

# Ames Modernization Project

## April 2008

The National Centers for Animal Health is composed of the:

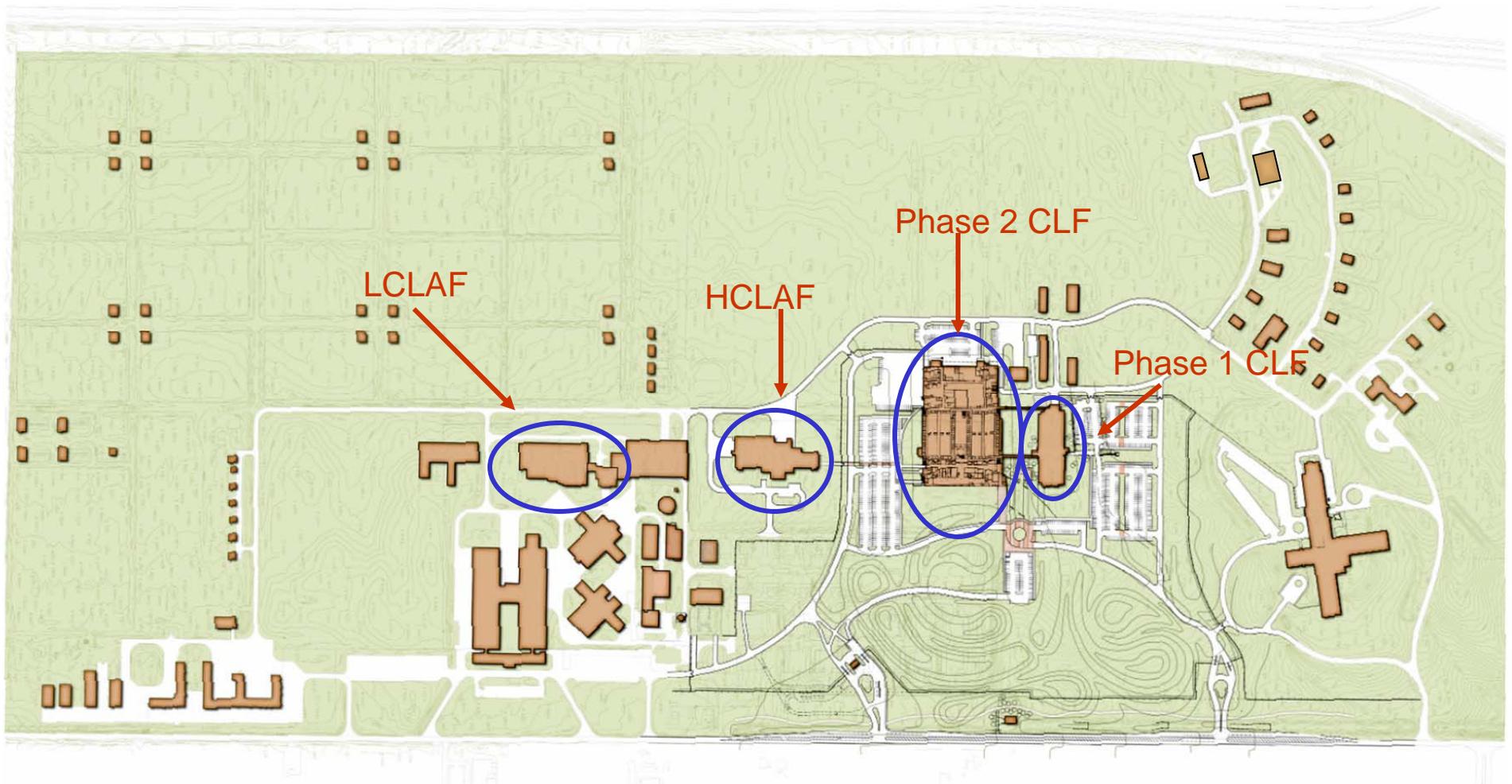
- National Veterinary Services Laboratories, APHIS
- Center for Veterinary Biologics, APHIS
- National Animal Disease Center, ARS

Together they meet the national needs for animal health research, diagnosis, and product evaluation. A \$460 M project is currently underway to modernize and consolidate the facilities of the Centers.

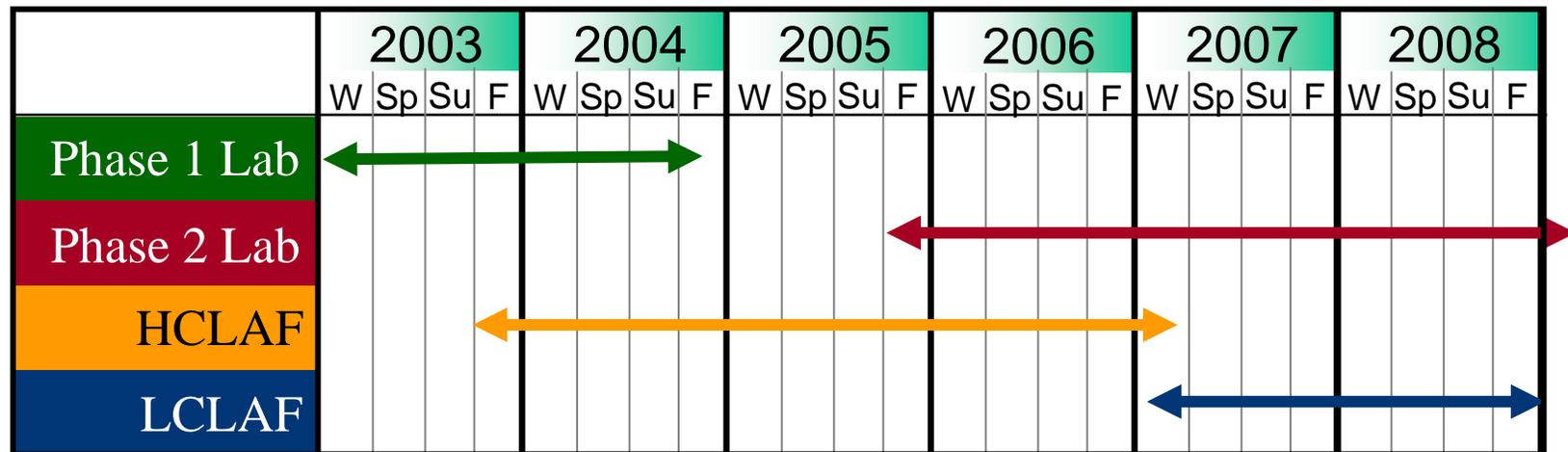


- **NVSL** provides **DIAGNOSTIC** laboratory testing for animal disease programs designed to protect the health of U.S. livestock and poultry industries.
- **CVB** ensures that veterinary **BIOLOGICS** are pure, safe, potent and effective.
- **NADC** conducts basic and applied **RESEARCH** on selected diseases of economic importance to the U.S. livestock and poultry industries.

