



Comprehensive Facilities Plan Update 2018

Minnesota State University Mankato

Volume 1

10.21.2019 100% Document





MINNESOTA STATE
UNIVERSITY
MANKATO

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MINNESOTA STATE
UNIVERSITY
MANKATO

 DLR Group



October 2, 2019

Brian Yolitz
Associate Vice Chancellor for Facilities
Minnesota State Colleges and Universities
700 Wells Fargo Place
70 East 7th Street
St. Paul, MN 55101

RE: MINNESOTA STATE UNIVERSITY, MANKATO
UPDATED FIVE YEAR MASTER FACILITIES PLAN

Dear Associate Vice Chancellor Yolitz:

Minnesota State University, Mankato is pleased to submit our updated master facilities plan. In alignment with our University Strategic Goals and Objectives 2016-2021 and with the System's three guiding principles of Student Success; Programmatic and Financial Sustainability; and Diversity, Equity, and Inclusion, the following pages illustrate the best mix of physical facilities and delivery practices to serve the students at Minnesota State Mankato, who are Minnesota's future workforce.

We have spent the past year engaged in the master planning experience which created important opportunities to reflect on past plan achievements and assess current challenges. This plan is the result of extensive discussion, review and visioning across the breadth of the campus community, our surrounding neighbors and planners for the City of Mankato. Our committees reflected upon and evaluated implementation achievements of preceding master plans, reviewed the campus' strategic priorities, and considered current and projected academic and space needs.

Minnesota State Mankato remains committed to outstanding stewardship of our current facilities resources in alignment with state needs and global visions while planning for the campus of the future.

I look forward to reviewing this updated five year plan with you soon.

Best Regards,

A handwritten signature in black ink, appearing to read "Richard Davenport", with a large, sweeping flourish at the end.

Richard Davenport
President



MINNESOTA STATE
UNIVERSITY
MANKATO

 DLR Group

October 21, 2019

President Richard Davenport
Minnesota State University, Mankato
309 Wigley Administration Center
Mankato, MN 56001

Re: Minnesota State University, Mankato Comprehensive Facilities Plan

Dear President Davenport,

Enclosed is the final Comprehensive Facilities Plan for Minnesota State University, Mankato (MSUM). After a year of engagement with various administration members, faculty, staff, and students, we have compiled a document that aligns MSUM's physical environment with the university's vision and strategic plan. We believe this document meets Minnesota State Colleges and Universities CFP guidelines and requirements.

It has been our pleasure collaborating with everyone on campus to create this plan for the next 11+ years. Your future is bright and we couldn't be more thrilled to have had a part in crafting this plan with you!

Sincerely,
DLR Group, Inc., a Minnesota corporation



Kate Yurko, AIA, LEED AP
Principal



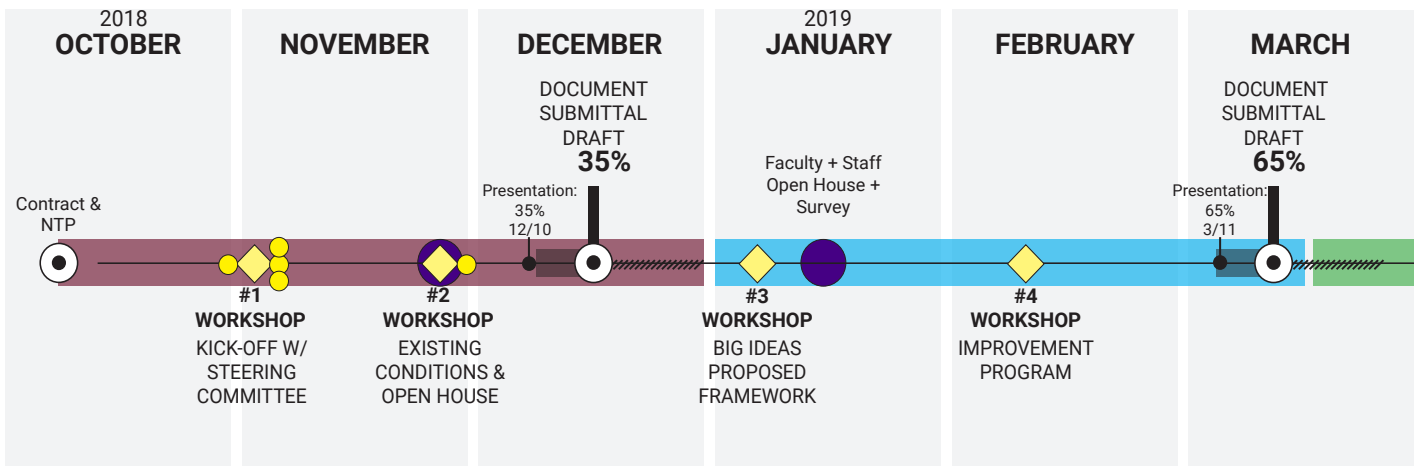
Workshop #1



Open House #1



Workshop #2



-  PROJECT MILESTONE
-  PRESENTATION TO PRESIDENT AND CABINET
-  CAMPUS ENGAGEMENT
-  FOCUS GROUP MEETING
-  CFP STEERING COMMITTEE WORKSHOP

Introduction & Process

Summary

In October of 2018, Minnesota State University, Mankato kicked off the Comprehensive Facilities Plan, guided by MSU's Steering Committee and master planning consultants, DLR Group and Kimley Horn. Over the next seven months, through a series of workshops, open houses, and online surveys, DLR Group listened, facilitated, collected data and feedback from University stakeholders, faculty, staff and students on improvements for MSU's campus and facilities. Recommendations outlined in this document reflect the collaborative process and resulting outcomes.

Process

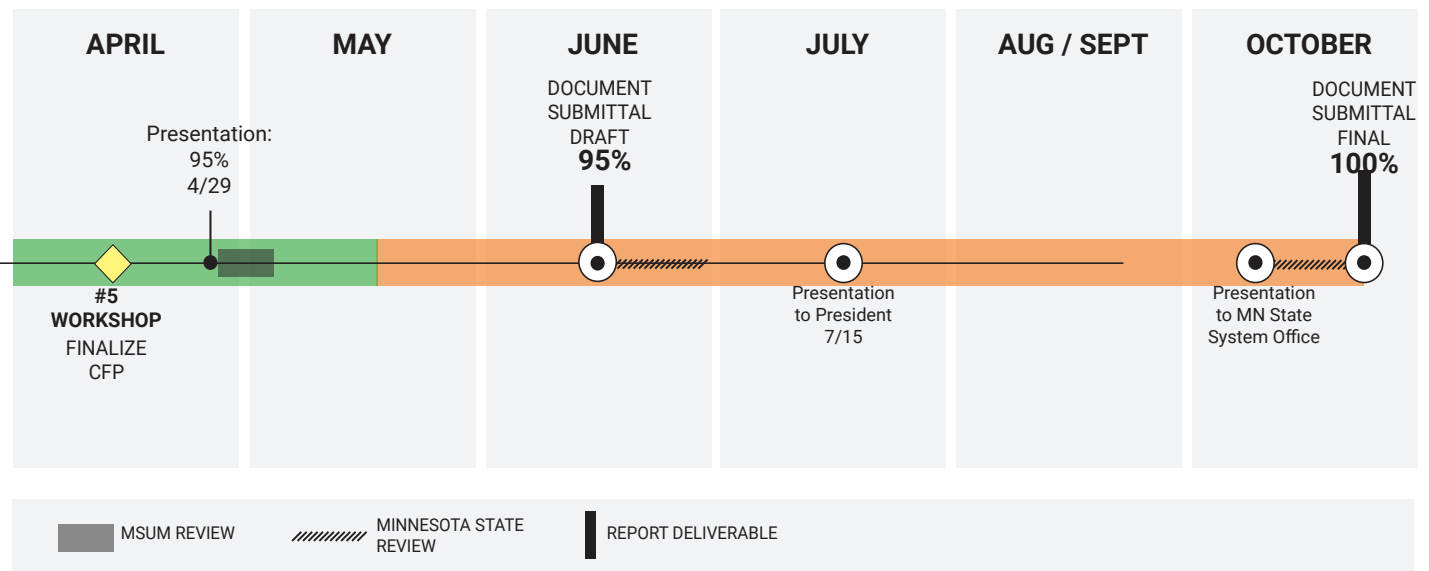
Workshop #3

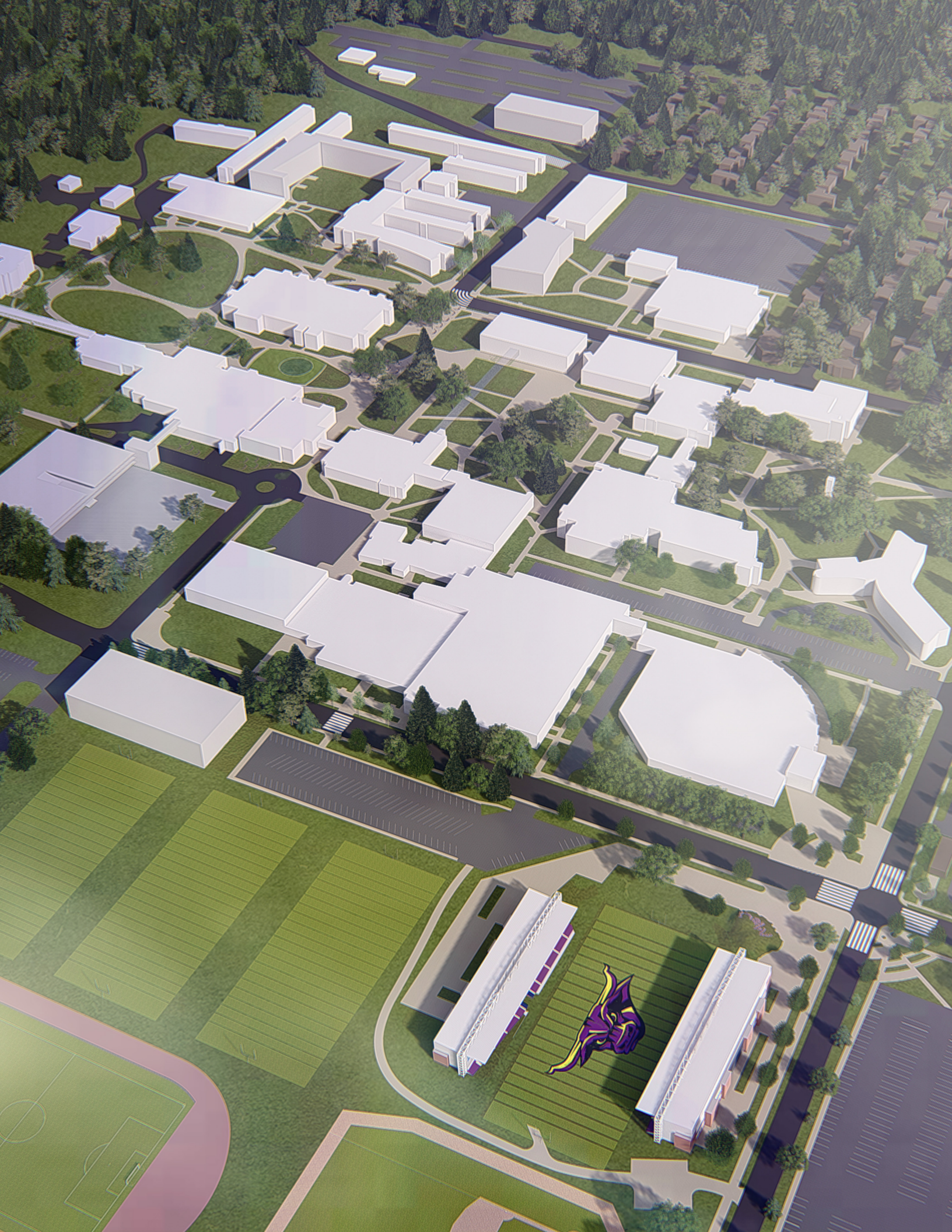


Open House #2



Workshop #4





Overall Guiding Principles

Summary

Guiding Principles

Overall guiding principles for the Comprehensive Facilities Plan were established grounded in the overarching themes of the University Strategic Plan and feedback given from the Steering Committee, Cabinet and Focus Groups.

Embrace / Promote a welcoming and inclusive campus that highlights our unique identity

- Enhance campus gateways, first impressions
- Strengthen campus wayfinding through cohesive hierarchal elements in interior and exterior spaces
- Prioritize pedestrian-forward approaches;
- Enhance access & mobility for visitors, students, faculty and staff
- Promote safe multi-modal transportation on campus

Integrity

Diversity

Create innovative, student-centered spaces on campus that supports student success of incoming generations

- Create technology-rich spaces that support faculty, staff and student research and showcases learning & innovation
- Promote collaboration across academic disciplines
- Exemplifies a truly National & International University
- Enhances the quality and variety of environments on campus to improve recruitment and retention

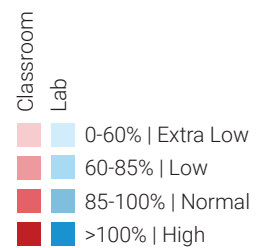
Access

Responsibility

Provides flexible yet comprehensive vision to respond to future initiatives

- Is flexible, to address the uncertain times & changes in Higher Education
- Set strategies for ongoing campus initiatives
- Provide the vision & planning to support design & construction requests in the future
- Addresses future infrastructure needs of aging facilities
- Considers the current state of legislative funding and explores external partnerships, research synergies, and funding strategies that MSU can leverage

Excellence



| | | Classroom Utilization | | Lab Utilization |
|---------------------------------------|--------------|-----------------------|---------------------|-----------------|
| Building | # Classrooms | 32 weekly hrs | # Class Labs 210 | 32 weekly hrs |
| Armstrong Hall | 42 | 83.4% | 20 | 69.2% |
| Center for Performing Arts | 5 | 59.2% | 6 | 28.9% |
| Clinical Sciences Building | 5 | 89.6% | 5 | 47.0% |
| Ford Hall | 1 | 64.6% | 9 | 31.1% |
| Highland Center | 3 | 54.3% | 2 | 25.4% |
| Margaret A Preska Residence Community | 2 | 3.7% | 0 | n/a |
| Memorial Library | 2 | 24.6% | 4 | 40.1% |
| Morris Hall | 7 | 67.3% | 4 | 41.7% |
| Nelson Hall | 1 | 75.8% | 7 | 72.3% |
| Pennington Hall | 4 | 69.4% | 0 | n/a |
| Taylor Center | 2 | 67.7% | 1 | 2.2% |
| Trafton Science Ctr - Center | 10 | 80.8% | 1 | 43.6% |
| Trafton Science Ctr - East | 2 | 98.2% | 7 | 16.8% |
| Trafton Science Ctr - North | 2 | 76.5% | 14 | 26.4% |
| Trafton Science Ctr - South | 1 | 45.1% | 16 | 54.5% |
| Wiecking Center | 5 | 74.8% | 4 | 8.8% |
| Wissink Hall | 8 | 77.4% | 10 | 54.9% |

Figure 0.0 - Existing Campus Utilization

Campus Analysis

Existing Conditions

Enrollment & Space Needs

Similar to many higher education facilities in Minnesota, MSU Mankato has experienced a dip in student enrollment and projects enrollment to remain flat over the next five years. Therefore significant space needs are not expected, however, campus facilities would benefit from various improvements to support flexible and adaptable learning environments that accommodate non-traditional future students and allows for future expansion and growth. Other specific space needs to support student services, innovation and research, and social / study space are outlined in the proposed projects list.

Facility Analysis

MSU Mankato has several buildings that are nearing the end of their life spans and carrying high deferred maintenance items. Armstrong Hall, Wiecking Center and Nelson Hall are among the top three that are being considered for demolition and replacement due to their age and funding necessary to bring them up to today's building standards. The Performing Arts Center is also in need of HEAPR funding to replace HVAC systems and single paned storefront glazing. A structural solution to Blakeslee Stadium has been employed for the near term, however, will require replacement in the next 10 years.

With the pending demolition of Carkoski Commons, a new home for Health Services and new residence hall are projects slated for the mid term.

Space Utilization

Overall, MSU Mankato reports scheduled classrooms on an average of 75% to 80%, while class labs hover around 50% utilization. The current scheduling is based on a 32 hour week, however, the University is expected to increase the available hours to 38 per week, expanding their class schedule, increasing efficiency and taking the load off peak class times. In addition, the University is moving toward a common bell schedule among all programs. Armstrong Hall is known as the workhorse on campus, with 42 classrooms (83% utilized) and 20 labs (69% utilized). The Clinical Sciences Building also reports highly scheduled classrooms at 90%. Lower utilization is generally reported for the athletic facilities, like Taylor Center, where rooms double in function. They can be scheduled for credited courses while also supporting the needs of intramurals and other athletic team needs. The same trend is seen for many labs, where utilization may appear lower, as rooms are intentionally not scheduled around the clock, to serve student open lab needs.

Total Faculty Headcount

1,062

Total Student Headcount

14,798

Campus completed Sq Ft

2,757,768 SF

13,455

Total FYE Students

Figure 0.1 - Overall Rendered Master Plan



Goals & Strategies

Building Development

Facility development strategies are designed to support the comprehensive facilities plan guiding principles #2. Recommended building projects have been carefully considered from a financial standpoint and vetted to support the future vision of MSU Mankato. Projects are designed and crafted to :

Create innovative, student-centered spaces on campus that support academic needs of incoming generations

- Create technology-rich spaces that support faculty, staff and student research and showcases learning & innovation
- Promote collaboration across academic disciplines
- Exemplify a truly National & International University
- Enhance the quality and variety of environments on campus to improve recruitment and retention

It is imperative that with any new construction or renovation projects, effort should be made to include student-focused space for collaborative work and quiet study and reflection. With an increasingly diverse incoming student body, the need to provide spaces that promote student success, inclusivity, and accessibility will be a focus for MSU Mankato.

Site Development

Recommendations for proposed site development support the primary guiding principle of the comprehensive facilities plan. The proposed projects outlined in this section reflect these goals and are designed to :

Embrace and promote a welcoming and inclusive campus that highlights MSU's unique identity

- Enhances campus gateways, first impressions and elevates collegiate experience
- Strengthens campus wayfinding through cohesive hierarchal elements in interior and exterior spaces
- Prioritizes pedestrian-forward approaches
- Enhances access & mobility for visitors, students, faculty and staff
- Promotes safe multi-modal transportation on campus

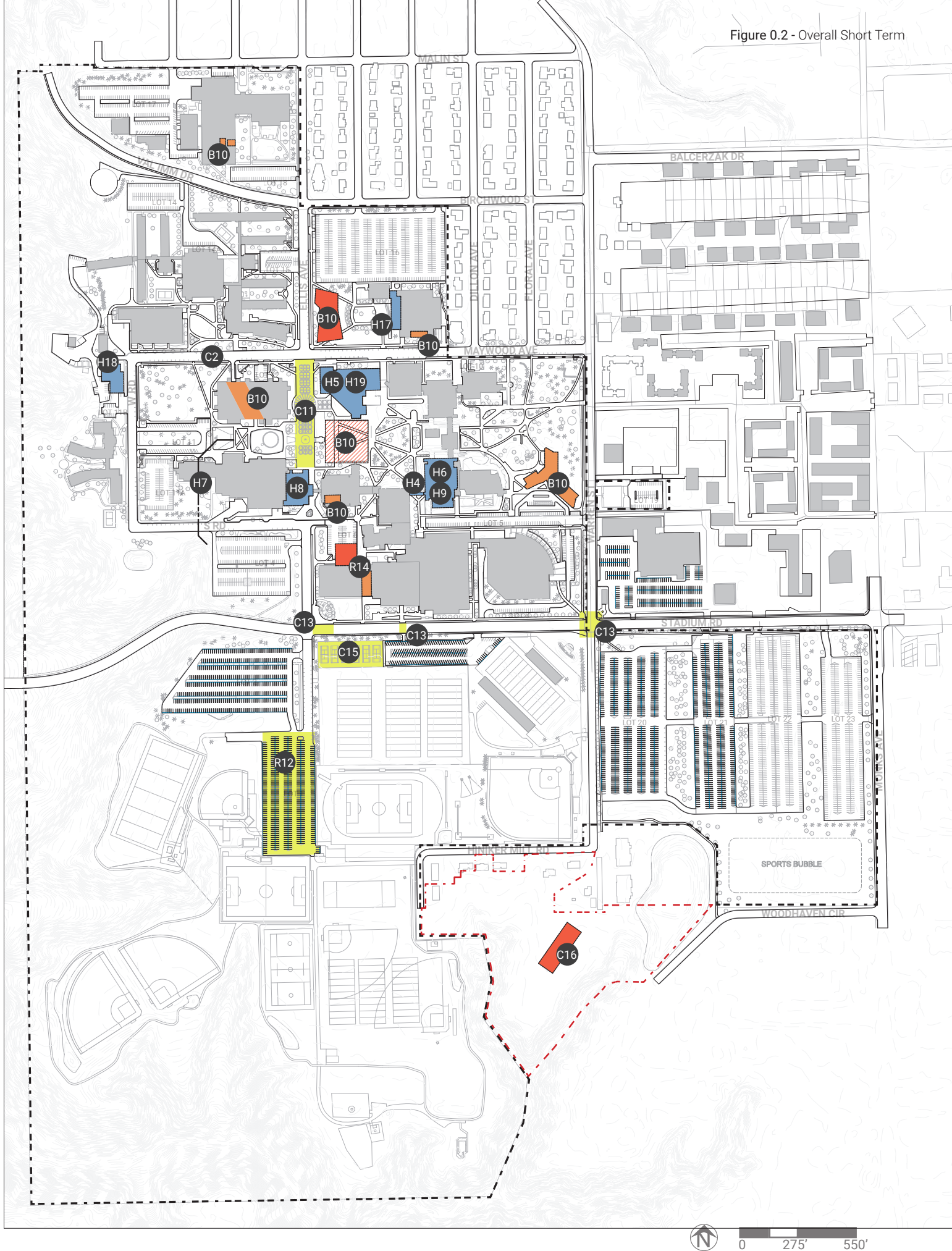
Additionally, MSU Mankato has some unique site conditions that must be considered. MSU Mankato operates on a tight campus footprint so a major site development goal is strategic and thoughtful land management. It is critical that decisions are well considered from many perspectives when it comes to potential locations for future facilities and the value of operating and maintaining existing facilities to the value of the property.

Land owned by the Alumni Foundation south of Hiniker Mill Road offers some potential in leveraging this relationship for future development and partnerships.

Utility renewals will request HEAPR funding to upgrade sanitary, sewer and stormwater systems across campus.

The first three projects in the short term focus on campus-wide studies to better understand campus systems and establish strategies for implementation as projects of the facilities plan gets underway. A major site development goal that has been discussed in past master plans and continues to surface in conversation has been the discussion of closing the vehicular ring road and creating a pedestrian mall.

Figure 0.2 - Overall Short Term



Overall Short Term

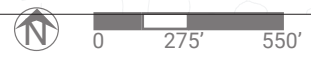
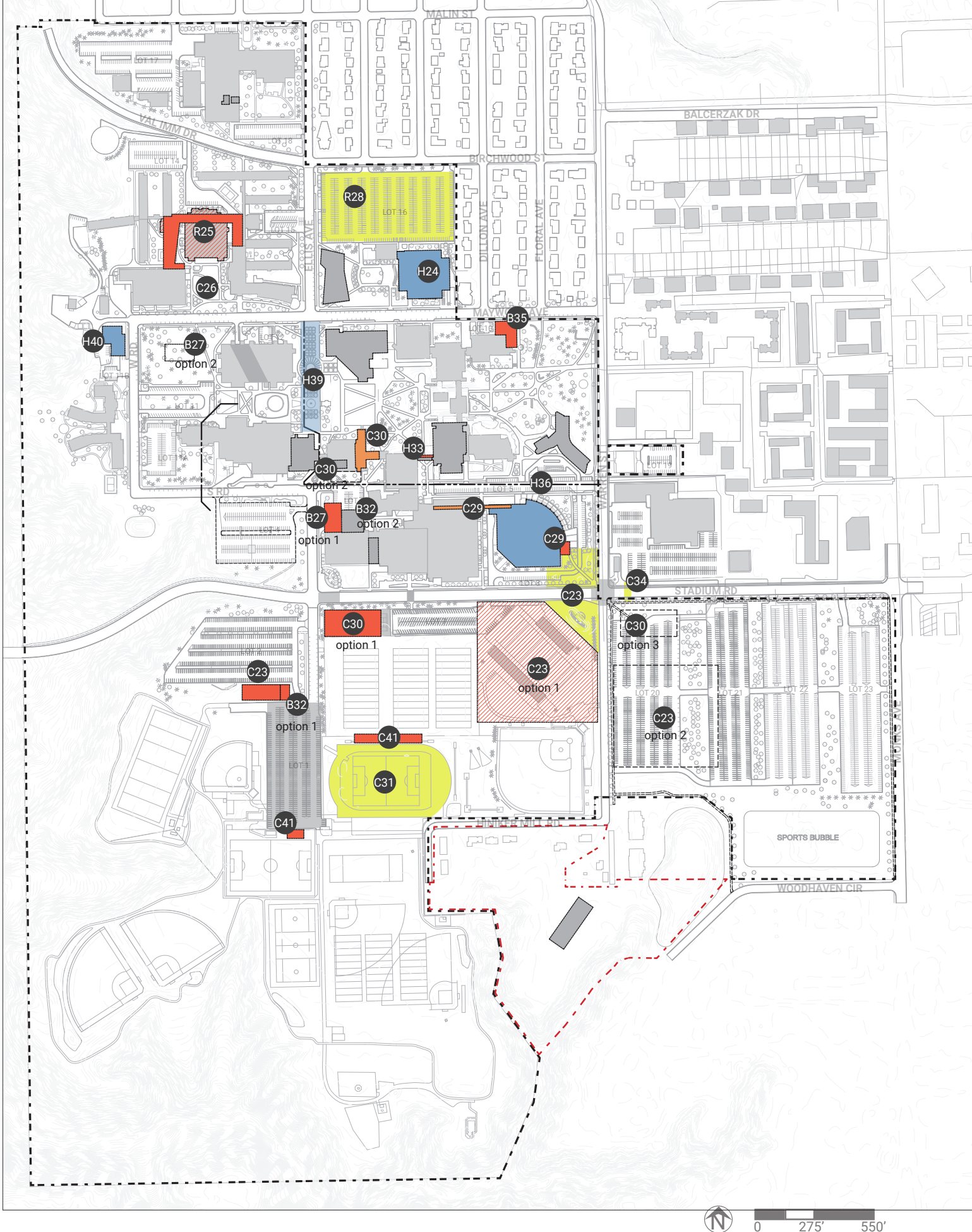
1-5 years

- New Construction
- Renovation
- Renewal
- On-Grade Site Improvement
- Site Acquisition

| Project Funding Key | |
|---------------------|---|
| B | GO Bonding\$82M |
| H | GO HEAPR\$16M |
| R | Revenue Bonding\$ 8M |
| C | Campus Funded + Other Source\$29M |

- C1** **Exterior Wayfinding Study**
develop an improvement plan & standards for external wayfinding throughout campus
- C2** **Pedestrian Mall Study**
develop an improvement plan to convert part of Maywood Ave, W Rd, & part of S Rd to pedestrian mall w/ emergency & maintenance access; assumed that improvements will be made incrementally
- C3** **Interior Wayfinding Study**
develop an improvement plan & standards for internal wayfinding throughout campus
- H4** **Trafton Highland Link - Waterproofing**
repair and upgrade the below grade link between Trafton South and Highland North
- H5** **Nelson Hall - Envelope + Infrastructure**
galvanized waste piping replacement, single pane glass replacement, electrical buss duct in several labs, and some electrical distribution panel replacements
- H6** **Trafton Window Replacement**
replace existing curtain wall system
- H7** **Stormwater Management Upgrade**
add water quality improvements when renovating parking lots; new stormwater management control for existing entrance to Library Tunnel; backflow preventer to be constructed in the outlet pipe, and the outflow capacity to be increased to prevent flooding of the tunnel
- H8** **Wigley Administration Building Envelope**
replacement of the south elevation curtain wall
- H9** **Trafton South - Casework Renewal**
upgrade science lab casework in +/- 25 bio rooms (Trafton S) (HEAPR)
- B10** **Armstrong Hall Solution + portion of Pedestrian Mall Implementation**
renovate unoccupied basement level of clinical sciences; new Armstrong Hall replacement building per pre-design; demolish Armstrong Hall & replace with green space; renovate Wiecking Center, Performing Arts Center, Memorial Library, and Morris Hall
- C11** **Campus Open Space Renovation**
remove planters & renovate campus plaza/ walkway between Memorial Library & Nelson/Armstrong; provide outdoor seating; firepit between Student Union & Library
- R12** **Parking Lot #1 Repairs**
Lot 1 (\$1M) repairs, potential reconfiguration, stormwater treatment, relocate lighting
- C13** **Safety Crossing Improvements**
new crossing at Stadium Rd & Warren St; improve crossing south of Highland Center and at Ellis & Stadium Rd.
- R14** **Otto Recreation Addition & Remodel**
new weight room (9000 sf); remodel of exist weight room to multi-purpose rooms (4000 sf) & small inclusive locker room (200 sf)
- C15** **Replace Tennis Courts + New Pickleball Courts**
replacement of (3) tennis courts and introduction of (3) pickleball courts; location TBD
- C16** **Upper Class Apartment Housing**
new housing south of Hiniker Mill Road within foundation owned property; (themed townhome style housing preferred); themes Greek, Spanish, etc.; MSUM to engage consultant to confirm or change direction to most recent housing plan; project possible with private-public partnership, private lease, and traditional revenue bond sales; style of housing, population served, and debt capacity may influence the funding approach for the project; proposed to accommodate about 300 beds
- H17** **Performing Arts Center Renewal**
enhanced entry, replace single pane storefront glazing, improve accessibility; HVAC replacement & building envelope (HEAPR)
- H18** **Utility Plant Equipment Upgrades #1**
upgrade utilities equipment to support future work on campus (new buildings beyond Armstrong Solution)
- H19** **Nelson Hall Roof**
replace existing roof with new roof systems
- H20** **Emergency Generator Replacement**
replacement of emergency generators & associated gears w/ two new appropriately sized generators
- H21** **Underground Storage Tank**
removal and replacement of existing 50,000 gallon backup fuel tank, with new 50,000 gallon double wall fiber glass fuel tank.
- C22** **Solar Power - Location TBD**
provide new solar array; location TBD

Figure 0.3 - Overall Mid Term



Overall Mid Term

6-10 years

- New Construction
- Renovation
- Renewal
- On-Grade Site Improvement
- Site Acquisition

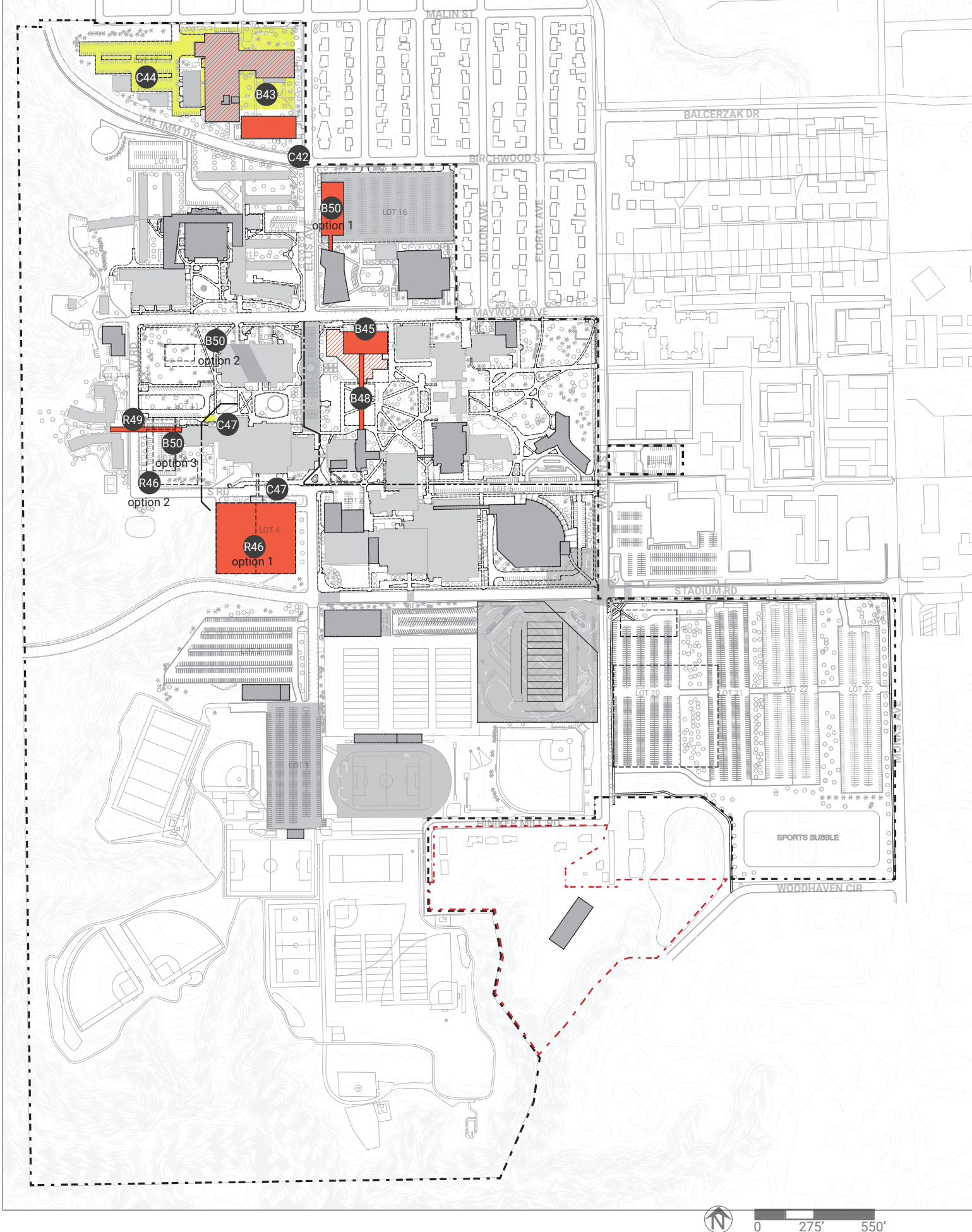
| Project Funding Key | |
|---------------------|---|
| B | GO Bonding\$20M |
| H | GO HEAPR\$27M |
| R | Revenue Bonding\$47M |
| C | Campus Funded + Other Source\$62M |

- C23** **Blakeslee Stadium Replacement**
demolish Blakeslee Stadium; replace with new facility (sized for soccer); bleachers, press, storage, etc. and re-orient field; team room + support (pregame / halftime satellite); two potential location opportunities for replacement; option 1 - reoriented at current location; option 2 - Lot 20 provide new storage for grounds maintenance south of Lot 2; high bay area; new plaza in front of Blakeslee Stadium & across Rd in front of Taylor Center
- H24** **Performing Arts Center Renewal P2**
Continuing renovation work from previous Performing Arts Center Renewal project as more funding becomes available
- R25** **New Residence Hall**
demolish Carkoski Commons per residential life masterplan; demolish portion of Crawford Residence Community; new residence hall / commons per residential life masterplan; +320 beds (traditional)
- C26** **Campus Open Space Upgrade + portion of Pedestrian Mall Implementation**
Upgrades outside Preska: fire pit, furnishings, shade, power access, etc.
- B27** **New Home for Health Services**
new home for health services; includes 300-400 sf Interfaith reflection space two potential location opportunities identified: Option 1 - north of Highland Center; Option 2 - west of Memorial Library
- R28** **Parking Lot #16 Repairs**
Lot 16 (\$2M) repairs, potential reconfiguration, stormwater treatment, salvage & reinstall lighting; potential for solar power

- C29** **Taylor Plaza & Connectivity Improvements**
southeast corner connectivity; improving pedestrian experience with new entry addition; improved welcome center (admissions + alumni relations); improving pedestrian experience through Taylor Center entrance & athletic buildings
- C30** **New Business Building / Welcome Center**
new business building & welcome center on Lot 20 North; repurpose spaces in Morris for other programs; university is considering additional alternate locations
- C31** **Track & Field Turf Replacement**
new turf, removals & prep
- B32** **Campus Rec / Maverick Adventures Facility**
space to support outdoor programs through Campus Rec & Maverick Adventures - large equipment storage/ rental two potential location opportunities identified; Option 1 - south in athletics fields; Option 2 - north of Otto Rec (combine w/ weight room addition)
- H33** **Trafton South Connection Upgrade**
demolish existing tunnel; new skyway connection to create campus gateway to quad
- C34** **Entry Gateway Enhancements**
enhancement of existing gateway features into campus from the west on Stadium Rd, from north on Val Imm, and corner of Stadium & Warren
- B35** **Agriculture Lab Addition**
addition for AG lab / etc.; location TBD; 9000sf @ 1.5 stories
- H36** **Sanitary / Sewer Renewal**
replace existing sewer line; trenchless replacement; currently 20-25' under
- H37** **Utility Tunnel Repairs**
repair existing utility tunnels

- H38** **Taylor Center Roof**
renovate existing roof
- H39** **Campus Mall Replacement**
renovate campus plaza/ walkway between Memorial Library & Nelson/ Armstrong phase 2
- H40** **Utility Plant Equipment Upgrades #2**
renovate & expand utilities equipment to support future work on campus (new buildings beyond Armstrong Solution)
- C41** **Track & Field Support Facilities**
Bleachers & Press; Restrooms, Concessions & Storage

Figure 0.4 - Overall Long Term



Overall Long Term

11+ years

- New Construction
- Renovation
- Renewal
- On-Grade Site Improvement
- Site Acquisition

| Project Funding Key | |
|---------------------|---|
| B | GO Bonding\$94M |
| H | GO HEAPR\$ 0M |
| R | Revenue Bonding\$40M |
| C | Campus Funded + Other Source\$ 1M |

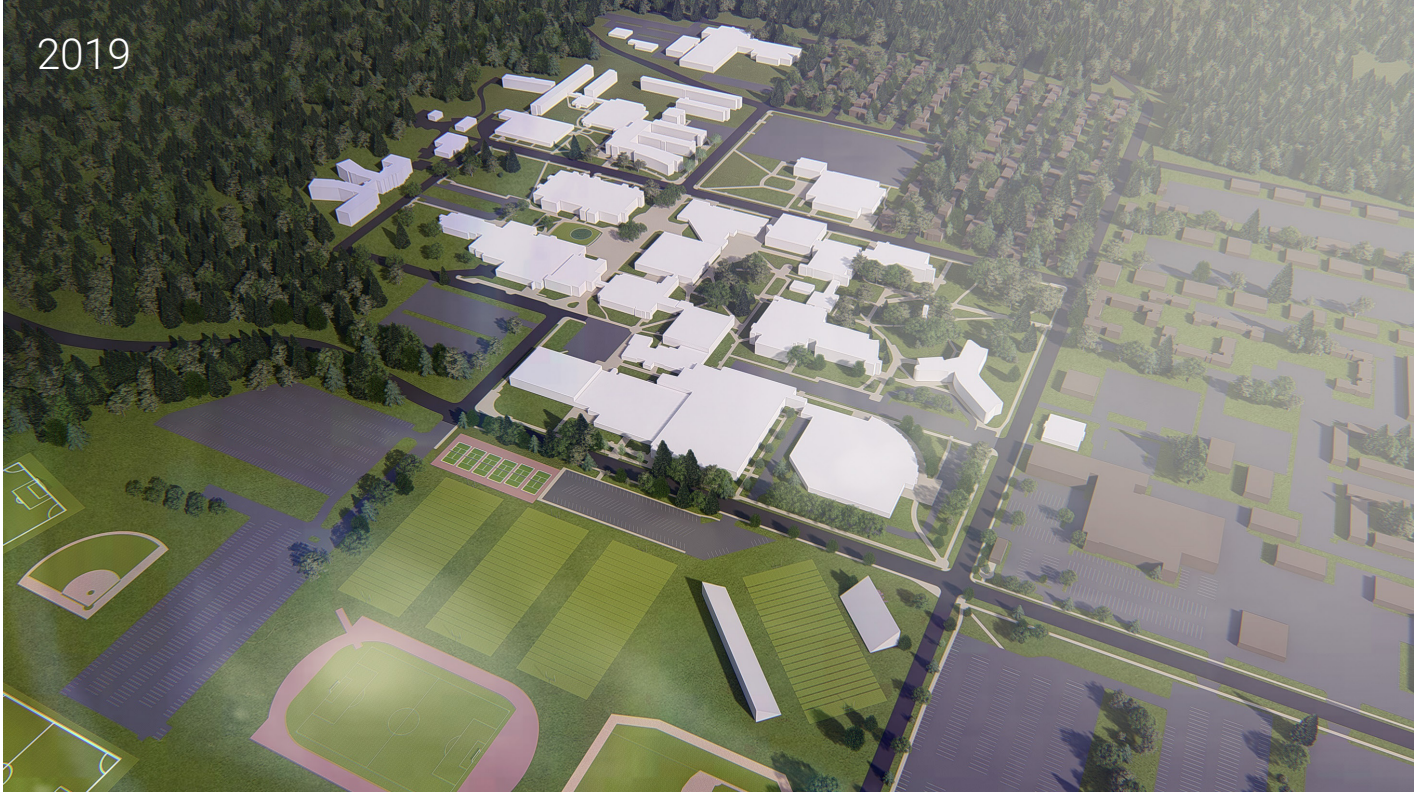
- C42 New Entry Gateway**
new gateway feature into campus at corner of Val Imm & Ellis
- B43 Wiecking Center Replacement + Parking**
demolish Wiecking center; new Wiecking Center replacement building on south-east corner of site; automotive shop moved from nelson hall to here; new parking on north side of new wiecking center replacement building
- C44 Parking Lot #17 Repairs**
Lot 17 (\$600k) repairs, potential reconfiguration, stormwater treatment, new lighting
- B45 Nelson Hall Replacement**
demolish existing Nelson Hall; rebuild new building, potentially for art program
- R46 Parking Ramp & Transit Stop Upgrades**
two potential locations identified for parking structure;

OPTION 1: multi level parking structure on existing Lot 4 & 4A
West side: 4 story (ground + 3 levels above) parking ramp (320'x180') at 170 spaces / flr;
East side: 2 level lot - surface parking cap over existing to match S Rd Elevation, for short-term visitor parking;

OPTION 2: 3 story, 250 ft long x 120 ft wide ; 110 spaces / flr; ingress/egress on S Road exclusively
- C47 Transit Stops**
renovate transit stop outside of Student Union (south) and transit stop outside of Student Union (north-west) - Lot 11

- B48 Connection between Nelson Hall Replacement & Morris Hall**
on grade or tunnel connection across quad to the New Nelson Hall Replacement
- R49 CSU & Sears Skyway Connection**
new skyway connection between Sears & CSU; could partially occur in new building/ramp
- B50 New Academic Building - TBD**
new academic building - various potential locations identified; Option 1: north of proposed Armstrong Hall Replacement; Option 2: West of Memorial Library; Option 3: West of CSU

2019

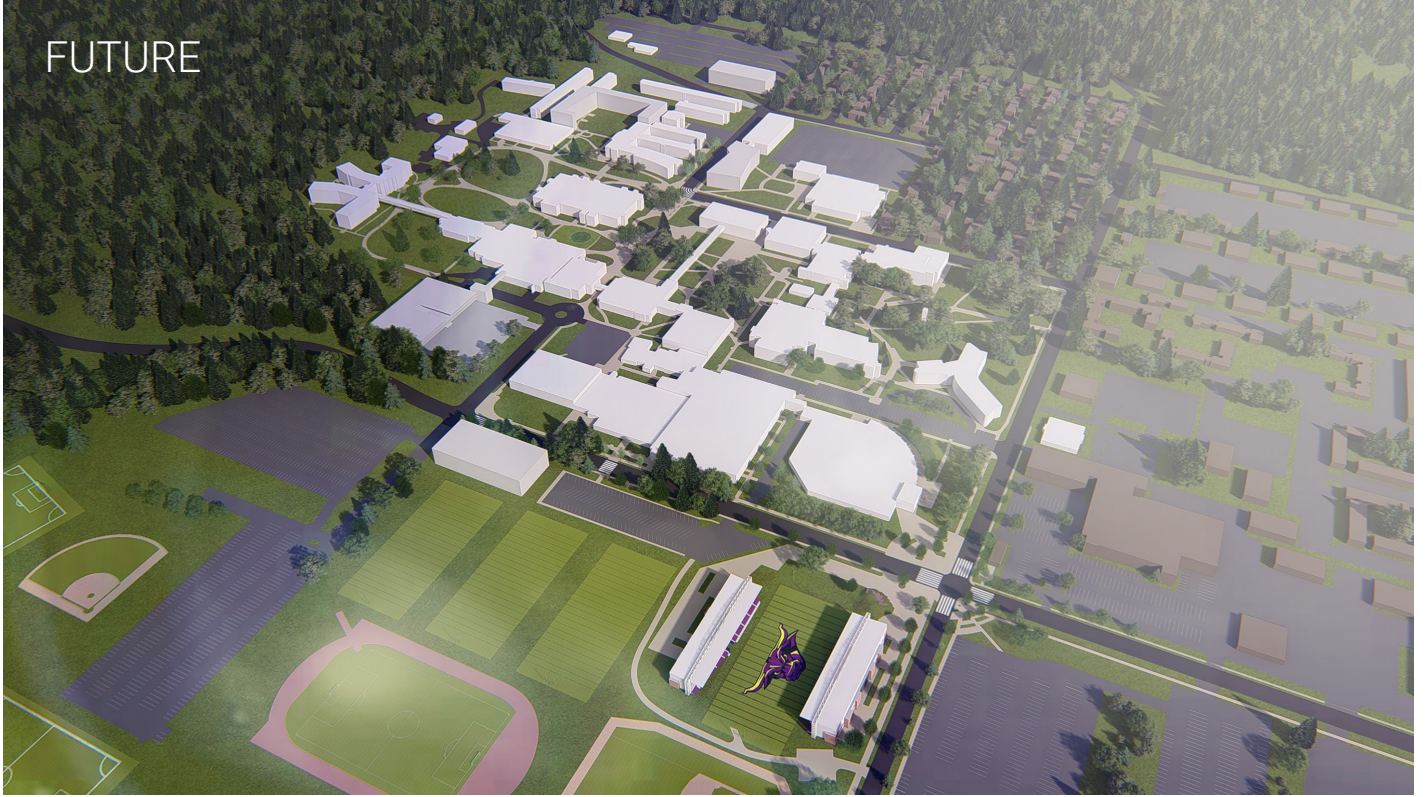


- Exterior Wayfinding Study
- Pedestrian Mall Study
- Interior Wayfinding Study
- Trafton Highland Link - Waterproofing
- Nelson Hall - Envelope + Infrastructure
- Trafton Window Replacement
- Stormwater Management Upgrade
- Wigley Administration Building Envelope
- Trafton South - Casework Renewal
- Armstrong Hall Solution
- Campus Open Space Renovation
- Parking Lot #1 Repairs
- Safety Crossing Improvements
- Otto Recreation Addition & Remodel
- Replace Tennis Courts + New Pickleball Courts
- Upper Class Apartment Housing
- Performing Arts Center Renewal
- Utility Plant Equipment Renewal #1
- Nelson Hall Roof
- Emergency Generator Replacement
- Underground Storage Tank
- Solar Power - Location TBD

SHORT TERM
(complete)

- Blakeslee Stadium Replacement
- New Residence Hall
- Campus Open Space Upgrade

FUTURE



- New Home for Health Services
- Parking Lot #16 Repairs
- Taylor Plaza & Connectivity Improvements
- New Business Building / Welcome Center
- Track & Field Turf
- Campus Rec / Maverick Adventures Facility
- Trafton South Connection Upgrade
- Entry Gateway Enhancements
- Agriculture Lab Addition
- Sanitary / Sewer Renewal
- Utility Tunnel Repairs
- Taylor Center Roof
- Campus Mall Replacement
- Utility Plant Equipment Upgrades #2
- Track & Field Support Facilities

MID TERM
(complete)

- New Entry Gateway
- Wiecking Center Replacement + Parking
- Parking Lot #17 Repairs
- Nelson Hall Replacement
- Parking Ramp - TBD
- Transit Stops
- Connection between Nelson Hall Replacement & Morris Hall
- CSU & Sears Skyway Connection
- New Academic Building - TBD

LONG TERM
(complete)



1

Campus Profile

- 1.1 Campus History and Characteristics
- 1.2 Demographics: Regional
- 1.3 Demographics: Campus

- 1.4 Academic Goals
- 1.5 Technology Planning

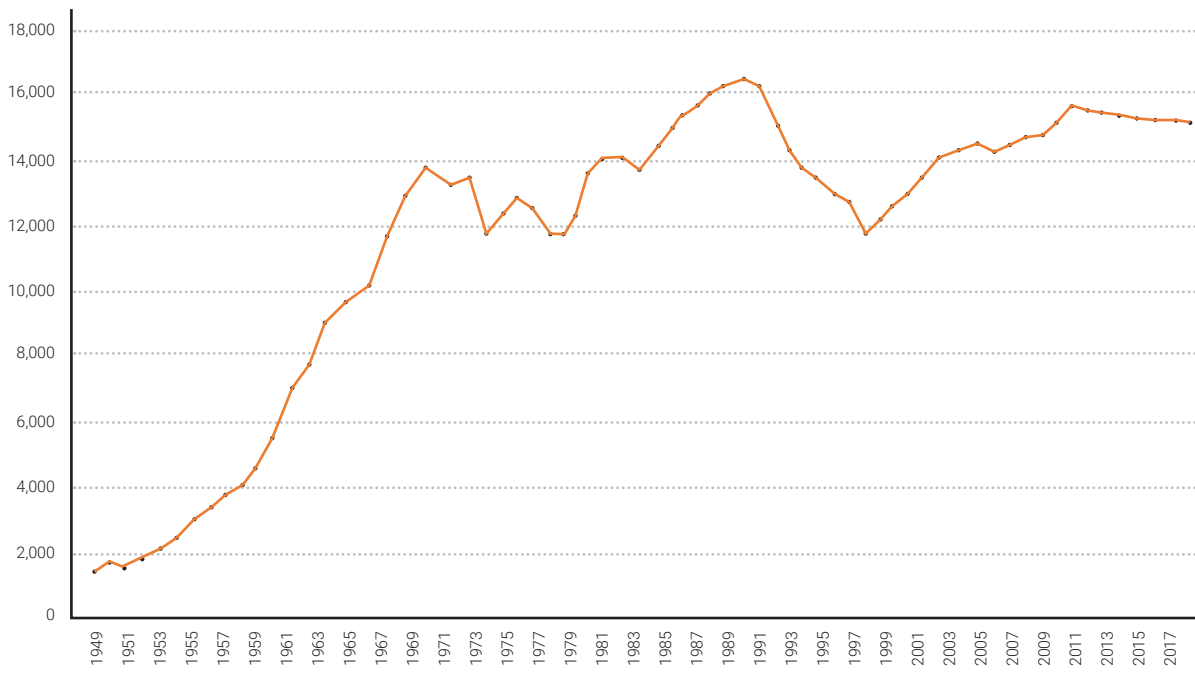


Figure 1.0 - MSU Mankato Historical Fall 30th Day Enrollment

Campus History & Characteristics

Minnesota State University, Mankato was founded in 1868 as Mankato Normal School, devoted to teacher training. The school began its first year with 27 local area students, operating out of rented quarters at the Methodist Episcopal Church. The school quickly moved to semi-permanent quarters in the Shaubut building in downtown Mankato. In 1870, Old Main was completed and Mankato Normal moved to its permanent home.

The school underwent several name designations, starting with the Mankato State Teachers College in 1921, then Mankato State College in 1957 and Mankato State University in 1975.

Growing enrollment and space limitations on the lower campus in the 1940s and 50s sparked interest and construction on the school's Highland campus, approximately a mile away. Armstrong Hall was constructed on the upper campus in 1964, splitting classes between the two sites. The shift to the upper campus was completed in 1979 with the construction of the Wigley Administration building.

Today, MSU Mankato occupies 303 acres. The University also operates out of several off-campus locations, convenient for working professionals in the Twin Cities. The Edina location is at 7700 France Ave, while partner locations in the Twin Cities include Normandale Community College and Mesabi Range Community & Technical College.

Campus within Minnesota State System

Minnesota State University, Mankato is one of 37 state colleges and universities that make up the Minnesota State system. Of the total 376,000 students served annually, Minnesota State Mankato serves approximately 5% of those students.

Minnesota State Mankato has a combined economic contribution of \$781.5 million. This includes a direct impact of \$393.6 million and an indirect/induced impact of \$387.9 million.

Operational and capital spending in the State of Minnesota generates \$452.1 million of the total impact and \$329.4 million from student and visitor spending.

Overall Guiding Principles

Summary

Overall guiding principles for the Comprehensive Facilities Plan were established grounded in the overarching themes of the University Strategic Plan and feedback given from the Steering Committee, Cabinet and Focus Groups.

Integrity

Diversity

Access

Responsibility

Excellence



Embraces / Promotes a welcoming and inclusive campus that highlights our unique identity

- Enhances campus gateways, first impressions and elevates collegiate experience
- Strengthens campus wayfinding through cohesive hierarchal elements in interior and exterior spaces
- Prioritizes pedestrian-forward approaches
- Enhances access & mobility for visitors, students, faculty and staff
- Promotes safe multi-modal transportation on campus



Creates innovative, student-centered spaces on campus that supports academic needs of incoming generations

- Creates technology-rich spaces that support faculty, staff and student research and showcases learning & innovation
- Promotes collaboration across academic disciplines
- Exemplifies a truly National & International University
- Enhances the quality and variety of environments on campus to improve recruitment and retention



Provides flexible yet comprehensive vision to respond to future initiatives

- Is flexible to address the uncertain times & changes in Higher Education
- Sets strategies for ongoing campus initiatives
- Provides the vision & planning to support design & construction requests in the future
- Addresses future infrastructure needs of aging facilities
- Considers the current state of legislative funding and explores external partnerships, research synergies, and funding strategies that MSU can leverage

Summary of Facilities Master Plan

Update 2014

The previous facilities master plan was completed in 2014 and focused on the following guiding ideas:

- Character/Image: Be an inviting, unique place, connecting and connected, that students want to attend and return to each year
- Academics: Promote collaboration in learning; provide choices for multiple effective and current teaching and learning modes.
- Transportation/Environment/Safety: Showcase practices for safety, in energy efficiency, resource efficiency and healthy living.
- Infrastructure: Incorporate ongoing renewal of site, buildings, furniture and technology
- Growth: Plan for enrollment growth (experienced and projected) both on-campus and on-line

Many of the projects identified in the previous master plan resurfaced during workshops and planning sessions as priorities for campus. Some of the projects identified in the Immediate and Short Term Projects have been carried out, such as the Armstrong Hall Predesign Study, Clinical Sciences Building, new Dining Center, Sports Bubble, Athletic Facilities Master Plan, Tunnel and Amphitheater link between Library and CSU, Additional parking at Gage

1

Campus Identity and Community Connections

- Campus will remain compact and be easy to navigate
- Campus edges and gateways will be distinct and welcoming to visitors
- The 'Core' will be connected to residential areas
- Technology/network equipment will link extended learners with campus
- Stakeholders within the institution (faculty, staff, students, graduate assistants) will be arranged for more interaction among themselves and with external partners
- The campus landscape and amenities

will celebrate and enhance the northern climate experience

Recommendations included:

- Continued improvements at campus gateways, the lower level link between CSU and Memorial Library
- Strengthen the core identity with remodeling to the mall, better connecting the residential areas with the core
- Develop edges of the campus
- Improve wayfinding, particularly entering campus; for visitors in vehicles and on foot

2

Transportation and Circulation

- Strengthen and expand the campus's pedestrian core for safety, health and resource conservation
- Limit vehicle traffic and parking at core but maintain accessible parking
- Locate parking areas at perimeter
- Support access for service vehicles for ease of maintenance and operations
- Accommodate multiple transportation modes through 'complete street' design

approach (bikes and pedestrians as well as motor vehicles)

Recommendations included:

- Improve all pedestrian crossings to maintain safe walking routes
- Improve bicycle, bus and shuttle systems
- Address needs for parking near campus core

3

Renovation and New Construction

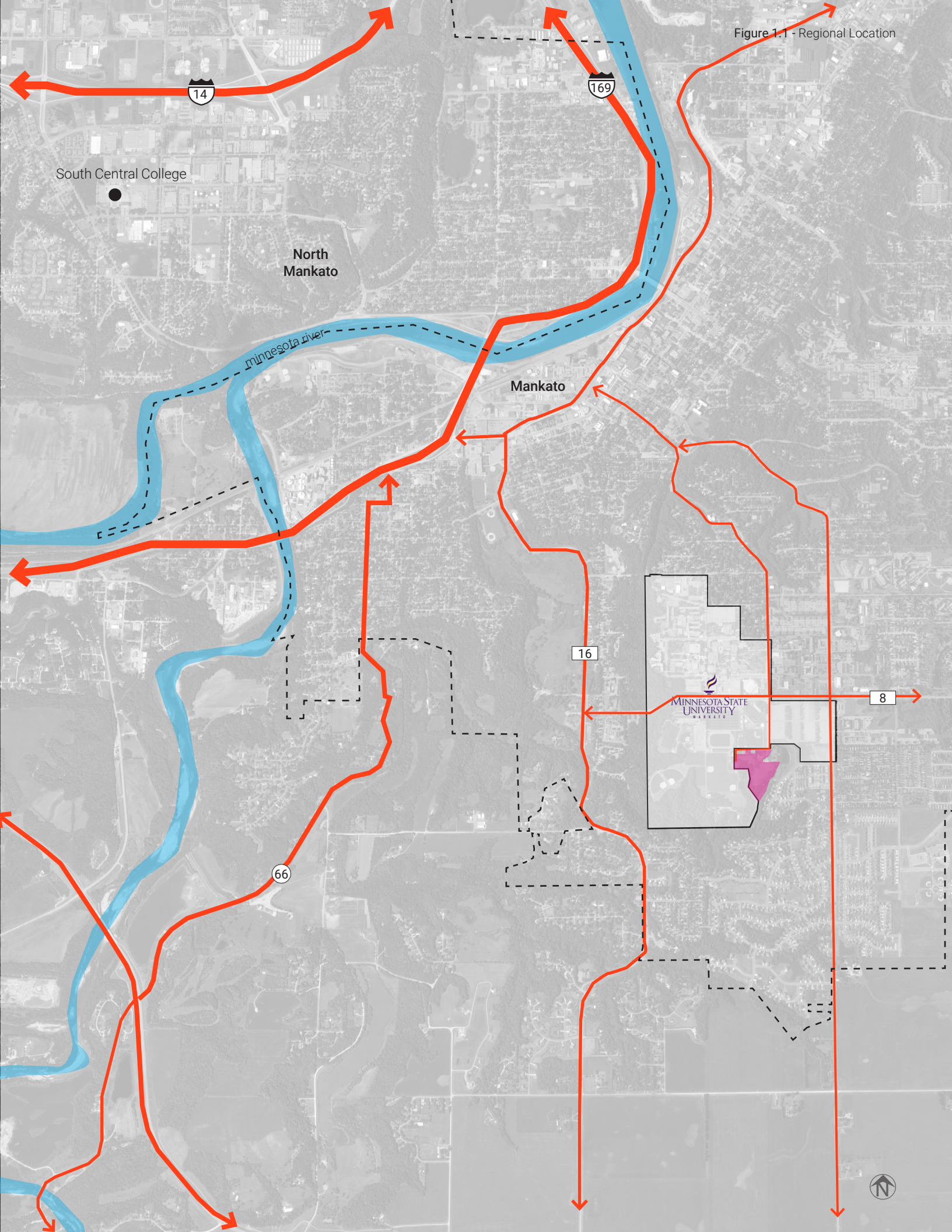
- Inter-disciplinary, multi-disciplinary space for different types of delivery – "no more 4 walls and a lecture"
- Incorporate qualities known to support learning: daylighting, adaptability, furniture that supports movement.
- Adaptable, rapidly re-configurable space supported by furniture
- Acknowledge and integrate reality of hybrid and all on-line coursework

Recommendations included:

- Tunnel to library/amphitheater (summer 2013)

- Clinical Sciences (seek funding in 2014)
- Global Solutions/B-School (hoping for funding by 2014)
- Carkoski replacement (Revenue bonds)
- Future additional residence hall
- HEAPR projects
- Armstrong Hall study: addition and/or remodeling
- Improve learning spaces for all Colleges
- Creation of a larger intercultural center
- Construction of additional residence hall space to follow the new Dining Hall
- Greek societies assembly space
- Improvements to the existing Stadium

Figure 1.1 - Regional Location



South Central College

North Mankato

Minnesota River

Mankato

MINNESOTA STATE UNIVERSITY

8

16

66

14

169



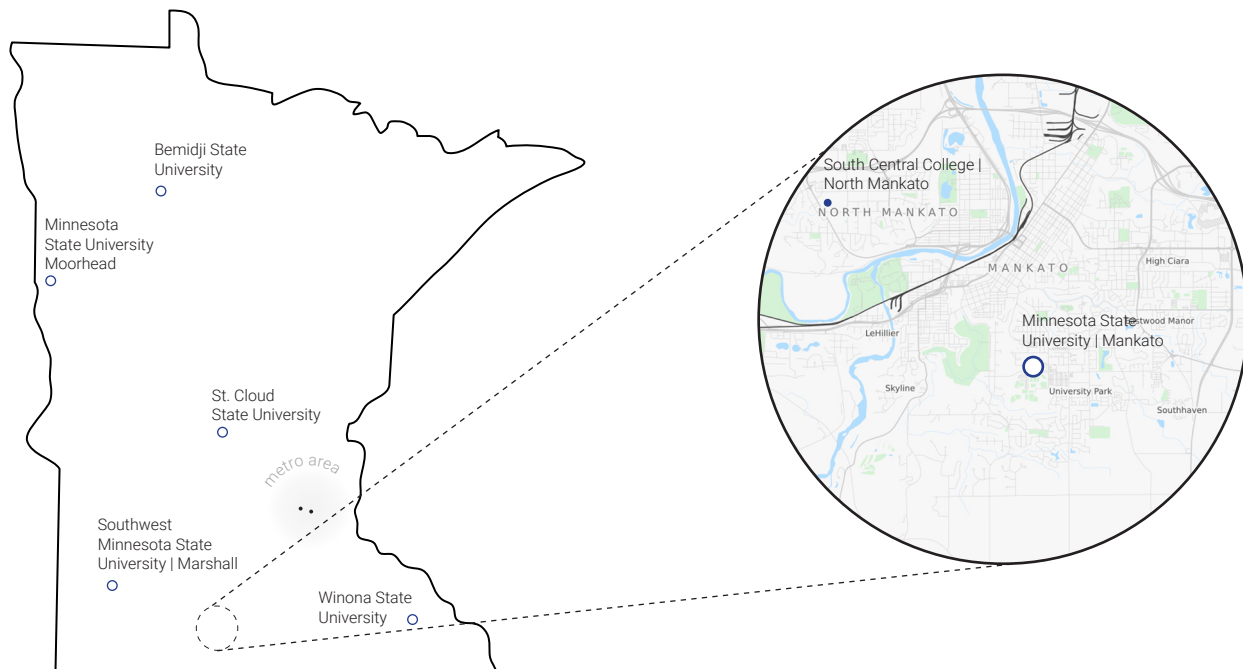
Regional Demographics

Minnesota State University, Mankato is located on the outskirts of Mankato's central business district, situated on bluffs that overlook the city below. The campus property covers approximately 315 acres.

The nearest higher education institution is South Central Community College in North Mankato, less than 5 miles away. Other University campuses are:

| Minnesota State University Campuses | Driving Distance to MSU Mankato |
|--|--|
| Bemidji State University | 268 miles |
| Minnesota State University - Moorhead | 271 miles |
| St. Cloud State University | 113 miles |
| Southwest Minnesota State Univ - Marshall | 101 miles |
| Winona State University | 137 miles |
| to Metro area (Mpls - St Paul) | 90 miles |

- Foundation owned property
- Vehicular Routes
- City boundary line



Regional Population Analysis

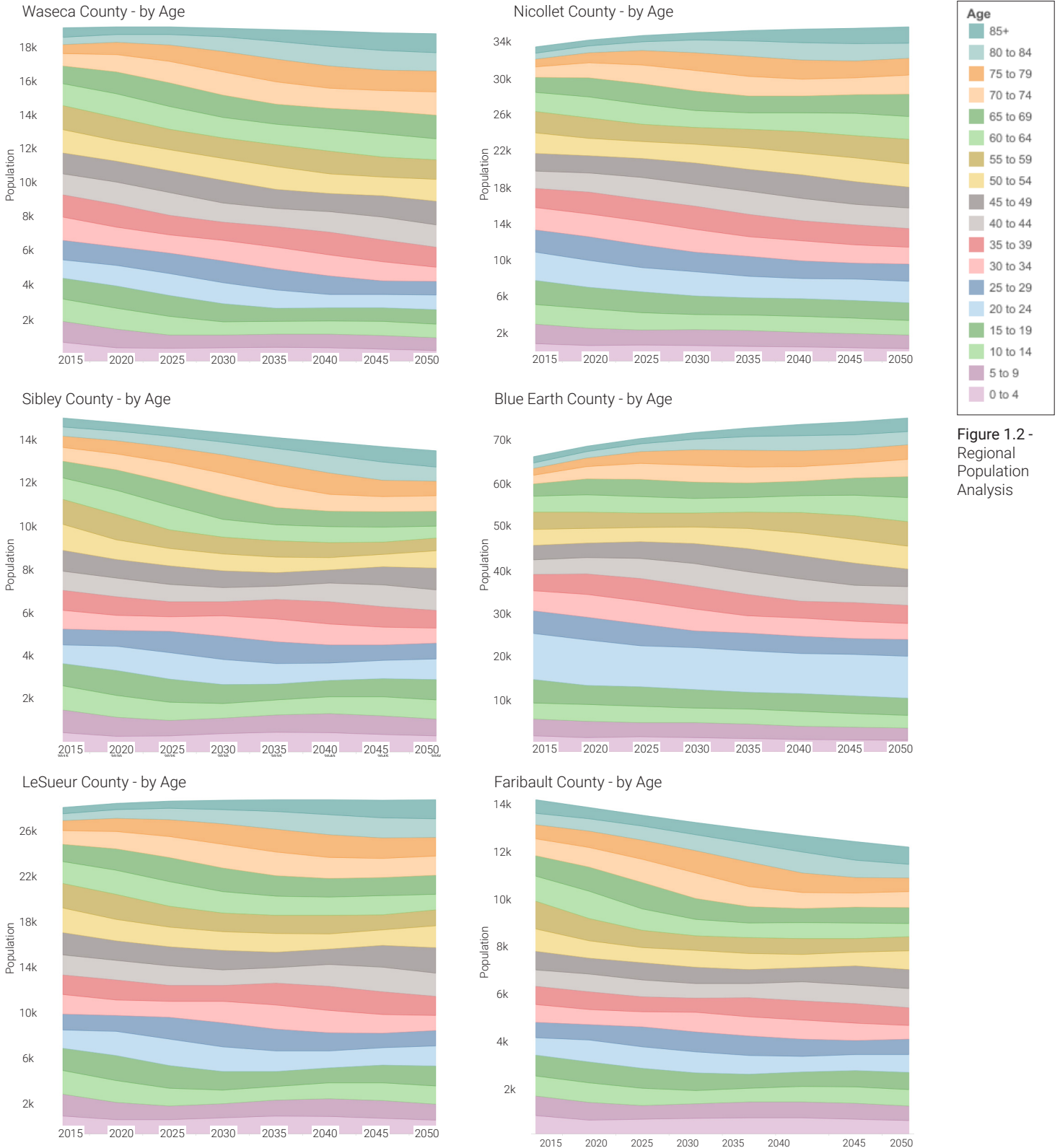


Figure 1.2 - Regional Population Analysis

Regional Demographics

Economic Indicators

Between 1950 and 2015, Blue Earth County has seen a population increase of 48%. Future plans for downtown Mankato include the redevelopment of 86 acres of former quarry land. Community residents and business owners have discussed a multitude of options including a high-tech business park, mountain biking park, and drive-in movie theater, with the potential to drive the economy and bring new jobs to the area.

| Economy | | |
|-------------------------------|-------------------|-----------|
| 2016 Estimates | Blue Earth County | Minnesota |
| Population | 66,441 | 5,489,594 |
| Labor Force | 39,471 | 2,990,254 |
| Average Unemployment | 3.2% | 3.9% |
| Average Annual Income | \$40,922 | \$54,457 |
| Cost of Living Individual | \$26,827 | \$30,084 |
| Cost of Living Average Family | \$45,080 | \$80,976 |

Source: DEED Local Area unemployment Statistics; Cost of Living; U.S. Census Bureau, 2016 American Community Survey

Occupational Employment Trends

In Blue Earth County, Education and Health Services is the leading industry of employment, accounting for a higher percentage of jobs in the county than state.

| Industry | | | | | |
|------------|--------------------------------------|-----------------------|--------------------------|----------------------|--------------------------|
| Blue Earth | Top Industries of Employment | Total 2015 Employment | Percent Change 2006-2015 | Average Annual Wages | Percent Change 2006-2015 |
| | Total, All Industries | 38,666 | 5.6% | \$40,913 | 22.0% |
| 1 | Education and Health Services | 12,011 | 21.9% | \$44,913 | 22.9% |
| 2 | Trade, Transportation, and Utilities | 8,735 | 1.4% | \$31,117 | 23.4% |
| 3 | Leisure and Hospitality | 4,114 | 11.5% | \$13,344 | 37.7% |
| 4 | Manufacturing | 3,703 | -1.2% | \$54,028 | 35.9% |

Source: DEED Quarterly Census of Employment and Wages 2006-2015

Campus Demographics

Actual Enrollment

Student Enrollment

Full Year Equivalent (FYE) Students (Undergraduate = CR/30, Graduate = CR/20)

| | 2013-14 | | 2014-15 | | 2015-16 | | 2016-17 | | 2017-18 | |
|---------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|-----------------|-------------|
| | Count | % Of | Count | % Of | Count | % Of | Count | % Of | Count | % Of |
| Undergraduate | 12,630.4 | 89% | 12,250.5 | 88% | 12,162.9 | 88% | 12,065.8 | 88% | 11,883.1 | 88% |
| Graduate | 1,549.7 | 11% | 1,610.7 | 12% | 1,589.1 | 12% | 1,591.2 | 12% | 1,572.6 | 12% |
| Total | 14,180.1 | 100% | 13,861.2 | 100% | 13,752.0 | 100% | 13,657.0 | 100% | 13,455.7 | 100% |

All Program Declarations - Student Admission Category

| | Fall 2013 | | Fall 2014 | | Fall 2015 | | Fall 2016 | | Fall 2017 | |
|--------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
| | Count | % Of | Count | % Of | Count | % Of | Count | % Of | Count | % Of |
| Undergraduate First-Time | 7,649 | 58% | 8,530 | 59% | 8,430 | 58% | 8,362 | 59% | 8,652 | 58% |
| Undergraduate Transfer | 3,858 | 29% | 4,120 | 28% | 4,109 | 29% | 4,056 | 29% | 4,144 | 28% |
| Graduate Degree Seeking | 1,651 | 12% | 1,675 | 12% | 1,724 | 12% | 1,483 | 11% | 1,804 | 12% |
| Specialist | 67 | 1% | 72 | 0% | 77 | 1% | 102 | 1% | 78 | 1% |
| Doctoral | 61 | 0% | 67 | 0% | 75 | 1% | 89 | 1% | 120 | 1% |
| Total | 13,286 | 100% | 14,464 | 100% | 14,415 | 100% | 14,092 | 100% | 14,798 | 100% |

All Program Declarations - New or Continuing Student Status

| | Fall 2013 | | Fall 2014 | | Fall 2015 | | Fall 2016 | | Fall 2017 | |
|---------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|---------------|-------------|
| | Count | % Of | Count | % Of | Count | % Of | Count | % Of | Count | % Of |
| New to University | 3,210 | 24% | 3,899 | 27% | 4,017 | 28% | 4,083 | 29% | 4,057 | 27% |
| New to Program | 3,210 | 24% | 3,899 | 27% | 4,017 | 28% | 4,075 | 29% | 4,034 | 27% |
| Continuing to Program | | 0% | | 0% | | 0% | 8 | 0% | 23 | 0% |
| Continuing to University | 10,006 | 75% | 10,493 | 73% | 10,332 | 72% | 9,914 | 70% | 10,579 | 71% |
| New to Program | 1,325 | 10% | 1,788 | 12% | 1,230 | 9% | 1,149 | 8% | 1,284 | 9% |
| Continuing to Program | 8,681 | 65% | 8,705 | 60% | 9,102 | 63% | 8,765 | 62% | 9,295 | 63% |
| Unknown | 70 | 1% | 72 | 0% | 66 | 0% | 95 | 1% | 162 | 1% |
| New to Program | 70 | 1% | 72 | 0% | 66 | 0% | 55 | 0% | 99 | 1% |
| Continuing to Program | | 0% | | 0% | | 0% | 40 | 0% | 63 | 0% |
| Total | 13,286 | 100% | 14,464 | 100% | 14,415 | 100% | 14,092 | 100% | 14,798 | 100% |

Figure 1.3 - Enrollment

Enrollment Trends - Headcount vs FYE

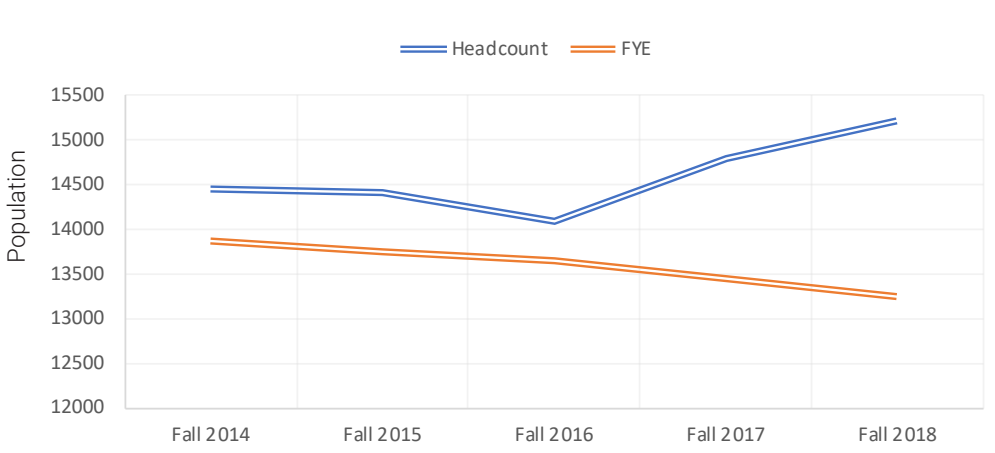
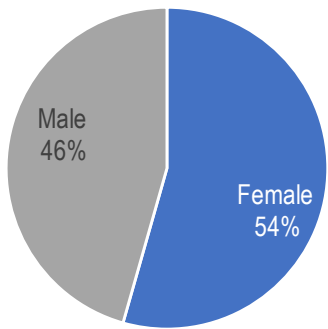


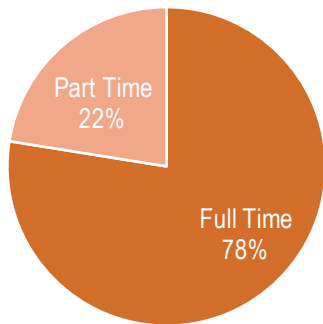
Figure 1.4 - Enrollment Trends

Student Enrollment Demographics by Gender



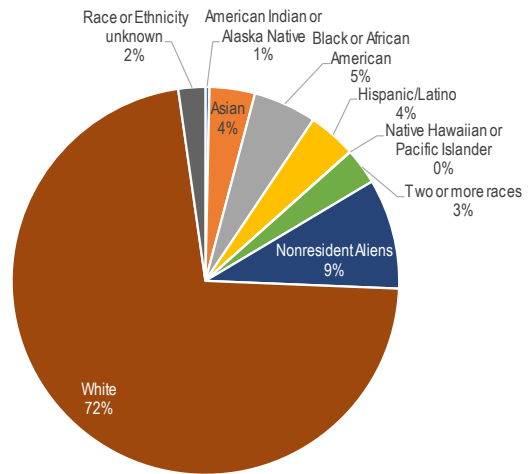
Student Enrollment Demographics by Type

MSU Mankato serves a higher ratio of full time students than many of their peer institutions in the System.



