

BUILD THE FUTURE:

2035 CAMPUS PLAN

UNIVERSITY SENATE OCTOBER 26, 2022



**Michigan
Technological
University**

BUILD THE FUTURE

AUDACITY TO BE BOLD



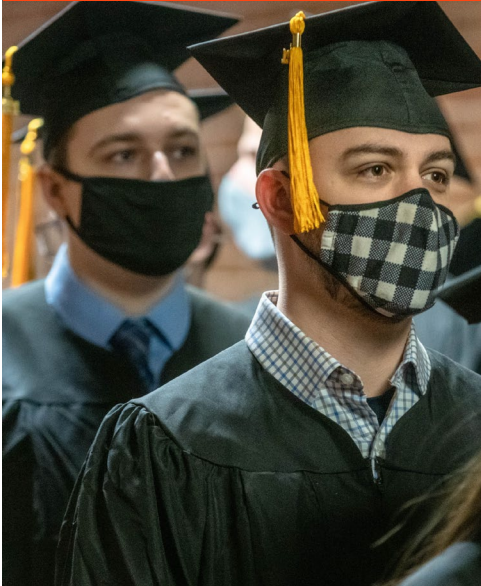
Shaping the Michigan Tech Brand

ACADEMIC AND RESEARCH EXCELLENCE



Premier Hiring Initiative

HUSKY NATION



Recruitment, Enrollment, Retention

TOMORROW'S FLAGSHIP TECHNOLOGICAL UNIVERSITY



Capital Campaign

BUILD THE FUTURE



Campus Plan



PLAN DRIVERS

STRATEGIC ALIGNMENT



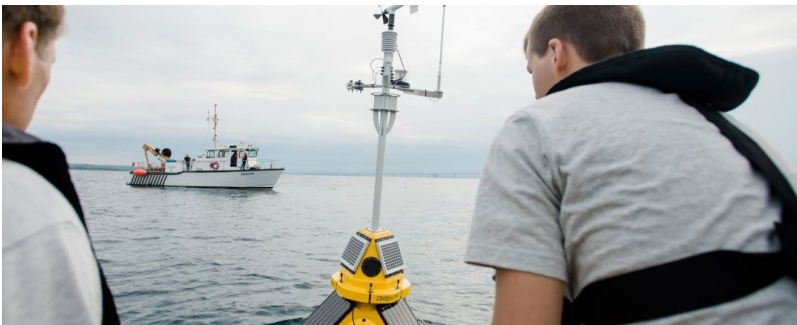
Diversity and Inclusion



