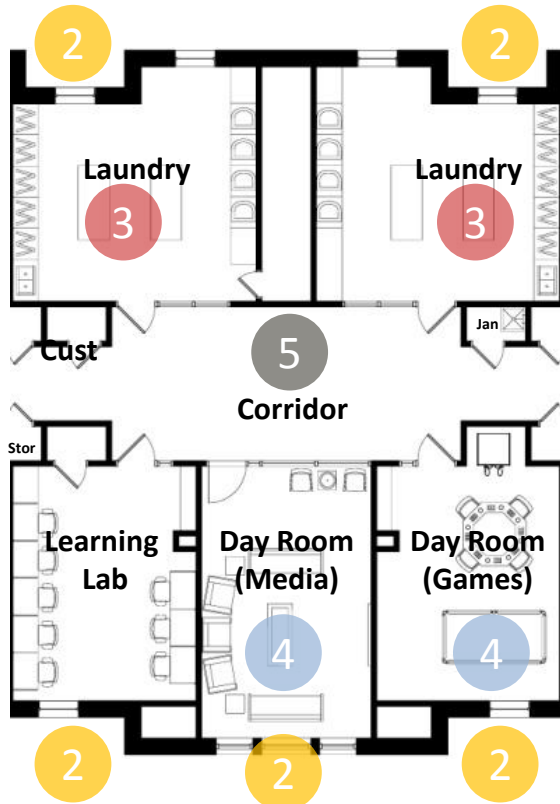
### Redesigned Living Quarters to address reduced Peak Design Capacity

- 1 In lieu of 100% of the Living Quarters designed to accommodate the Peak Design Capacity (PDC) of 3 Occupants per Sleeping Area only 50% of the Living Quarters will accommodate PDC
- 2 Relocation of structural Grid lines removes column from built-in wardrobe closets
- 3 Length of the Vanity Counter extended from 3'-0" to 4'-0"
- 4 Width of Toilet/Shower Room extended to provide more separation between toilet and shower

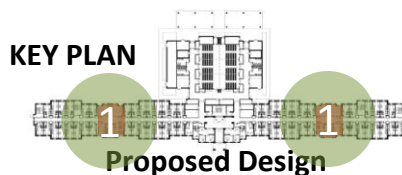


# AIT Complex

## B/COF Standard Design



### Trainee Support Module



## Grouping of Laundry, Day Rooms, and Computer Learning Lab to create Trainee Support Modules

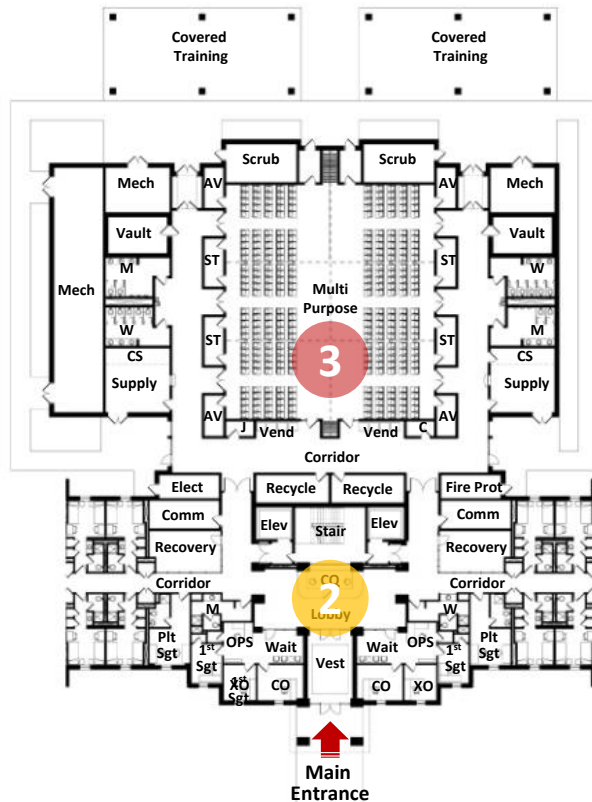
- 1 Central location of the Trainee Support Module among the Living Quarters provides improved trainee access to laundry rooms and recreational spaces
- 2 Relocation of the laundry and recreational spaces from the building's central core to the housing wings allows for natural day-lighting
- 3 Two Laundry Rooms provide gender separation for enhanced safety and security
- 4 Two Day Rooms provide for separation of trainee recreational uses, Media (Quiet) and Games (Noisy)
- 5 Corridor width increased to minimize congestion at entrances to laundry rooms and trainee recreational spaces