Student Enrollment Demographics by Race / Ethnicity

Between Fall 2013 and Fall of 2017, MSU's demographics in student population has shifted slightly, with students of color increasing from 13% to 16% of the total, reflecting University academic goals, as discussed in the next section.



Projected Enrollment

Over the next five years, Minnesota State University, Mankato projects a flat enrollment. According to WICHE's Knocking at the College Door annual report (<https://knocking.wiche.edu/data>), Minnesota is experiencing a demographic flattening of domestically enrolled high school students in the near term. There is anticipated growth in high school graduates from 2023-2025, followed by a slight dip and rebound in 2029. This projected enrollment is heavily influenced by the domestic number of high school graduates available in our state and neighboring Midwest states. Beyond this traditional population, the University anticipates continued growth at the graduate level and with online offerings. Like all of higher education, we are experiencing volatility related to our international enrollment due to unpredictable federal actions and policy interpretations. If there is a change in policy interpretation and application at the federal

level, we may experience a return to growth in our international enrollment. To maintain this projection, we are assuming no significant changes in state funding, state scholarship programs, federal loan programs, etc. A change in any of these can have large ripple effects to our enrollment. Additionally, there is an focused effort to increase student retention, which in turn, will increase overall enrollment. This past year, an increase of 3% in student retention was realized.

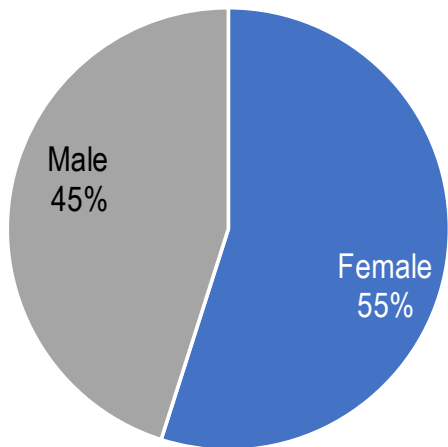
Faculty & Staff

| | 2013-14 | | 2014-15 | | 2015-16 | | 2016-17 | | 2017-18 | |
|--|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| Full Time Equivalent Faculty (FTEF) | | % Of | | % Of | | % Of | | % Of | | % Of |
| Instruction | 597.4 | 86% | 584.2 | 85% | 586.5 | 85% | 587.1 | 82% | 555.7 | 82% |
| Chair/Director/NonInstruction | 50.1 | 7% | 52.3 | 8% | 52.0 | 8% | 61.6 | 9% | 57.2 | 8% |
| Research | 12.3 | 2% | 14.3 | 2% | 13.0 | 2% | 11.6 | 2% | 9.9 | 1% |
| Overload | 32.3 | 5% | 38.5 | 6% | 36.0 | 5% | 30.2 | 4% | 34.5 | 5% |
| Other | na | 0% | na | 0% | na | 0% | 23.6 | 3% | 22.2 | 3% |
| Total | 692.2 | 100% | 689.4 | 100% | 687.5 | 100% | 714.0 | 100% | 679.5 | 100% |

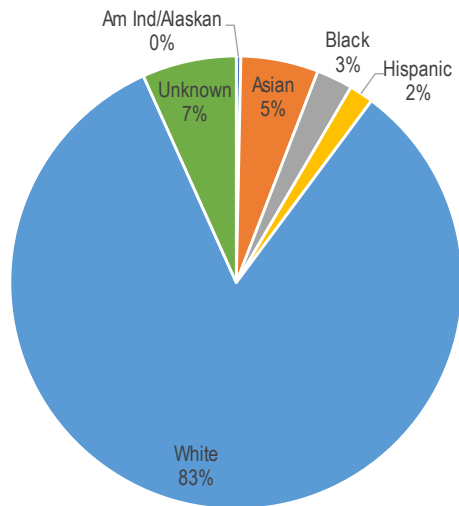
| | 2013-14 | | 2014-15 | | 2015-16 | | 2016-17 | | 2017-18 | |
|--|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
| Faculty Instructional Headcount | | % Of | | % Of | | % Of | | % Of | | % Of |
| Tenured | 348 | 28% | 338 | 28% | 329 | 28% | 335 | 31% | 331 | 31% |
| Non-Tenure Track | 3 | 0% | 3 | 0% | 3 | 0% | 2 | 0% | 2 | 0% |
| Fixed Term | 77 | 6% | 71 | 6% | 77 | 6% | 46 | 4% | 48 | 5% |
| Probationary | 108 | 9% | 122 | 10% | 137 | 12% | 146 | 14% | 150 | 14% |
| Adjunct | 399 | 32% | 368 | 31% | 355 | 30% | 297 | 28% | 297 | 28% |
| Teaching Assistant | 293 | 24% | 285 | 24% | 285 | 24% | 251 | 23% | 234 | 22% |
| Total | 1,228 | 100% | 1,187 | 100% | 1,186 | 100% | 1,077 | 100% | 1,062 | 100% |

Figure 1.5 - Faculty & Staff Counts

Faculty and Staff Demographics by Gender



Faculty and Staff Demographics by Ethnicity



Faculty and Staff Average Age = 48

Academic Goals

Academic Master Plan 2015 – 2018

In August 2015, Minnesota State University, Mankato launched a new, dynamic, and integrated Academic Master Plan “to define how we want to be known as a large and comprehensive university, with graduate and undergraduate programs, right now and in the future.” At the midpoint of the three year plan, progress highlights include:

A set of shared Academic Principles that would be points of deliberative dialogue as the plan is advanced were established and recommended for adoption:

- Liberal Arts and Applied Learning
- Entrepreneurial Thinking and Innovation
- Leadership and Global Awareness
- Student Engagement and Success
- Diversity and Equity
- Academic Advising and Mentoring
- Teaching Excellence and Innovation
- Research, Scholarly and Creative Activity
- Information Technology and Competency

Areas of Distinction - Academic Research and Industry

Twelve overarching Areas of Distinction - Academic, Research and Industry - emerged and set the stage for further conversation, clarification and confirmation over the time horizon of the Academic Master Plan and beyond.

Current Areas of Distinction:

- Academic Affairs
- Business Management and Financial Services
- Creative and Performing Arts
- Education and Professional Services
- Engineering, Manufacturing, and Technology
- Food and Natural Resources
- Gender and Intercultural Studies
- Communication
- Health and Biomedical Science
- Public Policy, Administration and Services

Emerging Areas of Distinction:

- Agriculture
- Data and Information Science
- Marketing and Sales
- Transportation, Distribution and Logistics

In September 2015, MSU Mankato received certification as a “Non-Land Grant College of Agriculture (NLGCA) by the United States Department of Agriculture (USDA), National Institute of Food and Agriculture (NIFA), furthering the University’s focus in expanding academic programs, applied and integrative research, and partnerships in agriculture, food, and natural resources. This distinction also aligns with the University’s early and active participation in GreenSeam, Greater Mankato Growth’s agriculture business initiative and aspiration to become known as the premier ag-business epicenter in the United States. Agriculture is currently the largest business industry segment within our region with more than \$15.3 billion in sales annually.

Academic Degree Program & College Highlights

Big ideas emerged from the six academic colleges through their departments and programs. They include:

- 18 new programs for the next three years; Examples from the College of Science, Engineering and Technology are a new BAS in Computer Application Development, a new certificate in Project-based Engineering, and a new certificate in Environmental Geology
- Redesign of 51 program plans; 42 achieved in Year 1 of the plan period
- Department of Music faculty redesigned the entire curriculum, including updating individual courses across six programs and suspending low enrollment programs
- College of Arts & Humanities added a second advisor enabling all first-year students to receive dedicated advising, a strategy proven to support increased retention
- A new Center for Innovation and Entrepreneurship, led by the College of Business, immerses students, faculty and business partners in the real world
- The College of Education received a \$1.06M grant from the US Dept of Education’s Office of Special Education Programs to help address the state-identified shortage of teachers qualified to work with infants, toddlers, and children with disabilities
- The College of Social and Behavioral Sciences focused on expanding continuing education and customized training programs, and received grant funding to run a supervisory development center
- Two programs - the BS in Social Studies and BS in Applied Organizational Studies - have been positioned in departments in the College of Social and Behavioral Sciences to support their enrollment growth and student success
- Across the Colleges, 8 programs were approved for additional locations, and 1 for new online delivery

Extraordinary Education Task Force Highlights

Sixteen strategic recommendations from the four Extraordinary Education Task Forces were presented, with measurable progress and achievements.

Three Task Forces (Academic Advising, Teaching Excellence and Innovation, and Academic Engagement Programs and Opportunities) focused on improving student retention and completion. Several accomplishments include:

- MSU Mankato was selected by the American Association for State Colleges and Universities (AASCU) among a select cohort of institutions for the "Re-Imagining the First Year of College (RFY) Project", an initiative designed to help institutions make transformative changes in the interest of improving student success and retention, especially for low income, first generation and students of color
- The RFY plan includes seven strategies - redesigns of the first year advising model and first-year seminar, gateway courses, financial literacy, supplemental instruction, peer mentoring programs, micro-grants, and pay-it-forward grants, campus

- communications transformation, and a student data council
- The University hired a Learning Communities Program Coordinator, accepted 17 Learning Community Proposals, and increased funding to support capacity to serve 408 students

Recommendations from the Research, Scholarly & Creative Activity Task Force support activities that include a diverse group of people, with space and funding to enable the breadth and depth of activity. Highlights include:

- The College of Graduate Studies and Research has partnered with the Academic Network to recruit graduate students from historically black colleges and universities and institutions serving Hispanic students
- Graduate Online Symposium launched in 2017, showcasing research, scholarly and creative activities
- MSU's indirect cost policy was made more transparent; a new grant specialist in the Research and Sponsored Programs office has received financial reallocation to further grow grants and contracts

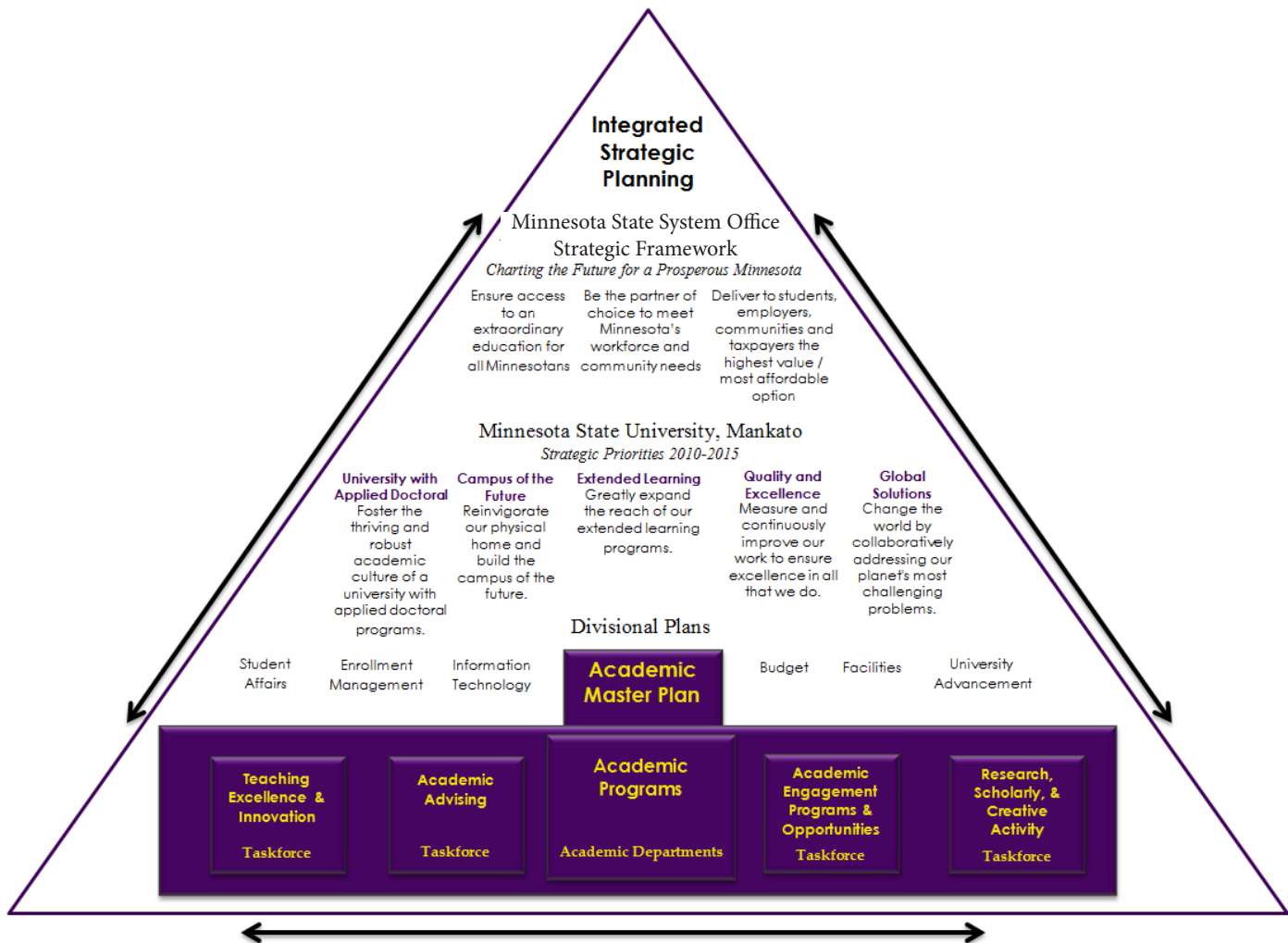


Figure 1.6 - Pyramid of MSU, Mankato's support of the System Office's core commitments

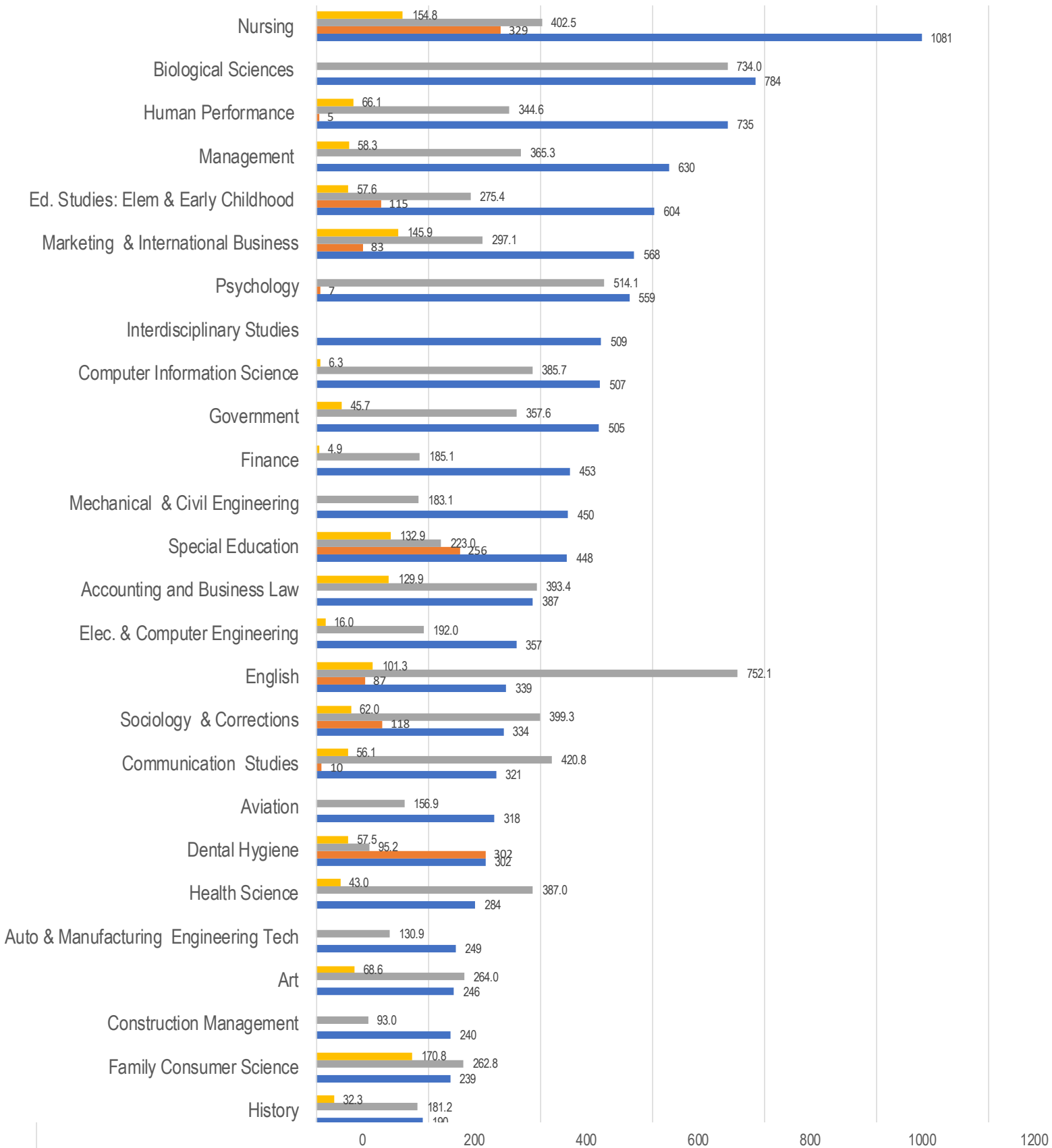
Academic Areas by Enrollment

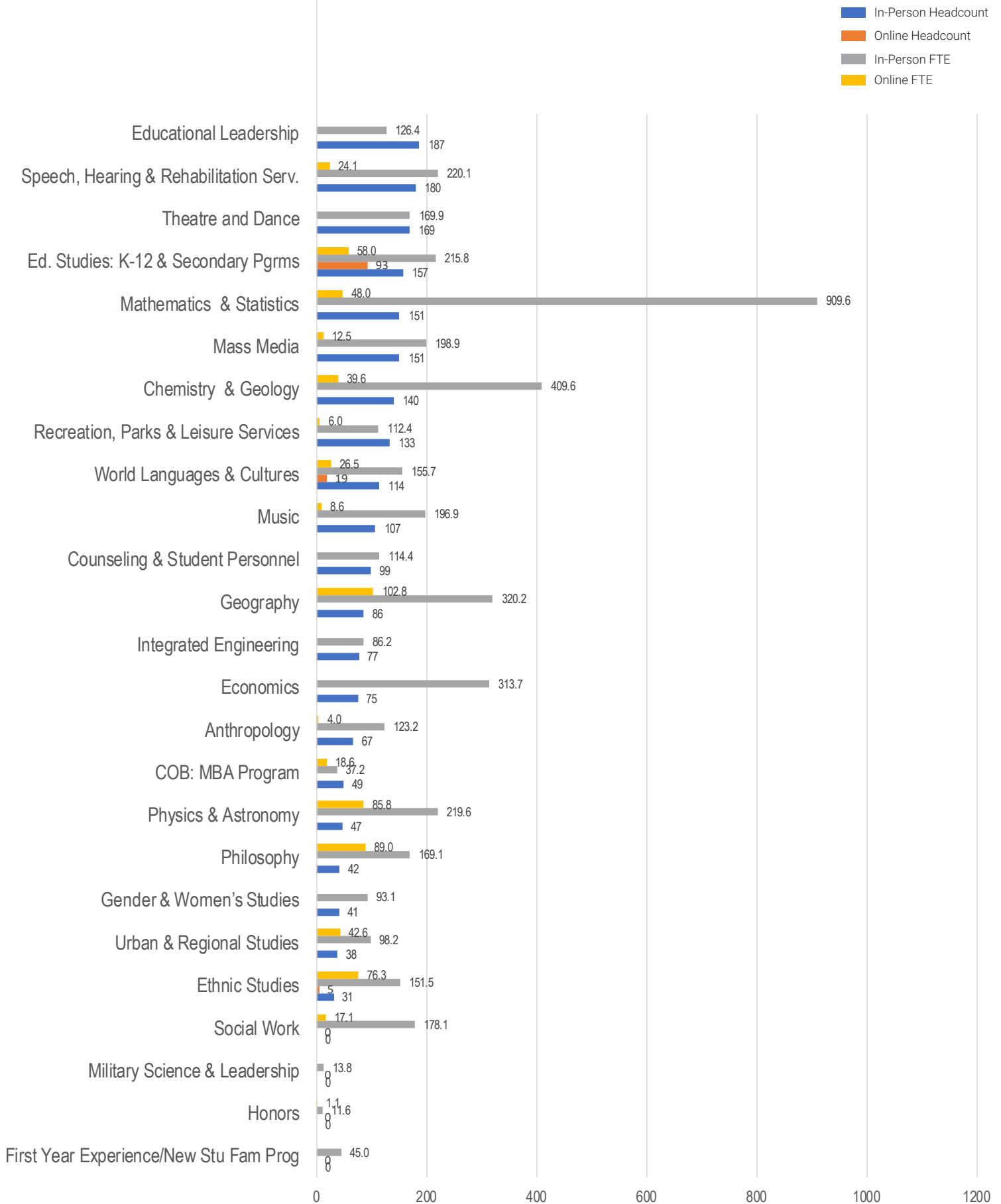
80% of students major in 20% of the academic programs offered

| Department | In-Person Headcount | Online Headcount | Department | In-Person FTE | Online FTE |
|--|---------------------|------------------|--|---------------|------------|
| Nursing | 1,081 | 329 | Mathematics & Statistics | 909.6 | 48.0 |
| Biological Sciences | 784 | | English | 752.1 | 101.3 |
| Human Performance | 735 | 5 | Biological Sciences | 734.0 | |
| Management | 630 | | Psychology | 514.1 | |
| Ed. Studies: Elem & Early Childhood | 604 | 115 | Communication Studies | 420.8 | 56.1 |
| Marketing & International Business | 568 | 83 | Chemistry & Geology | 409.6 | 39.6 |
| Psychology | 559 | 7 | Nursing | 402.5 | 154.8 |
| Interdisciplinary Studies | 509 | | Sociology & Corrections | 399.3 | 62.0 |
| Computer Information Science | 507 | | Accounting and Business Law | 393.4 | 129.9 |
| Government | 505 | | Health Science | 387.0 | 43.0 |
| Finance | 453 | | Computer Information Science | 385.7 | 6.3 |
| Mechanical & Civil Engineering | 450 | | Management | 365.3 | 58.3 |
| Special Education | 448 | 256 | Government | 357.6 | 45.7 |
| Accounting and Business Law | 387 | | Human Performance | 344.6 | 66.1 |
| Elec. & Computer Engineering | 357 | | Geography | 320.2 | 102.8 |
| English | 339 | 87 | Economics | 313.7 | |
| Sociology & Corrections | 334 | 118 | Marketing & International Business | 297.1 | 145.9 |
| Communication Studies | 321 | 10 | Ed. Studies: Elem & Early Childhood | 275.4 | 57.6 |
| Aviation | 318 | | Art | 264.0 | 68.6 |
| Dental Hygiene | 302 | 302 | Family Consumer Science | 262.8 | 170.8 |
| Health Science | 284 | | Special Education | 223.0 | 132.9 |
| Auto & Manufacturing Engineering Tech | 249 | | Speech, Hearing and Rehabilitation Serv. | 220.1 | 24.1 |
| Art | 246 | | Physics & Astronomy | 219.6 | 85.8 |
| Construction Management | 240 | | Ed. Studies: K-12 & Secondary Pgrms | 215.8 | 58.0 |
| Family Consumer Science | 239 | | Mass Media | 198.9 | 12.5 |
| History | 190 | | Music | 196.9 | 8.6 |
| Educational Leadership | 187 | | Elec. & Computer Engineering | 192.0 | 16.0 |
| Speech, Hearing and Rehabilitation Serv. | 180 | | Finance | 185.1 | 4.9 |
| Theatre and Dance | 169 | | Mechanical & Civil Engineering | 183.1 | |
| Ed. Studies: K-12 & Secondary Pgrms | 157 | 93 | History | 181.2 | 32.3 |
| Mass Media | 151 | | Social Work | 178.1 | 17.1 |
| Mathematics & Statistics | 151 | | Theatre and Dance | 169.9 | |
| Chemistry & Geology | 140 | | Philosophy | 169.1 | 89.0 |
| Recreation, Parks and Leisure Services | 133 | | Aviation | 156.9 | |
| World Languages and Cultures | 114 | 19 | World Languages and Cultures | 155.7 | 26.5 |
| Music | 107 | | Ethnic Studies | 151.5 | 76.3 |
| Counseling and Student Personnel | 99 | | Auto & Manufacturing Engineering Tech | 130.9 | |
| Geography | 86 | | Educational Leadership | 126.4 | |
| Integrated Engineering | 77 | | Anthropology | 123.2 | 4.0 |
| Economics | 75 | | Counseling and Student Personnel | 114.4 | |
| Anthropology | 67 | | Recreation, Parks and Leisure Services | 112.4 | 6.0 |
| COB: MBA Program | 49 | | Urban and Regional Studies | 98.2 | 42.6 |
| Physics & Astronomy | 47 | | Dental Hygiene | 95.2 | 57.5 |
| Philosophy | 42 | | Gender and Women's Studies | 93.1 | |
| Gender and Women's Studies | 41 | | Construction Management | 93.0 | |
| Urban and Regional Studies | 38 | | Integrated Engineering | 86.2 | |
| Ethnic Studies | 31 | 5 | First Year Experience/New Stu Fam Prog | 45.0 | |
| | | | COB: MBA Program | 37.2 | 18.6 |
| | | | Military Science and Leadership | 13.8 | |
| | | | Honors | 11.6 | 1.1 |

Academic Program Enrollment - ordered by Headcount

*FTE may be greater than headcount due to departments being utilized to fulfill general education requirements and they serve a large number of students that are in other programs.





Course Delivery

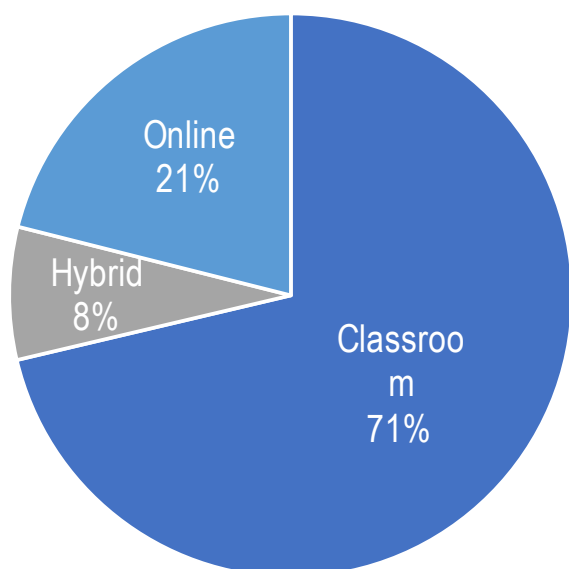
Classroom teaching has become much more collaborative learning with flipped classrooms, breakout sessions and work group projects. Modern classrooms need the floor space and flexibility to easily switch from traditional lecture to small group breakout sessions and back again. Technology needs to be distributed around the room for some of these sessions. This generally requires movable furniture and larger square foot to workstation floor space. We also need to take into consideration our economically viable average class size to arrive at the recommended classroom size. Our current average sized classrooms on campus (in particular Armstrong Hall) are not large enough to provide the flexibility for collaborative work and support the economically viable class size.

Financially Viable Class Size FY2019 Data

- College of Social and Behavioral Sciences, with a typical course instructor (Professor), the class size required is 33
- College of Arts and Humanities, with a typical instructor (Professor), the class size required is 36
- College of Education, with a typical instructor (Assistant Professor), the class size required is 27

Recruiting Strategies

Minnesota State University, Mankato Office of Admissions purchases prospective student names from multiple national vendors that maintain databases of high school students interested in attending college. Our university prioritizes students from MN and the surrounding states and also purchases small numbers of strategic names of students outside of our region based on their propensity to enroll with us or their connection to the university. We also travel to high schools, college fairs and community colleges around MN, WI, IA, and SD in order to meet with students, counselors and families. All of our outreach activities are designed to encourage students to visit campus and to apply for admission. We have robust communication campaigns targeted to students based on their interests and stage in the college selection process. We currently host around 9,000 visitors to campus through various formats during the fiscal year including personal visits with admissions staff as well as group visits and tours that include up to 500 people at a given event. A student's visit to campus including the campus tour continue to be one of the greatest predictors of their enrollment, our campus impresses visitors because of the physical environment and maintenance of the buildings and facilities.



Strategic Partnerships

Minnesota State Mankato has several centers and resources in place to serve the community.

Continuing and Professional Education - operates out of two locations, at the Strategic Partnerships Center in the Hubbard Building, Mankato and Edina Campus.

- Courses & Programs
 - Maverick Academy Series - series of leadership- based programming, including Nonprofit Leadership Academy, Manufacturing Leadership Academy, Executive Leadership Academy, Grit Academy, Executive Decision Making Academy, Supervisory Development Center, Digital Marketing Academy
 - Continuing Education Courses - Health & Biomedical Sciences Summit, Test Preparation, Legal Studies, SSWAA, Professional Development for Current K-12 Teachers
 - Youth Programs - Camp Maverick - Rec N' Read; Research Based Reading Instruction
- Training Grants - topics in Business & Leadership, Healthcare Simulations, and Manufacturing
- Customized Training
- Certified Financial Planner, CFP

Small Business Development Center - the South Central Minnesota Small Business Development Center (SBDC) is part of the Minnesota network of regional centers; funded by the U.S. Small Business Administration and regional support partners, including MSU Mankato

Center for Innovation & Entrepreneurship - located in the Hubbard Building / Strategic Partnerships Center

Integrated Engineering (Iron Range and Twin Cities programs)

Iron Range Nursing

Much of the research at Minnesota State Mankato is conducted in state-of-the-art facilities, including a number of research centers.

- Andreas Observatory
- Chesley Center on Aging - hub for innovative aging-related research and resources
- Center for Rural Policy and Development
- Center for Transportation Research and Implementation
- Force Science Research Center
- Kessel Institute for Peace and Change
- Minnesota Center for Automotive Research
- Minnesota Center for Engineering and Manufacturing Excellence
- Minnesota Center for Rapid Prototyping and Production
- Minnesota Center for Rural Policy and Development
- Organizational Effectiveness Research Group (OERG)
- Southern Minnesota Historical Center
- Space Image Processing
- Standeford Observatory
- Urban and Regional Studies Institute (URSI)
- WALTER Weather Analysis Lab
- Water Resources Center

Current Business partners include:

- Adayana, Inc.
- Advanced Wireless Communication
- Ag Star Financial Services, ACA
- Allina Hospitals and Clinics
- AURI (Agricultural Utilization Research Institute)
- BioBusiness Alliance of Minnesota
- Bloomington Public Schools
- Brown Printing Company
- Bush Foundation
- Center for Rural Policy and Development
- CHS, Inc.
- Corn Plus
- Coughlan Companies, Inc.
- Daktronics, Inc.
- Davisco Foods International, Inc.
- Del Monte Foods
- DiaServe Inc.
- Dotson Company Inc.
- Drumm Industries
- Eden Prairie Public Schools
- Enterprise Minnesota
- Envision 2020
- Federated Insurance
- FPX (formerly Firepond)
- Gaia Group
- Goodrich
- Greater Mankato Growth, Inc.
- Green Duck Energy Solutions
- Hormel Institute
- I-35 Educational Alliance
- IBM
- Immanuel St. Joseph's - Mayo Health System
- Independent Natural Resources, Inc.
- International BioEnergy Days (IBED)
- Iowa Lakes Community College
- IRETI
- IRP Irathane/Iracore (ISO 9000)
- LarsonAllen - CPAs, Consultants & Advisors
- LifeScience Alley
- Luminare Eternus, LLC
- Maverick Software Consulting
- Maverick Solutions
- Mayo Clinic
- Minnesota Department of Corrections
- Minnesota Pollution Control Agency
- Minnesota Renewable Energy Marketplace
- Minnesota Timberwolves
- MnCEME (Minnesota Center for Engineering & Manufacturing Excellence)
- MTU Onsite Energy (formerly Katolight)
- Oswald Fisheries
- Project Maverick
- Rahr Malting
- Rolco, Inc.
- RSP Architects, Ltd.
- SAGE Electrochromics, Inc.
- Southern Minnesota Initiative Foundation
- Southern Minnesota Regional Competitiveness Project
- Southern Research and Outreach Center (SROC)
- Toro Company
- USDA (United States Department of Agriculture)
- Viracon, Inc.
- Wells Concrete Products
- Worthington Regional Economic Development Corporation
- Year-A-Round Corporation

Mission Statement

IT Solutions positions Minnesota State University, Mankato as a leading institution in student outcomes, teaching, research, and service. We achieve this by building partnerships with our campus community, providing knowledgeable, high-quality and courteous services, and offering evidence-based, customer-focused, and innovative solutions to advance the university's strategic goals.

Organizational Structure

IT Solutions is divided into five major areas. Each team addresses unique solutions to provide the University with reliable information technology systems and innovative solutions.

Customer Services

Customer Services includes three departments:
 IT Solutions Center - Where faculty, staff, and students can go for one-stop assistance and triage for their technology requests and issues
 Campus Technology Support - Provides services such as computer imaging, lab development and support, and classroom technology design, development and support
 Campus Computer Store and Asset Management

Consulting Services

Consulting Services is made up of a team of Collegiate Technology Directors. The Technology Directors provide business analysis and strategic planning consulting services for Colleges and administrative units. The Technology Directors also serve as liaisons to help usher in adjustments to existing services or entirely new services to help promote faculty and student success.

Technical Services

Technical Services provides infrastructure support on campus, including managing our physical and wireless network, managing servers, and developing infrastructure to support new and existing services.

Mobile, Application Development and Web Services

Mobile, Application Development and Web Services include web site development and management and development of customized software for the University.

Academic Technology Services

Academic Technology Services provides instructional design, support, and production services for academic and research technologies.

Information Security Services

Data and access to it is increasingly ubiquitous, and expectations and needs for access to data has become a critical aspect of our University's strategic health and viability. As a University, we have a duty to our students and ourselves to diligently protect the "confidentiality," "integrity," "availability," and "accountability" of University and Student data. The Information Security Team is committed to addressing Information Security needs at the highest and lowest levels of the University.

Technology Planning

The IT Solutions Strategic Plan

The Strategic Plan for IT Solutions includes five elements:

1. **Student and Faculty Success:**
IT Solutions will be leveraged to enhance learning outcomes, improve retention, introduce new teaching models, and further our applied research mission across a diverse faculty and student population.
2. **Service and Process Improvement:**
IT Solutions will be leveraged to create more efficient campus business practices and improve services to Minnesota State Mankato stakeholders.
3. **Professional and Effective Staff:**
IT Solutions staff will be courteous and well-trained, familiar with state-of-the-art technologies and best practices, and provide best-in-class service and support. IT Solutions staff will support campus diversity; staff promote cross-cultural understanding and thrive in a diverse campus environment.
4. **Relationships, Partnerships, and Communication:**
Minnesota State Mankato IT Solutions will build strong working relationships with Minnesota State Mankato academic and business units; help form strategic partnerships with industry and sister schools; provide an infrastructure for campus safety; and communicate effectively with campus stakeholders.
5. **Superlative Access to Data:**
Minnesota State Mankato students, faculty and staff will have ubiquitous, high-speed, secure and reliable access to their individual data and top-quality decision support regardless of device or platform.
This Element is foundational to the success of all IT Solutions initiatives.

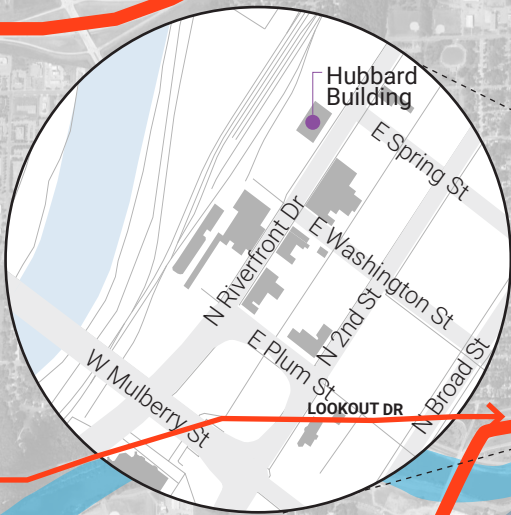
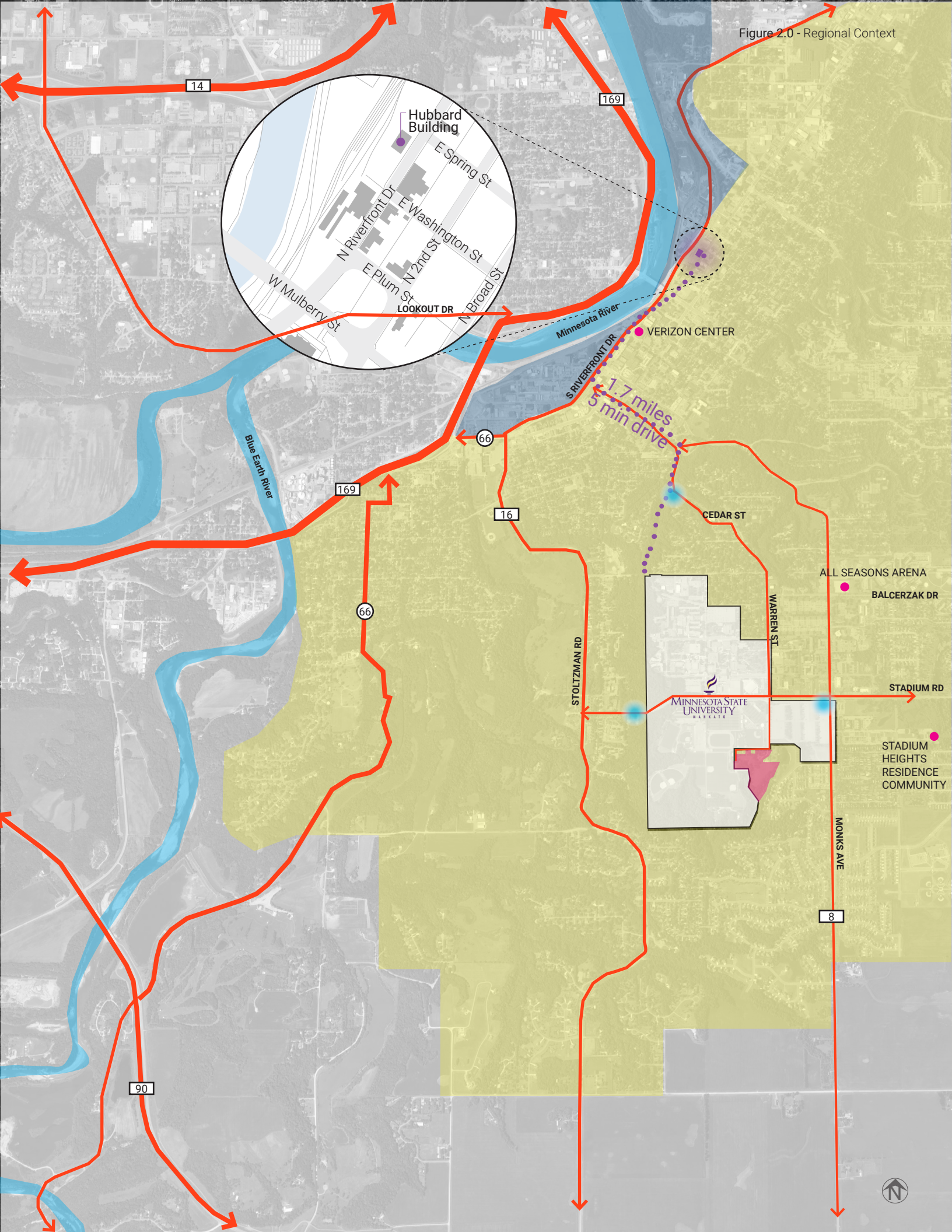


2

Existing Site Conditions

- 2.1 Land Management
- 2.2 Landscape / Civil
- 2.3 Campus Use

Figure 2.0 - Regional Context



1.7 miles
5 min drive









Regional Context

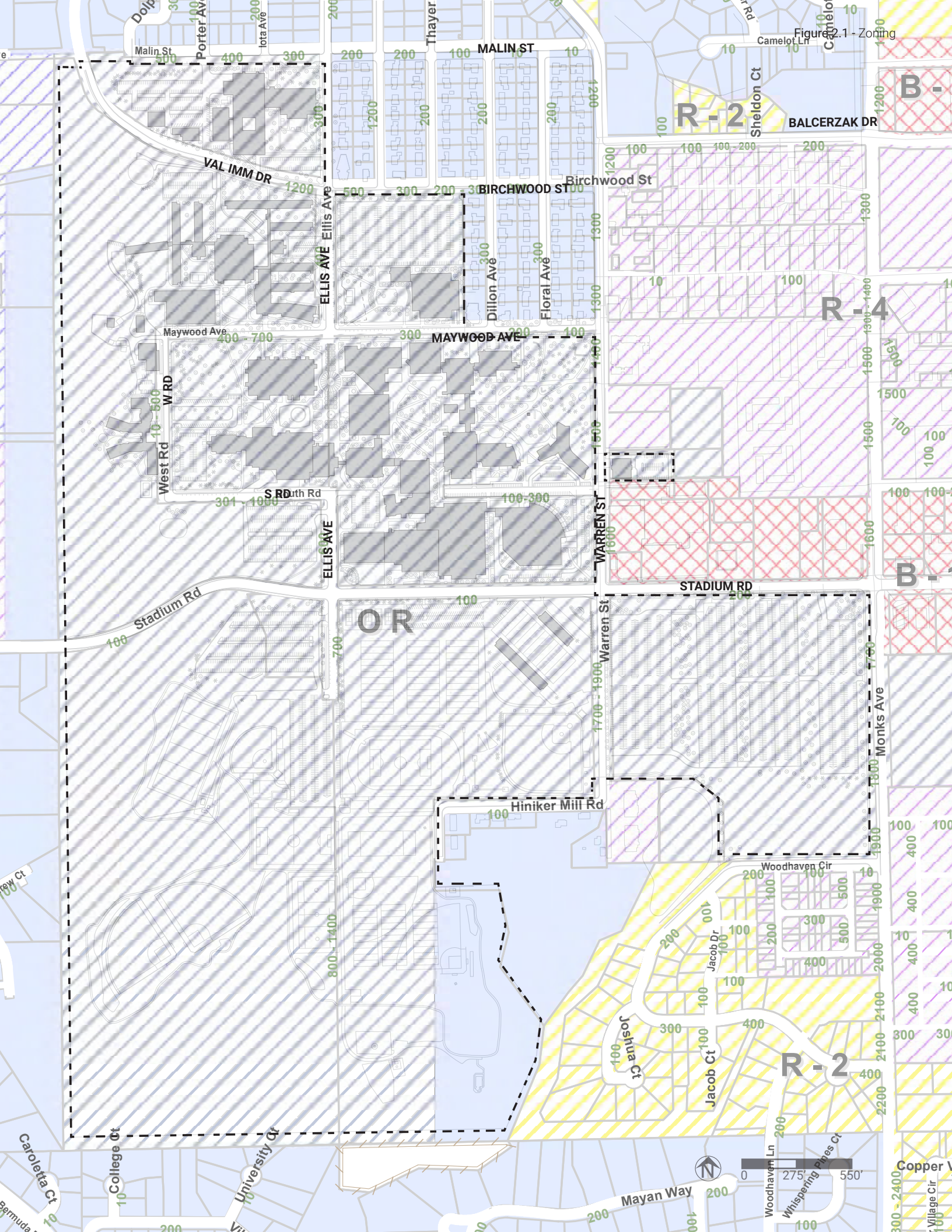
Minnesota State University, Mankato is located on the outskirts of Mankato's central business district, situated on bluffs that overlook the city below. The campus property covers approximately 315 acres. The western edge is bordered by a dense tree line and steep cliffs that make any development in that direction very difficult.

The campus is located in a largely residential area, with property boundaries zoned by the City as Residential and Office use. The MSU Foundation owns approximately 12.5 acres of land south of Hiniker Mill Rd in land zoned for Residential use.

Other properties leased by the University are located on the map.

Monument signs located on Cedar Street and Stadium Road serve as initial markers for campus, indicating MSU well before arriving on campus.

-  Manufacturing
-  Residential
-  Foundation owned property
-  Leased property
-  Monument sign
-  Hubbard Building







Overall City Zoning

-  T-Transition District
-  R-1 One Family Dwelling
-  R-2 One & Two Family Dwelling
-  R-3 Limited Multiple Dwelling
-  R-4 Multiple Dwelling
-  R-T Residential Transition
-  OR Office Residential / O Office
-  CBD-C Central Business District Core
-  CBD-F Central Business District Fringe
-  B-1 Community Business District
-  B-2 General Business District
-  B-3 Highway Business District
-  PI Planned Industrial
-  M-1 Light Industrial
-  M-2 Heavy Industrial
-  IO Institutional Overlay

Figure 2.2 - Campus Site & Landscape



Overall Campus Site & Landscape

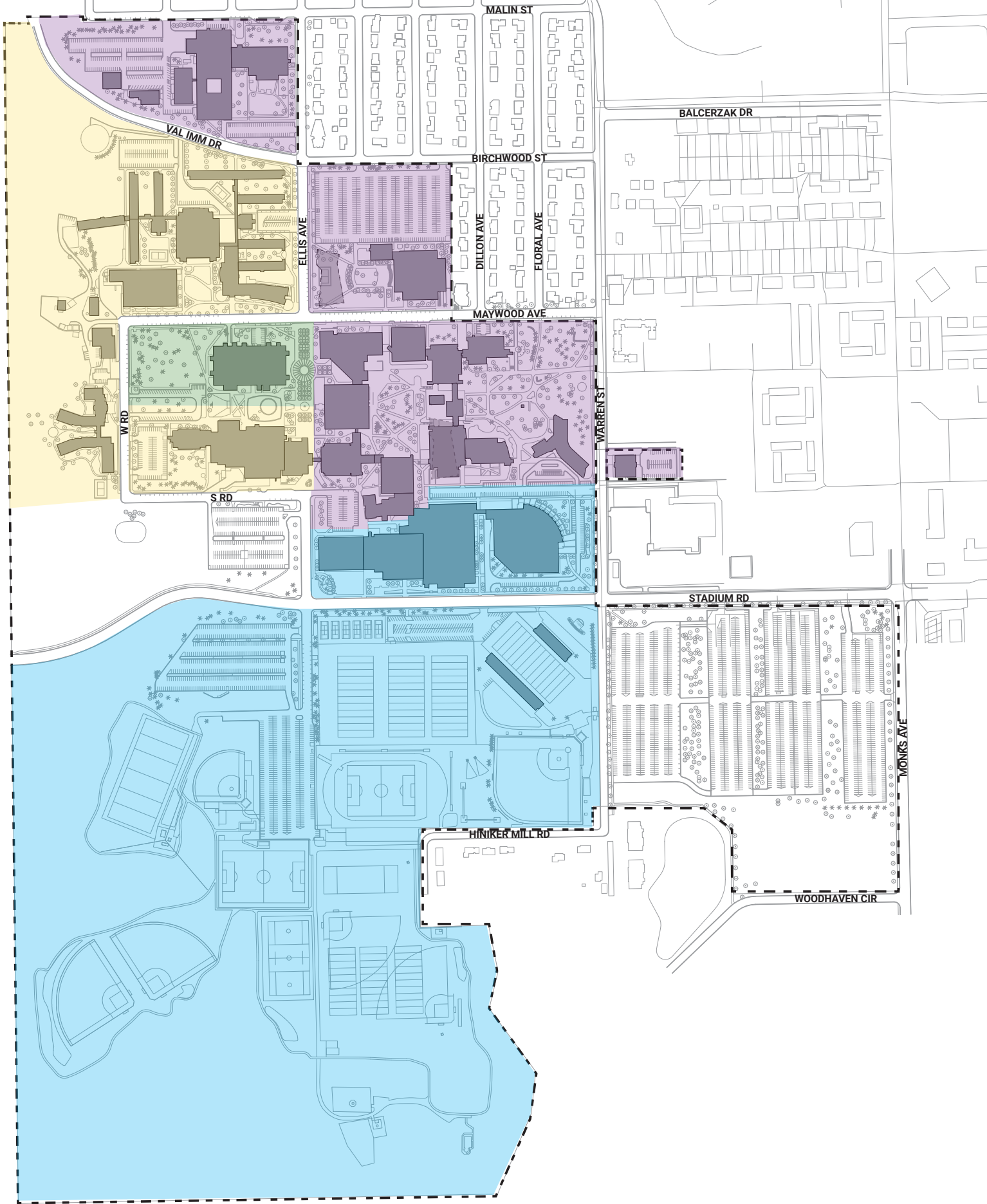
-  Surge Pond
-  Green Space
-  Trees
-  Solar Energy

The campus has a footprint of 315 acres. It is quite compact with well-defined natural boundaries to the west, a surge pond to the south and business and residential communities on the north and east sides. These pose some challenges when considering any sort of future site expansion.

MSU has a beautiful campus of well-maintained, high quality buildings that are both modern and consistent with the aesthetic of older buildings. The grounds are well kept and landscaped to present a quintessential quad in the center of campus that emphasizes a collegiate feel or experience.





Sustainability is important to MSU and sites and initiatives that improve energy efficiency and resource management will be explored. The most recent building constructed on campus, Clinical Sciences, has highly-utilized solar umbrellas. There may be other opportunities to harness solar energy and take advantage of the southern solar exposure with photo voltaic panels.

Figure 2.3 - Overall Campus Zones



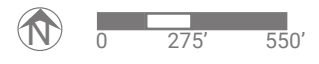
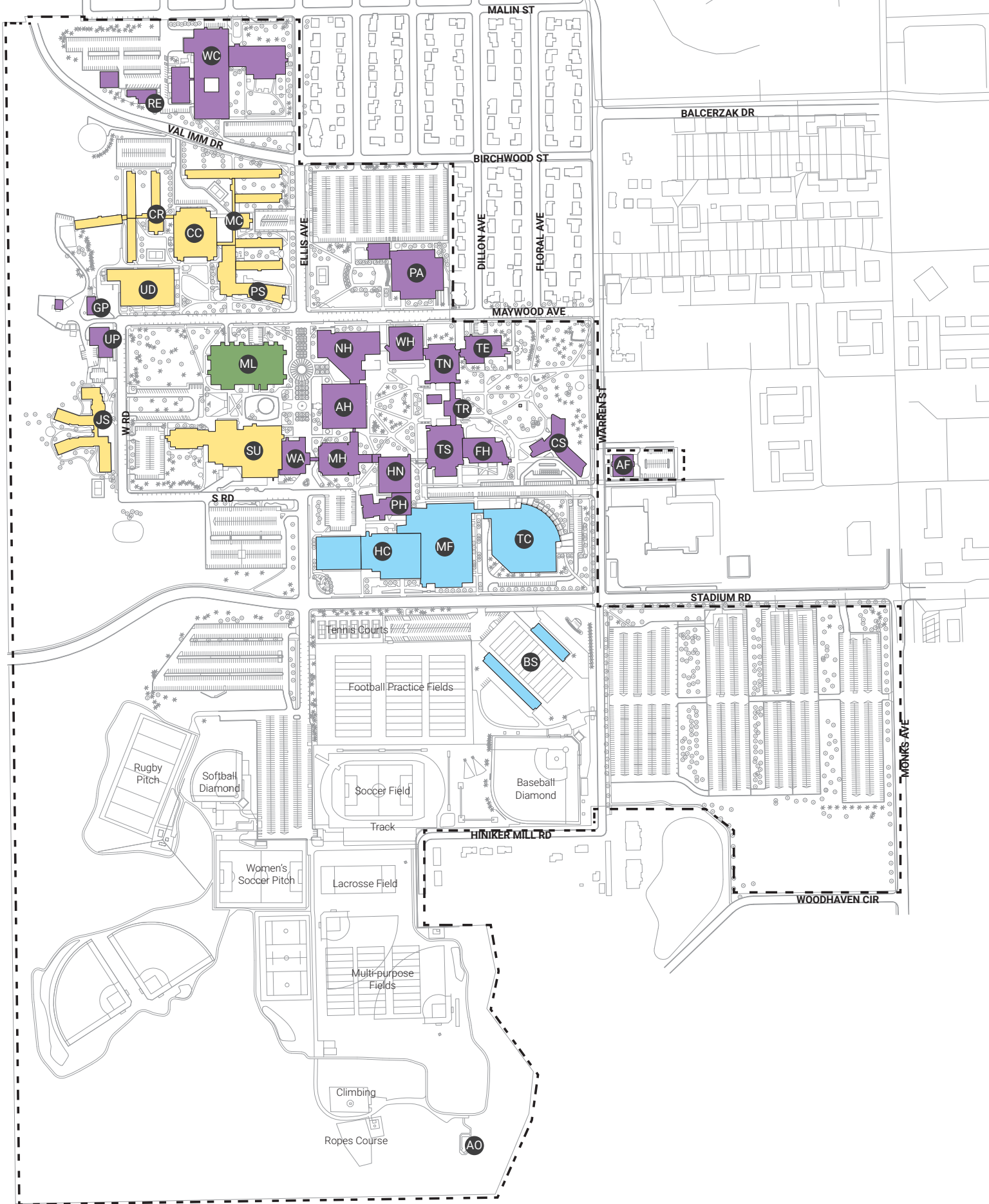
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Overall Campus Zones

-  Academic & Administration
-  Student & Residence Life
-  Academic Support
-  Athletic / Recreation

The campus is composed of well-defined zones that support the vision and growth model set in previous master plans. The zones work well for MSU and help arrange campus in a way that intuitively is easy to understand. A central Academic & Administration zone allows for easy and accessible pedestrian circulation around campus. The outlier in this zone is Wiecking Center, located north of Val Imm Drive. This can pose a challenge for students with tight class schedules. Athletics and Recreation is on the south end of campus, with indoor facilities on the north side of Stadium Rd and outdoor fields to the south. Crossing Stadium Rd can be a challenge, and safe pedestrian connections should be explored. The Residential and Student Life zone is located on the west side of campus, bordered by the trees and bluff. This provides a quieter area away from the main activity zones.

Figure 2.4 - Overall Campus Use



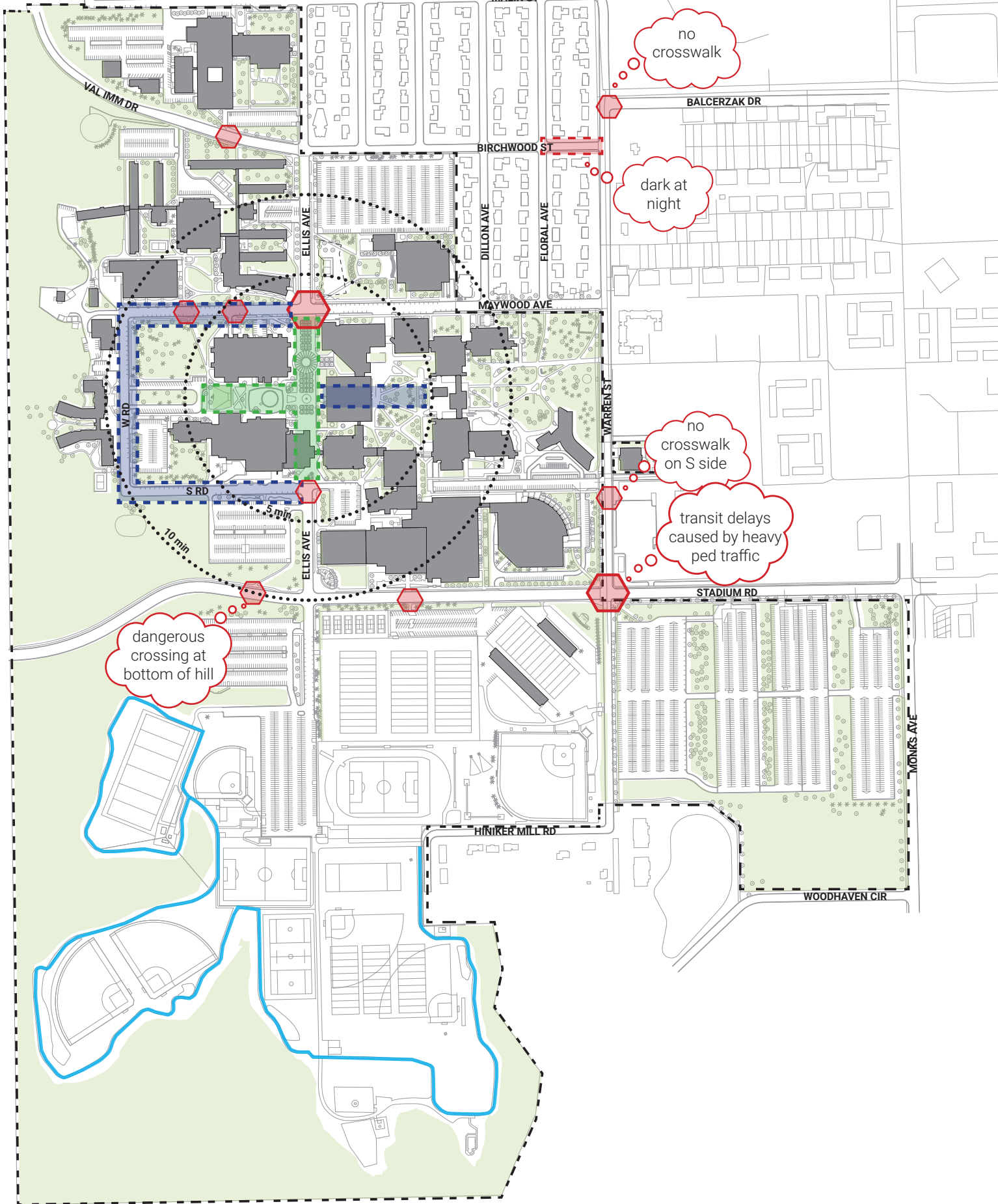
Overall Campus Use

- Academic & Administration
- Student & Residence Life
- Academic Support
- Athletic / Recreation

- AF Alumni Foundation Center
- AH Armstrong Hall
- CC Carkoski Commons
- CR Crawford Residence Community
- FH Ford Hall
- GP Generator Plant
- HC Highland Center
- HN Highland Center N
- JS Sears Residence Community
- MC McElroy Residence Community
- MF Myers Field House
- ML Memorial Library
- MH Morris Hall
- NH Nelson Hall
- PA Early Center for Performing Arts
- PH Pennington Hall
- PS Preska Residence Community
- RE Center of Renewal Energy (CORE)
- SU Centennial Student Center
- SH Stadium Heights Residence Community
- TC Taylor Center
- TE Trafton Science Center E
- TN Trafton Science Center N
- TR Trafton Science Center
- TS Trafton Science Center S
- UP Utility Plant
- WC Wiecking Center
- WA Wigley Administration Center
- WH Wissink Hall
- CS Clinical Sciences
- UD University Dining Center
- BS Blakeslee Stadium
- AO Andreas Observatory

*Campus completed Sq Ft =
2,757,768 SF*

Figure 2.5 - Overall Pedestrian Access & Circulation



dangerous crossing at bottom of hill

no crosswalk

dark at night

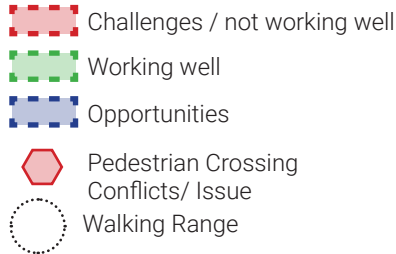
no crosswalk on S side

transit delays caused by heavy ped traffic



0 275' 550'

Overall Pedestrian Access & Circulation



Walking

The MSU-Mankato campus is inherently walkable, with a total distance of less than one-mile from one corner of campus to the other. Internal walking paths connect buildings through open quad areas, especially on the east side of campus. Attractive green spaces and landscaping, and good building design invite walking.

Sidewalks along Warren Street, Maywood Avenue, and other campus-area streets provide pedestrian connectivity along the perimeters and connect campus to and from adjacent neighborhoods. Nearby commercial destinations provide off-campus amenities for students and the MSU community to walk to. The internal quad fronting the Memorial Library and the Centennial Student Union and comprising Ellis Avenue between Maywood Avenue and South Road, provide a core pedestrian-oriented zone at the center of campus.

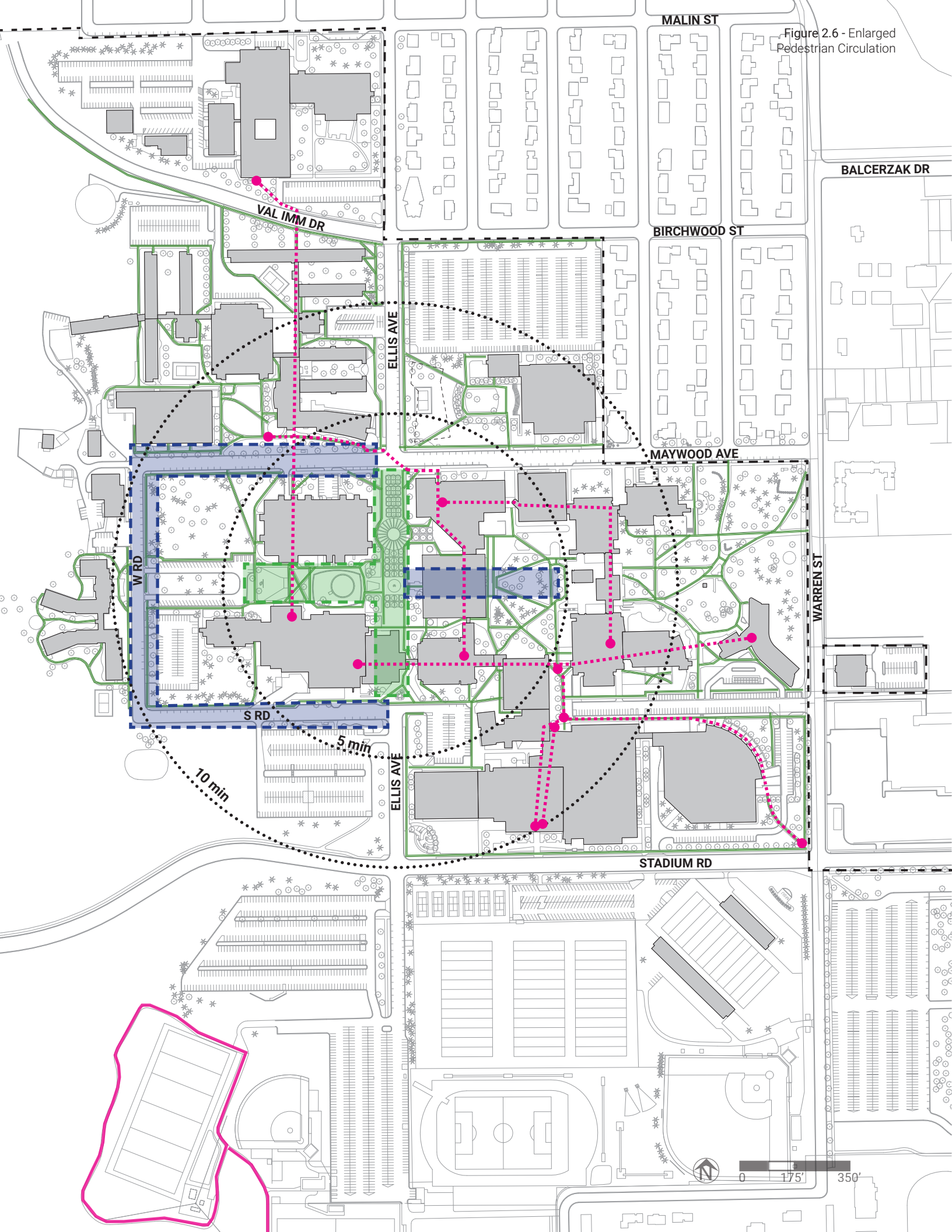
With all its assets, there are various issues and considerations to note about the pedestrian experience. The comfort and safety of pedestrians crossing campus and adjacent city streets is a significant issue on campus. Locations where these concerns have been observed and are known to exist (per results of stakeholder engagement) include:

- Warren Street at Maywood Avenue (with pedestrians crossing to and from the neighborhood to the east of Warren Street)
- Warren Street at Stadium Drive (a location that experiences transit delay and modal conflicts, with pedestrians crossing to and from Parking Lots 20-23, and the athletic complex)
- Maywood Avenue at Ellis Avenue
- Ellis Avenue at South Road
- Val Imm Drive at Wiecking Center

The Comprehensive Facilities Plan will put forth appropriate measures that MSU-Mankato to take to avoid and/or manage modal conflicts at these locations to improve the comfort of crossing pedestrians.

Additionally, engagement with campus stakeholders indicates a desire for improved wayfinding for pedestrians both outside and inside of campus buildings, as well a desire for a more enhanced pedestrian-oriented campus core in the form of a potential core campus mall where vehicular traffic is restricted.

Figure 2.6 - Enlarged Pedestrian Circulation



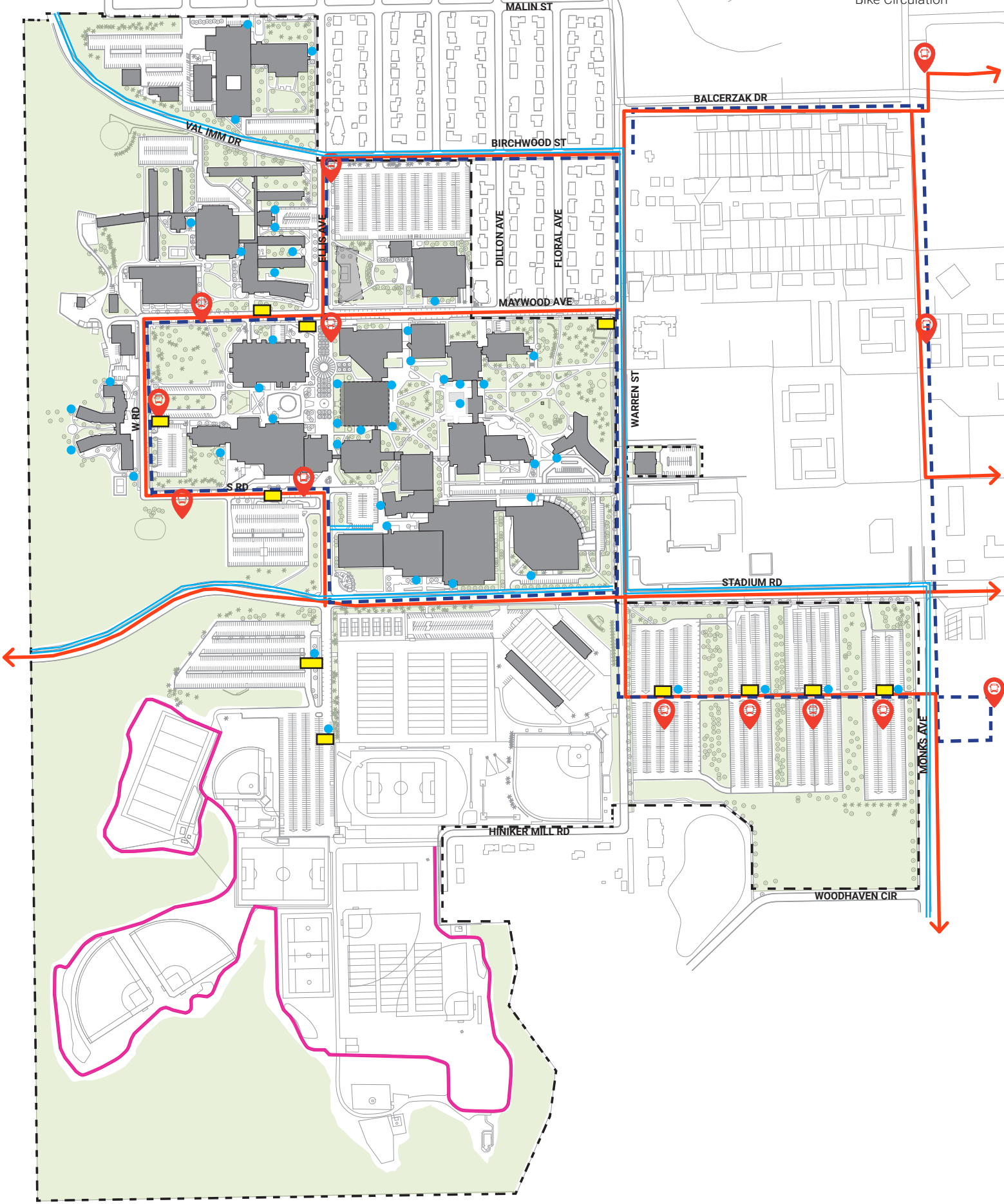
Campus Use 2.3

Enlarged Pedestrian Circulation








 Working well Opportunities Sidewalks / Ped Paths Routes people take / wish they
could take Fitness Path Walking Range

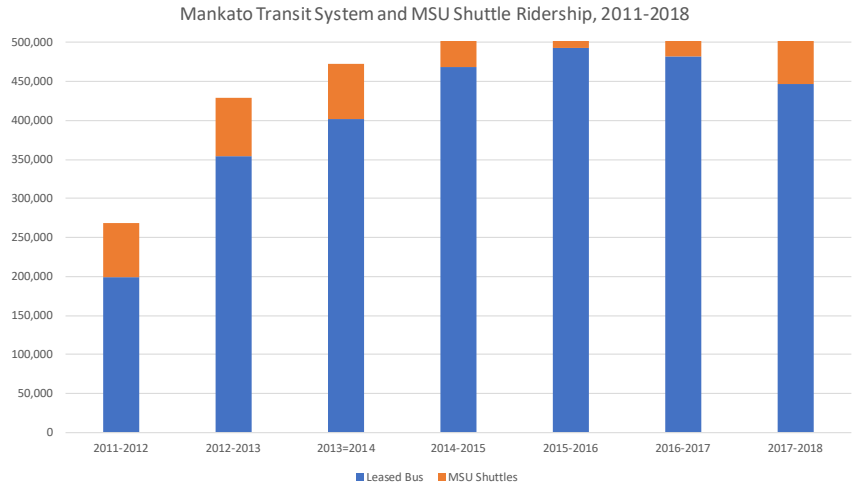
Campus facilities are proximate to each other, offering easy access and reasonable walking ranges for students, employees, and visitors moving across campus. The longest distance from Wiecking Hall at the north end to Taylor Center at the southeast is approximately a 12 minute walk. Facilities are also connected via underground pedestrian tunnels and skyways making it a very walkable campus, even in winter months.

Figure 2.7 - Overall Transit & Bike Circulation



Overall Transit & Bike Circulation

-  Bus Routes
(City + MSU partnership)
-  Parking Lot Shuttle
-  Campus Area Bus Stop
-  Bus Shelter
-  Bike Racks
-  On Street Bike Route
-  Fitness Path



Biking

As is the case with walking, MSU-Mankato is a bikeable campus, and bicyclists can connect to nearby destinations within close proximity. MSU earned a Bronze Bicycle Friendly University designation in November 2017 from the League of American Bicyclists. Maywood Avenue, W Road, and S Road are relatively low volume and low speed streets that offer internal bike connectivity. Along the eastern edge of campus, Warren Street does not have designated on-street bike infrastructure, but (although not ideal) has Share the Road signage.

On-street curbside bike lanes exist on Stadium Road along the southern edge of campus from Ellis Avenue to the east. West of Ellis Avenue, an off-street shared-use path exists on the north side of Stadium Road west to Stoltzman Road, where it connects to Rasmussen Woods to the north. Amenities such as bicycle parking and repair stations are available across campus.

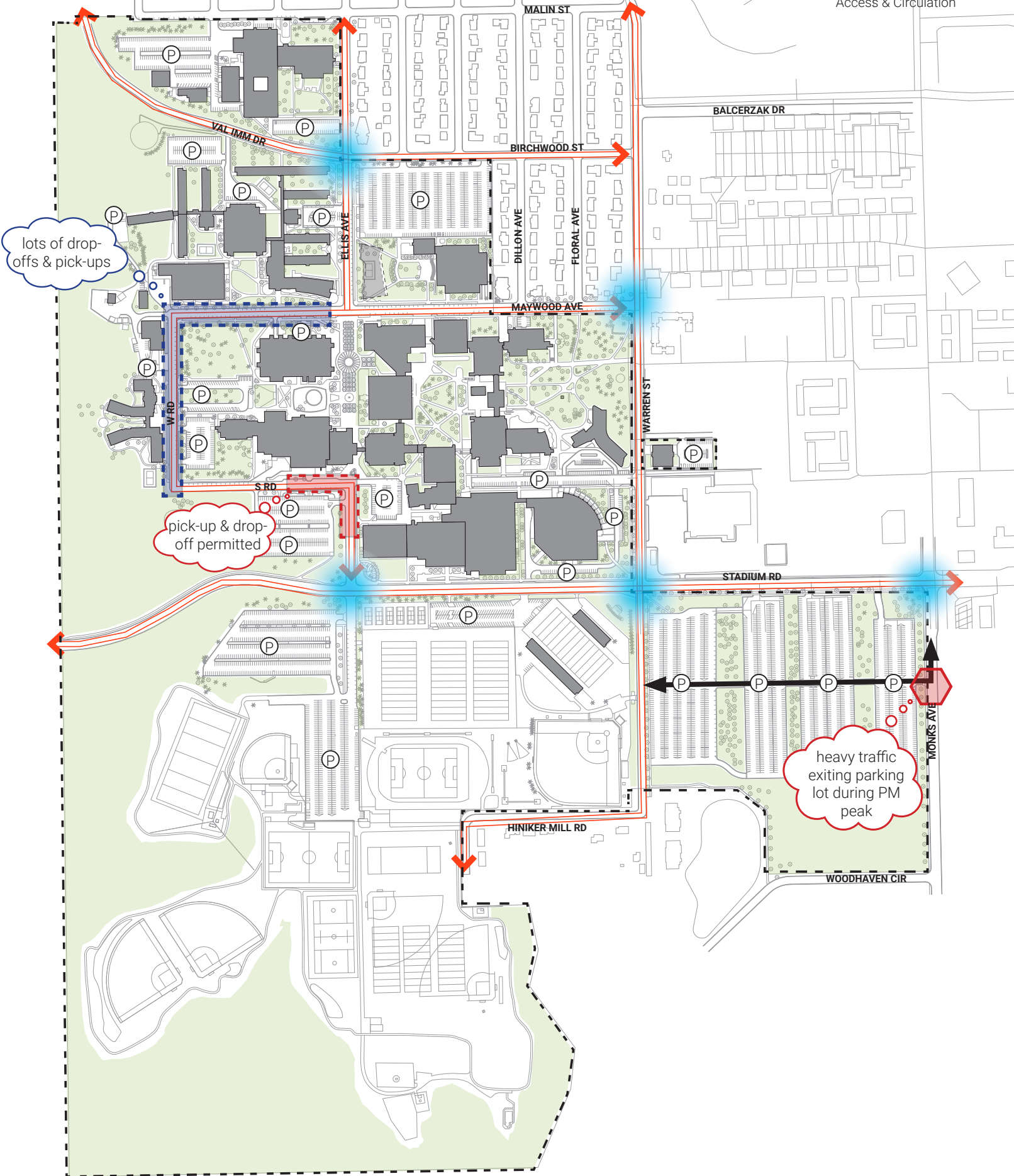
Transit

The MSU-Mankato campus is well-served by Greater Mankato Transit System (MTS) and campus shuttle service for commuting and circulation trips around campus and to and from campus parking facilities and the campus core. The Maverick Shuttle provides on-campus circulatory service, while the Stomper Express shuttle connects the residence hall with locations in Mankato. Late night shuttle service connects campus with downtown Mankato, and the Land to Air Express connects campus with the Minneapolis-St. Paul International Airport

MTS Routes encircle the MSU-Mankato campus on weekdays and converge at a hub on the south side of the Centennial Student Union. Routes provide access to the MSU commuting via the MavCard, provide circulatory connections around campus, to and from perimeter parking lots, and to and from destinations throughout Mankato. Ridership on MTS routes by the MSU community has increased measurably since 2011-2012 and increasing use of transit for commuting purposes has mitigated the demand for peripheral (orange and purple) parking permits.