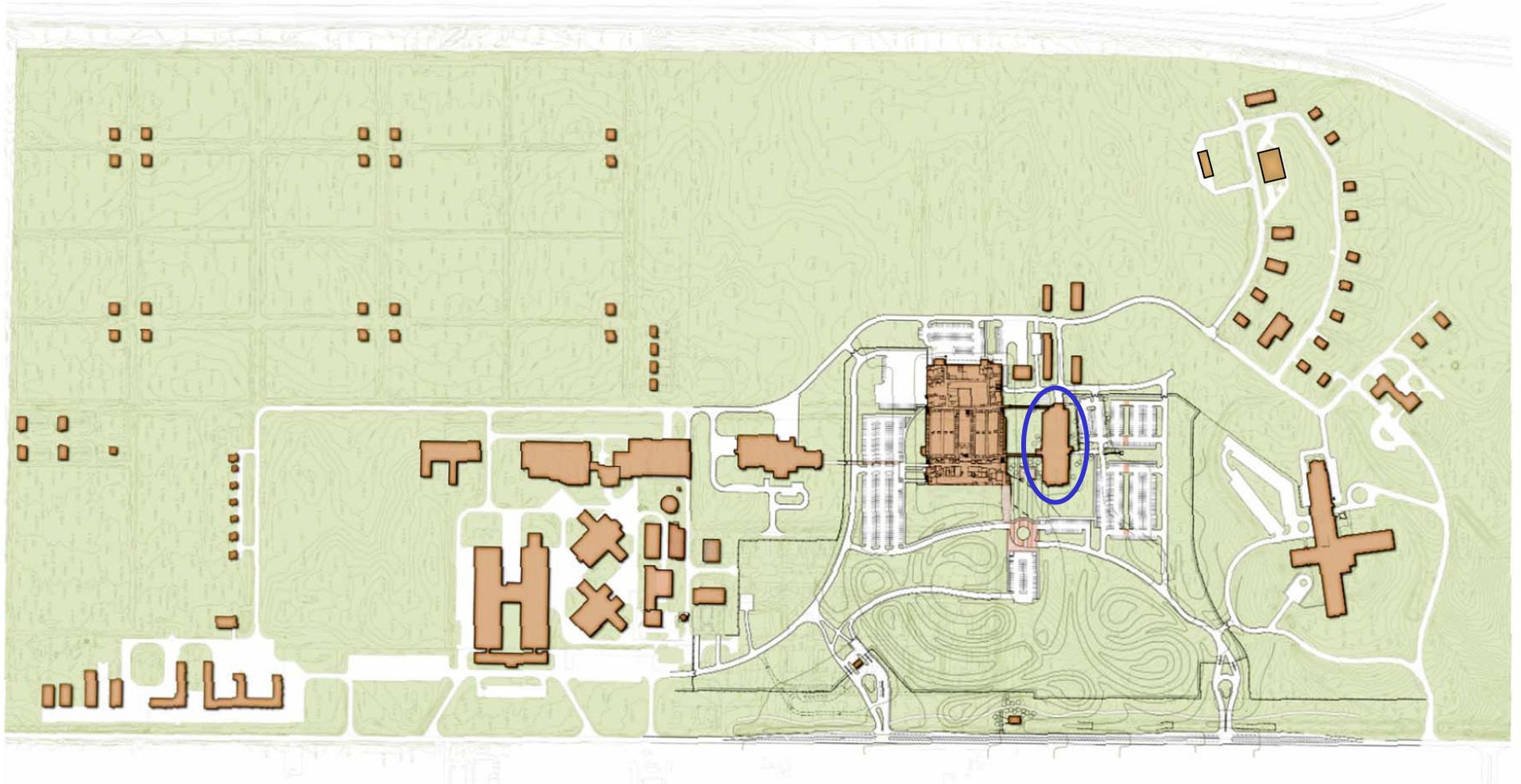
## Four Major Projects



# Ames Modernization Project Status



# Phase 1, Building 21



# Phase 1, Building 21 Completed Sept 04



## •Net Space

- 12,865 BSL-2 Laboratory
- 3,920 BSL-3 Laboratory
- 4,344 Office/Conference
- 1,120 Support
- 22,249 Total

