Program Statement

Wescoe B&C Renovation - 5th & 6th Floor

University of Kansas Medical Center

Kansas City, Kansas

BACKGROUND

The University of Kansas Medical Center (KUMC) is currently designing an update to the mechanical, electrical and plumbing (MEP) infrastructure of the Wescoe B & C buildings to facilitate the complete remodeling of the buildings (floor-by-floor). As part of subsequent phased work, Wescoe B & C will eventually house all the same administrative offices and the future expansion of the Clinical & Translational Science Unit (CTSU). For this project, KUMC is proposing is the first phase of the floor-by-floor remodeling starting with two floors (5th & 6th) of Wescoe B. Wescoe C does not have floor space on 5th and 6th floor. These floors were chosen to work with the least interruption to the remaining floors to tie into the new MEP infrastructure. Each floor remodeling will need to occur separately due to limited campus office space availability to enable current occupants of these floors to office elsewhere during the period of construction. The next phase will be the 3rd and 4th floors of both Wescoe B & C.

Wescoe B (the L-shape with the east-west corridor) was originally built in 1927 and the 6th floor was added in 1947.
Wescoe C (the extension of the L-shape to the south) was added to Wescoe B in 1935 and 3rd and 4th floors were added in 1943.
Part of Wescoe B, north of the main east-west corridor, that houses the Wescoe elevators and the stacked grouped restrooms, was added to the older building in the 1960s. This addition also extends to the north side of Delp D and is called the Delp D Addition project in our archived drawings. This is shared to understand the following conflicts. First, asbestos laden insulation was sprayed on structural steel for fire-proofing in all the floors of this Delp D Addition. The abatement of the asbestos will affect the project planning and construction logistics as we move into each floor remodel. And lastly, the existing exterior structural elements around the exterior where the Delp D Addition butts up against the north wall is restrictive to run ductwork across.

With the ongoing renovations in Delp D building regarding the construction of ADA restrooms, those restrooms have been designed to serve the Wescoe B &C occupancy numbers. Construction will involve the demolition of the existing group restrooms in the Delp D Addition of the Wescoe B building and will not require KUMC to reinstall group ADA restrooms in Wescoe.

KUMC is proposing to solicit MEP Engineering firms to act as Prime Consultant with the Architect as a subconsultant to them.

The funding source is Deferred Maintenance Funds.

PROJECT NARRATIVE

Mechanical

Currently the HVAC for Wescoe B & C is provided by a mix of air handling systems, 2 & 4 pipe fan coil units, below the window and through the exterior wall units and other rooftop DX units with steam reheat. Additionally, original building steam radiators are still located in some areas to provide heating. The buildings are short of delivering the minimum outside air required to occupied spaces for ventilation as many units are clogged or blanked off. A steam to hot water heat exchanger (but located in the Delp D Addition) provides dedicated heating hot water to Wescoe B & C. Wescoe B &C uses chilled water and steam from the KUMC main central plant - Applegate Energy Center.

During the 5th & 6th Floor Renovation, original steam and condensate lines will be removed from serving these two floors entirely and capped.

New horizontal heating hot water piping will be extended from the vertical main risers installed in the last 15 years and reworked and extended during the prepatory MEP infrastructure phase.

New horizontal chilled water piping will be extended from the new vertical main risers and pump installed in the prepatory MEP infrastructure phase.

Size and locate a new central AHU per floor of Wescoe B with downstream terminal VAV boxes and heating hot water coils. Size and locate a new smaller central AHU per floor of Wescoe B Delp D Addition area behind the double elevators with downstream terminal VAV boxes and heating hot water coils.

Outside air will be supplied through a louver in an exterior wall at each AHU. All new Automated Logic Controls will be needed.

PROJECT NARRATIVE

Electrical

Normal power in Wescoe B & C is fed from a 13.8kV feed from the KUMC main central plant - Applegate Energy Center. That high voltage feed serves the new main transformer TN2-03 and 208V, 3-phase power is delivered into the main switchgear in Wescoe B. The Delp D Addition part of Wescoe B was supplied with power from the 208V, 3-phase service from the MSN2-09 switchgear in Delp D G004 until the prepatory MEP infrastructure phase when it was combined into one Wescoe service. A typical floor would need six (6) 100A branch panels as follows: two to serve Wescoe C and three to serve Wescoe B and one to serve the new AHU and related mechanical equipment.