Autonomous and Intelligent Systems



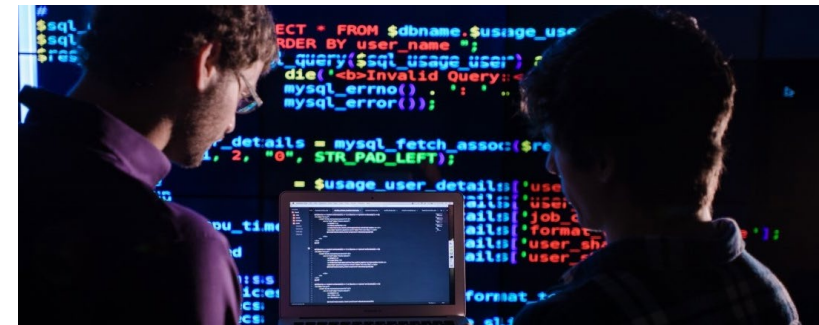
Education for the 21st Century



Natural Resources, Water, and Energy



Health and Quality of Life



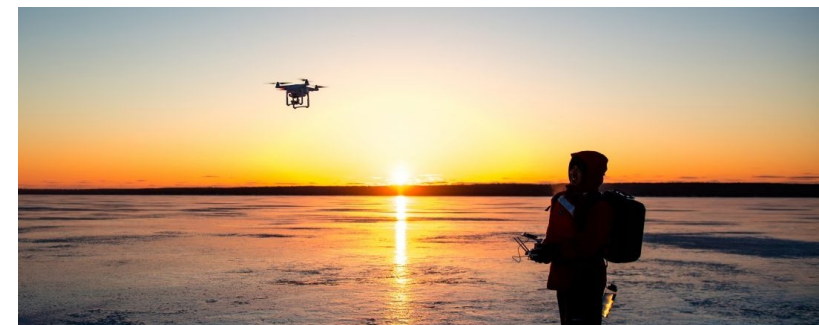
Data Revolution and Sensing



Sustainability and Resilience



Advanced Materials and Manufacturing



Policy, Ethics, and Culture

FOCUS ON EXCELLENCE

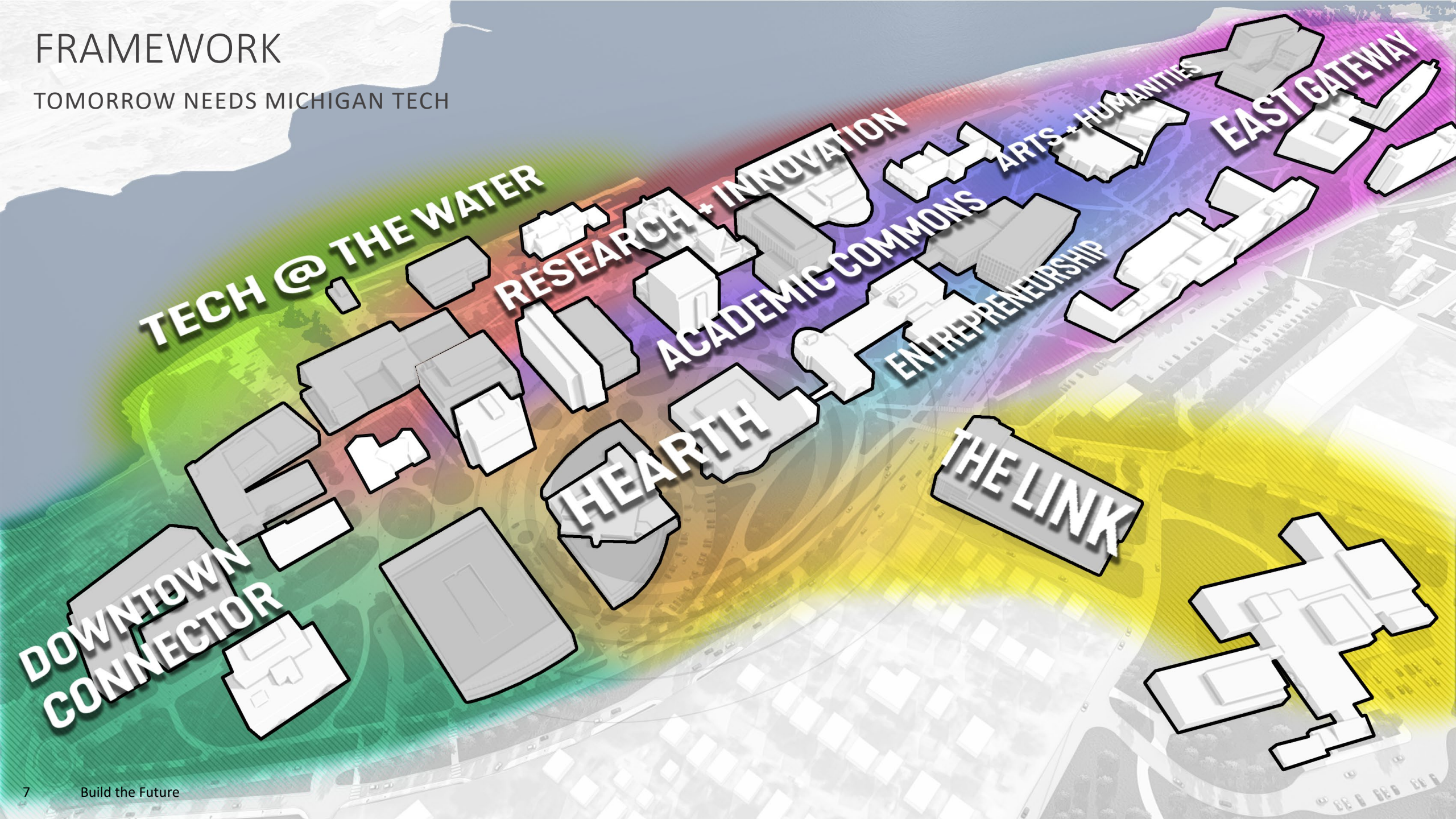
Internationally Competitive Faculty
International Recognition for Research
Transformational Residential Experience
10,000 Students