## •Gross Space floor plates

- 41,500 Ground Floor
- 24,000 Penthouse
- 2,500 Basement
- 5,400 Central Plant



BSL-2 Laboratory space

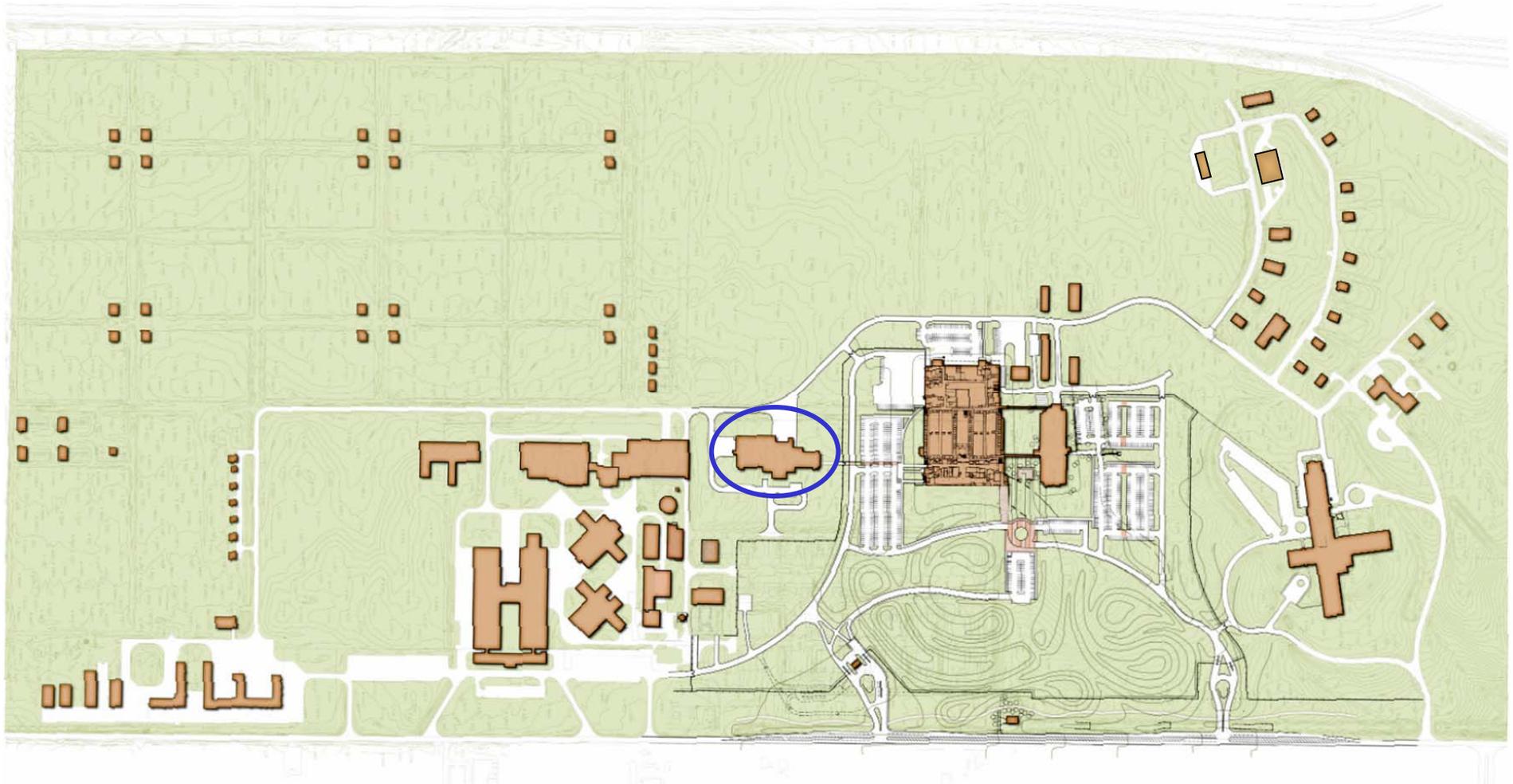


BSL-3 Laboratory space



HEPA filter housing in penthouse

# BSL 3AG Large Animal Housing & Training Facility



# BSL 3Ag Large Animal Housing & Training Facility



# BSL 3Ag Large Animal Housing & Training Facility



APHIS diagnostic, biologics,  
and training programs

- 9 animal rooms and necropsy area



ARS research

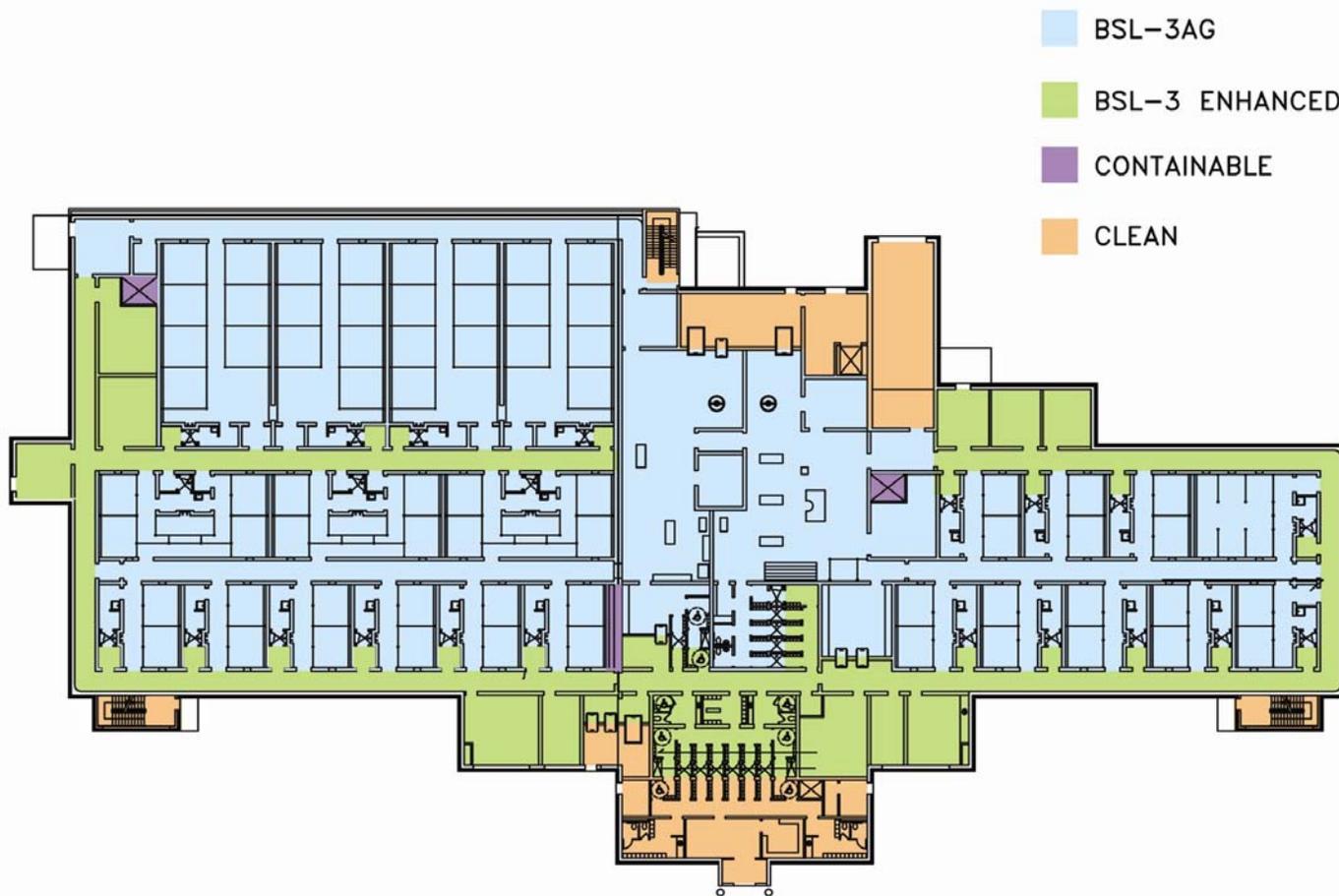
- 13 animal rooms and necropsy area



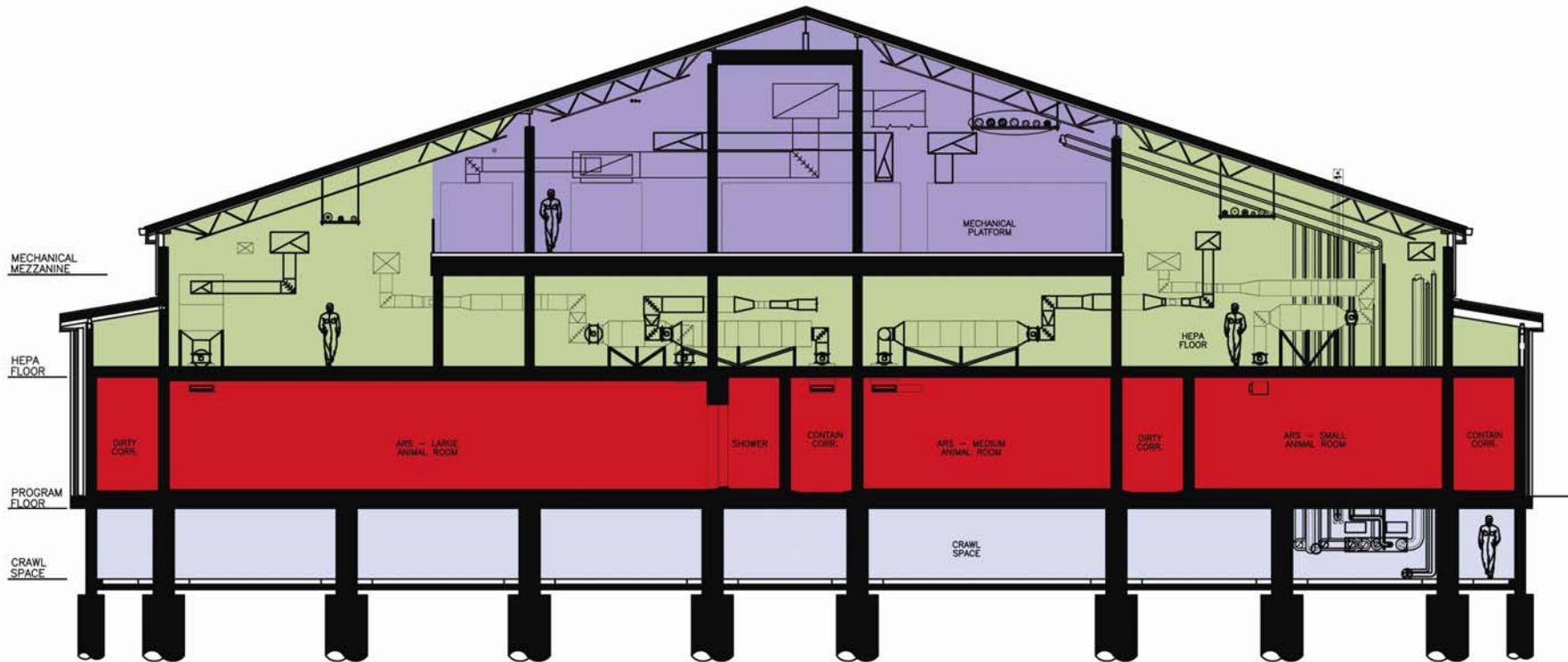