Delay in transit service is an issue at several locations on campus, with the interactions between transit vehicles and the large number of pedestrians. This is particularly evident at the intersection of Stadium Road and Warren Street. This intersection sees heavy vehicular movements with vehicles accessing the perimeter parking lots to the southeast, and turning between Warren Street and Stadium Road, particularly during morning and evening peak. Several transit routes pass through this intersection to connect to the peripheral parking areas, Warren Street, and the campus core. The intersection is heavily utilized by pedestrians walking to and from peripheral parking facilities, campus, and the athletic complex. The City of Mankato and MSU Mankato have investigated various potential options for the intersection to improve the pedestrian experience and relieve transit delay.

Figure 2.8 - Overall Vehicular Access & Circulation



0 275' 550'

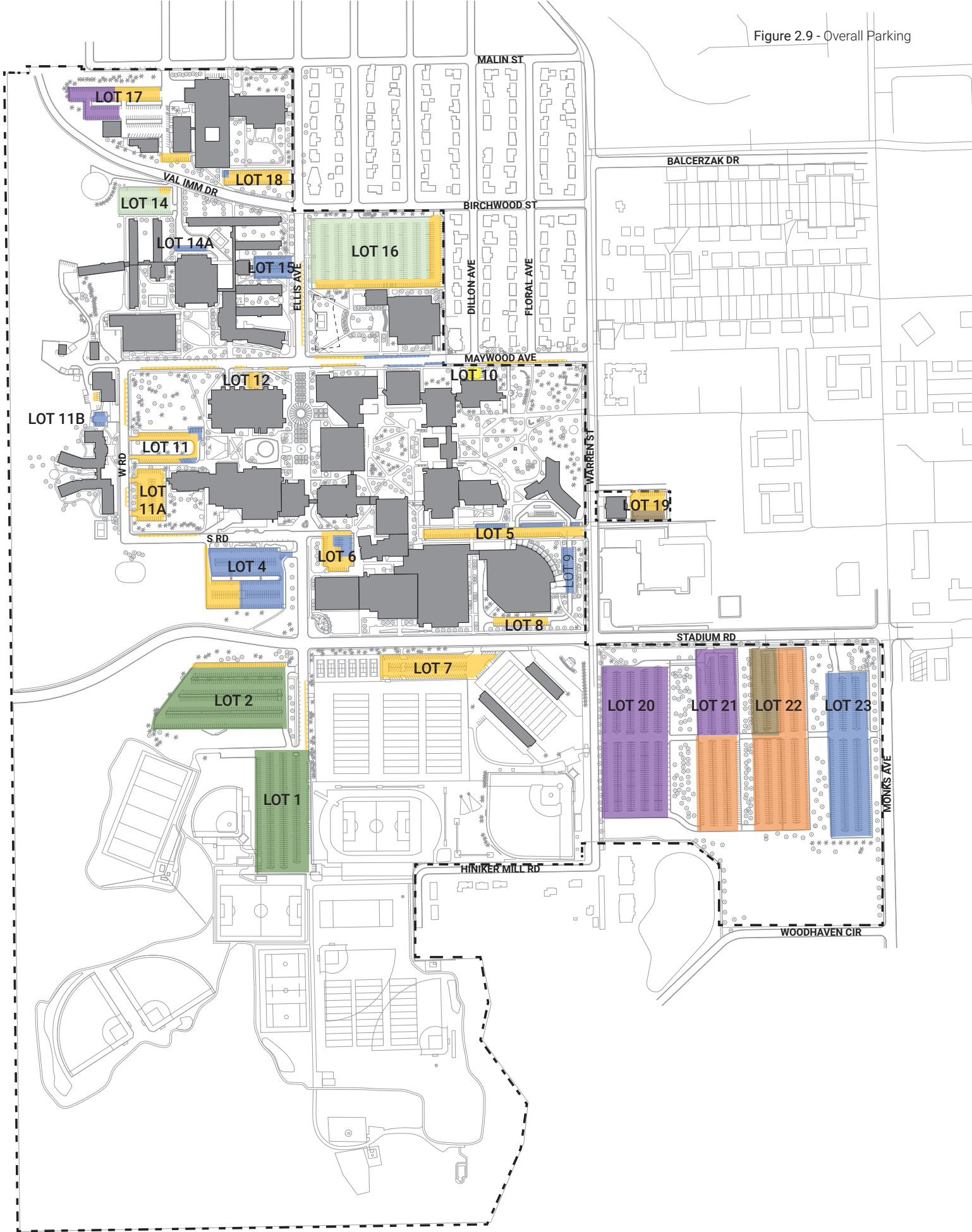
Overall Vehicular Access & Circulation

-  Vehicular Circulation
-  Parking
-  Campus Entry Points
-  Challenges / not working well
-  Opportunities

Vehicles

Stadium Road provides major east-west connectivity across the south edge of campus, connecting campus to the regional transportation network. Warren Street and Val Imm Drive provide north-south connectivity, connecting campus to downtown Mankato. Val Imm Drive is the primary northern entry point into the core of campus, while Ellis Avenue serves as the primary southern entry point, and Maywood Drive serves as the primary eastern entry point. Localized traffic congestion occurs on and around campus, particularly during the afternoon/evening peak. This congestion is particularly evident along Maywood Avenue west of Warren Street, and on Monks Avenue and Stadium Road during the peak unloading of the peripheral campus parking facilities.

Figure 2.9 - Overall Parking

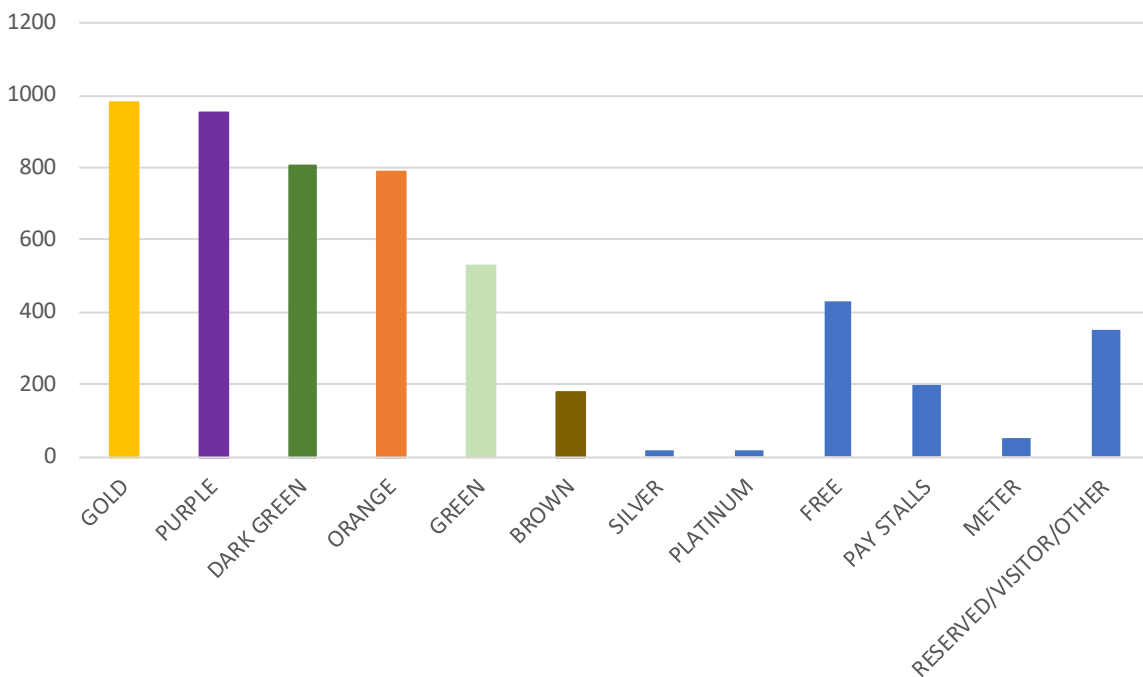


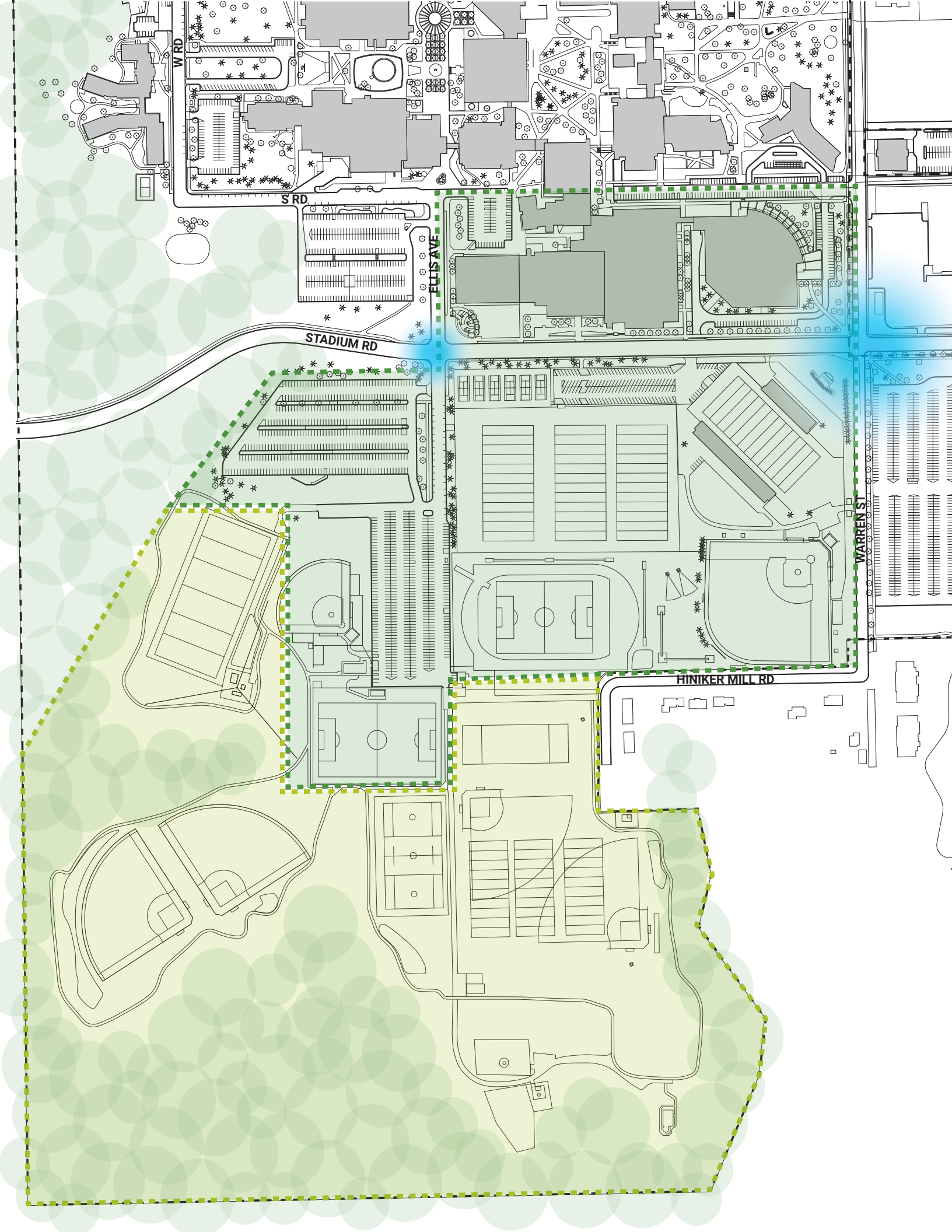
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Overall Parking

MSU Mankato sells a variety of permits at varying price points to commuter and resident students, faculty, and staff for access to the nearly 5,300 campus parking spaces. Green permits provide parking for residence students, gold parking permits provide parking in the campus core, along with on-street metered parking. Purple and orange parking permits provide access to Lots 20-22 at the southeast corner of campus. Lot 23 offers free parking and operates at full capacity during the day, while Lots 20-22 are not fully utilized. The visitor pay lot off Ellis Avenue is the primary supply of visitor parking on campus. MSU maintains a ratio of 0.35 parking spaces per person.

Current Parking Inventory





W RD

S RD

STADIUM RD

ELLIS AVE

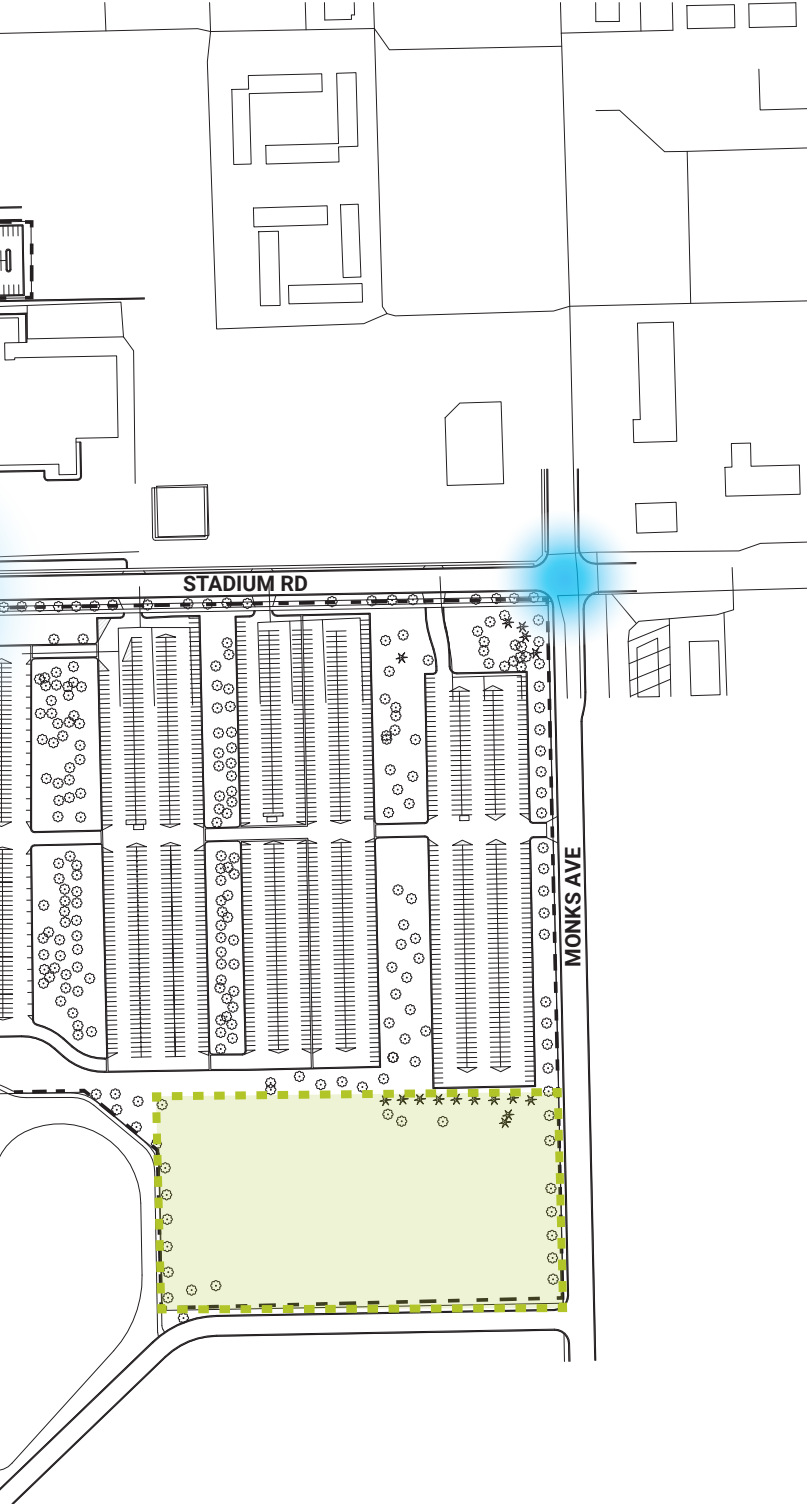
HINIKER MILL RD

WARREN ST

Campus Use 2.3

Enlarged Athletics & Recreation Focus

- ■ ■ ■ Athletic & Recreation Focus
- ■ ■ ■ Recreation Focus
- First Impressions

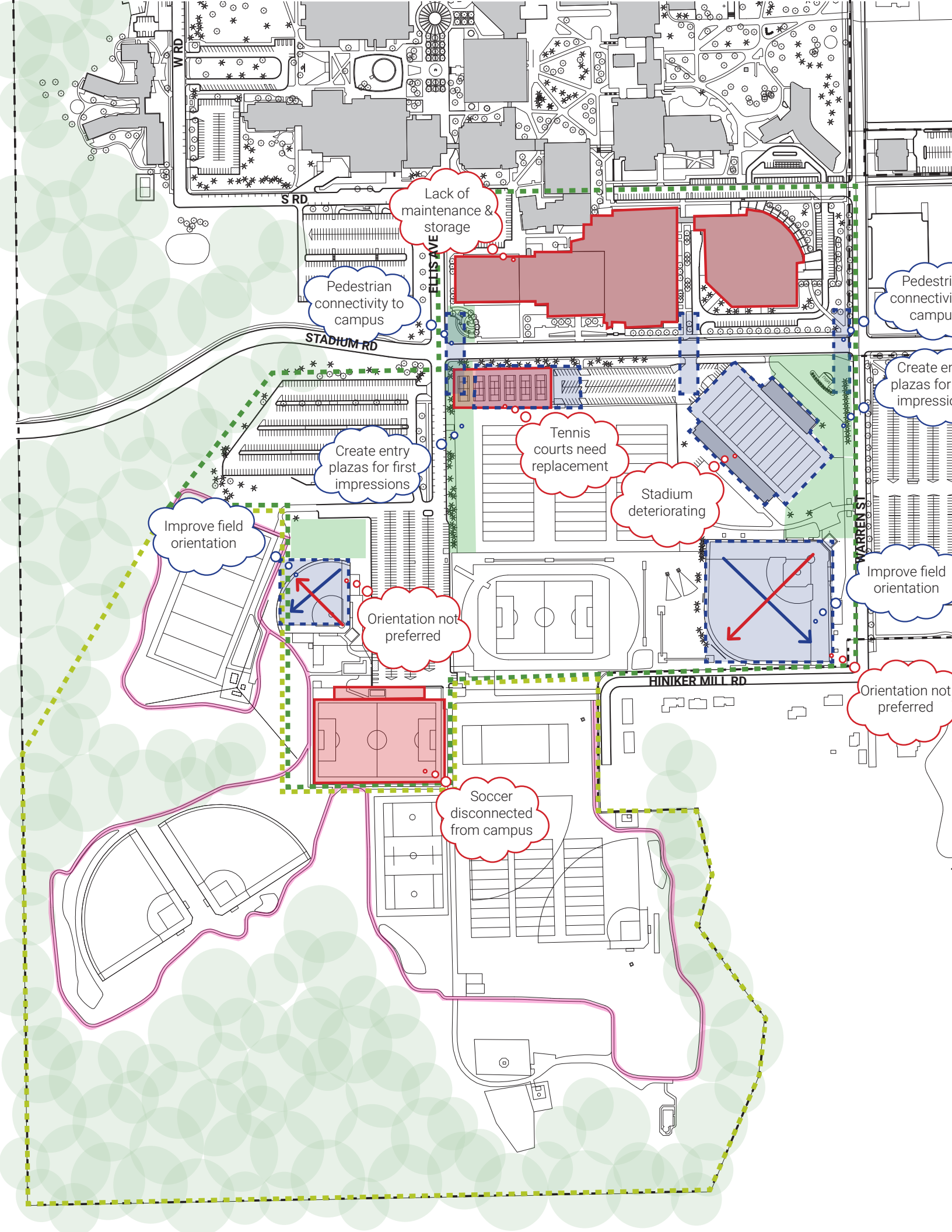


The athletic and recreation plan is inherently a major component of the comprehensive facilities plan for several reasons. The fields and facilities occupy a large percentage of overall campus land, are a major draw for prospective students and visitors, and a revenue generator for various athletic teams to rent for tournaments. The CFP also offers the opportunity to integrate multiple plans and consider potential synergies between athletics, recreation, student health and wellness services and clinics.

Most spectators driving to campus for events experience first impressions of campus at key intersections. Drivers from the east first approach Monks Ave and Stadium Rd and may turn into the parking lots before any indication of MSU signage. From the west, visitors arrive at the top of a winding hill at the intersection of Stadium and Ellis. Visitors and event attendees typically park in the large lots south of Stadium Rd, crossing Warren mid-street to get to Blakeslee Stadium and the fields or at the Warren and Stadium intersection for the indoor facilities. This furthers the need for a safe pedestrian-friendly crossing and opportunity to enhance this corner of campus.

Figure 2.10 - Enlarged Athletics & Recreation Focus





Lack of maintenance & storage

Pedestrian connectivity to campus

Pedestrian connectivity to campus

Create entry plazas for first impressions

Tennis courts need replacement

Stadium deteriorating

Create entry plazas for first impressions

Improve field orientation

Orientation not preferred

Improve field orientation

Orientation not preferred

Soccer disconnected from campus

W RD

S RD

STADIUM RD

ELIUS AVE

FINIKER MILL RD

WARREN ST

Campus Use 2.3

Enlarged Athletics & Recreation Considerations

- Challenges / not working well
- Plaza Opportunities
- Opportunities
- Fitness Path

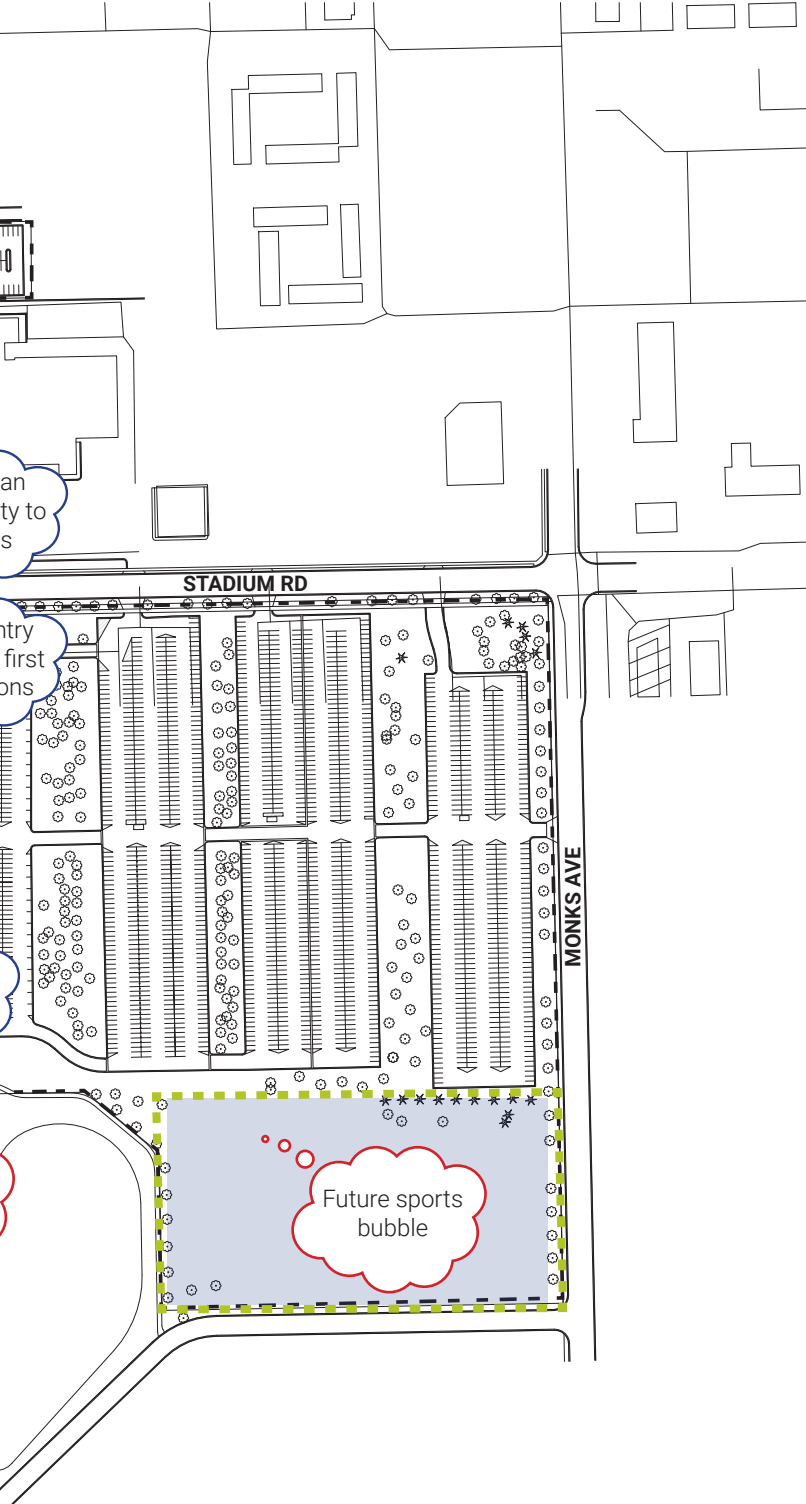
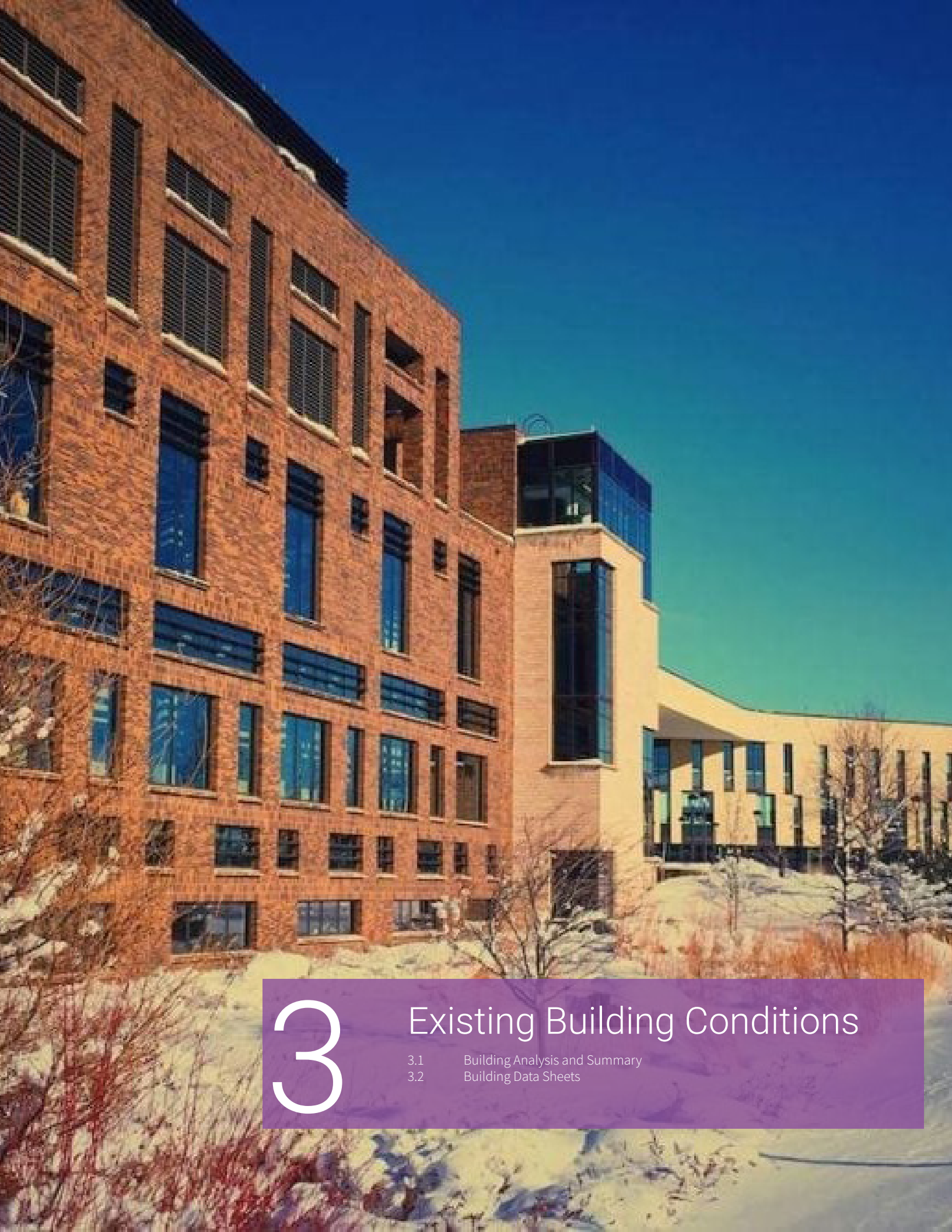


Figure 2.11 - Enlarged Athletics & Recreation Considerations

- Create Entry Plazas for First Impressions
 - Hall of fame plaza opportunities
 - Stronger connection into campus
- Available Space to Move Soccer Towards Campus
 - Utilize an existing practice field to bring Soccer closer to campus
 - More synergy between stadiums
- Utilize Existing Site and Orientation for Football Stadium
- Improve Softball and Baseball Orientation on Existing Site
 - Orientation is based on drawing a line from home plate through the pitcher's mound to second base.
 - The desired orientation per the rules book is "east-northeast"
 - The least desired is west-northwest due to safety and having the batters look into the setting sun
- Keep Practice Fields Adjacent to Football Stadium / Indoor Field House
 - Allows quick access from the locker rooms and stadium field
- Utilize Existing Track and Field
- Space Available for Maintenance and Storage Facility on Site
 - Be able to provide storage on site for maintenance equipment and supplies
- Pedestrian Connectivity to Campus
- Lack of Gameday Fan Amenities
 - There is a need for proper restrooms and concessions to create a strong gameday experience
- Soccer Disconnected from Campus
 - Opportunity to create an athletics synergy bringing it closer to football and baseball
- Tennis Courts Need Replaced
 - There is a need for Pickle ball courts. Reducing the number of tennis courts to allow for some to be converted to an ice rink/basketball court.
 - Propose sliding these to the east for a greater plaza at Ellis and Stadium.
- Lack of Maintenance and Storage Space in the Taylor Center/ Myers Field House/ Otto Rec Center
 - Storage space among programs is an issue and results in usable space getting taken over for storage needs. A standalone storage area, combined with maintenance, is recommended to provide some resolution.
- Lack of Field Maintenance and Equipment Storage
 - To be used for gameday storage, sports equipment storage, etc. to help free up space in the Taylor center and field house.
- Blakeslee Stadium (Football Stadium) Deteriorating Condition
 - The stadium needs to be replaced sooner than later, opening up the opportunity to move/ reorient the stadium.
- Baseball and Softball Field Orientation is Not Preferred





3

Existing Building Conditions

- 3.1 Building Analysis and Summary
- 3.2 Building Data Sheets

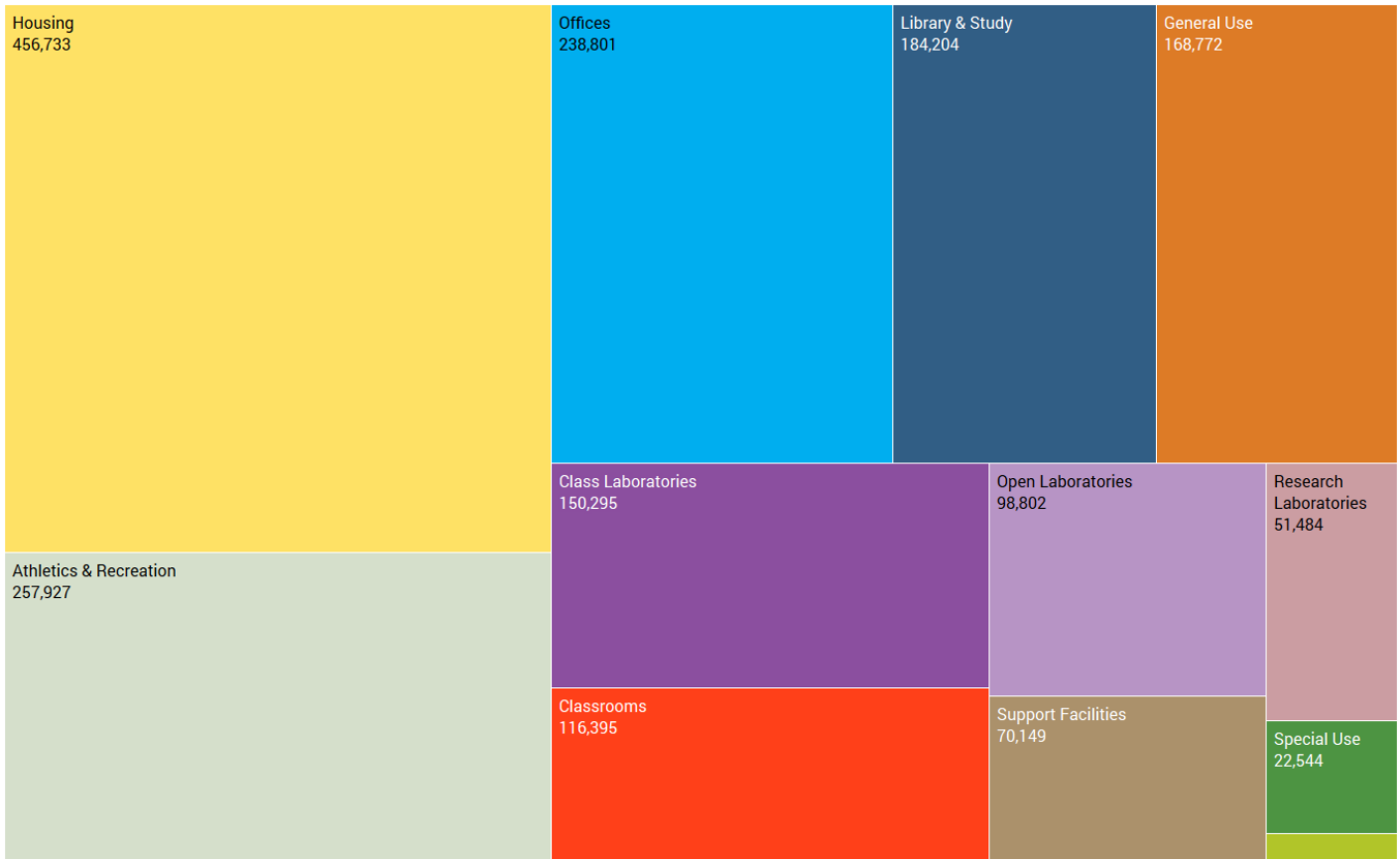


Table 3.0 - Existing Campus Space Analysis (ASF)

Due to limited ASF data, McElroy, Crawford, and part of Preska are included as estimates based on their overall GSF and building usage. Once room-by-room ASF data is available for these facilities the graphic will be updated accordingly

Overall Building Analysis & Condition Summary

Overall, campus facilities would benefit from various improvements to become an adaptable 21st century learning campus. Classrooms and Labs should be flexible, to accommodate for non-traditional future students and allow for future expansion and growth. The spaces should also be flexible in terms of technology and furniture for reconfiguration into different learning environments, depending on the needs of specific courses. Power and technology connectivity remains a high priority for spaces, as students are highly mobile and flexible in where they work. Increasingly, students carry personal devices, such as laptops, phones, Ipads, so having wifi connection and battery charging stations are a necessity to everyday functions. The campus has many social & gathering spaces throughout the campus which gives students the ability to continue learning and discussion beyond the classroom environment. These type of spaces are very valuable and should continue to be developed to give student the most up-to-date technology.

Existing campus buildings range in age from a few years old (Dining Center and Preska) to nearly 60 year old Wiecking Center. Older facilities are more restrictive environments to renovate to accommodate active learning environments. This is one of the challenges Armstrong Hall faces, as described in the 2018 Predesign. As departments and programs disperse from Armstrong Hall, the proposed solution involves several buildings, including Memorial Library, Clinical Sciences Building, Performing Arts and Wiecking Center.

Existing spaces tend to be assigned to specific departments, while many of these spaces can be shared between departments across the entire university. This allows for better utilization of existing spaces and gives the various departments opportunities for interaction, collaboration, and sharing of ideas.



New Clinical Sciences work space

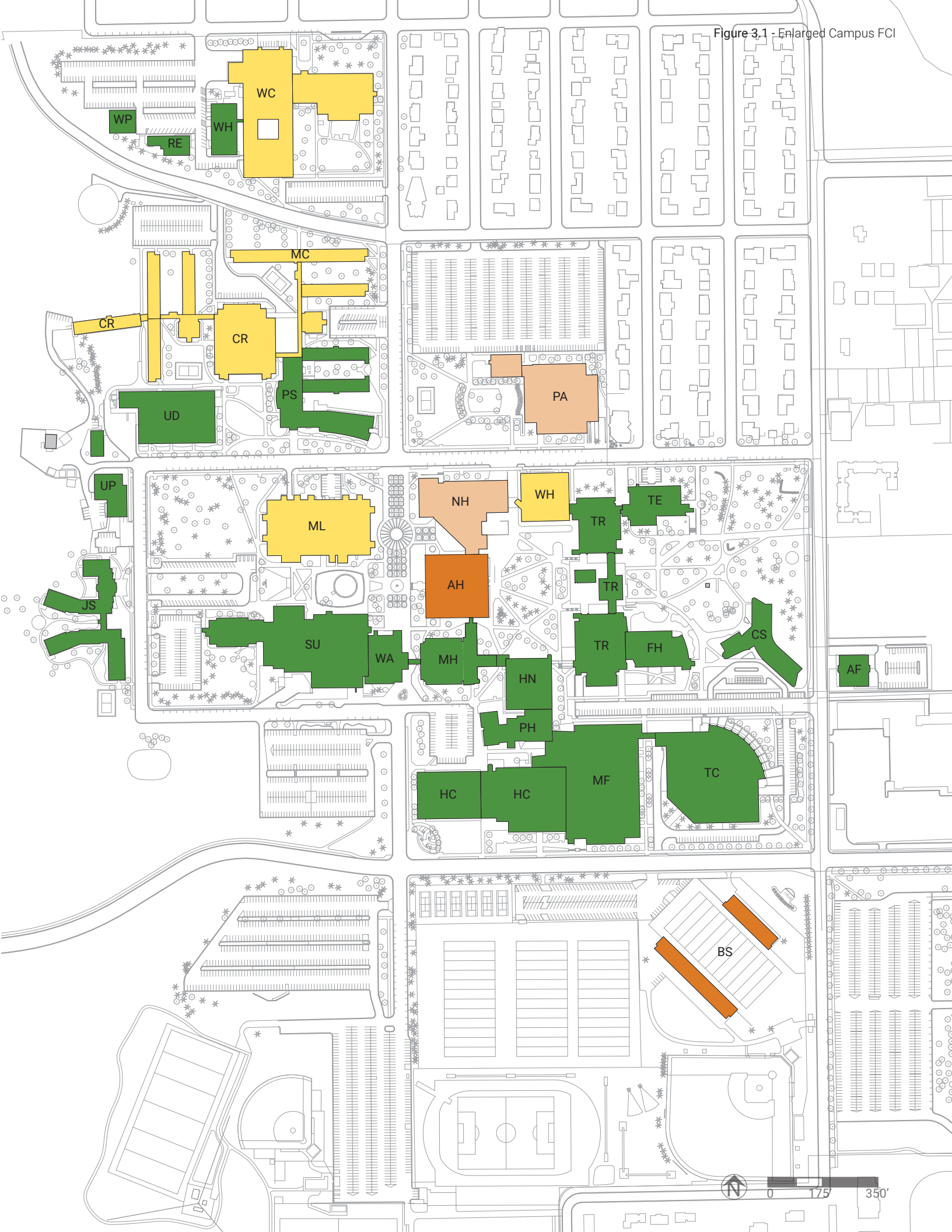


Computer touchdown in Wigley



Einstein Bagels in Highland Center - a favorite

Figure 3.1 - Enlarged Campus FCI

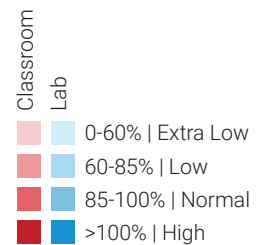


Enlarged Campus FCI

| | | |
|---|-----------|-------------|
| ■ | Excellent | < 0.05 |
| ■ | Good | 0.05 - 0.15 |
| ■ | Average | 0.15 - 0.30 |
| ■ | Poor | 0.30 - 0.50 |
| ■ | Crisis | > 0.50 |

Facilities are well maintained, with an overall campus FCI of 0.08. Buildings falling in the Poor, Average and Good range are all addressed in future building projects, a testament to the careful and considered planning MSU Mankato implements for their campus facilities.

| | | |
|----|-----------------------------------|-------------|
| AF | Alumni Foundation Bldg | 0.00 |
| | AMET Storage Bldg | 0.00 |
| AO | Andreas Observatory | 0.00 |
| | Andreas Theatre Addition | 0.00 |
| AH | Armstrong Hall | 0.46 |
| BS | Blakeslee Stadium | 0.42 |
| SU | Centennial Student Union | 0.03 |
| RE | Center of Renewable Energy | 0.00 |
| CS | Clinical Sciences Building | 0.00 |
| CR | Crawford Center | 0.05 |
| UD | Dining Center | 0.00 |
| | East Building | 0.00 |
| FH | Ford Hall | 0.00 |
| HC | Highland Center | 0.01 |
| HN | Highland Center North | 0.05 |
| HC | Highland Center Phase II Addition | 0.00 |
| JS | Julia A. Sears Res Community | 0.00 |
| | KMSU Transmitter | 0.00 |
| PS | Margaret R. Preska Res Community | 0.01 |
| MC | McElroy Center | 0.08 |
| ML | Memorial Library | 0.14 |
| ML | Memorial Library Addition | 0.07 |
| MH | Morris Hall | 0.02 |
| MH | Morris Hall Addition | 0.01 |
| MF | Myers Field House | 0.04 |
| NH | Nelson Hall (Mankato) | 0.18 |
| NH | Nelson Hall Addition | 0.16 |
| | Ostrander Bell Tower | 0.00 |
| PH | Pennington Hall | 0.00 |
| PA | Performing Arts | 0.26 |
| | Stand-by Generator Bldg | 0.00 |
| SO | Standeford Observatory | 0.00 |
| TC | Taylor Center | 0.00 |
| TE | Trafton East Addition | 0.00 |
| TR | Trafton Science Bldg | 0.05 |
| UP | Utility Plant | 0.19 |
| | Utility Plant Storage | 0.00 |
| | Utility Tunnels | 0.06 |
| | West Building | 0.00 |
| | West Road Paint Shop | 0.01 |
| WC | Wiecking Center | 0.12 |
| WP | Wiecking Shop Bldg | 0.01 |
| WS | Wiecking Storage Bldg | 0.00 |
| WA | Wigley - Administration | 0.00 |
| WH | Wissink Hall | 0.07 |
| | TOTAL | 0.08 |



| Building | # Classrooms | Classroom Utilization | | Lab Utilization | |
|---------------------------------------|--------------|-----------------------|---------------------|-----------------|--|
| | | 32 weekly hrs | # Class Labs 210 | 32 weekly hrs | |
| Armstrong Hall | 42 | 83.4% | 20 | 69.2% | |
| Center for Performing Arts | 5 | 59.2% | 6 | 28.9% | |
| Clinical Sciences Building | 5 | 89.6% | 5 | 47.0% | |
| Ford Hall | 1 | 64.6% | 9 | 31.1% | |
| Highland Center | 3 | 54.3% | 2 | 25.4% | |
| Margaret A Preska Residence Community | 2 | 3.7% | 0 | n/a | |
| Memorial Library | 2 | 24.6% | 4 | 40.1% | |
| Morris Hall | 7 | 67.3% | 4 | 41.7% | |
| Nelson Hall | 1 | 75.8% | 7 | 72.3% | |
| Pennington Hall | 4 | 69.4% | 0 | n/a | |
| Taylor Center | 2 | 67.7% | 1 | 2.2% | |
| Trafton Science Ctr - Center | 10 | 80.8% | 1 | 43.6% | |
| Trafton Science Ctr - East | 2 | 98.2% | 7 | 16.8% | |
| Trafton Science Ctr - North | 2 | 76.5% | 14 | 26.4% | |
| Trafton Science Ctr - South | 1 | 45.1% | 16 | 54.5% | |
| Wiecking Center | 5 | 74.8% | 4 | 8.8% | |
| Wissink Hall | 8 | 77.4% | 10 | 54.9% | |

Figure 3.2 - Existing Campus Utilization

Further clarification:

Total classroom and lab counts may include the following "unused" rooms. MSU Mankato is completing final walk throughs of rooms to ensure accurate room coding.

Armstrong Hall - includes (1) "unused" labs: Rm 0121 Group Therapy Room-CDIS

Centennial Student Union - not included in table above; (4) bowling alley sections are in Utilization Report as labs. While bowling classes are offered for PE credit, these are also used for campus recreation and intramurals

Performing Arts - includes (1) "unused" labs: Rm 0217 Class Lab may be coded incorrectly

Highland Center - includes (1) "unused" lab; Rm 1232 Lab

Preska Residence - includes (1) "unused" classroom; Rm 105 Class

Memorial Library - includes (1) "unused" classroom: Rm 0094B TelePresence Room / Conference Rm

Morris Hall - includes (1) unused Rm 0012 Assessment Lab and (1) unused 0013 Collaborative Classroom

Trafton East - includes (3) "unused" labs: Rm E120, E216, E308

Trafton North - includes (4) "unused" labs: Rm N379 (old numbering), Rm N351 Research Lab and N377 & N338 Skills Recording Labs

Wiecking Center - includes (2) "unused" labs: Rm 115 FCS Ed Lab & B138 Food Prep Lab

Wissink Hall - includes (3) "unused" labs: Rm 0210 (old numbering), Rm 0366 Nursing Sim Lab; Rm 379 is duplicated in report as Class Lab and Collaborative Classroom

Overall Campus Utilization Summary

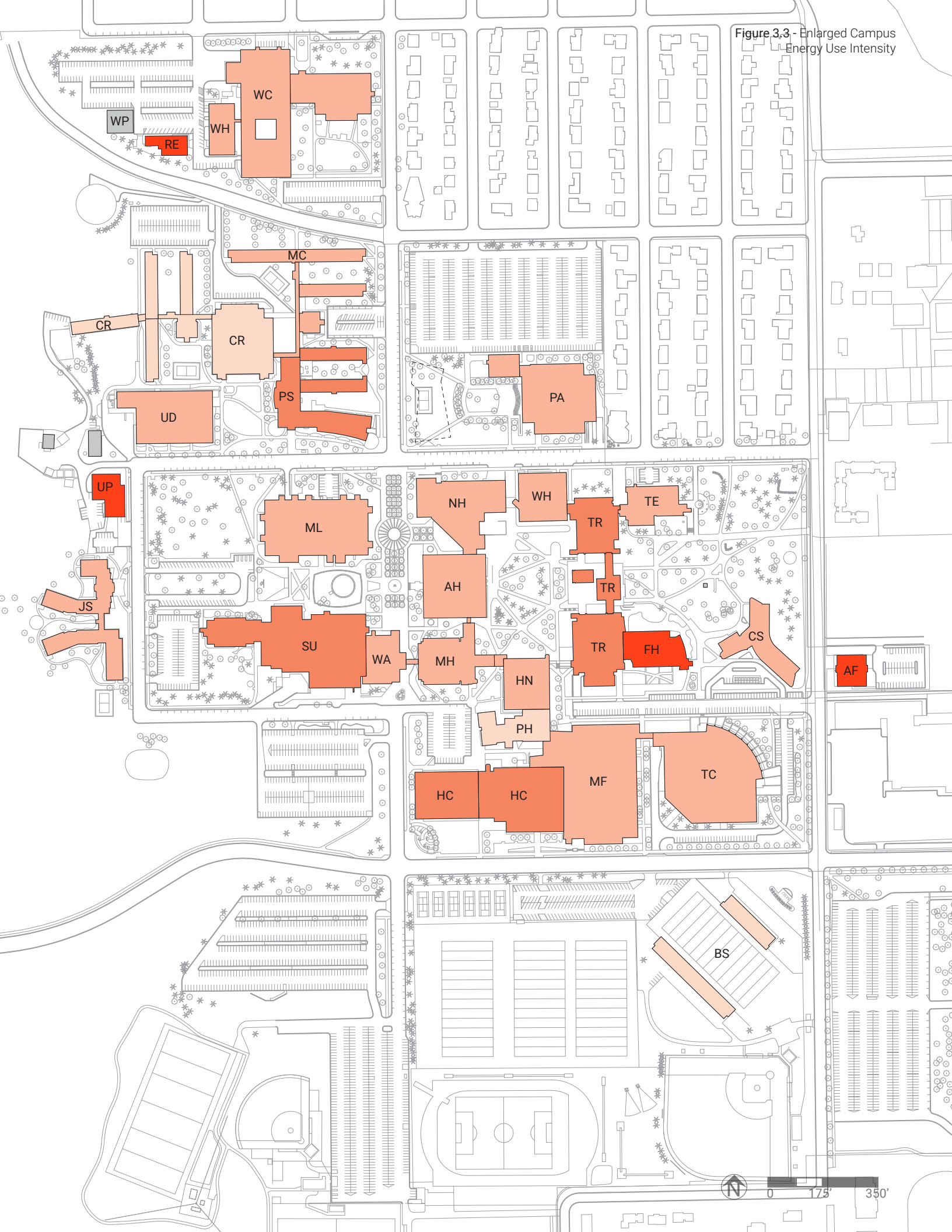
The existing campus utilization is based on the EMS Campus Room Utilization Report run on 8/27/2018 through 12/08/2018 and 8/26/2018 through 5/03/2019. The baseline weekly room hour target was set at 32 hours available. The EMS Report includes room utilization based only on academic purposes, for credit bearing events, or classes where both students and instructors are present. This does not include any room usage for open lab hours where students are required to practice skills, or rooms classified as open or research labs, which can be used for cost generating activities and research. MSU Mankato uses their classrooms for many different uses, so it is not uncommon to find these rooms also utilized for events and meetings.

The majority of general classrooms are operating at Low Utilization, between 70% - 80%. Clinical Sciences Building, and Trafton Science Center - East are operating in Normal ranges, while Center for Performing Arts, Highland Center and Memorial Library are operating at Very Low Utilization rates. This is expected as the majority of their spaces are more specialized, e.g. Theater, Athletics and Study space.

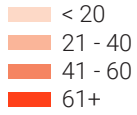
Coming out of the 2017 Campus Space Analysis study, MSU set an aspirational goal to base classroom utilization on a rate of 38 weekly room hours, rather than the standard 32 weekly room hours. This opens up opportunities to alleviate space needs and realign department space. Additional findings include the need to move towards a common bell schedule to align all course start and end times. This allows rooms to be scheduled more efficiently, rather than sitting empty during gaps in class times. While this will have a major impact on utilization, the primary driver for this initiative is to optimize learning spaces and student success. A work group set out in Fall 2018 to develop a common bell framework and proposal, which was adopted in May 2019. It looks at reorganizing courses based on daytime demand and distributing section offerings throughout the day, so as not to limit students' access to courses.

MSU general classrooms average 19 ASF per student, which is less than the standard of 22 ASF per student. This indicates classrooms do not have the amount of space per student station to support contemporary learning modalities and best practices. Active learning classrooms, for example, require more space to allow for flexibility in furniture layout and learning/working styles, than a traditional tablet arm chair. Preliminary space needs analysis has suggested the campus may benefit from additional assembly and exhibit space and informal learning space. This analysis is based off benchmarking other institutions of similar size, and qualities including student make-up, regional context, and components, including research, athletics and residential life.

Figure 3.3 - Enlarged Campus Energy Use Intensity



Enlarged Campus Energy Use Intensity



MSUM ranks 38th out of 39 universities that are reporting data to SB2030 with an overall ranking of two out of five stars. The reason for this is due to high energy use as compared to the benchmark set within SB2030.

| # | Name | Benchmark | Actual (kBtu/SF/yr) | Benchmark (kBtu/SF/yr) | Index Ratio |
|---|----------------------------|-----------|---------------------|------------------------|-------------|
| 1 | MSU Dining Services | ★★★★☆ | 210.81 | 314.49 | 0.67 |
| 2 | Alumni Foundation | ★★★★☆ | 60.46 | 78.59 | 0.77 |
| 3 | MSU Clinical Science | ★★★★☆ | 158.63 | 199.52 | 0.80 |
| 4 | Julia A. Sears Residence H | ★★★★☆ | 72.13 | 84.94 | 0.85 |
| 5 | Ford Hall | ★★★★☆ | 280.43 | 304.33 | 0.92 |
| 6 | Armstrong Hall | ★★★☆☆ | 104.28 | 78.40 | 1.33 |
| 7 | Centennial Student Union | ★☆☆☆☆ | 279.20 | 123.69 | 2.26 |

The dining services building is receiving 4 stars within the B3 rating system as assessed towards its benchmark, but the remaining 6 buildings recorded on the B3 website are bringing the overall star rating down.

| | |
|----------------------------------|-----|
| Alumni Foundation Bldg | 88 |
| Armstrong Hall | 23 |
| Blakeslee Stadium | 17 |
| Centennial Student Union | 50 |
| Center of Renewable Energy | 127 |
| Clinical Sciences Building | 24 |
| Crawford Center | 19 |
| Dining Center | 38 |
| Ford Hall | 89 |
| Highland Center | 47 |
| Highland Center North | 34 |
| Julia A. Sears Res Community | 31 |
| Margaret R. Preska Res Community | 41 |
| McElroy Center | 21 |
| Memorial Library | 32 |
| Memorial Library Addition | 32 |
| Morris Hall | 25 |
| Morris Hall Addition | 33 |
| Myers Field House | 25 |
| Nelson Hall (Mankato) | 34 |
| Nelson Hall Addition | 28 |
| Pennington Hall | 19 |
| Performing Arts | 22 |
| Taylor Center | 25 |
| Trafton East Addition | 35 |
| Trafton Science Bldg | 50 |
| Utility Plant | 169 |
| Wiecking Center | 29 |
| Wigley - Administration | 26 |
| Wissink Hall | 21 |

VALUES - Viewing Architecture through the Lens of User Experience for Sustainability

Top 10 Measures

| Key Performance Indicator (KPI) | Human Health | Resource Conservation | Ecology | Priority (1 to 10) | Design Good Better Best | Promote Educate Engage Empower | Prove Survey Meter Sensor |
|---------------------------------|--------------|-----------------------|---------|--------------------|----------------------------------|---|------------------------------------|
| Energy Consumption | | | | 70 | Better | Engage, Empower | Meter, Sensor |
| Air Quality | | | | 55 | | Educate | Sensor |
| Renewable Energy | | | | 54 | Better | Educate | Survey |
| Stormwater Management | | | | 50 | Best | Educate | |
| Water Consumption | | | | 50 | Best | Educate, Empower | Sensor |
| Waste Management | | | | 45 | | Educate, Empower | Sensor |
| Thermal Comfort | | | | 39 | | Educate | |
| Lighting Control | | | | 34 | Good | Empower | Survey |
| Daylight | | | | 32 | Better | Educate, Engage | |

Figure 3.4 - Top 10 measures within the VALUE worksheet; This is a list of strategies MSUM concluded with towards the end of a workshop.

| | |
|--|---|
| LED Lighting Upgrades | The end result provided a more open and brighter space. Improved night-time visibility and safety |
| Control Upgrades (Library VFDs & Economizer Programming) | Pump Speed Reduction = Energy Savings |
| Boiler #4 Control Upgrades | Removed unsupported, outdated controls with latest technology |
| Central Boiler Plant Improvements | Improved Feedwater and Deaerator Controls |
| Belimo Energy Valves | Precise Control of Chilled Water to "Free-Up" Chiller Capacity |
| Chiller #2 VFD | Precise and clean installation, Chiller Modulation for Improved Performance |

Figure 3.5 - Current sustainability initiatives

Sustainability Initiatives

Minnesota State University has a number of active sustainability initiatives, summarized on the website and listed below. This listing summarizes initiatives that the campus has already taken advantage of and implemented or completed in the past.

- Carbon Footprint
- Climate Action Plan
- Guaranteed Energy Savings Program (GESP)
- Campus Master Plan
- Natural Resource Management - Learning Community
- Electric Vehicle Charging
- Commute Survey - Spring of each Semester
- Green Transportation Fee
- B3 Benchmarking
- RecycleMania
- Bee Friendly Campus
- Environmental Committee Charter (PDF)
- Campus of the Future

The most impactful of which is the GESP which will reduce greenhouse gas emissions reduction in CO₂ by 84,280 Metric tons. To do so, the campus will perform the following upgrades. Note that the campus is five years into this plan, and further data on the success so far from this will be included in future revisions of this report.

Most recently, MSU is reporting a 14% reduction in their carbon footprint project.

Future initiatives include solar photovoltaic installations and continued upgrades to the central utility plant to reduce energy consumption and cost.

The priorities identified in VALUES strongly aligns with SB2030 and the B3 requirements.

Values

One of the focus group sessions revolved around Sustainability on campus - what it means to MSU and how low-cost / no-cost measures can be incorporated into the CFP. The VALUES worksheet is a list of 20+ Key Performance Indicators, grouped into three overarching categories of Human Health, Resource Conservation, and Ecology. The focus group filled each of these worksheets out independently, ranking KPI's in order of priority to MSU. The top 10 measures featured in Figure 3.5 provide a glimpse into defining what sustainability means to MSU.

It became apparent that sustainability efforts should be focused on Resource Conservation, creating and maintaining energy efficient buildings. Also of interest was optimizing buildings in terms of Energy Consumption, investing in Renewables (PV), and an interest in Stormwater Management.

Because most of campus is linked together, it is more difficult to quickly evaluate the performance of each building. A potential way to improve energy consumption might be to make the energy

performance information more granular, so that the energy efficiency data can be understood at a building level, rather than campus level. Installing individual meters and creating simple feedback loops to can ensure buildings are operating effectively. Though this is not a requirement of B3, asking design teams to investigate this early in the design process may not carry a huge cost premium, while being quite impactful.

The other part of the VALUES worksheet sets a scale on how design decisions get made; is the approach good, better or best? Promote focuses on how the design is translated and shared with occupants. This could be through educational placards, to calls to action, to instructions on how to engage with the buildings. The Prove column deals with the granularity of the data and on reporting these metrics back. Sensors or meters can measure data in incremental time periods, at different frequencies, whether it is on a daily basis, monthly or yearly.

B3 vs Values

B3 requirements are organized by the following categories: Sustainable Sites, Water Efficiency, Energy & Atmosphere, Material & Resources, Indoor Environmental Quality. This is a one size fits all standard with prerequisite sustainable strategies that are required by all, in addition to a list of optional strategies that are sustainable design and operation best practices that anyone can select to apply if they so wish.

VALUES features all of the recommendations in the B3 recommended list but also takes inspiration from other sustainability standards such as LEED, WELL, Green Globes, Living Building Challenge, RESET, Energy Star and more. The high level priorities identified in the VALUES charrette will guide the VALUES strategy list based on the points given to each category.

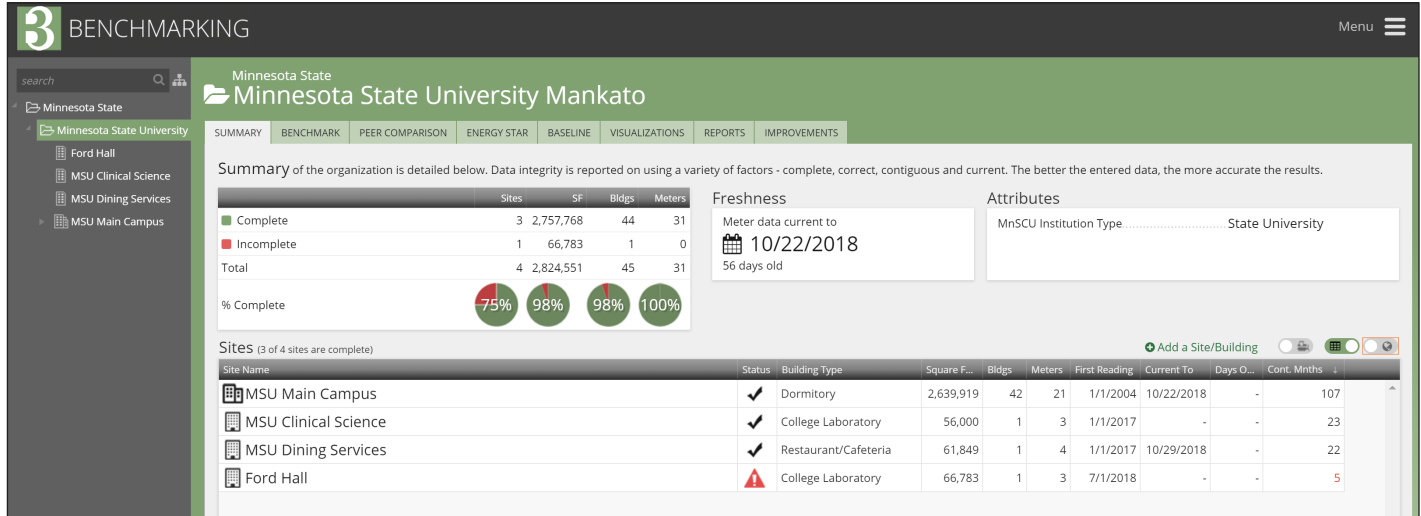


Figure 3.6 - Projects on the B3 benchmarking website

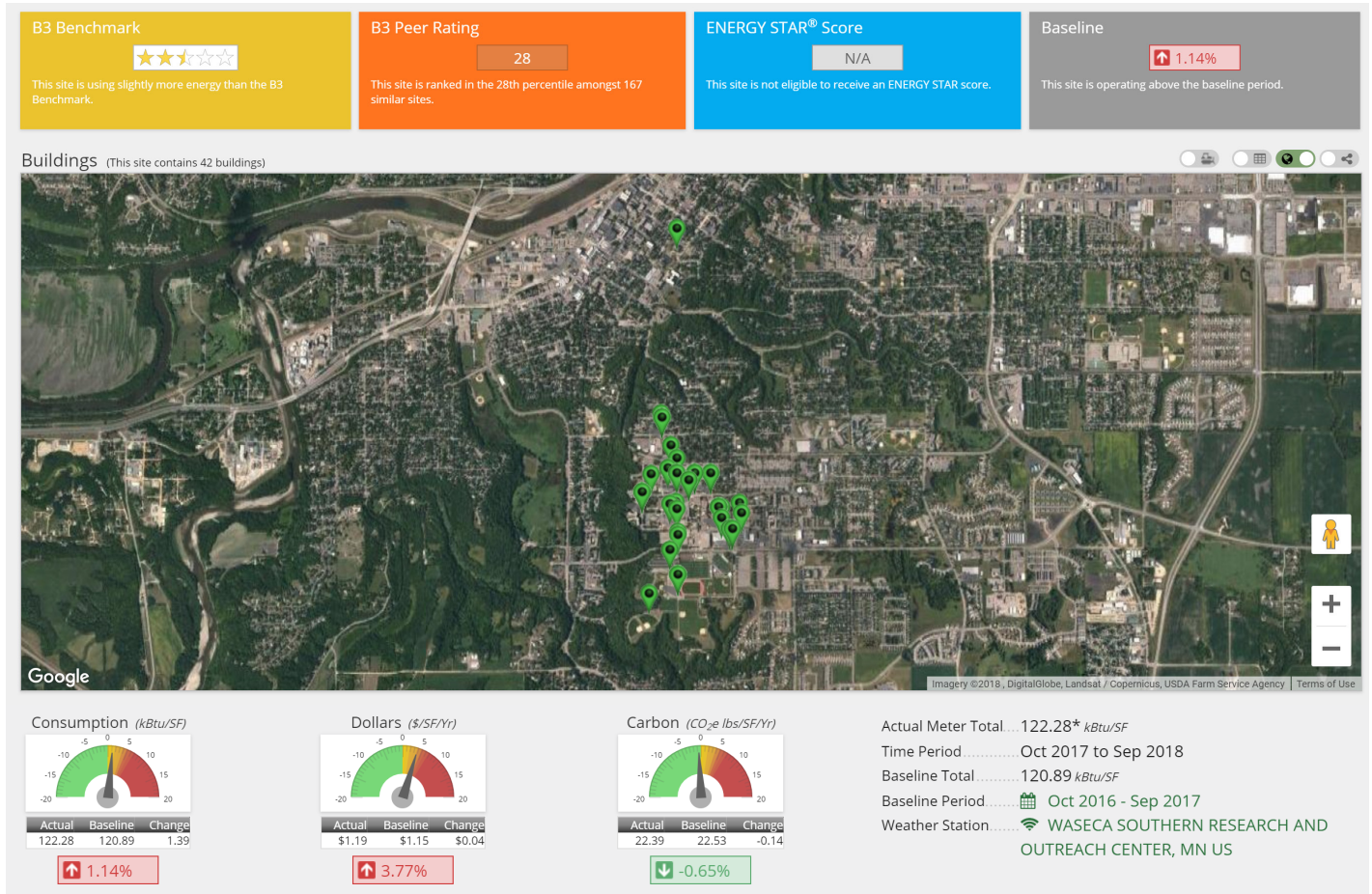


Figure 3.7 - Buildings on the B3 benchmarking website

B3 Benchmarking

The B3 Guidelines are required on all design and renovation projects that receive general obligation bond funding from the State of Minnesota. The guidelines can also be used on a voluntary basis on any project. By using the B3 Guidelines, projects will automatically be applying the SB 2030 Energy Standard, which aligns with the AIA architecture 2030 goal of achieving carbon neutrality of new buildings by 2030. After design, during the building occupancy period, the building can also use the B3 Benchmarking tool to track and compare actual energy use and the B3 Post Occupancy Evaluation (POE) to survey occupants on the indoor environmental quality of the building.

MSU Makato is currently reporting its energy consumption in the B3 benchmarking tool.

Minnesota State University has four separate projects on the B3 benchmarking website:

1. MSU Campus Main Campus
 - B3 Rating - 28th percentile
2. MSU Clinical Sciences
 - B3 Rating – 76th percentile
3. MSU Dining Services
 - B3 Rating – 3rd percentile
4. Ford Hall
 - NA for rating as only 5 months of benchmark data to date

Focusing on the MSU Campus, the benchmark data includes 42 buildings on the B3 Benchmarking Website with 21 meters. Each building is not broken out individually so the following paragraphs will discuss the campus as a whole – a key recommendation moving forward would be to start including submetering per building in any building renovation so that building performance can be benchmarked more effectively. This will also help decouple scheduling and operational issues from central plan energy optimization opportunities.

The campus actual energy consumption rate is 122 kBtu/SF, which is 1.14% more than the baseline consumption of 120 kBtu/SF. While MSU's consumption is more than the baseline, their carbon emissions are 0.65% less than the baseline due to their fuel mix of Chilled Water, Steam, Natural Gas and Electricity.

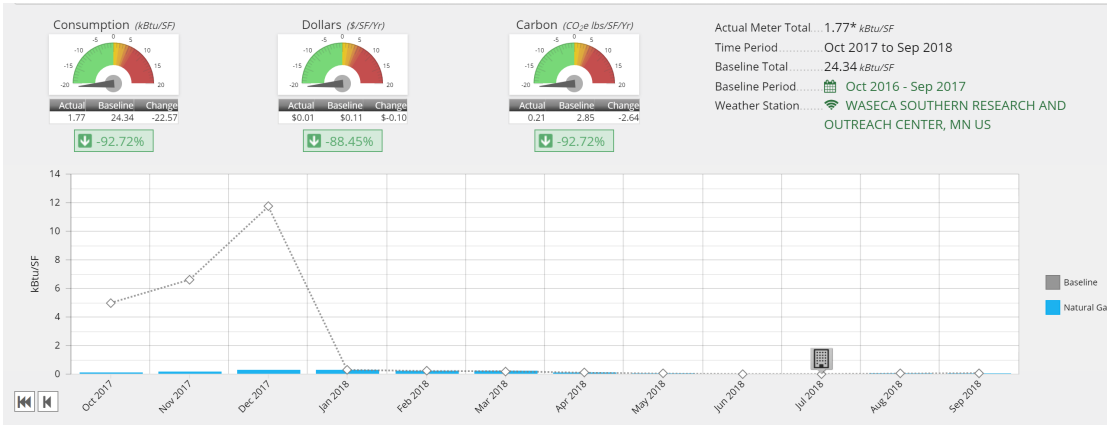


Figure 3.8 - Campus Natural Gas Consumption

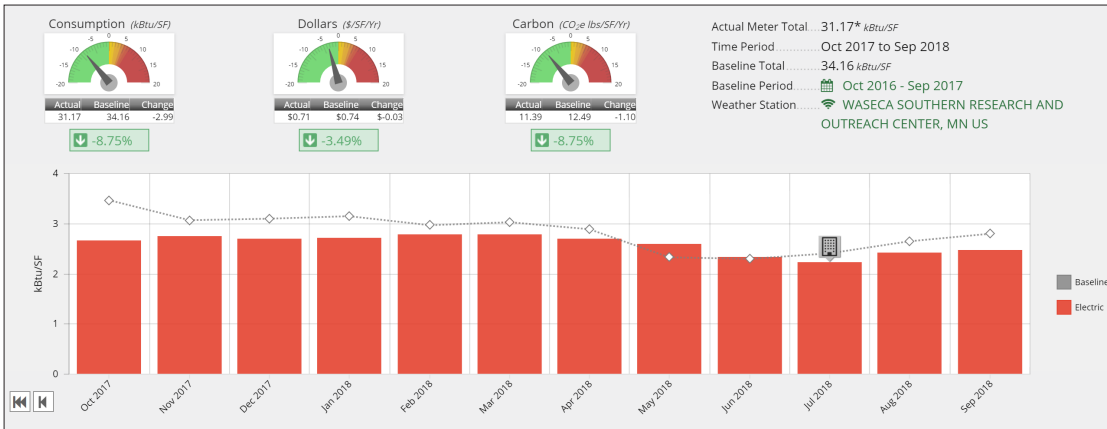


Figure 3.9 - Campus Electrical Consumption

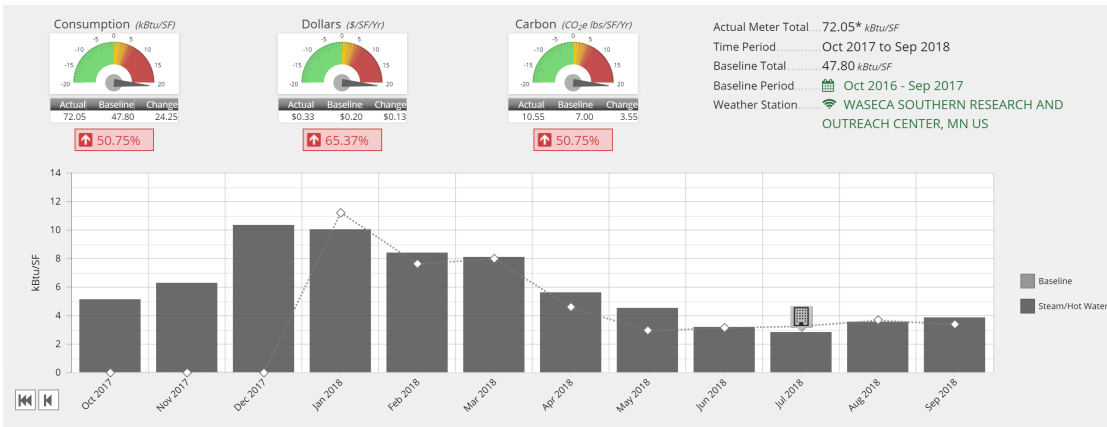


Figure 3.10 - Campus Steam Consumption

Energy Consumption

The campus uses slightly more than the benchmark indicated by the yellow trend line in Figure 3.11, which can be attributed mainly to the steam and chilled water consumption. Comparing to the baseline this is really because the baseline does not have a central plant and instead uses more electricity and natural gas, which can be seen in the following usage comparisons by fuel type.

Energy consumption impact of the GESB has shown calculated savings from Xcel Energy of 5,346,992 kWh (17.9% drop) for \$423,508.50 savings on the utility bills. It is difficult to see the impact on a year over year basis on the utility meters as two new buildings were under construction during the campus wide energy retrofit installations.