# AIT Complex

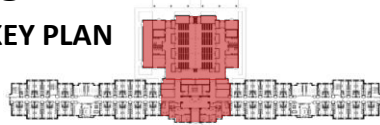
## B/COF Standard Design

### Reorganization of Administrative and Training /Instructional Areas to create a Training and Instruction Module



### Training and Instruction Module

KEY PLAN



Proposed Design

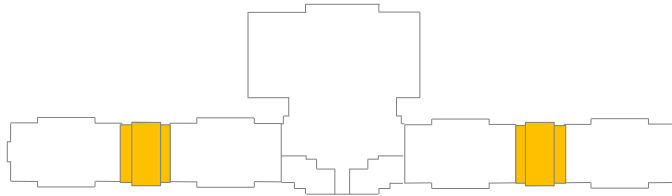
- 1 Company COFs have been redesigned and remain at the front of the building. COFs are adjacent yet separated by and accessible from a single main entrance to the building
- 2 Placement of the CQ Station to maximize visual site lines for enhanced safety and security
- 3 Adjacency of Multi-Purpose/Instructional Areas for each Company provide maximum flexibility through the use of operable walls to partition instructional areas



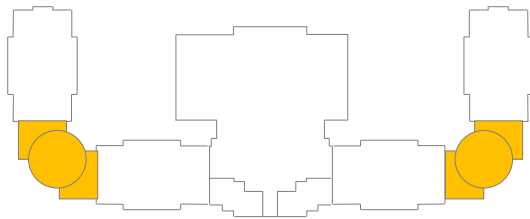
# AIT Complex

## B/COF Proposed Standard Design Building footprint options

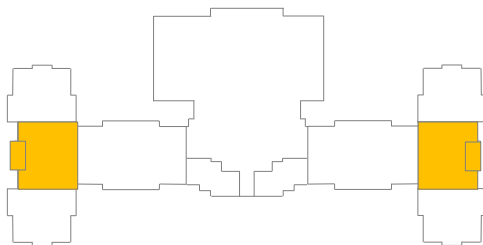
### Standardization and Sustainability



Building Organizational Concept 'A'



Building Organizational Concept 'B'



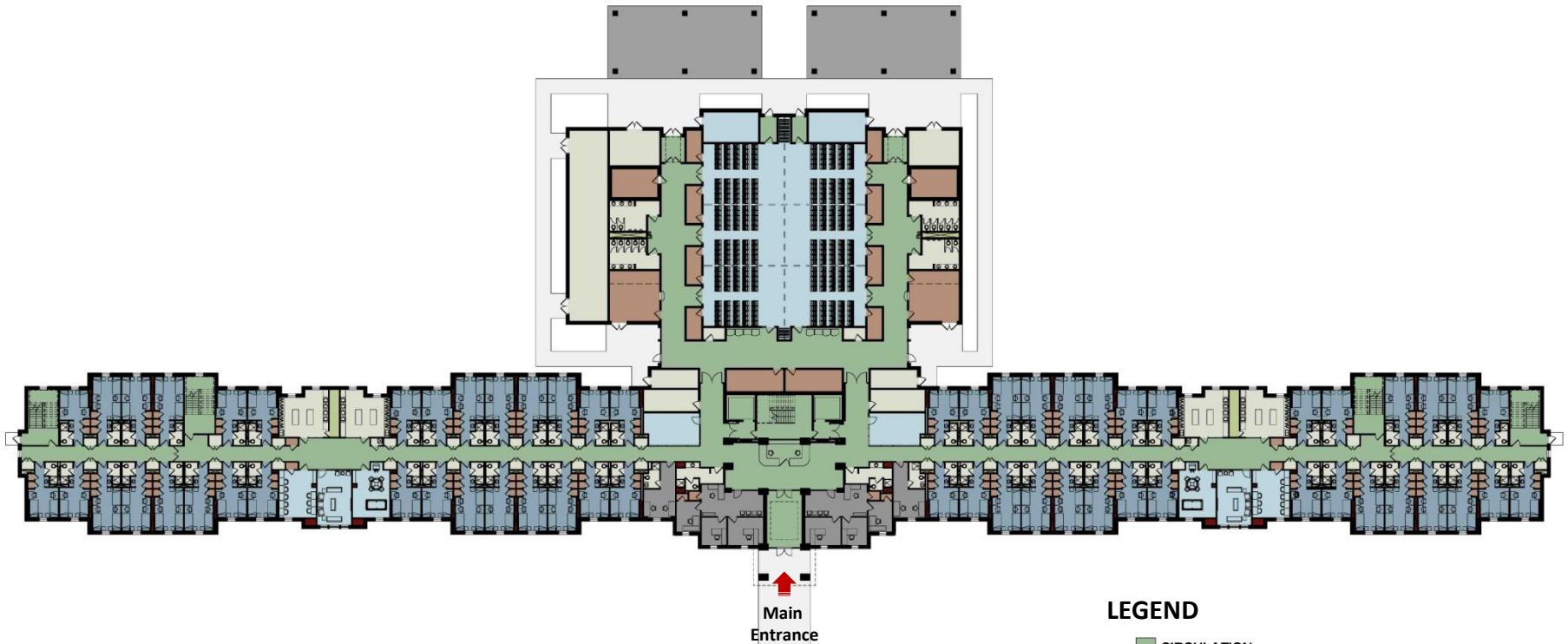
Building Organizational Concept 'C'