ARS NECROPSY – LOOKING WEST/SOUTHWEST



# BSL 3Ag Large Animal Housing & Training Facility



# BSL 3Ag Large Animal Housing & Training Facility



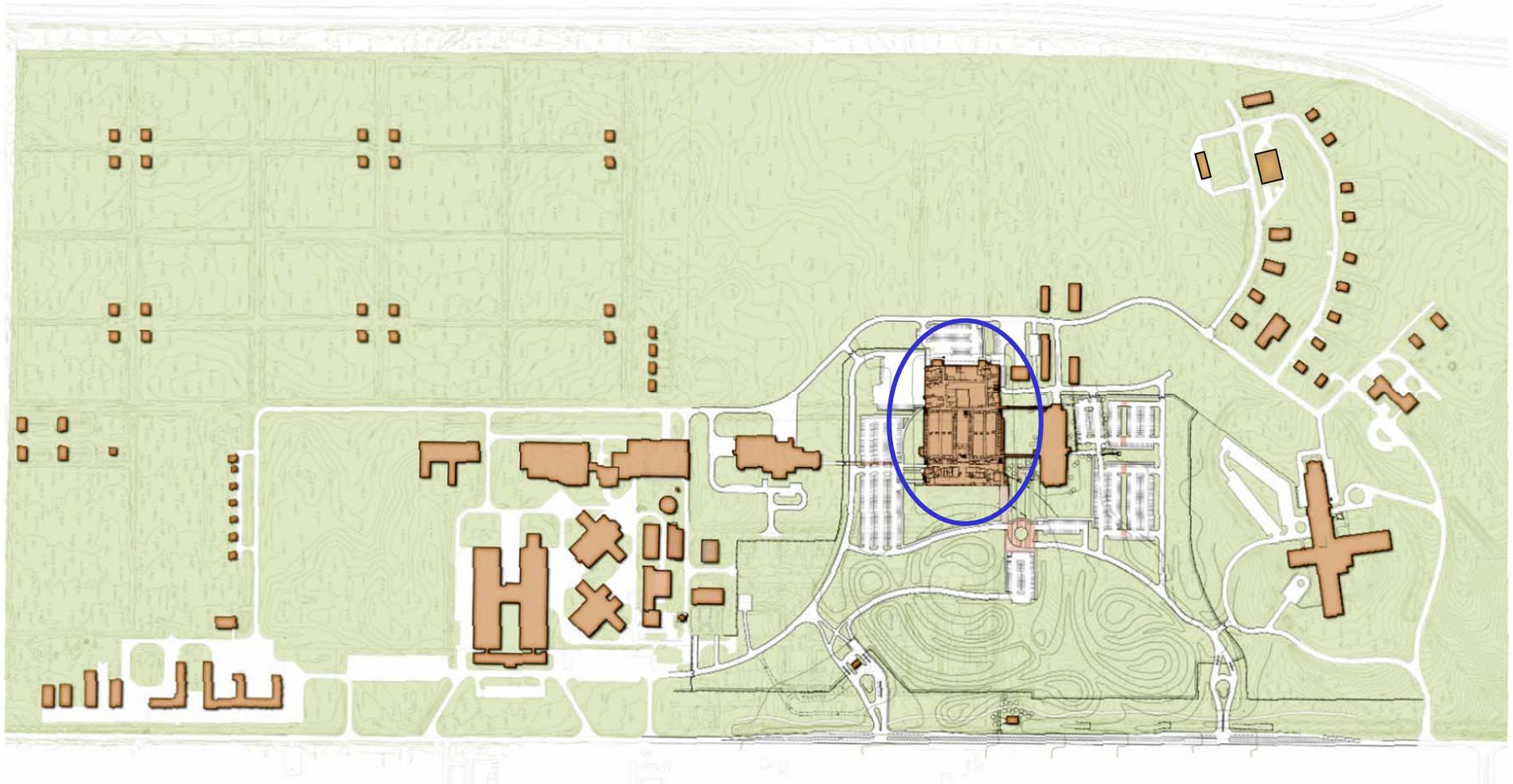
# BSL 3Ag Large Animal Housing & Training Facility



# BSL 3Ag Large Animal Housing & Training Facility



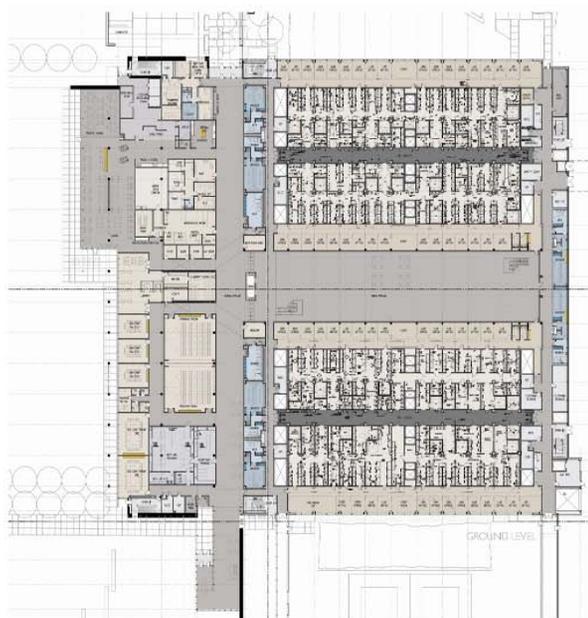
# Phase 2 Laboratory and Administration Facilities



# Phase 2 Laboratory and Administration Facilities



550,000 GSF  
BSL2 and 3 Labs  
Caged Animal Facility  
Laboratory Support Services  
Administrative Functions  
Conference & Training Spaces