PLAN VISION

FRAMEWORK

TOMORROW NEEDS MICHIGAN TECH



QUANTITATIVE ANALYSIS

SPACE NEEDS

- **Teaching labs** need is driven by courses and assumes utilization targets are met
- **Classroom** square footage quantity is in balance but will be a shortage as enrollment increases
 - Opportunity to improve use of existing rooms through increased scheduling and aligning section sizes with room capacities
- **Student collaboration/informal learning** areas should be distributed across campus
- **Research space** quantity is sufficient; however, the condition, quality, configuration, and location hinder interdisciplinary collaboration
- **Office** “surplus” cannot easily be repurposed as physical inventory reflects spaces scaled based upon a different workplace environment.
- **Student-centered space** is currently sufficient in quantity; however, enrollment growth will create a need for additional space

QUALITATIVE ANALYSIS

SPACE NEEDS

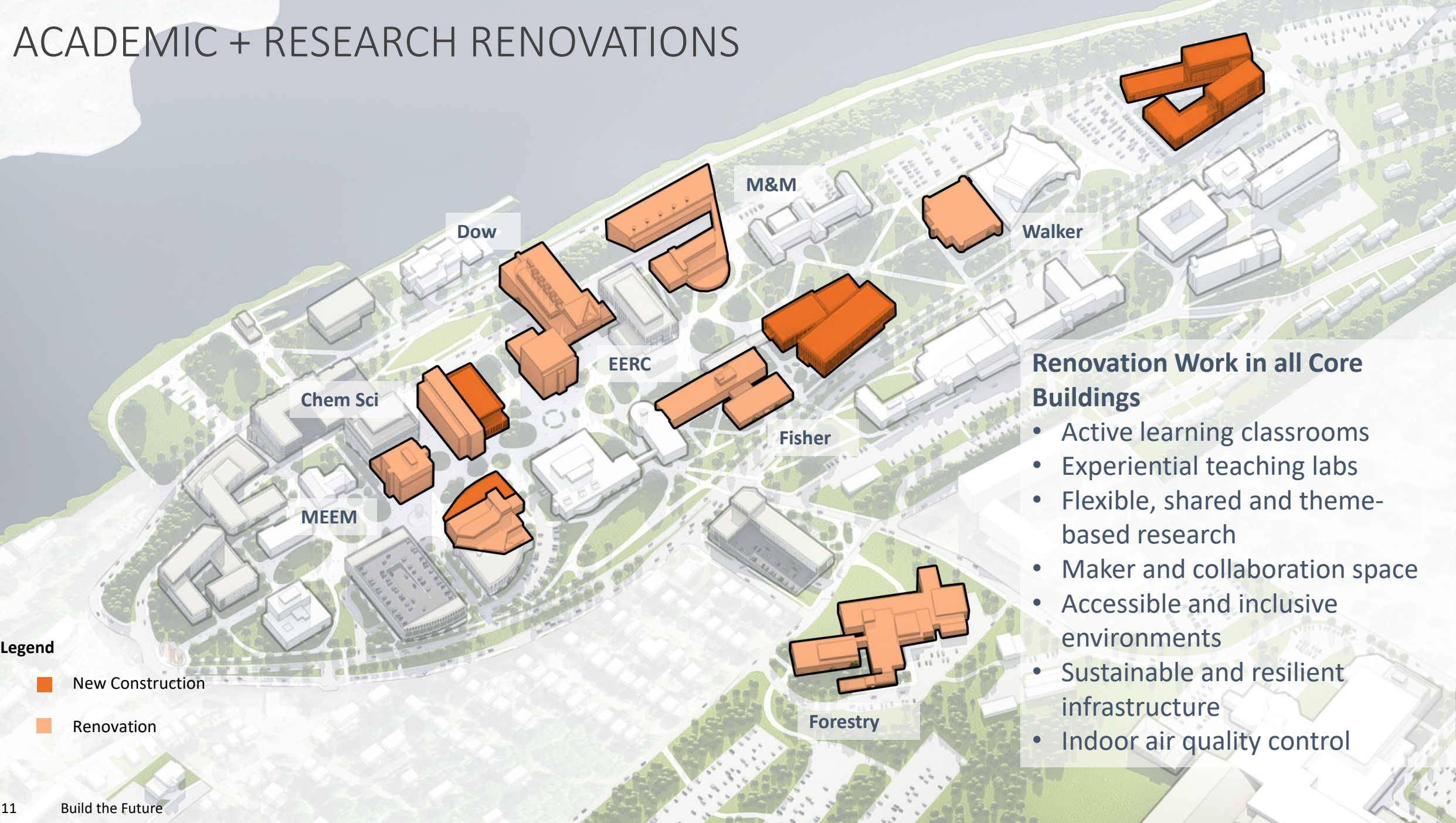
- **Location** of space
- **Condition** and **quality** of existing space
 - For example, classrooms are more traditional in nature with low space per seat, which impacts pedagogical flexibility.
- **Configuration** of legacy buildings particularly impacts adaptability for next-gen spaces
- **Lack of collaboration areas**, which impacts ability to develop learning communities and showcase student success
- **Space alignment** with marketing needs
 - Hands-on learning but not on display / **lack of transparency in buildings**
 - **Welcoming physical environment** to support recruiting greater diversity and support changing demographics