- 1 The Standardization of Building Program Components advances the concept of 'Standardization'
- 2 The Trainee Support Module can be reorganized to serve as a transitional space to support multiple 'Building Organizational Concepts'
- 3 These 'Building Organizational Concepts' will provide Installations with the ability to consider multiple site configurations in the development of their Installation Master Plan
- 4 This additional level of 'Standardization' will provide the opportunity to select a 'Building Organization Concept' and Site that consider building orientation and placement minimizing site development costs while addressing sustainability requirements to maximize day-lighting and energy efficiencies



# AIT Complex

## 5-Story B/COF - Standard Design



Proposed Floor Plan  
(First Floor)

### LEGEND

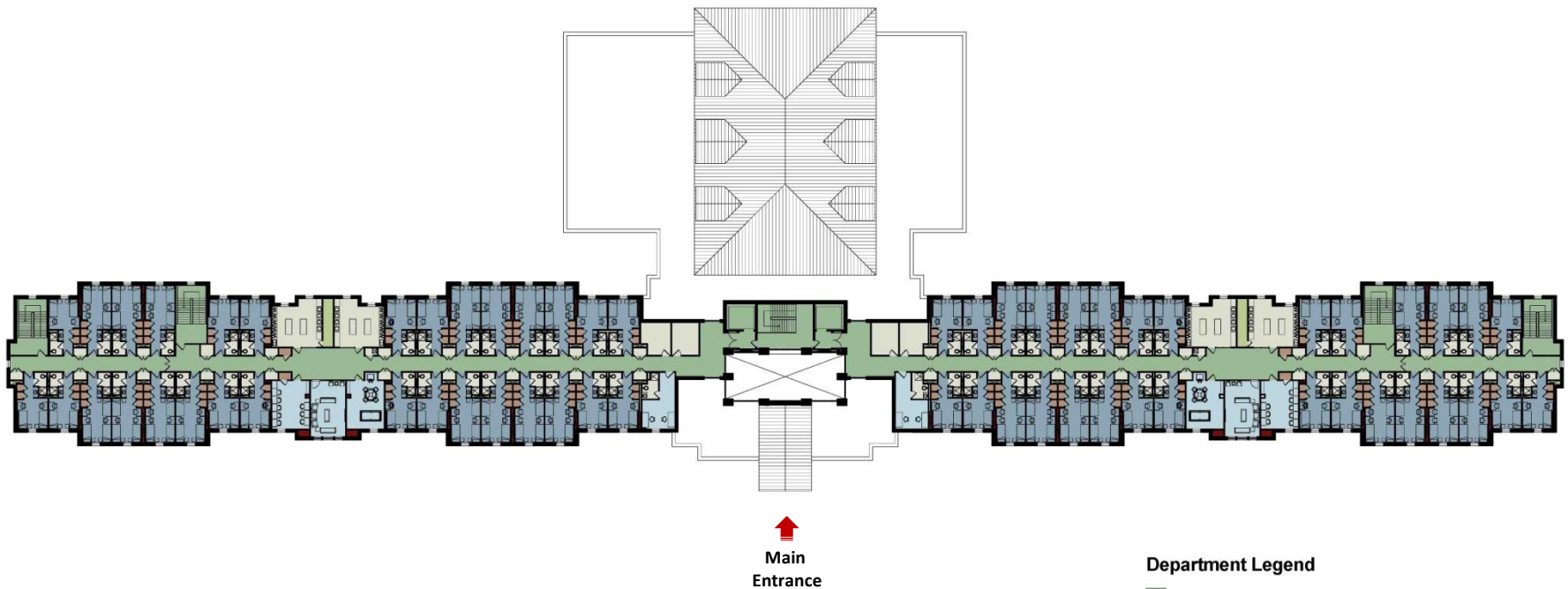
- CIRCULATION
- COMMAND
- SERVICE
- SLEEPING
- STORAGE
- TRAINING





# AIT Complex

## 5-Story B/COF - Standard Design



**Proposed Floor Plan  
(Second through Fifth Floor)**

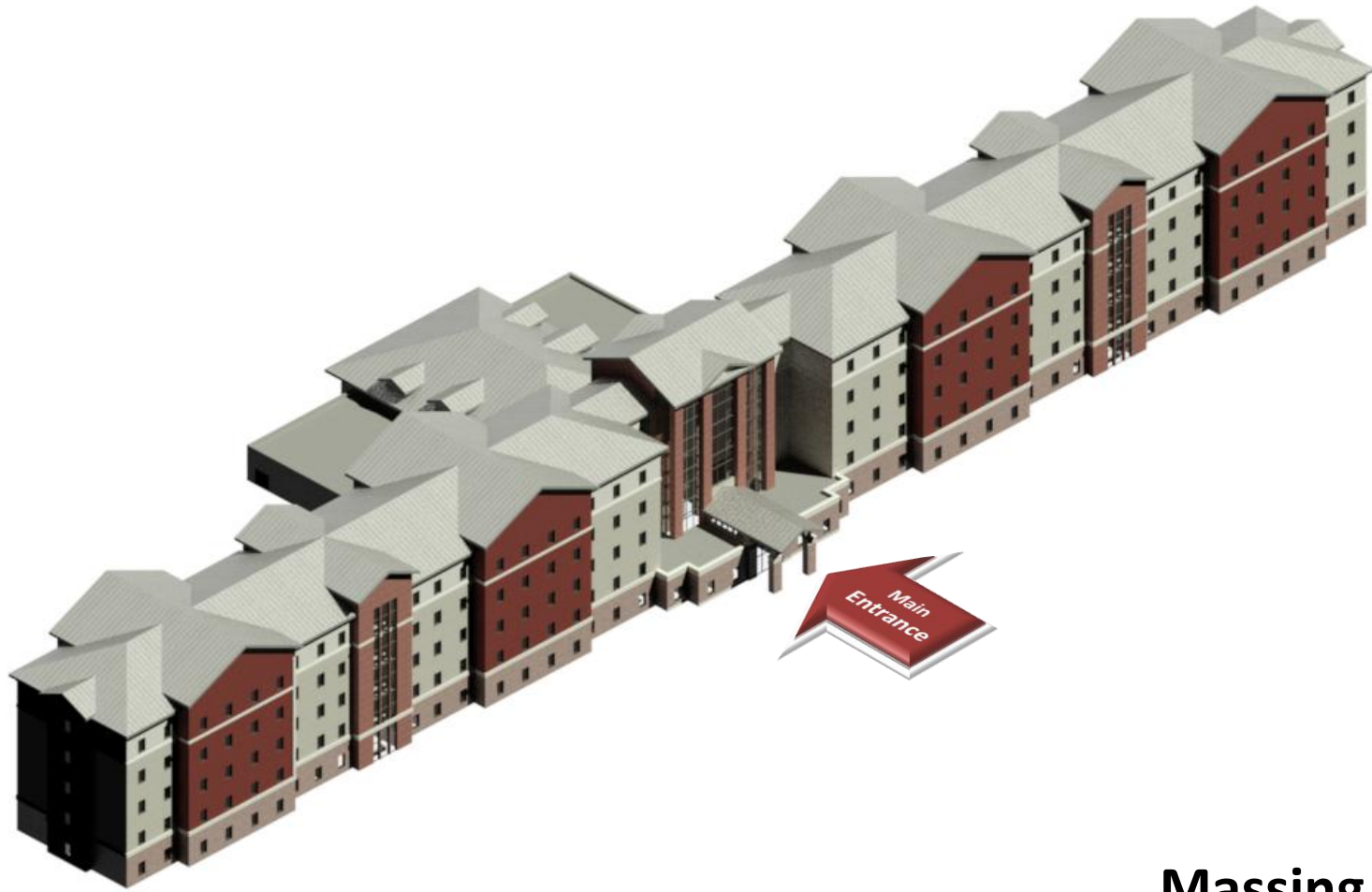
