

Wake County Detention Center Phase 3 Expansion

Schematic Design Presentation

Facilities Design & Construction

April 13, 2026



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Agenda

- **Existing Facility & Historic Planning**
- **Updated Needs Assessment**
- **Jail Best Practices**
- **Site Overview**
- **Building Overview**
- **Systems Overview**
- **Budget**
- **Schedule**



Existing Wake County Detention Center - 3301 Hammond Road



**WAKE COUNTY
DETENTION CENTER
2030 MASTER PLAN**
UPDATED DECEMBER 2010



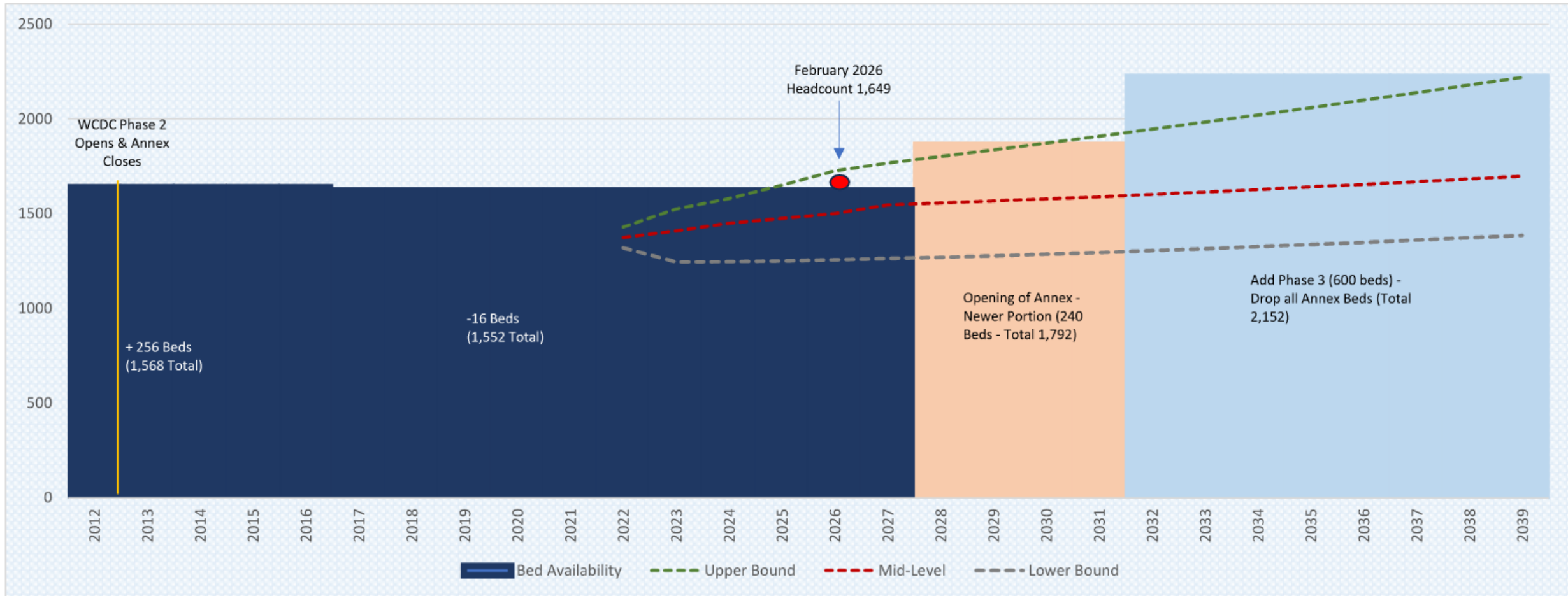
PHASE	PLAN
ANNEX	416
PSC	480
PHASE 1B	416
PHASE 2	672
PHASE 3	456
PHASE 4	840
TOTAL	3,280



**Original 2030
Master Plan**

Wake County Update Detention Projections & Review Housing Options

Phase 3 – 600 Bed Addition and Closing of Annex



Detention Housing Needs



- Bed capacity
- Address deferred maintenance in existing detention
- Wet-cell housing
- Flexible tools for classification

Best Practices – Staff Environment

- **Detention Division – Emphasize Staff Retention and Recruiting**
- **Direct / Indirect Supervision**
- **Staff Breakrooms Each Level**



- **Additional Academic Area**
- **Housing Best Practices**
 - Recreation Opportunities
 - Safety Solutions
 - Sub-dayroom separation