CAMPUS PLAN

VISION 2035



ACADEMIC + RESEARCH RENOVATIONS



- Legend**
- New Construction
 - Renovation

- Renovation Work in all Core Buildings**
- Active learning classrooms
 - Experiential teaching labs
 - Flexible, shared and theme-based research
 - Maker and collaboration space
 - Accessible and inclusive environments
 - Sustainable and resilient infrastructure
 - Indoor air quality control

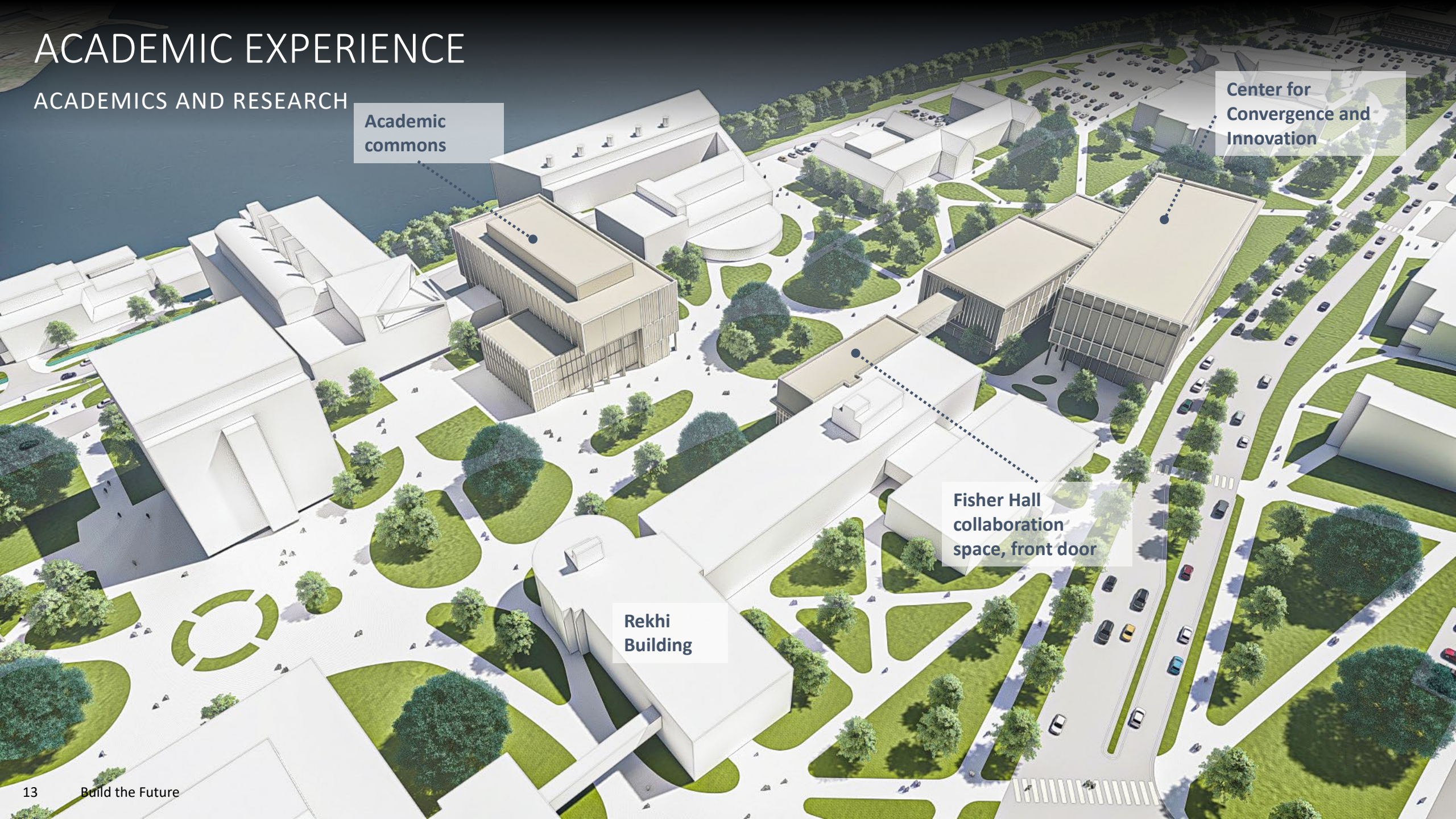
EAST END STUDENT HOUSING



Townsend Drive

ACADEMIC EXPERIENCE

ACADEMICS AND RESEARCH



Academic commons

Center for Convergence and Innovation

Fisher Hall collaboration space, front door

Rekhi Building

FLEXIBLE RESEARCH

THEME BASED. TRANSDISCIPLINARY. PARTNERSHIPS

Lakefront
Research
Building

H-STEM
Complex

Business and Industry
Research Addition:
flexible research labs,
industry partnerships

MEMORIAL UNION BUILDING

STUDENT ORGANIZATIONS. FOOD. COLLABORATION SPACE.



DOWNTOWN CONNECTOR

INTEGRATED EXPERIENCE



Student Housing
(lower division)