Life safety and standby emergency power distribution is fed separately. The life safety loads will be new emergency lighting circuits (two per floor) to connect to the new panelboard and inverter located on the Ground Floor of Wescoe B installed in the prepatory MEP infrastructure phase. Standby power comes from the new emergency distribution in Delp D to serve panels on Ground and 4th Floors of Wescoe. One new 60A panelboard per floor will be served by this existing infrastructure.

Plumbing

All single person restrooms will be removed during floor-by-floor demolition.

Wescoe B is served by two different sets of domestic water risers from the basement. The original risers serving 5th floor and below are installed with galvanized pipes and in poor condition. In 1972, a set of copper risers were installed to serve the whole building but were only ever connected to the 6th floor. Wescoe C is served from galvanized piping risers that connect to the original piping in the Wescoe B basement level. This project would remove all of the galvanized piping and utilize new taps and valves installed in the Wescoe B copper risers for any domestic water needs as part of each floor-by-floor remodel. The Delp D Addition area is fed from copper piping risers connected to the Delp D basement piping and that can be removed and capped during floor-by-floor demolition.

All waste & vent piping risers will be removed and replaced as needed as part of each floor-by-floor remodel in the same vicinity as the existing risers.

All roof drains will be replaced during that floor's renovation. Roof drain piping will be replaced as part of each floor-by-floor remodel in the same vicinity as the existing risers.

All existing medical and laboratory gas piping is abandoned in place and can be removed during floor-by-floor demolition.

PROJECT NARRATIVE

Fire Suppression

There is a 4” Class 1 standpipe in Wescoe B (near G026A Wescoe and up). There is also a class 2 standpipe in the main corridor. Both are fed from a 6” fire main fed from the fire pump in the KUMC main central plant - Applegate Energy Center and can be removed as part of the floor-by-floor remodel.

The floor-by-floor remodel will include the horizontal extension from the new 6” standpipe in Wescoe B stairwells #S01 and #S02 previously installed in the infrastructure project. This will supply a wet sprinkler system over the whole floor area.

Fire Alarm

Wescoe B &C are served by an existing Honeywell XLS1000 fire alarm system. KUMC is moving towards a new EST4 system as part of another project to be starting soon. Floor-by-floor remodels will remove the Honeywell system and extend new wiring conduit from the EST4 system frontend to connect all the new fire alarm devices needed to protect the new floor layout and fire sprinkler standpipe flows and tampers.

