National Institutes of Health
Office of Management

Facilities Presentation to the Clinical Center Research Hospital Board (CCRHB)

by
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Announcements and Agenda

- Projects Recently Awarded: C103157 Surgery, Radiology and Laboratory Medicine (SRLM) Building, (including Catheterization Lab and Interventional Radiology
- Projects That Have Achieved Substantial Completion of Construction
- Projects Under Construction
- Positive Results from Quarterly Meetings with Congressional Appropriations Committee Staffs:
  - Increase in Buildings & Facilities appropriation from $200M to $250M, representing a 25% increase. This is the largest percentage increase of all NIH appropriations and now represents the base for future year appropriations.
  - The increase in Special Authority (AKA General Provision 216) from $3.5M/project to $5M/project and aggregate amount from $40M to $100M, which will enable NIH Institutes and Centers to utilize more of their funding for repairs and improvements

Projects Recently Awarded C103157 Surgery, Radiology and Laboratory Medicine (SRLM) Building, including Catheterization Lab and Interventional Radiology

C103157 Surgery, Radiology and Laboratory Medicine (SRLM) Building, including Catheterization Lab and Interventional Radiology

Looking from north to south

Looking from west to east

Identified Risk/Impact: Clinical Center Departments of Perioperative Medicine, Laboratory Medicine, Radiology and Imaging Sciences, and the NHLBI Cardiac Catheterization Program are housed in 1980-era obsolete space with mechanical, electrical and plumbing infrastructure that cannot be economically upgraded. Leaks and floods occur regularly in the existing space.

Project Benefit / Risk Mitigation Strategy: Safe, compliant, maintainable and flexible facilities to support cutting edge research and optimal patient care.

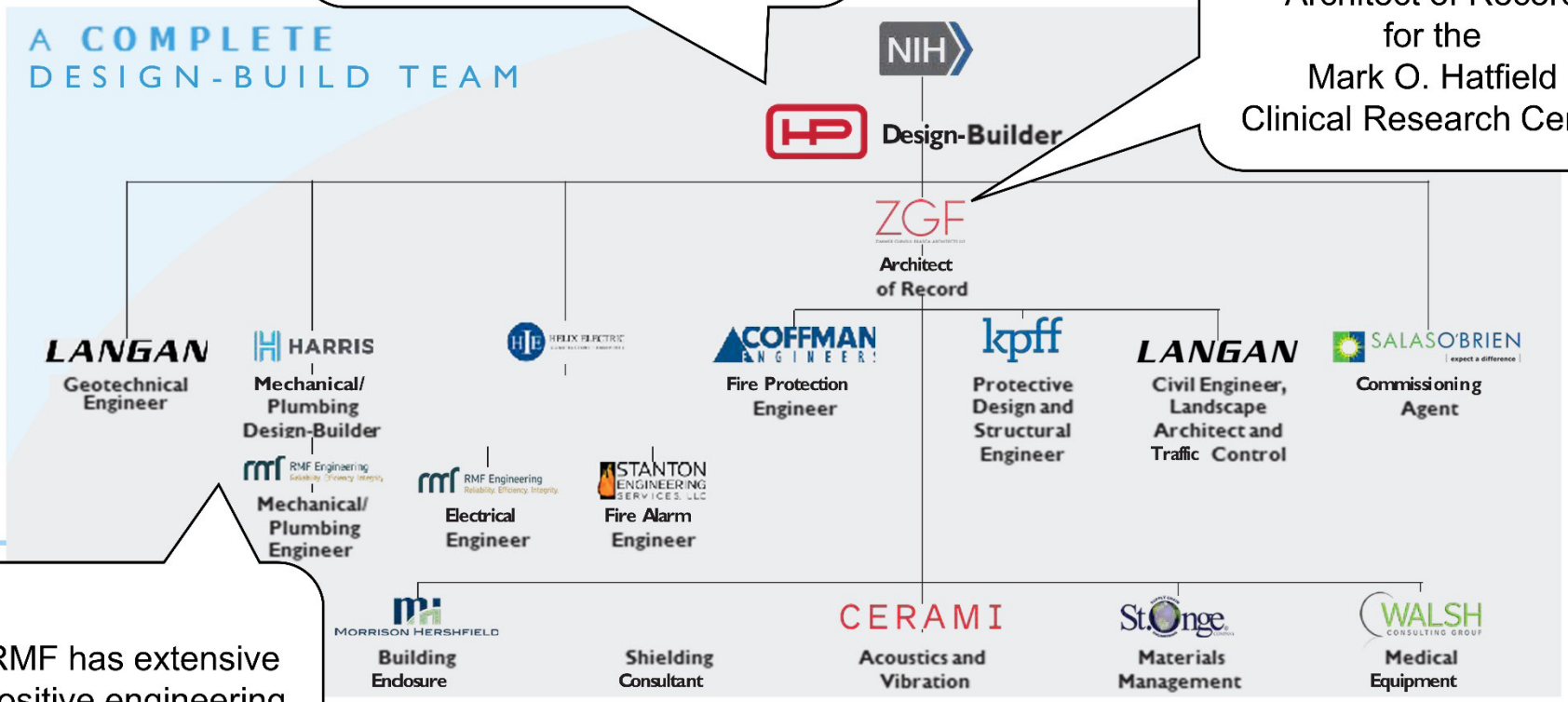
Funding Status: Design-Build Contract is funded.