Cliff Drive

Wmsend Drive

THE LINK

HIGH PROFILE, MIXED-USE, P3



Upper division + graduate apartments

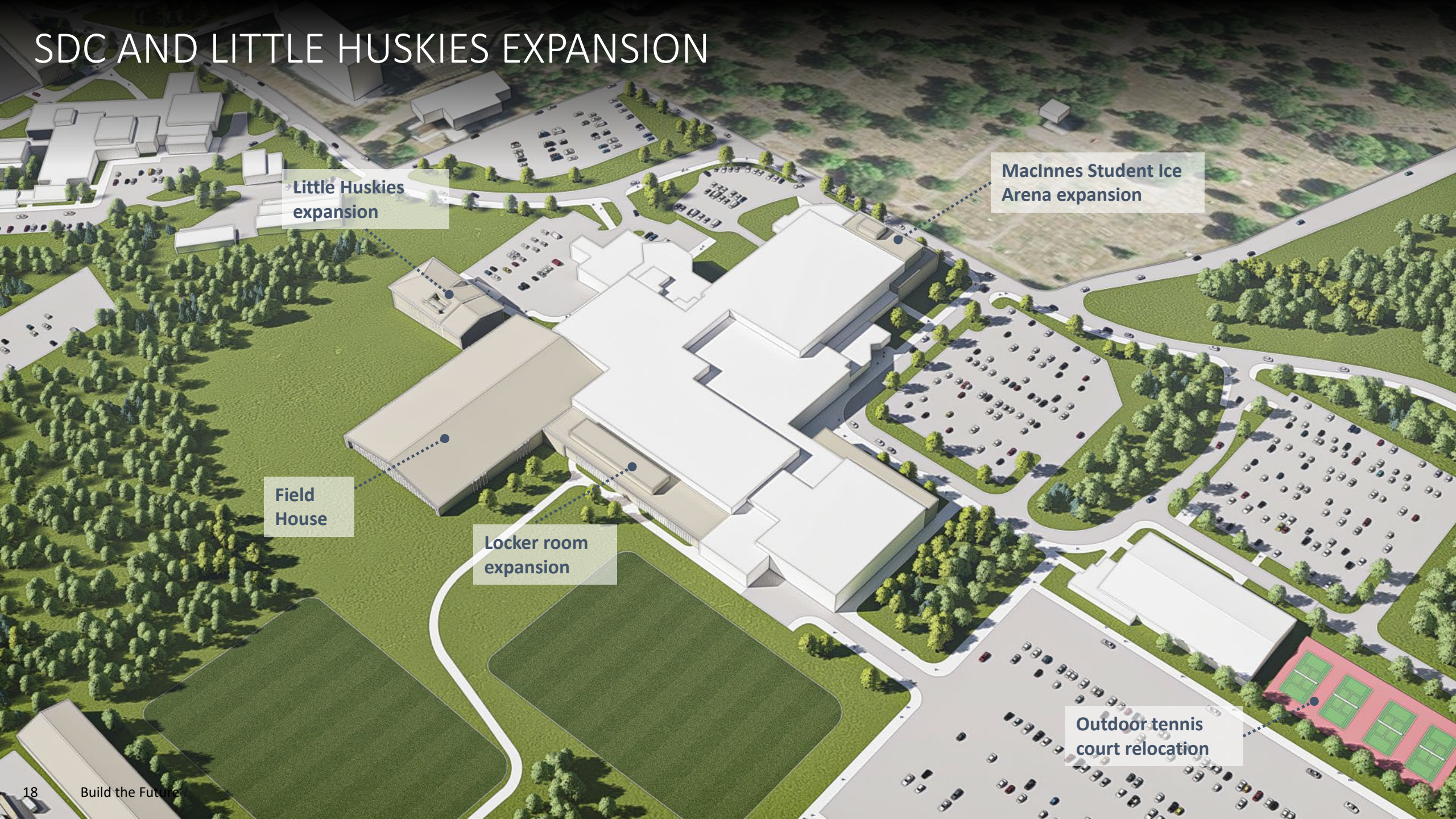
Parking structure

Mixed-use / office space

Ground floor retail

Townsend Drive

SDC AND LITTLE HUSKIES EXPANSION



Little Huskies expansion

MacInnes Student Ice Arena expansion

Field House

Locker room expansion

Outdoor tennis court relocation

ENERGY TRANSITION

CAMPUS AS LIVING LABORATORY. NATIONAL LEADER.

- All-electric
- Geothermal
- Microgrids
- Low-entropy temperature
- Water-source variable refrigerant system
- Dedicated outside air systems
- Off-peak generation and energy storage
- Deep conservation