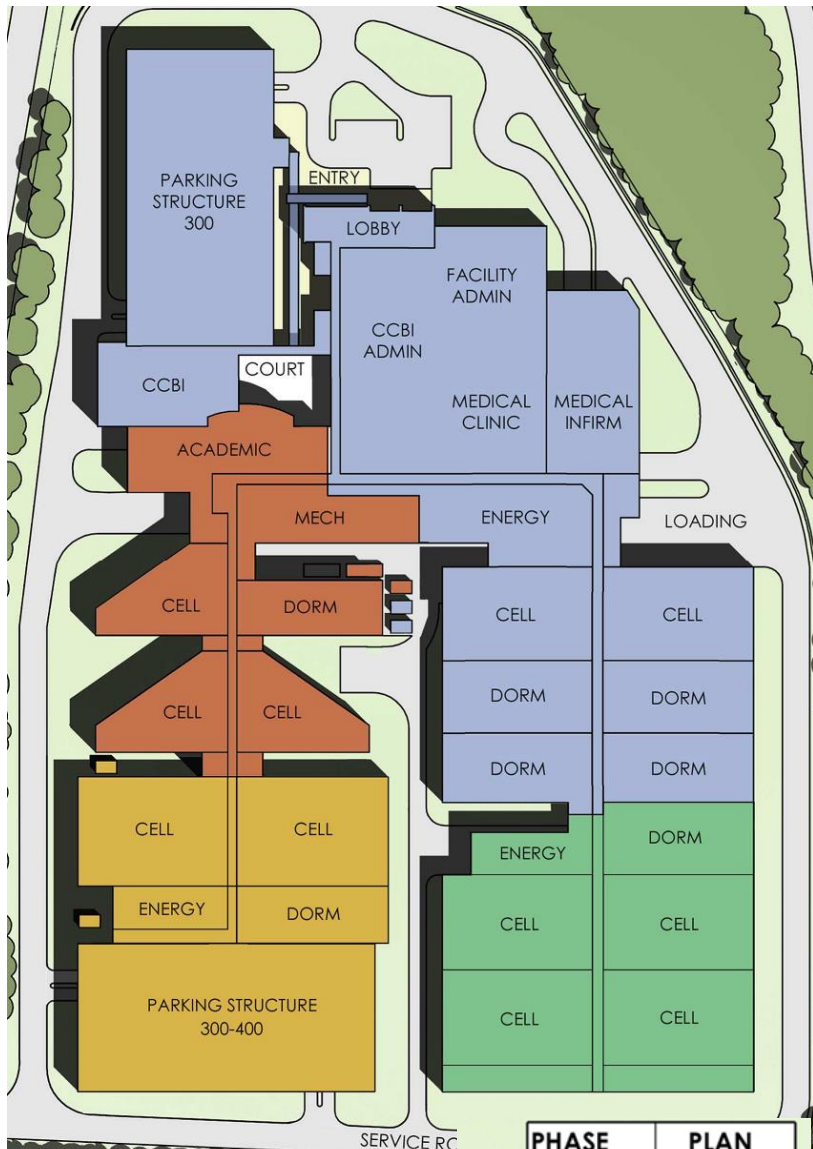




- **Housing Best Practices**
 - Use of Color
 - Calming Features
 - Assist Behavior Management

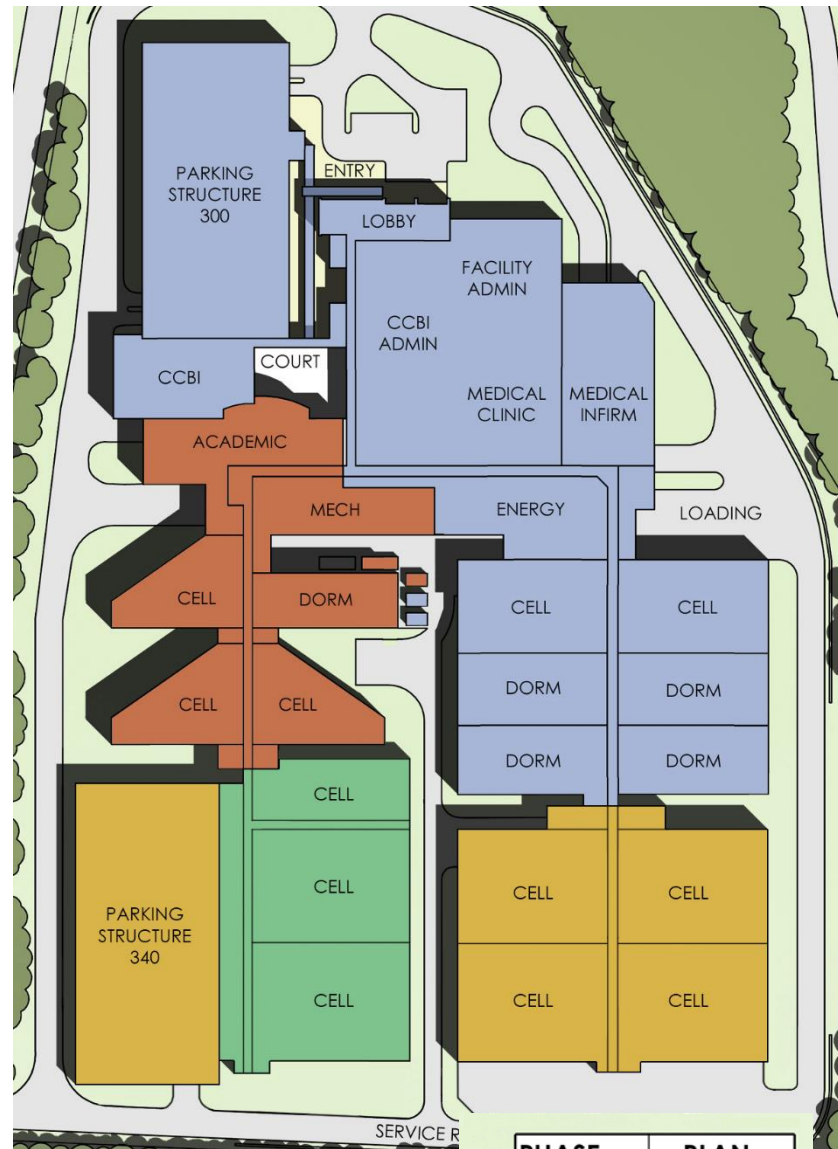


Site Plan Overview



Original 2030 Master Plan

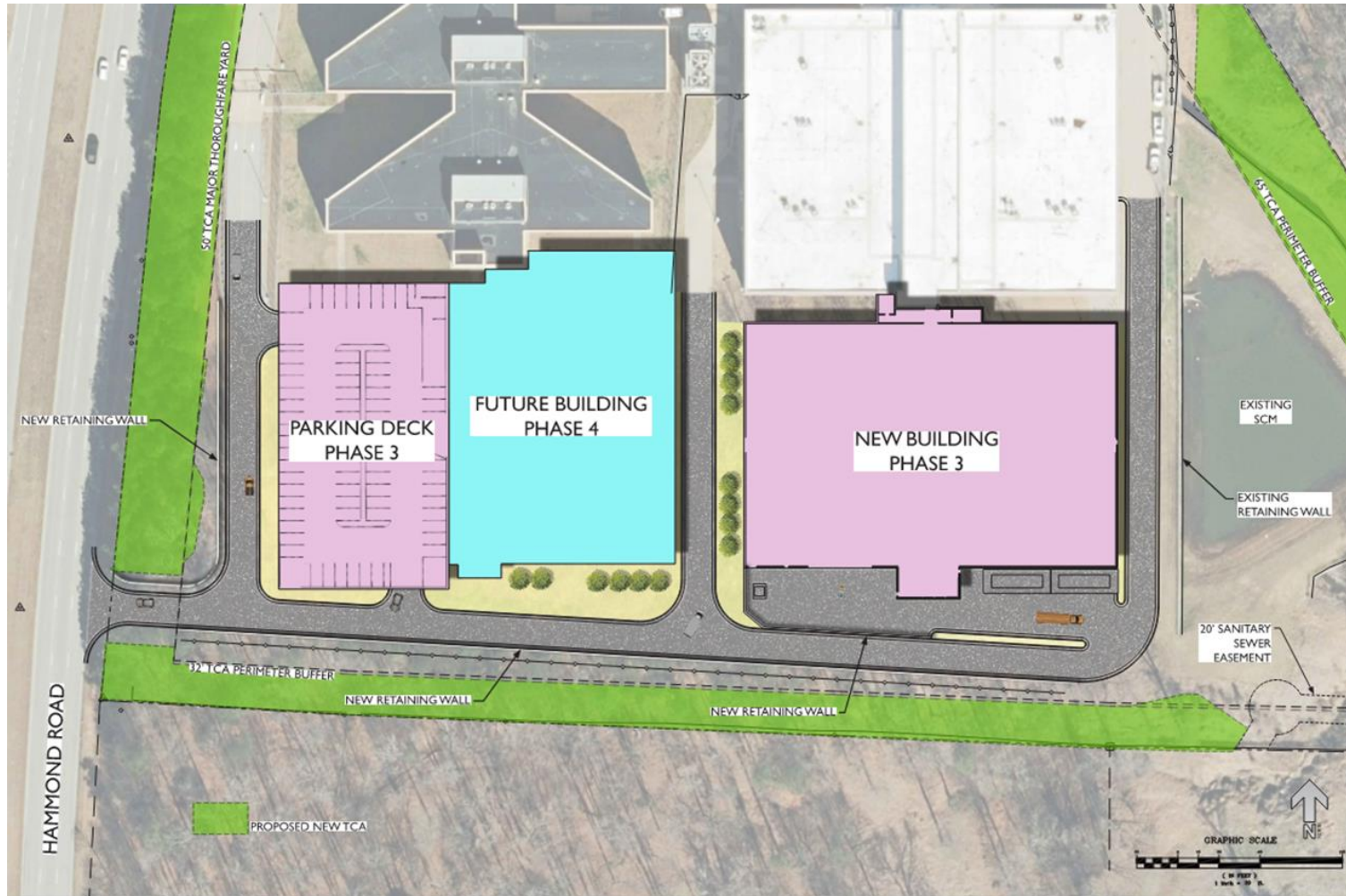
PHASE	PLAN
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TOTAL	3,280