Schedule Status: Design-Build Contract for the new addition was awarded on 3/22/22. Design-Build Contract for the renovation portion will be awarded in a few weeks; awaiting additional funds provided by the Omnibus Bill.

Hensel Phelps Design-Build Team

Hensel Phelps recently completed the Center for Alzheimer's and Related Dementias Project, completed on-time and on-budget

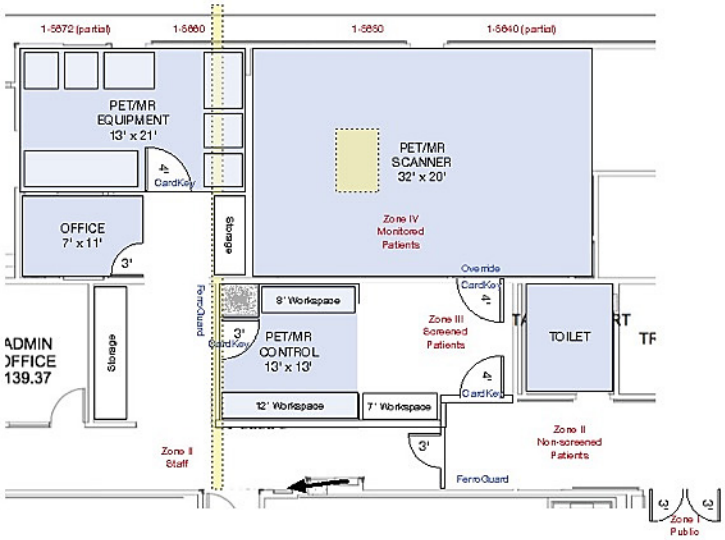
ZGF was the Architect of Record for the Mark O. Hatfield Clinical Research Center