CLF, March 2006



CLF, March 2007



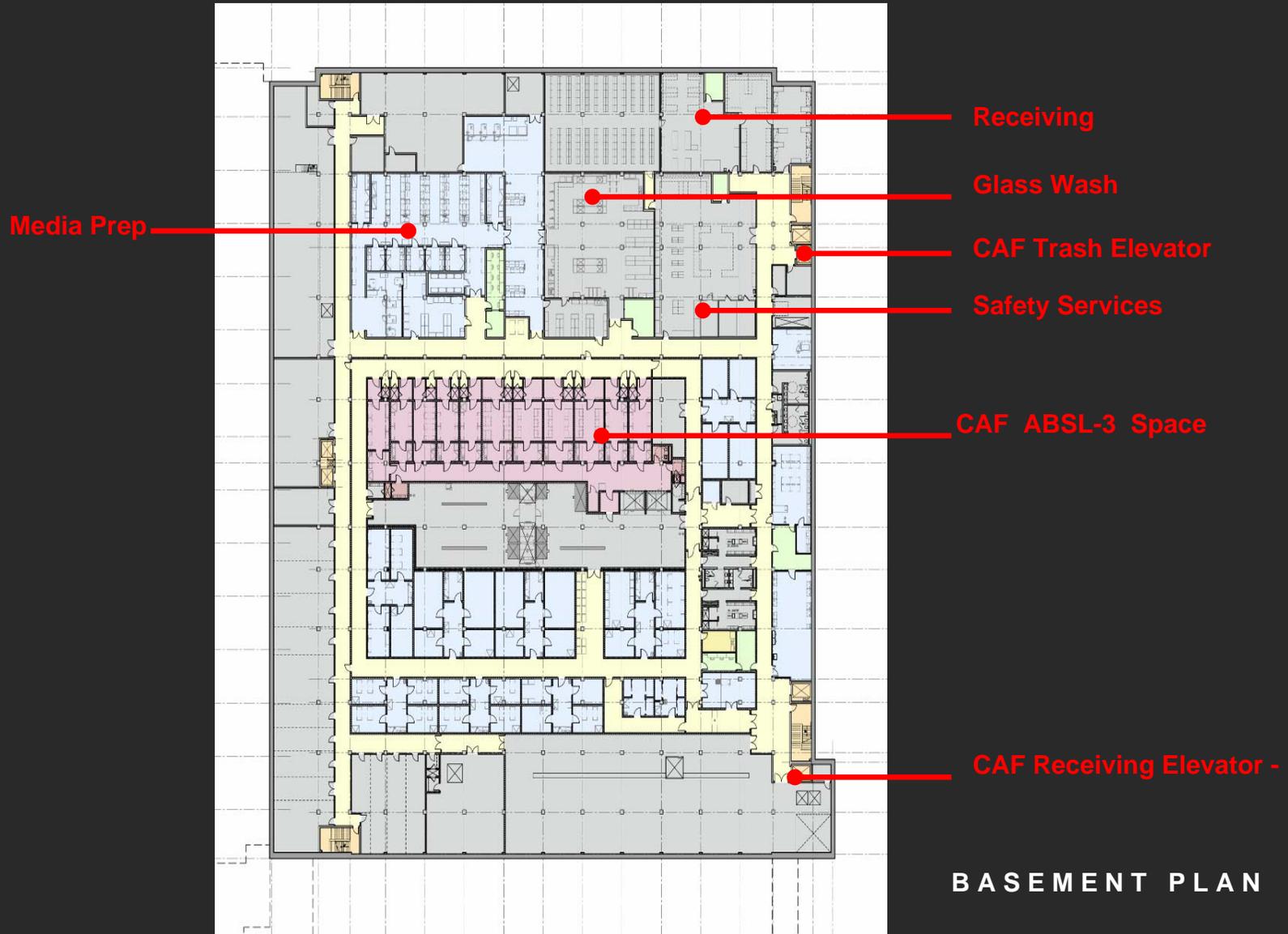
CLF, September 2007



# Phase 2 Laboratory and Administration Facilities



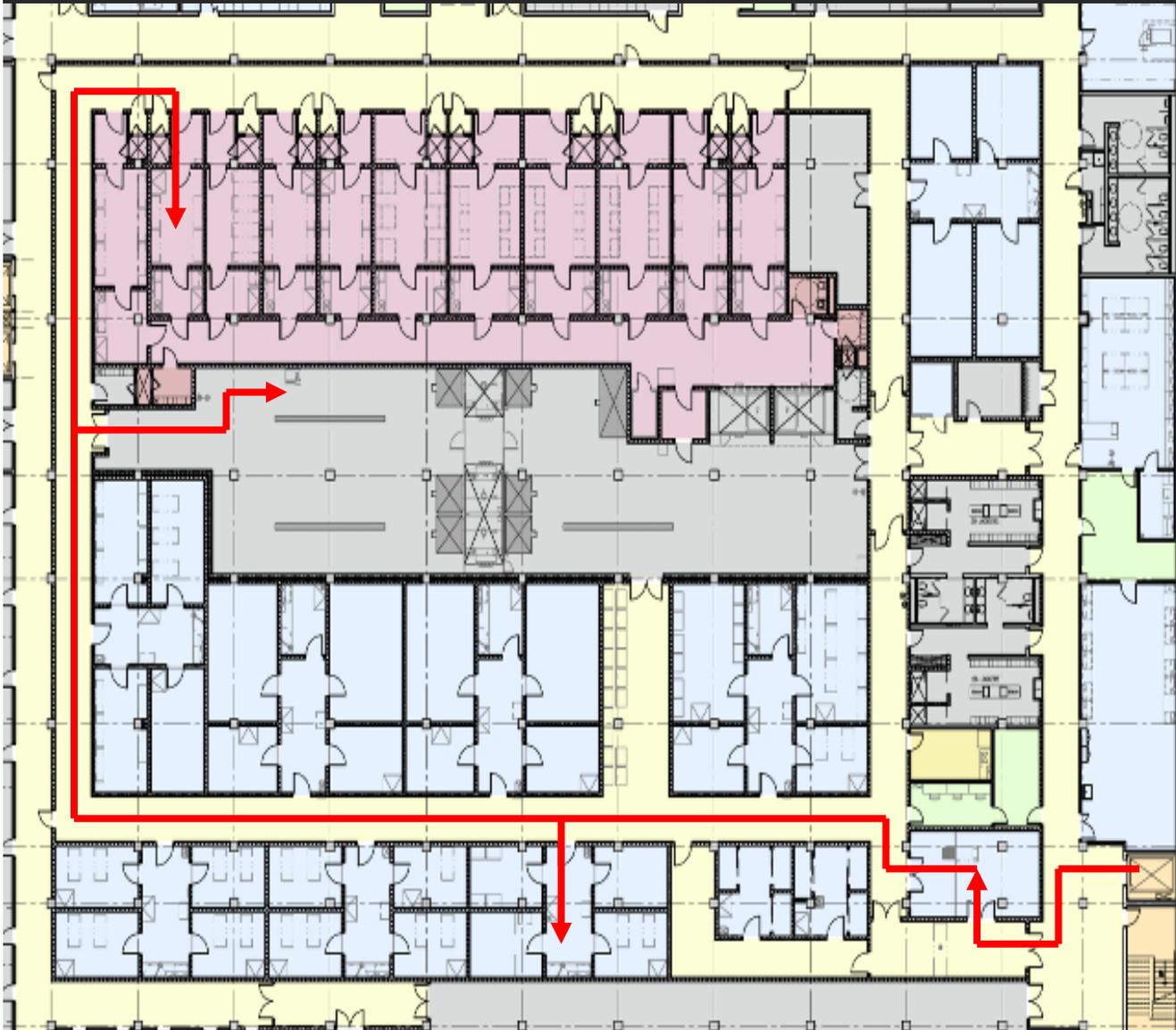
USDA CONSOLIDATED LABORATORY FACILITY  
AMES, IOWA



BASEMENT PLAN

CIRCULATION FLOWS

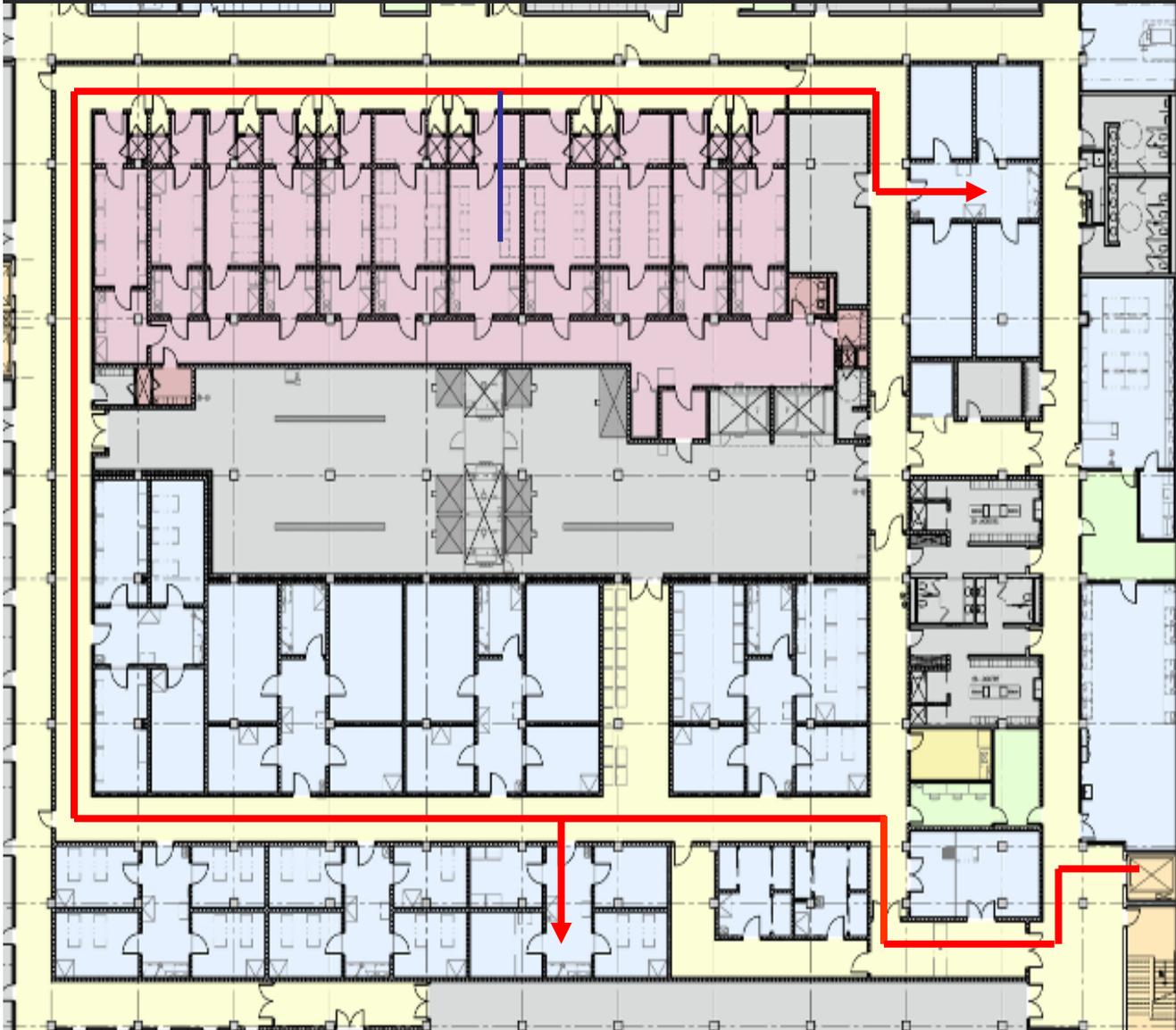
USDA CONSOLIDATED LABORATORY FACILITY  
AMES, IOWA