Update 2040 Master Plan

PHASE	PLAN
ANNEX	416
PSC	480
PHASE 1B	416
PHASE 2	672
PHASE 3	600
PHASE 4	280
TOTAL	2,864

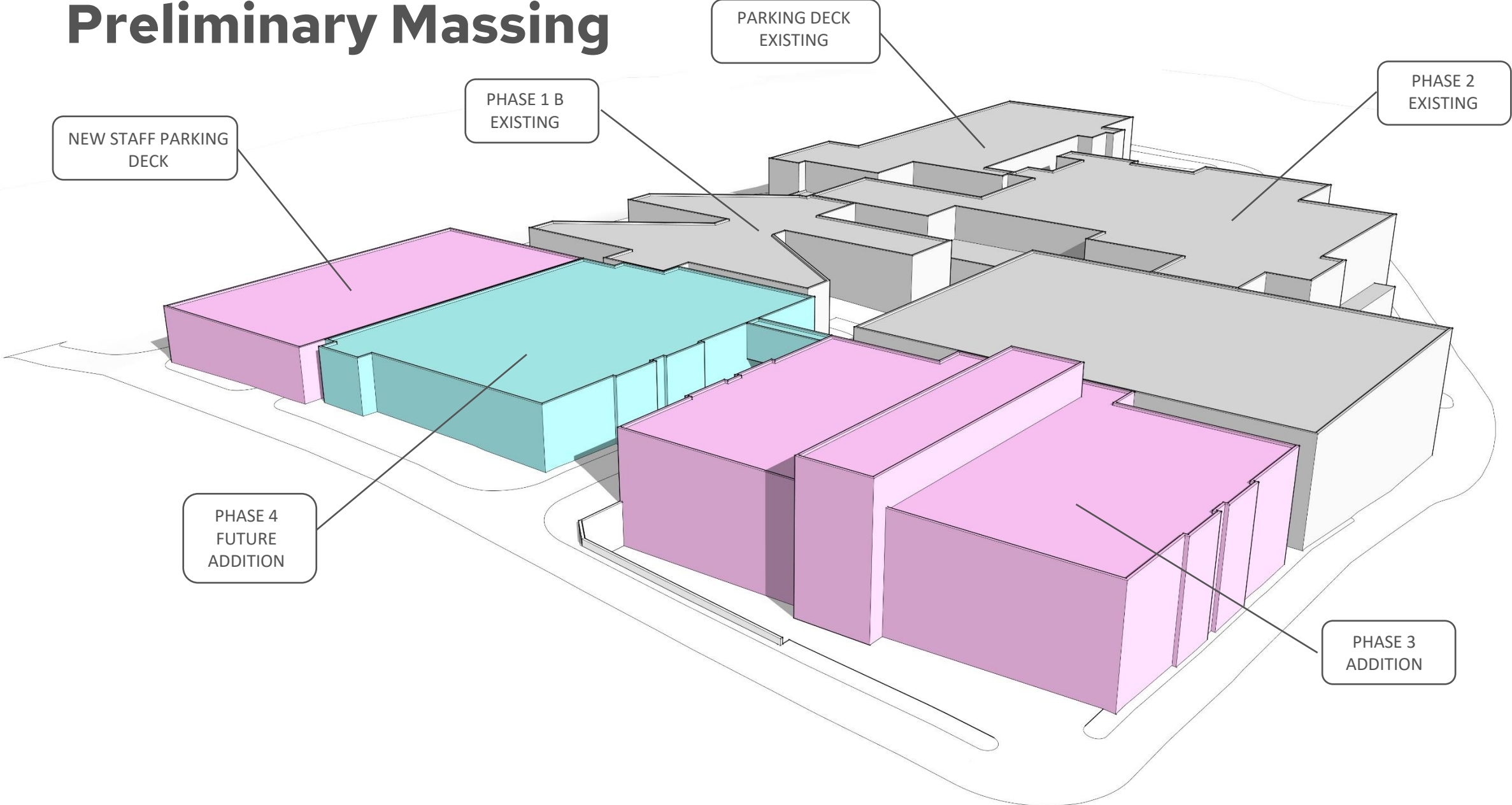
Building & Site Planning



Phase 3 Expansion

- Three story building area 220,000 SF
- Housing 160,000 SF
600 Beds
- Academic area
3,500 SF
- Staff parking deck
350 cars