RMF has extensive positive engineering experience with NIH

Projects That Have Achieved Substantial Completion of Construction

C108095 PET/MR Scanner Turnkey Upgrade



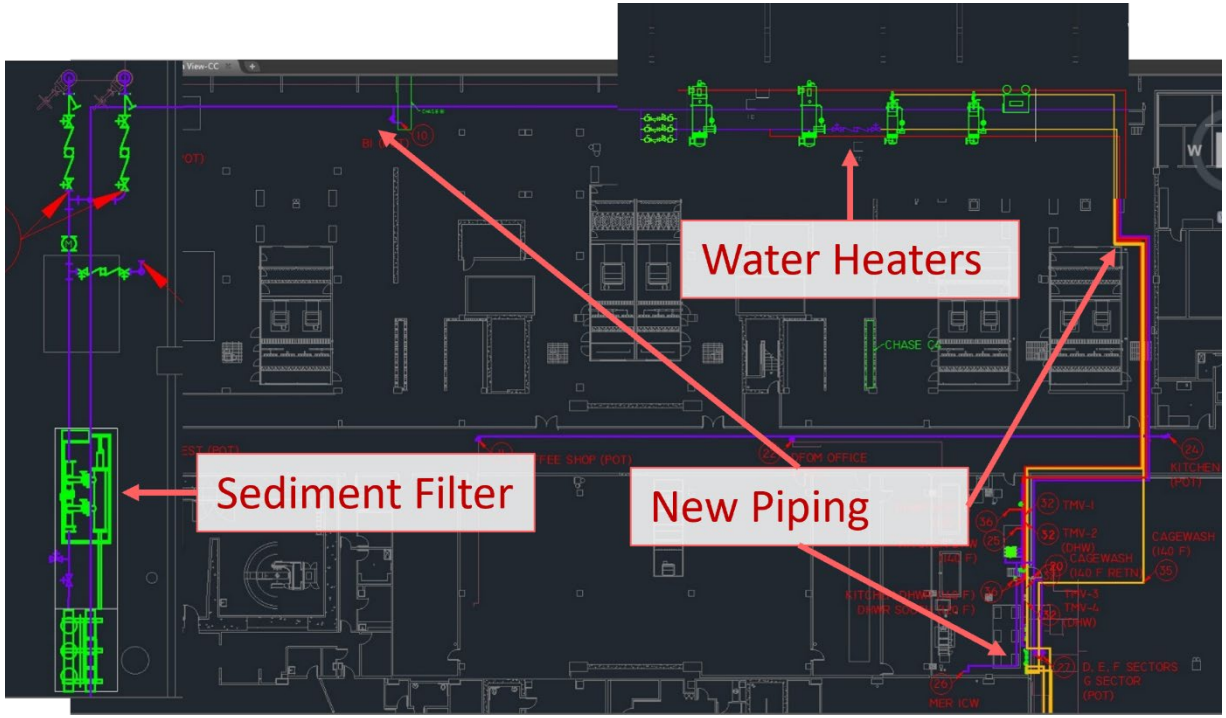
Identified Risk/Impact: The current nursing and PET space will be renovated to accommodate a new PET/3T-MR scanner, that permits simultaneous PET and MR imaging.

Project Benefit / Risk Mitigation Strategy: For patients who need both PET and MR scans, there is easier scheduling and only one rather than two separate visits for imaging.

Funding Status: Funded

Schedule Status: CC awarded design-build contract in May 2020. Construction started in January 2021 and was completed in October 2021.

C107678: CRC Water Quality Improvement



B2 – Domestic & Industrial Water System

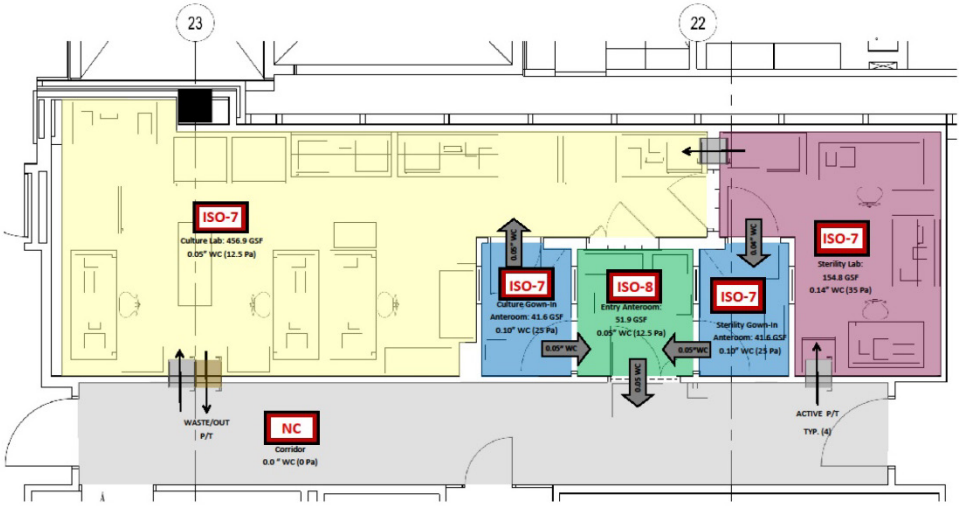
Identified Risk/Impact: Poor water quality within the CRC due to low flow rates and unreliable hot water heaters

Project Benefit / Risk Mitigation Strategy: Replace 12” main distribution piping with 6” copper, new water heaters, addition of sediment filtration

Funding Status: Funded

Schedule Status: Construction complete.