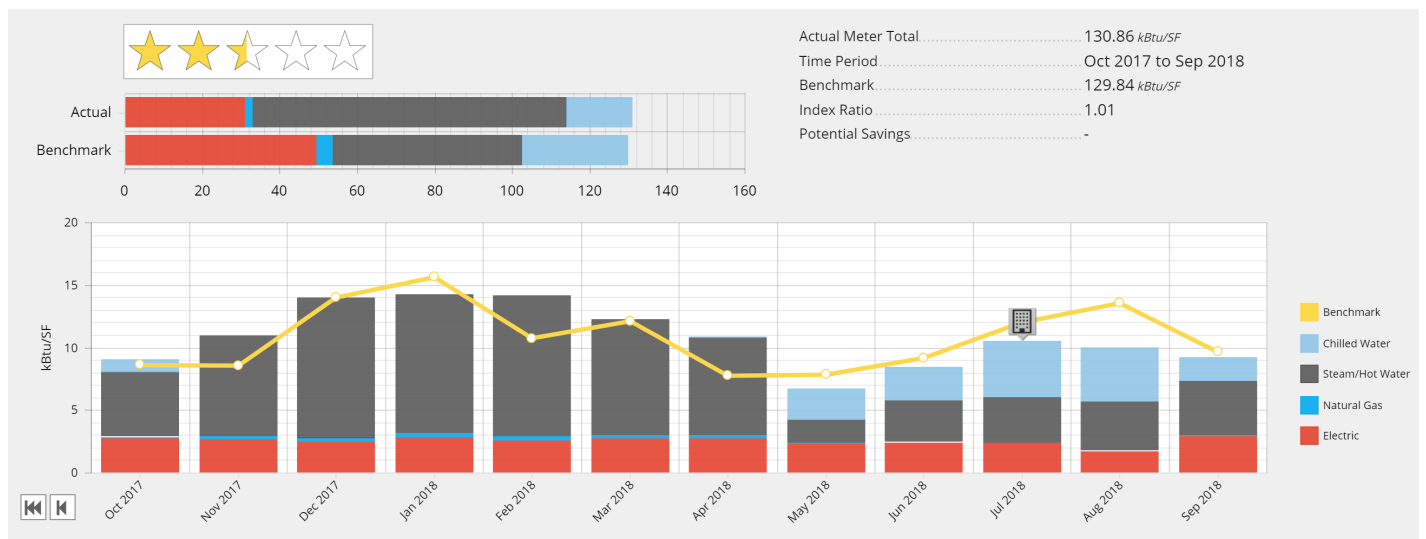


Figure 3.11 - Overall Energy Consumption

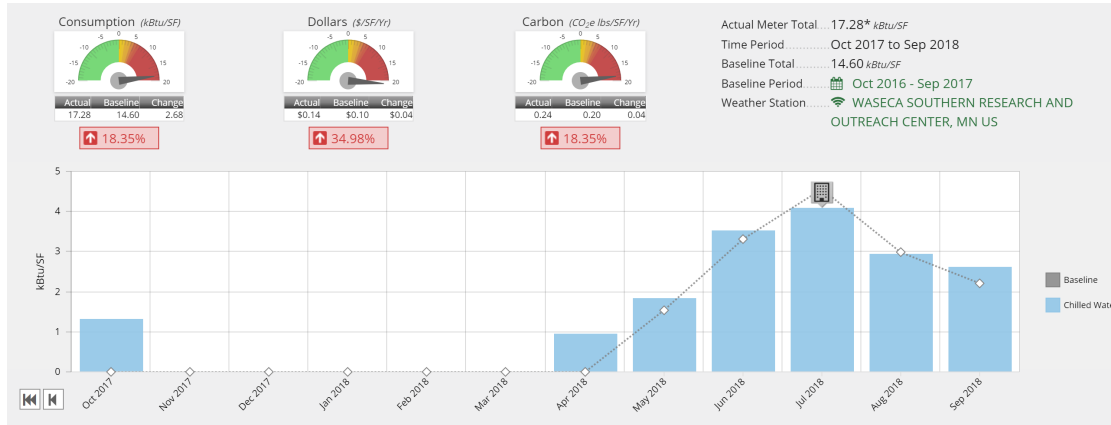


Figure 3.12 - Chilled Water Consumption

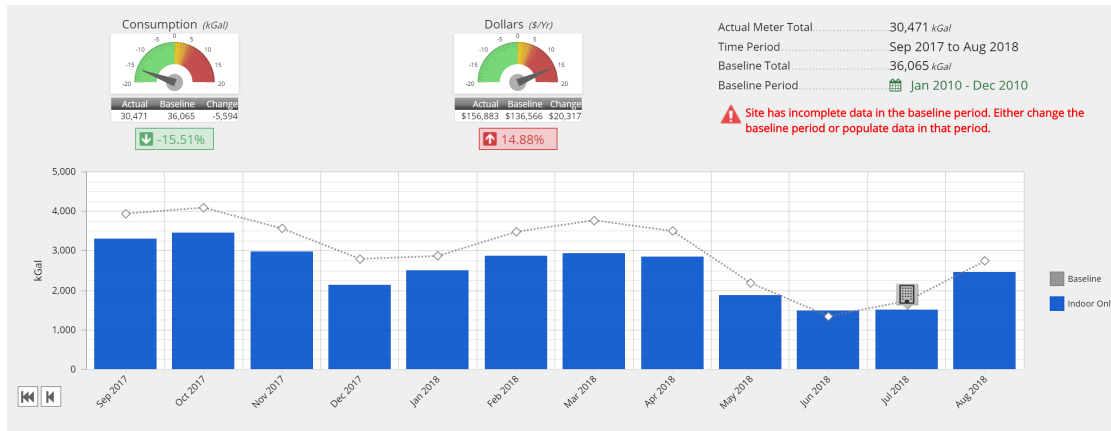


Figure 3.13 - Indoor Water Consumption

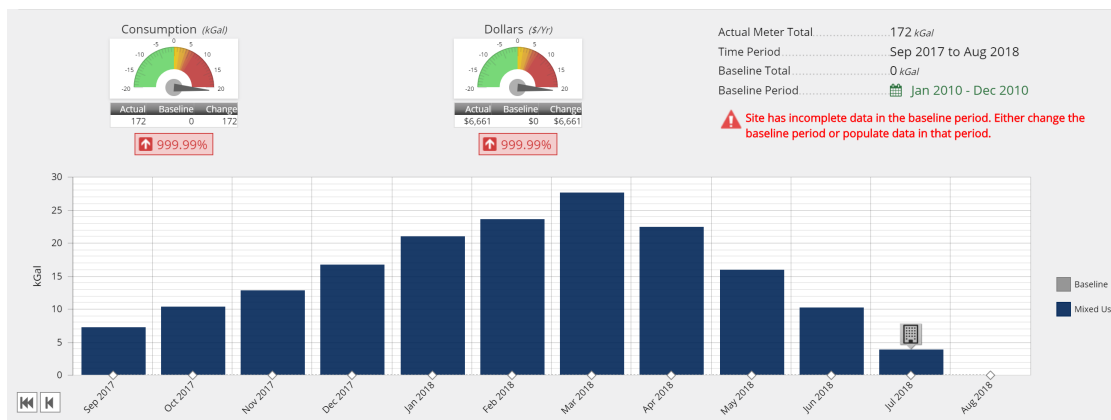


Figure 3.14 - Mixed Use Water Consumption

Water Consumption

The university benchmarks water consumption, again over 42 buildings and 76 meters. Submeters were added in May 2016 and the GESP completed in June 2017 impacted consumption. Water consumption is not broken out by building but instead by end use:

- Total
- Mixed Use
- Indoor
- Sanitary
- Irrigation
- Other

Overall the campus used 1.45% more water than the benchmark but is spending 88.67% more money on water than the benchmark. MSU Mankato did not pursue water reduction projects in the GESP due to previous projects and renovations completed to reduce water consumption where appropriate. Note that a large portion of our water consumption is irrigation to maintain the large number of campus athletic and recreation fields. Water use for these areas is weather dependent and fluctuates.

Benchmark Comparison

There is no benchmark for 'mixed use' water consumption so the campus has nothing to compare to here. Indoor water consumption is 15% better than the benchmark, sanitary is nearly 4% better than the benchmark and 'other' is 21% better than the benchmark. Irrigation is consuming 125% more than the benchmark. Overall there is the most opportunity for reduction in the 'Mixed Use and 'Irrigation' categories. Considering the increased cost for water in the campus, it will be recommended to focus on these opportunities in more detail.

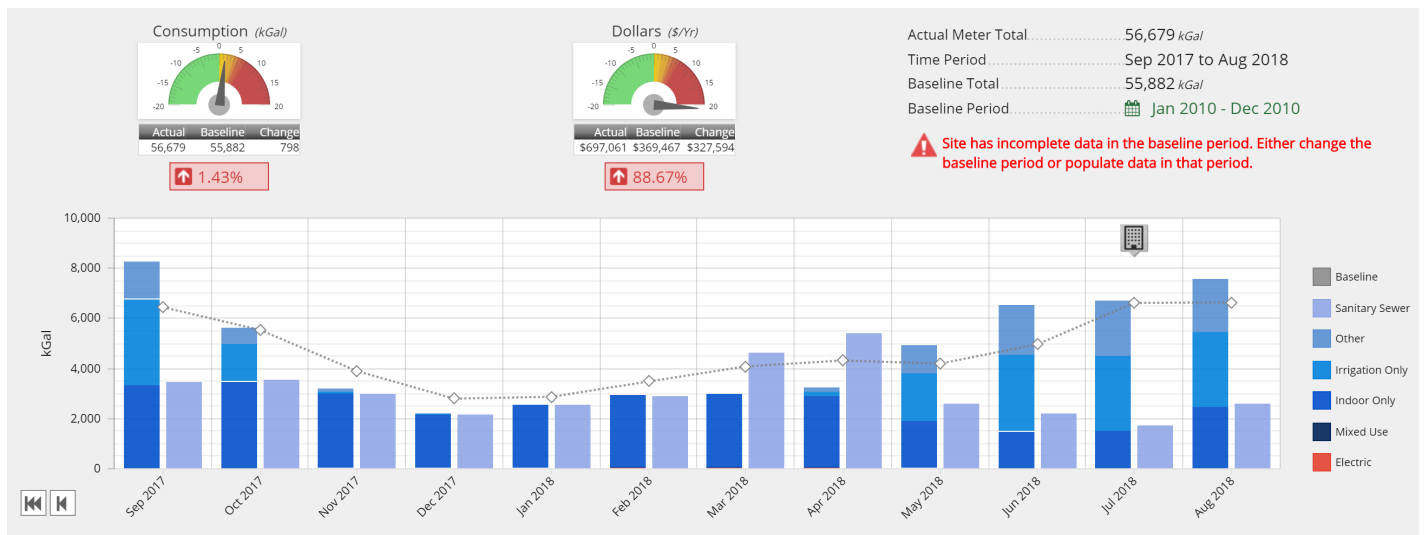


Figure 3.15 - Overall Water Consumption

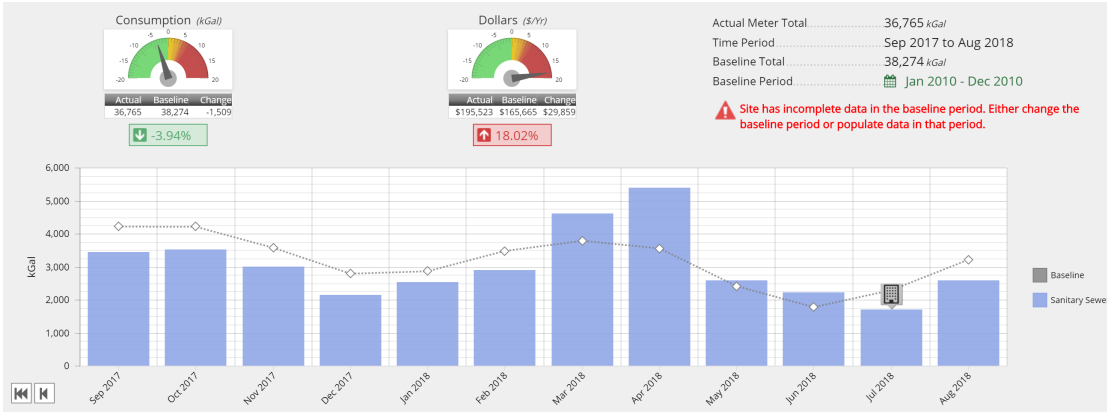


Figure 3.16 - Sanitary Sewer Water Consumption

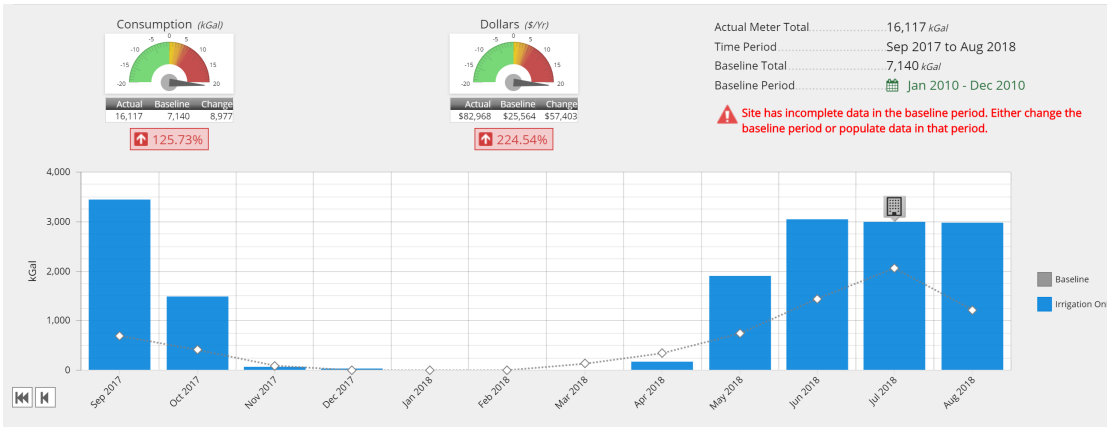


Figure 3.17 - Irrigation Use Water Consumption

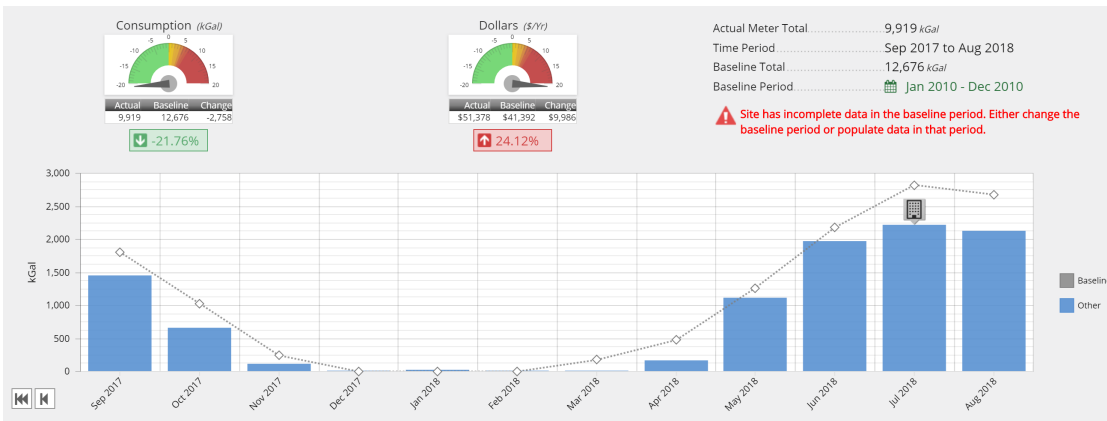
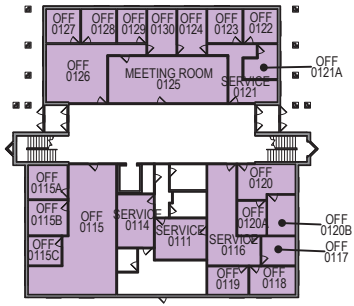


Table 3.18 - Other Water Consumption

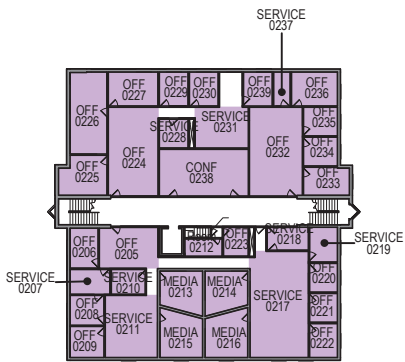
Water Consumption

(continued)

Department Space Use



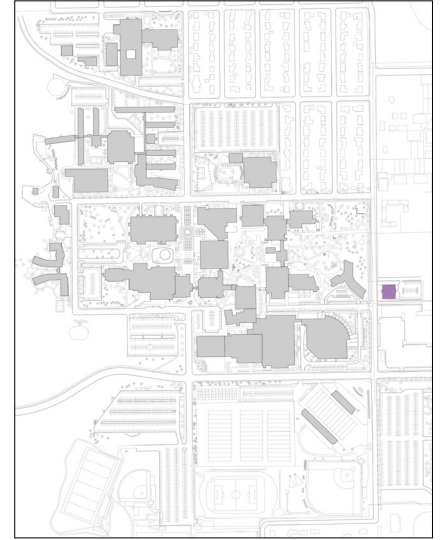
ALUMNI FOUNDATION CENTER LEVEL 1



ALUMNI FOUNDATION CENTER LEVEL 2



Alumni Foundation Center



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 17,400 |
| Year Built | 1989 |
| Number of Levels | 2 |
| Backlog | \$0 |
| CRV | \$6,448,000 |
| Facility Condition (FCI) | 0.00 |
| 5-year renewal forecast | \$910,000 |
| Roof Type | MnSCU Standard |

Overview

Houses University Advancement, Alumni Affairs, Development, KMSU-FM, Advancement Information System (ADIS), and the MSU News Service, as well as the College of Graduate Studies and Research. The building was constructed by the MSU Foundation for lease to Minnesota State University, Mankato.

Building Conditions

Recent Renewals:

- Elevators updated for code compliance in 2010
- Rooftop AHU's replaced in 2009
- New transformer and feed from campus in 2008
- Roofing renewal in 2007

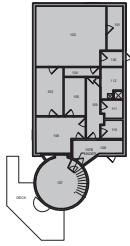
Upcoming renovations needed include interior finishes, exterior finishes, and new plumbing fixtures.

No future implementation plans for this building.

- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library



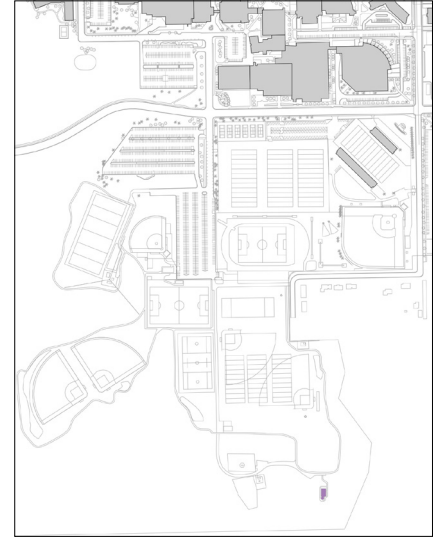
Department Space Use



ANDREAS OBSERVATORY



Andreas Observatory



| BUILDING SUMMARY | |
|--------------------------|---------------------------|
| Gross SF | 1,863 |
| Year Built | 1990 |
| Number of Levels | 1 |
| Backlog | \$0 |
| CRV | \$690,000 |
| Facility Condition (FCI) | 0.00 |
| 5-year renewal forecast | \$240,000 |
| Roof Type | Built-up, Membrane, Cedar |

Overview

Andreas Observatory is located on the southern edge of the MSU campus approximately 550 yards beyond the Lot #1 gate and 150 yards east of Standeford Observatory. It is home to several telescopes, instrumentation, including cameras, spectrometer, photographic cameras and photometers. The main telescope is housed in an 18.5' Ash Dome that includes a control room, presentation room, work room and storage areas. Andreas Observatory is open for monthly open houses and public viewing sessions and events.

Building Conditions

Recent Renewals:

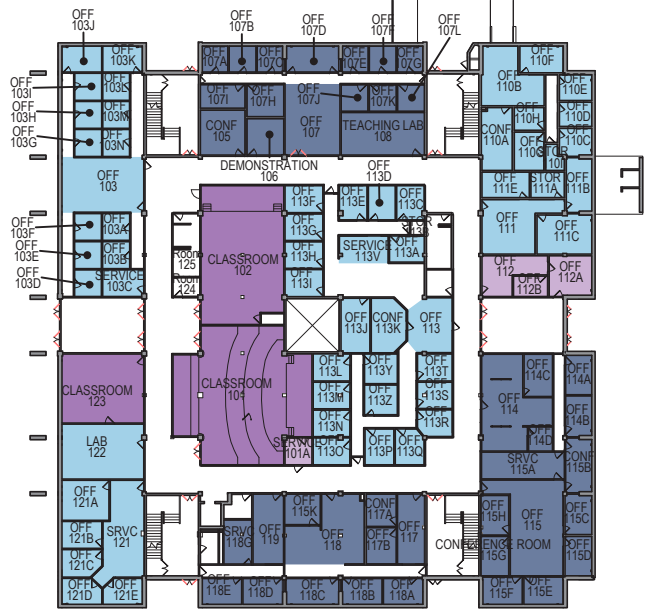
- received a new furnace in 2006
- upgraded fire detection systems in 2004
- Interior finishes renewal in 2006

Upcoming renovations/ renewal needed includes re-roofing and interior finishes.

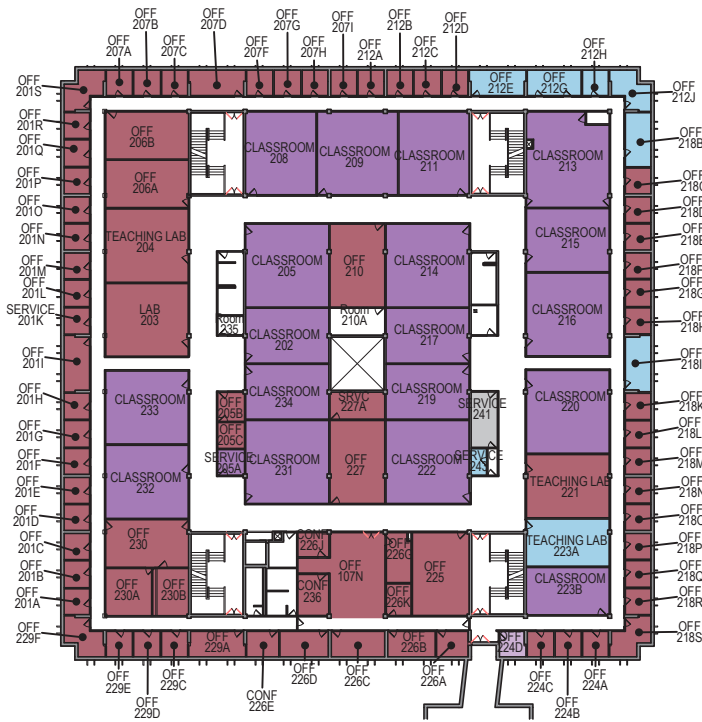
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library



Department Space Use

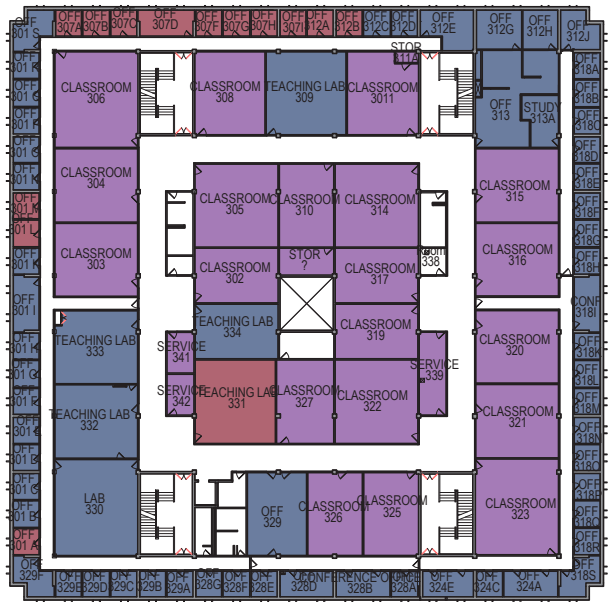


ARMSTRONG HALL LEVEL 0



ARMSTRONG HALL LEVEL 2

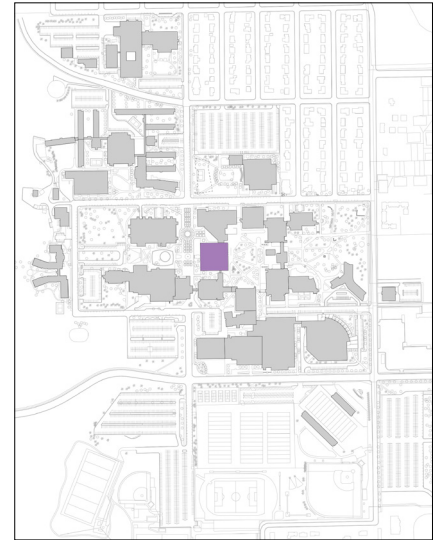
ARMSTRONG HALL LEVEL 1



ARMSTRONG HALL LEVEL 3



Armstrong Hall



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 143,966 |
| Year Built | 1964 |
| Number of Levels | 4 |
| Backlog | \$24,691,000 |
| CRV | \$53,351,000 |
| Facility Condition (FCI) | 0.46 |
| 5-year renewal forecast | \$27,358,000 |
| Roof Type | Built-up/Memb. |

Overview

At its time of construction, Armstrong Hall was called English-Education Building. It currently houses various classrooms and offices of the Colleges of Arts and Humanities, the College of Education, and the College of Social and Behavioral Sciences.

Building Conditions

Recent Renewals:

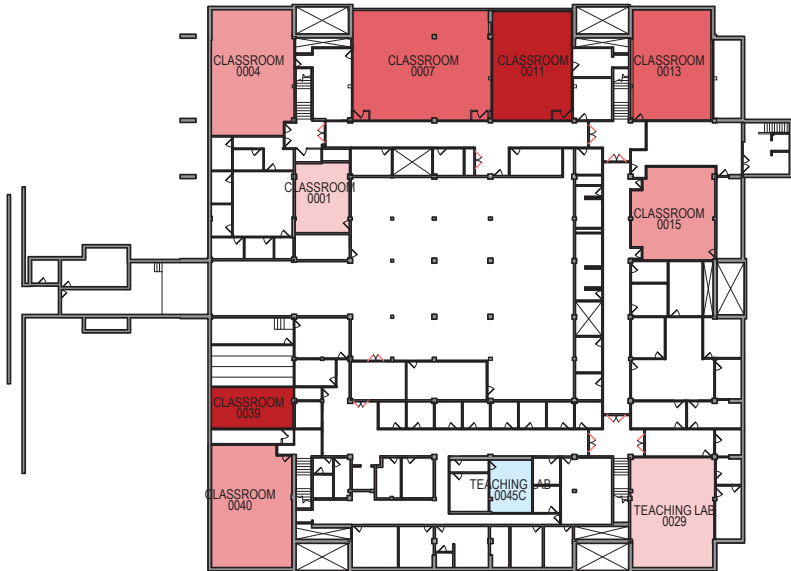
- Upgraded FX controls in 2014
- Ductwork cleaning and sealing, some new VAV boxes, chilled water coils will provide a 6 to 10 year window to modify other VAV and duct work and AHU upgrades; completed in 2010
- Added new markerboards / chalkboards between 2007 and 2010
- Replaced stone window frames, reinstalled and anchored selected stone areas of building, selected tuck pointing and caulking; complete in 2009

Armstrong Hall has the highest backlog on campus, accounting for 30% of the total campus backlog. A number of systems are due for immediate renewal / replacement including roofing, exterior facade, windows and doors, HVAC upgrades, electrical, plumbing, built-in equipment, and interior finishes. Armstrong has undergone several predesigns to determine what the best course of action is for an aging facility that no longer functionally meets the demands of today's modern learning environments.

- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
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- College of Science, Engineering & Technology
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- General Classroom
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- Athletics & Recreation
- Residential Life & Student Life
- Library

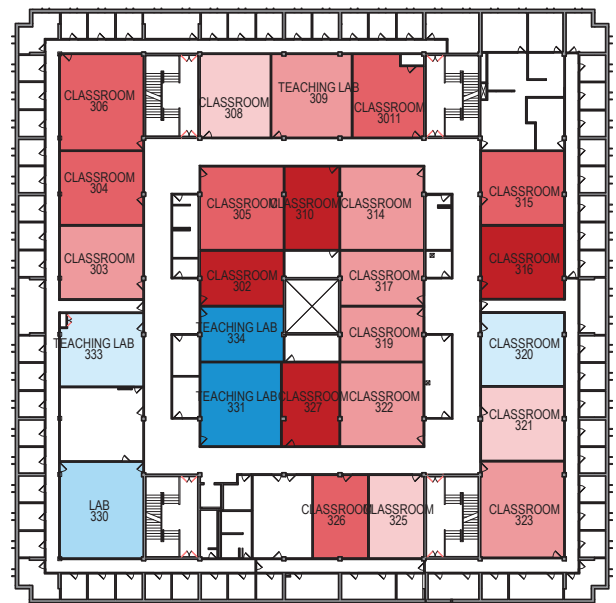
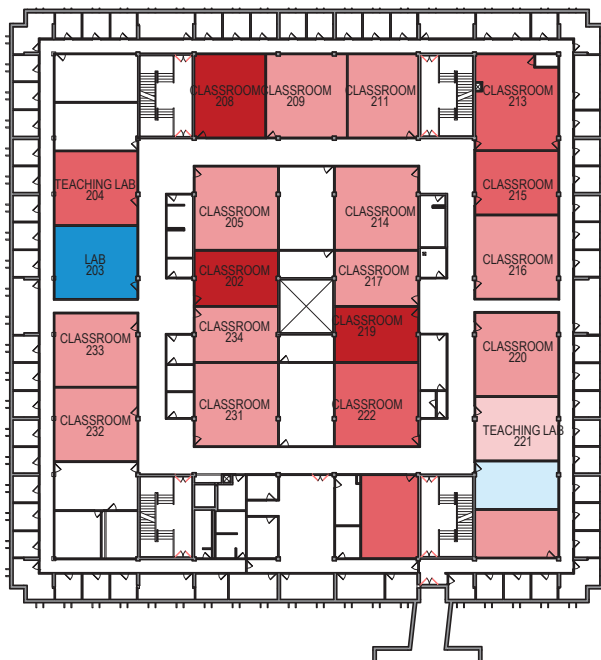


Space Utilization Summary



ARMSTRONG HALL LEVEL 0

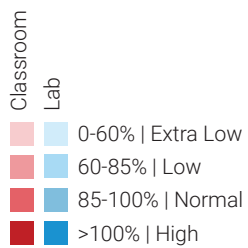
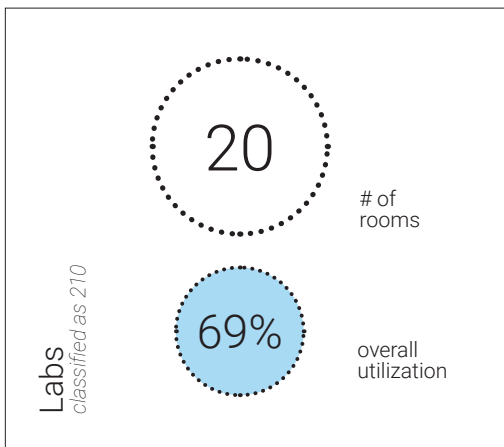
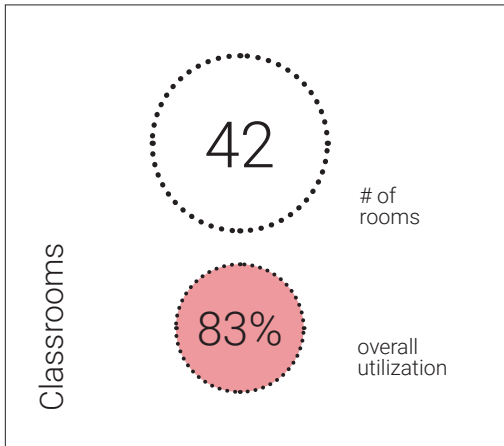
ARMSTRONG HALL LEVEL 1



ARMSTRONG HALL LEVEL 2

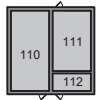
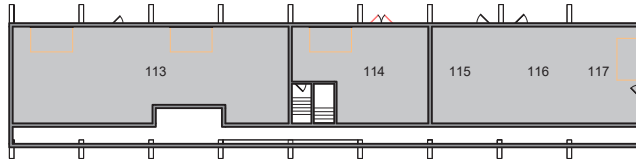
ARMSTRONG HALL LEVEL 3

Armstrong Hall

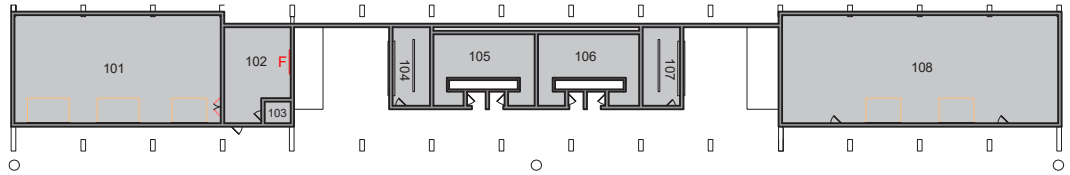
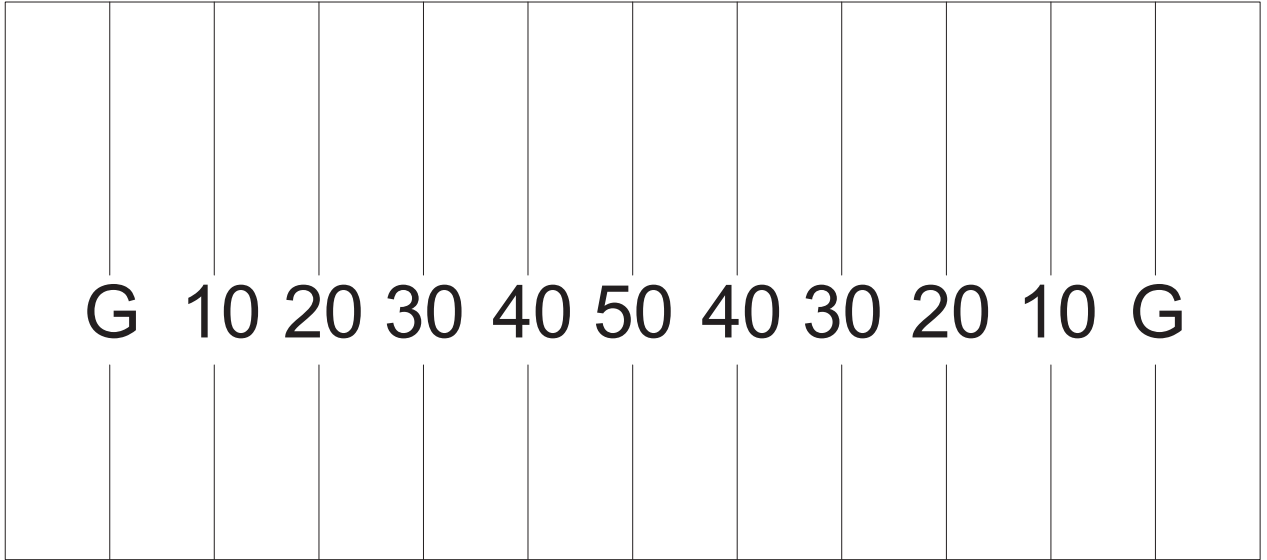


Department Space Use

EAST SIDE



TICKET BOOTH

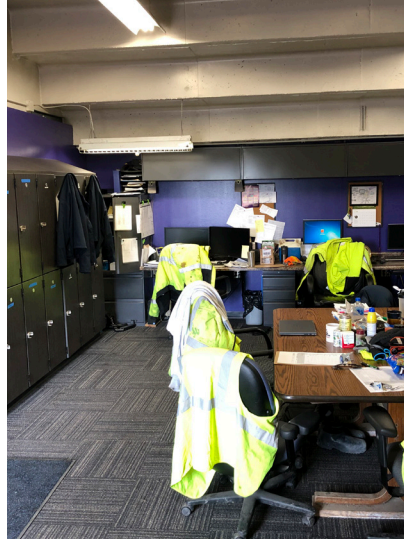


WEST SIDE

BLAKESLEE STADIUM LEVEL 1



Blakeslee Stadium



| BUILDING SUMMARY | |
|--------------------------|-------------------------------------|
| Gross SF | 19,443 |
| Year Built | 1963 |
| Number of Levels | 2 |
| Backlog | \$2,993,000 |
| CRV | \$7,205,000 |
| Facility Condition (FCI) | 0.42 |
| 5-year renewal forecast | \$3,540,000 |
| Roof Type | Metal/Concrete (stadium seating) |

Overview

Blakeslee Stadium has 7,000 seats (6,000 permanent + 1500 portable), excellent sightlines and natural grass field.

Building Conditions

Recent Renewals:

- new garage doors on west side in 2009
- electrical panel upgrades in 2007

Upcoming renovations/ renewals needed include exterior facade repair, bleacher replacement, built-in equipment and plumbing fixtures.

Blakeslee Stadium has a number of code non-compliance issues pertaining to egress requirements from the bleacher stadium, lack of handrails at aisles, and non-accessible wheelchair spaces in the ADA seating area. Press boxes are in poor condition and do not meet ADA requirements.

The stadium facility has recently experienced some structural deterioration and has been reinforced for the interim as discussions around its future are held.

Unclear entry points and ticket windows create a lackluster sense of arrival and game day experience for visitors and fans. Support facilities such as concessions and restrooms are undersized for the number of spectators being served.

Electrical service capacity is inadequate for the facility, resulting in the unsafe use of extension cords.

The grass field can be difficult to maintain, and is sufficient for limited game day use.

- Administration
- College of Allied Health & Nursing
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- Athletics & Recreation
- Residential Life & Student Life
- Library

0.42
FCI

Centennial Student Union



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 209,638 |
| Year Built | 1967 |
| Number of Levels | 3 |
| Backlog | \$2,048,000 |
| CRV | \$77,688,000 |
| Facility Condition (FCI) | 0.03 |
| 5-year renewal forecast | \$4,114,000 |
| Roof Type | MnSCU Standard |

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- Library

0.03
FCI

Overview

CSU is home to a multitude of student services, student activities, dining, campus bookstore, computer store, Maverick Bullpen, conference rooms and offices. It has undergone a number of renovations since its construction in 1967, occurring in phases and funded by student activity fees.

Building Conditions

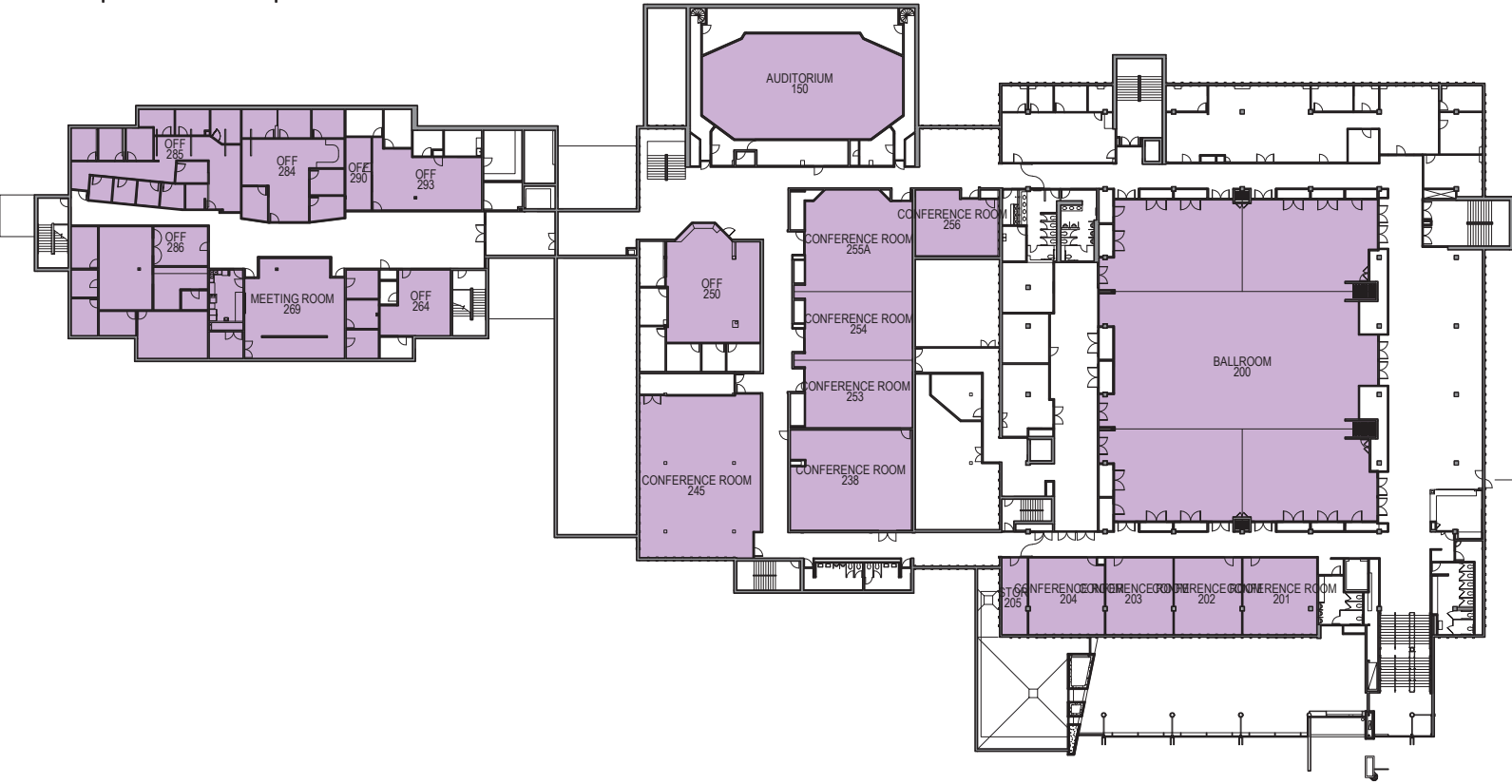
Recent Renewals:

- Reroofed ballroom in 2011
- HVAC remodel unit #23 in 2016
- Phase 3 HVAC remodel in 2015
- Existing North Elevator upgrade in 2014
- HVAC FX controls upgrade/replacement in 2014
- Interior finishes and built-in equipment in various conference rooms

Items in CSU's backlog include the renewal of exterior finishes, HVAC controls, plumbing rough-in and fixtures and interior finishes.

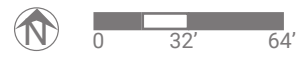
The most recent renovation in 2006 put a new southern facade on CSU, creating a welcoming atrium for visitors and students, that floods the interior space with natural daylight. This building is a favorite of students who cite the many ways they use the facility, from socializing, eating, getting involved in student activities and organizations, studying in groups or alone, relaxing and playing.

Department Space Use

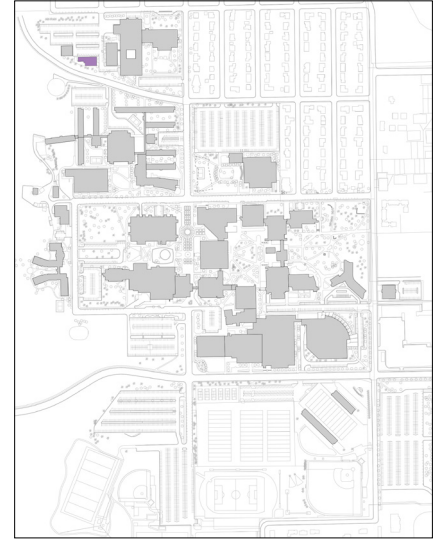


CENTENNIAL STUDENT UNION LEVEL 2

- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life



Center of Renewable Energy (CORE)



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 7,585 |
| Year Built | 2010 |
| Number of Levels | 1 |
| Backlog | \$0 |
| CRV | \$3,922,000 |
| Facility Condition (FCI) | 0.00 |
| 5-year renewal forecast | \$0 |
| Roof Type | Built-up/Memb. |

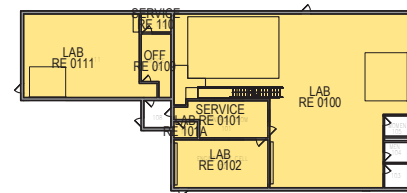
Overview

The Center of Renewable Energy conducts research in the area of emissions testing and biofuel. This facility is home to the Emissions Lab and International Renewal Energy Technology Institute (IRETI). Contributions from local and state organizations helped fund this project.

Building Conditions

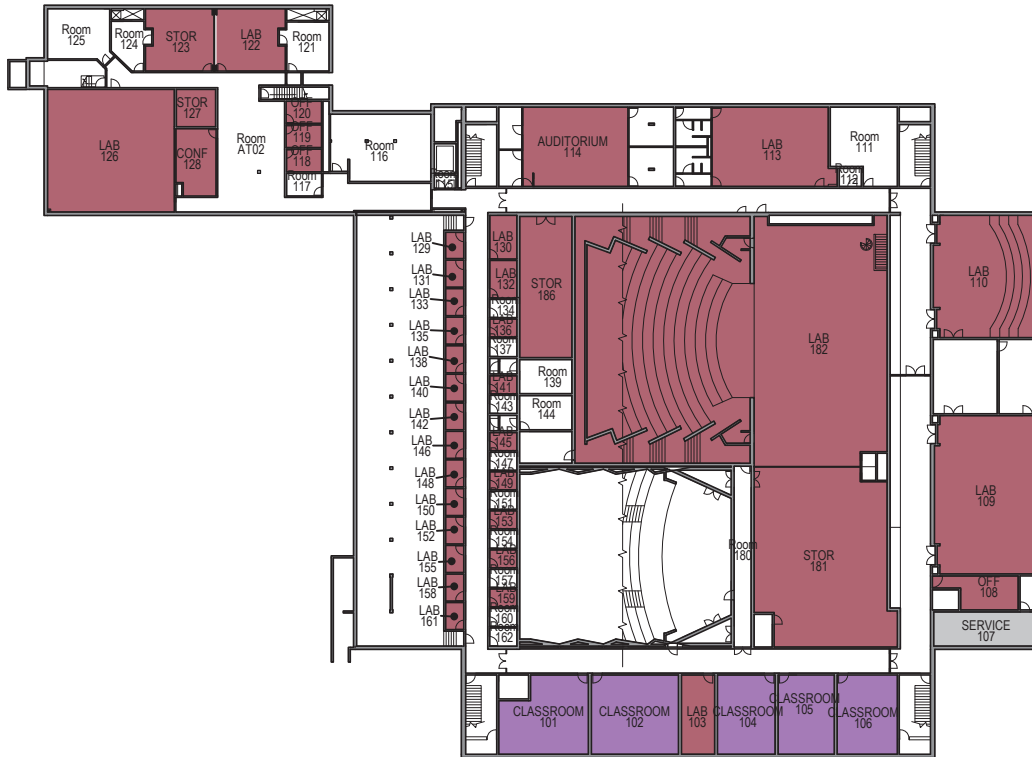
This building is in excellent condition. Sub-systems are slated for replacement starting in 2025 (interior finishes) to 2060 (HVAC and plumbing).

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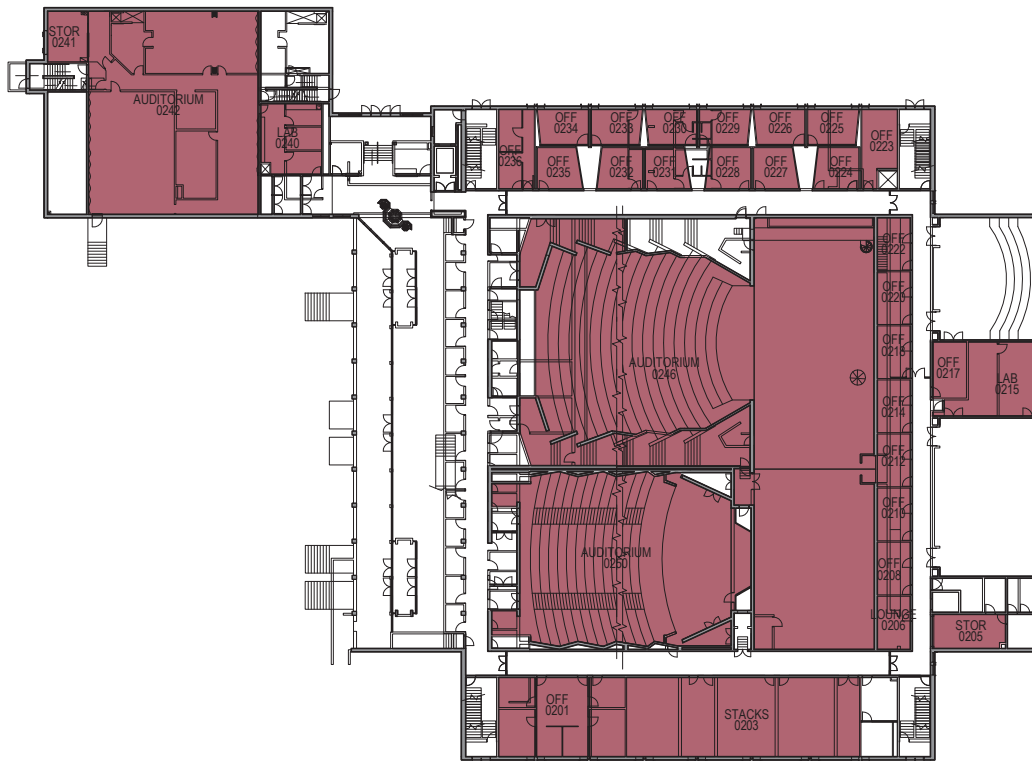


CORE LEVEL 1

Department Space Use



CENTER FOR PERFORMING ARTS LEVEL 0



CENTER FOR PERFORMING ARTS LEVEL 1

Center for Performing Arts



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 87,887 |
| Year Built | 1967 |
| Number of Levels | 3 |
| Backlog | \$8,545,000 |
| CRV | \$32,570,000 |
| Facility Condition (FCI) | 0.26 |
| 5-year renewal forecast | \$9,620,000 |
| Roof Type | MnSCU Standard |

Overview

The building serves the disciplines of theater, music and communication studies. The building houses two large performance venues, the Ted Paul Theater which seats 529 and Elias J. Halling Recital Hall, which seats 350. It also houses scene and costume shops, band and choir rooms, music library, and various studios, classrooms, practice rooms, and related offices.

Building Conditions

Recent Renewals:

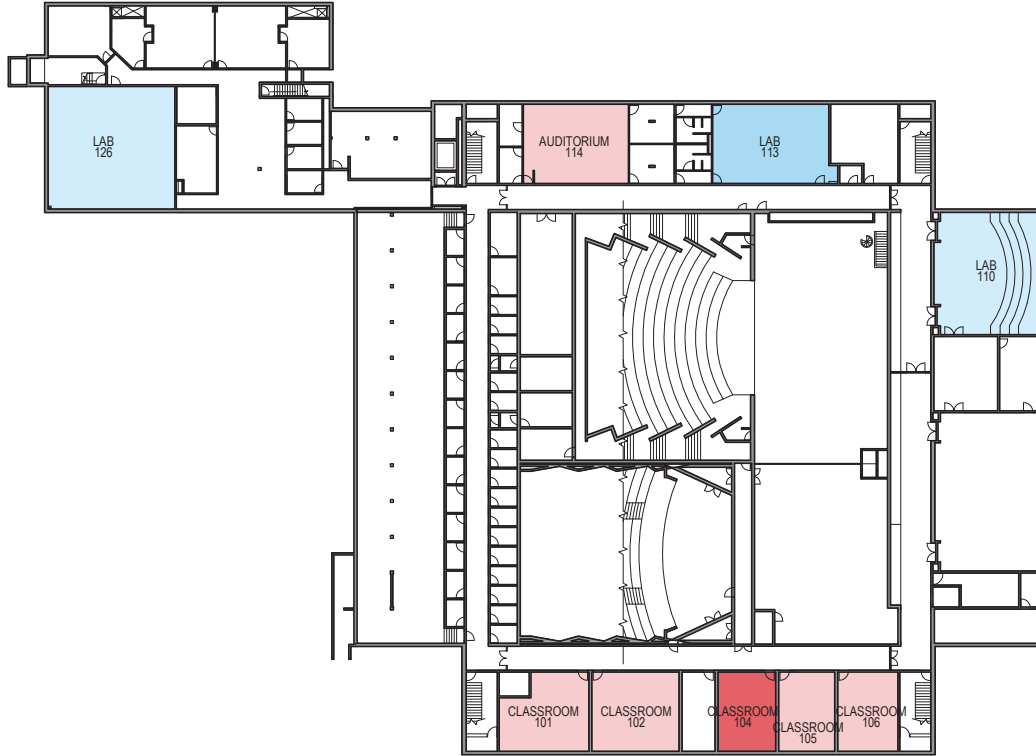
- Replaced main transformer in 2016
- Reconstructed stone fascia and columns in 2014
- HVAC FX controls in 2014
- Replaced switchgear in 2011

Immediate needs are the replacement of HVAC distribution systems, equipment and controls, interior finishes, plumbing rough-in and fixtures, and built-in equipment. The glass curtain wall at the lobby is single pane glass which is not energy efficient and causing condensation and moisture issues. Additionally, the entrance to the Performing Arts Center from the parking lot is not accessible and should be upgraded to meet ADA requirements.

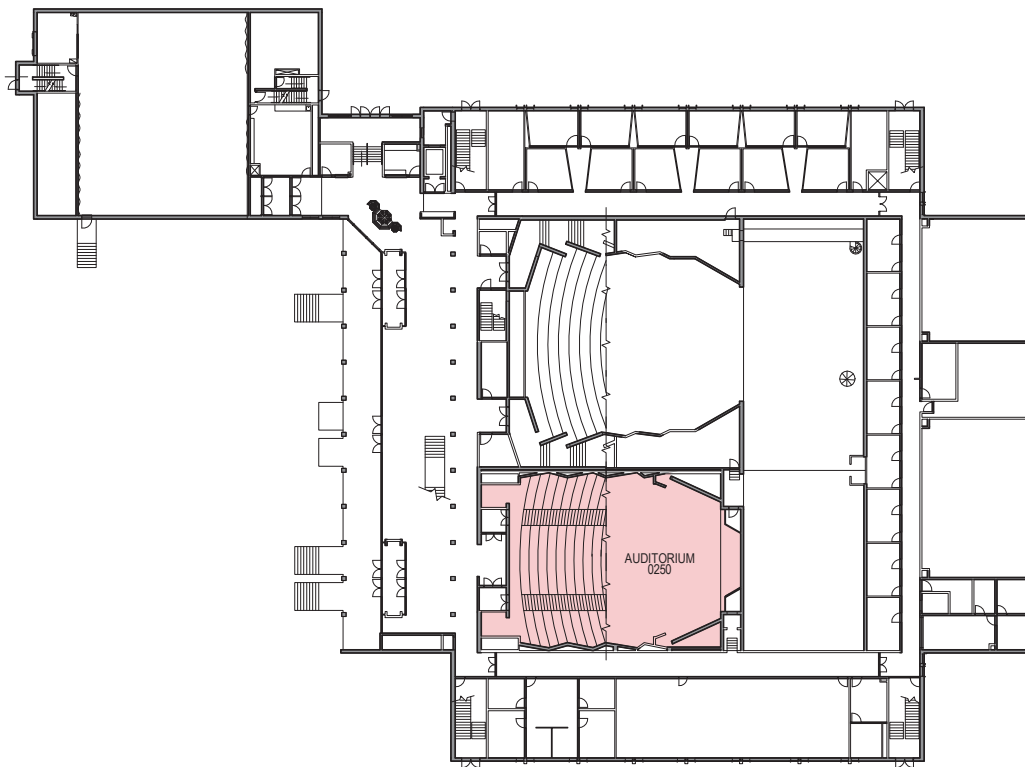
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
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Space Utilization Summary

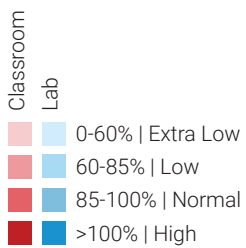
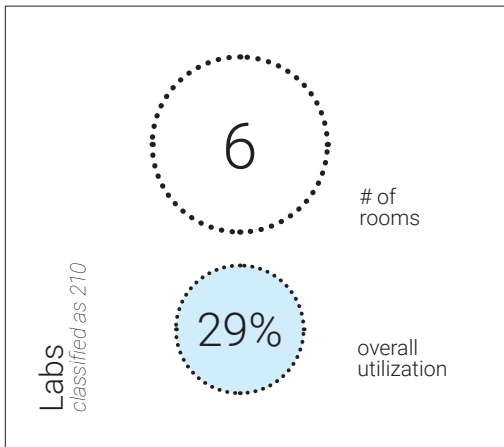


CENTER FOR PERFORMING ARTS LEVEL 0



CENTER FOR PERFORMING ARTS LEVEL 1

Center for Performing Arts



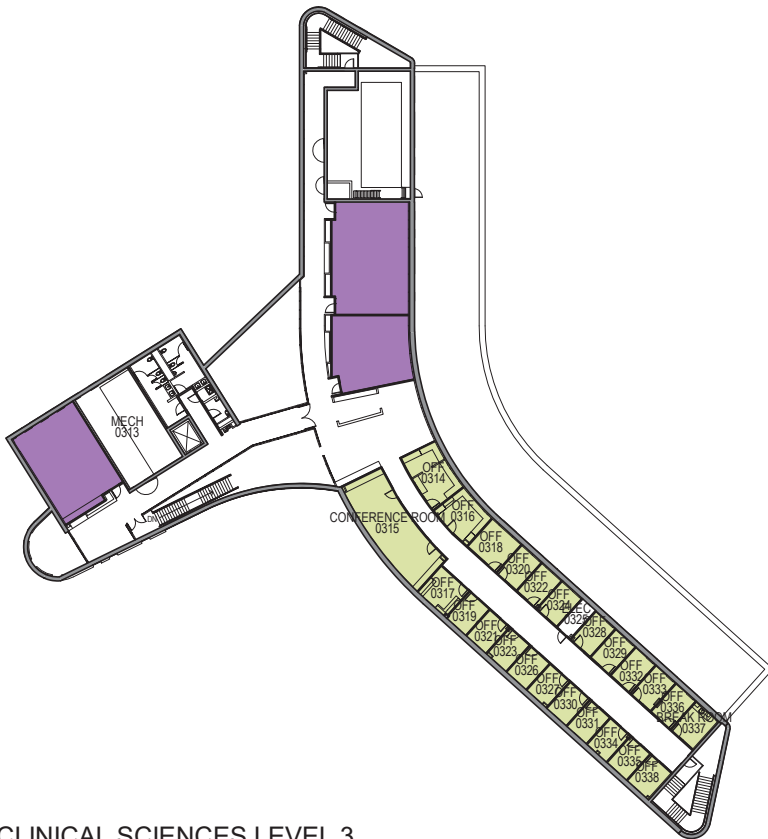
Department Space Use



CLINICAL SCIENCES LEVEL 1



CLINICAL SCIENCES LEVEL 2



CLINICAL SCIENCES LEVEL 3

Clinical Sciences Building



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 80,152 |
| Year Built | 2016 |
| Number of Levels | 4 |
| Backlog | \$0 |
| CRV | \$41,446 |
| Facility Condition (FCI) | 0.00 |
| 5-year renewal forecast | \$0 |
| Roof Type | MnSCU Standard |

Overview

Clinical Sciences Building houses labs for the School of Nursing, the Department of Dental Hygiene in partnership with South Central College's Dental Assisting Program, and the Department of Communications Disorders (Speech, Hearing and Rehabilitation Services). These labs and client work areas provide students real-world practicum experiences and patient interaction. Clients are drawn from the local and regional area.

Building Conditions

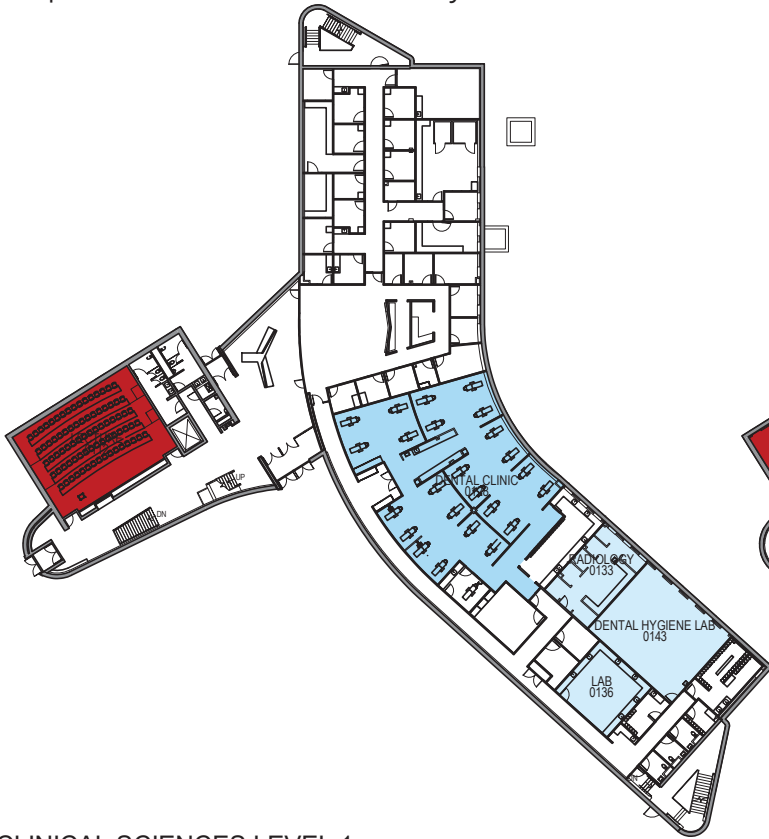
This building is newly constructed and in excellent condition.

Students have indicated the modern facilities are a favorite place to study and work.

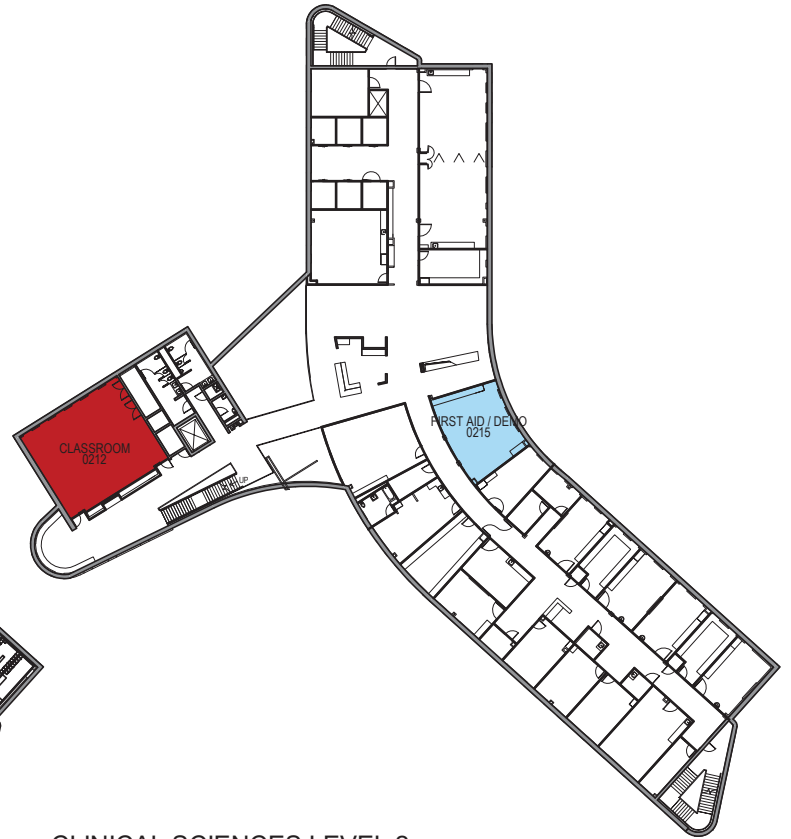
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
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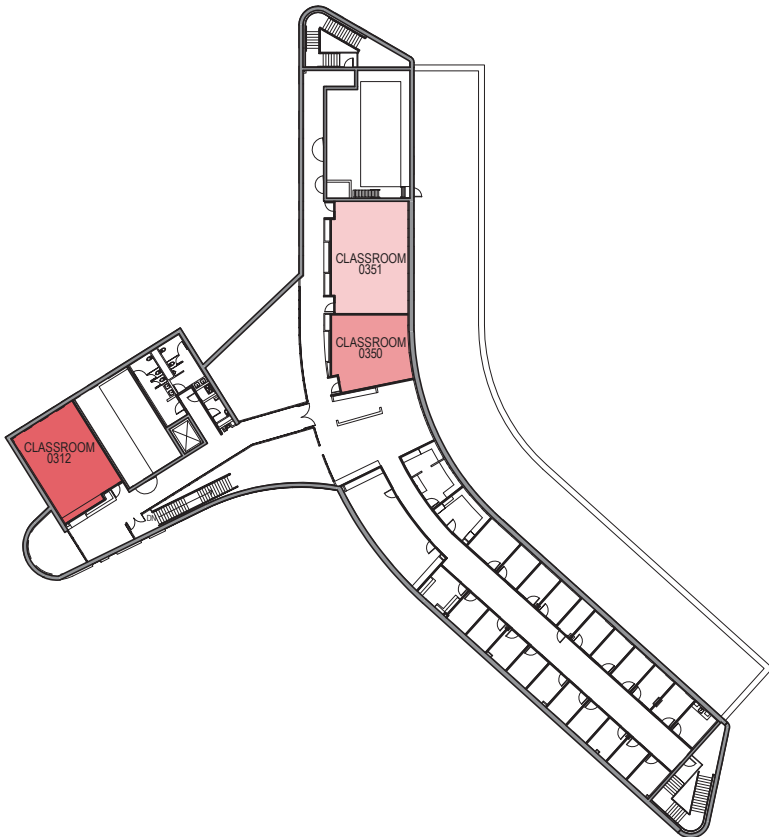
Space Utilization Summary



CLINICAL SCIENCES LEVEL 1

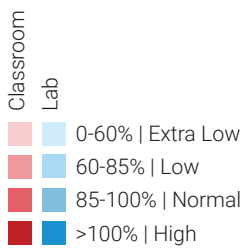
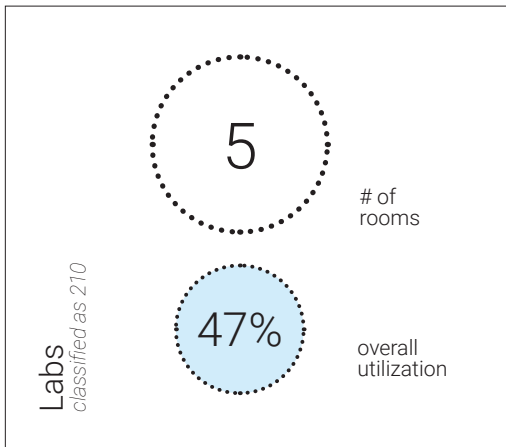


CLINICAL SCIENCES LEVEL 2

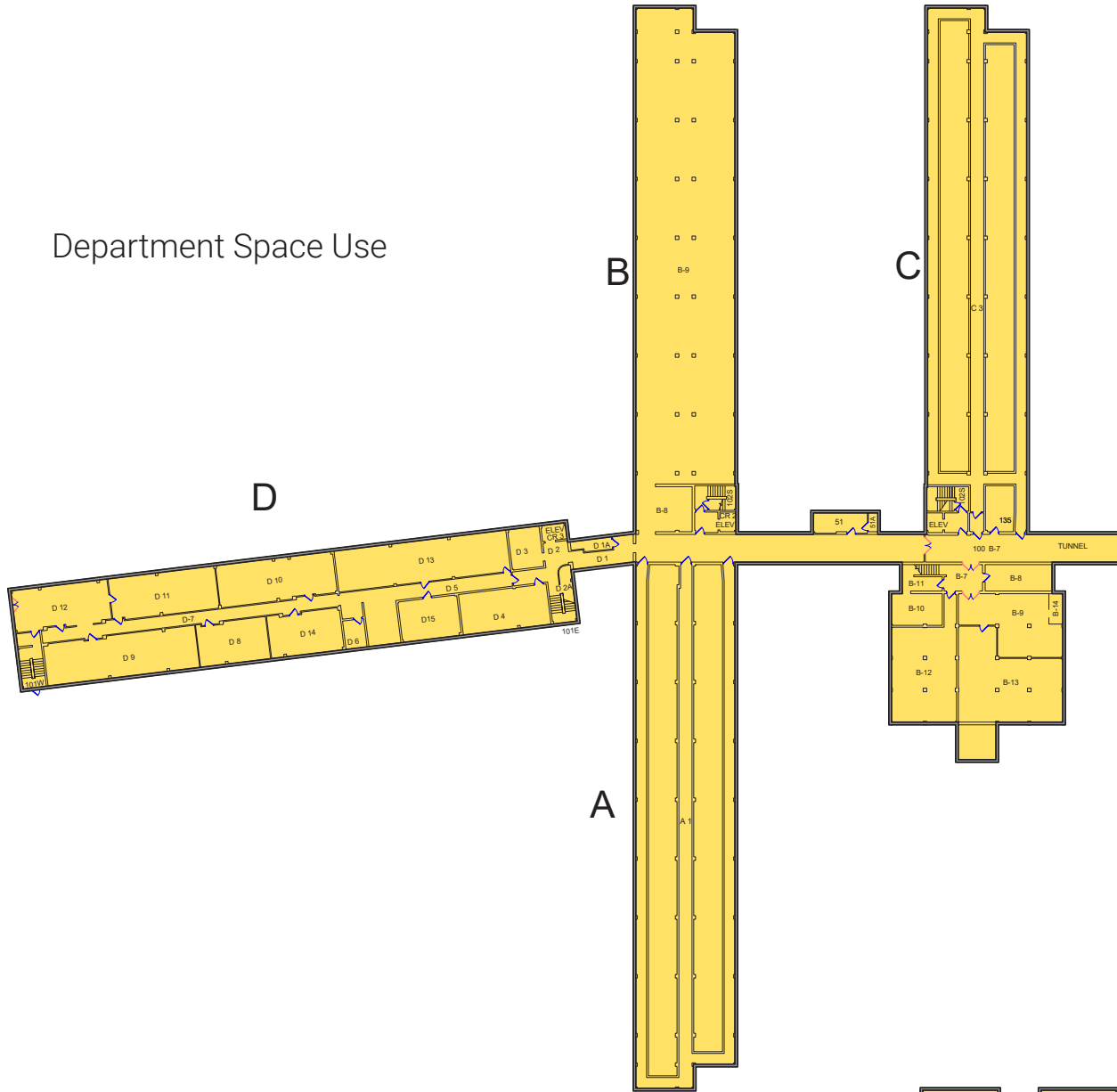


CLINICAL SCIENCES LEVEL 3

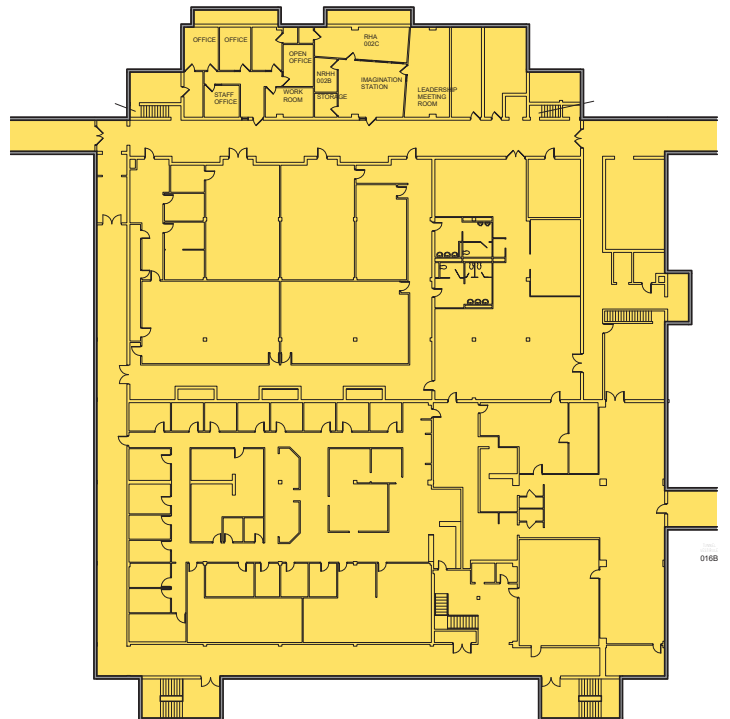
Clinical Sciences Building



Department Space Use



CRAWFORD LEVEL 0



CARKOSKI LEVEL 0



Crawford Residence Community + Carkoski Commons



| BUILDING SUMMARY | |
|--------------------------|---|
| Gross SF | 241,406 |
| Year Built | 1964 |
| Number of Levels | 5 |
| Backlog | \$4,583,000 |
| CRV | \$88,408,000 |
| Facility Condition (FCI) | 0.05 |
| 5-year renewal forecast | \$6,562,000 |
| Roof Type | Metal/ Concrete, MnSCU Standard, Built-up/Memb. |

Overview

Crawford Residence Community was the first building constructed and occupied on the new Highland Campus. It was built in two stages, completed in 1959 and 1967. The four halls of Crawford (A, B, C, and D) offer a wide variety of housing in offers both renovated and basic room types. Outdoor recreational fields adjacent to Crawford include a large grass field, several basketball courts and a sand volleyball pit. Crawford currently houses 725 residents on the north side of campus and is home of the Maverick Mentor program for first-years students.

Carkoski Commons links Crawford, McElroy and Preska Residence Communities. It is home to many student services, including Residential Life Office and Student Health Services. Carkoski Dining Hall, Chet's Place Grill, Computer Lab and print are also located in this building.

Building Conditions

Recent Renewals:

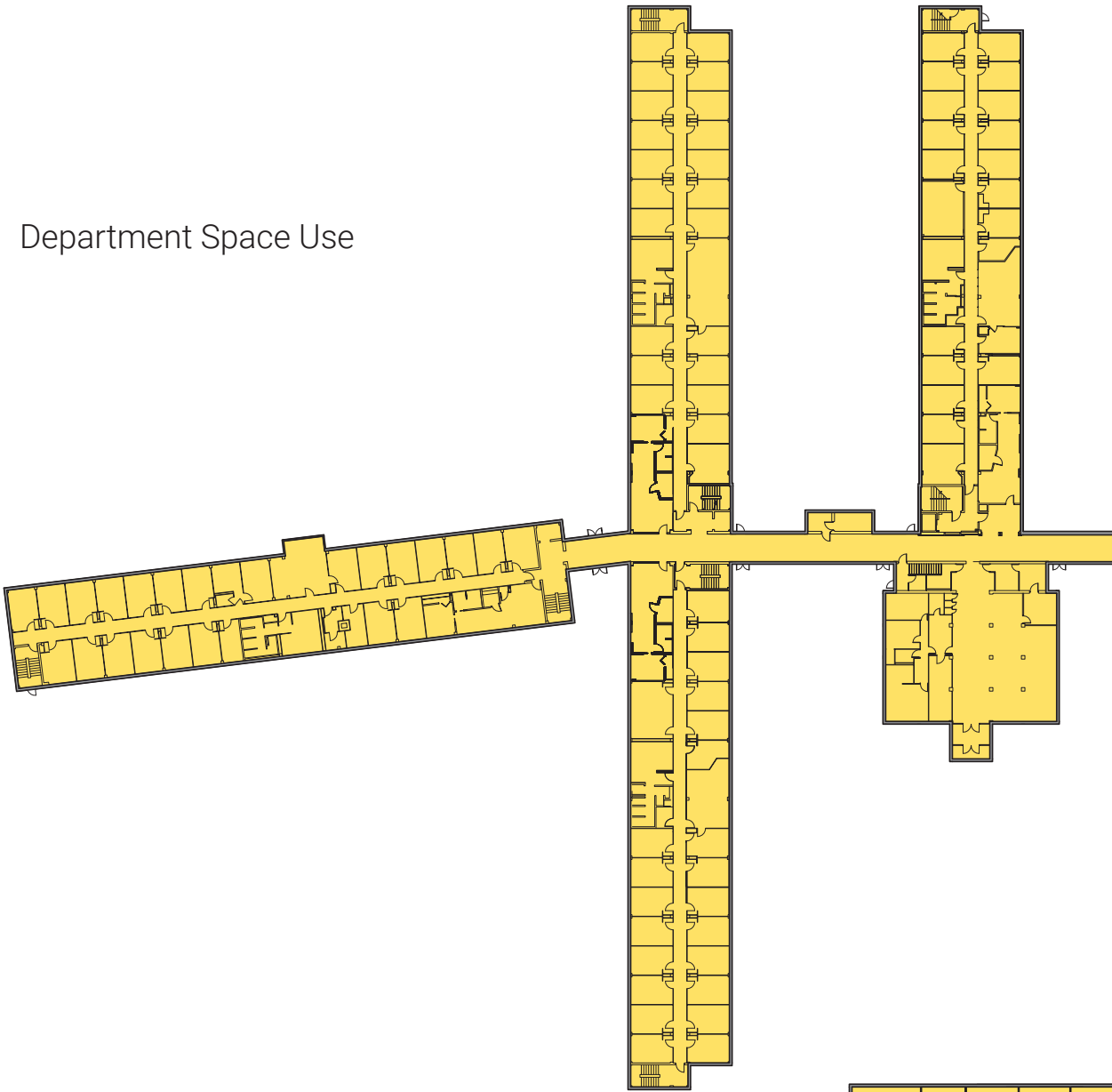
- C Hall added new make-up air in 2012
- C Hall replaced lights in residence room in 2012
- Carkoski Commons dining hall refresh in 2012
- Various carpet replacement in 2005-2018

Backlog items include renewal of roofing - built-up/membrane, building exteriors, HVAC Equipment and Distribution and Plumbing rough-in.