### Department Legend

- CIRCULATION
- COMMAND
- SERVICE
- SLEEPING
- STORAGE
- TRAINING



# AIT Complex

5-Story B/COF – Proposed Standard Design



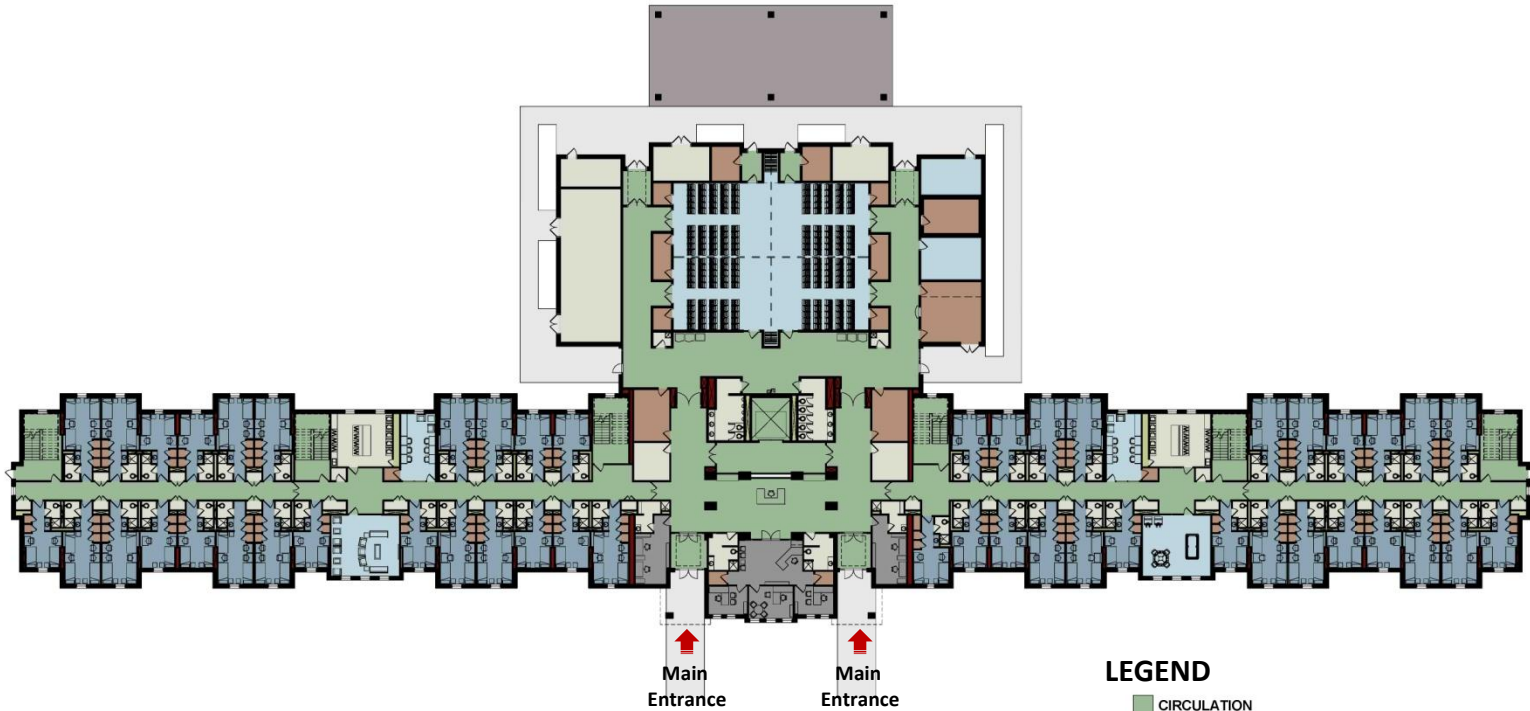
Massing Model





# AIT Complex

## 3-Story B/COF - Standard Design



**Proposed Floor Plan  
(First Floor)**

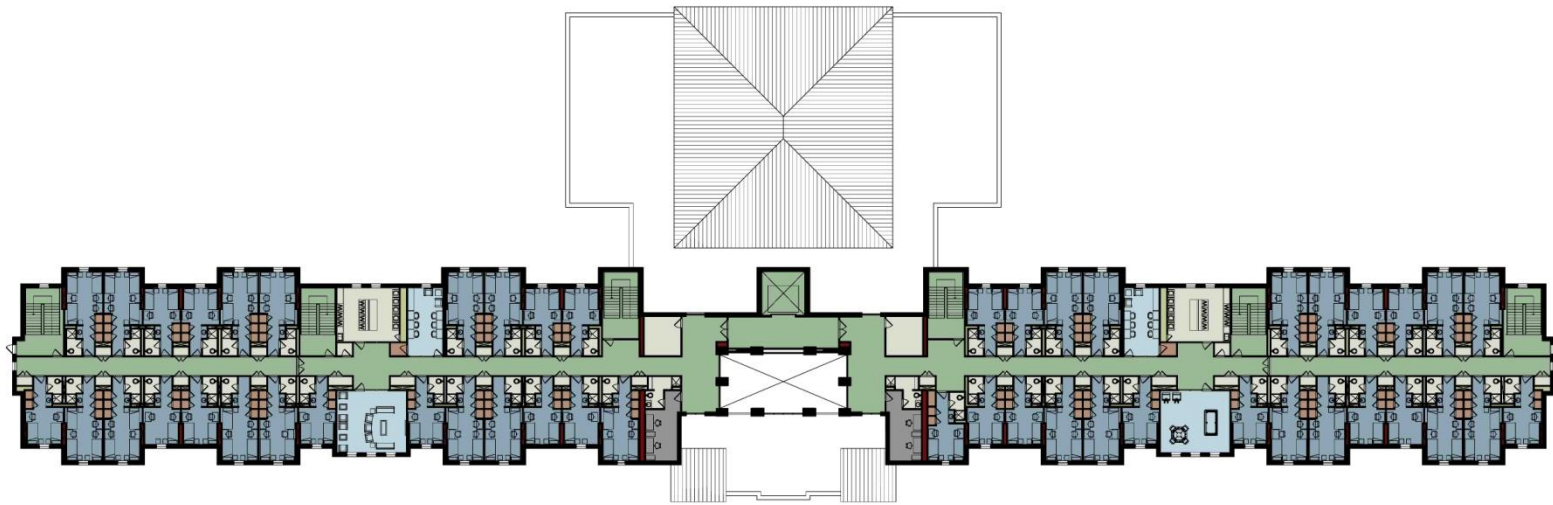
### LEGEND

- CIRCULATION
- COMMAND
- SERVICE
- SLEEPING
- STORAGE
- TRAINING



# AIT Complex

## 3-Story B/COF - Standard Design



Main Entrance  
Main Entrance

Proposed Floor Plan  
(Second Floor)