FEEDING AND BEDDING  
DELIVERY

CIRCULATION FLOWS

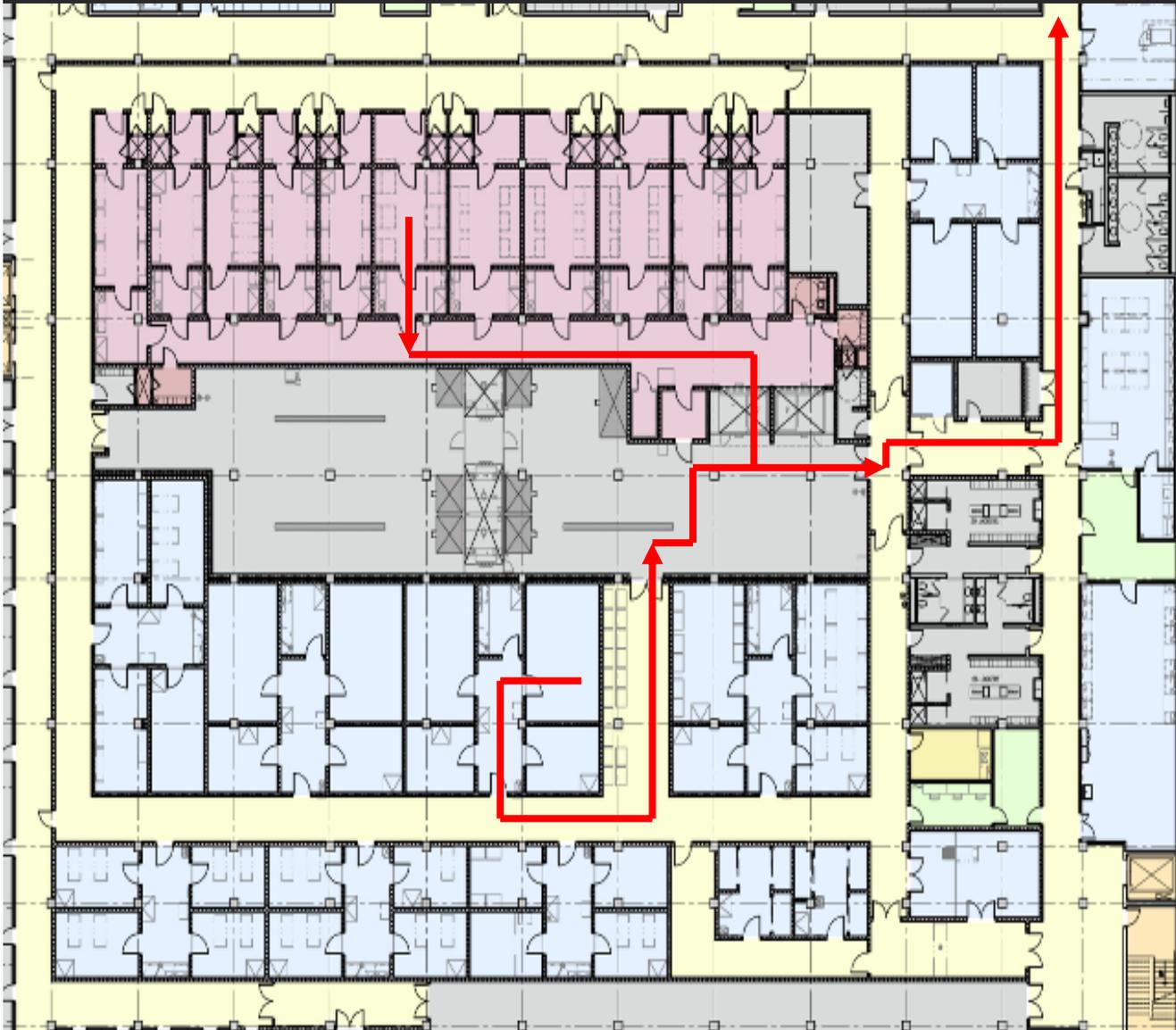
USDA CONSOLIDATED LABORATORY FACILITY  
AMES, IOWA



ANIMAL DELIVERY

CIRCULATION FLOWS

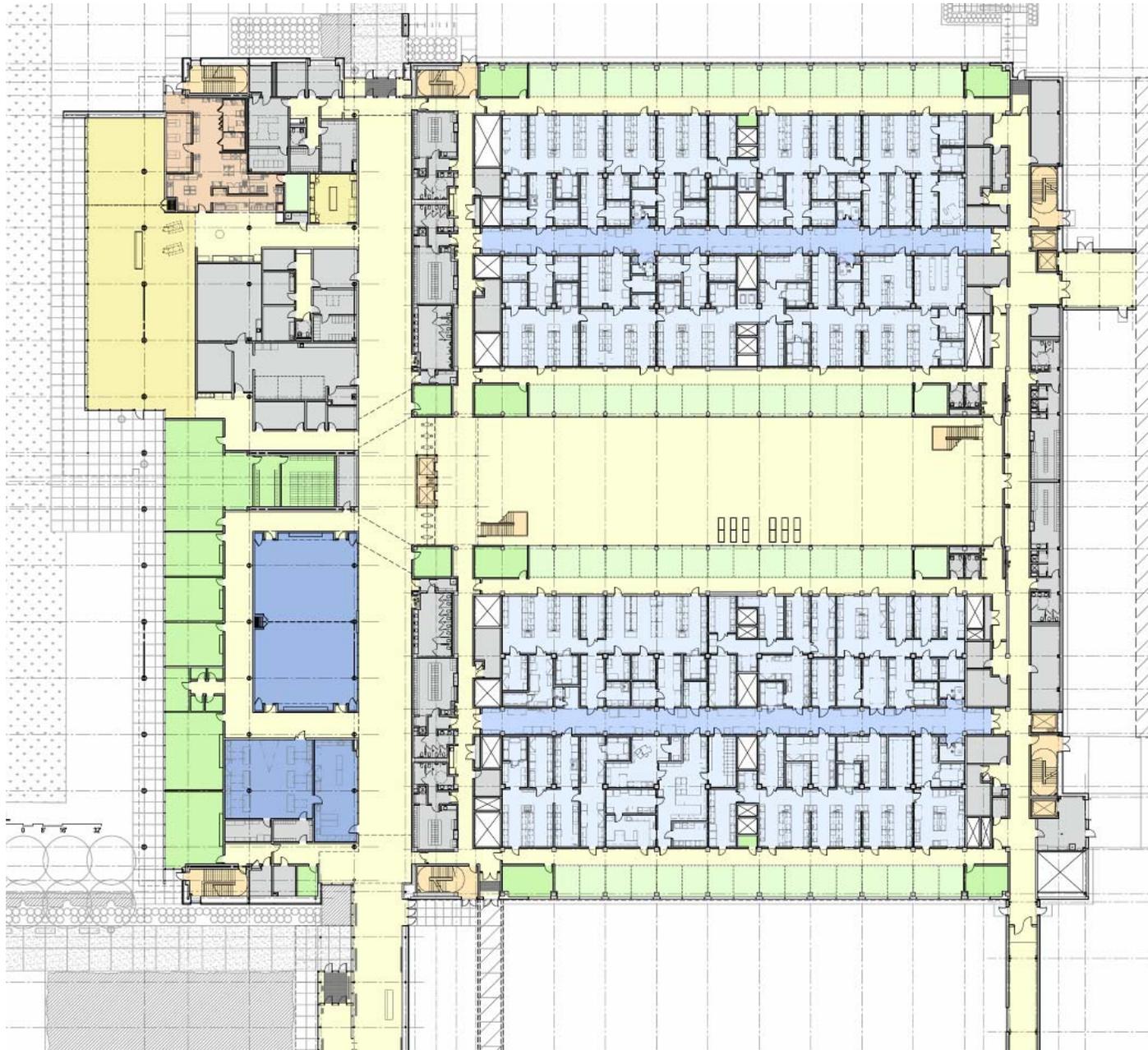
USDA CONSOLIDATED LABORATORY FACILITY  
AMES, IOWA