C104603 Department of Laboratory Medicine Sterility Lab



Second Floor of ACRF

Identified Risk/Impact: Lack of sterility testing facility will affect patient safety.

Project Benefit / Risk Mitigation Strategy: Sterility testing on a wide-range of investigational new drugs will contribute to patient safety.

Funding Status: Funded

Schedule Status: Construction is completed. Office of Research Support and Compliance (ORSC) audit was completed on March 16, 2022. Minor deficiencies identified during the audit are being addressed by the Users and are expected to be completed by April 08, 2022.

C104935 Center for Cellular Engineering (CCE) Cell Processing Facility

Identified Risk/Impact: Inadequate amount of cGMP-compliant space to accomplish critical research objectives.

Project Benefit / Risk Mitigation Strategy: New facility to support DTM with additional aseptic Cell Processing and Engineering.

Funding Status: Funded

Schedule Status: Construction completed in November 2020. Commissioning, Qualification, and Validation (CQV) completion in April 2022. Environmental Monitoring Performance Qualification (EMPQ), scheduled for June 2022, will provide documented evidence that the area is capable of meeting specified levels for the proposed classification.

Projects Under Construction

C112347 – Sterile Processing Upgrades

Identified Risk/Impact: Infection control, sterile processing production delays, and regulatory compliance.

Project Benefit / Risk Mitigation Strategy: Improved safety, production, workflows, and regulatory compliance.

Funding Status: Partially funded.

Schedule Status:

- New surgical cart washer and two new sterilizers installed in the B1 Level as of September 2021.
- Two remaining surgical steam sterilizers in B1 Level being replaced now. Estimated completion date is July 2022.
- Once Sterile Processing relocates to the B1 Level, the current sterile processing area on the 2nd Floor will be renovated and specialty equipment replaced.

C100663 E-Wing Renovation, Including Cell Processing

Identified Risk/Impact: Outdated and inadequate facilities, negatively impacting mission accomplishment.

Project Benefit / Risk Mitigation Strategy: Renovated and modernized facilities to support cutting edge research.

Funding Status: Funded

Schedule Status: In Construction phase. Estimated completion in May 2023.

C100663 E Wing Cross Section and Housing Plan

Mechanical	14th Floor
Mechanical	13th Floor
CC-DTM cGMP Suite	12th Floor
NIAID	11th Floor
NIDDK	10th Floor
NIDDK, Mechanical	9th Floor
NHLBI	8th Floor
NHLBI,NIMH	7th Floor
NHLBI	6th Floor
NINDS,NIDDK	5th Floor
NIMH, Mechanical	4th Floor
CC-DTM	3rd Floor
CC-DTM	2nd Floor
CC-DTM, WALS	1st Floor
FAES, DFOM	B1 Level
Cagewash, Mechanical	B2 Level