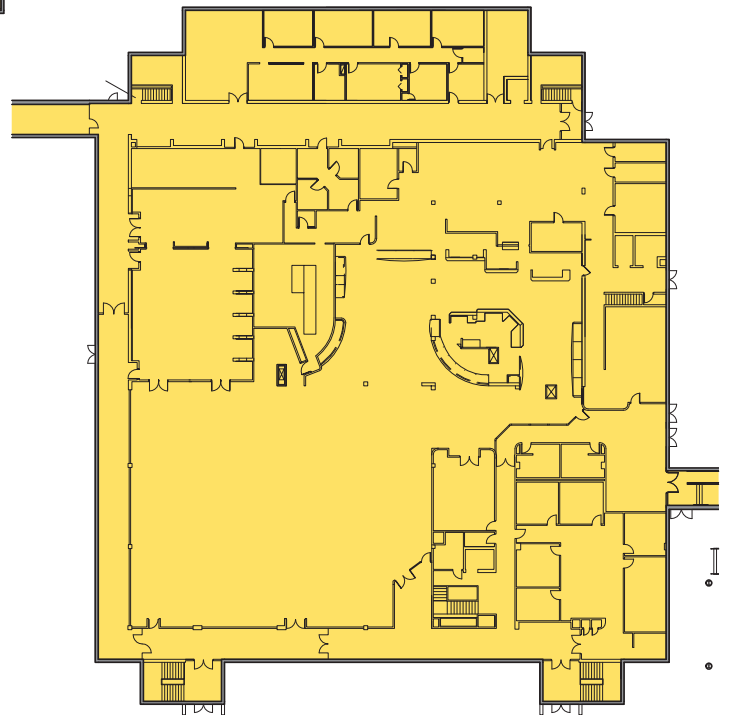
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
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Department Space Use

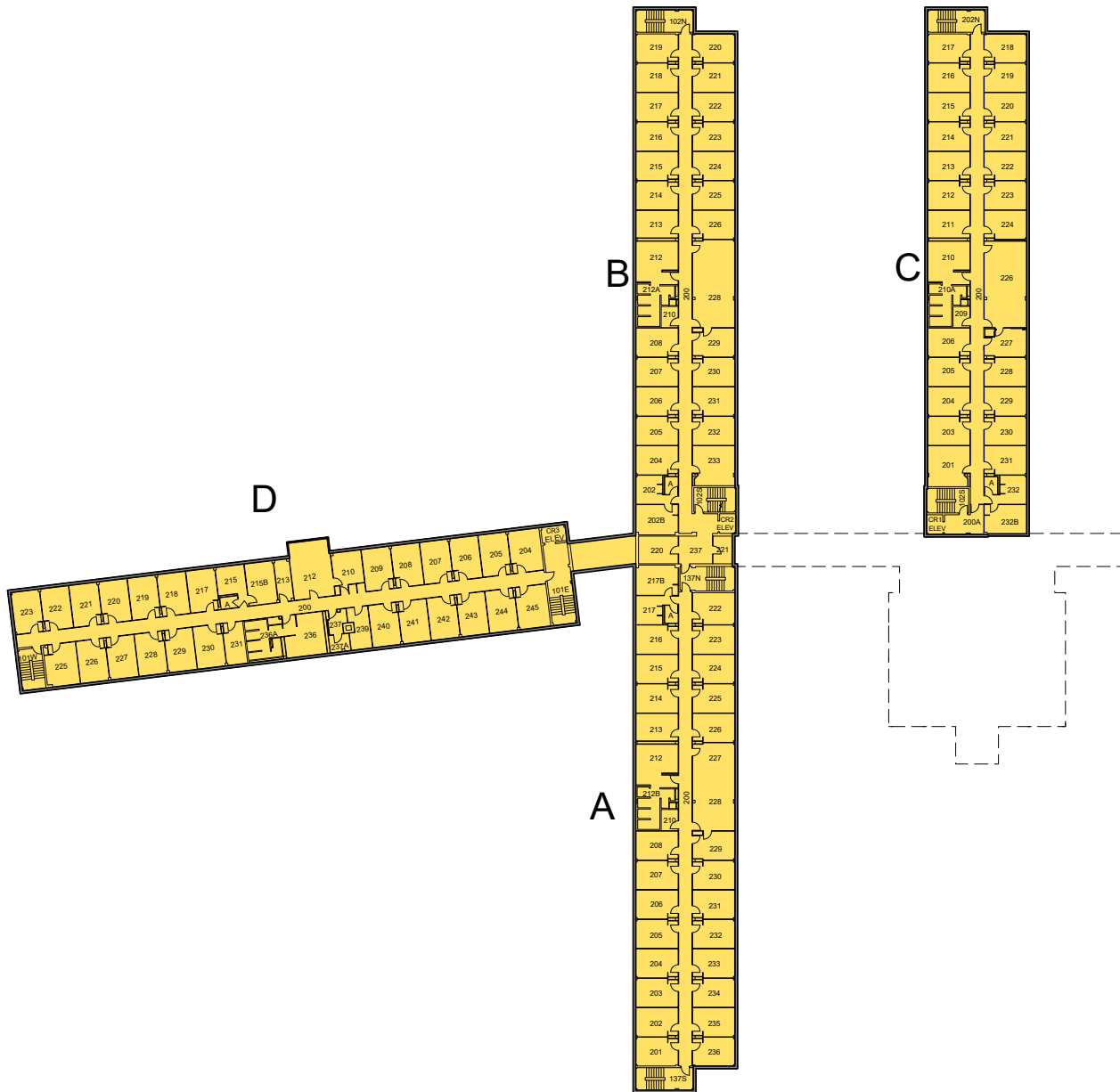


CRAWFORD LEVEL 1



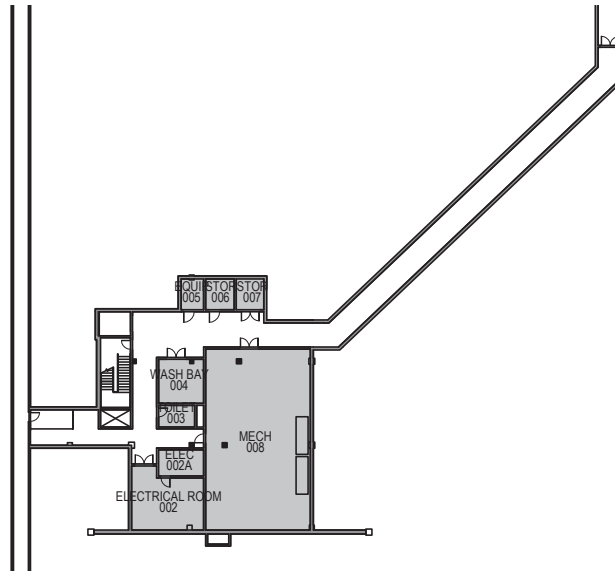
CARKOSKI LEVEL 1



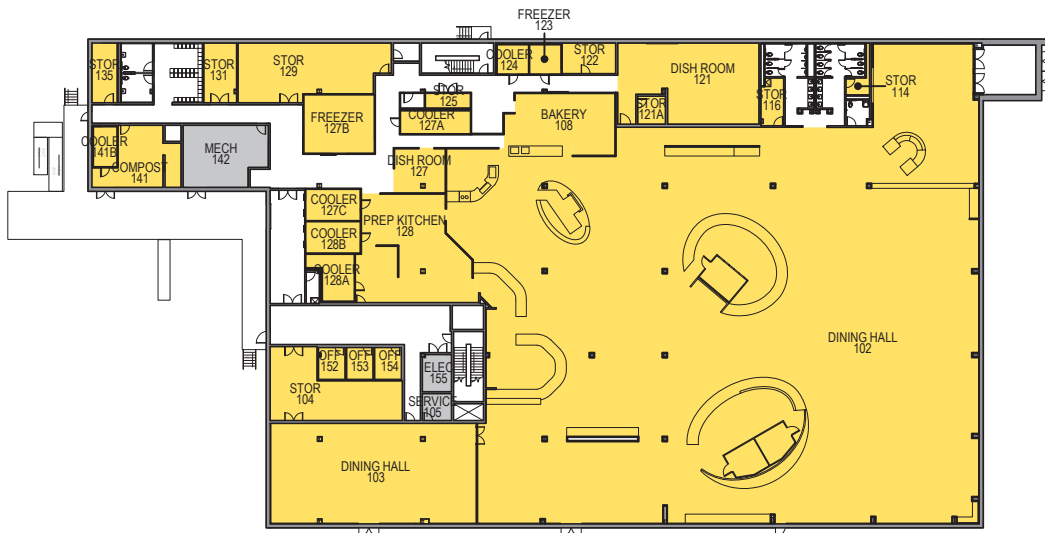


CRAWFORD LEVEL 2-4

Department Space Use



DINING CENTER LEVEL 0



DINING CENTER LEVEL 1



DINING CENTER LEVEL 2



Dining Center



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 62,209 |
| Year Built | 2016 |
| Number of Levels | 2 |
| Backlog | \$0 |
| CRV | \$32,168,000 |
| Facility Condition (FCI) | 0.00 |
| 5-year renewal forecast | \$0 |
| Roof Type | MnSCU Standard |

Overview

Serves more than 3,000 students

Building Conditions

This building is newly constructed and in excellent condition.

- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
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- Library

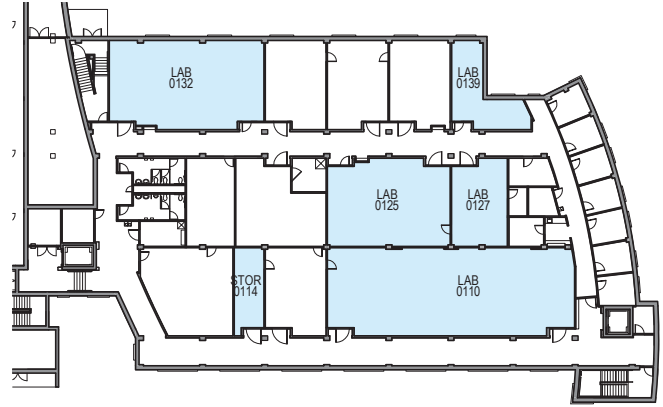


Department Space Use



FORD HALL - LEVEL 1

Space Utilization Summary



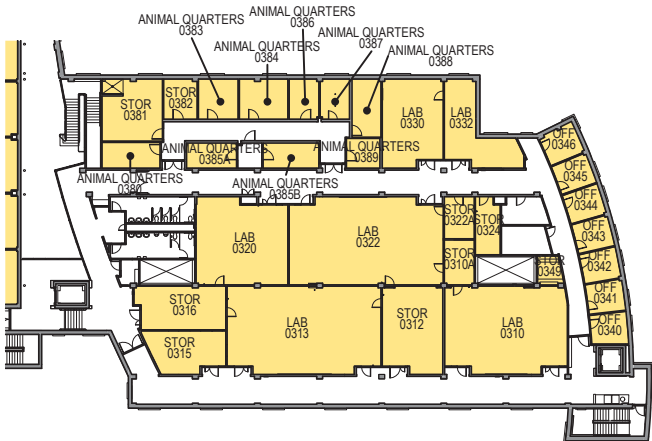
FORD HALL - LEVEL 1



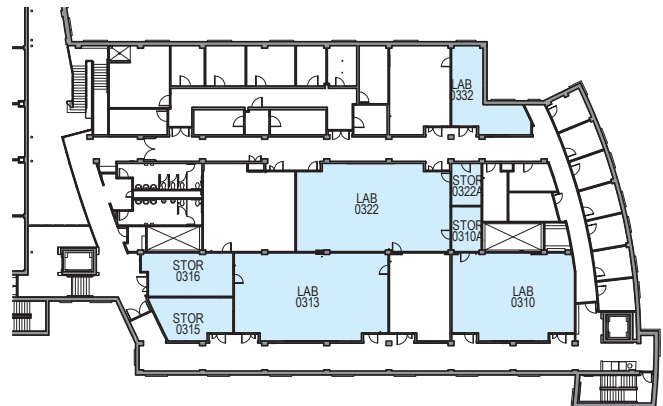
FORD HALL - LEVEL 2



FORD HALL - LEVEL 2



FORD HALL - LEVEL 3



FORD HALL - LEVEL 3



Ford Hall



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 66,783 |
| Year Built | 2008 |
| Number of Levels | 3 |
| Backlog | \$0 |
| CRV | \$34,533,000 |
| Facility Condition (FCI) | 0.00 |
| 5-year renewal forecast | \$949,000 |
| Roof Type | MnSCU Standard |

Overview

Ford Hall wing is located off Trafton Science Center and home to the Chemistry & Geology Department in the College of Science, Engineering & Technology. In 2008, it was awarded one of Minnesota's 25 'Top Projects' for its innovative construction, creativity in design, and overall complexity. Numerous sustainability features to the building added initial costs but have paid off in energy costs.

Building Conditions

This building is in excellent condition.

Department Space Use Legend

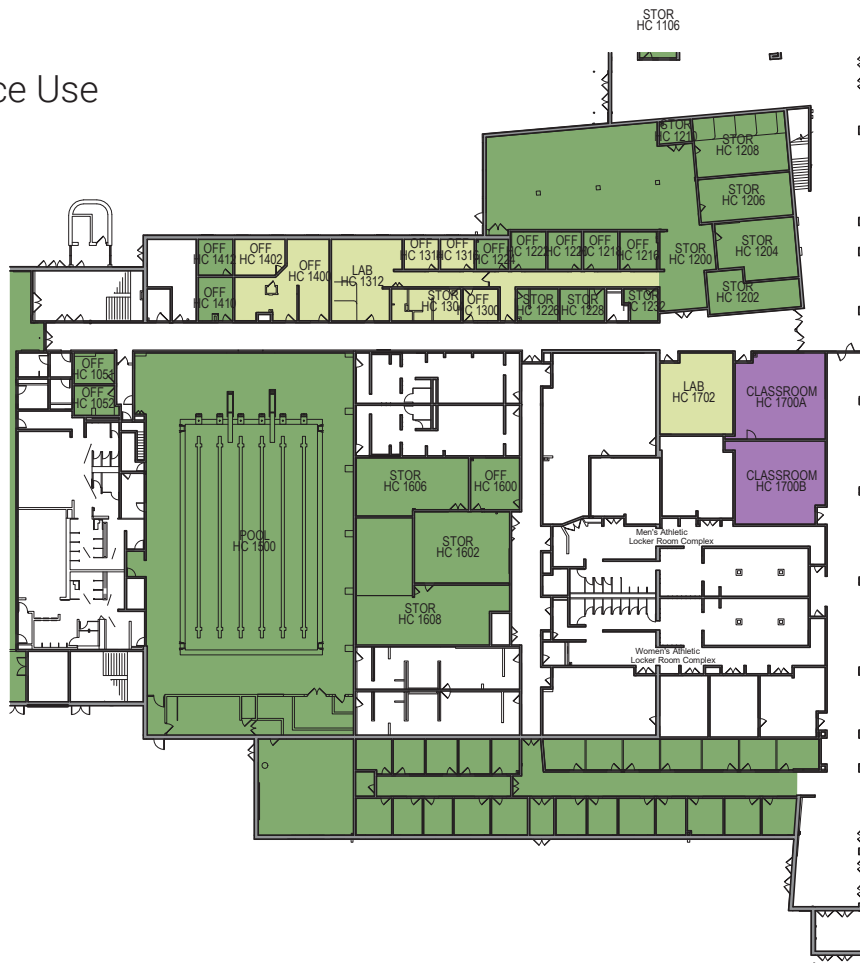
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
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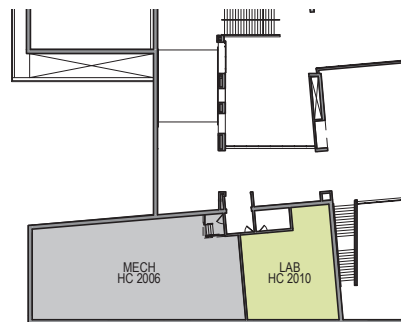
Space Utilization Legend

- Classroom
- Lab
- 0-60% | Extra Low
- 60-85% | Low
- 85-100% | Normal
- >100% | High

Department Space Use



Highland Center Level 1



Highland Center Level 2



Highland Center



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 92,710 |
| Year Built | 1962 |
| Number of Levels | 2 |
| Backlog | \$196,000 |
| CRV | \$34,357,000 |
| Facility Condition (FCI) | 0.01 |
| 5-year renewal forecast | \$2,173,000 |
| Roof Type | MnSCU Standard |

Overview

Highland Center houses the swimming pool, coaches offices, and the departments of Intercollegiate Athletics, Recreational Sports, and Human Performance. In 2002, an extensive remodel and addition included Human Performance administrative and faculty offices, a new Human Performance lab, a Campus Recreation office, a new Athletic Training complex and offices, a new Athletic locker room complex, new classrooms, new coaches offices, a student lounge and a concession area.

Building Conditions

Recent Renewals:

- HVAC FX controls replacement in 2014

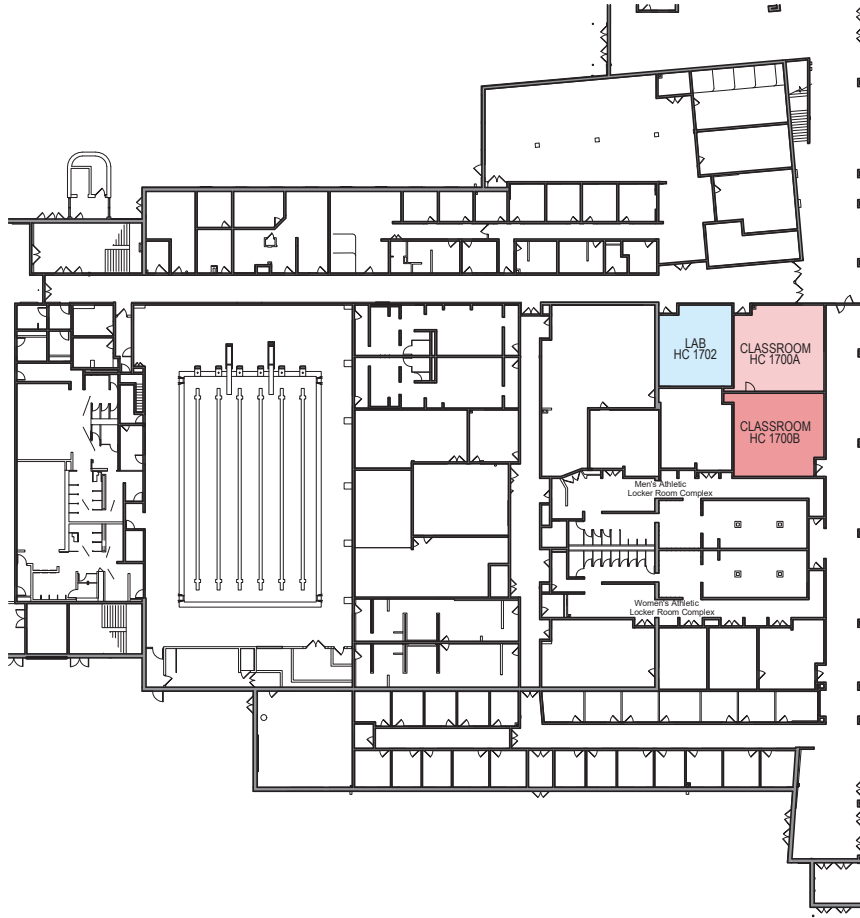
Immediate renewal needs include plumbing rough-ins and interior finishes.

Department Space Use Legend

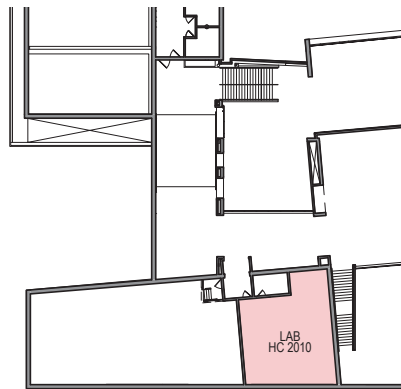
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library



Space Utilization Summary

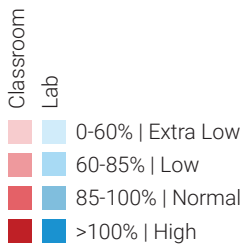


Highland Center Level 1



Highland Center Level 2

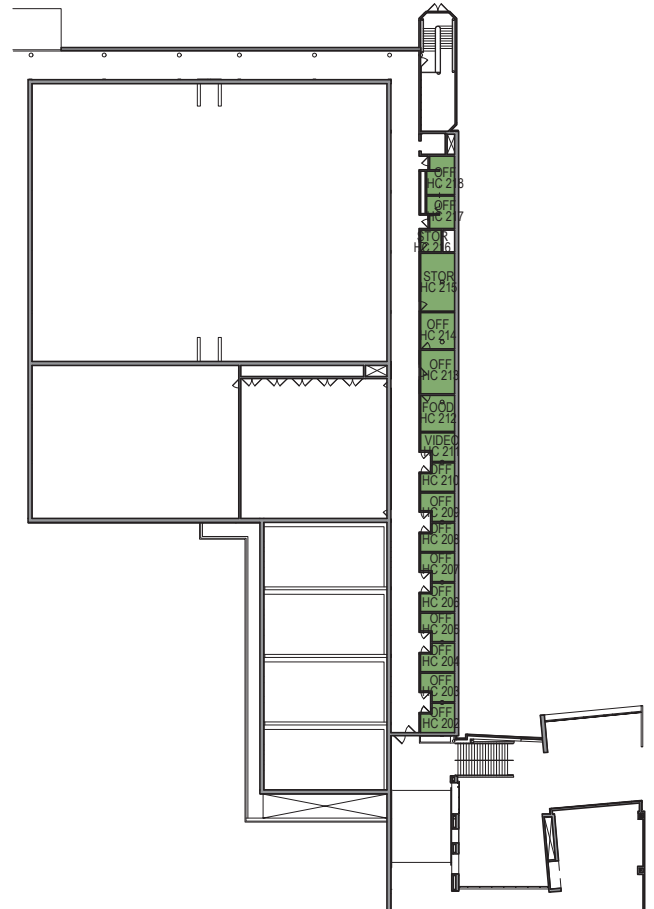
Highland Center



Department Space Use

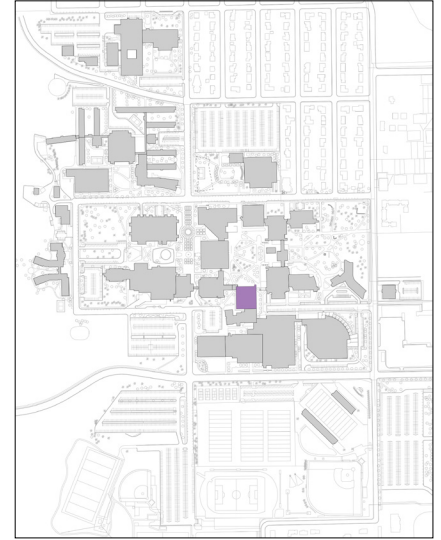


HIGHLAND CENTER NORTH LEVEL 1



HIGHLAND CENTER NORTH LEVEL 2

Highland Center North



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 37,116 |
| Year Built | 1979 |
| Number of Levels | 2 |
| Backlog | \$742,000 |
| CRV | \$13,755,000 |
| Facility Condition (FCI) | 0.05 |
| 5-year renewal forecast | \$1,130,000 |
| Roof Type | MnSCU Standard |

Overview

Schellberg Gymnasium is housed in Highland North and is used by Athletics, Campus Recreation and Human Performance. In addition, Highland North houses an aerobics studio, locker rooms, administrative offices for both Recreation, Parks & Leisure Services and Health Sciences along with faculty offices.

Building Conditions

Recent Renewals:

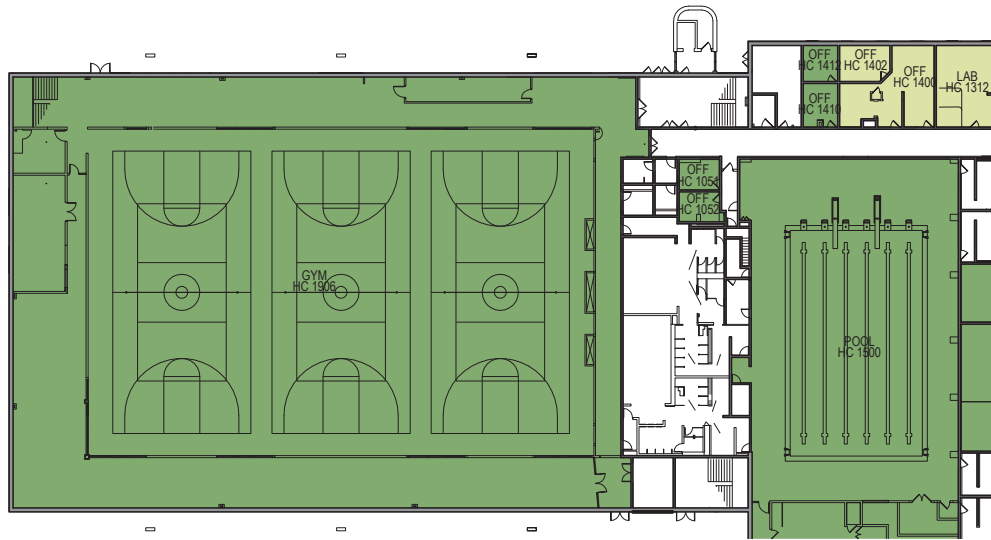
- Elevator replacement in 2012
- AHU #1, coils in AHU #4 in 2011
- Replacement of all control systems, entire VAV system, and 75% of ductwork in 2011
- Replaced motor control center and lights on 1st and second floor in 2011
- Received new finishes in offices, gym floor, corridors 2009-2011

Immediate renewal needs include building exteriors, HVAC equipment and distribution, plumbing rough-in and fixtures.

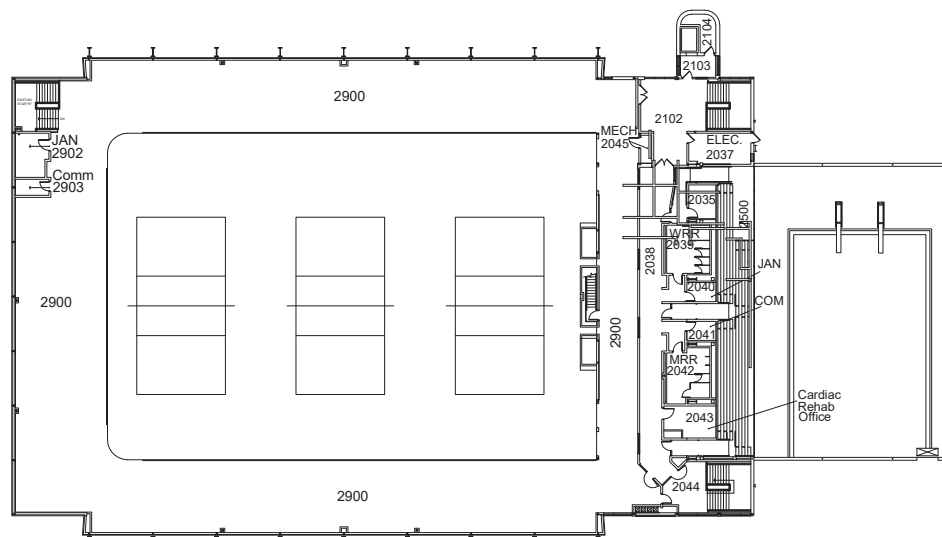
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library



Department Space Use



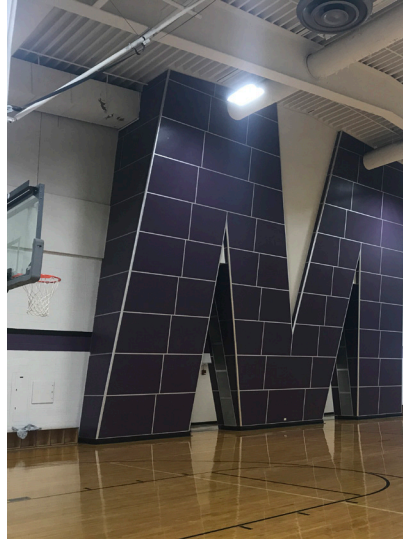
HIGHLAND CENTER LEVEL 1



HIGHLAND CENTER LEVEL 2



Highland Center Addition



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 37,570 |
| Year Built | 2002 |
| Number of Levels | 2 |
| Backlog | \$0 |
| CRV | \$13,923,000 |
| Facility Condition (FCI) | 0.00 |
| 5-year renewal forecast | \$850,000 |
| Roof Type | MnSCU Standard |

Overview

This facility is also known as Otto Recreation Center. In Fall 2005, a \$8.4M renovation included a new wood gym floor housing three basketball/volleyball courts, a new three-lane walking/jogging track and “TechRec” cardio area, a new weight room, a central check in point and equipment checkout desk, remodeled locker rooms and a student lounge.

Building Conditions

Recent Renewals:

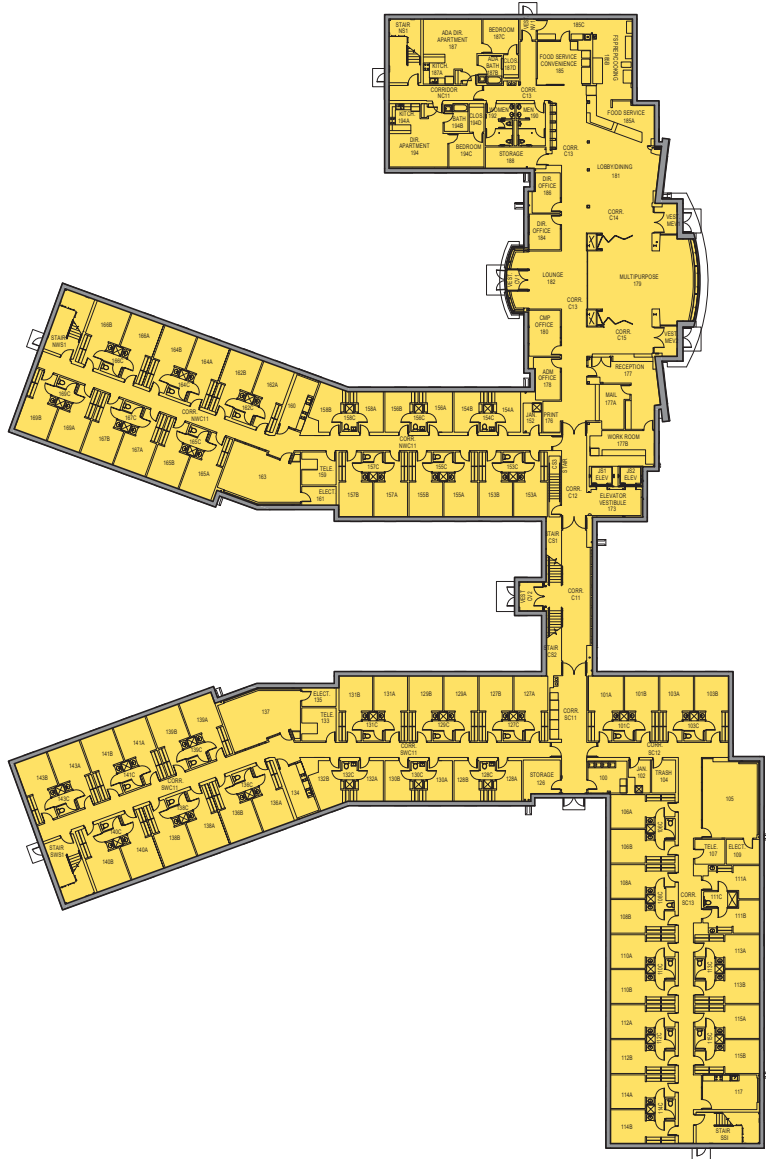
- HVAC FX controls replacement in 2014

There is no current backlog for Otto Rec.

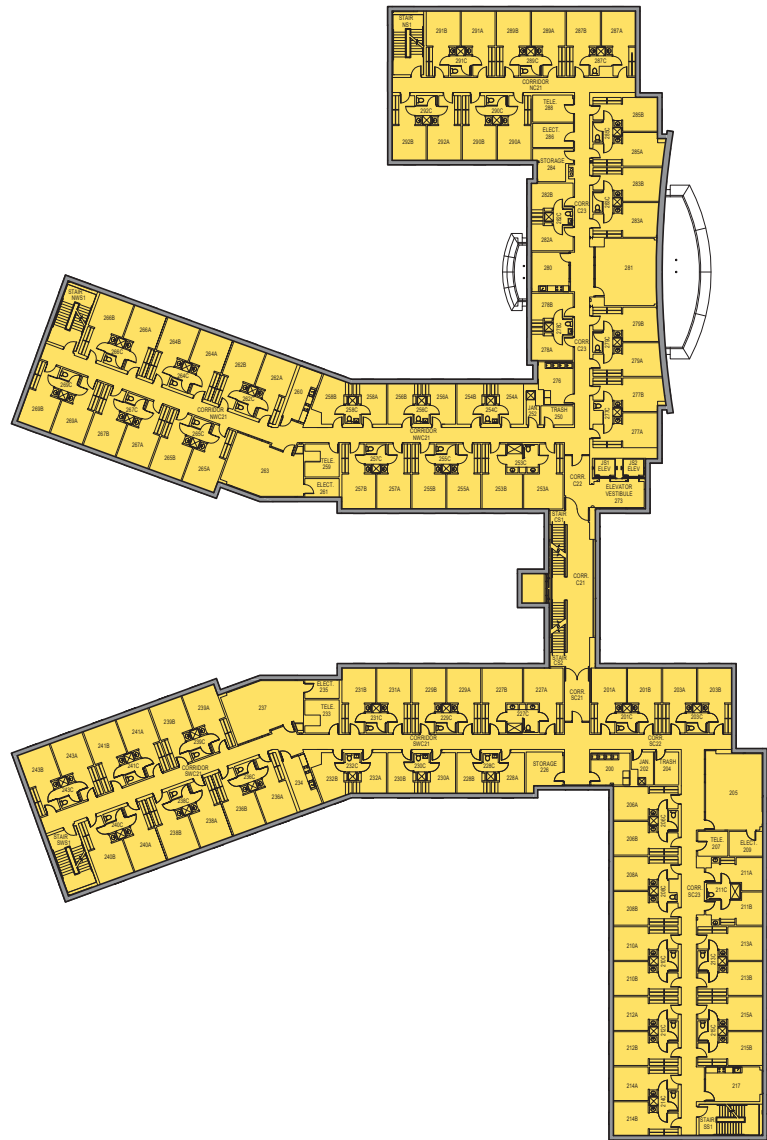
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library



Department Space Use



JULIA A. SEARS RESIDENCE COMMUNITY LEVEL 1



JULIA A. SEARS RESIDENCE COMMUNITY LEVEL 2 - 4

Julia A. Sears Residence Community



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 150,275 |
| Year Built | 2008 |
| Number of Levels | 4 |
| Backlog | \$0 |
| CRV | \$46,624,000 |
| Facility Condition (FCI) | 0.00 |
| 5-year renewal forecast | \$1,816,000 |
| Roof Type | MnSCU Standard |

Overview

Julia Sears is comprised of all semi-suite rooms, housing approx 620 students. The 1872 Grill & Convenience Store is located on the lower level of Sears.

Building Conditions

Recent Renewals:

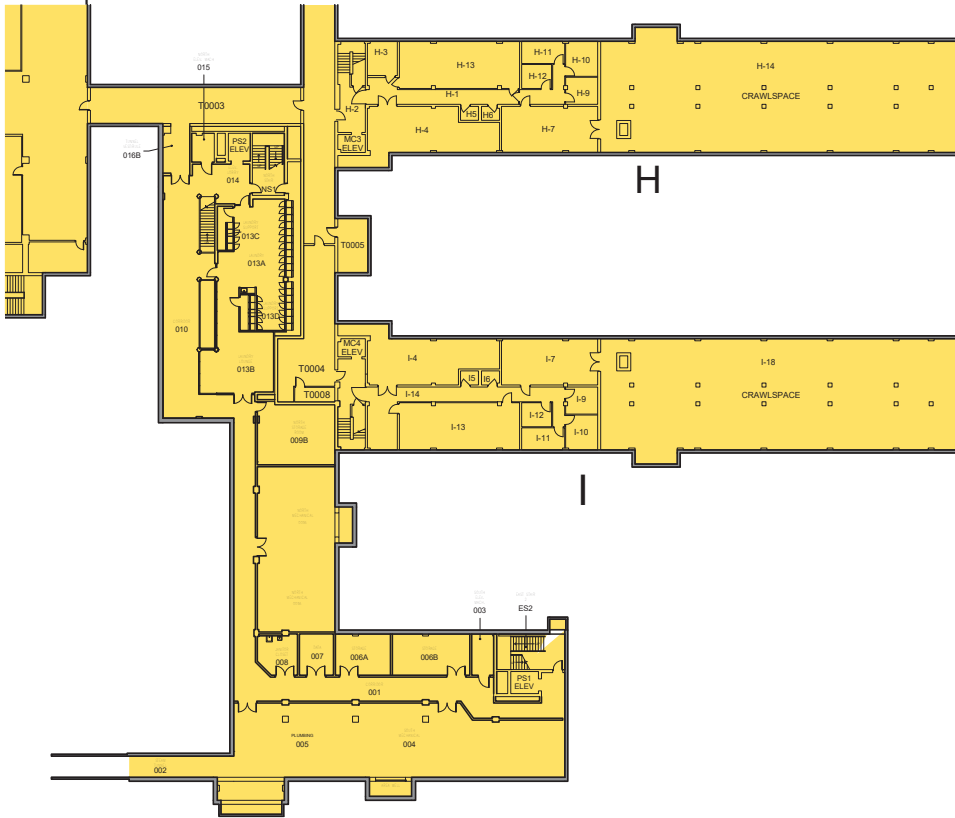
- Installed new DX System in 2010
- Replaced all room locks in 2010

This building is in good condition with no backlog.

- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library



Department Space Use



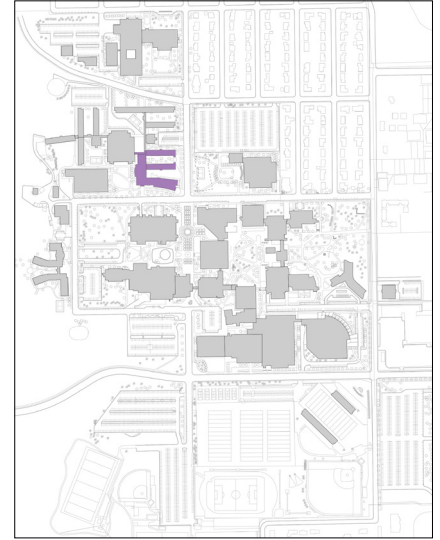
PRESKA LEVEL 0



PRESKA LEVEL 1



Margaret R. Preska Residence Community



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 157,145 |
| Year Built | 2012 |
| Number of Levels | 5 |
| Backlog | \$406,000 |
| CRV | \$57,550,000 |
| Facility Condition (FCI) | 0.00 |
| 5-year renewal forecast | \$521,000 |
| Roof Type | MnSCU Standard |

Overview

Preska is comprised of four residence halls (I, J, K & L). This structure includes the latest improvements for the 500 residents living there, along with offices for New Student and Family Programs. Most of the semi-suites house four residents, and a limited number of single semi-suites are available. The main floor includes classrooms and gathering spaces. This building is adjacent to Carkoski Commons, providing indoor access to the Carkoski Dining Hall.

Building Conditions

Recent Renewals:

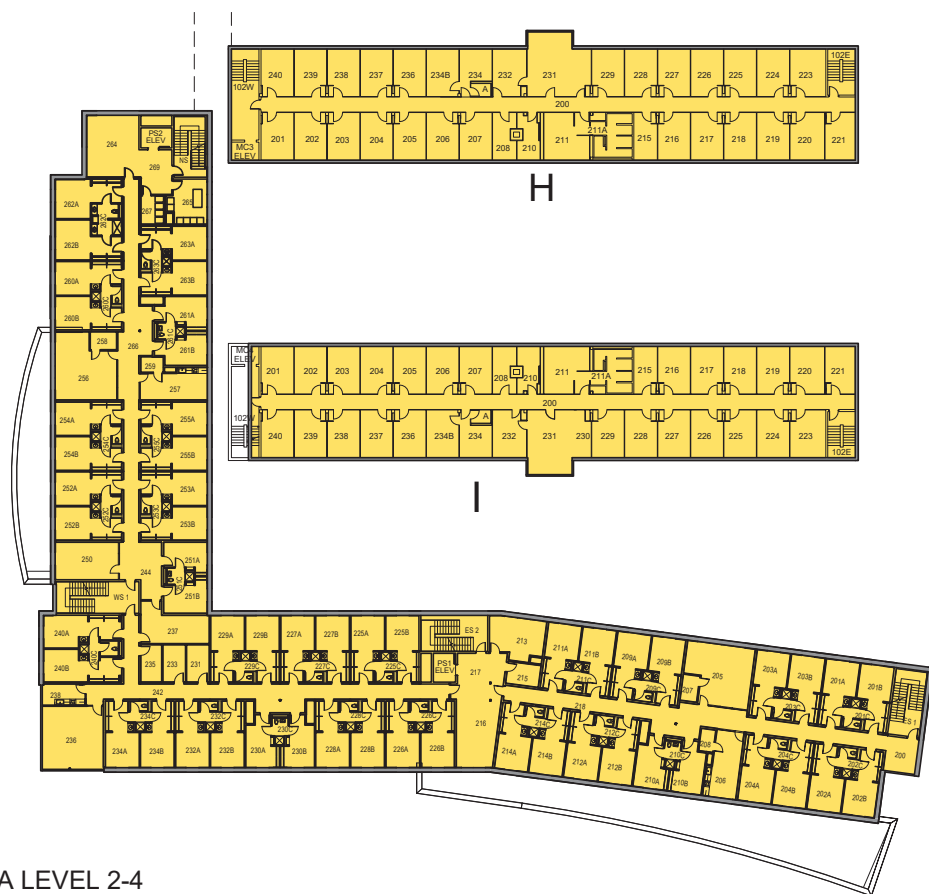
- I Hall has had recent renovations from 2006-2010

This building is in good condition with no backlog.

- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library



Department Space Use



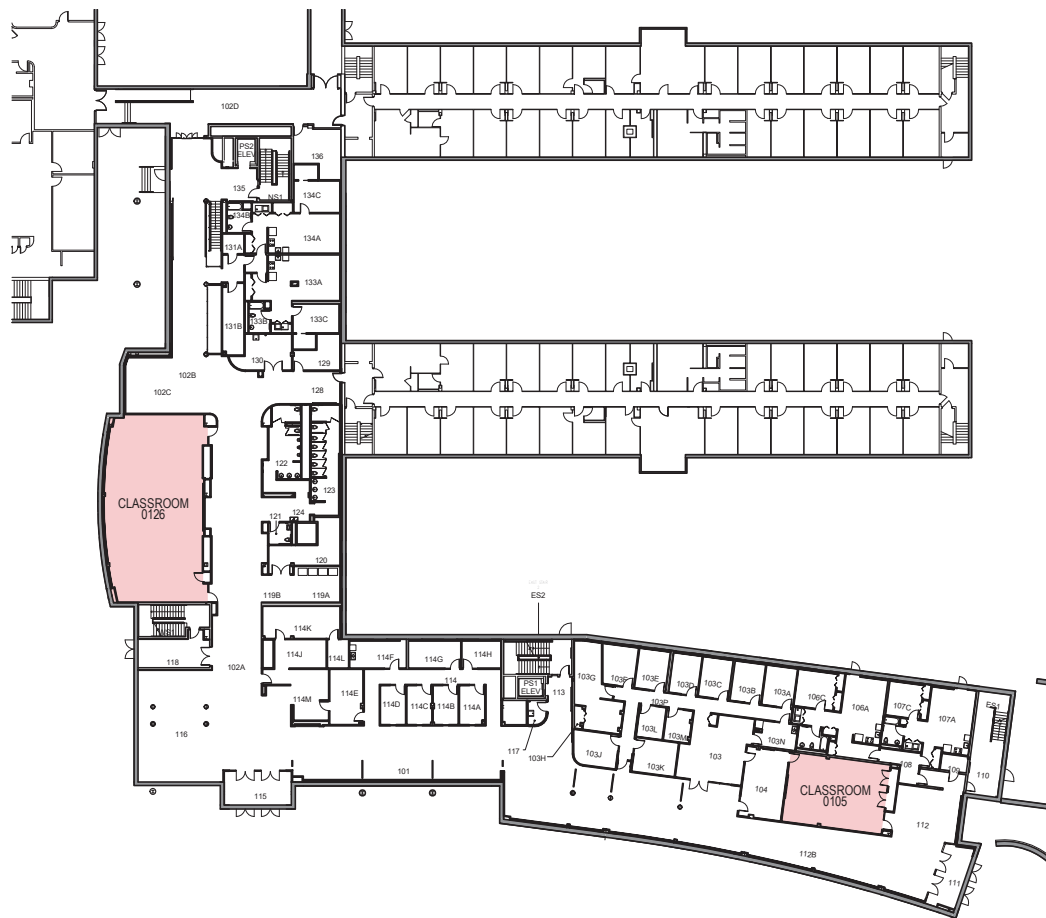
PRESKA LEVEL 2-4

- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life

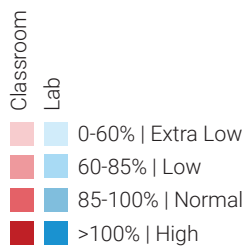


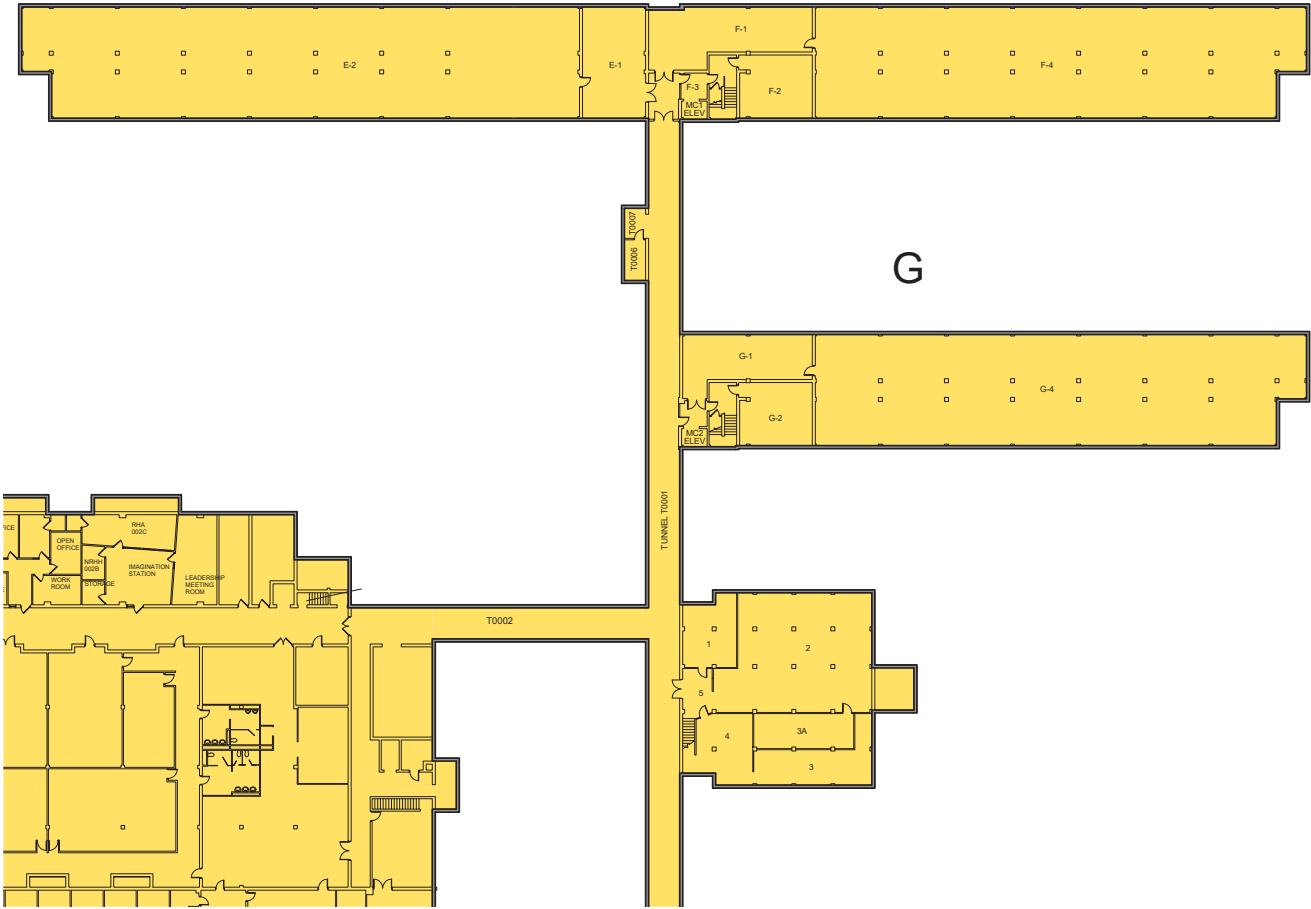
Margaret R. Preska Residence Community

Space Utilization Summary

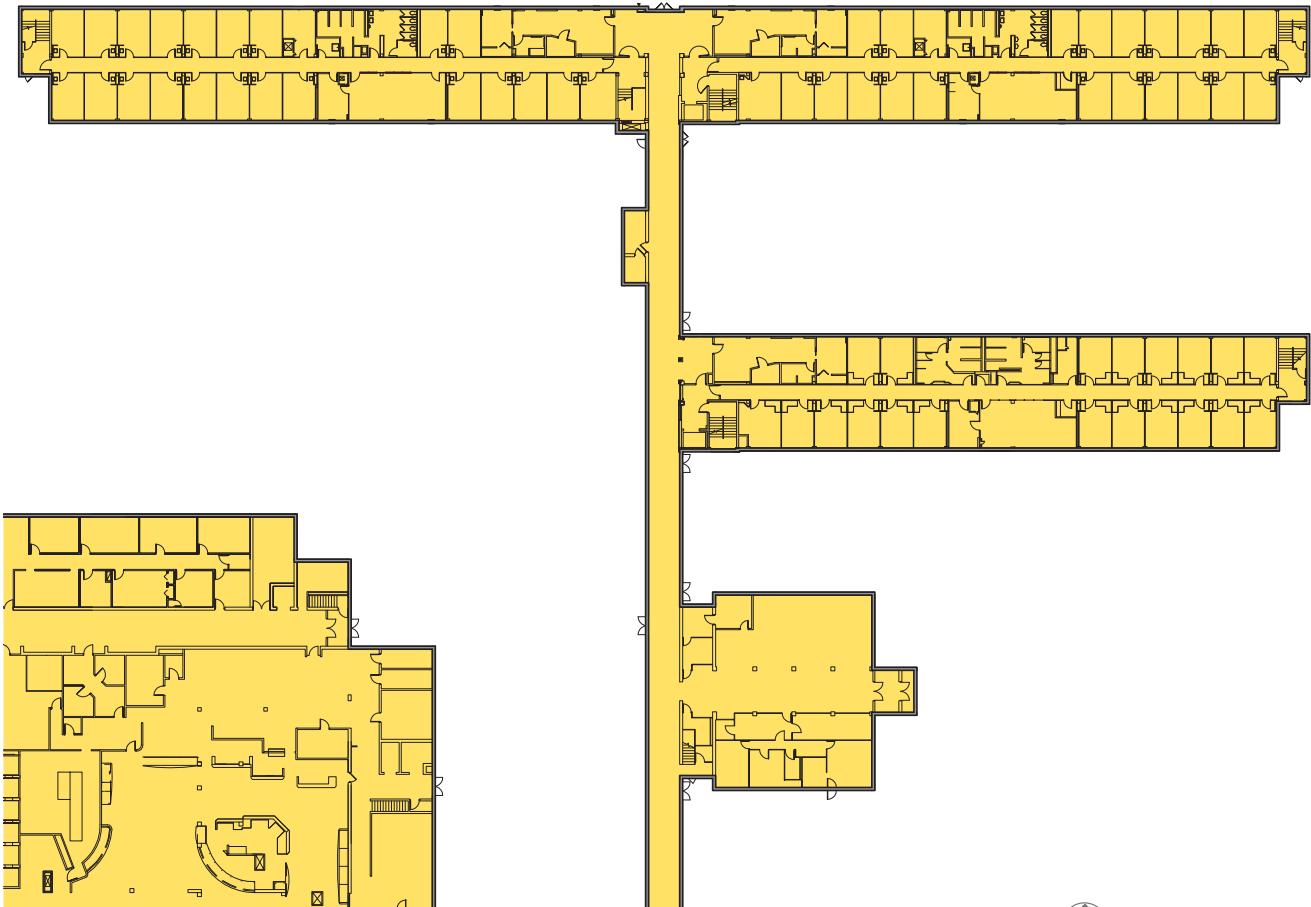


PRESKA LEVEL 1





MCELROY LEVEL 0

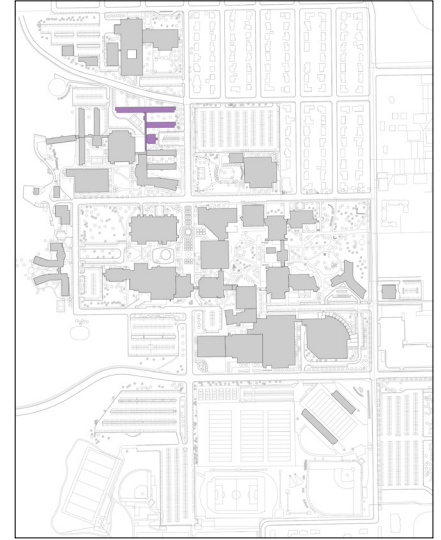


MCELROY LEVEL 1



McElroy Center

Department Space Use



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 170,618 |
| Year Built | 1964 |
| Number of Levels | 5 |
| Backlog | \$5.14 Million |
| Facility Condition (FCI) | 0.08 |
| 5-year renewal forecast | \$6.84 Million |
| Roof Type | MnSCU Standard |

Overview

McElroy is comprised of four residence halls (E, F, G, & H). E, F, and G wings were constructed in 1961. H and I wings were constructed in 1964. (A remodeled I Hall became part of the Margaret R. Preska Residence Community in fall, 2012.). There are approximately 750 residents.

- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library



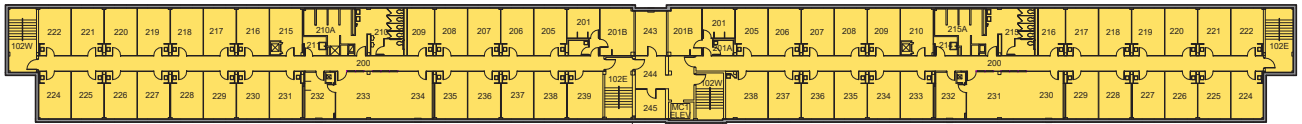
Building Conditions

Recent Renewals:

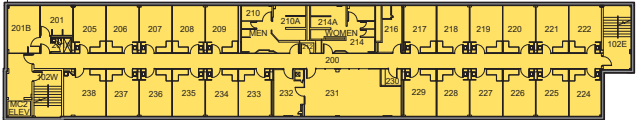
- E & F Wings Bldg Exterior renovation in 2011
- Update E and F wing controls to electronic in 2011
- E wing new lights, and emergency notification system in 2011; G wing new lights in rooms in 2012
- Replace restroom and showers rough in E and F in 2011
- G Hall replaced makeup air in 2012
- Built in furniture removed between 2009-2017
- Carpet replacement in all halls between 2008-2016

McElroy E Hall renovation will be complete in Summer 2019. F Hall will be complete in Fall 2019.

Immediate renewal needs include building exteriors, HVAC controls, equipment and distribution and the removal of built-in equipment to modular furniture in residence halls.



G



MCELROY LEVEL 2-4



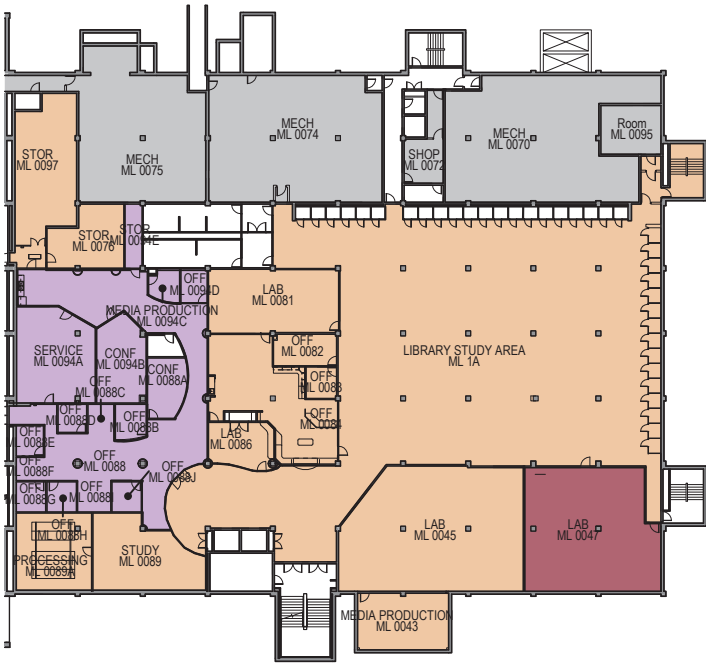
0 32' 64'

McElroy Center

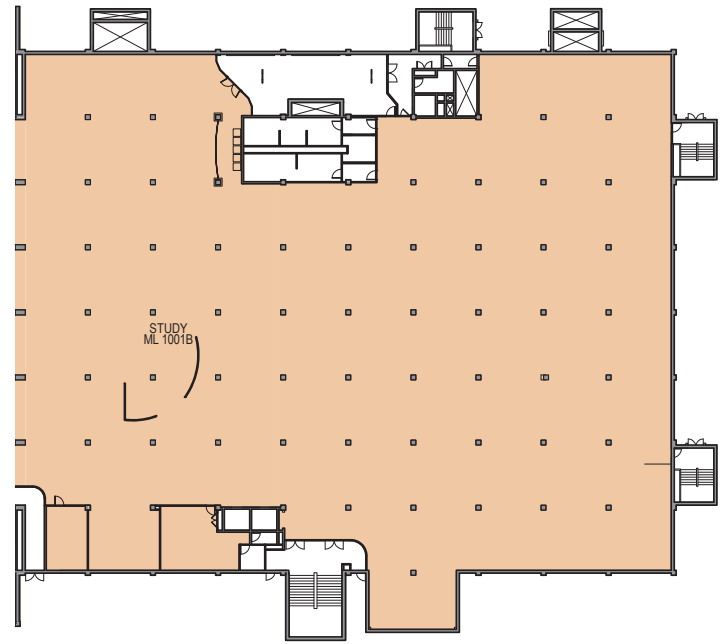
Department Space Use

-  Administration
-  College of Allied Health & Nursing
-  College of Arts & Humanities
-  College of Business
-  College of Education
-  College of Science, Engineering & Technology
-  College of Social & Behavioral Sciences
-  General Classroom
-  Service
-  Athletics & Recreation
-  Residential Life & Student Life
-  Library

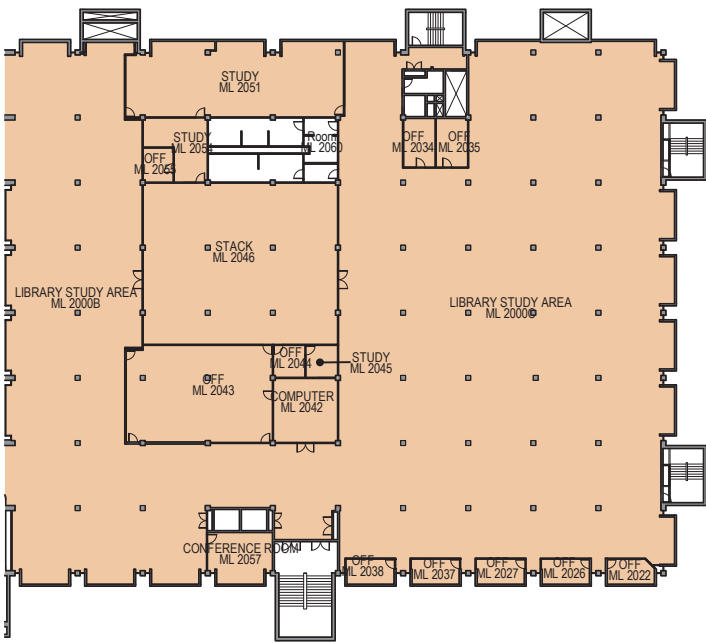
Department Space Use



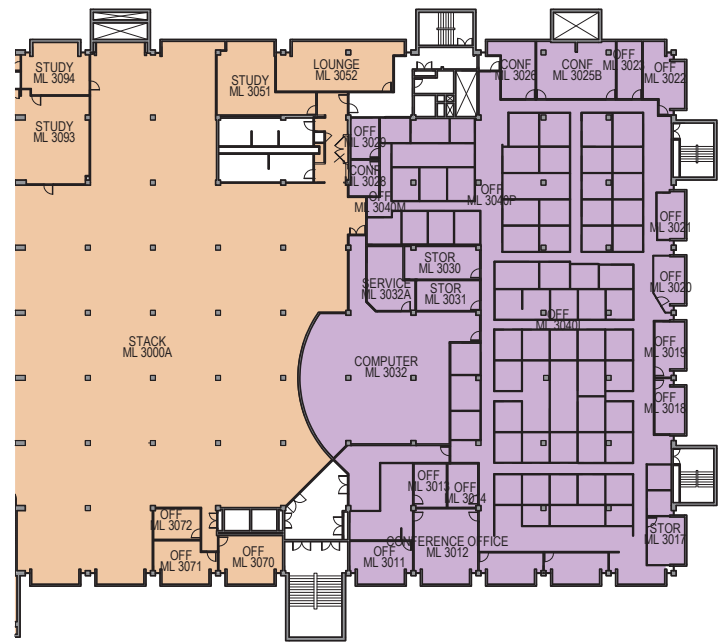
MEMORIAL LIBRARY LEVEL 0



MEMORIAL LIBRARY LEVEL 1

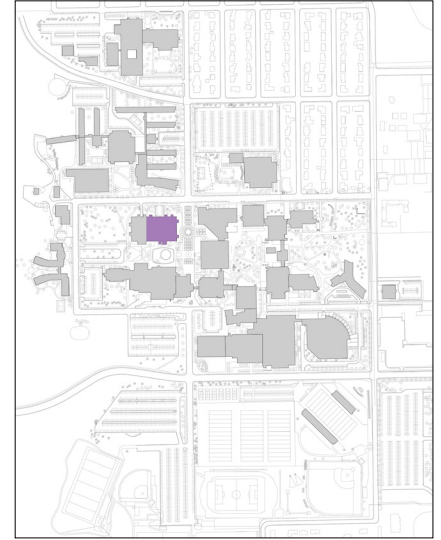


MEMORIAL LIBRARY LEVEL 2



MEMORIAL LIBRARY LEVEL 3

Memorial Library



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 166,181 |
| Year Built | 1967 |
| Number of Levels | 4 |
| Backlog | \$8,687,000 |
| CRV | \$63,065,000 |
| Facility Condition (FCI) | 0.14 |
| 5-year renewal forecast | \$13,496,000 |
| Roof Type | MnSCU Standard |

Overview

An addition and significant remodel was completed in 1992, and in 2013, an indoor pedestrian link connected the Library with the CSU. A large portion of the third floor now houses the Office of Information Technology Services as well as offices for Minnesota State IT Services

Building Conditions

Recent Renewals:

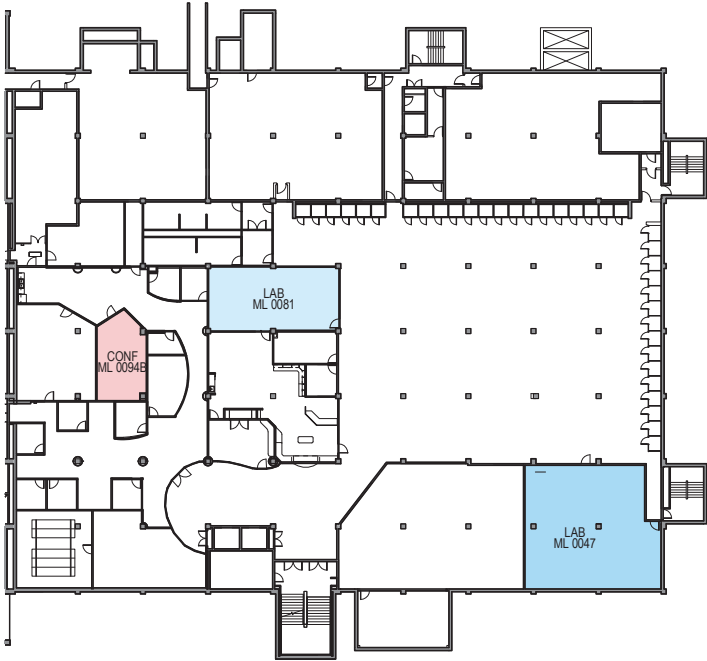
- Upgrade controls to FX in 2014
- Re-roof, replace failing limestone fascia w/ metal panel system, new louvers in 2011
- Replacement of PRVs and exhaust fans on roof in 2011
- Abatement and replacement of east fresh air intake tunnel insulation in 2011
- Basement light replacement and replacement of switch gear and motor control center in 2011

Memorial Library has some significant backlog items, such as HVAC controls and equipment renewal, upgraded fire protection and detection systems, replacement of interior finishes and electrical equipment.

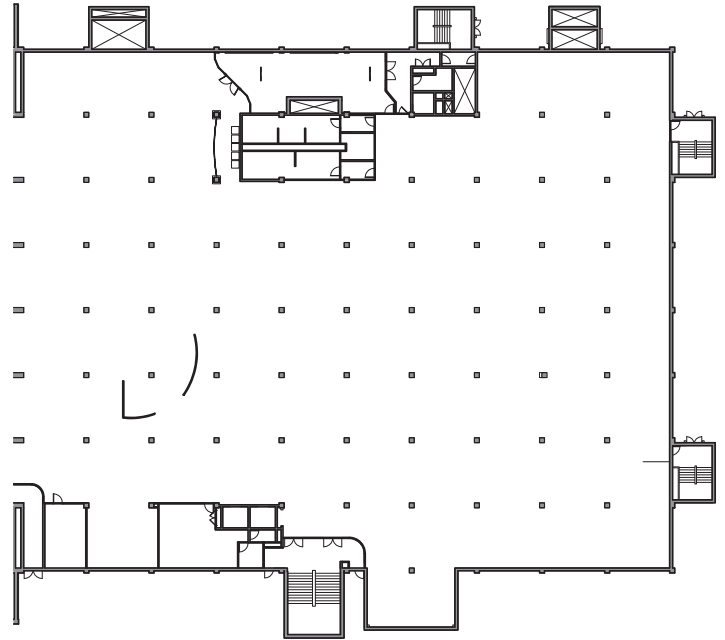
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library



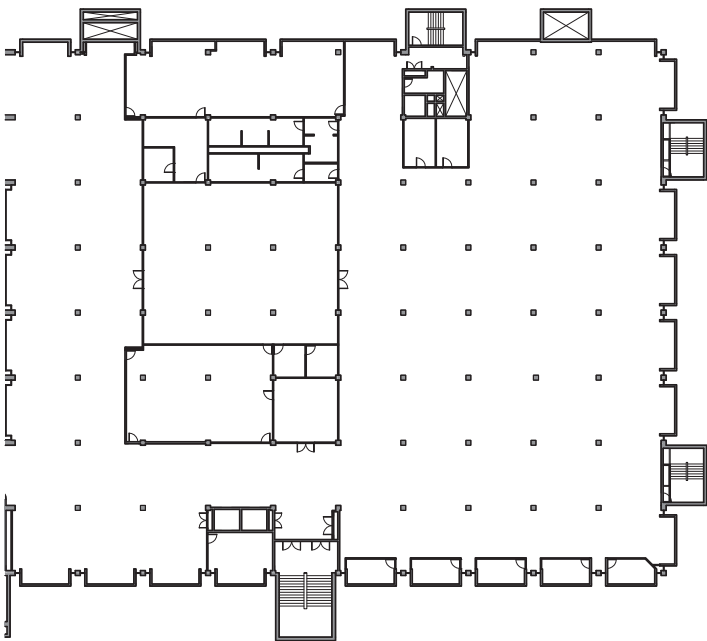
Space Utilization Summary



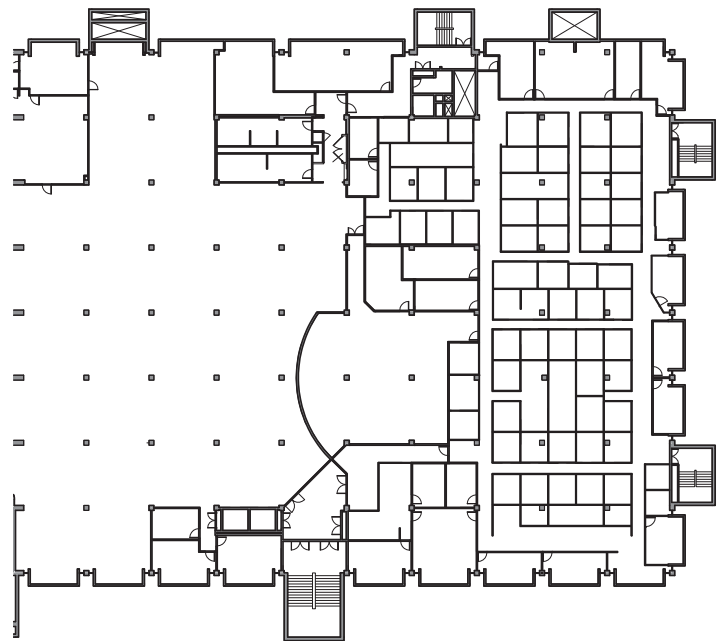
MEMORIAL LIBRARY LEVEL 0



MEMORIAL LIBRARY LEVEL 1



MEMORIAL LIBRARY LEVEL 2

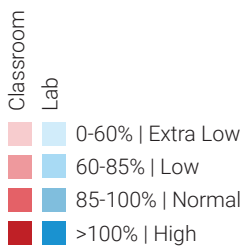


MEMORIAL LIBRARY LEVEL 3

Memorial Library



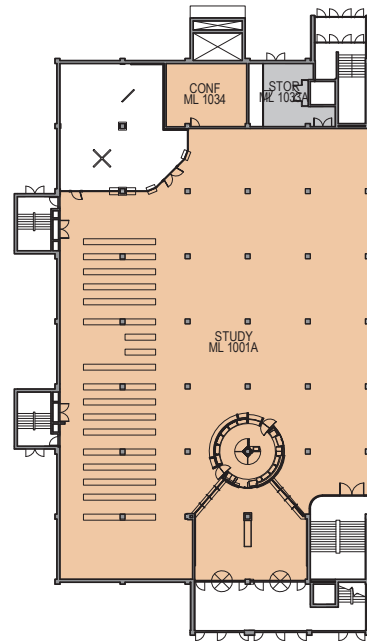
* includes Memorial Library addition classrooms & labs



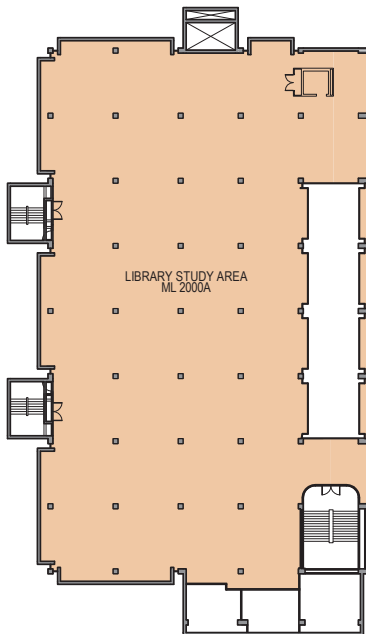
Department Space Use



MEMORIAL LIBRARY LEVEL 0



MEMORIAL LIBRARY LEVEL 1



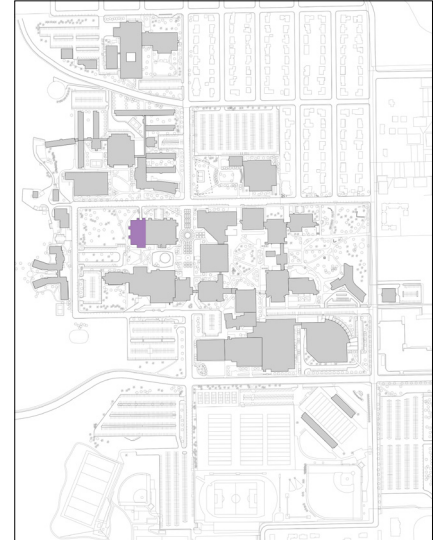
MEMORIAL LIBRARY LEVEL 2



MEMORIAL LIBRARY LEVEL 3



Memorial Library Addition



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 80,184 |
| Year Built | 1992 |
| Number of Levels | 4 |
| Backlog | \$3,101,000 |
| CRV | \$29,715,000 |
| Facility Condition (FCI) | 0.10 |
| 5-year renewal forecast | \$7,041,000 |
| Roof Type | Built-up/Memb. |

Overview

An addition and significant remodel was completed in 1992.

Building Conditions

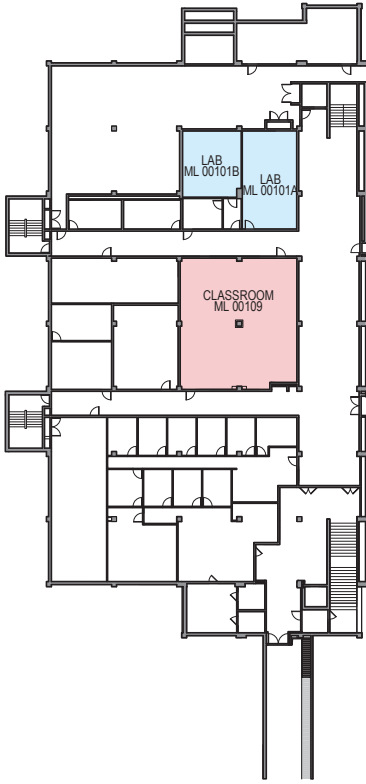
Recent Renewals:

- Study room finishes renovation in 2011

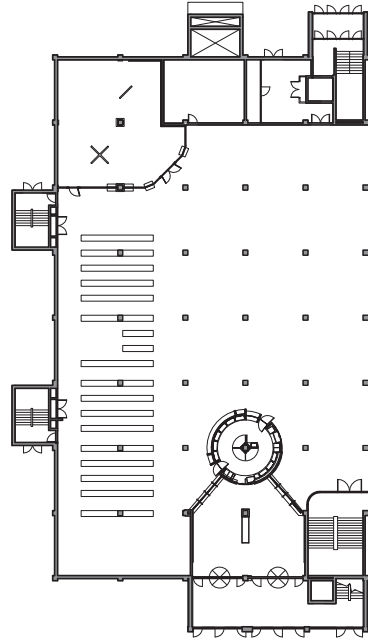
Immediate needs include re-roofing, replacement of HVAC controls, and fire protection and detection systems, and replacement of interior finishes.

- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library

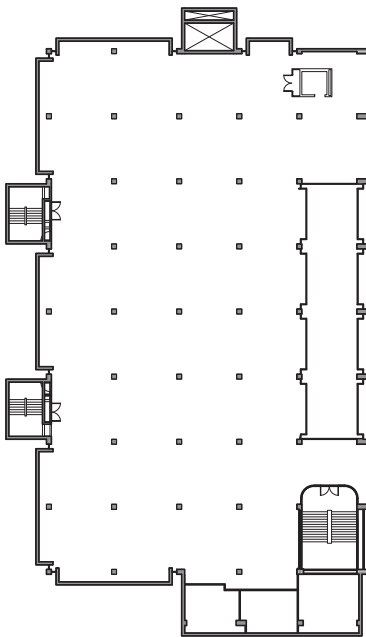




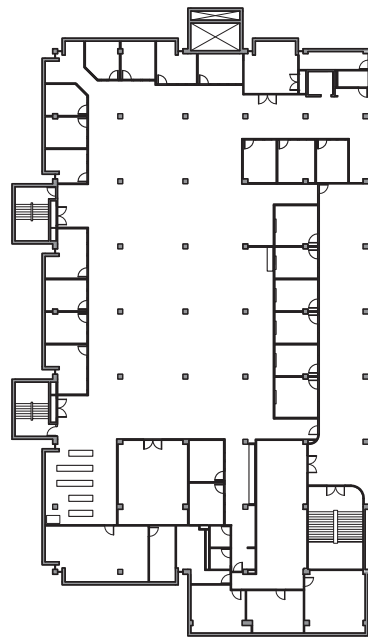
MEMORIAL LIBRARY LEVEL 0



MEMORIAL LIBRARY LEVEL 1



MEMORIAL LIBRARY LEVEL 2



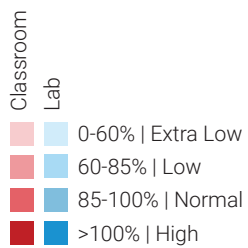
MEMORIAL LIBRARY LEVEL 3



Memorial Library Addition

Space Utilization Summary

*see Memorial Library for
classroom & lab summary*

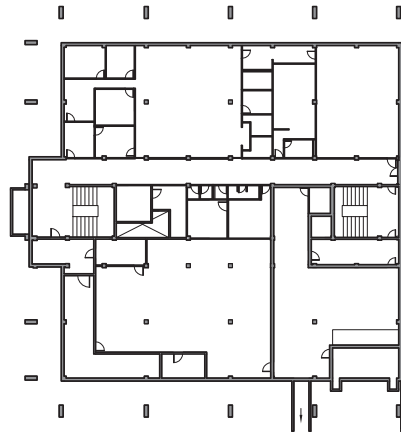


Department Space Use

Space Utilization Summary



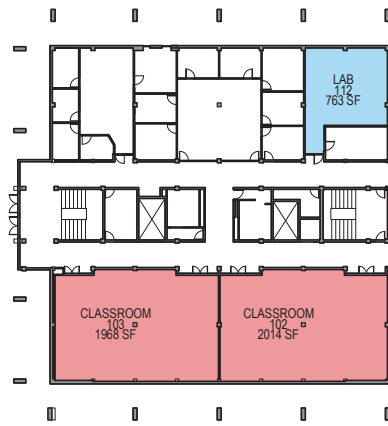
MORRIS HALL LEVEL 0



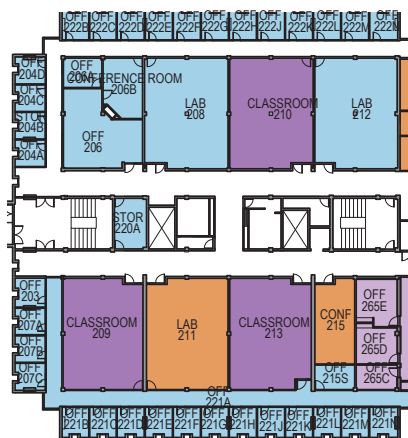
MORRIS HALL LEVEL 0



MORRIS HALL LEVEL 1



MORRIS HALL LEVEL 1



MORRIS HALL LEVEL 2



MORRIS HALL LEVEL 2



Morris Hall



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 44,325 |
| Year Built | 1968 |
| Number of Levels | 3 |
| Backlog | \$1,633,000 |
| CRV | \$16,426,000 |
| Facility Condition (FCI) | 0.10 |
| 5-year renewal forecast | \$1,983,000 |
| Roof Type | MnSCU Standard |

Overview

The departments of Urban and Regional Studies, Geography, Government, Ethnic Studies, Gender & Women's Studies, Economics, Dental Hygiene, the Undergraduate Research Center and the Honors Program also call Morris Hall home.

Building Conditions

Recent Renewals:

- Replacement windows in 2013
- Elevator replacement in 2014
- HVAC controls, equipment & distribution in 2013
- Updated distribution panels in 2016

Immediate needs include renewal of building exteriors, plumbing fixtures and rough-in, fire detection systems, built-in equipment and replacement of interior finishes.

Department Space Use Legend

- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library

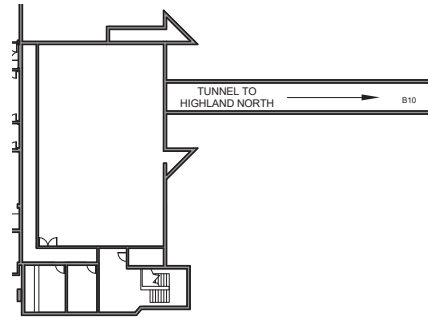
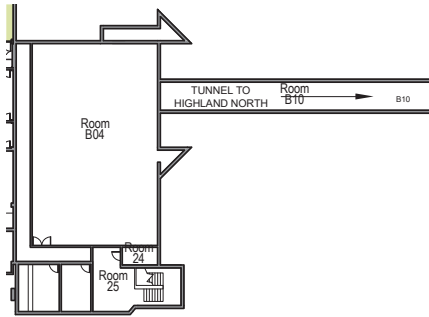
Space Utilization Legend

- Classroom
- Lab
- ■ 0-60% | Extra Low
- ■ 60-85% | Low
- ■ 85-100% | Normal
- ■ >100% | High

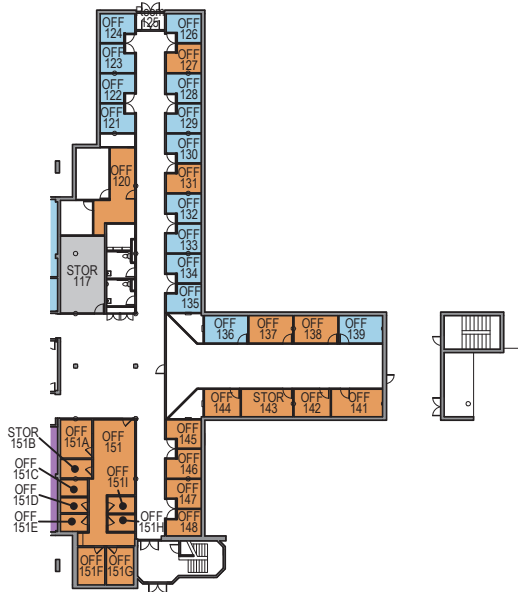


Department Space Use

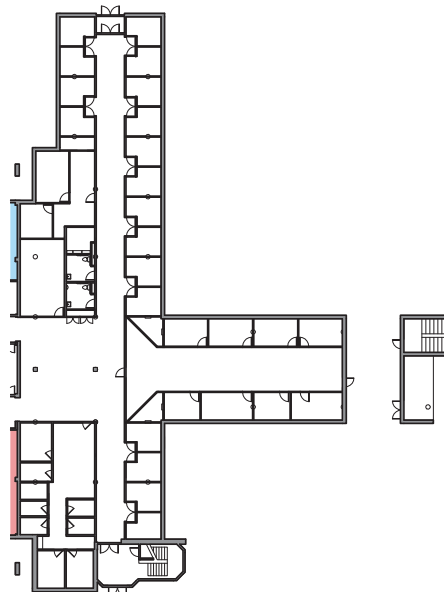
Space Utilization Summary



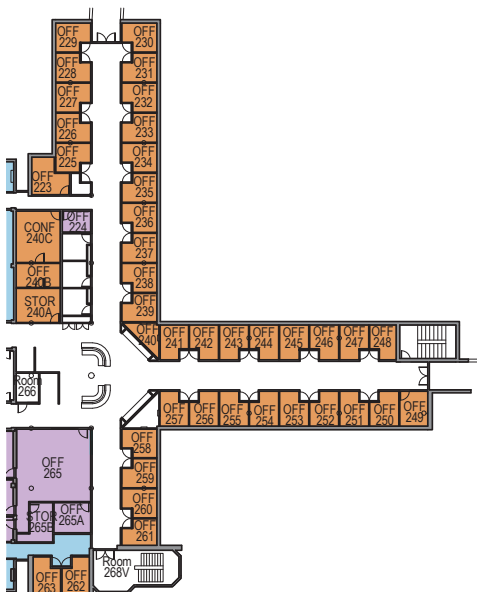
MORRIS HALL LEVEL 0



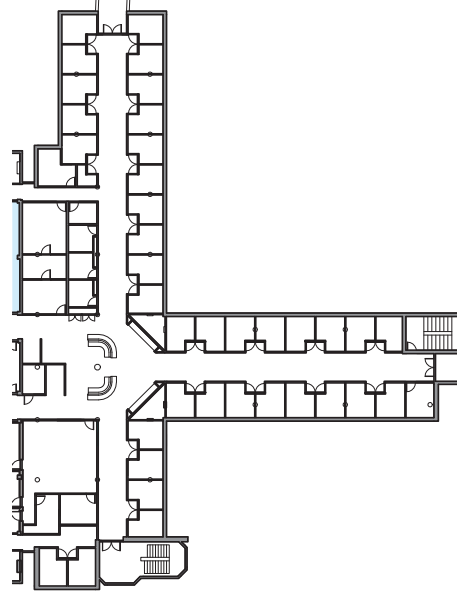
MORRIS HALL LEVEL 0



MORRIS HALL LEVEL 1

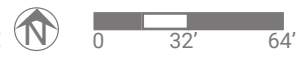


MORRIS HALL LEVEL 1



MORRIS HALL LEVEL 2

MORRIS HALL LEVEL 2



Morris Hall Addition



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 22,436 |
| Year Built | 1979 |
| Number of Levels | 3 |
| Backlog | \$93,000 |
| CRV | \$8,314,000 |
| Facility Condition (FCI) | 0.01 |
| 5-year renewal forecast | \$189,000 |
| Roof Type | MnSCU Standard |

Overview

The Morris Addition was built in 1979

Building Conditions

Recent Renewals:

- HVAC controls, equipment & distribution in 2015
- Electrical equipment switchgear updated in 2016

Immediate needs are the renewal of building exteriors.

Department Space Use Legend

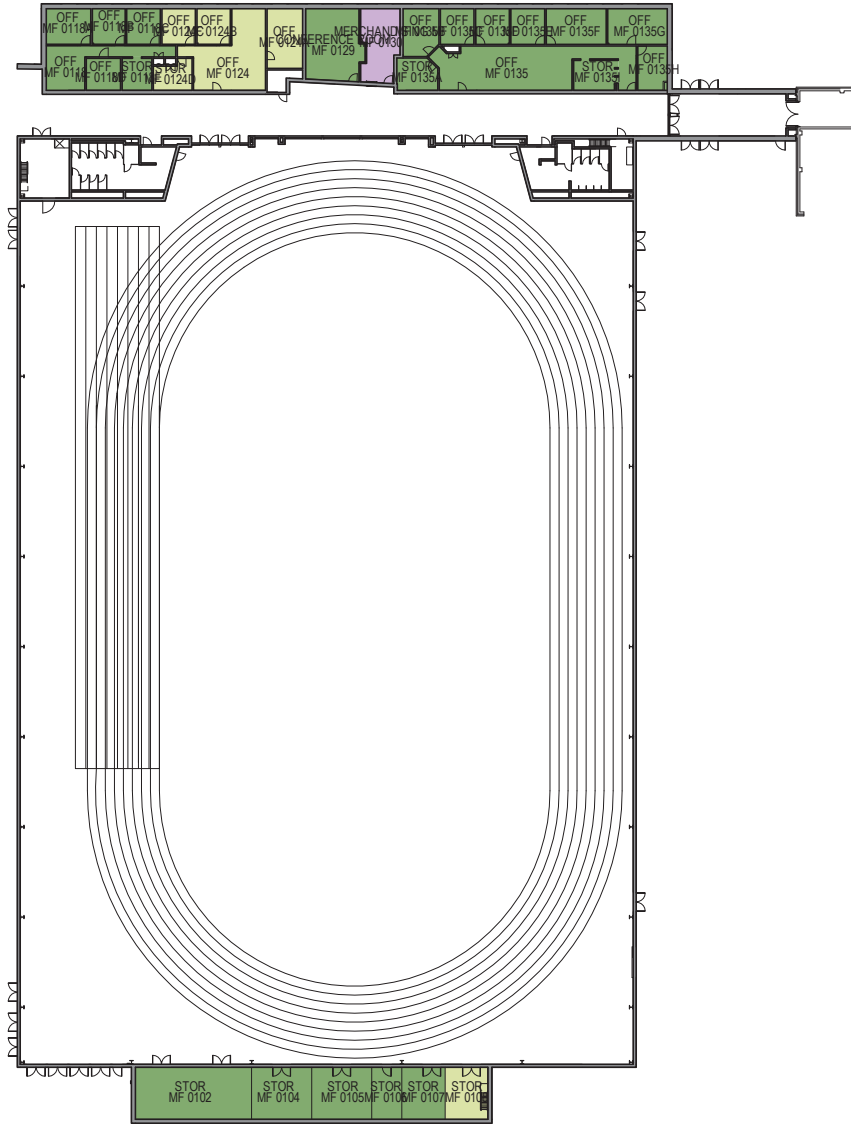
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library

Space Utilization Legend

- Classroom
- Lab
- ■ 0-60% | Extra Low
- ■ 60-85% | Low
- ■ 85-100% | Normal
- ■ >100% | High



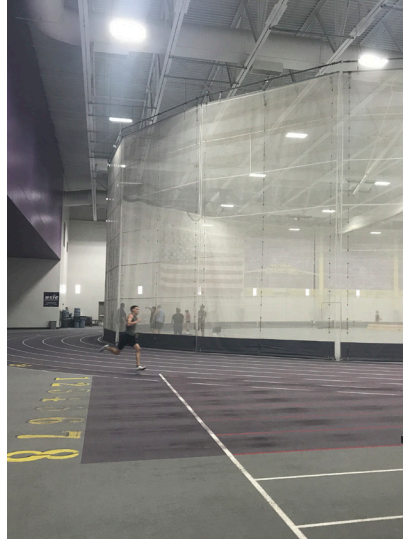
Department Space Use



MYERS FIELD HOUSE LEVEL 1



Myers Field House



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 82,308 |
| Year Built | 2001 |
| Number of Levels | 1 |
| Backlog | \$1,170,000 |
| CRV | \$30,502,000 |
| Facility Condition (FCI) | 0.04 |
| 5-year renewal forecast | \$2,199,000 |
| Roof Type | MnSCU Standard |

Overview

The \$11 million 84,000 sq. ft. field house was completed in 2001. It is a state-of-the-art facility that supports NCAA track and field events; practice space for softball, baseball, tennis, and student intramurals; along with a multi-purpose venue for the departments of Human Performance and Recreation. The newest addition to the Fieldhouse is a popular rock climbing wall in the southeast corner of the facility.

Building Conditions

This facility has minimal backlog, primarily the replacement of interior finishes.

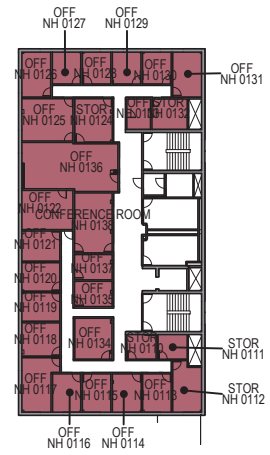
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
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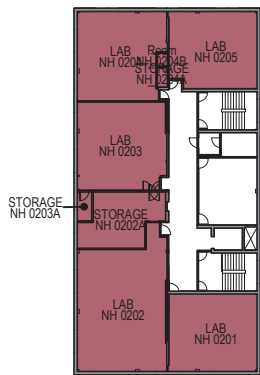
Department Space Use



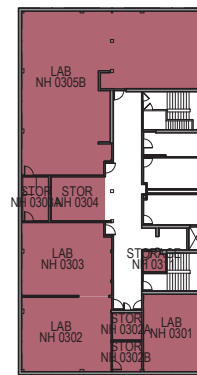
NELSON HALL LEVEL 0



NELSON HALL LEVEL 1

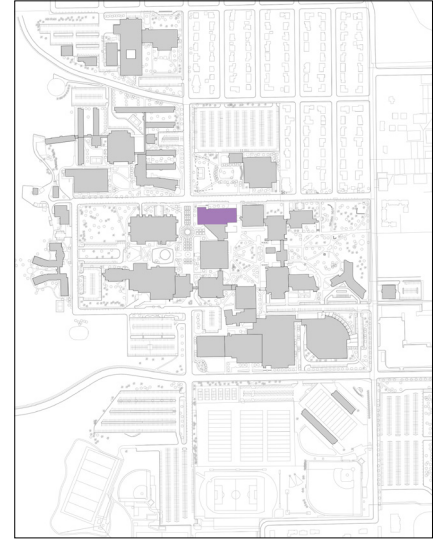
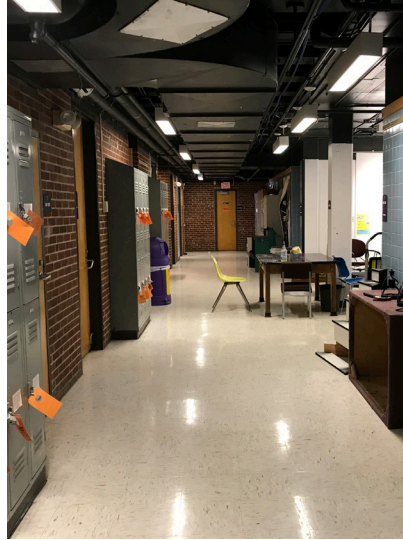


NELSON HALL LEVEL 2



NELSON HALL LEVEL 3

Nelson Hall



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 51,617 |
| Year Built | 1962 |
| Number of Levels | 4 |
| Backlog | \$3,384,000 |
| CRV | \$19,128,000 |
| Facility Condition (FCI) | 0.18 |
| 5-year renewal forecast | \$4,401,000 |
| Roof Type | Built-up/Memb. |

Overview

When it opened in 1962, Nelson Hall was intended to be an industrial arts building. It is now home to the departments of Art and Mass Media. Its east wing houses labs for Automotive Engineering Technology. A connecting link from Nelson to Armstrong houses art studios and the Effie Conkling Gallery.

Building Conditions

Recent Renewals:

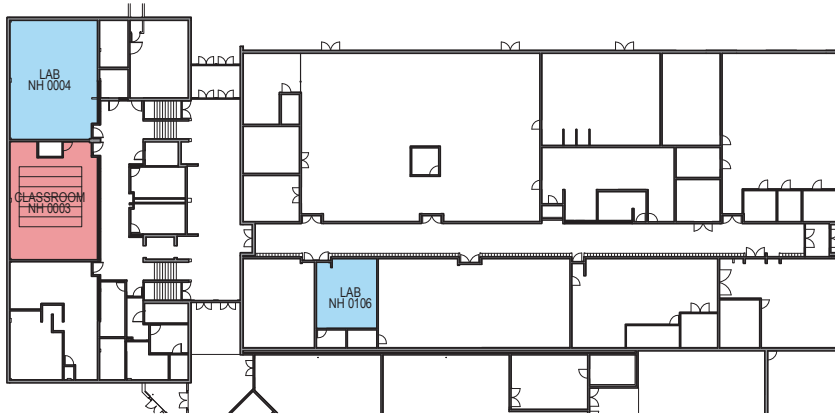
- HVAC FX controls upgrade in 2014
- Restroom renovations in 2010
- Elevator updates for code compliance in 2010

Immediate needs include roof replacement, refurbishment of building exteriors, replacement of HVAC equipment and distribution, plumbing fixtures and rough-in, upgrade of fire protection systems, built-in equipment and interior finishes. Elevators are past their expected life cycle and should be upgraded.

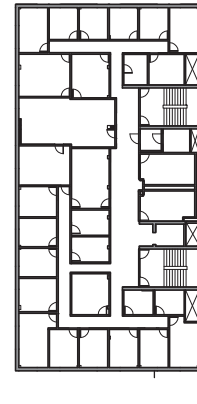
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library



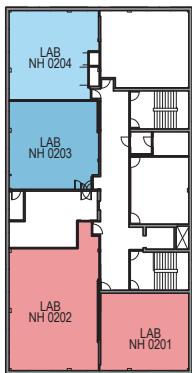
Space Utilization Summary



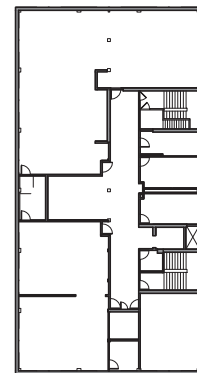
NELSON HALL LEVEL 0



NELSON HALL LEVEL 1

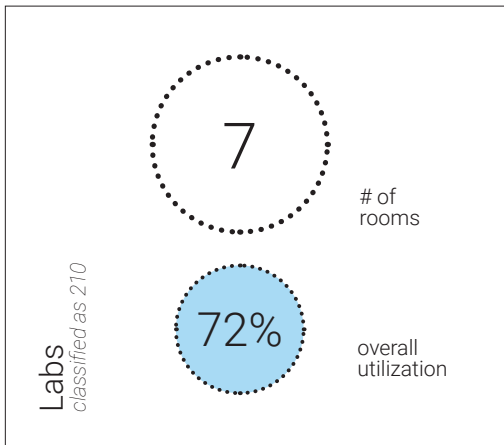


NELSON HALL LEVEL 2

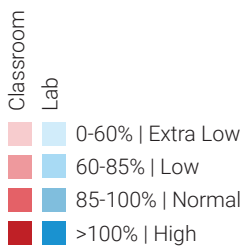


NELSON HALL LEVEL 3

Nelson Hall



* includes Memorial Library
addition classrooms & labs

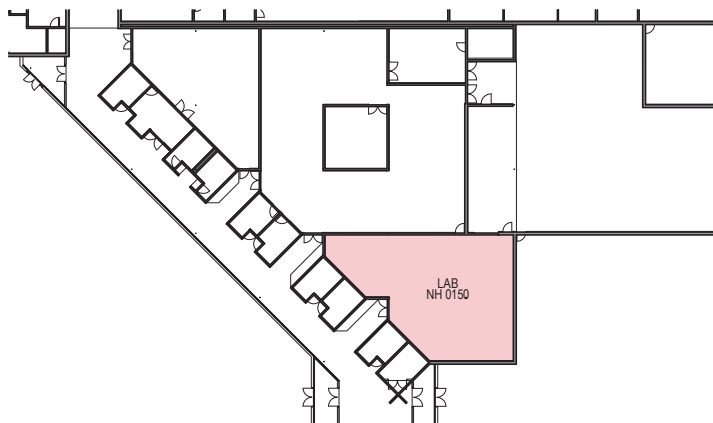


Department Space Use



NELSON HALL LEVEL 0

Space Utilization Summary



NELSON HALL LEVEL 0



Nelson Hall Addition



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 13,076 |
| Year Built | 1979 |
| Number of Levels | 1 |
| Backlog | \$787,000 |
| CRV | \$4,846,000 |
| Facility Condition (FCI) | 0.16 |
| 5-year renewal forecast | \$849,000 |
| Roof Type | MnSCU Standard |

Overview

A connecting link from Nelson to Armstrong houses art studios and the Effie Conkling Gallery.

Building Conditions

Recent Renewals:

- HVAC FX controls update in 2014
- Replacement of 3 transformers, 4 panels, main distribution panel and motor control center in 2010
- New controls and VAV system for 2009

Immediate needs include the replacement of HVAC controls, equipment and distribution, plumbing fixtures and rough-in and interior finishes. VAV boxes are failing and need to be replaced.

Department Space Use Legend

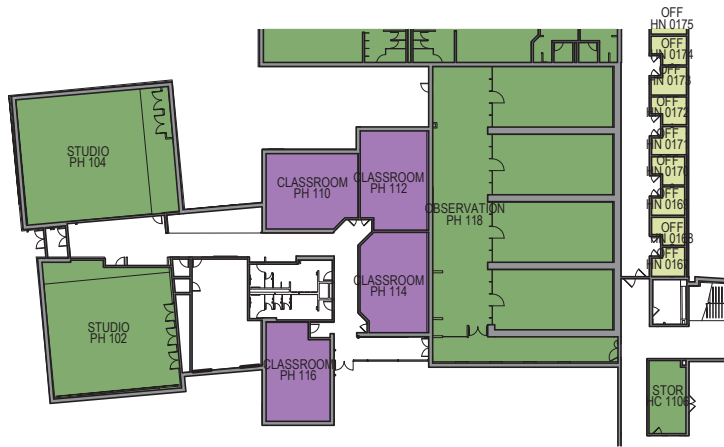
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library



Space Utilization Legend

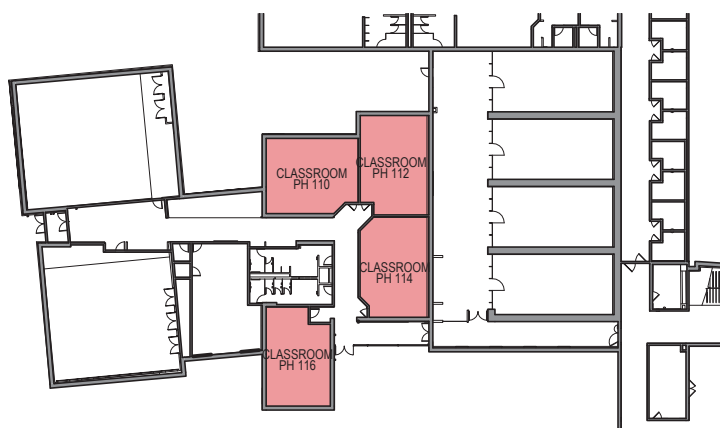
- | | |
|-----------|-------------------|
| Classroom | 0-60% Extra Low |
| Lab | 60-85% Low |
| | 85-100% Normal |
| | >100% High |

Department Space Use



PENNINGTON HALL LEVEL 1

Space Utilization Summary

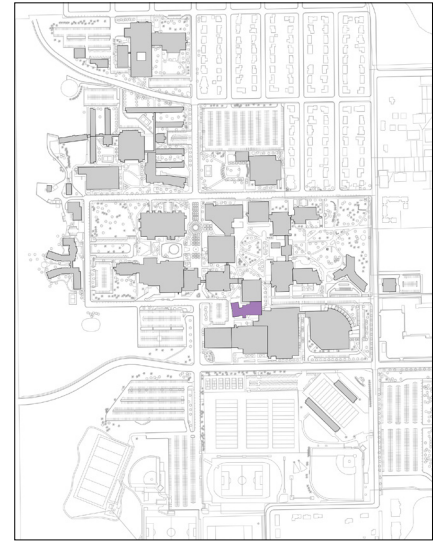


PENNINGTON HALL LEVEL 1



0 32' 64'

Pennington Hall



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 17,514 |
| Year Built | 1986 |
| Number of Levels | 1 |
| Backlog | \$0 |
| CRV | \$6,490,000 |
| Facility Condition (FCI) | 0.00 |
| 5-year renewal forecast | \$321,000 |
| Roof Type | MnSCU Standard |

Overview

Pennington Hall has two multipurpose rooms, located west of the four original classrooms. These rooms were completed in August 2005 along with an indoor link from Highland North to Pennington Hall and includes a matted room for martial arts and a wood floor group fitness and dance studio.

Building Conditions

Recent Renewals:

- The addition and renovation in 2005 provided an overall upgrade to many building systems

Pennington Hall does not have any backlog; upcoming needs include renewal of interior finishes and building exteriors.

Department Space Use Legend

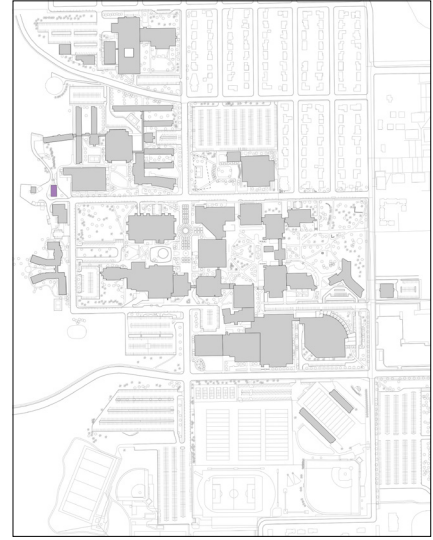
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
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- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library



Space Utilization Legend

- Classroom
- Lab
- ■ 0-60% | Extra Low
- ■ 60-85% | Low
- ■ 85-100% | Normal
- ■ >100% | High

Stand-by Generator Building



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 3,000 |
| Year Built | 2005 |
| Number of Levels | 1 |
| Backlog | \$0 |
| CRV | \$1,551,000 |
| Facility Condition (FCI) | 0.00 |
| 5-year renewal forecast | \$43,000 |
| Roof Type | MnSCU Standard |



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- Library

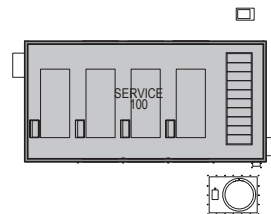
Overview

The stand-by generator building currently houses three diesel generators with the capacity to hold four generators when the demands of campus requires it. Installed in 2005, the generators can provide stand-by power for the university's full electrical load, qualifying the university for a reduced utility rate on electricity.

Building Conditions

The building is in good condition and does not have any backlog. Engines are tested regularly.

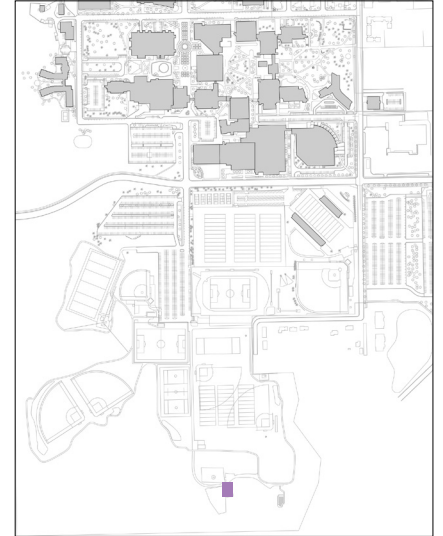
Department Space Use



GENERATOR PLANT LEVEL 1



Standeford Observatory



| BUILDING SUMMARY | |
|--------------------------|----------|
| Gross SF | 200 |
| Year Built | 1982 |
| Number of Levels | 1 |
| Backlog | \$0 |
| CRV | \$43,000 |
| Facility Condition (FCI) | 0.00 |
| 5-year renewal forecast | \$0 |
| Roof Type | n/a |



Overview

Standeford Observatory is home to a variety of telescopes. These instruments are used primarily for visual observations of the sky by MSU students and other observatory visitors. Standeford Observatory is staffed by undergraduate students observing assistants under the supervision of astronomy faculty members.

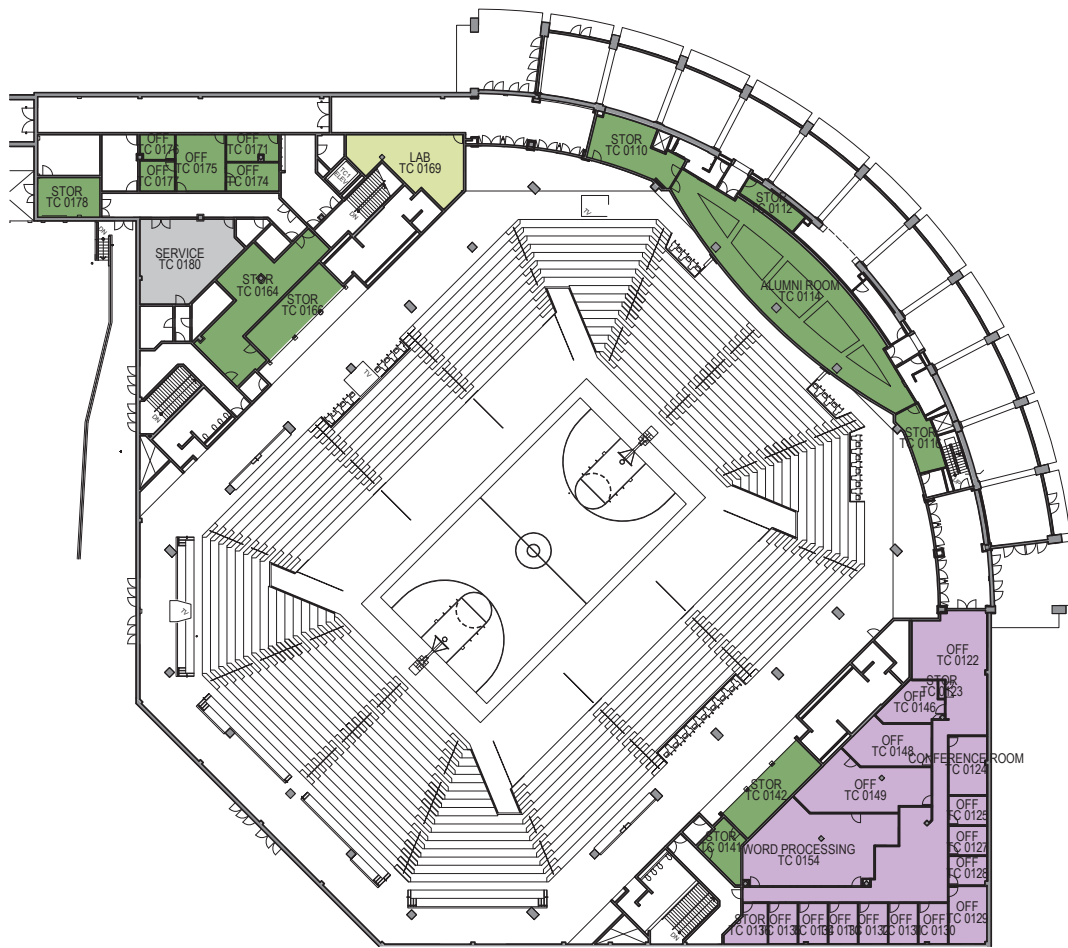
Building Conditions

The observatory is in good condition and does not have any backlog.

Department Space Use



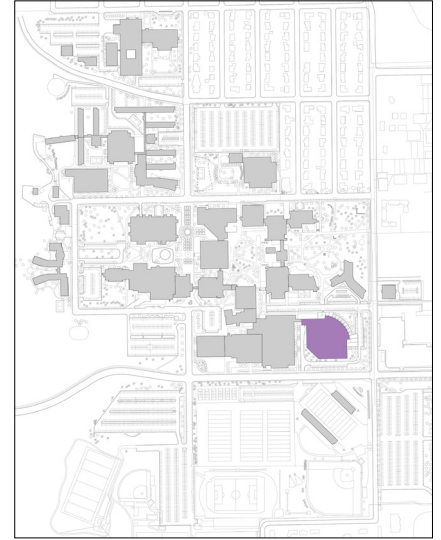
TAYLOR CENTER LEVEL 0



TAYLOR CENTER LEVEL 1



Taylor Center



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 142,951 |
| Year Built | 2000 |
| Number of Levels | 2 |
| Backlog | \$0 |
| CRV | \$52,975,000 |
| Facility Condition (FCI) | 0.00 |
| 5-year renewal forecast | \$7,017,000 |
| Roof Type | Built-up/Memb. |

Overview

Taylor Center, with a total area of 142,951 square feet serves as the gateway to campus for students, alumni, faculty, staff and visitors. The building houses Bresnan Arena, and is the home of Mavericks basketball, volleyball and wrestling.

Building Conditions

Recent Renewals:

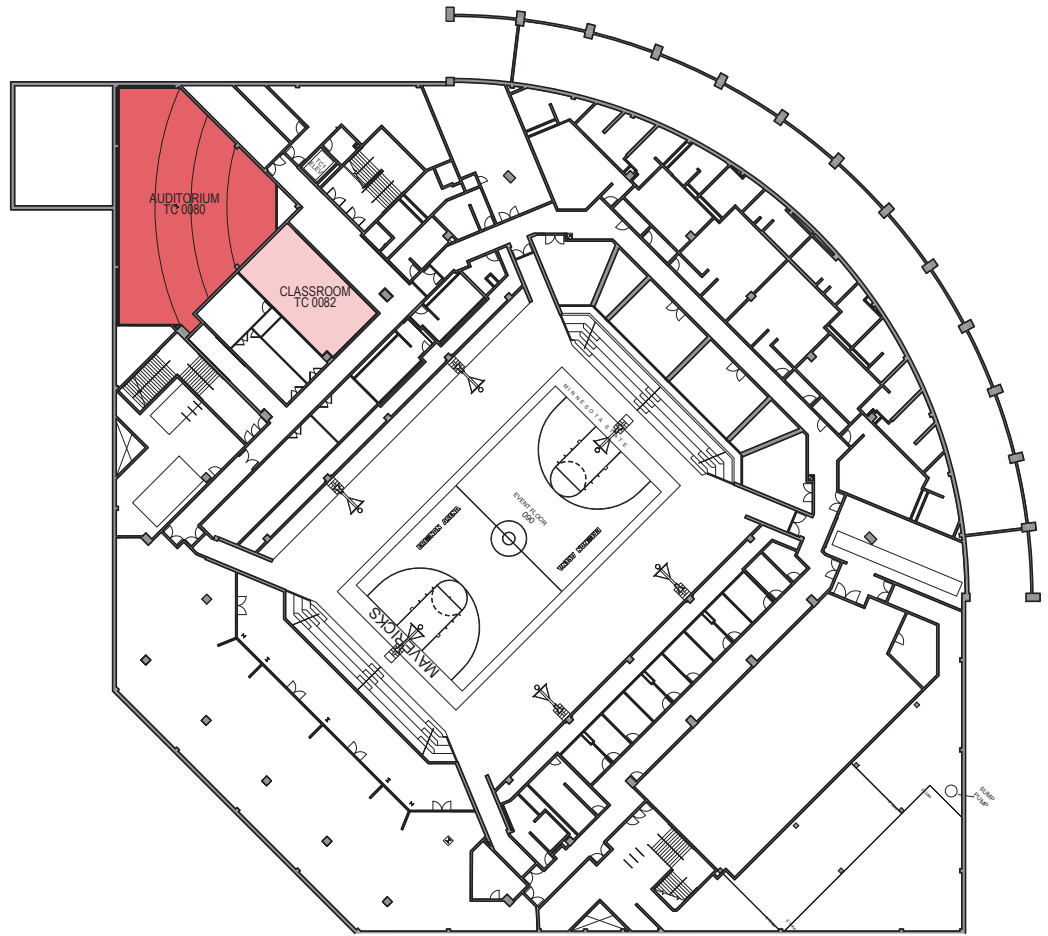
- New HVAC FX controls in 2014
- Two new classrooms, fixed furniture and new HVAC duct work in 2012
- Motorized bleachers in 2012
- Two new restrooms in 2012
- New finishes, including removal and replacement of new terrazzo in Hall of Champions, acoustic spray arena ceiling, and refresh of main arena floor in 2012

Taylor Center's immediate renewal needs are replacement/repair of roofing. Other upcoming items include updates of HVAC controls, fire detection systems and interior finishes.

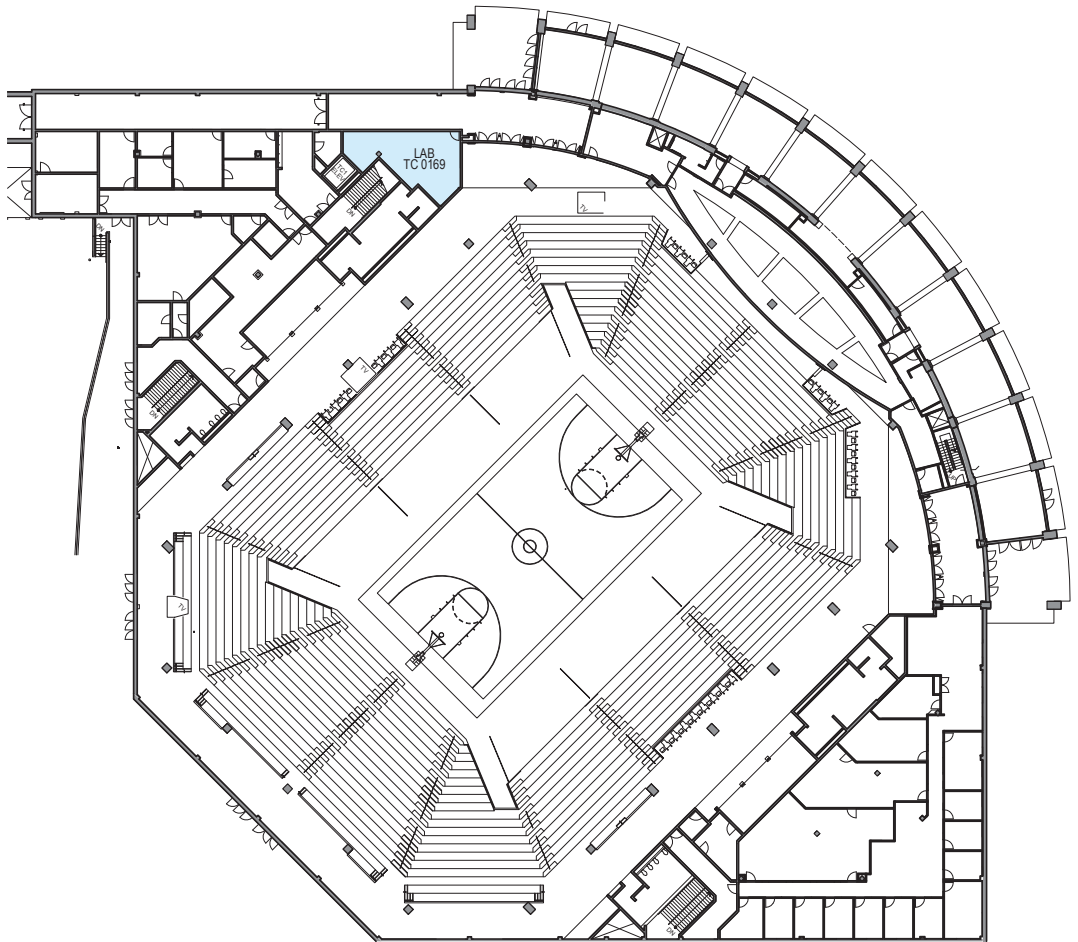
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
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- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library



Space Utilization
Summary



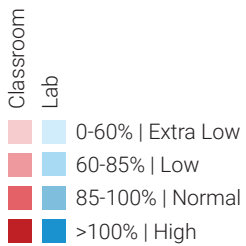
TAYLOR CENTER LEVEL 0



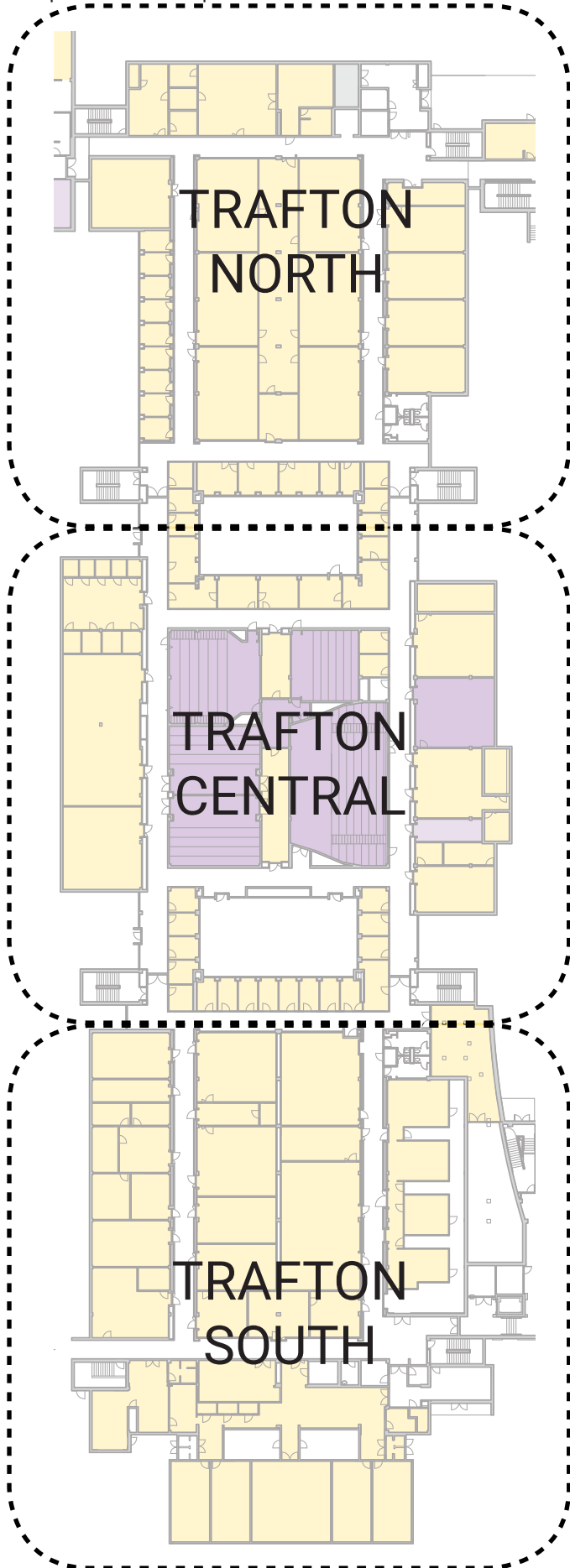
TAYLOR CENTER LEVEL 1



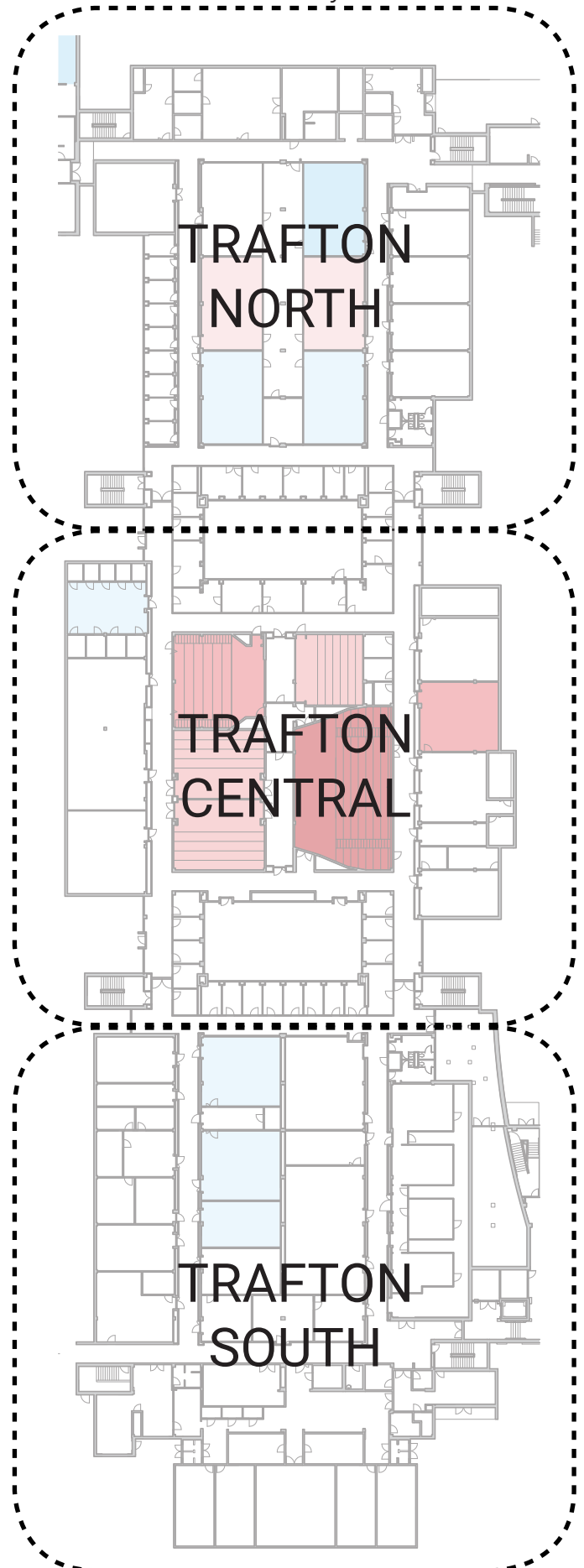
Taylor Center



Department Space Use



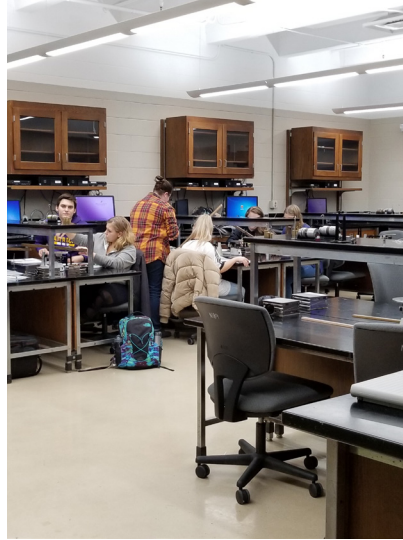
Space Utilization Summary



0 275' 550'

Trafton Science Center

North, Central, South



| BUILDING SUMMARY | |
|--------------------------|----------------------------------|
| Gross SF | 224,864 |
| Year Built | 1972 |
| Number of Levels | 3 |
| Backlog | \$6,332,000 |
| CRV | \$119,072,000 |
| Facility Condition (FCI) | 0.05 |
| 5-year renewal forecast | \$6,332,000 |
| Roof Type | Metal/Concrete MnSCU Standard |

Overview

Trafton's main building and the Trafton addition (1994) house various science, engineering and technology classrooms, offices and laboratories. MSU's Water Resource Center is housed here, and the Departments of Social Work and Anthropology have offices in the main Trafton Building.

Building Conditions

Recent Renewals:

- Replacement of unit ventilators in all offices in 2014
- New unit heaters in stairwells in 2011
- 80% of south end labs retrofitted in 2009
- Center and North end corridors, offices and labs renovated; new doors & hardware, finishes in 2010
- Upgraded Central & North end to new controls in 2010
- North elevator replaced, South elevator removed & replaced w/ unisex restrooms in 2010

Immediate renewal needs are replacement/ repair of building exteriors, electrical equipment, plumbing fixtures & rough-in, replacement of lab casework, and refresh of interior finishes.

Department Space Use Legend

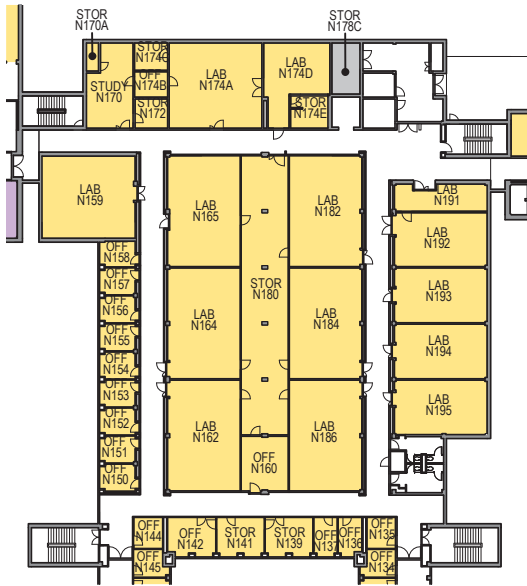
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
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- College of Education
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- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library



Space Utilization Legend

- | | |
|-----------|-------------------|
| Classroom | 0-60% Extra Low |
| Lab | 60-85% Low |
| | 85-100% Normal |
| | >100% High |

Trafton North Department



TRAFTON NORTH - LEVEL 1



TRAFTON NORTH - LEVEL 2

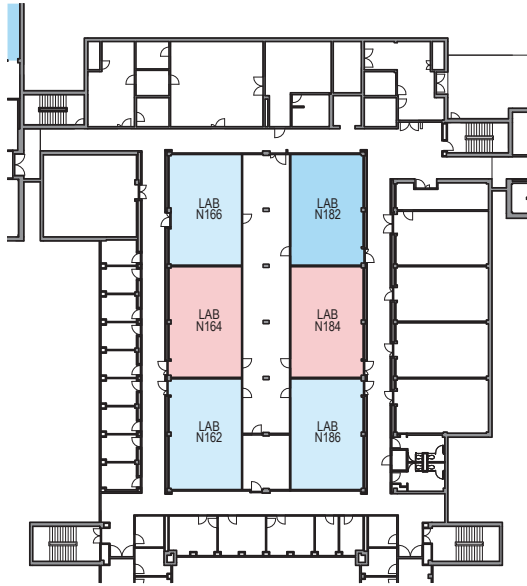


TRAFTON NORTH - LEVEL 3

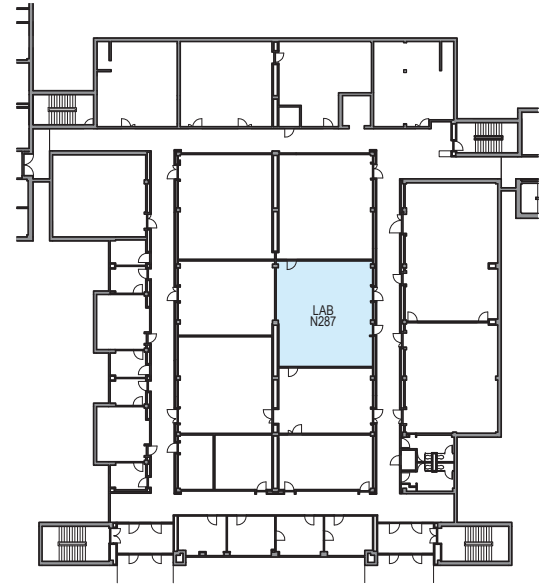
- Administration
- College of Allied Health & Nursing
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- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Library



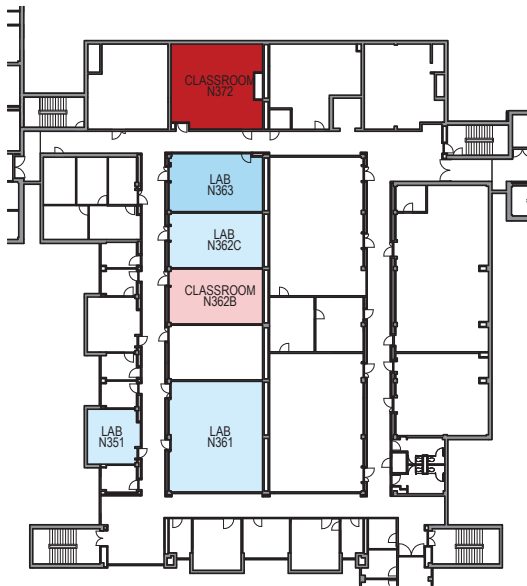
Trafton North Utilization



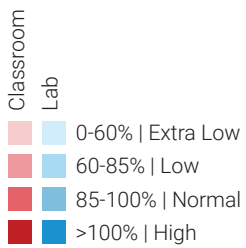
TRAFTON NORTH - LEVEL 1



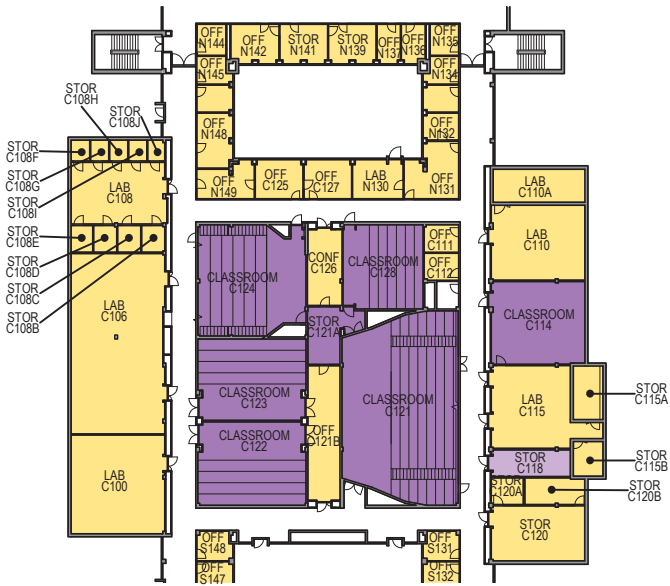
TRAFTON NORTH - LEVEL 2



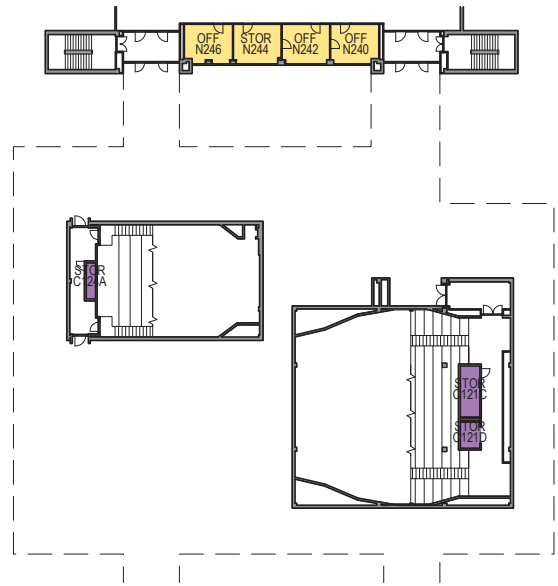
TRAFTON NORTH - LEVEL 3



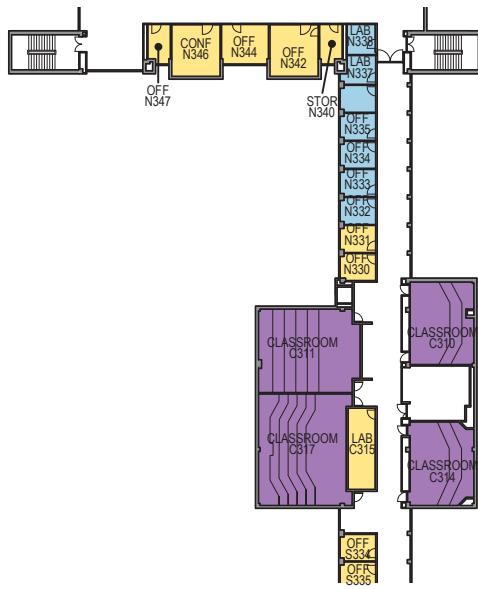
Trafton Central Department



TRAFTON CENTRAL - LEVEL 1



TRAFTON CENTRAL - LEVEL 2



TRAFTON CENTRAL - LEVEL 3

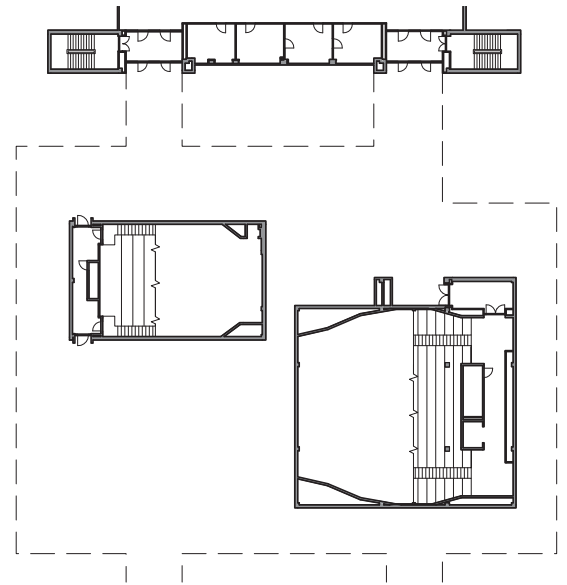
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- Service
- General Classroom
- Library



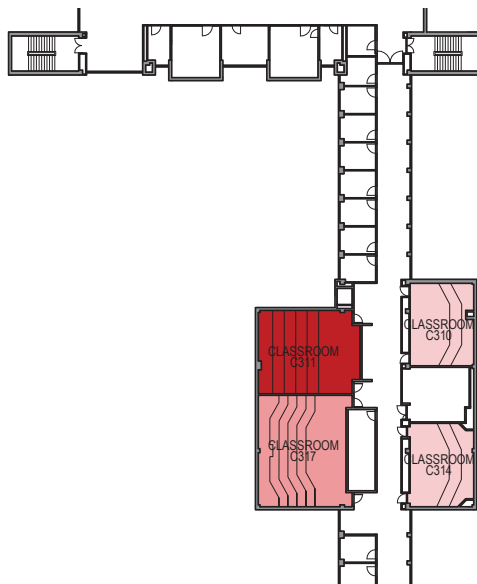
Trafton Central Utilization



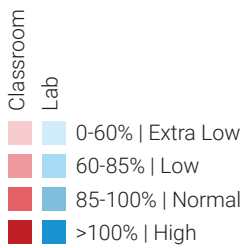
TRAFTON CENTRAL - LEVEL 1



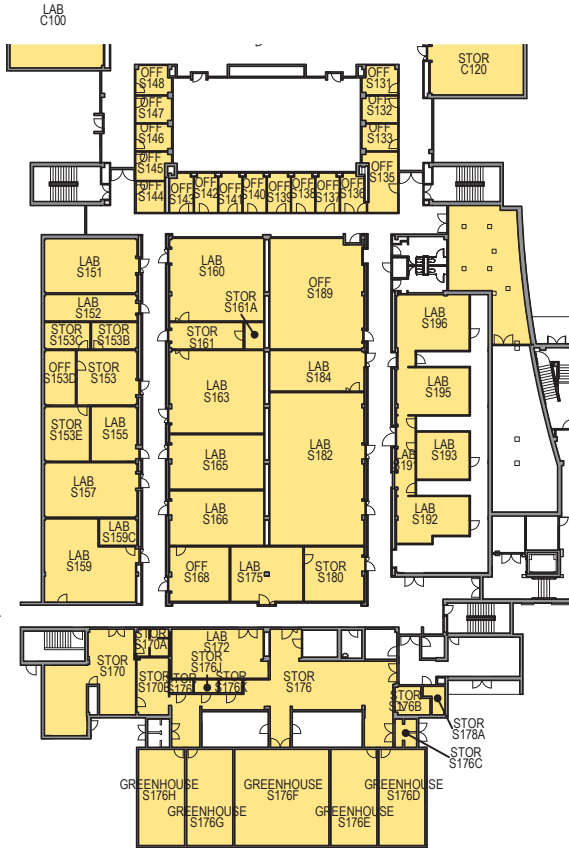
TRAFTON CENTRAL - LEVEL 2



TRAFTON CENTRAL - LEVEL 3



Trafton South Department



TRAFTON SOUTH - LEVEL 1



TRAFTON SOUTH - LEVEL 2

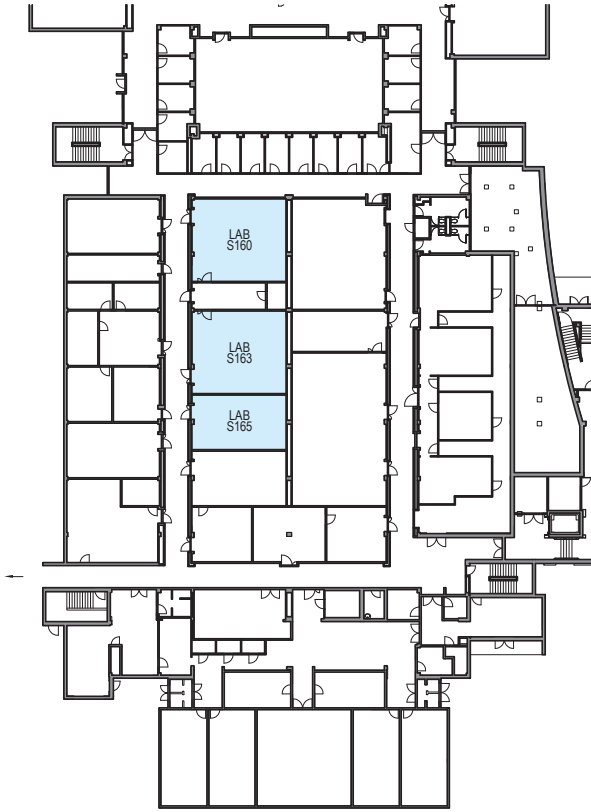


TRAFTON SOUTH - LEVEL 3

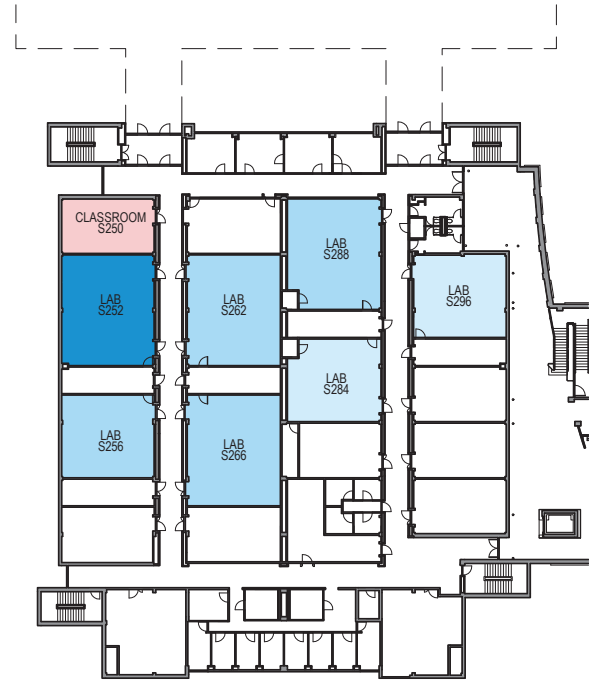
- | | | |
|--|--|---|
| Administration | College of Education | General Classroom |
| College of Allied Health & Nursing | College of Science, Engineering & Technology | Service |
| College of Arts & Humanities | College of Social & Behavioral Sciences | Library |
| College of Business | | |



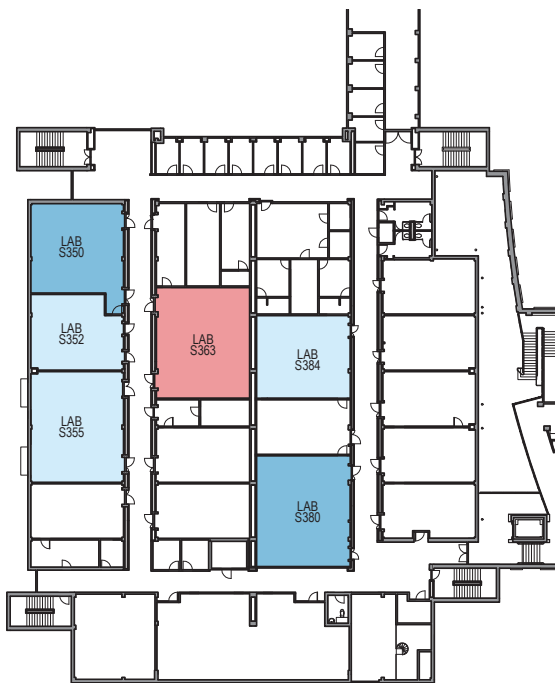
Trafton South Utilization



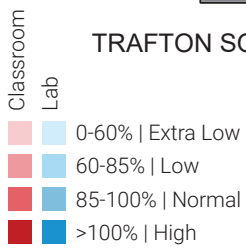
TRAFTON SOUTH - LEVEL 1



TRAFTON SOUTH - LEVEL 2



TRAFTON SOUTH - LEVEL 3

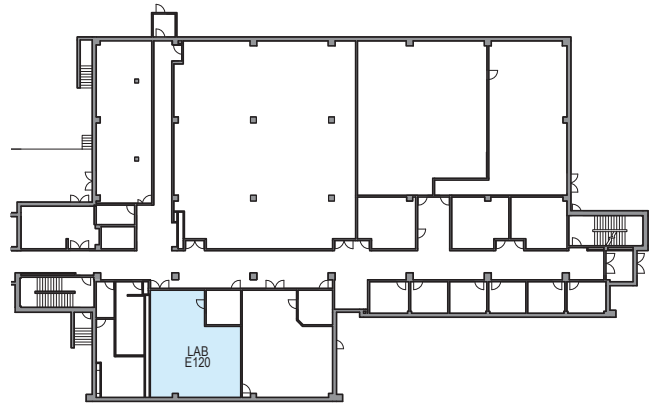


Department Space Use

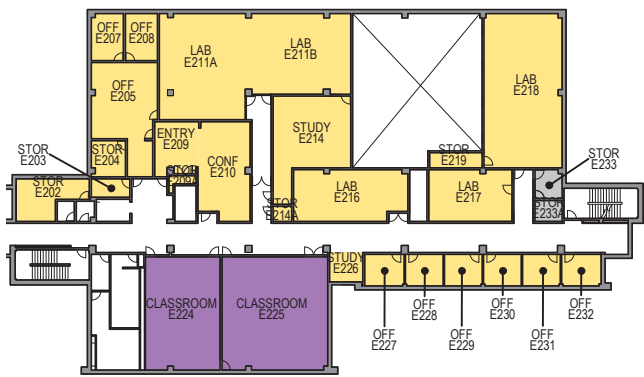


TRAFTON EAST - LEVEL 1

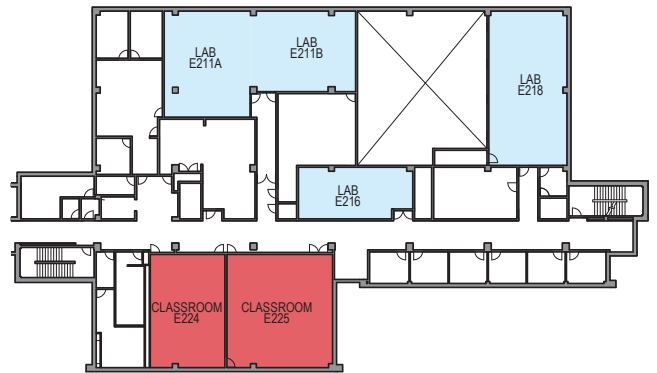
Space Utilization



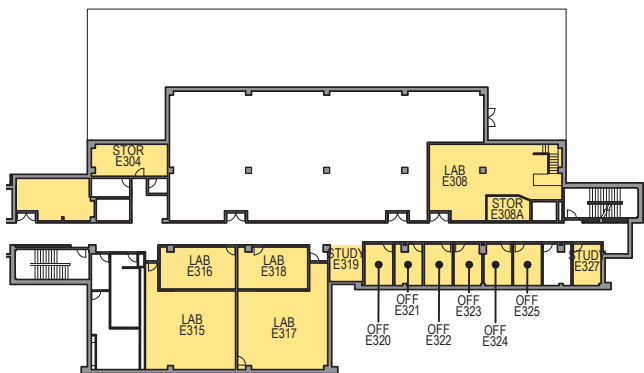
TRAFTON EAST - LEVEL 1



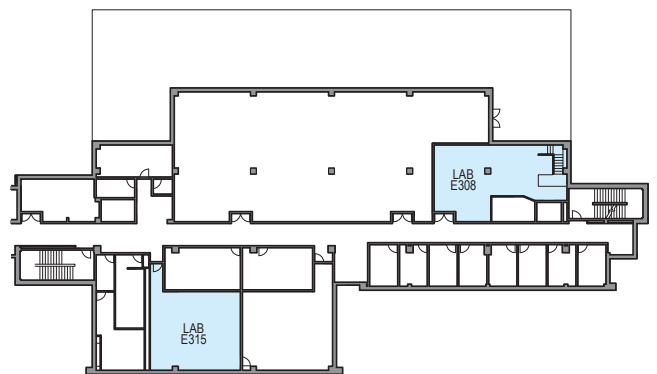
TRAFTON EAST - LEVEL 2



TRAFTON EAST - LEVEL 2



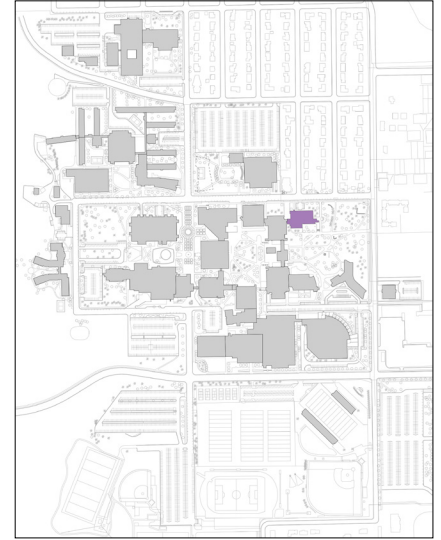
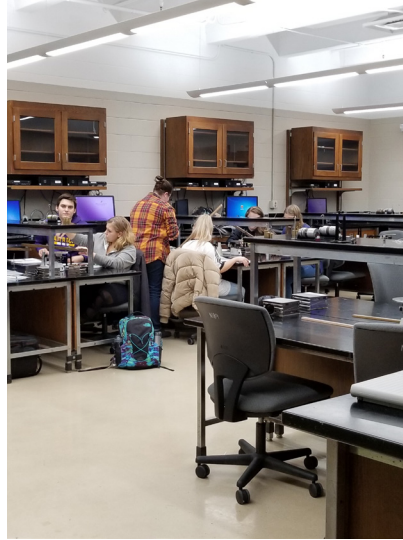
TRAFTON EAST - LEVEL 3



TRAFTON EAST - LEVEL 3



Trafton Science Center East



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 57,270 |
| Year Built | 1994 |
| Number of Levels | 4 |
| Backlog | \$0 |
| CRV | \$21,223,000 |
| Facility Condition (FCI) | 0.00 |
| 5-year renewal forecast | \$813,000 |
| Roof Type | MnSCU Standard |

Overview

The Trafton addition (1994) houses various science, engineering and technology classrooms, offices and laboratories.

Building Conditions

Recent Renewals:

- Replaced all HVAC controls in 2011
- GeoTech Lab remodel in 2007

Trafton East does not have any backlog items. Upcoming renewal items include elevator refurbishment and renewal of built-in equipment (lab casework).

