ILLINOIS STATE University

BOARD OF TRUSTEES

<u>Resolution No. 2024.01/01</u> <u>Authorization of</u> <u>Watterson Towers –</u> <u>Fire Separation Remediation Project</u>

Resolution:

Whereas, Watterson Towers, is comprised of two 28-story student residence hall towers, and a center service core tower which opened in 1969 and houses 2,700 students and is owned and operated by Illinois State University, and,

Whereas, the Watterson Towers Fire Separation Remediation Design Project was approved by the Board of Trustees on February 18, 2022 (Item 2022.02/02) with an original authorized budget of \$750,000, and;

Whereas, Watterson Towers contains many unique architectural design characteristics, including three separate towers connected by breezeways, 5-story residence style "houses", a roof terrace, and contains a total of twenty-five floors of student sleeping rooms in each tower, and contains three other floor levels that include management offices, activity spaces, laundry facilities, exercise facilities, and the entry lobby, and,

Whereas, applicable life safety building standards apply to existing and new construction and address those building occupancy features necessary to minimize life safety concerns from the effects of fire, including smoke, heat, and toxic gases created during a fire. In the years since Watterson Towers was built, many construction, maintenance, and repair projects were completed that have impacted existing fire separation barriers and life safety protection measures, and,

Therefore, be it resolved that the Board of Trustees authorizes a capital project to design remedial measures and undertake construction to restore code required fire protection requirements in Watterson Towers at a cost not to exceed \$17.5 million.

Board Action on:			Postpon Amend	Postpone:	
Second by: Vote:	Yeas:	Nays:	Disapprove:		
			ATTEST:	Board Action,	January 25, 2024

Secretary / Chairperson

Board of Trustees Illinois State University Authorization of Watterson Towers – Fire Separation Remediation Project

Background

Watterson Towers is a 28-story cast in place reinforced concrete high-rise building at Illinois State University (ISU) and is one of the tallest residence halls in the world. Construction was completed in 1969. The residence hall is home to approximately 2,700 student residents and features many unique design characteristics. These characteristics include three separate towers connected by breezeways, 5-story residence style "houses" and contains a total of twenty-five floors of student sleeping rooms in each tower, and a roof terrace. The design of the houses makes vertical circulation unique and challenging as the elevators only serve the third level of every 5-story house. Watterson Towers contains three other floor levels that include management offices, activity spaces, laundry facilities, exercise facilities, and the entry lobby.

Justification

Watterson Towers is subject to the toughest applicable life safety and fire protection building codes because it is a high-rise residential building. Applicable life safety building codes apply to existing building occupancy features necessary to minimize danger to life from the effects of fire, including smoke, heat, and toxic gases created during a fire. In particular, the life safety code deals with hazards to human life in buildings and the safe operation of all building infrastructure systems supporting human occupancies. During Watterson Towers' 55 years of service, many construction, maintenance, and repair projects were completed that have impacted existing fire separation barriers and life safety protection measures.

Project Scope

This project proposes to update the building's fire separation barriers to ensure compliance with all applicable building code requirements.

The project scope included engaging a professional architectural/engineering building code construction forensic expert to make recommendations that include, but are not limited to:

- 1. Vertical mechanical/HVAC equipment shafts
- 2. Missing or damaged fire protection dampers in mechanical/HVAC ducts
- 3. Plumbing fire separation penetrations
- 4. Telecom/data wiring fire separation penetrations
- 5. Electrical device fire separation penetrations
- 6. Doorways, and service access panels in code required protected pathways.
- 7. Any wall/floor/ceiling mounted materials in protected pathways

Project Schedule

The project schedule defines an action plan for a phased construction schedule approach to cause the least disruption to students and university housing services operations. The plan involves starting non-occupant affecting work in the spring 2024 and major occupant affecting work taking place during the summer of 2024 and 2025.

Project Resource Requirements	
Architecture/Engineering Services	\$ 750,000
Construction	\$ 15,000,000
Project Commissioning & Testing Fees	\$ 500,000
Contingency	<u>\$1,250,000</u>
Total Project Cost - Not to Exceed	<u>\$ 17,500,000</u>

Source of Funding: AFS System Housing Resources