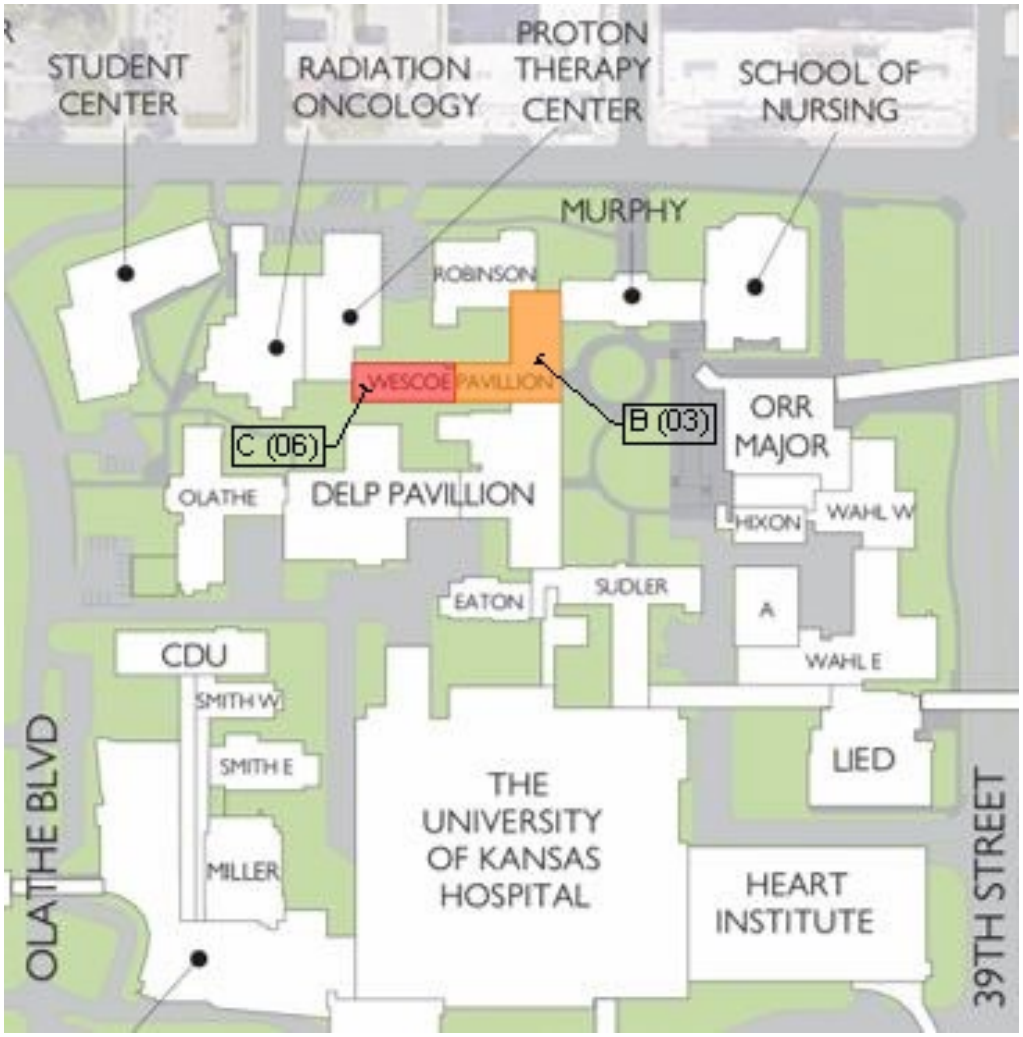
Abatement

As previously mentioned, KUMC will procure an abatement contractor to perform that work in the Delp D Addition area of Wescoe B prior to demolition activities commencing.

Architectural

Document existing conditions in Wescoe B & C and show extent of floor-by-floor complete demolition around existing stairwells & chases and elevator shafts. Remodel build-back will consist of administrative office layout with main connector corridors linking back to Delp & Robinson/Murphy.

LOCATION PLAN



SPACE SUMMARY

5th FLOOR – Wescoe B **SPACE SUMMARY**	SIZE (SQ.FT.)
MECHANICAL ROOM	275
MECHANICAL ROOM (DELP D ADDITION SIDE)	130
VERTICAL CIRCULATION	635
NEW ADMINISTRATIVE OFFICE & HORIZONTAL CIRCULATION	8020
TOTAL	**9060 SQ.FT.**

6th FLOOR – Wescoe B **SPACE SUMMARY**	SIZE (SQ.FT.)
MECHANICAL ROOM	253
MECHANICAL ROOM (DELP D ADDITION SIDE)	169
VERTICAL CIRCULATION	677
NEW ADMINISTRATIVE OFFICE & HORIZONTAL CIRCULATION	5800
TOTAL	**6900 SQ.FT.**

PROJECT SCHEDULE

Solicit and Select Design Team	April 2024 – June 2024
Design	June 2024 - September 2024
Bid/Award	October 2024 – December 2024
Construction	March 2025 – October 2025
Substantial Completion	November 2025