C100231 Black Start Generators

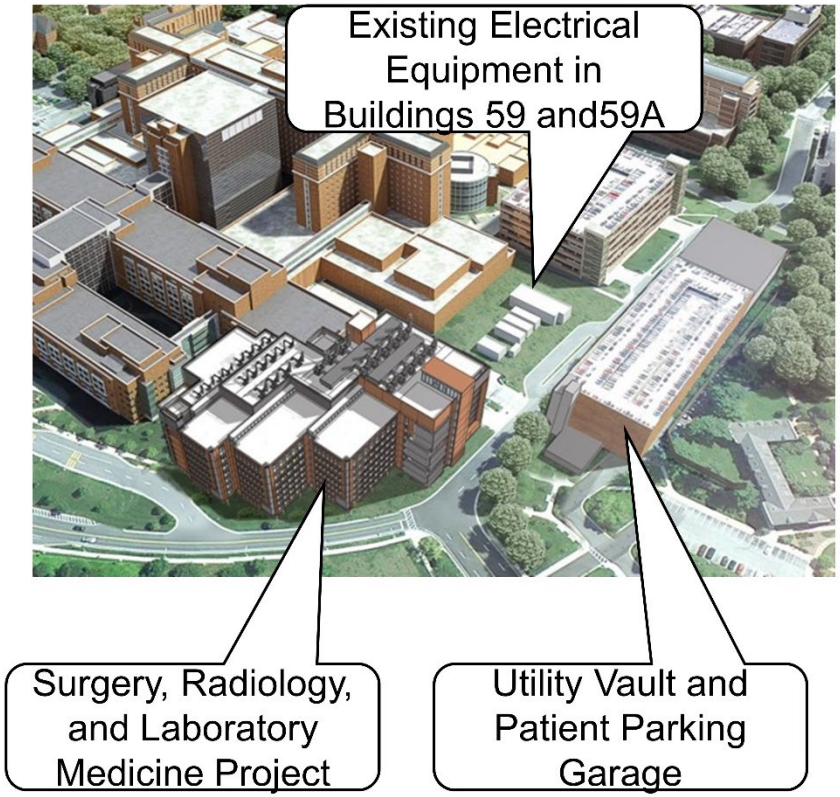
Identified Risk/Impact: Loss of steam generation/hot water/chilled water distribution due to power outage.

Project Benefits / Risk Mitigation Strategy: In a regional power outage, NIH will be able to start the 23-megawatt Cogeneration plant to 1) supply power to boilers to generate steam to buildings during an area power outage; and 2) supply power to chillers to generate chilled water for critical loads, including patient care.

Funding Status: Funded

Schedule Status: In Construction. Completion estimated: June 2023.

C104771 Utility Vault and Patient Parking Garage



Identified Risk/Impact: Security Risk – power supply components (normal and emergency) for Building 10/Hospital Complex are currently vulnerable due to unprotected location. Also, the current structure offers no space to accommodate additional electrical equipment needed to support SRLM. Lastly, parking under hospital is suffering from spalling concrete and poses a security threat.

Project Benefit / Risk Mitigation Strategy: Protects vital power supply components, for current and future loads, in reinforced structure. Also, decreases parking load in current lot under Building 10.

Funding Status: Funded.

Project/Schedule Status: Design-Build (DB) contract awarded in September 2019. Electrical feeders were installed to provide needed redundancy. Construction is underway. Super structure construction completed. Garage scheduled for completion in June 2022. Utility Vault and Fuel Vault scheduled for completed in July 2022.

C104771 Utility Vault and Patient Parking Garage
View of Parking Garage

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C104771 Utility Vault and Patient Parking Garage
View of Future Electrical Utility Vault

C111195 1NW (Pediatrics Inpatient) HEPA Unit Installation

Identified Risk/Impact: Additional protective isolation patient care program space

Project Benefit / Risk Mitigation Strategy: Improved patient safety for pediatric patients