Department Space Use Legend

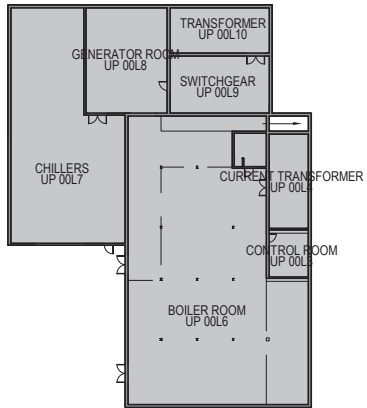
- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library



Space Utilization Legend

- | | |
|-----------|-------------------|
| Classroom | 0-60% Extra Low |
| Lab | 60-85% Low |
| | 85-100% Normal |
| | >100% High |

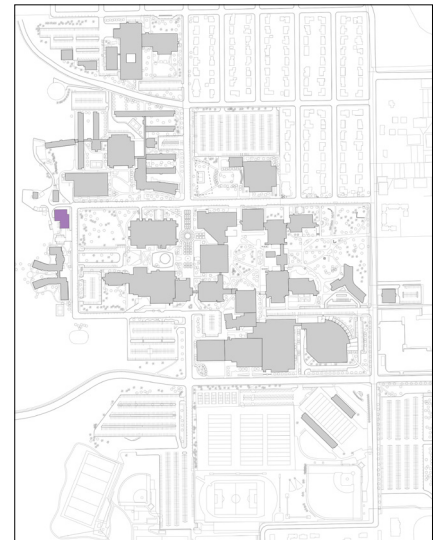
Department Space Use



UTILITY PLANT LEVEL 1



Utility Plant



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 13,574 |
| Year Built | 1962 |
| Number of Levels | 2 |
| Backlog | \$1,392,000 |
| CRV | \$7,357,000 |
| Facility Condition (FCI) | 0.19 |
| 5-year renewal forecast | \$2,631,000 |
| Roof Type | MnSCU Standard |

Overview

The Utility Plant generates steam and chilled water that are distributed through a network of pipes and tunnels to the buildings on campus. The Utility Plant houses four boilers that provide all of the heating required on campus year round. Three chillers provide air-conditioning indirectly for most of the campus buildings. In this system air-handling units use water to air heat exchangers to cool the air down to the specified temperature.

Building Conditions

Recent Renewals:

- Chiller and boiler controls upgraded in 2014
- VFD on cooling towers installed in 2011
- Boiler 1 Burner upgraded in 2010
- Replaced media in cooling towers and replaced condensate and transfer pumps in 2011

Current backlog for the Utility Plant includes plumbing work, built-in equipment and interior finish renewal.

- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library

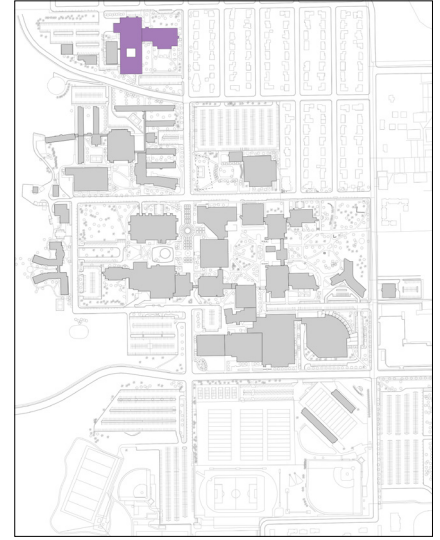


Department Space Use



WIECKING LEVEL 1

Wiecking Center



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 98,224 |
| Year Built | 1959 |
| Number of Levels | 1 |
| Backlog | \$4,429,000 |
| CRV | \$36,400,000 |
| Facility Condition (FCI) | 0.12 |
| 5-year renewal forecast | \$8,395,000 |
| Roof Type | MnSCU Standard |

Overview

The structure originally housed the Wilson Campus School, an experimental laboratory school which in 1968 adopted an innovative open curriculum for which it became nationally known. The school operated until June 1977 when legislative funding support was discontinued. Continuing in service for other university purposes, the building was renamed the Wiecking Center in 1979.

The building now houses several classrooms and offices for various departments on campus, and it is also home to MSU's Children's House, the departments of Construction Management and Family & Consumer Sciences, the Trio Programs, Military Science, Printing Services and classrooms, including the Wiecking auditorium. A metal building annex also houses various shops for the building trades and printing services.

Building Conditions

Recent Renewals:

- New rooftop unit, controls & distribution, serving rooms 331 to 338 in 2016
- Physical plant and southwest corner received new AHU, distribution & controls in 2014
- FX controls upgraded / replaced; east wing updated to FX controls in 2014
- Replaced print shop HVAC, SF9 CW coil and compressor in 2012

Current backlog for Wiecking Center includes re-roofing, renewal of building exteriors (window replacement), electrical equipment, plumbing work and replacement of interior finishes.

Wiecking Center is a single story facility occupying a large footprint of MSU's total campus footprint. Due to this, its age and construction type, it is not a very efficient building, nor was it intended for the functions that now occupy it.

| | |
|---|--|
| ■ | Administration |
| ■ | College of Allied Health & Nursing |
| ■ | College of Arts & Humanities |
| ■ | College of Business |
| ■ | College of Education |
| ■ | College of Science, Engineering & Technology |
| ■ | College of Social & Behavioral Sciences |
| ■ | General Classroom |
| ■ | Service |
| ■ | Athletics & Recreation |
| ■ | Residential Life & Student Life |
| ■ | Library |

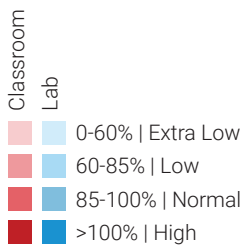
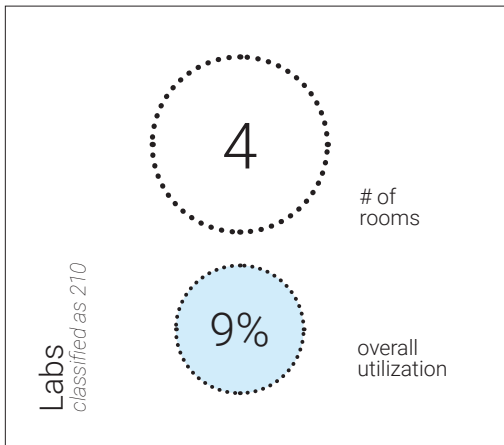
0.12
FCI

Space Utilization Summary

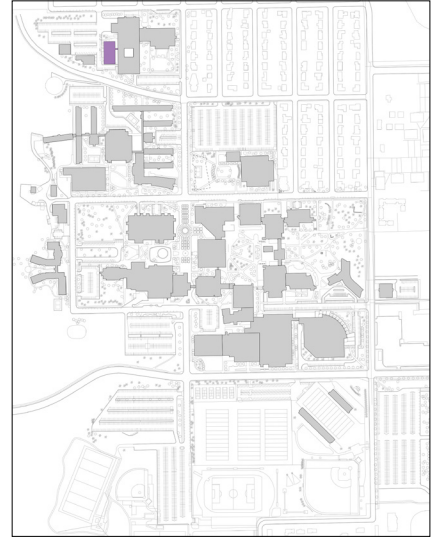


WIECKING LEVEL 1

Wiecking Center



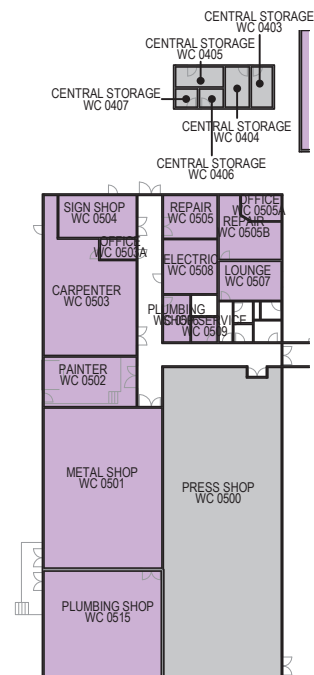
Wiecking Shop Building



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 13,061 |
| Year Built | 1987 |
| Number of Levels | 1 |
| Backlog | \$15,000 |
| CRV | \$1,801,000 |
| Facility Condition (FCI) | 0.01 |
| 5-year renewal forecast | \$1,338,000 |
| Roof Type | Metal/Concrete |



Department Space Use



WIECKING LEVEL 1

Overview

The Wiecking Shop Building is a metal building annex that houses various shops for the building trades and printing services.

Building Conditions

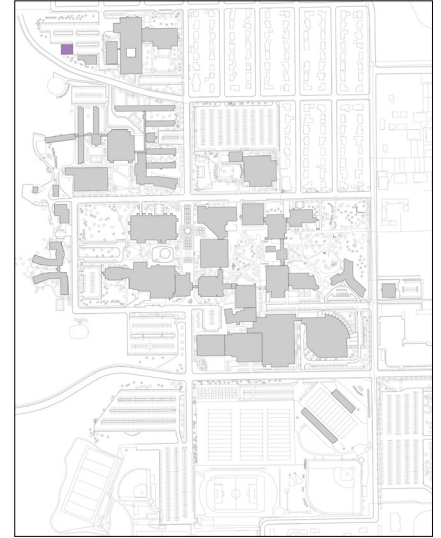
Recent Renewals:

- Recoated Roof predesign option 2 in 2009
- HVAC controls upgrade to Repairman HVAC and Plumbing and Metal Shop in 2009
- Replaced insulation in Printing Services ceiling in 2009

Current backlog for Wiecking Shop Building is upgrading HVAC Controls.



Wiecking Storage Building



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 5,600 |
| Year Built | 1987 |
| Number of Levels | 1 |
| Backlog | \$0 |
| CRV | \$772,000 |
| Facility Condition (FCI) | 0.00 |
| 5-year renewal forecast | \$82,000 |
| Roof Type | Metal/Concrete |



- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library

Overview

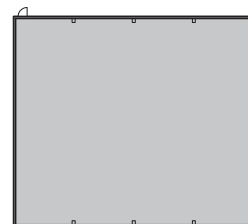
The Wiecking Storage Building is a metal building annex that houses various shops for the building trades and printing services.

Building Conditions

Recent Renewals:

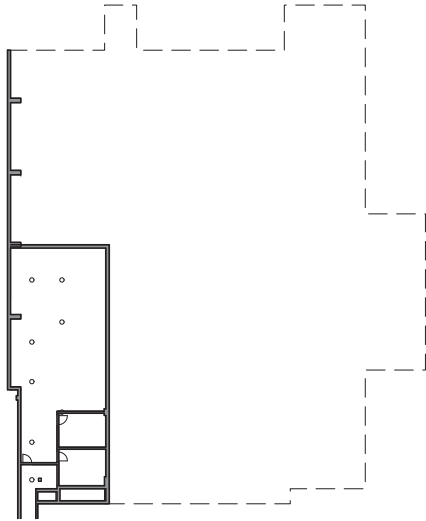
- Recent renovation in 2017 upgraded electrical equipment, building exteriors, and interior finishes

Department Space Use



WIECKING STORAGE BUILDING LEVEL 1

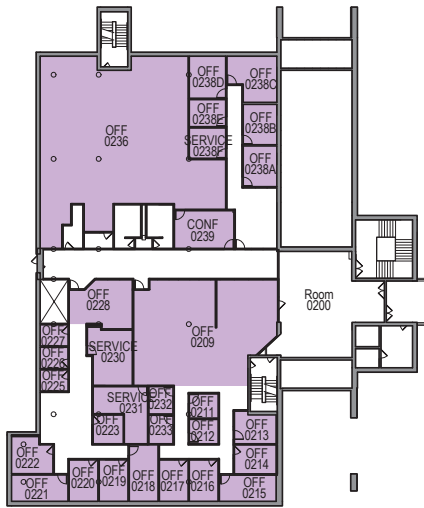
Department Space Use



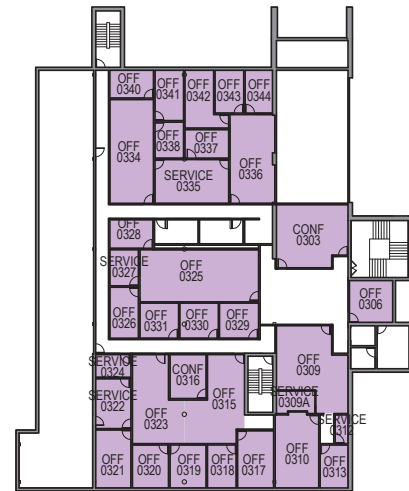
WIGLEY LEVEL 0



WIGLEY LEVEL 1



WIGLEY LEVEL 2



WIGLEY LEVEL 3

Wigley Administration



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 48,933 |
| Year Built | 1979 |
| Number of Levels | 3 |
| Backlog | \$40,000 |
| CRV | \$18,134,000 |
| Facility Condition (FCI) | 0.00 |
| 5-year renewal forecast | \$681,000 |
| Roof Type | MnSCU Standard |

Overview

Wigley houses the President's Office and various support offices affiliated with Academic Affairs, Fiscal Affairs, and Student Affairs.

- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library



Building Conditions

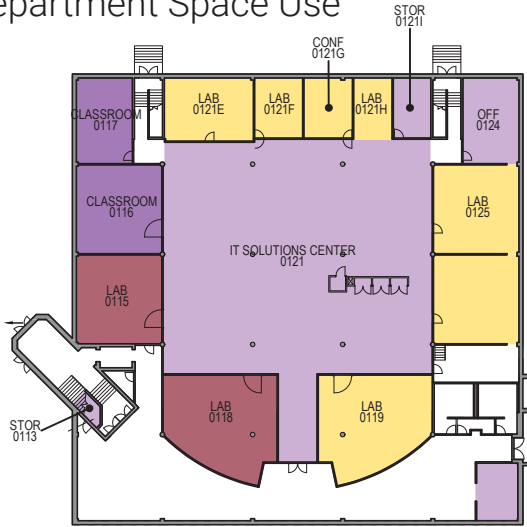
Recent Renewals:

- HVAC FX controls update in 2014
- Switchgear replaced in 2014
- Remodeled president's office and lobby area in 2012
- Elevator replacement in 2012

Current backlog for Wigley Admin includes the refurbishment of building exteriors.

Department Space Use

Space Utilization Summary



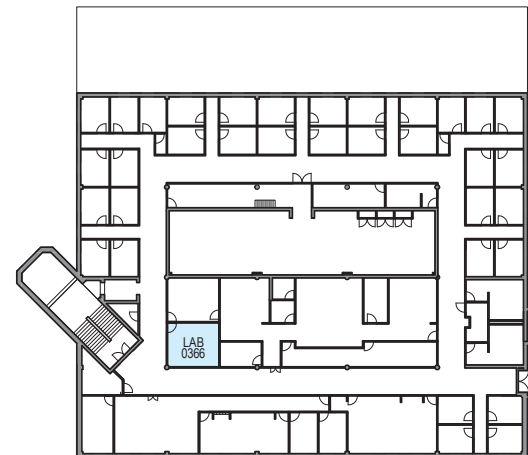
WISSINK HALL - LEVEL 1

WISSINK HALL - LEVEL 1



WISSINK HALL - LEVEL 2

WISSINK HALL - LEVEL 2

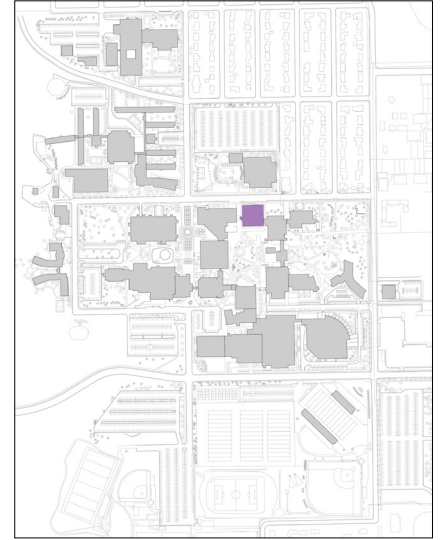


WISSINK HALL - LEVEL 3

WISSINK HALL - LEVEL 3



Wissink Hall



| BUILDING SUMMARY | |
|--------------------------|----------------|
| Gross SF | 65,725 |
| Year Built | 1987 |
| Number of Levels | 3 |
| Backlog | \$1,794,000 |
| CRV | \$24,357,000 |
| Facility Condition (FCI) | 0.07 |
| 5-year renewal forecast | \$5,160,000 |
| Roof Type | Built-up/Memb. |

Overview

This building houses the Academic Computer Center, departments of Mathematics and Statistics, Computer and Information Sciences, and the School of Nursing, and several classrooms

Building Conditions

Recent Renewals:

- New elevators in 2014
- Remodeled various rooms in 2012
- Three humidifiers replaced in 2011
-

Current backlog for Wissink Hall includes re-roofing, built-in equipment and replacement of interior finishes.

Department Space Use Legend

- Administration
- College of Allied Health & Nursing
- College of Arts & Humanities
- College of Business
- College of Education
- College of Science, Engineering & Technology
- College of Social & Behavioral Sciences
- General Classroom
- Service
- Athletics & Recreation
- Residential Life & Student Life
- Library



Space Utilization Legend

- Classroom
- Lab
- ■ 0-60% | Extra Low
- ■ 60-85% | Low
- ■ 85-100% | Normal
- ■ >100% | High



4

Proposed Framework for Site Development

- 4.1 Site Development Goals & Strategies
- 4.2 Proposed Phasing
- 4.3 Future Campus

Figure 4.0 - Overall Rendered Master Plan



Site Development Goals & Strategies

Recommendations for proposed site development support the primary guiding principle of the comprehensive facilities plan. The proposed projects outlined in this section reflect these goals and are designed to :

Embrace and promote a welcoming and inclusive campus that highlights MSU's unique identity

- Enhances campus gateways, first impressions and elevates collegiate experience
- Strengthens campus wayfinding through cohesive hierarchal elements in interior and exterior spaces
- Prioritizes pedestrian-forward approaches
- Enhances access & mobility for visitors, students, faculty and staff
- Promotes safe multi-modal transportation on campus

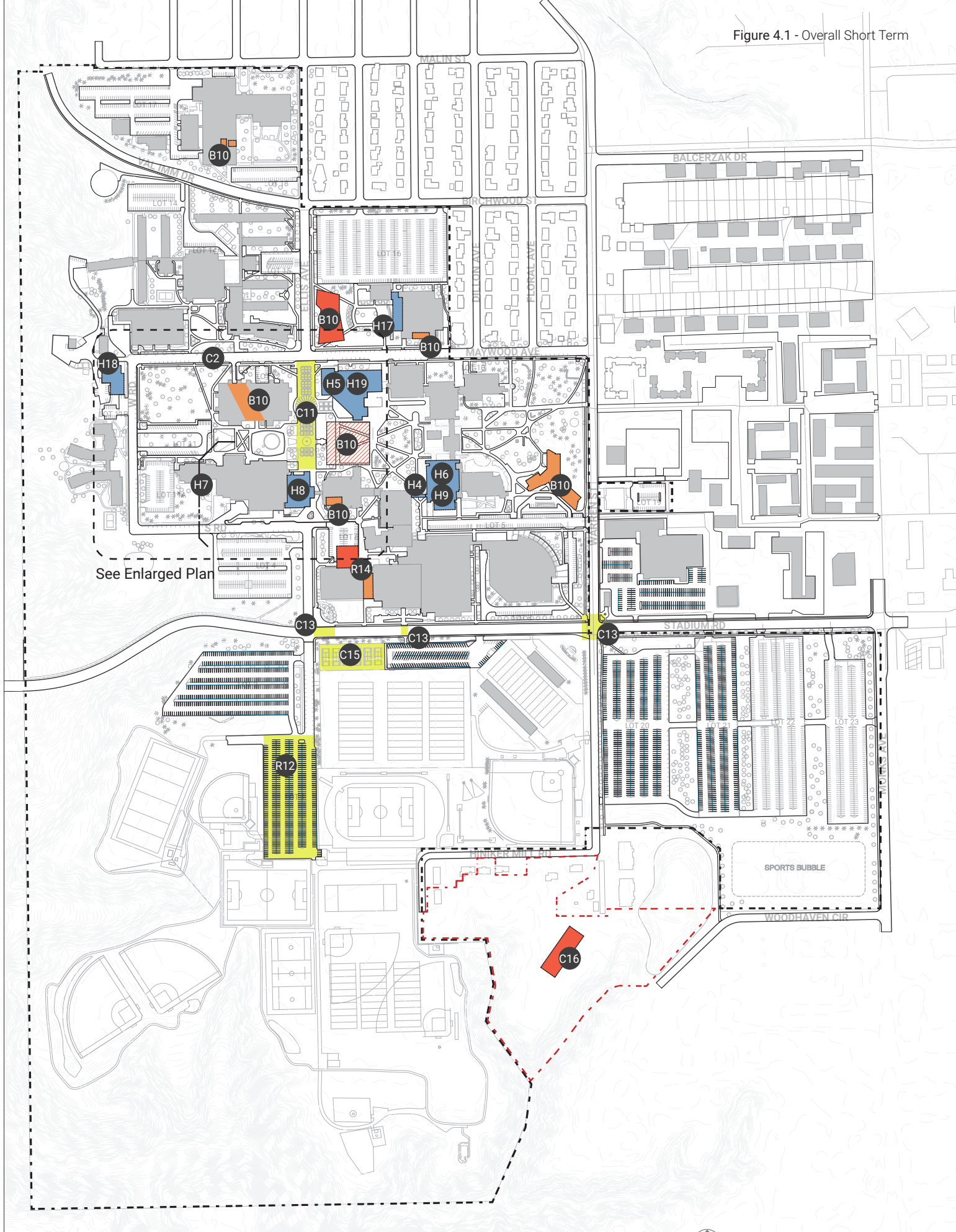
Additionally, MSU Mankato has some unique site conditions that must be considered. MSU Mankato operates on a tight campus footprint so a major site development goal is strategic and thoughtful land management. It is critical that decisions are well considered from many perspectives when it comes to potential locations for future facilities and the value of operating and maintaining existing facilities to the value of the property.

Land owned by the Alumni Foundation south of Hiniker Mill Road offers some potential in leveraging this relationship for future development and partnerships.

Utility renewals will request HEAPR funding to upgrade sanitary, sewer and stormwater systems across campus.

The first three projects in the short term focus on campus-wide studies to better understand campus systems and establish strategies for implementation as projects of the facilities plan gets underway. A major site development goal that has been discussed in past master plans and continues to surface in conversation has been the discussion of closing the vehicular ring road and creating a pedestrian mall.

Figure 4.1 - Overall Short Term



Overall Short Term

1-5 years

- New Construction
- Renovation
- Renewal
- On-Grade Site Improvement
- Site Acquisition

| Project Funding Key | |
|---------------------|---|
| B | GO Bonding\$82M |
| H | GO HEAPR\$16M |
| R | Revenue Bonding\$ 8M |
| C | Campus Funded + Other Source\$29M |

- C1** **Exterior Wayfinding Study**
develop an improvement plan & standards for external wayfinding throughout campus
- C2** **Pedestrian Mall Study**
develop an improvement plan to convert part of Maywood Ave, W Rd, & part of S Rd to pedestrian mall w/ emergency & maintenance access; assumed that improvements will be made incrementally
- C3** **Interior Wayfinding Study**
develop an improvement plan & standards for internal wayfinding throughout campus
- H4** **Trafton Highland Link - Waterproofing**
repair and upgrade the below grade link between Trafton South and Highland North
- H5** **Nelson Hall - Envelope + Infrastructure**
galvanized waste piping replacement, single pane glass replacement, electrical buss duct in several labs, and some electrical distribution panel replacements
- H6** **Trafton Window Replacement**
replace existing curtain wall system
- H7** **Stormwater Management Upgrade**
add water quality improvements when renovating parking lots; new stormwater management control for existing entrance to Library Tunnel; backflow preventer to be constructed in the outlet pipe, and the outflow capacity to be increased to prevent flooding of the tunnel
- H8** **Wigley Administration Building Envelope**
replacement of the south elevation curtain wall
- H9** **Trafton South - Casework Renewal**
upgrade science lab casework in +/- 25 bio rooms (Trafton S) (HEAPR)
- B10** **Armstrong Hall Solution + portion of Pedestrian Mall Implementation**
renovate unoccupied basement level of clinical sciences; new Armstrong Hall replacement building per pre-design; demolish Armstrong Hall & replace with green space; renovate Wiecking Center, Performing Arts Center, Memorial Library, and Morris Hall
- C11** **Campus Open Space Renovation**
remove planters & renovate campus plaza/ walkway between Memorial Library & Nelson/Armstrong; provide outdoor seating; firepit between Student Union & Library
- R12** **Parking Lot #1 Repairs**
Lot 1 (\$1M) repairs, potential reconfiguration, stormwater treatment, relocate lighting
- C13** **Safety Crossing Improvements**
new crossing at Stadium Rd & Warren St; improve crossing south of Highland Center and at Ellis & Stadium Rd.
- R14** **Otto Recreation Addition & Remodel**
new weight room (9000 sf); remodel of exist weight room to multi-purpose rooms (4000 sf) & small inclusive locker room (200 sf)
- C15** **Replace Tennis Courts + New Pickleball Courts**
replacement of (3) tennis courts and introduction of (3) pickleball courts; location TBD
- C16** **Upper Class Apartment Housing**
new housing south of Hiniker Mill Road within foundation owned property; (themed townhome style housing preferred); themes Greek, Spanish, etc.; MSUM to engage consultant to confirm or change direction to most recent housing plan; project possible with private-public partnership, private lease, and traditional revenue bond sales; style of housing, population served, and debt capacity may influence the funding approach for the project; proposed to accommodate about 300 beds
- H17** **Performing Arts Center Renewal**
enhanced entry, replace single pane storefront glazing, improve accessibility; HVAC replacement & building envelope (HEAPR)
- H18** **Utility Plant Equipment Upgrades #1**
upgrade utilities equipment to support future work on campus (new buildings beyond Armstrong Solution)
- H19** **Nelson Hall Roof**
replace existing roof with new roof systems
- H20** **Emergency Generator Replacement**
replacement of emergency generators & associated gears w/ two new appropriately sized generators
- H21** **Underground Storage Tank**
removal and replacement of existing 50,000 gallon backup fuel tank, with new 50,000 gallon double wall fiber glass fuel tank.
- C22** **Solar Power - Location TBD**
provide new solar array; location TBD

C1 Exterior Wayfinding Study

C3 Interior Wayfinding Study

The exterior and interior wayfinding studies propose the improvement of navigation strategies and development of standards for campus environments. It is particularly important to establish guidelines that will support future projects proposed for the short term, in a cohesive thoughtful manner.

C2 Pedestrian Mall Study

The Pedestrian Mall Study investigates the potential closure of the ring road of Maywood Ave, West Rd, and South Rd to general vehicular traffic. The intent is to reinforce the pedestrian-friendly campus core by improving the safety and security of people walking the highly trafficked routes between the Dining Center, residence halls and academic quad. The road would maintain its accessibility to select and specially permitted vehicles, such as emergency, transit, and service and maintenance. The concept has the potential to be implemented in phases, as dictated by the University. One consideration for phasing is to integrate the pedestrian mall concept so that initial closures correspond with building projects.

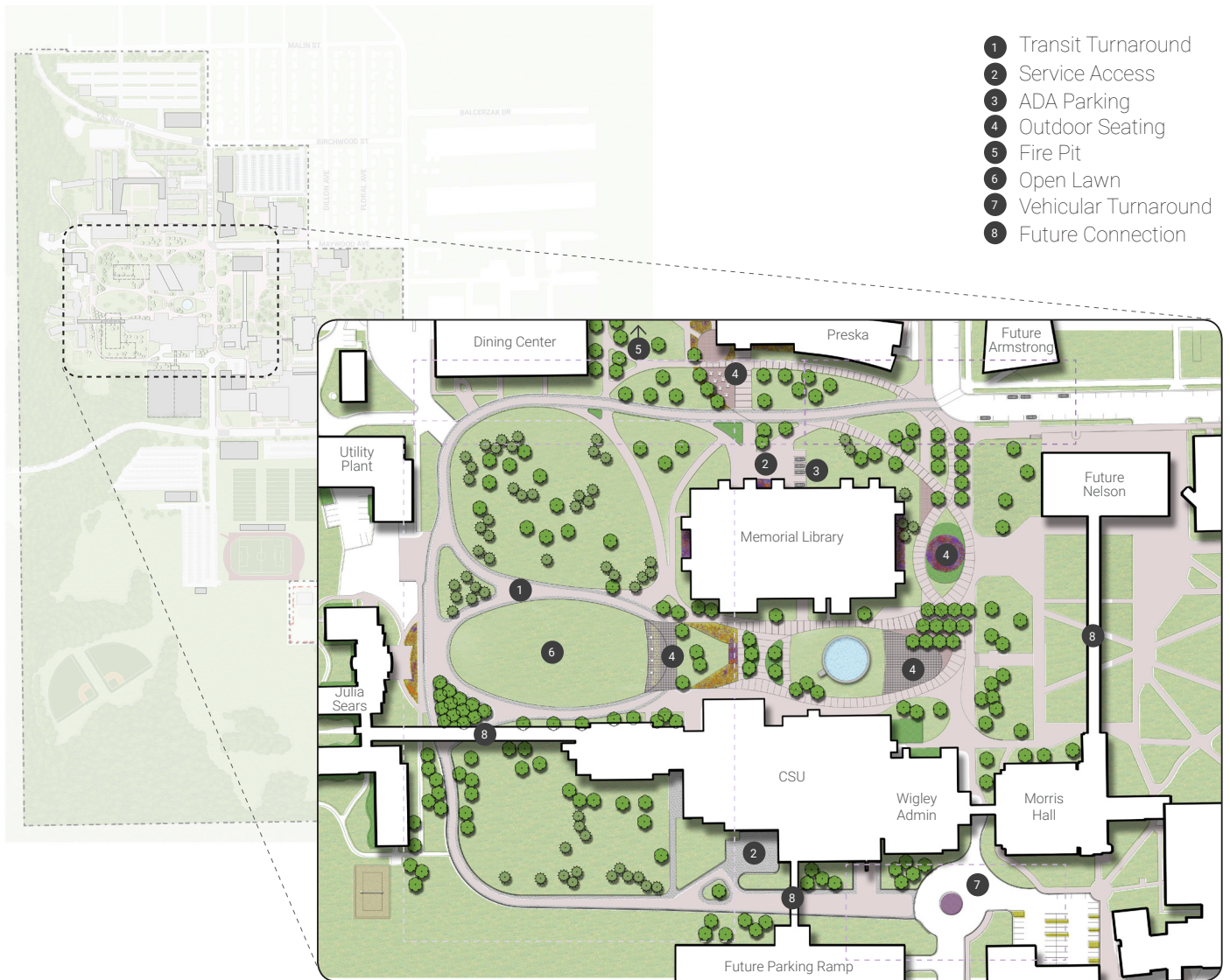
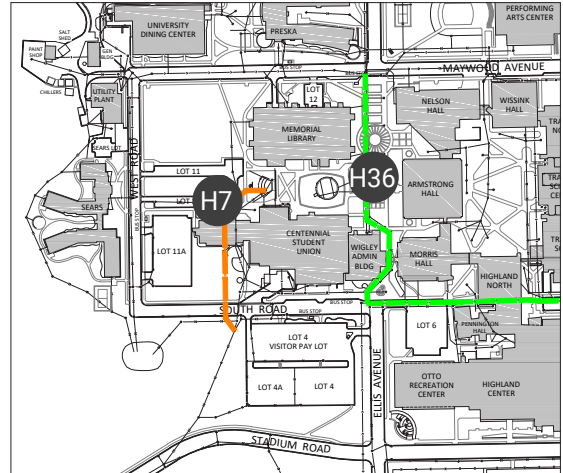


Figure 4.2 - Enlarged Pedestrian Mall & Campus Open Space Concept

H7 Stormwater Management Upgrade

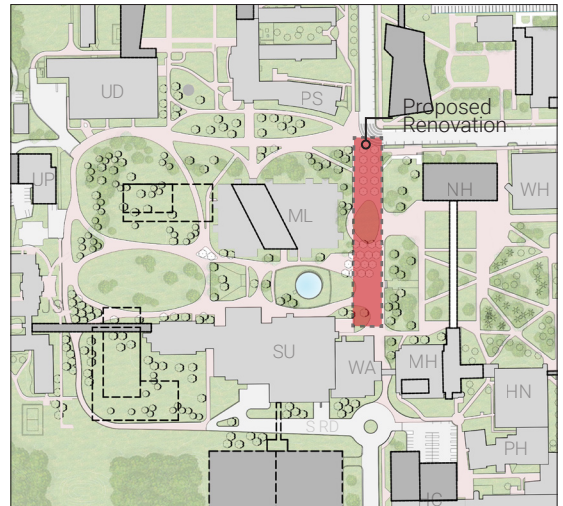
As identified in MSU Mankato's Storm Water Management Plan, proposed modifications include adding water quality improvements, such as reducing impervious areas of parking lots, by incrementally replacing surface lots with pervious paving. The existing entrance to the Library Tunnel is significantly lower than surrounding terrain; as such a backflow preventer should be constructed in the outlet pipe. The outflow capacity should be increased to prevent flooding of the tunnel.



○ Enlarged Plan

C11 Campus Open Space Renovation

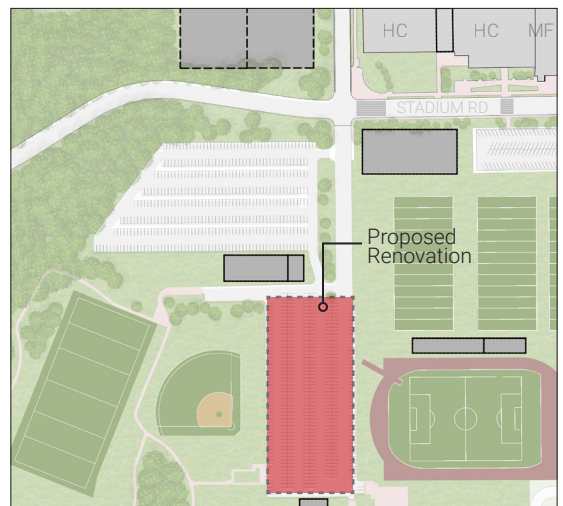
The campus open space renovation removes large planters in the campus plaza/ walkway between Memorial Library & Nelson/Armstrong, allowing more flexibility for groups to gather, improving visibility with taller landscape elements, providing outdoor seating and improving aesthetics.



○ Enlarged Plan

R12 Parking Lot #1 Repairs

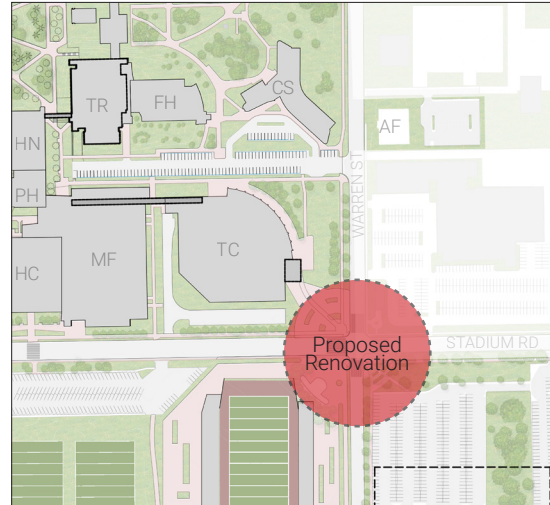
Lot 1 (\$1M) repairs, potential reconfiguration, stormwater treatment, relocate lighting



○ Enlarged Plan

C13 Safety Crossing Improvements

Various new and improved pedestrian safety crossings are proposed for Stadium Road. The crossing at Stadium and Warren generates a high volume of pedestrian traffic as students cross from the free parking lot to the academic core. This intersection also experiences a high volume of vehicular traffic. Additionally, because the athletics zone of campus is located south of Stadium, there are frequent pedestrian crossings at Highland Center and Ellis & Stadium. Various traffic calming measures can be taken that will delineate pedestrian crossings, such as speed humps, reduced lane widths, improved lighting, and special pavings.



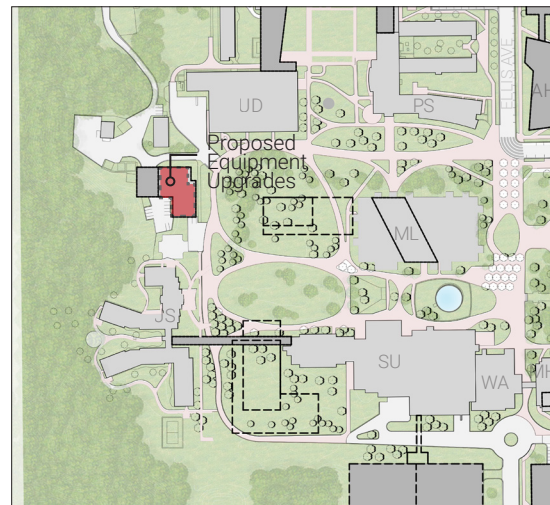
○ Enlarged Plan

C15 Replace Tennis Courts + New Pickleball Courts

The tennis courts have reached the end of their life cycle and are in need of replacement. Students have expressed interest in other types of recreational courts, such as pickleball, that could increase the usability of the courts. Further studies by MSUM will have to be undertaken to understand ideal locations for courts, whether centrally located in the recreation fields or dispersed throughout the residential and student life zones of campus.

H18 Utility Plant Equipment Upgrades #1

As further developments on campus are implemented, it will be necessary to upgrade the utilities equipment to support these facilities. This project is slated to occur after the proposed Armstrong Hall Solution, as the demolition of existing Armstrong will free up some of the load capacities.



○ Enlarged Plan

C22 Solar Power - Location TBD

Consideration for a new solar power array has been identified in the short term projects phasing. While a location has not been finalized, several locations have been identified as potential sites, including the roof of Memorial Library, on future academic buildings, and carport style solar arrays on parking lots #2 and #16.

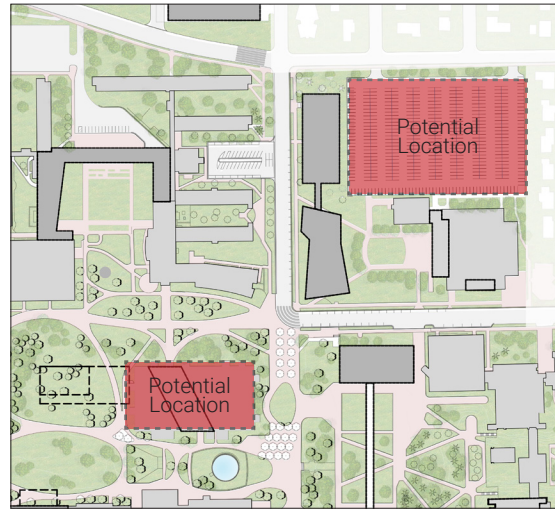
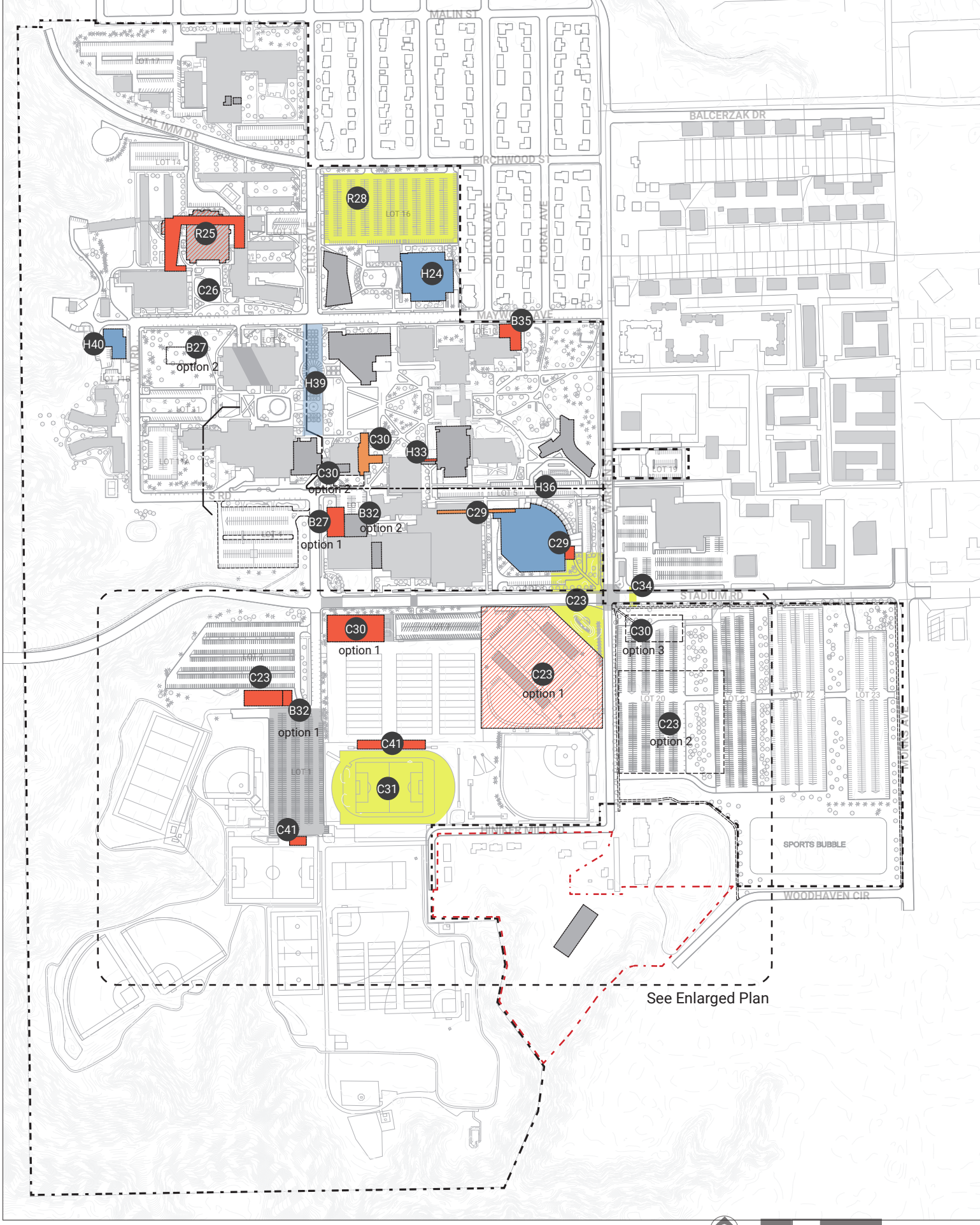


Figure 4.3 - Overall Mid Term



See Enlarged Plan

Overall Mid Term

6-10 years

- New Construction
- Renovation
- Renewal
- On-Grade Site Improvement
- Site Acquisition

| Project Funding Key | |
|---------------------|---|
| B | GO Bonding\$20M |
| H | GO HEAPR\$27M |
| R | Revenue Bonding\$47M |
| C | Campus Funded + Other Source\$62M |

- C23** **Blakeslee Stadium Replacement**
demolish Blakeslee Stadium; replace with new facility (sized for soccer); bleachers, press, storage, etc. and re-orient field; team room + support (pregame / halftime satellite); two potential location opportunities for replacement; option 1 - reoriented at current location; option 2 - Lot 20 provide new storage for grounds maintenance south of Lot 2; high bay area; new plaza in front of Blakeslee Stadium & across Rd in front of Taylor Center
- H24** **Performing Arts Center Renewal P2**
Continuing renovation work from previous Performing Arts Center Renewal project as more funding becomes available
- R25** **New Residence Hall**
demolish Carkoski Commons per residential life masterplan; demolish portion of Crawford Residence Community; new residence hall / commons per residential life masterplan; +320 beds (traditional)
- C26** **Campus Open Space Upgrade + portion of Pedestrian Mall Implementation**
Upgrades outside Preska: fire pit, furnishings, shade, power access, etc.
- B27** **New Home for Health Services**
new home for health services; includes 300-400 sf Interfaith reflection space two potential location opportunities identified: Option 1 - north of Highland Center; Option 2 - west of Memorial Library
- R28** **Parking Lot #16 Repairs**
Lot 16 (\$2M) repairs, potential reconfiguration, stormwater treatment, salvage & reinstall lighting; potential for solar power

- C29** **Taylor Plaza & Connectivity Improvements**
southeast corner connectivity; improving pedestrian experience with new entry addition; improved welcome center (admissions + alumni relations); improving pedestrian experience through Taylor Center entrance & athletic buildings
- C30** **New Business Building / Welcome Center**
new business building & welcome center on Lot 20 North; repurpose spaces in Morris for other programs; university is considering additional alternate locations
- C31** **Track & Field Turf Replacement**
new turf, removals & prep
- B32** **Campus Rec / Maverick Adventures Facility**
space to support outdoor programs through Campus Rec & Maverick Adventures - large equipment storage/ rental two potential location opportunities identified; Option 1 - south in athletics fields; Option 2 - north of Otto Rec (combine w/ weight room addition)
- H33** **Trafton South Connection Upgrade**
demolish existing tunnel; new skyway connection to create campus gateway to quad
- C34** **Entry Gateway Enhancements**
enhancement of existing gateway features into campus from the west on Stadium Rd, from north on Val Imm, and corner of Stadium & Warren
- B35** **Agriculture Lab Addition**
addition for AG lab / etc.; location TBD; 9000sf @ 1.5 stories
- H36** **Sanitary / Sewer Renewal**
replace existing sewer line; trenchless replacement; currently 20-25' under
- H37** **Utility Tunnel Repairs**
repair existing utility tunnels

- H38** **Taylor Center Roof**
renovate existing roof
- H39** **Campus Mall Replacement**
renovate campus plaza/ walkway between Memorial Library & Nelson/ Armstrong phase 2
- H40** **Utility Plant Equipment Upgrades #2**
renovate & expand utilities equipment to support future work on campus (new buildings beyond Armstrong Solution)
- C41** **Track & Field Support Facilities**
Bleachers & Press; Restrooms, Concessions & Storage

C23 Blakeslee Stadium Replacement

The first project slated for mid term phasing is the Replacement of Blakeslee Stadium. Recent structural improvements have extended the life of the current stadium's infrastructure by another 5 years or so, but will have to be quickly addressed in the next phase. The comprehensive master plan for campus builds upon some of the proposals put forth in the Outdoor Athletic Master Plan of 2014. Recommendations for the stadium include rotating it to create a true north/south orientation, appropriately size the field to be shared with soccer, and introduce synthetic turf for lengthier season play.

Two potential location options are shown, with the preferred location rotated in its current spot. The other location is across Warren Parking Lot 20. Shared plaza space and connectivity across Stadium to the Taylor Center would enhance the game day experience as well as every day use and connection to

campus. Shared support facilities include storage, restrooms, potential team room + support, which would serve as a satellite space for teams to use during pre-game or halftime. New storage for grounds maintenance is slated south of Lot 2, which would include high bay areas for equipment.

Much needed improvements to facility and athletic space will also provide opportunities to host revenue-generating events, conferences, and competitions.

- 1 New Stadium
- 2 Storage
- 3 Restrooms
- 4 Bleachers

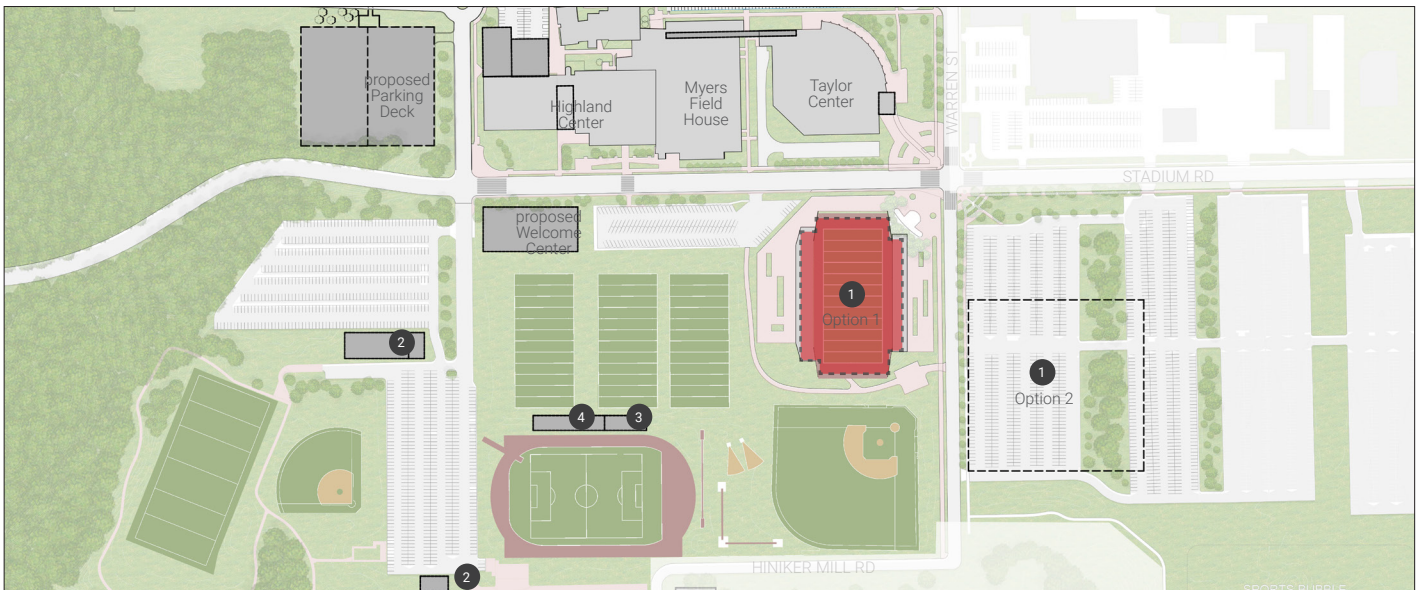


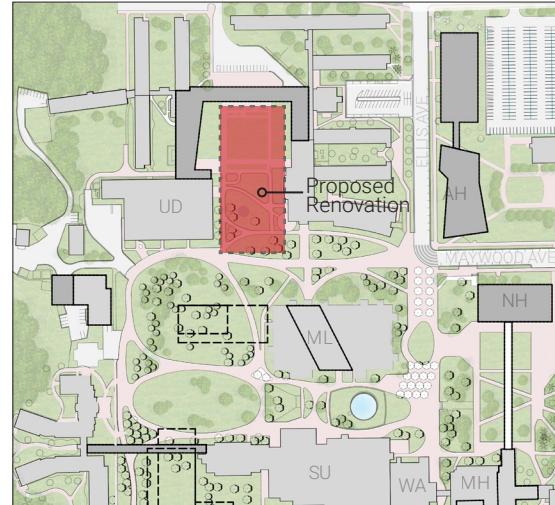
Figure 4.4 - Enlarged Athletics & Recreation Plan



Figure 4.5 - Proposed Stadium Replacement Conceptual Rendering

C26 Campus Open Space Upgrade

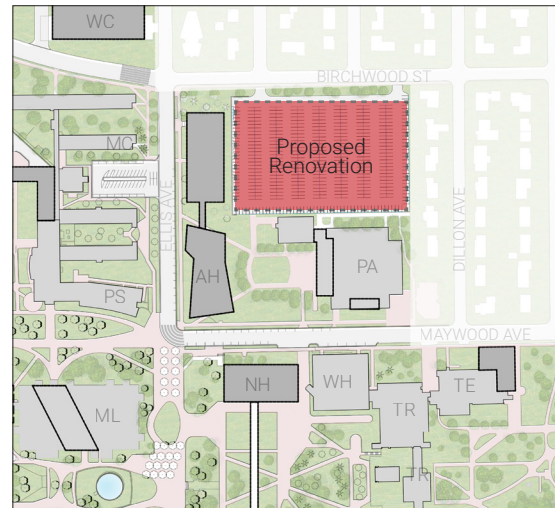
In addition to residence community facility upgrades, exterior upgrades that enhance social interactions among students should be implemented. Fire pits, outdoor furnishings, trees or structures providing shade, and access to power are planned for the open space outside Preska and the new residence hall.



○ Enlarged Plan

R28 Parking Lot #16 Repairs

Proposed repairs to Parking Lot 16 include stormwater treatment measures, the potential reconfiguration of parking stalls and reinstallation of salvaged site lighting. This lot has been identified as a potential site for a solar power array.

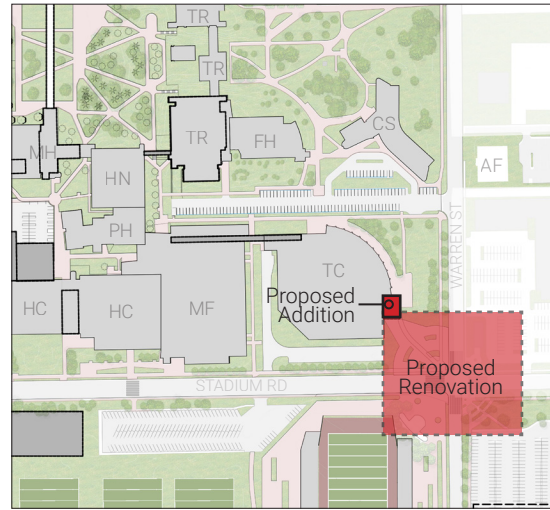


○ Enlarged Plan

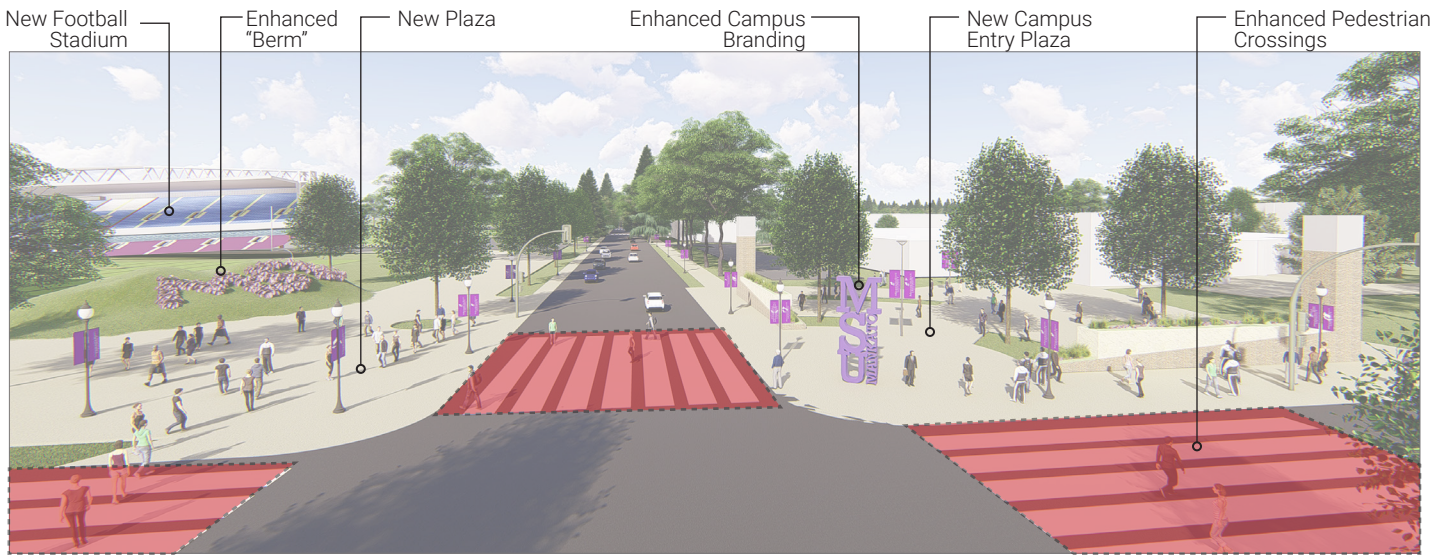
C29 Taylor Plaza & Connectivity Improvements

The southeast corner of Taylor Center and intersection of Warren St and Stadium Rd offers a tremendous opportunity to improve the pedestrian experience of those arriving on campus from the parking lots. Many students and event visitors park in the purple and orange permit and free lots at the southeast corner of campus. They cross the intersection of Warren and Stadium, and then, especially in winter months, enter the first building they encounter, Taylor Center. With the outdoor plaza improvements to Blakeslee, the entire quadrant can be improved to create a more welcoming gateway. A new entry addition is planned to accommodate the transition from outside to inside. An improved welcome center (admissions + alumni relations) could be located here if it does not become part of the program in the College of Business. Upgrades and replacement of finishes should be incorporated through Taylor Center and the athletic buildings to enhance connectivity of all of campus.

The City has been consulted and are supportive of looking at ways to improve this intersection. Generally the City assesses the adjacent property owners for street/sidewalk improvements so opportunities for shared funding is limited to partnership on a state or federal grant applications.

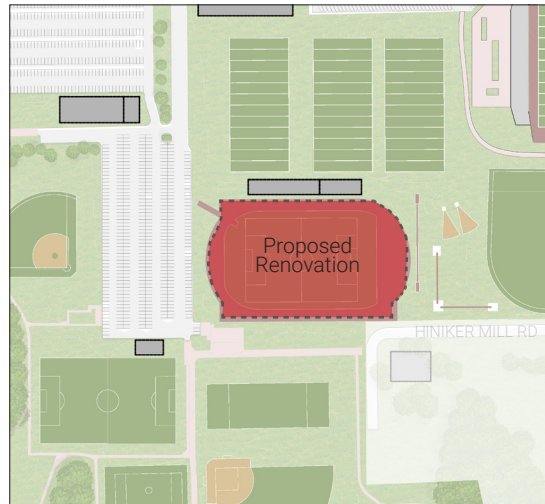


Enlarged Plan



C31 Track & Field Turf Replacement

The replacement of the current natural grass field with synthetic turf is recommended for the infield of the outdoor track. Currently, the Athletics department and Campus Rec programs use the field for various games and practices, but they are limited in season play due to field conditions. A turf field would allow an expanded schedule of play later into the fall and earlier in the spring. Additionally, other field uses, like flag football, lacrosse and rugby, and programs, Human Performance classes, could be realized.



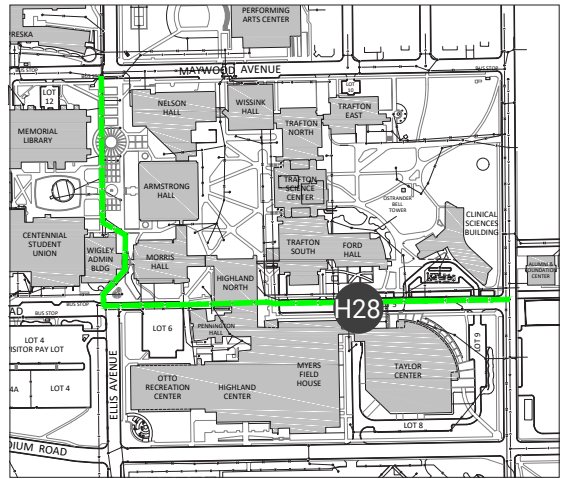
C34 Entry Gateway Enhancements

There are several existing entry gateway features that greet vehicles on their drive to MSU Mankato's campus. Stadium Road West signage and the gateway on the approach from the north on Val Imm should be enhanced with lighting, landscaping and any needed repair to the stone. The "Berm" will likely have some modifications in hand with the Blakeslee Stadium project.



H36 Sanitary / Sewer Renewal

As ongoing facility maintenance, the existing sewer line that runs down the middle of the campus plaza and east of South Rd will need replacement in the next 6 to 10 years. The replacement will likely be a trenchless system, replacing the piping that is currently 20'-25' underground.



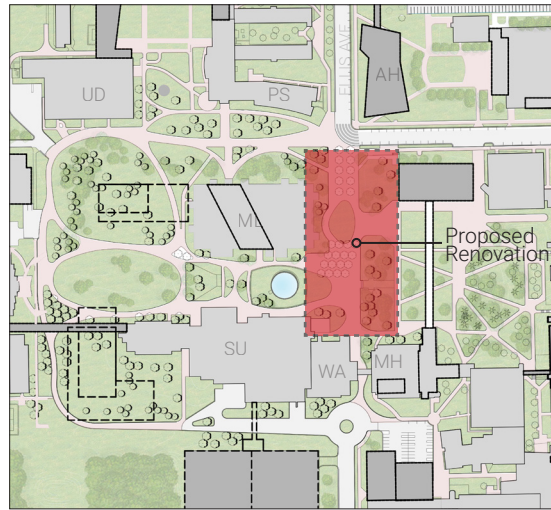
○ Enlarged Plan

H37 Utility Tunnel Repairs

This project is targeting multiple deficiencies documented throughout the campus utility tunnel system including failing tunnel joints, spalling concrete, failed waterproofing. Because the extent of the repairs need and the potential impact to the campus community, the repairs are likely a multi-year phased project.

H39 Campus Mall Replacement

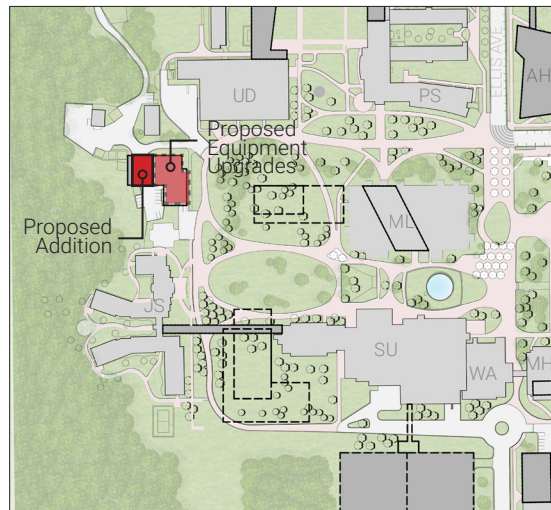
Renovate campus plaza/ walkway between Memorial Library & Nelson/Armstrong phase 2; continuing project from demolition of Armstrong Hall and enhancing the pedestrian experience on campus



○ Enlarged Plan

H30 Utility Plant Equipment Upgrades #2

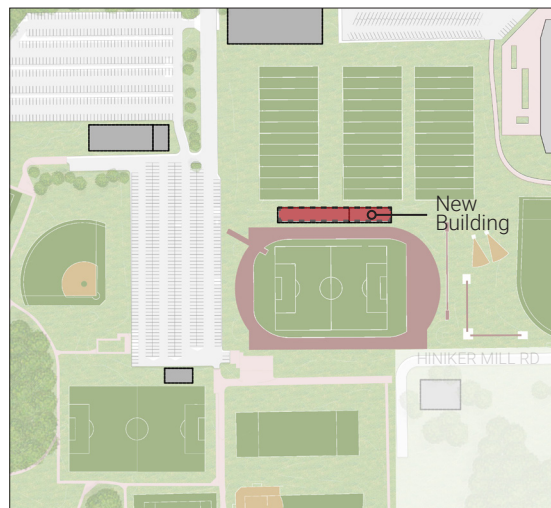
It is reasonable to expect and plan for additional upgrades to the utility plant equipment in the mid term phasing. Any equipment that is past its reasonable life will be replaced with energy efficient solutions and adequate capacities for future work on campus.



○ Enlarged Plan

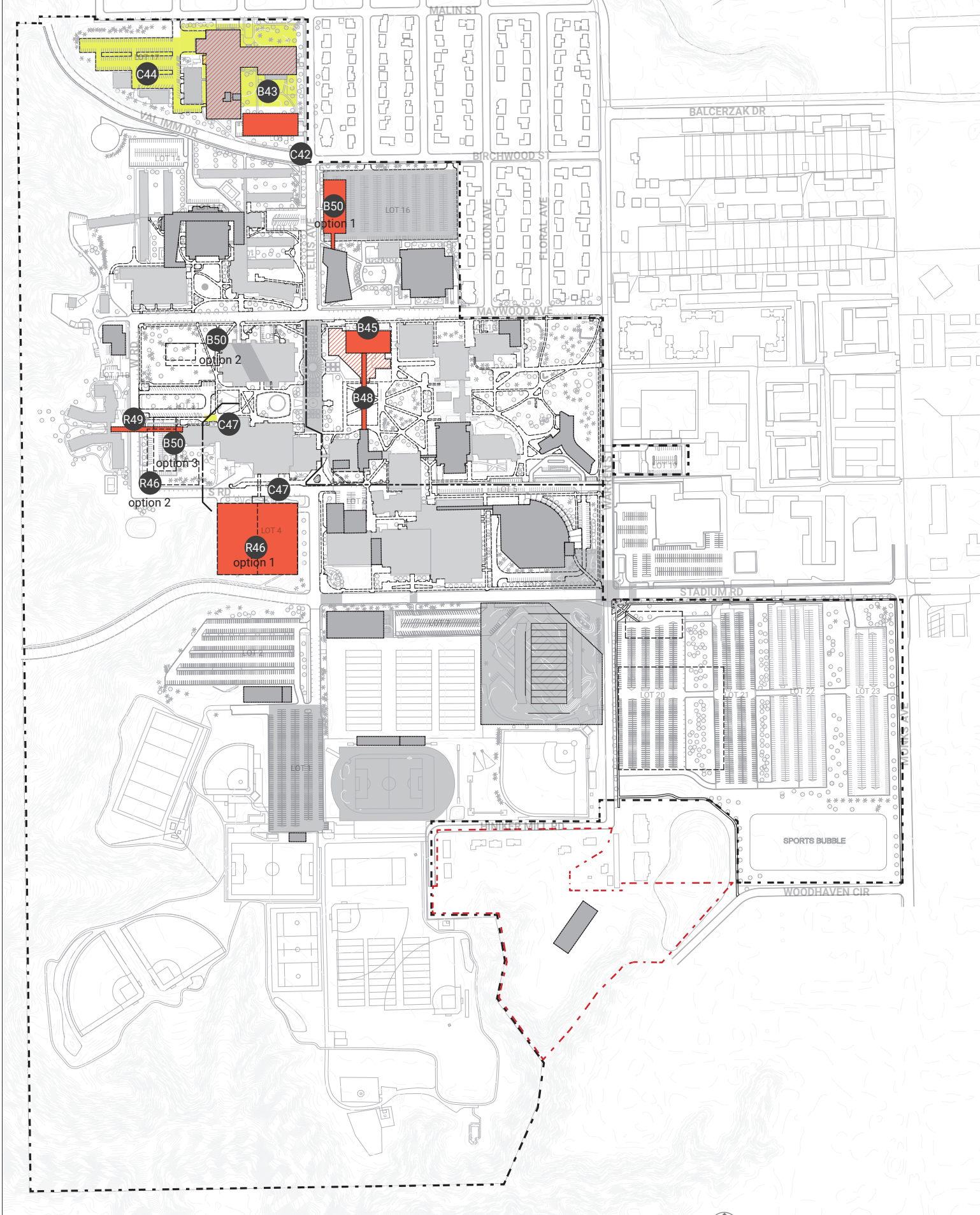
C41 Track & Field Support Facilities

The existing track and field complex is lacking adequate support facilities and amenities. Current conditions are primarily a ticket window and storage. The addition of restroom facilities, a press box, permanent bleachers, benches for athletes, and concessions would be very beneficial to improving the fan experience, as well as that of the competing athletes and coaches. Storage would also be incorporated into the facility and at a proximate location to the complex.



○ Enlarged Plan

Figure 4.6 - Overall Long Term



Overall Long Term

11+ years

- New Construction
- Renovation
- Renewal
- On-Grade Site Improvement
- Site Acquisition

| Project Funding Key | |
|---------------------|---|
| B | GO Bonding\$94M |
| H | GO HEAPR\$ 0M |
| R | Revenue Bonding\$40M |
| C | Campus Funded + Other Source\$ 1M |

- C42 New Entry Gateway**
new gateway feature into campus at corner of Val Imm & Ellis
- B43 Wiecking Center Replacement + Parking**
demolish Wiecking center; new Wiecking Center replacement building on south-east corner of site; automotive shop moved from nelson hall to here; new parking on north side of new wiecking center replacement building
- C44 Parking Lot #17 Repairs**
Lot 17 (\$600k) repairs, potential reconfiguration, stormwater treatment, new lighting
- B45 Nelson Hall Replacement**
demolish existing Nelson Hall; rebuild new building, potentially for art program
- R46 Parking Ramp & Transit Stop Upgrades**
two potential locations identified for parking structure;

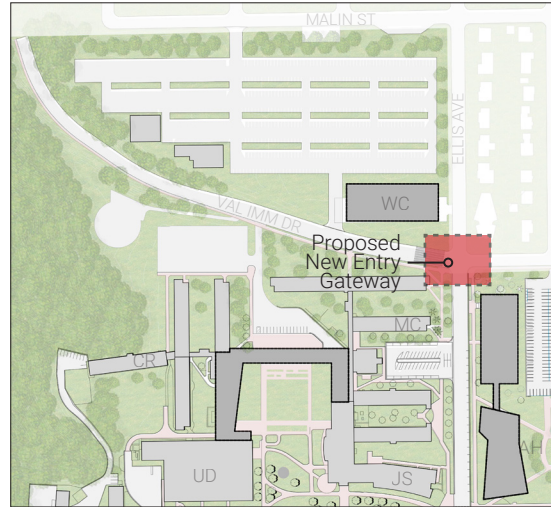
OPTION 1: multi level parking structure on existing Lot 4 & 4A
West side: 4 story (ground + 3 levels above) parking ramp (320'x180') at 170 spaces / flr;
East side: 2 level lot - surface parking cap over existing to match S Rd Elevation, for short-term visitor parking;

OPTION 2: 3 story, 250 ft long x 120 ft wide ; 110 spaces / flr; ingress/egress on S Road exclusively
- C47 Transit Stops**
renovate transit stop outside of Student Union (south) and transit stop outside of Student Union (north-west) - Lot 11

- B48 Connection between Nelson Hall Replacement & Morris Hall**
on grade or tunnel connection across quad to the New Nelson Hall Replacement
- R49 CSU & Sears Skyway Connection**
new skyway connection between Sears & CSU; could partially occur in new building/ramp
- B50 New Academic Building - TBD**
new academic building - various potential locations identified; Option 1: north of proposed Armstrong Hall Replacement; Option 2: West of Memorial Library; Option 3: West of CSU

C42 New Entry Gateway

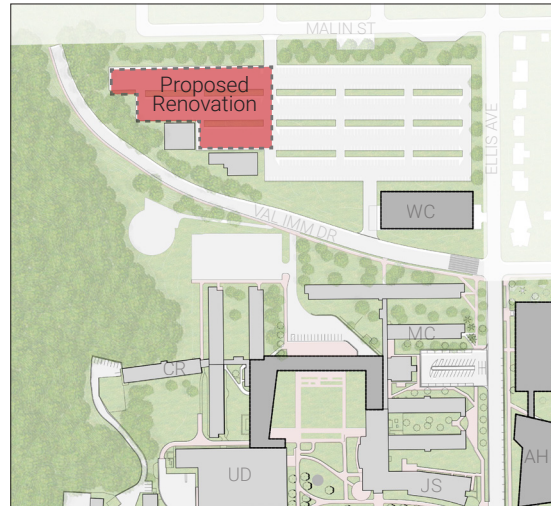
MSU Mankato has well-planned campus gateways for visitors approaching from the west and east on Stadium Rd, and farther north on Val Imm, but lacks an entry feature at the corner of Val Imm Dr and Ellis Ave. The approach from the west to that intersection highlights the Hosanna Highland Campus & Community Church, which can be confusing for those unfamiliar with campus. This project proposes a new entry gateway of a similar aesthetic, utilizing limestone and brick materials and MSU branding to create a sense of arrival and celebrate the collegiate atmosphere.



Enlarged Plan

C44 Parking Lot #17 Repairs

Proposed repairs to Parking Lot 17 include stormwater treatment measures, the potential reconfiguration of parking stalls and new site lighting.



Enlarged Plan

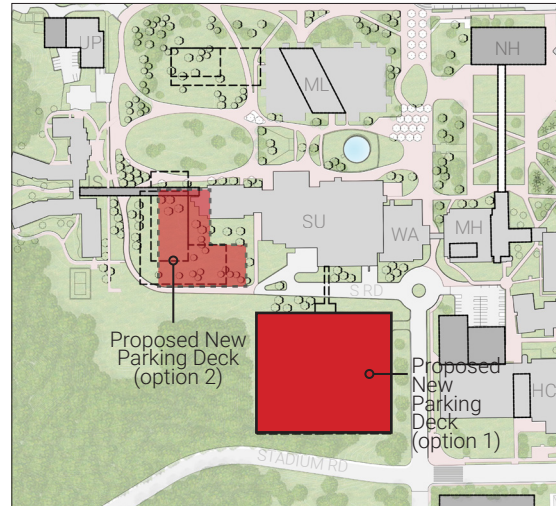
R46 Parking Ramp & Transit Stop Upgrades

The concept of a parking ramp has been a constant discussion point among campus and community groups, warranting a note and consideration for potential locations in the long term (20+) phasing plans. MSU Mankato acknowledges that current demand is not sufficient to support the expense for the short term or mid-term planning arenas. However, if that impression should change, the campus is prepared to conduct a market assessment and analysis to determine if the ramp would be self-funding. The campus currently has a good working relationship with the City of Mankato public transportation bussing system and there are some long range conversations on the creation of a transit station that could involve partnering and alternate funding source to justify a ramp that serves both campus and community.

Two potential locations have been identified for a parking structure. Both options plan for skyway connectivity and protected passage from parking to CSU.

Option 1 proposes a multi-level parking structure on existing Lot 4 & 4A. The west side of the site would be a 4-story (ground + 3 levels above) parking ramp (320'x180') at 170 spaces per floor. The east side is a 2-story lot, with the top level meeting the existing elevation of South Rd.

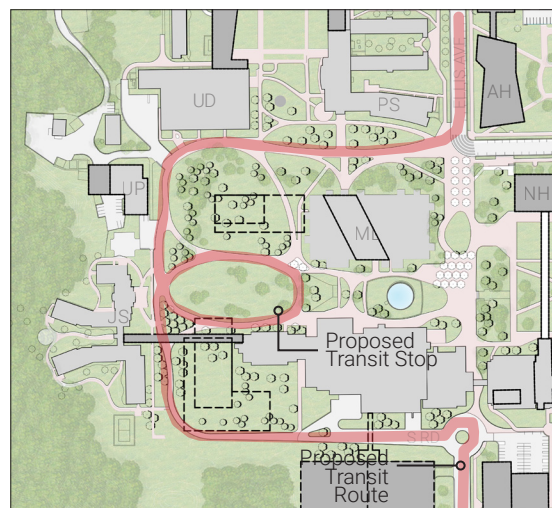
Option 2 explores a 3-story, 250 ft long x 120 ft wide structure on existing Lot 11a. 110 parking spaces per floor for a total capacity of xx. Ingress and egress would be exclusively on South Road.