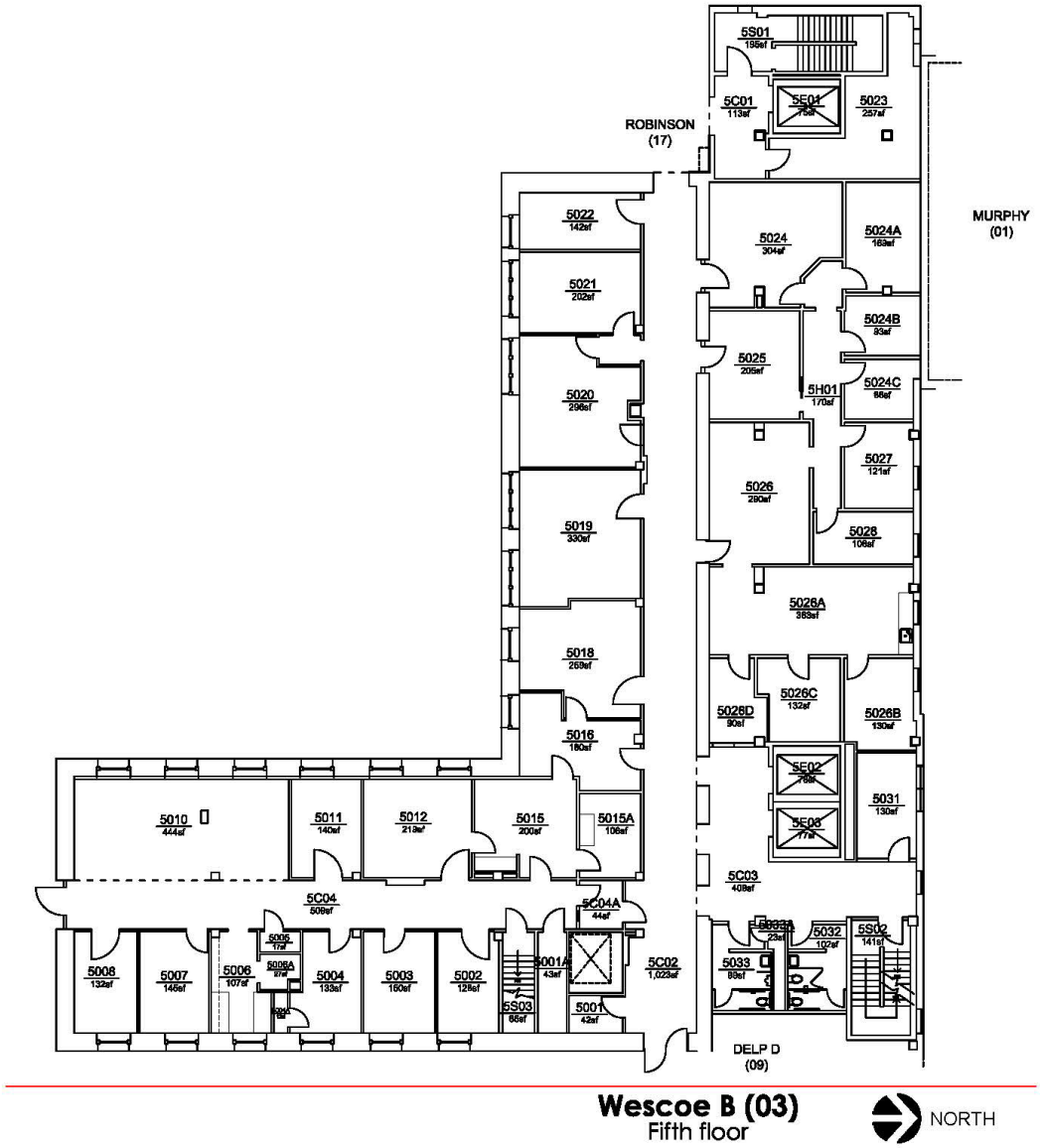
PROJECT ESTIMATE (revised)

General Construction				
5th Floor	8,020	sf	$250	$2,005,000
6th Floor	5,800	sf	$250	$1,450,000
Abatement	6,100	sf	$5	$30,500
Test & Balance	13,820	sf	$1.50	$20,730
IT	13,820	sf	$5	$69,100
SubTotal				$3,575,330
KUMC Contingency (10%)				$357,533
Construction plus Contingency				$3,932,863
Design Fees (Engineer/Architect)			11.00 %	$380,050
Agency Fee			0.727 %	$25,127
KUMC Facilities PM Fee			0 %	$0
TOTAL				**$4,338,040**