OPEN SPACE INITIATIVES

Transformed Waterfront

Bluff Trail

Bluff Stairs and Elevator

MacInnes Plaza

Student Activity Lawn

West Campus Mall Extension





IMPLEMENTATION

NEAR TERM PROJECTS

H-STEM Complex

East End Student Housing

Center for Convergence and Innovation

Academic and Research Renovations

Legend

- New Construction
- Renovation



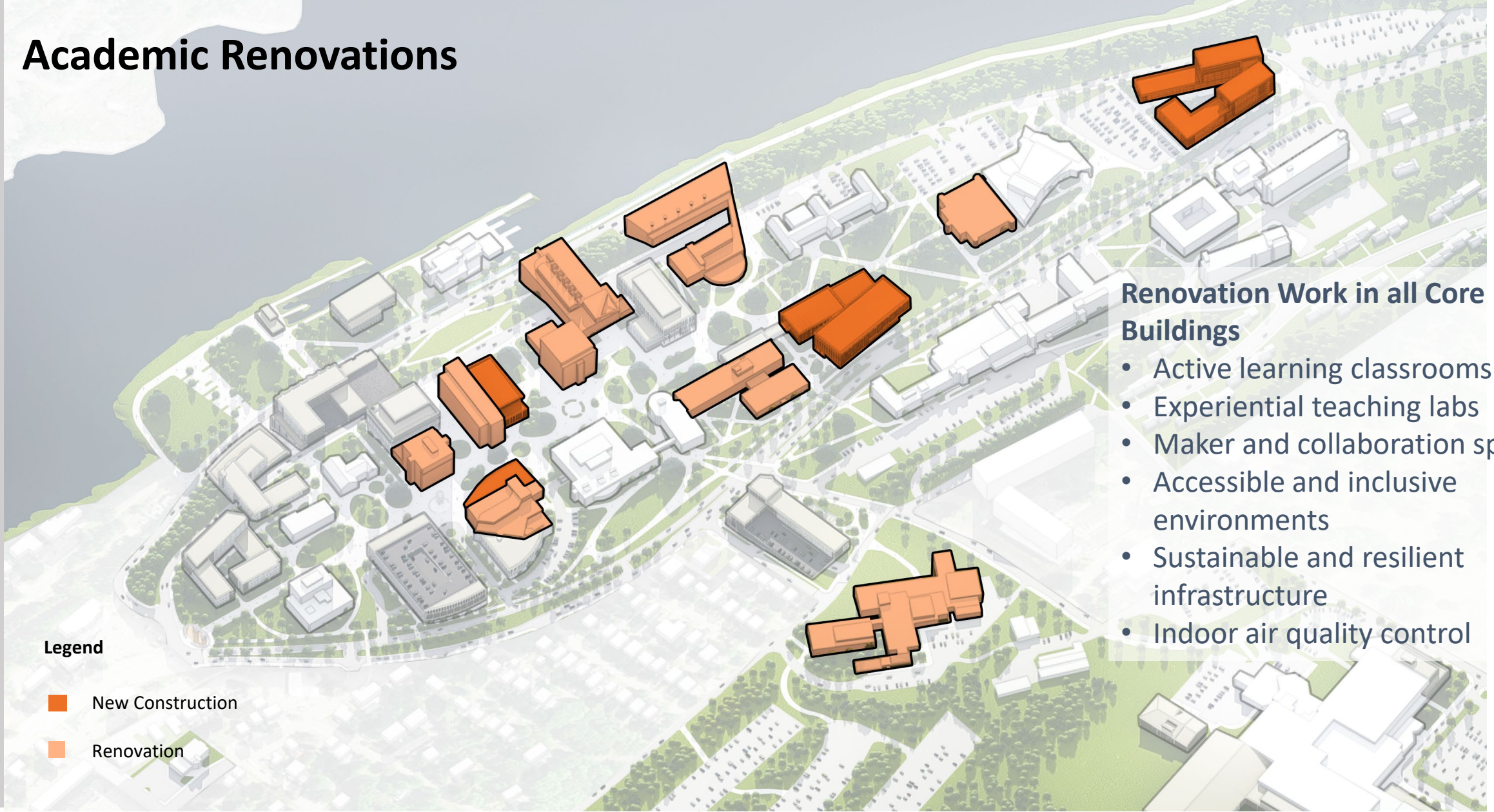
EAST END STUDENT HOUSING



PROJECT SCHEDULE

| | |
|---|--|
| Request for Qualifications: | July 14, 2022 |
| Request for Proposals: | October 5, 2022 |
| Pre-proposal Meeting: | October 13, 2022 (in-person) |
| Proposer Questions Due: | October 20, 2022 (all questions via email to Theresa Coleman-Kaiser) |
| Proposer Workshop 1: | November 3, 2022 (virtual) |
| Proposer Workshop 2: | November 17, 2022 (virtual) |
| Proposals Due: | December 9, 2022 |
| Final Interviews: | January 10, 2023 (in-person; tentative) |
| Developer Selection: | January 31, 2023 (tentative) |
| MTU BoT Endorsement: | February 23, 2023 |
| Design and Contract Negotiation Completion | August 25, 2023 |
| Construction | September 2023 – August 2025 |

Academic Renovations



Legend

- New Construction
- Renovation

Renovation Work in all Core Buildings

- Active learning classrooms
- Experiential teaching labs