SOLID WASTE

CIRCULATION FLOWS

# Phase 2 Laboratory and Administration Facilities



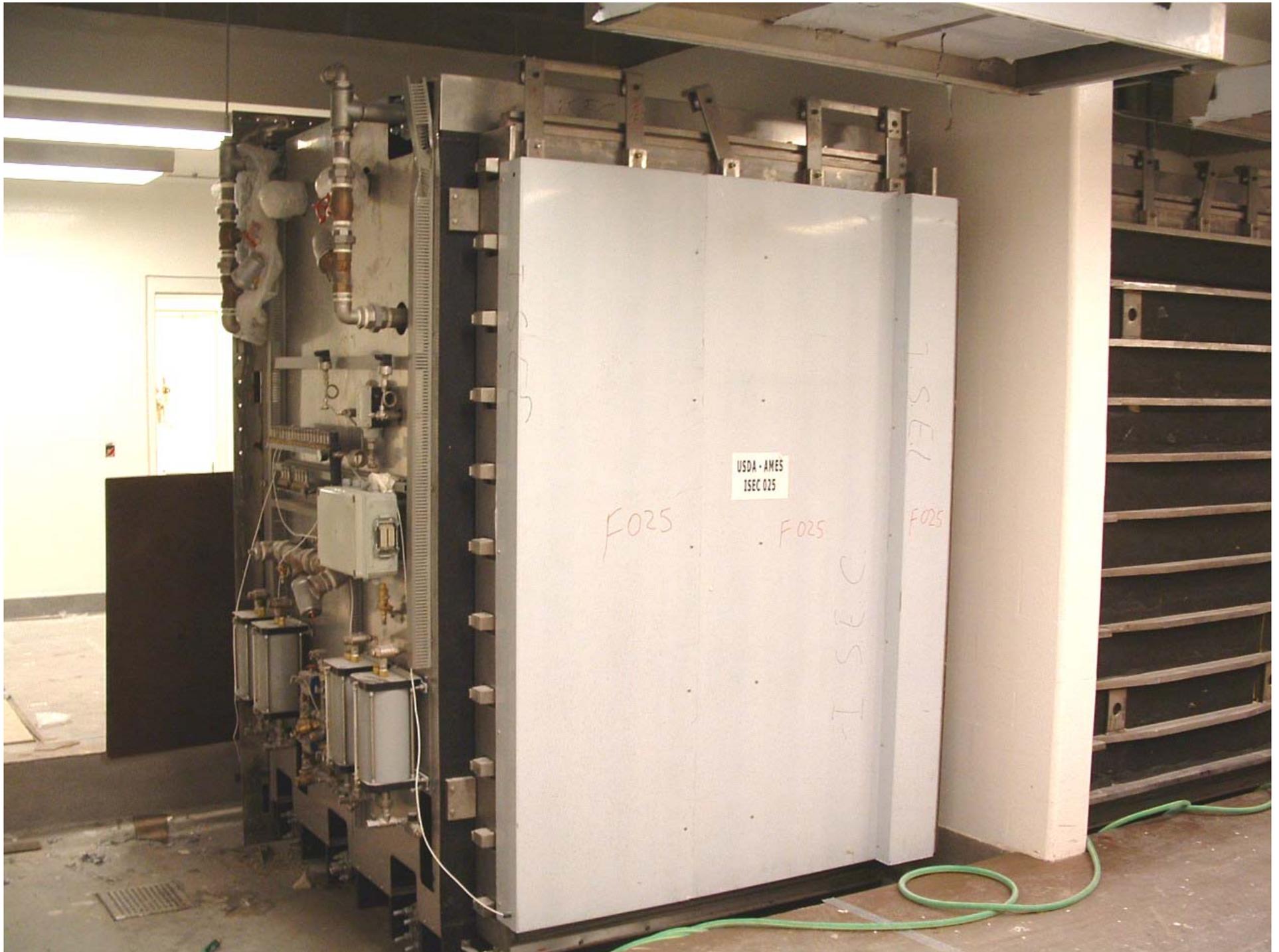












USDA - AMES  
ISEC 025

F025

F025

F025

I SEC

I SEC









STERIS Balance 400

STERIS

234808

234809-000

23480

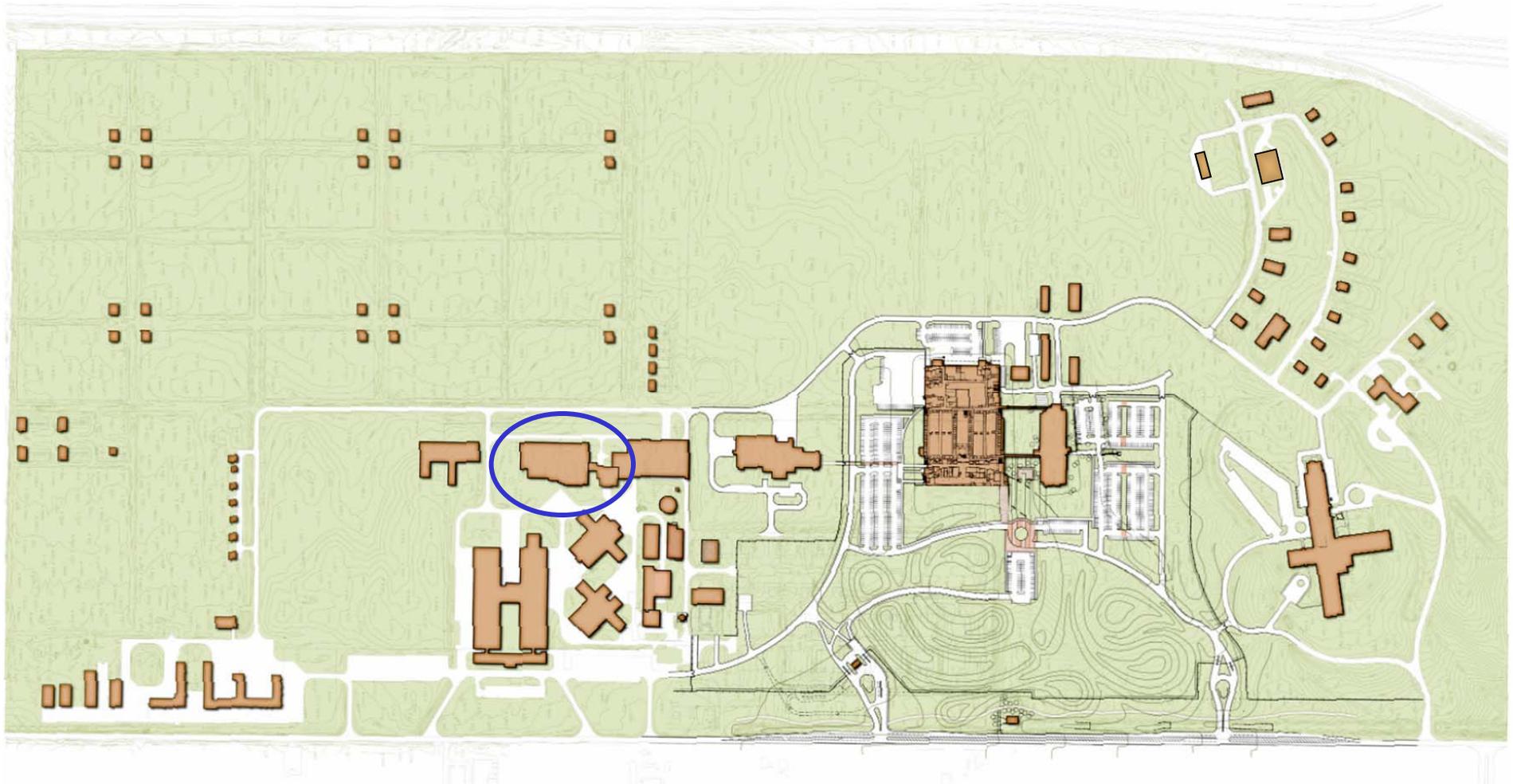
234807-000

OWING DRAIN  
OWING DRAIN  
OWING DRAIN  
OWING DRAIN  
OWING DRAIN





# Low Containment Large Animal Facilities



# Low Containment Large Animal Facilities

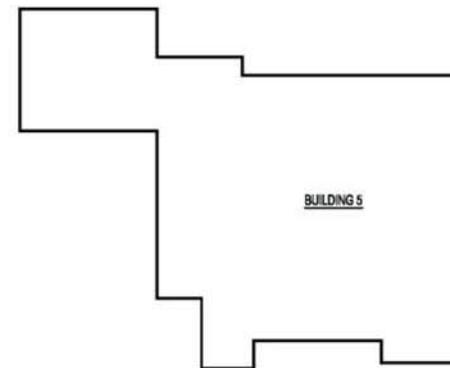


# Low Containment Large Animal Facility



50,748 net square feet

17,090 net usable animal space



## KEY

- ANTE ROOM
- FEED/STORAGE
- CMU WALLS
- SHOWER/LOCKER ROOM
- WORK AREA
- VESTIBULE















## \$24 Million project, Completed Aug 05

- Expansion of existing chiller plant building
- Installation of new chillers and cooling towers