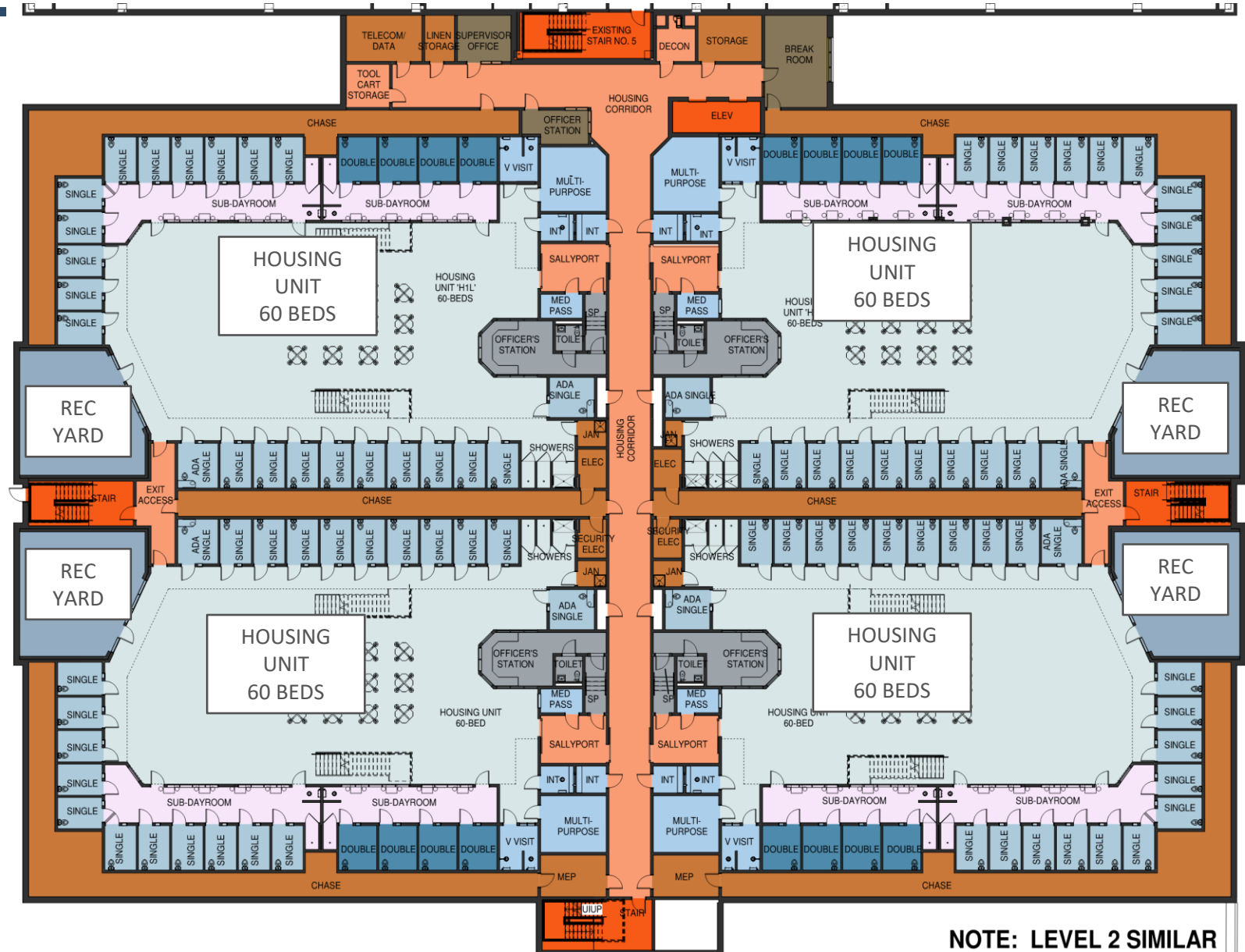
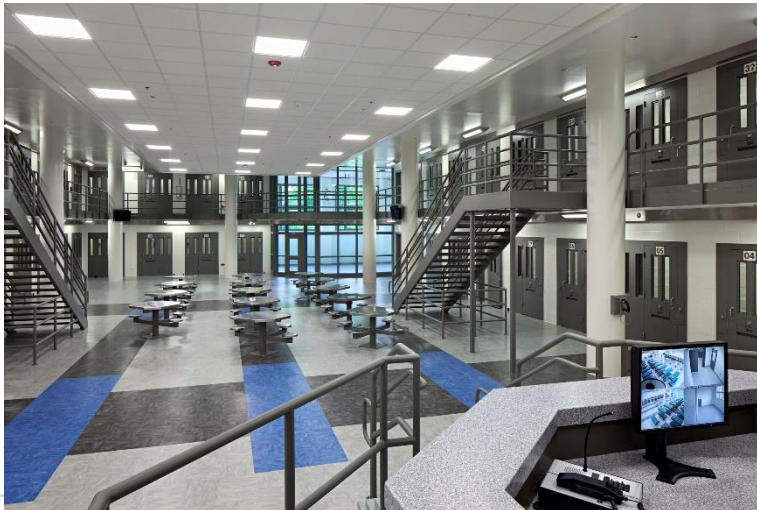
Preliminary Massing



Building Overview

Overall Floor Plan - Level 1 & 2

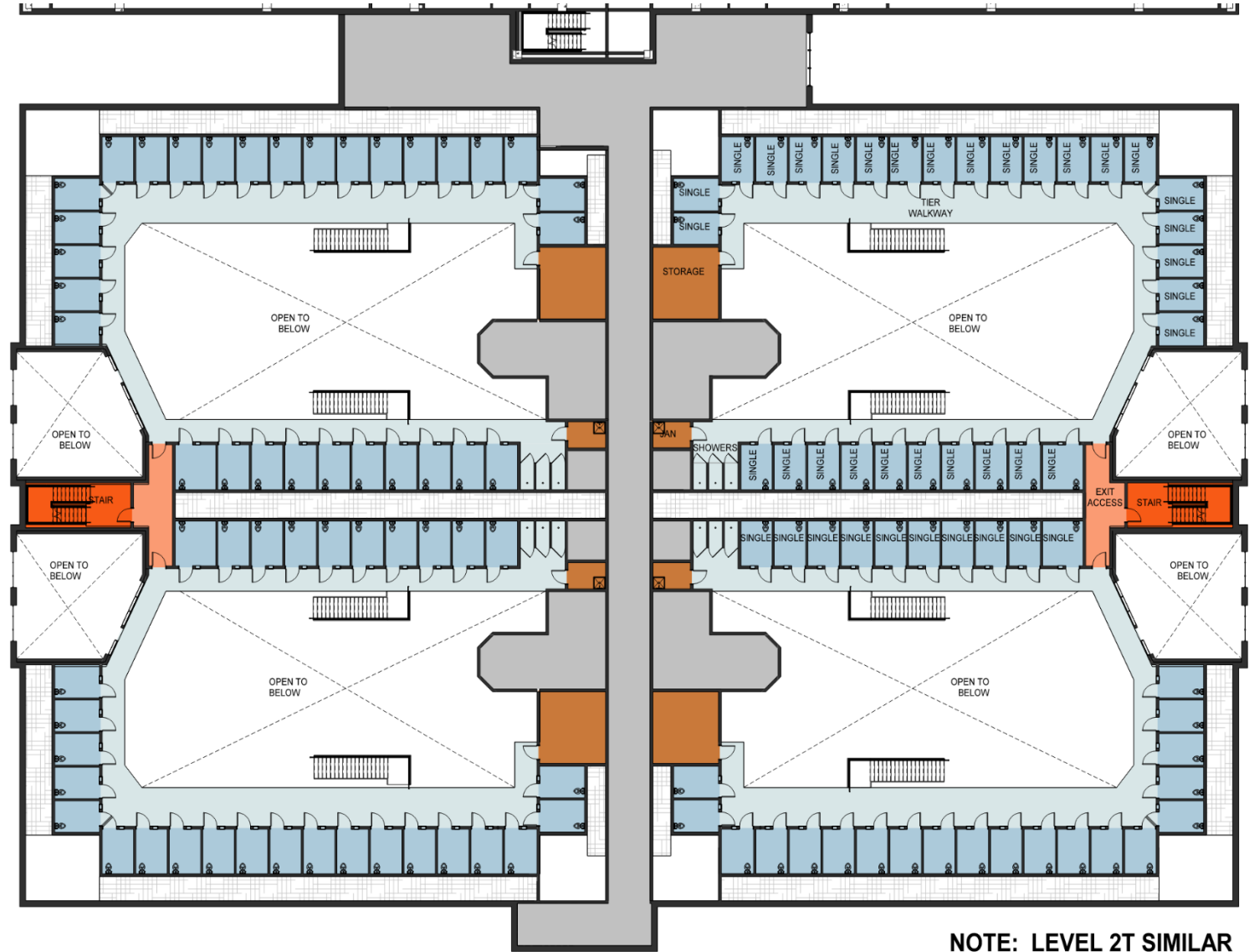
- Four 60-bed housing units + Housing support areas
- Level 1 and Level 2 floor plans identical