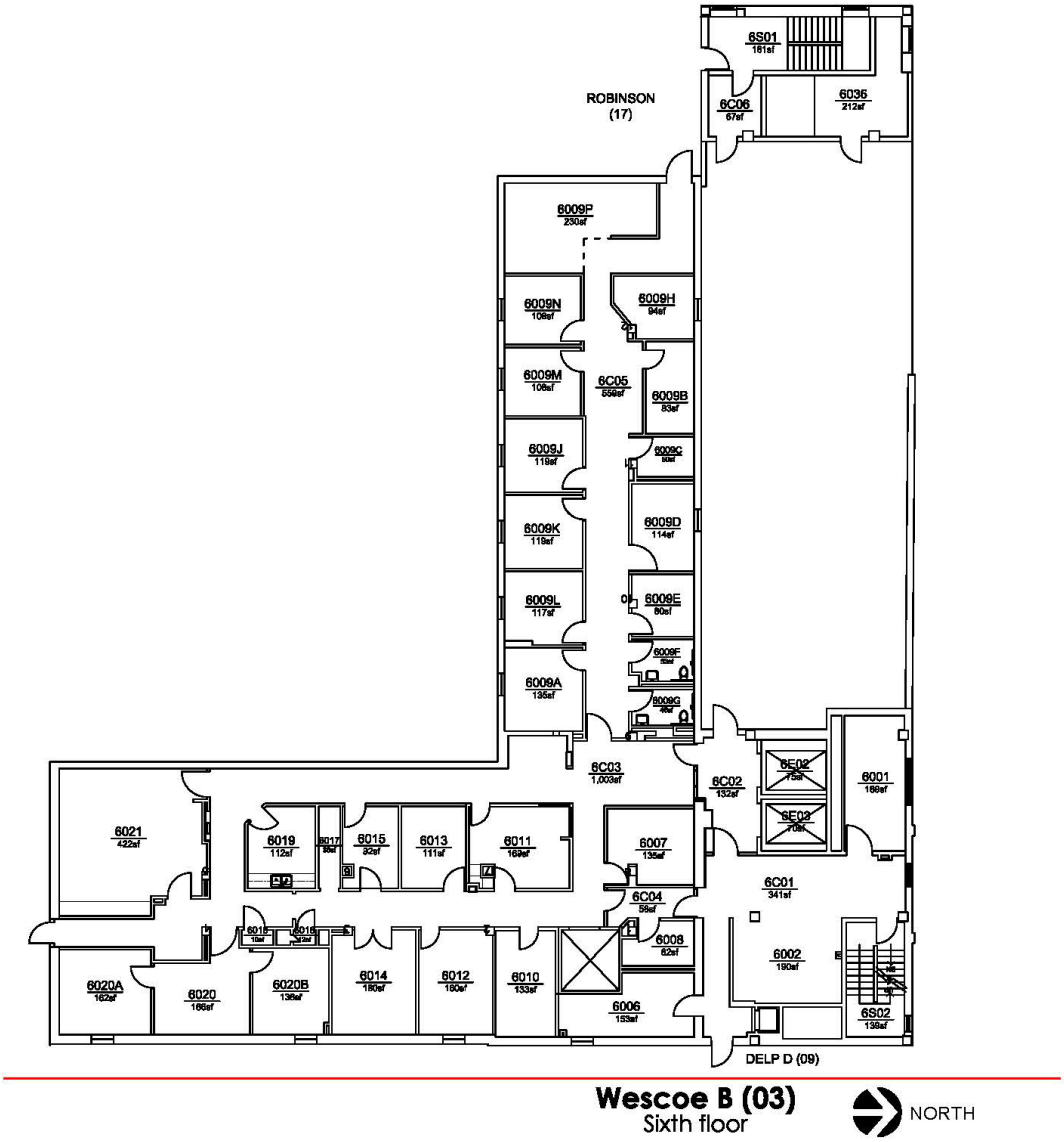
Note: No new or additional maintenance costs are anticipated as this project entails the reuse of existing space.

Project Delivery: **Design, Bid, Build**

Fifth Floor Plan - Existing



Sixth Floor Plan - Existing



Fifth Floor Plan – With Specific Use Areas Identified, Remaining floor space to be used for new Offices and Horizontal Circulation (new layout not set)

Sixth Floor Plan – With Specific Use Areas Identified, remaining floor space to be used for new Offices and Horizontal Circulation (new layout not set)