- Installation of fuel oil storage
- Construction of electrical substation
- Installation of back-up power generators
- Distribution of utilities to BL3-Ag building

# Central Plant/Infrastructure, Phase 1



New cooling towers, chillers, and electric substation



# Central Plant/Infrastructure, Phase 1



Building for backup generators,  
with 2 of 6 generators installed.

Fuel Storage Tank



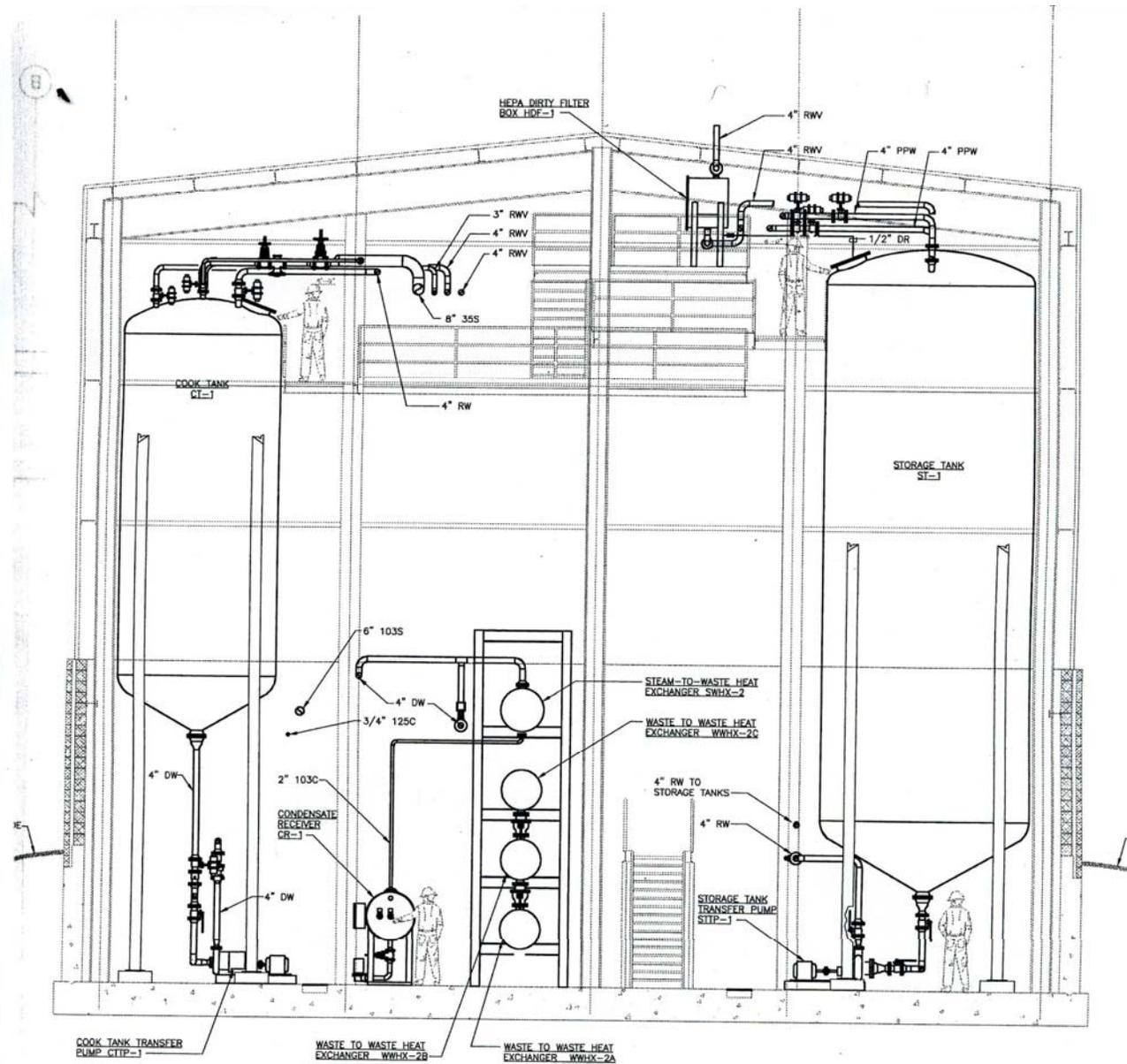
### \$25.5 Million project, Completion March 07

- Expansion of boiler plant
- Installation of new boiler
- Repair existing boiler
- Installation of absorption chiller
- Distribution of utilities to CLF site
- Construction of new waste water pretreatment plant

# Waste Water Pretreatment Plant



# Waste Water Pretreatment Plant



# North Utilities Extension



# North Utilities Extension