NOTE: LEVEL 2 SIMILAR

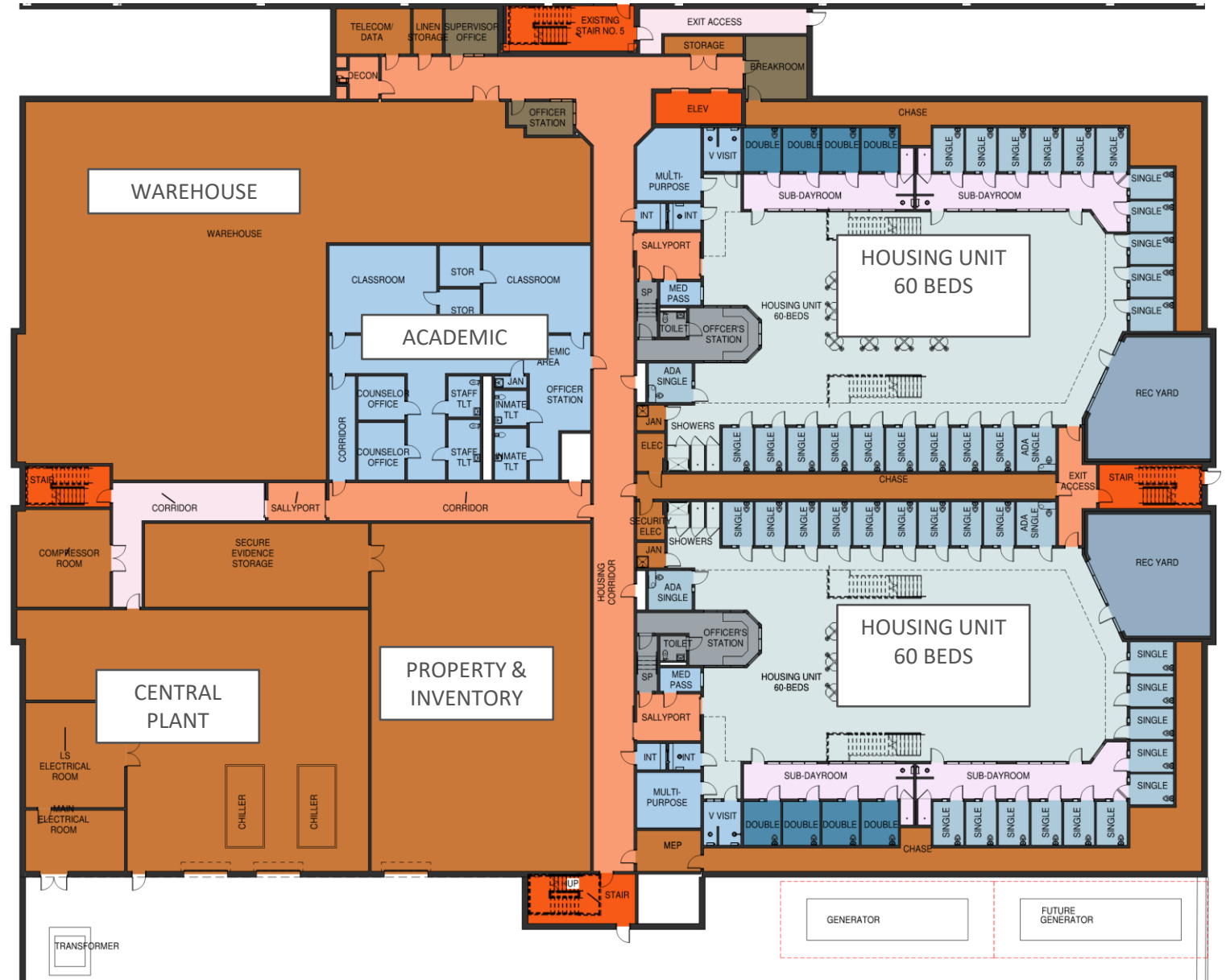
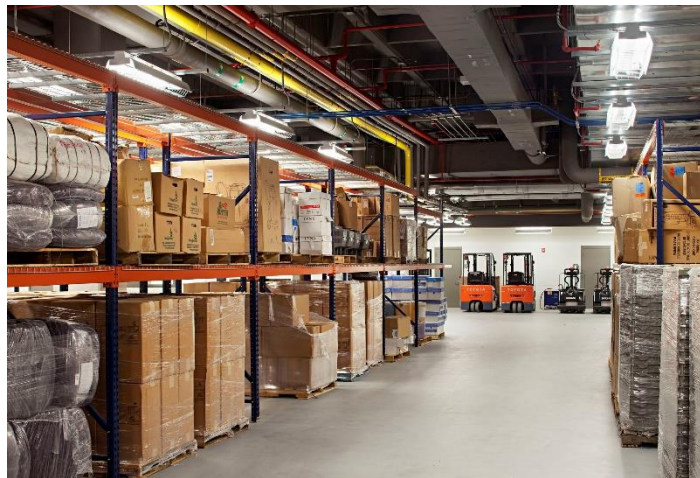
Overall Floor Plan - Level 1 & 2 Tiers