- Maker and collaboration space
- Accessible and inclusive environments
- Sustainable and resilient infrastructure
- Indoor air quality control

Phase I Renovations and Implementation

Bond Funded

- Classroom and Teaching Lab Renovations (\$16.3M)
 - ME-EM 11th Floor Renovation (\$2.5M)
 - 7th Street Parking (\$2.0M)
 - KRC High Bay Building (\$5.5M)
 - MacInnes Ice Arena HVAC Improvements (\$4.0M)
-

FY2024 State Capital Outlay Request

- Center for Convergence and Innovation

FUTURE PHASES AND OPPORTUNITIES

Near Term Projects

Research and Industry
Innovation Center

MUB Renovations and
Mallside Addition

Research Lab Renovations

Central Parking Structure

Student Housing
@Downtown Connector

Future Projects

- Academic Commons
- The Link Student Housing and Retail
- Facilities Relocation
- MUB South Expansion

Opportunity Projects

- Little Huskies Child Care
- SDC Expansions – Ice Hockey addition, field house, locker room addition
- Gates Tennis Center Expansion
- Tech Trails Cross Country Ski Lodge



Summer 2023

- Undergrad Chemistry Lab 501
- Organic Chemistry Lab 601
- Chem-Sci Classrooms
 - 101, 102, 104, 106, 211, 215

ME-EM 11th Floor Research Renovations

- Additive manufacturing
- Wave energy conversion
- Cyber physical systems
- Robotics and autonomous systems