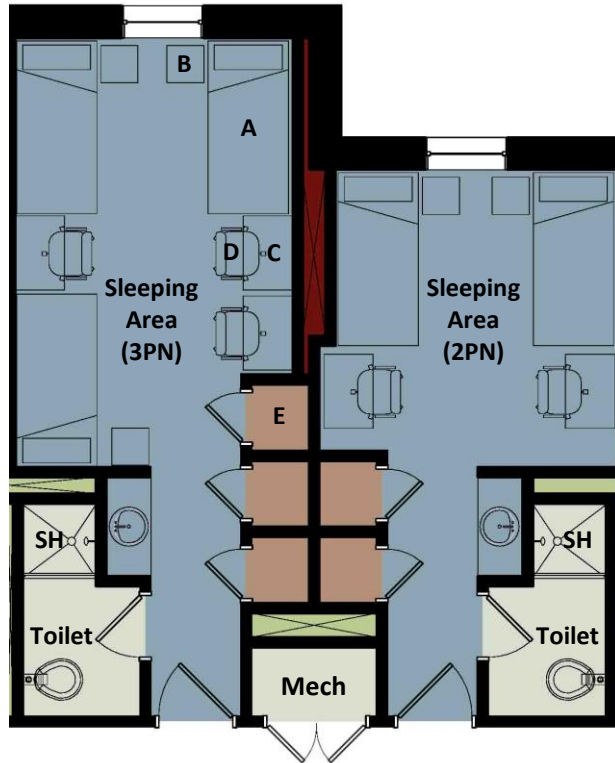
### Department Legend

- CIRCULATION
- COMMAND
- SERVICE
- SLEEPING
- STORAGE
- TRAINING



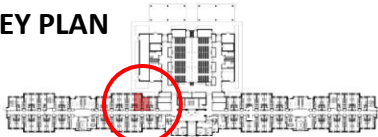
# AIT Complex

## B/COF Living Quarters



Proposed Floor Plan

### KEY PLAN



Proposed Design

### LEGEND

MECHANICAL CHASE	STORAGE
SERVICE	CIRCULATION
SLEEPING	STRUCTURAL CHASE

## Design Criteria

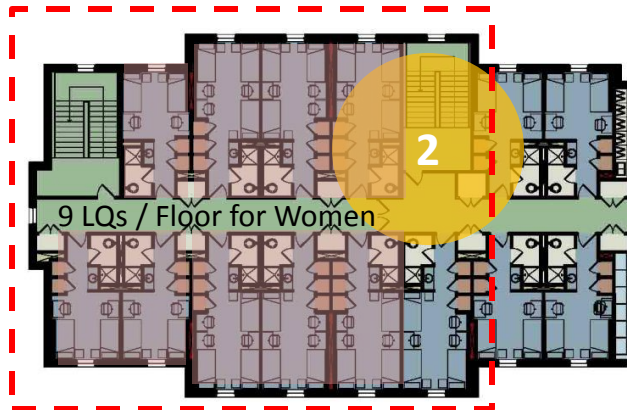
- **Base Design Capacity (BDC)**  
BDC = 2 Occupants per Sleeping Area in 50% of the Living Quarters
- **Peak Design Capacity (PDC)**  
PDC = 3 Occupants per Sleeping Area in 50% of the Living Quarters
- **Allocated Space per Occupant**  
Base Design Capacity (BDC): 90 NSF  
Peak Design Capacity (PDC): 72 NSF
- **Authorized Furnishings per PN**
  - One Bed (39" x 84")
  - One Night Stand (18" x 18")
  - One Desk (24" x 36")
  - One Chair (24" x 24")
- **Authorized Personal Storage**
  - Built-In Wardrobe Closet (24" x 36")



# AIT Complex

## B/COF Proposed Standard Design

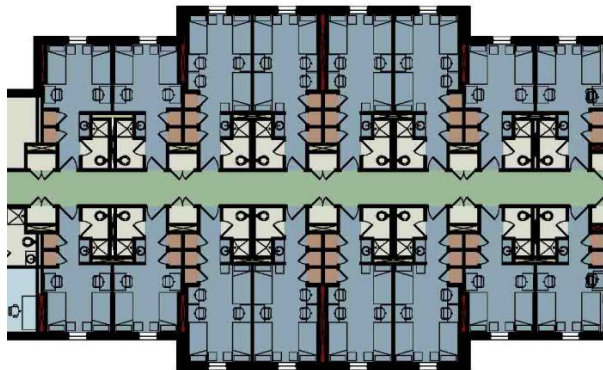
### Grouping of individual rooms to create Living Quarters Modules



**1** Standardization of the 14-Room and 16-Room Living Quarters Modules provides symmetry and balance of building's massing with a more cost-effective building/roof structure.

**2** Placement of two pair of cross-corridor doors and internal stairs on the upper floors of each wing within the 14-Room Living Quarters Modules provides more flexibility for gender separation and enhanced Safety and Security

**1A** Living Quarters: 14 Room Module

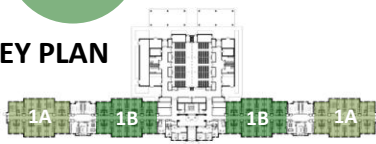


**1B** Living Quarters: 16 Room Module

### Number of Female Occupants per Floor:

- 1 Flr 18 BDC to 24 PDC 6.0% to 6.4%
- 2 Flrs 36 BDC to 48 PDC 12.0% to 12.8%
- 3 Flrs 54 BDC to 72 PDC 18.0% to 19.2%
- 4 Flrs 72 BDC to 96 PDC 24.0% to 25.6%