- Additional cells above main floor level within each housing unit
- Level 1 and Level 2 tier floor plans identical



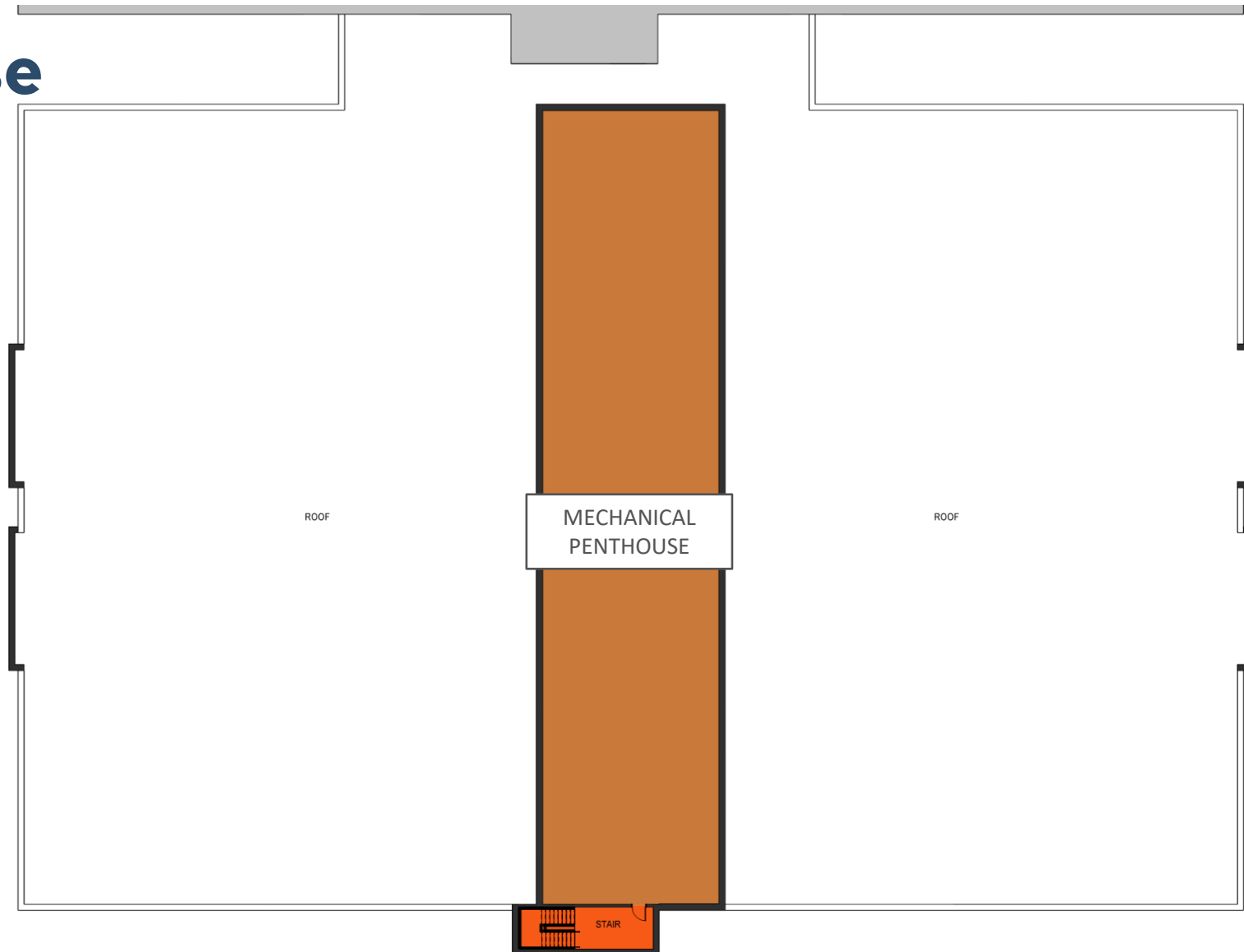
Overall Floor Plan - Level 0

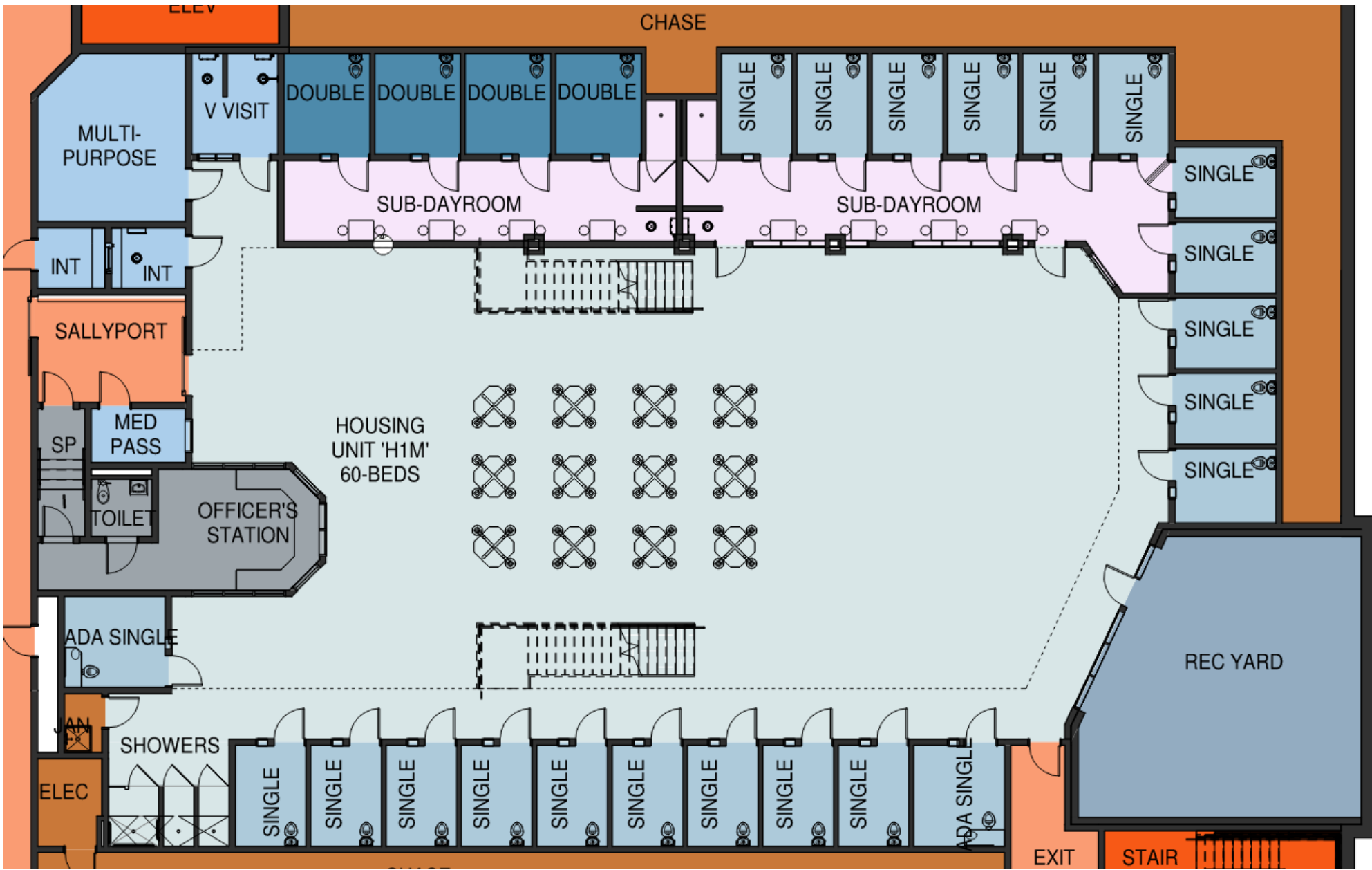
- Includes two future 60-bed housing units, Academic Area, Warehouse, Property & Inventory Storage, and Central Plant