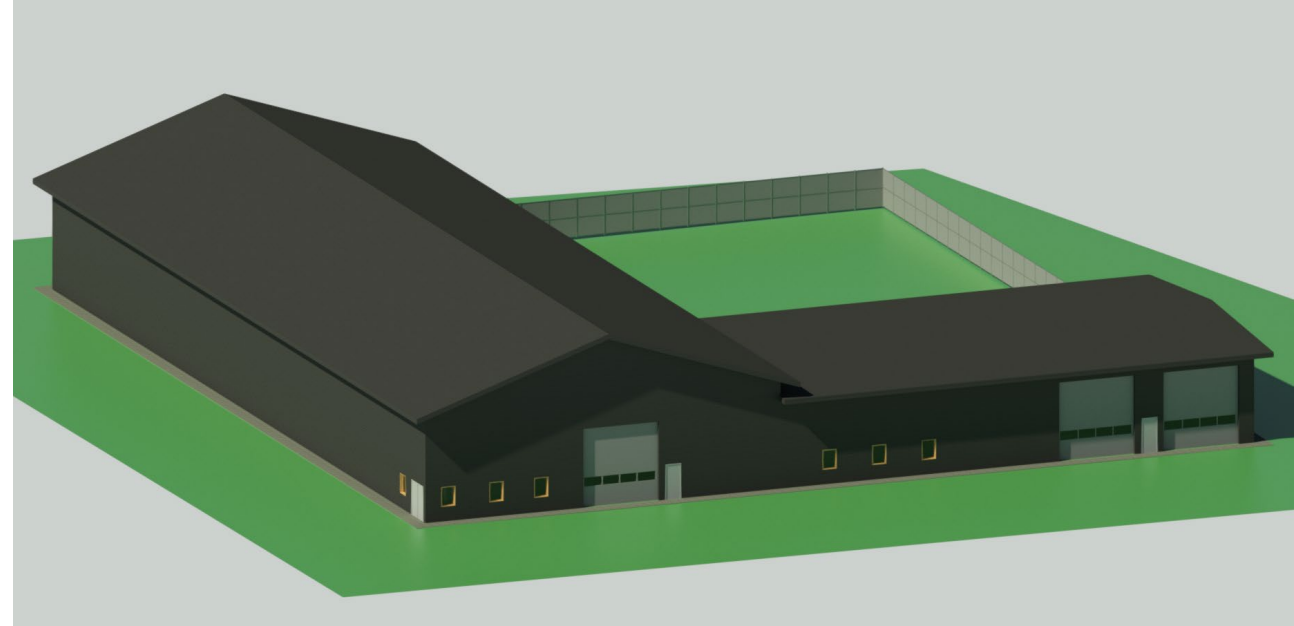
7TH AVENUE

SURFACE PARKING NOW. PARKING DECKS LATER.

Expanded
surface
parking

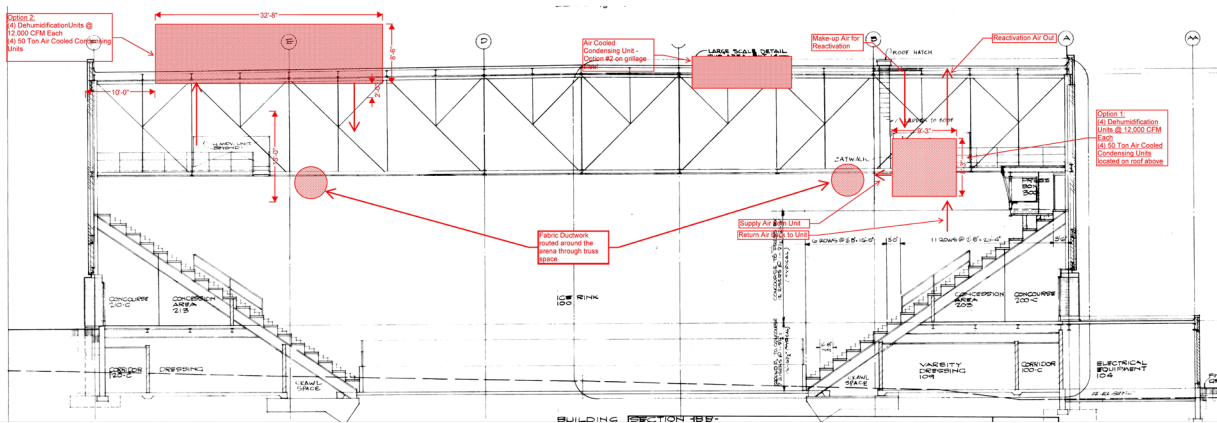
KRC High Bay Building

- 21,000 SF
- High bay garage with overhead crane
- 8 bays with 1 drive through
- Capacity to house 20+ large military ground vehicles
- Maintenance facilities



MacInnes Ice Arena HVAC Improvements

- Replace existing air handlers
- New dehumidification system
- Increased ventilation
- New heating system





Center for Convergence and Innovation

- \$70M (\$29.9M State share and \$40.1M MTU share)
- Awaiting planning authorization from the State
- House the College of Business and the College of Computing
- University wide classrooms
- Center for Diversity and Inclusion

DOWNTOWN CONNECTOR

WEST GATEWAY