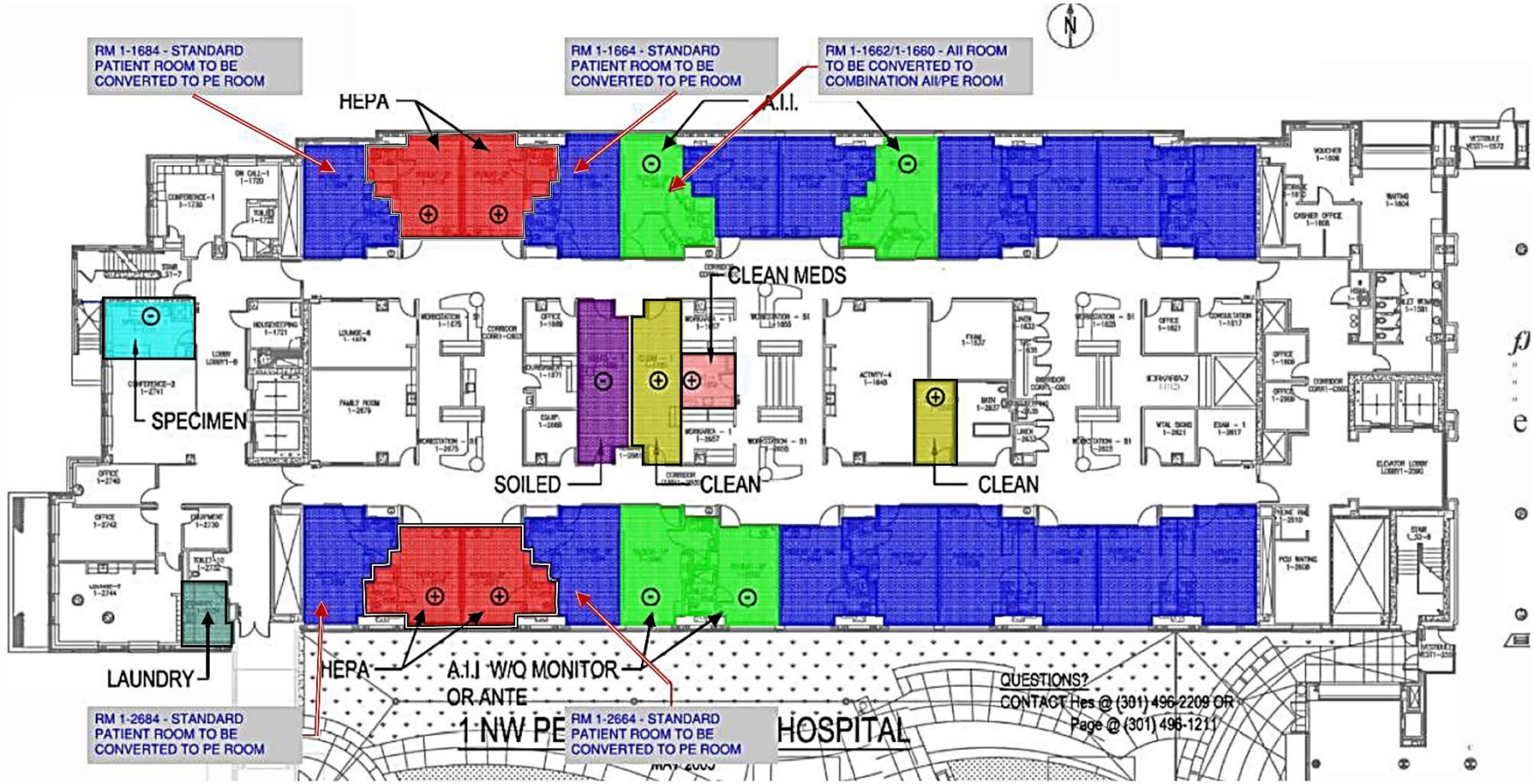
Funding Status: Funded

Schedule Status: 2 rooms (1-2664 & 1-2684) on the South side are 95% complete. Construction on 3 rooms (1-1660/62, 1-1664 and 1-1684) scheduled to start on 3/28/2022 with projected completion date of 5/27/2022.

Overall Scope of Work

- 1NW currently has 24 patient rooms
  - 16 Standard patient rooms
  - 4 Protective Environment (P.E.) rooms (with 99.99% efficient HEPA filtration and positive pressure)
  - 4 Airborne Infection Isolation (A.I.I.) rooms consisting of a patient room and anteroom within one unit
- This project will convert 4 standard patient rooms into P.E. rooms by installing HEPA filtration along with positive pressurization and 1 Airborne Infection Isolation room into dual purpose (A.I.I. + P.E.) room by adding HEPA filtration to the patient room. Ante room will act as a sink to the corridor and patient room.
- P.E. rooms will be designed to be used as standard patient rooms as well with the infrastructure to accommodate double occupancy, if needed.

C111195 1NW Floor Plan



Summary

- The increase in the Buildings & Facilities appropriation, combined with the increase in the IC Special Authority, will provide NIH more resources for facilities. These improvements are likely a result of the National Academies Consensus Report and the quarterly meetings with the Appropriations Staff.
- Especially noteworthy is the award of the Surgery, Radiology, and Laboratory Medicine (SRLM) project, which the CCRHB advocated for. Your support is much appreciated!!!