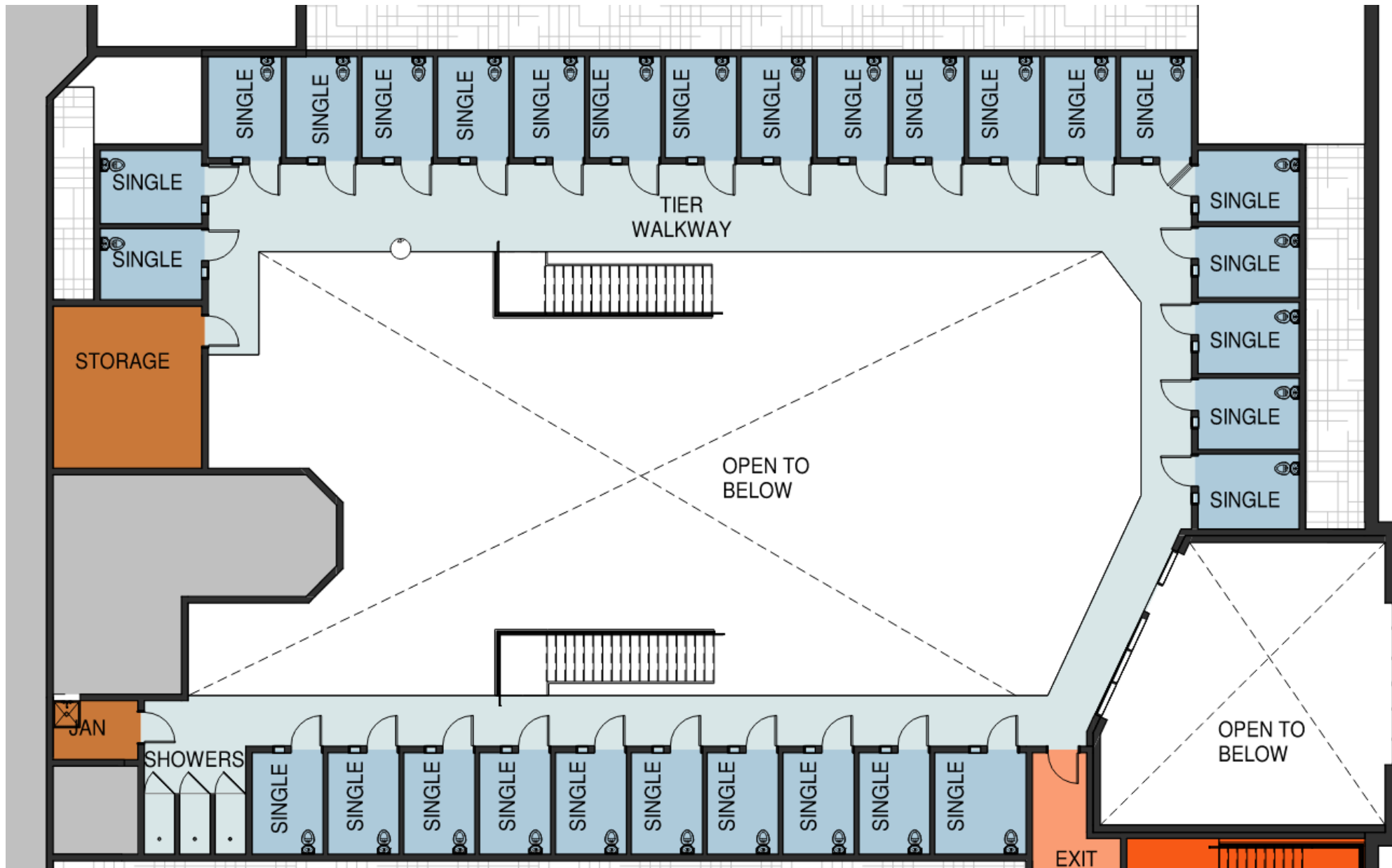
Overall Floor Plan – Mechanical Penthouse