### KEY PLAN



Proposed Design

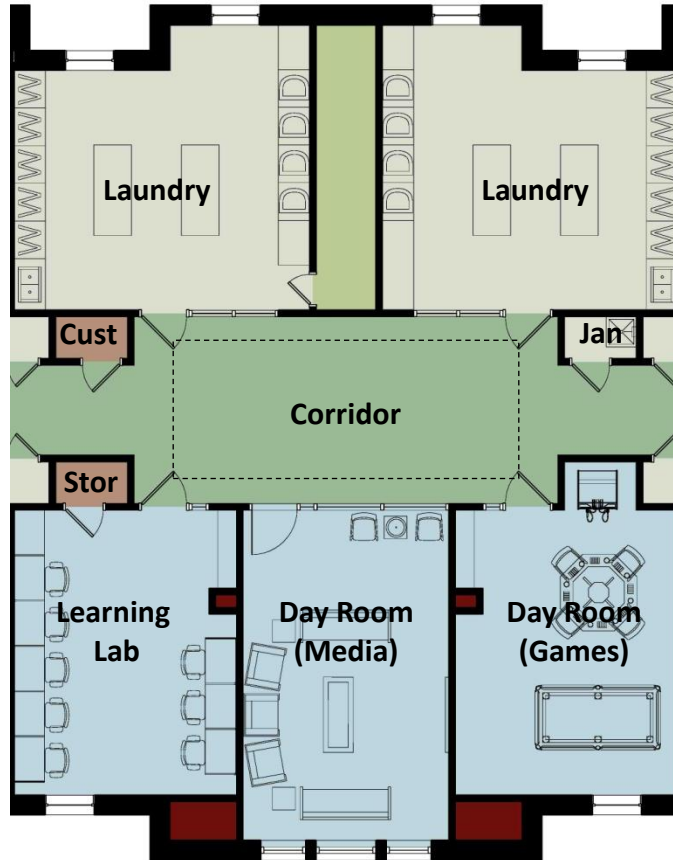
### LEGEND

- MECHANICAL CHASE
- SERVICE
- SLEEPING
- STORAGE
- CIRCULATION
- STRUCTURAL CHASE



# AIT Complex

## B/COF Proposed Standard Design



**Trainee Support Module**

## Standardization and Sustainability

- 1 The Standardization of Building Program Components advances the concept of 'Standardization'
- 2 This Module can be reorganized to serve as a transitional space to support multiple 'Building Organizational Concepts'
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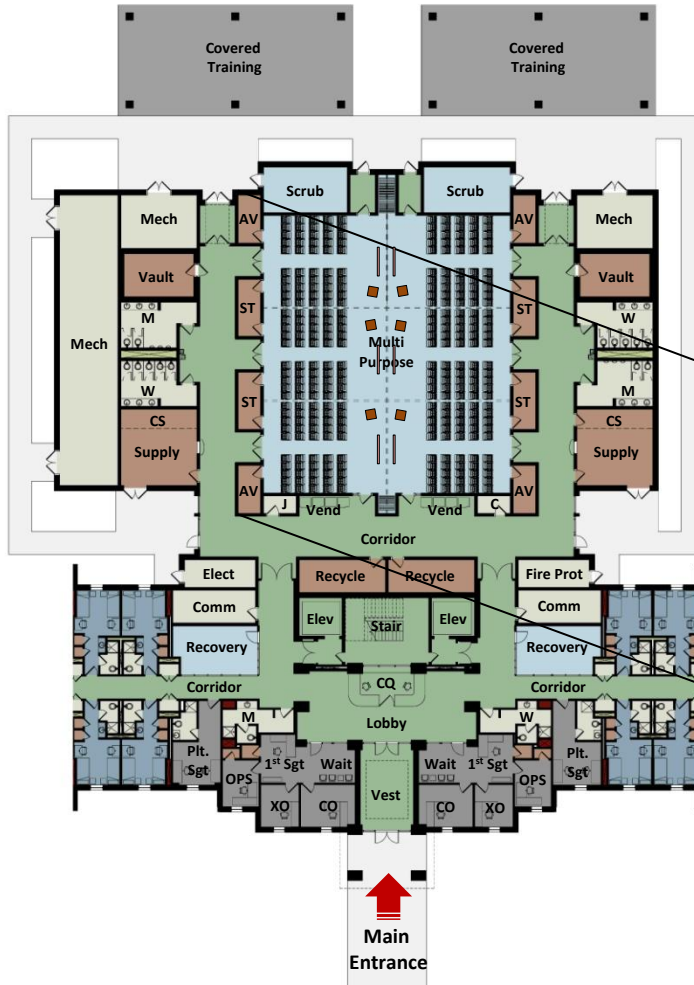


# AIT Complex

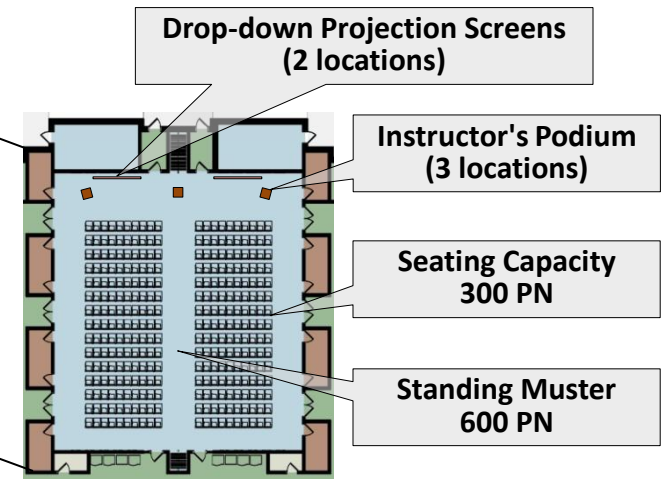
## Training Module

Reorganization of the Company Multi-Purpose Rooms to provide adjacency of Instructional Areas within the Training and Instruction Module

- 1 Provides maximum flexibility for instruction and assembly



Training and Instruction Module



Multi-Purpose Room  
Alternative Seating Plan  
(300 PN in Chairs w/tablet arms)