- Includes mechanical penthouse space similar to Phase 2 for air handlers





Typical Housing Unit - Floor Level



Typical Housing Unit - Tier Level

Systems Overview

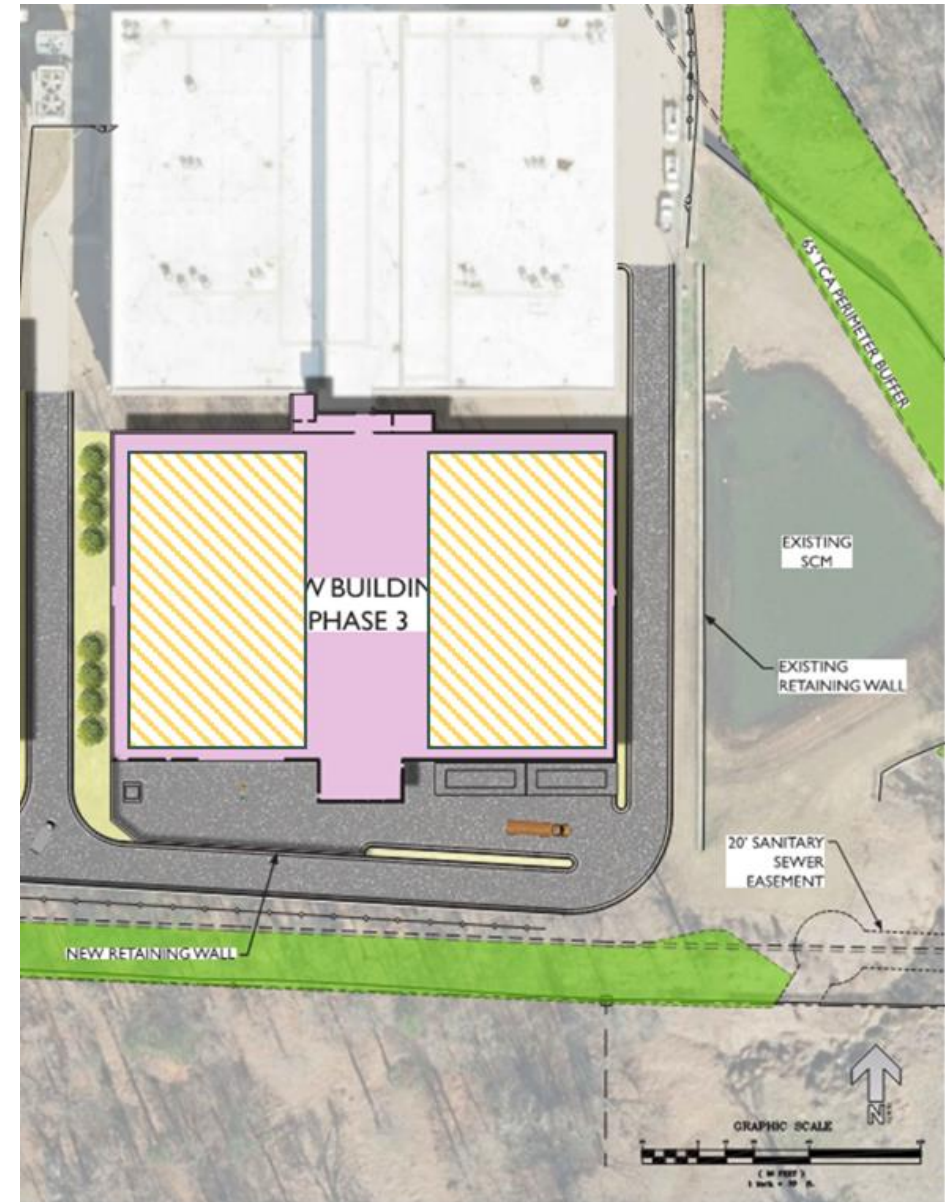
Design Solutions

- Minimize solar gains from glazing
- Resiliency through connections to existing central plant
- Durable interior finishes
- Energy recovery units (new to building)
- Water management system
- High-performance LED lighting w/ night lighting
- Rear-chase access to systems for maintenance



Design Solutions

- Planning for Solar Photovoltaic (PV) - ready building
- Large open roof space, capacity for substantial PV system



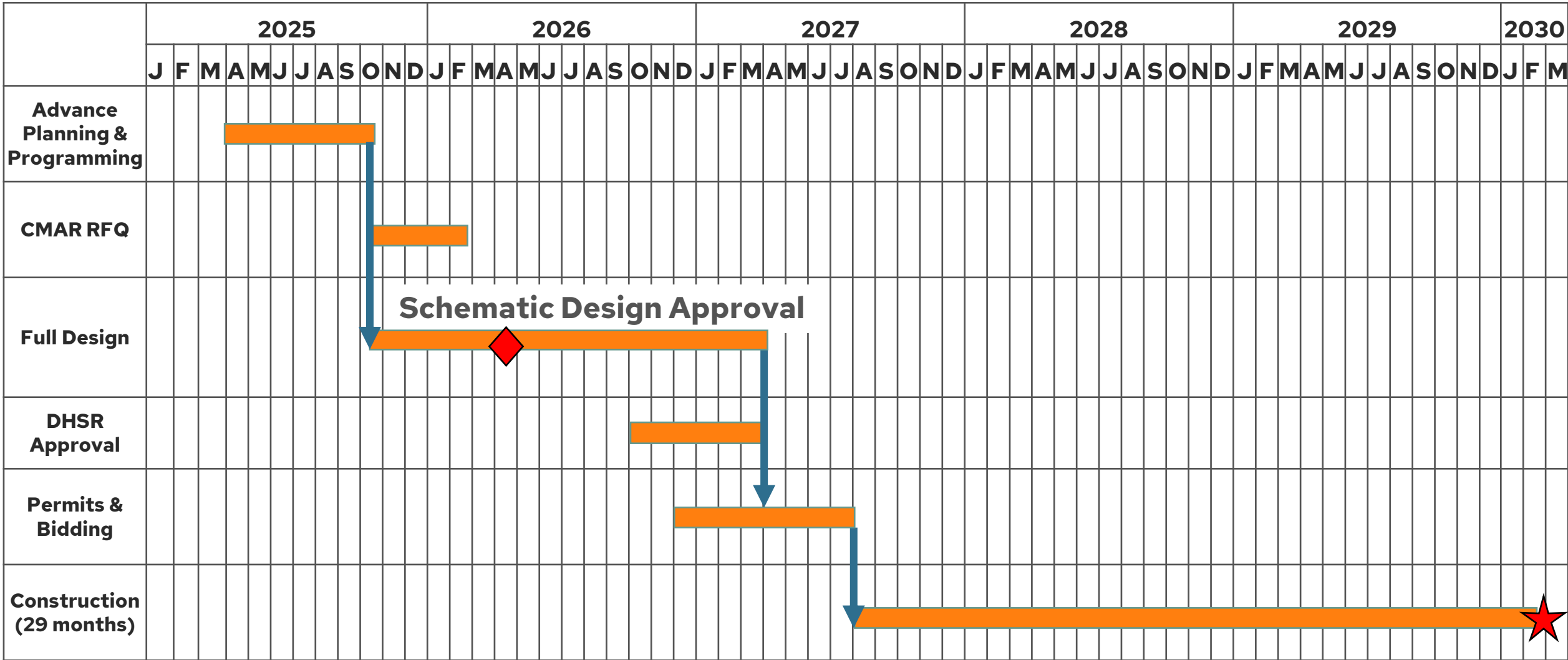
Budget

Schematic Design - Cost Estimate

Project Cost	FY26	FY28
Professional Fees	\$6M	\$2M – \$3M
Construction		\$171M – \$205M
Furnishings, Fixtures, Equipment		\$2M
Total Project Cost	\$6M	\$175M - \$210M

Schedule

Project Schedule





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