Enlarged Plan

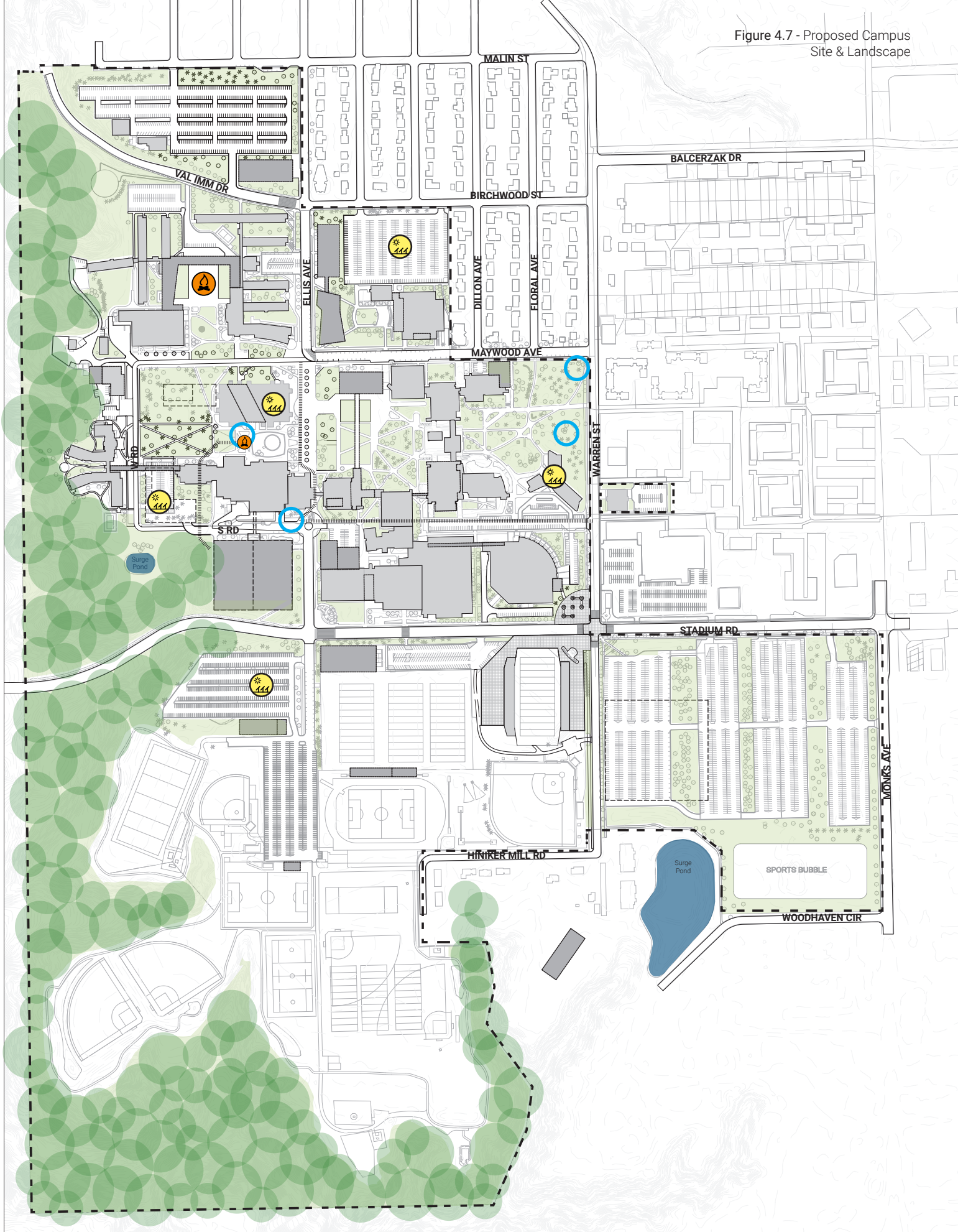
C47 Transit Stops

MSU plans to work with the City of Mankato on any new transit stations that could benefit the campus and community. Preliminary concepts outlined in the proposed pedestrian mall creates a transit loop around the grassy area on existing Lot 11, with protected transit station on the northwest corner of the Student Union. Transit stops should be covered for inclement weather, well-lit and equipped with safety features. Connectivity to transit apps are also encouraged to track buses and monitor schedule.










Enlarged Plan

Figure 4.7 - Proposed Campus Site & Landscape



Future Campus 4.3

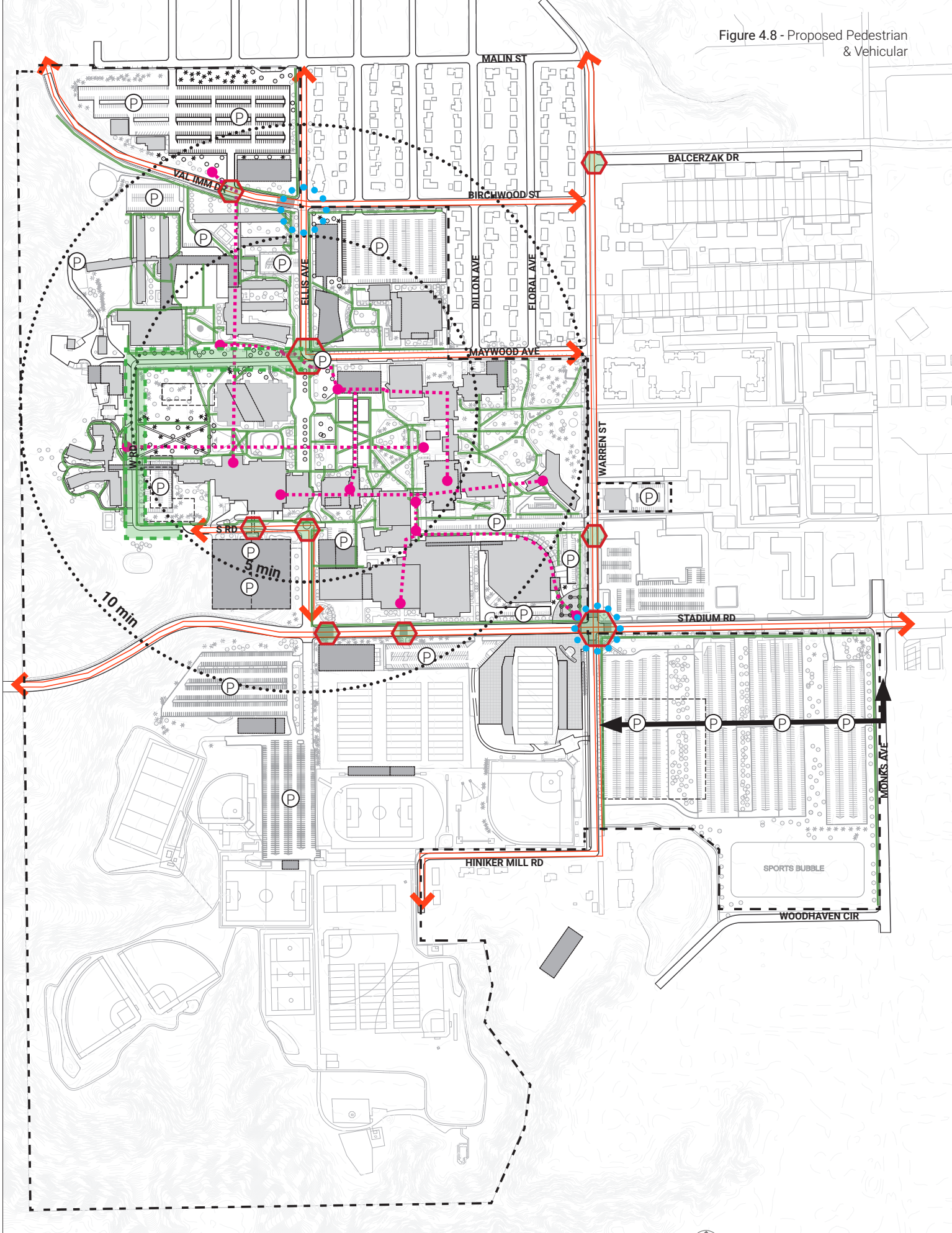
Proposed Campus Site & Landscape

-  Utilities Improvement
-  Surge Pond
-  Green Space
-  Trees
-  Solar Energy
-  Fire Pit - Potential Location
-  Landmark/Art - Potential Locations









Proposed construction and demolition projects, particularly Armstrong Hall, will be very impactful to the feel of the campus core and experience on the quadrangle. The north-south and east-west axis on campus becomes a strong green connector for pedestrian travel and unimpeded sightlines.

Embracing the northern climate and outdoor experience has been a key piece of previous master plans and continues to be a priority in developing the campus landscape. Potential locations for fire pits and enhanced gathering spaces have been identified in several key student-focused areas. Additionally, unique landmarks, or sculptural pieces, like the fountain, have been recognized by students as a fundamental part of what it means to be on the MSU Mankato campus. As opportunities allow, art and landmarks should be integrated onto campus, at impactful locations.

Figure 4.8 - Proposed Pedestrian & Vehicular



Proposed Pedestrian & Vehicular

-  Sidewalks / Ped Paths
-  Student Walking Paths
-  Pedestrian Street, Limited Vehicular Access
-  Pedestrian Crossing Improvements
-  Vehicular Circulation
-  Parking
-  Gateway Improvement
-  Walking Range

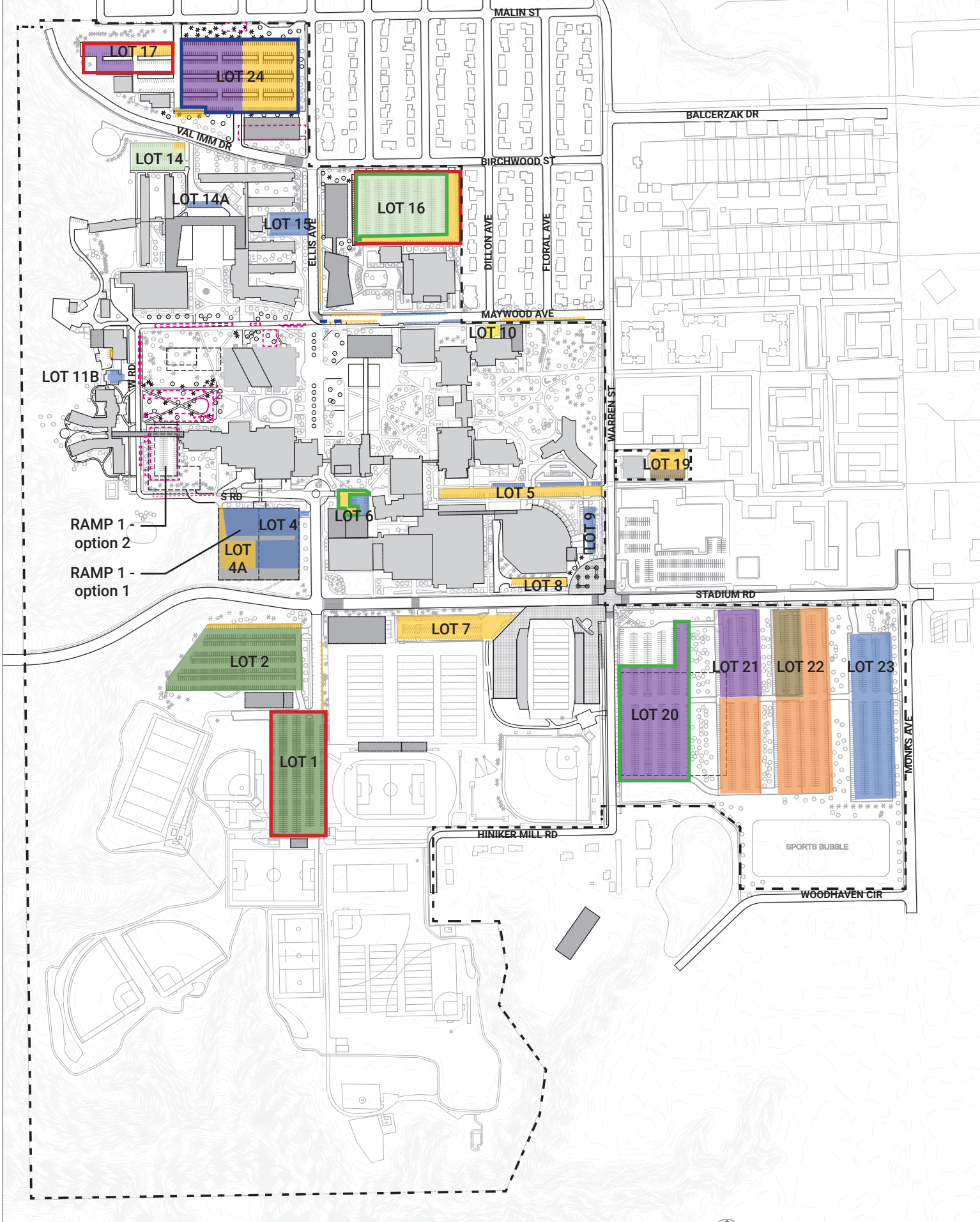
Walking

Early in the process, the team documented desired student walking paths, or routes students wish they could take. Many of these discussions led to the proposed visioning for safer street crossings, a re-imagining for the open space between Memorial Library and Nelson/ Armstrong and a direct pedestrian link between the Nelson Replacement building and Morris Hall.

Vehicles

A key element to the Comprehensive Facilities Plan is the concept of converting a portion of Maywood, W Rd and S Rd to a pedestrian mall. Eliminating vehicular traffic around this loop would increase safety and walkability between the residence zones of campus to the academic core. Further discussion on the pedestrian mall concept is in the short term phasing diagrams.

Figure 4.9 - Proposed Parking



Proposed Parking

-  Lot rehabilitated
-  Lot reduced
-  Lot removed
-  Lot added

A parking ramp project has been proposed in the long range vision for the campus. Two potential locations have been explored - one at the corner of S Rd and W Rd (currently Lot 11A), Option 1, and one south of S Rd (currently Lot 4 & 4A), Option 2. A multi-level ramp would alleviate some of the pressure of proximate parking to the core of campus, while maximizing the number of stalls on an equivalent lot footprint.

Option 1 Ramp explores a 3-story ramp, with approximately 110 spaces per floor, for ~330 stalls total. Ingress and egress would be exclusively at the southeast corner on S Rd, allowing for the remainder of the loop to be pedestrian only. This ramp has the potential to connect via skyway to CSU.

Option 2 Ramp studies the sunken lot at 4 and 4A, proposing a multi-level parking structure. The west side of the lot would be 4 levels at approximately 170 stalls per floor, while the east side would be a 2 level lot with a surface parking cap over the existing to match the elevation at S Rd. This allows unobstructed visuals to CSU as visitors and guests approach campus from the south. Short-term visitors could be accommodated here. A potential skyway connection could provide a safe, enclosed and inviting entrance from the west side ramp to CSU.

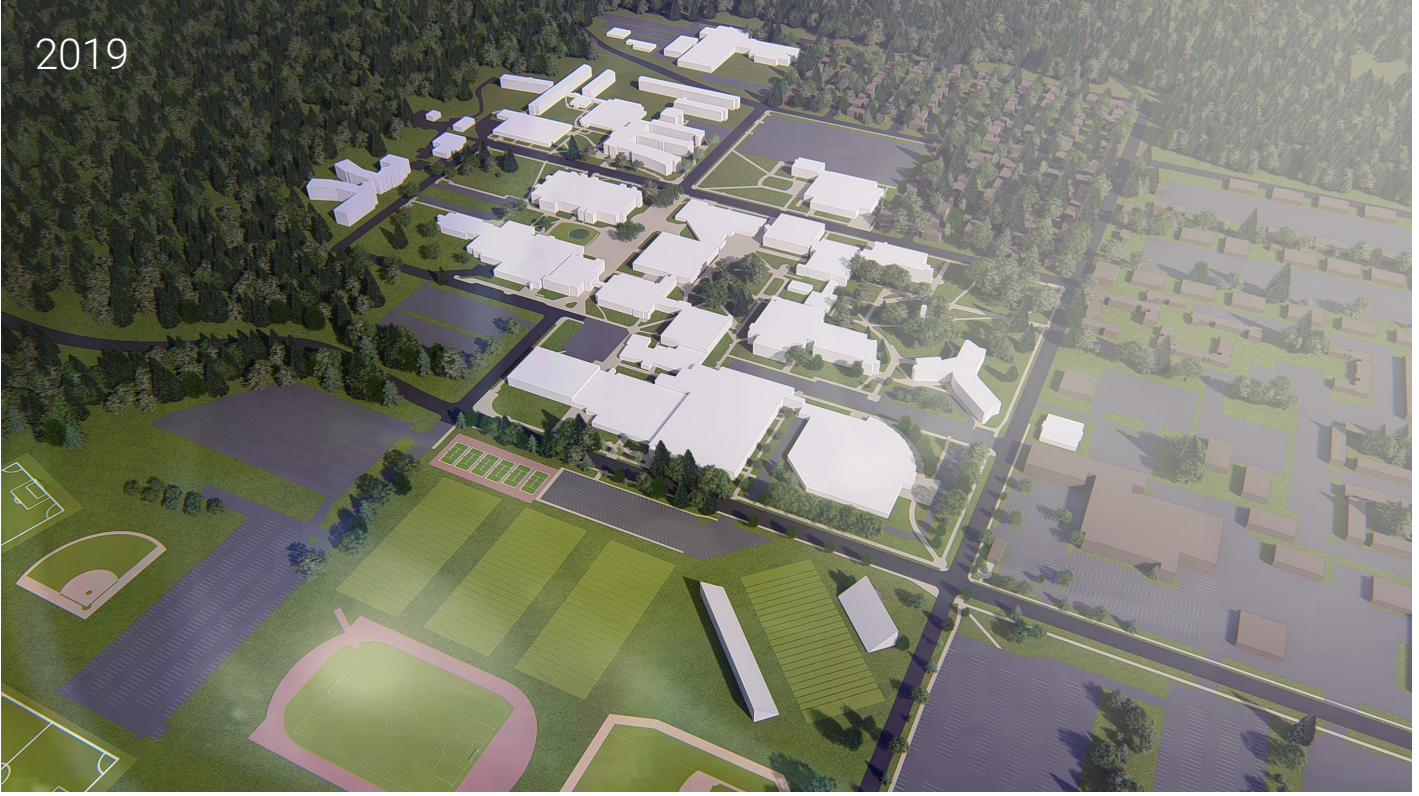
Parking lot renewal projects include Lot 1, Lot 16, and Lot 17, involving potential reconfiguration of stalls, stormwater treatment, new and/or relocated lighting. Several lots have been identified to be potential locations for siting future solar arrays.

Lots that have been reduced due to proposed new construction include Lot 6, Lot 16, and Lot 20. ADA accessible parking just north of Memorial Library is proposed to be relocated to Maywood Ave or the east side of the library to minimize vehicular traffic on the west side of Ellis Ave. Lot 6 also will experience some reduction in parking stalls with the addition on Otto Recreation. Handicap stalls in this location and quantity is a priority and will either remain in place or be accommodated across the street in Lot 4.

The removal of parking lots off W Rd intentionally pulls vehicular traffic away from the residence halls, strengthening the pedestrian experience. Service and emergency vehicles will continue to have access, as well as special circumstances around student move-in and move-out periods.

The replacement of Wiecking Center proposes a new facility reduced in its footprint, and repositioned further south towards campus. This reinforces the notion that campus facilities should be located near the core, supporting a walkable, connected, pedestrian-forward campus, while parking and vehicular traffic can move towards the fringes of campus.

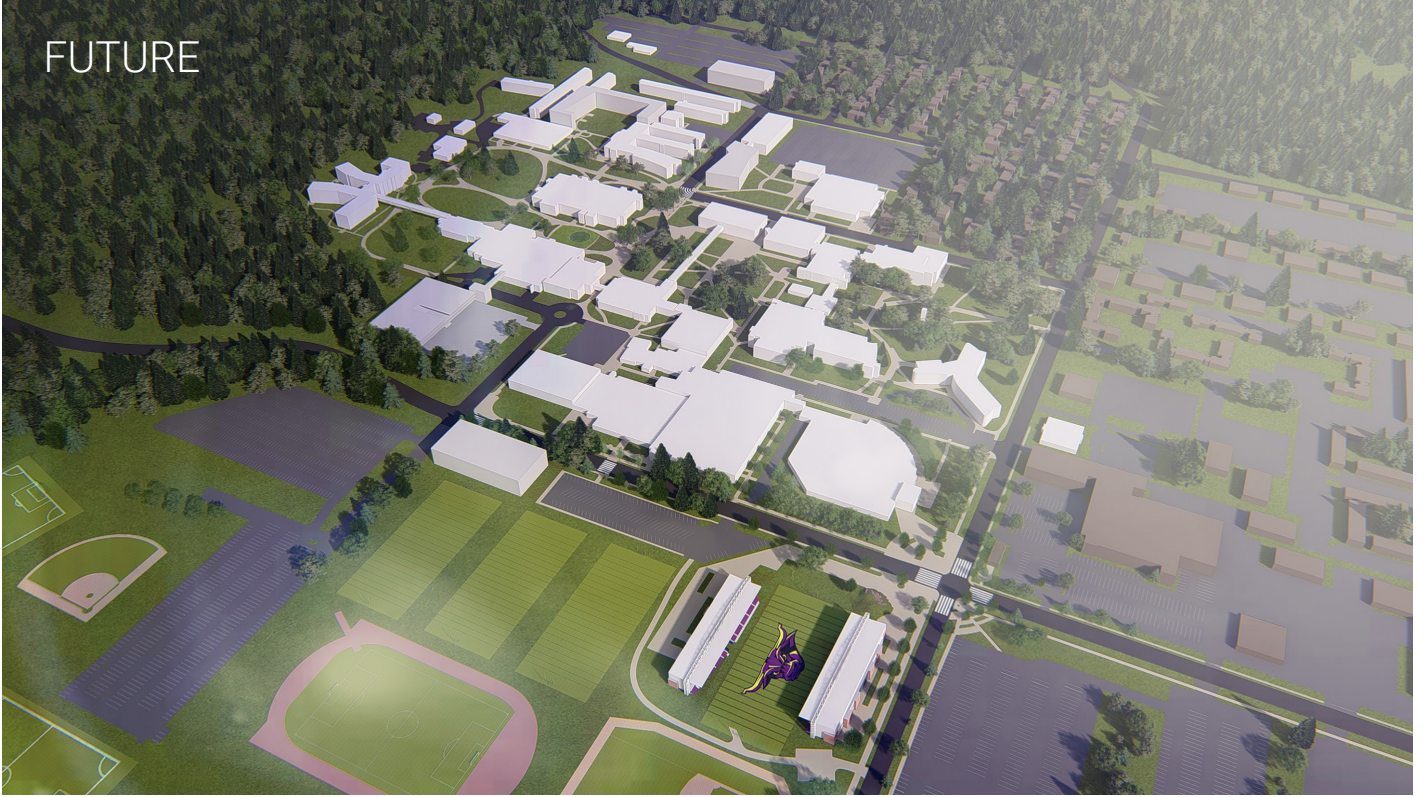
2019



- Exterior Wayfinding Study
- Pedestrian Mall Study
- Interior Wayfinding Study
- Trafton Highland Link - Waterproofing
- Nelson Hall - Envelope + Infrastructure
- Trafton Window Replacement
- Stormwater Management Upgrade
- Wigley Administration Building Envelope
- Trafton South - Casework Renewal
- Armstrong Hall Solution
- Campus Open Space Renovation
- Parking Lot #1 Repairs
- Safety Crossing Improvements
- Otto Recreation Addition & Remodel
- Replace Tennis Courts + New Pickleball Courts
- Upper Class Apartment Housing
- Performing Arts Center Renewal
- Utility Plant Equipment Renewal #1
- Nelson Hall Roof
- Emergency Generator Replacement
- Underground Storage Tank
- Solar Power - Location TBD

SHORT TERM
(complete)

- Blakeslee Stadium Replacement
- New Residence Hall
- Campus Open Space Upgrade



- New Home for Health Services
- Parking Lot #16 Repairs
- Taylor Plaza & Connectivity Improvements
- New Business Building / Welcome Center
- Track & Field Turf
- Campus Rec / Maverick Adventures Facility
- Trafton South Connection Upgrade
- Entry Gateway Enhancements
- Agriculture Lab Addition
- Sanitary / Sewer Renewal
- Utility Tunnel Repairs
- Taylor Center Roof
- Campus Mall Replacement
- Utility Plant Equipment Upgrades #2
- Track & Field Support Facilities

MID TERM
(complete)

- New Entry Gateway
- Wieking Center Replacement + Parking
- Parking Lot #17 Repairs
- Nelson Hall Replacement
- Parking Ramp - TBD
- Transit Stops
- Connection between Nelson Hall Replacement & Morris Hall
- CSU & Sears Skyway Connection
- New Academic Building - TBD

LONG TERM
(complete)



5

Proposed Framework for Building Development

- 5.1 Building Development Goals & Strategies
- 5.2 Proposed Phasing

Figure 5.0 - Proposed Phasing



Building Development Goals & Strategies

This section focuses on facility development strategies that support the comprehensive facilities plan guiding principles #2. The projects are designed and crafted to :

Create innovative, student-centered spaces on campus that support academic needs of incoming generations

- Create technology-rich spaces that support faculty, staff and student research and showcases learning & innovation
- Promote collaboration across academic disciplines
- Exemplify a truly National & International University
- Enhance the quality and variety of environments on campus to improve recruitment and retention

It is imperative that with any new construction or renovation projects, effort should be made to include student-focused space for collaborative work and quiet study and reflection. With an increasingly diverse incoming student body, the need to provide spaces that promote student success, inclusivity, and accessibility will be a focus for MSU Mankato.




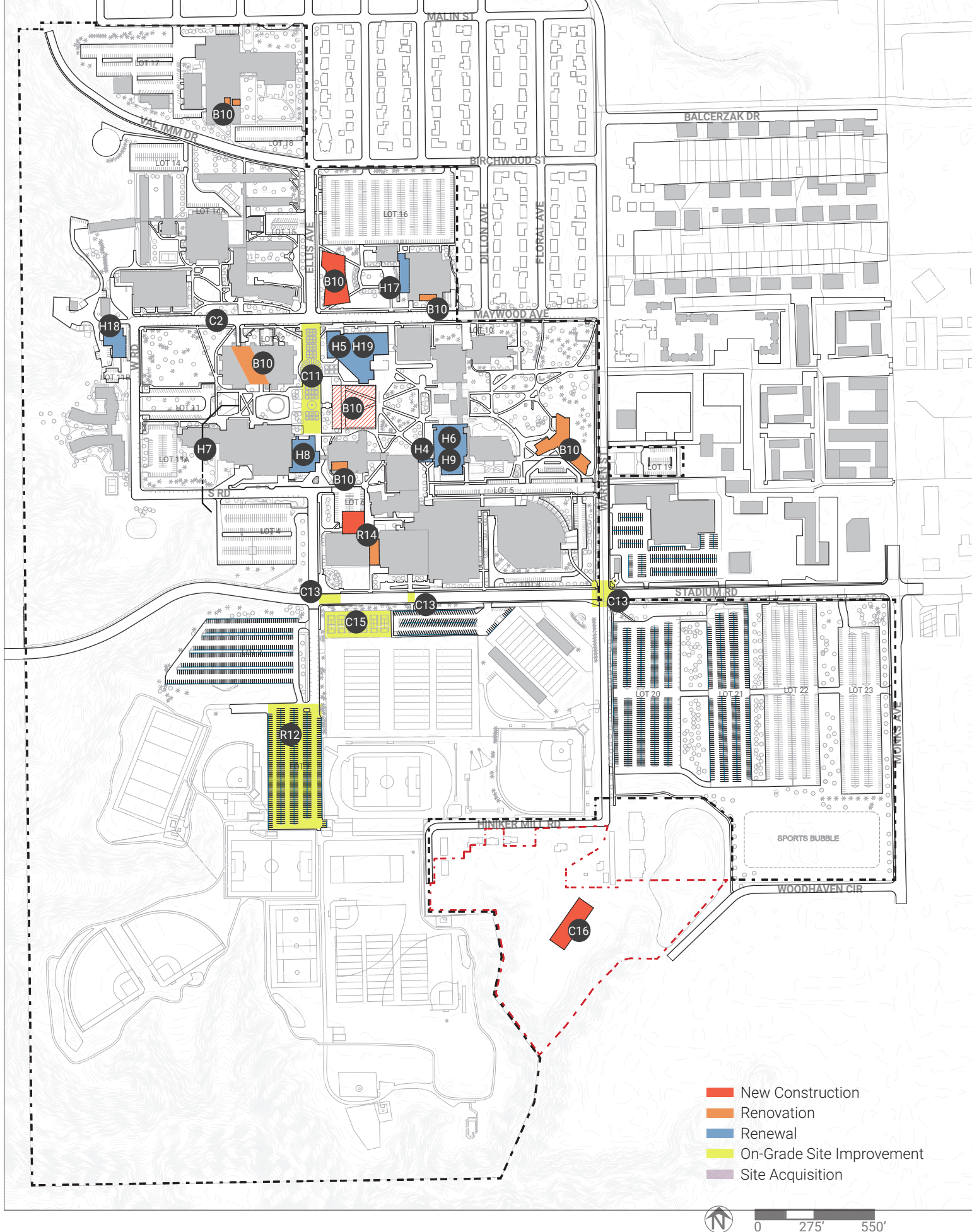
-  Short Term (1-5 years)
-  Mid Term (6-10 years)
-  Long Term (11+ years)

Figure 5.1 - Overall Short Term



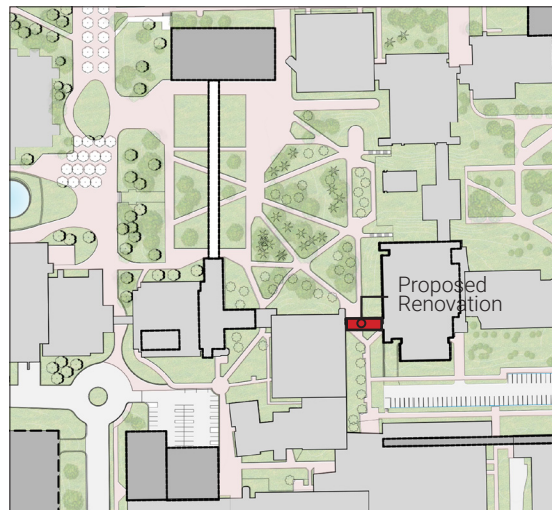
Overall Short Term

1-5 years

| | | | |
|---|---|--|--|
| C1 Exterior Wayfinding Study | H7 Stormwater Management Upgrade | C13 Safety Crossing Improvements | H19 Nelson Hall Roof |
| C2 Pedestrian Mall Study | H8 Wigley Administration Building Envelope | R14 Otto Recreation Addition & Remodel | H20 Emergency Generator Replacement |
| C3 Interior Wayfinding Study | H9 Trafton South - Casework Renewal | C15 Replace Tennis Courts + New Pickleball Courts | H21 Underground Storage Tank |
| H4 Trafton Highland Link - Waterproofing | B10 Armstrong Hall Solution | C16 Upper Class Apartment Housing | C22 Solar Power - Location TBD |
| H5 Nelson Hall - Envelope + Infrastructure | C11 Campus Open Space Renovation | H17 Performing Arts Center Renewal | |
| H6 Trafton Window Replacement | R12 Parking Lot #1 Repairs | H18 Utility Plant Equipment Upgrades #1 | |

H4 Trafton Highland Link - Waterproofing

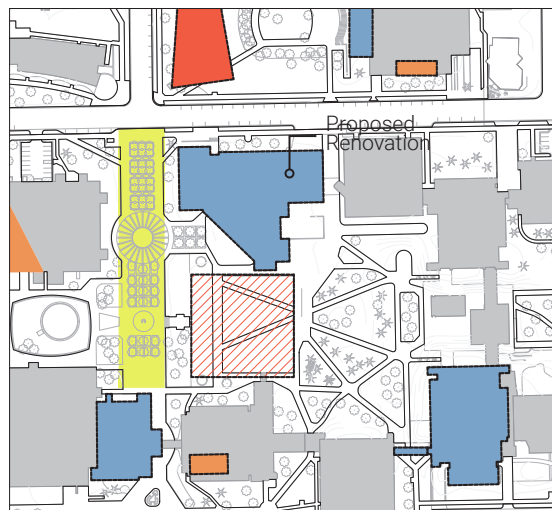
This project will repair and upgrade the below grade link between Trafton South and Highland North. The tunnel is subject to leaks in multiple locations and the exterior stairs on the south side of the link are failing. The project proposes a complete rework of the exterior waterproofing and reconstruction of the exterior stairway.



Enlarged Plan

H5 Nelson Hall - Envelope + Infrastructure

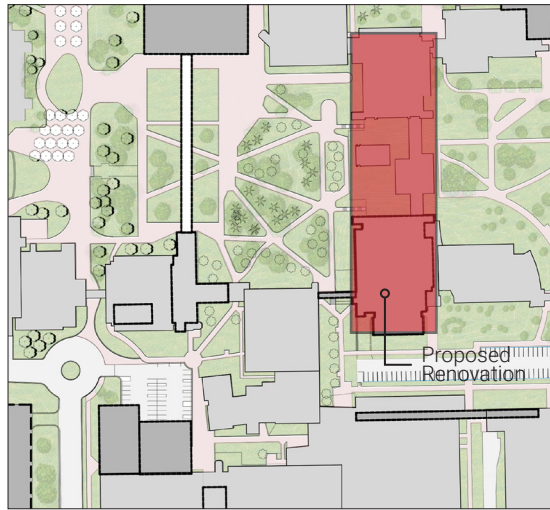
This project is a collection of several physical plant staff that identified urgent needs for the building envelop and infrastructure. Nelson Hall is the second oldest academic building on campus originally constructed in 1962. It has undergone several different partial remodeling and renovation projects in the past and the intent for these funds is to address the items that were excluded in these other projects. Includes galvanized waste piping replacement, single pane glass replacement, electrical buss duct in several labs, and some electrical distribution panel replacements.



Enlarged Plan

H6 Trafton Window Replacement

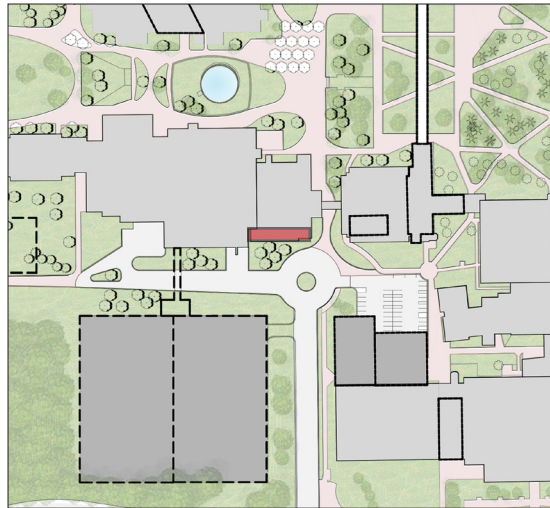
A predesign was completed in 2016 that indicated that the existing curtain wall systems have reached the end of their service life after 35 years of use. The predesign recommended replacement of the existing curtain wall systems with a new curtain wall system compliant with Minnesota State Facilities Design Standards.



○ Enlarged Plan

H6 Wigley Administration Building Envelope

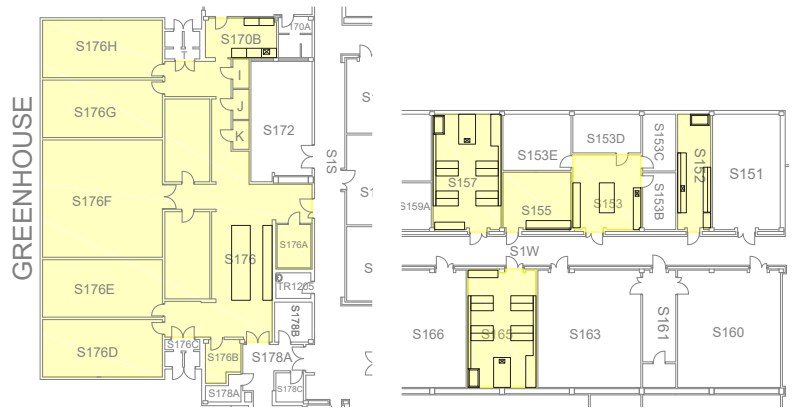
This project includes replacement of the south elevation curtain wall with the goal of improving thermal comfort for the building occupants and improving energy efficiency. The windows are original to the construction in 1977.



○ Enlarged Plan

H9 Trafton South-Casework Renewal

A portion of Trafton South labs underwent a renovation in 2009 - 2011. The casework renewal project seeks HEAPR funding to replace the science lab casework in the remainder of rooms, approximately +/- 25 biology rooms, as identified in the floor plans.

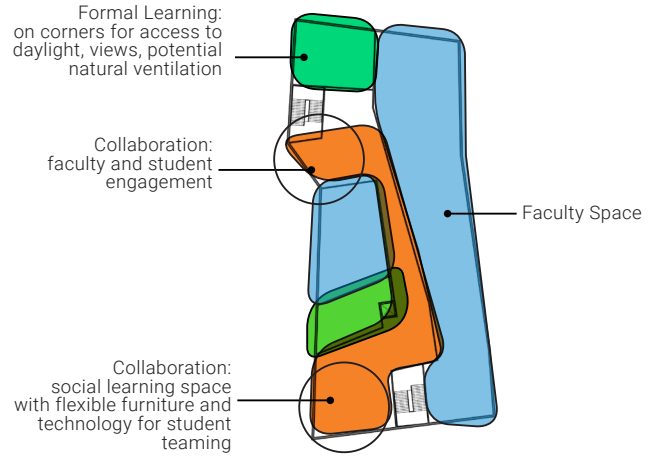


○ First Floor

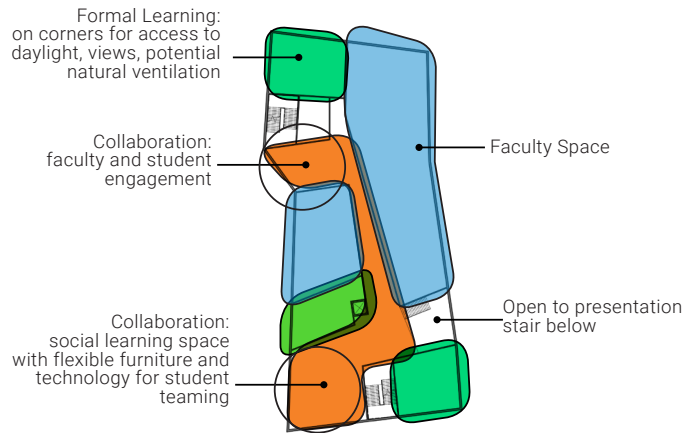


B10 Armstrong Hall Solution

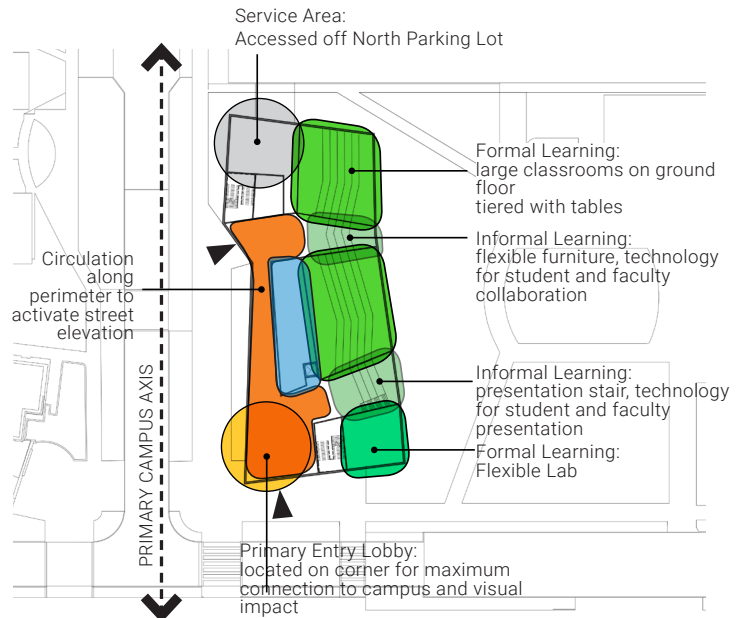
The Armstrong Hall Solution includes a number of projects across campus that will address an aging facility that has reached its useful life span, and reallocation of department and program space designed to increase synergies and efficiencies. It includes the renovation of the unoccupied basement of Clinical Sciences Building, a new Armstrong Hall replacement building (per predesign), demolition of Armstrong Hall and partial renovations of Wiecking Center, Performing Arts Center, Memorial Library and Morris Hall. During the predesign study, various locations were proposed for the Armstrong Hall replacement building and finally landed on the site at the corner of Maywood and Ellis. The demolition of Armstrong offers opportunities at the center of campus for green space and unobstructed visual and physical connections in the north-south and east-west axis.



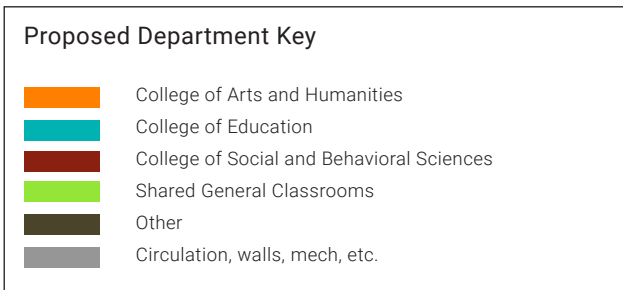
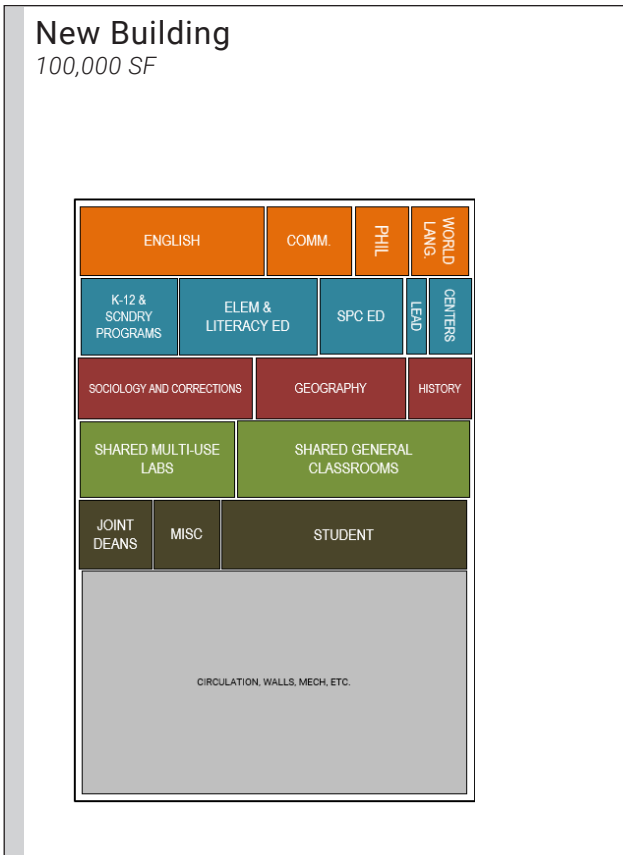
Third & Fourth Floor Plan Concepts



Second Floor Plan Concepts

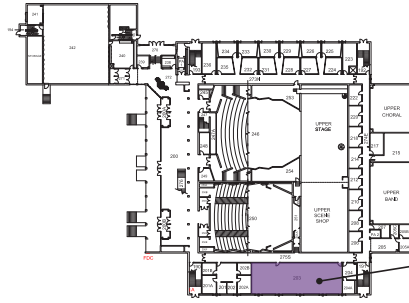


Ground Floor Plan Concepts



Performing Arts Center

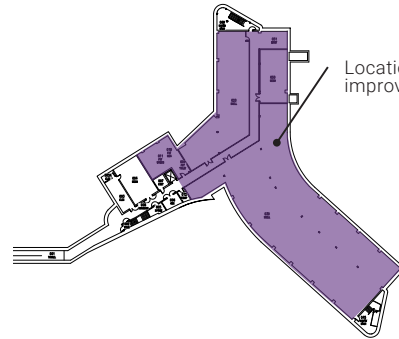
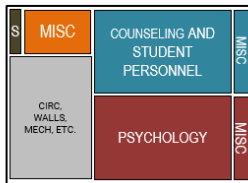
2,000 SF



○ Second Level Plan

Clinical Sciences Building

16,500 SF



○ Lower Level Plan

Wiecking Center

1,200 SF

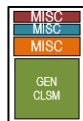


○ First Level Plan

Morris Hall

2,800 SF

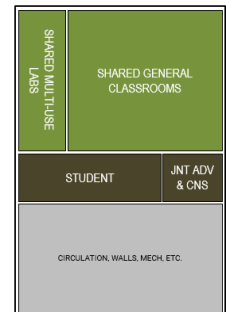
Location TBD



Memorial Library

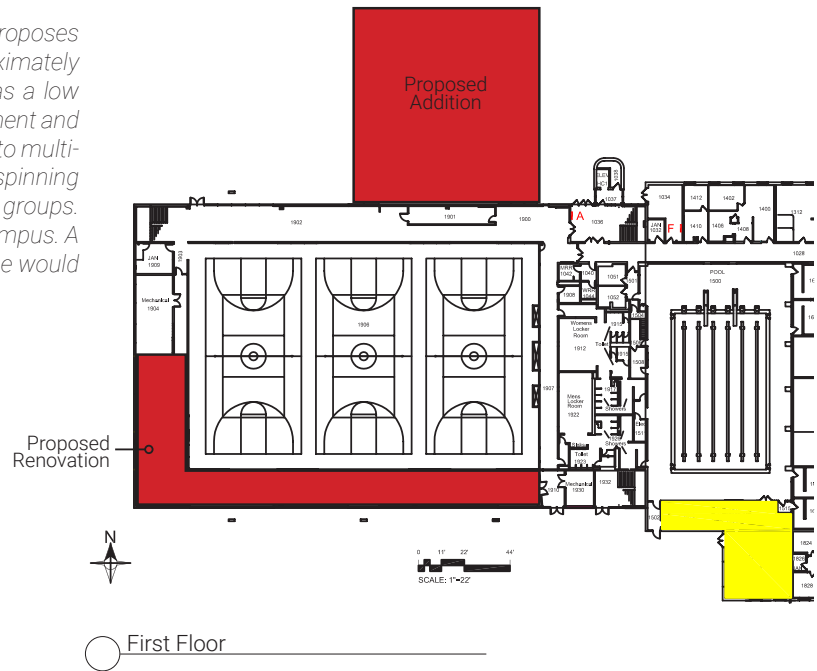
52,600 SF

Location TBD



R14 Otto Recreation Addition & Remodel

The Otto Rec Center Addition & Remodel project proposes the creation of a new weight room, sized at approximately 9000 SF. The current weight room is narrow and has a low ceiling height, which does not allow for certain equipment and lifting. The existing weight room would be remodeled to multi-purpose rooms and fitness studios that would serve spinning and fitness classes, club activities and student groups. Additionally, an inclusive locker room is needed on campus. A remodel of the existing gender-neutral changing space would include a shower.



C15 Upper Class Apartment Housing

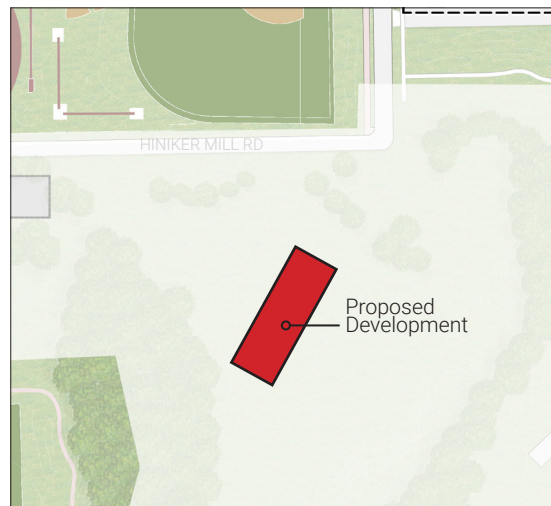
The University Foundation owns most of the property south of Hiniker Mill Road, spurring the conversation that development on this property could be a public-private partnership to create student focused housing on the campus' behalf. This project is not intended to replace or change the on-campus Residential Life Master Plan to demolish Carkoski Commons and complete the final phase of their plan. It is intended to complement existing first year housing accommodations as upperclass students are expressing a desire to stay on campus longer, a trend that supports higher student performance and retention.

With the demolition of Gage Towers, the campus entered a public private partnership for off-campus housing to make up the loss of over 300 beds. This has proven to be a very popular and successful agreement in several condominium style apartment buildings to the east of campus, including Stadium Heights. Several different models of partnership are under consideration. MSU Mankato has some previous experience with a public-private partnership where the private developer owns / maintains the property and the University's Residential Life manages the rental agreements and student conduct.

Current interest in this project is driven by the Foundation's desire to utilize the land asset that has been sitting idle for many years and the parallel ambitions from the Greek organizations to recreate traditional Greek-style housing opportunities near campus. When the campus fully moved from downtown to the single current location in the 1970's, Greek housing was left behind. Other models of living-learning communities and themed housing have also been of interest

to students. An updated market analysis will be performed as further development of this project.

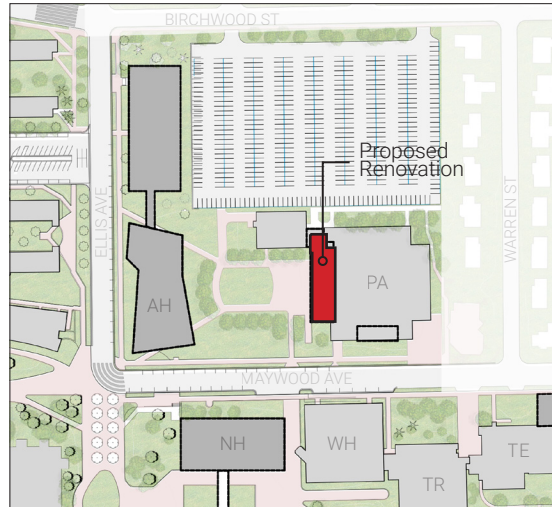
MSUM to engage consultant to confirm or change direction to most recent housing plan; project possible with private-public partnership, private lease, and traditional revenue bond sales; style of housing, population served, and debt capacity may influence the funding approach for the project.



○ Enlarged Plan

H17 Performing Arts Center Renewal

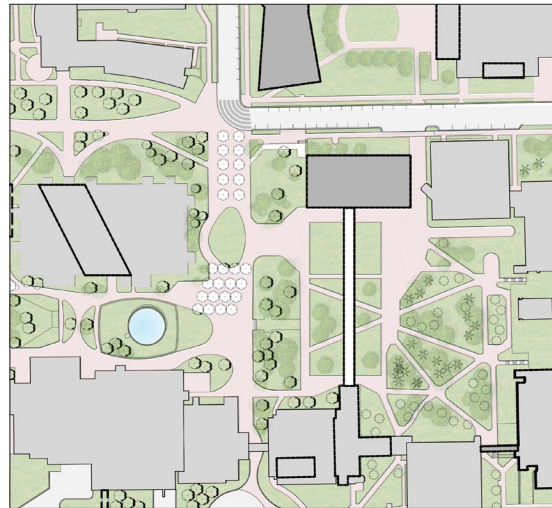
The Performing Arts Center has a high FCI of 0.26, primarily due to deficiencies in the HVAC system and building envelope. This project seeks HEAPR funding to replace the single pane two-story storefront glazing, replace HVAC as needed, and improve accessibility from the campus to the atrium entrance. A ramp is needed to provide wheelchair access at the south end of the PAC.



Enlarged Plan

H19 Nelson Hall Roof

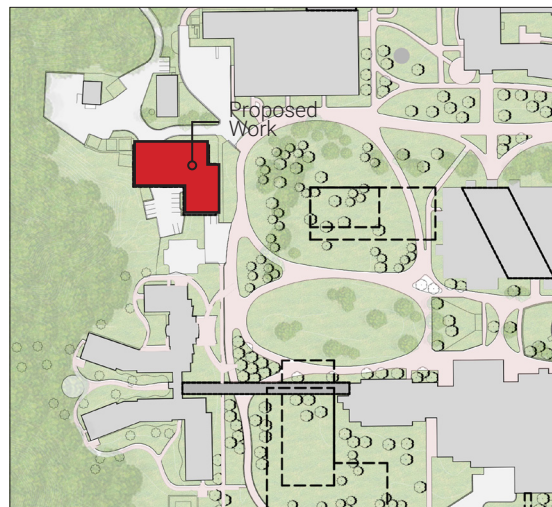
A predesign was conducted in 2011 that indicated roof failure in various areas, and indicated that roof does not meet Minnesota State Standards in current time. The predesign indicated replacement of existing roof with new built-up roof system per roofing standards set by the Minnesota State Colleges and Universities.



Enlarged Plan

H20 Emergency Generator Replacement

Project includes replacement of 2600 kW diesel emergency generators and associated electrical gear with 2 new appropriately sized generators. Electrical load to be analyzed and redistributed between units as part of the project.

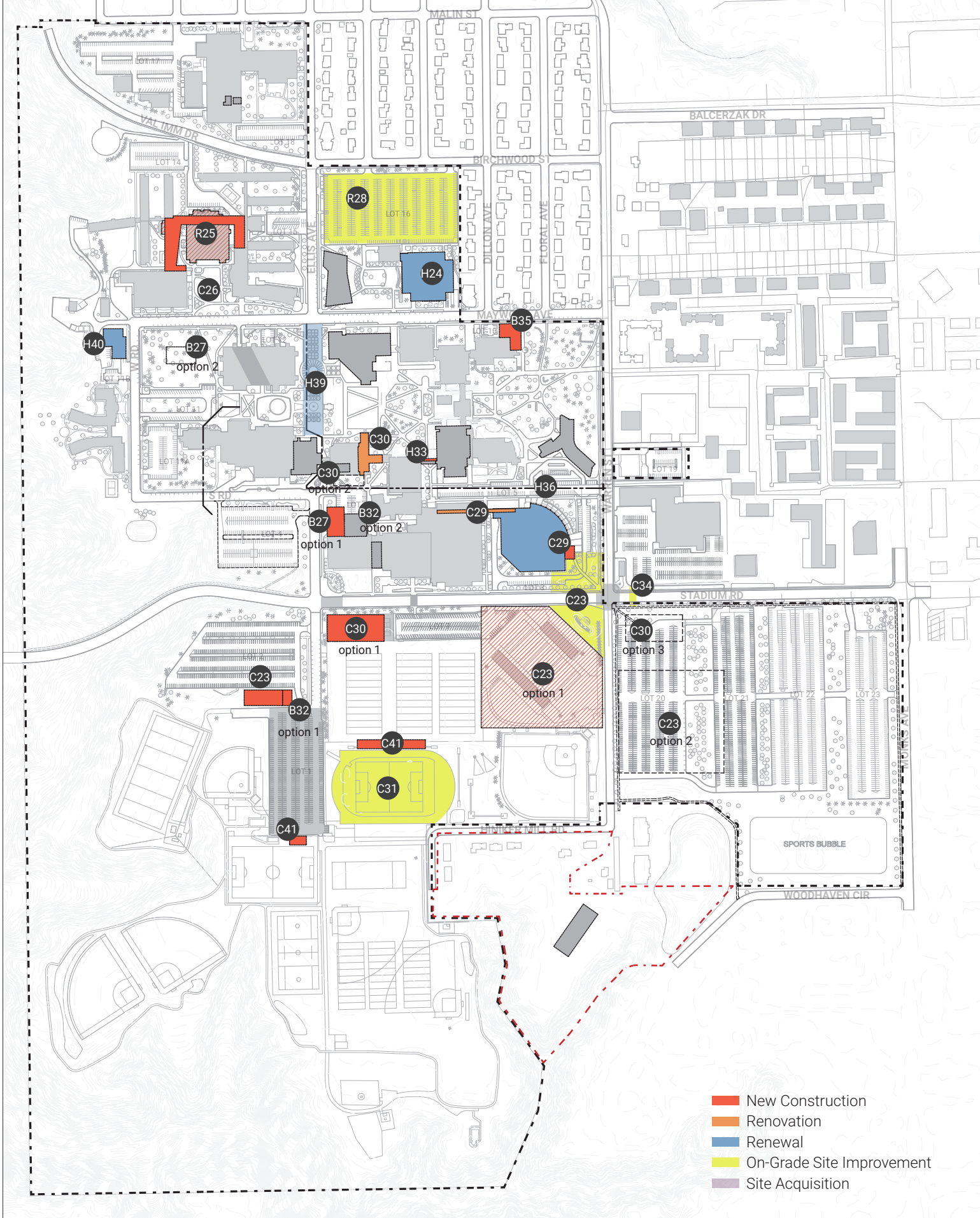


Enlarged Plan

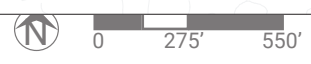
H21 Underground Storage Tank

The university currently has one active 50,000 gallon, steel double wall underground storage tank(UST) that is used for backup fuel for the Utility Plant located at 500 West Road in Mankato, MN. The university is evaluating the Phase #2 project process of removing the remaining 50,000 gallon, steel double wall UST and replacing it with a new 50,000 gallon fiberglass double wall USTs at the same location.

Figure 5.2 - Overall Mid Term



- New Construction
- Renovation
- Renewal
- On-Grade Site Improvement
- Site Acquisition



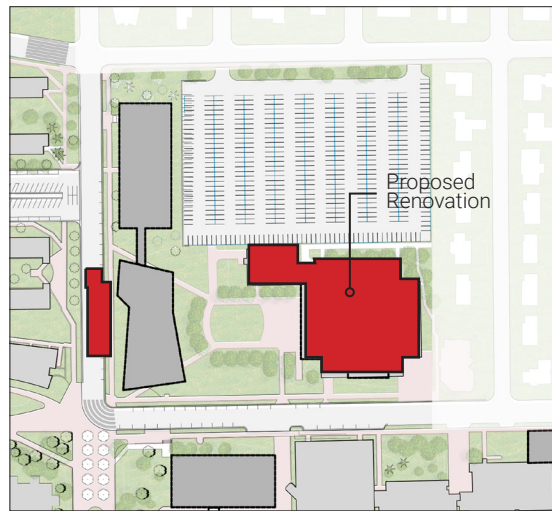
Overall Mid Term

6-10 years

- | | | | |
|--|--|---|---|
| C23 Blakeslee Stadium Replacement | R28 Parking Lot #16 Repairs | H33 Trafton South Connection Upgrade | H39 Campus Mall Replacement |
| H24 Performing Arts Center Renewal P2 | C29 Taylor Plaza & Connectivity Improvements | C34 Entry Gateway | H40 Utility Plant Equipment Renewal #2 |
| H25 New Residence Hall | C30 New Business Building / Welcome Center | B35 Agriculture Lab Addition | C41 Track & Field Support Facilities |
| C26 Campus Open Space Upgrade | C31 Track & Field Turf | H36 Sanitary / Sewer | |
| B27 New Home for Health Services | B32 Campus Rec / Maverick Adventures Facility | H37 Utility Tunnel Repairs | |
| | | H38 Taylor Center Roof | |

H24 Performing Arts Center Renewal P2

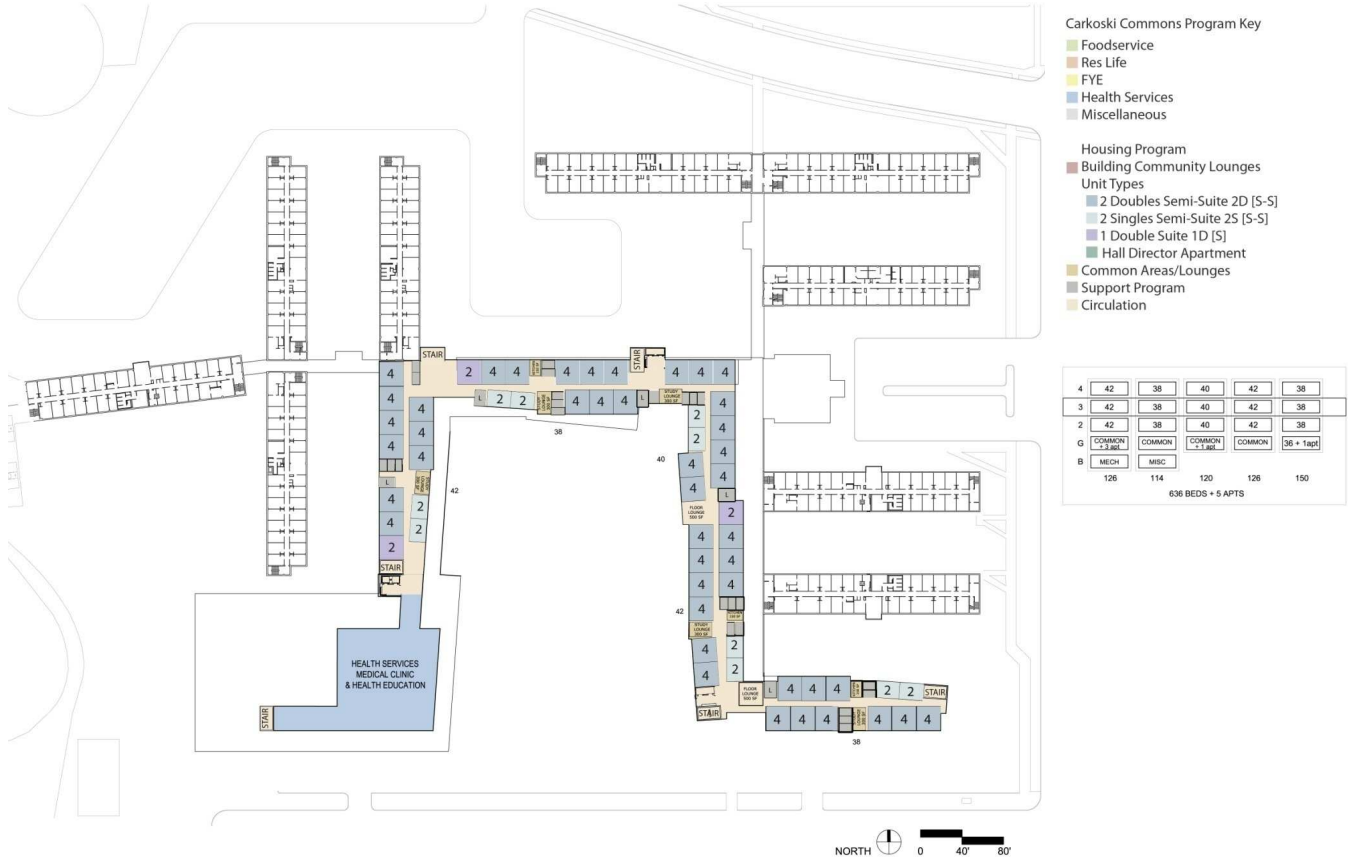
Continuing renovation work from previous Performing Arts Center Renewal project as more funding becomes available.



○ Enlarged Plan

H25 New Residence Hall

The residential life master plan has identified in its final phase, the demolition of Carkoski Commons, a portion of Crawford Residence Community, and the construction of a new residence hall and commons that would accommodate +/- 320 beds in traditional units. The plan for the new residence hall creates an inviting open green space in front, between Preska and the Dining Center.

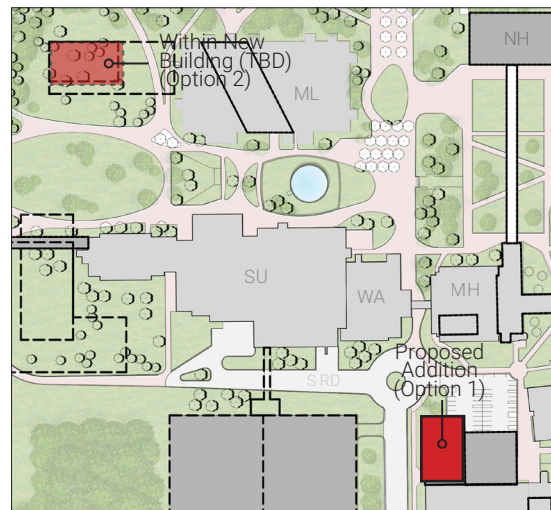


Typical Residence Floor

B27 New Home for Health Services

Several siting options have been identified for the new home for Health Services, which would house the functions demolished in Carkoski Commons. Two potential locations are: Option 1, the site north of Highland Center, and Option 2, the site west of Memorial Library. There has been much dialogue on the "right" location for this student service. Option 1 offers the proximity to athletic and recreation facilities, contributing to a focused area on campus that promotes health and wellness. Option 2 could be combined with a new academic building, located near residential and student life zones.

The student body has also identified the need for an interfaith reflection space, which would consist of a 300-400 sf quiet room with flexible furniture that is welcoming and open to all. While this is a concept that could be integrated much sooner in the master plan, it should be recognized that with any new construction, there should be a focus on providing student-focused space for both collaborative work and quiet study and reflection that will serve a diverse student population.



Enlarged Plan

C30 New Business Building / Welcome Center

Over the years, the College of Business project has explored a multitude of locations on campus, with this master plan proposing the COB be located on the southeast corner of Stadium Rd and Ellis Ave, while identifying several alternate locations. This location has the benefit of central utilities close by (the utilities that used to serve Gage Residence Hall) and prospect of lightening the pedestrian crossing volume at Warren and Stadium.

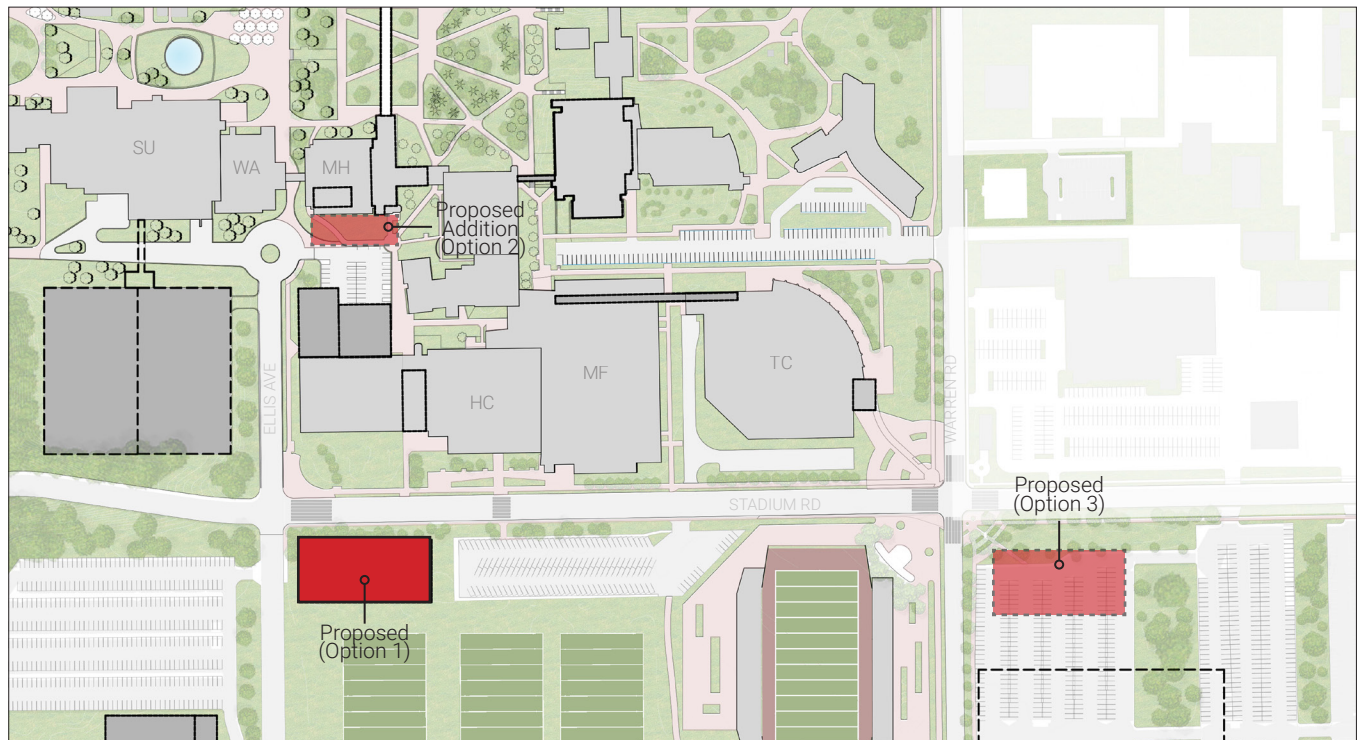
The COB project continues to be envisioned as a 100% donated funds venture and will require a more formal predesign effort once the funding gift pyramid has been developed to an appropriate level to justify the expenditure of a full predesign study. Additionally, the campus will need to remain somewhat

flexible on scope and timing which would be subject to fundraising capacity and success.

As business programs move out of their current Morris Hall areas, space will be freed up to repurpose for other programs. A proposed Welcome Center could also reside in this building, where the campus sees a mutual benefit and combined use of spaces between the two programs.

The alternate site location of a Morris Hall addition is also being considered which would allow existing faculty offices to continue to be used, freeing up funds and space for classrooms and labs.

University is considering additional alternate locations for this project.



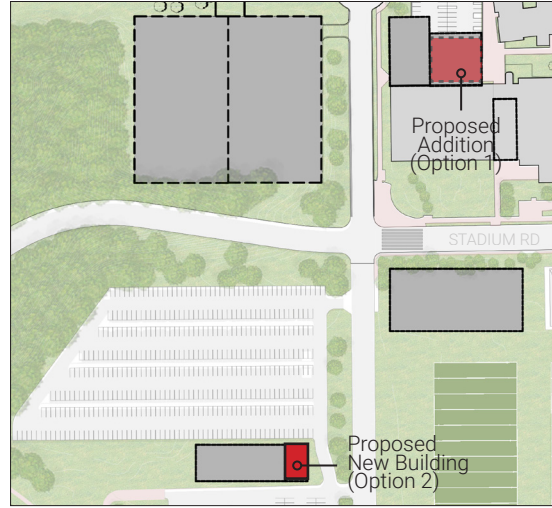
B32 Campus Rec / Maverick Adventures Facility

The Athletics and Campus Recreation Programming and Space Needs Task Force has determined a need for a space that supports outdoor programs through Campus Rec & Maverick Adventures. The space would include office space for staff and student work stations, a counter for large equipment storage/ rental and customer service, maintenance/repair space, storage space and planning space.

Data supports high student interest in this area and the impact it could have on MSU Mankato's campus recreational offerings impacting recruitment and retention.

Two potential location opportunities have been identified. Option 1 proposes the facility be located more remotely, near the athletic fields, offering the benefits of separating vehicles doing pick-ups and drop-offs of equipment.

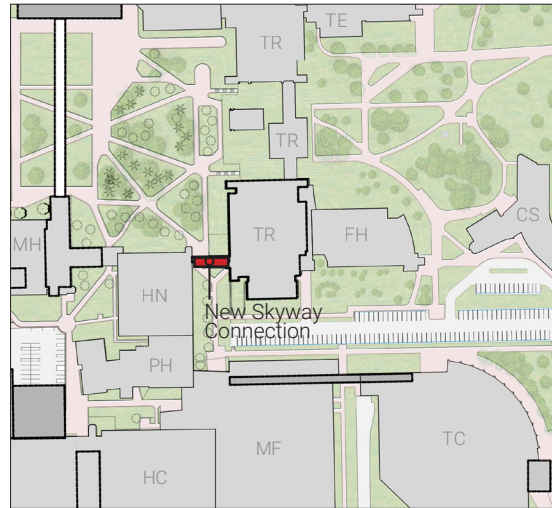
Option 2 creates a consolidated facility with the Otto Rec Addition.



Enlarged Plan

H33 Trafton South Connection Upgrade

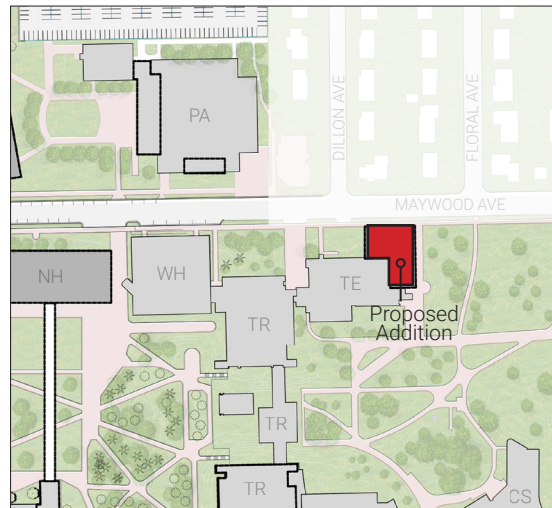
The existing tunnel between Trafton South and Highland North is leaking and in need of repair. This HEAPR project would demolish the tunnel and move pedestrian connectivity to a skyway link. A skyway connection could also create a welcoming overhead campus gateway to the quad from the south. The north corridors through Taylor Center and Myers Field House is well traveled by pedestrians seeking an interior route to the campus core.



Enlarged Plan

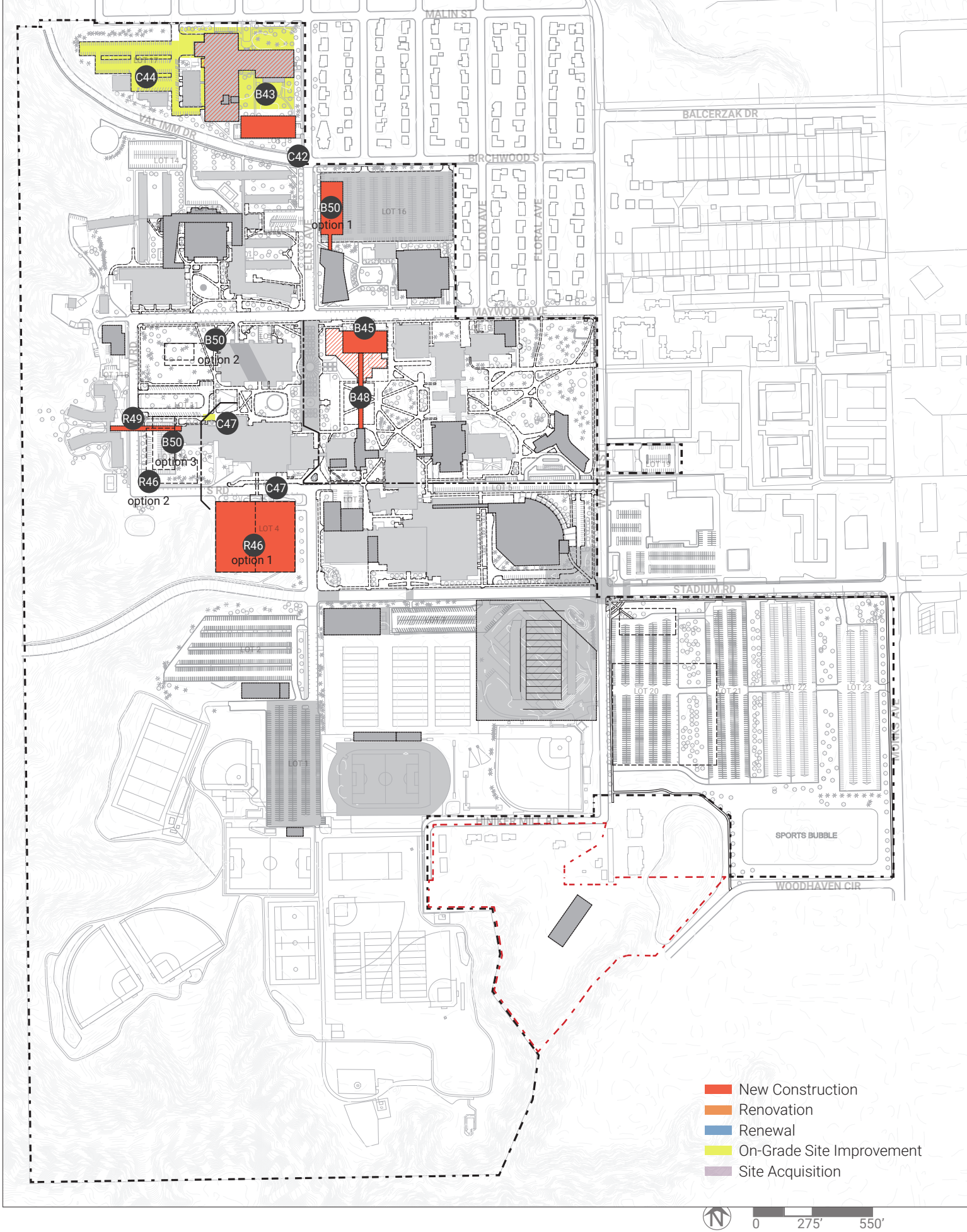
B35 Agriculture Lab Addition

The agriculture lab addition has been proposed off the east end of Trafton East. It would provide approximately 9000 SF of large lab spaces at 1.5 stories with the benefit of nearby adjacency to science labs. The other potential location for the ag labs is in the Wiecking Replacement building, which moves these functions farther from the campus core, into a lab-focused building.

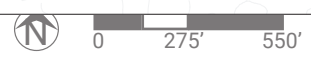


Enlarged Plan

Figure 5.3 - Overall Long Term



- New Construction
- Renovation
- Renewal
- On-Grade Site Improvement
- Site Acquisition



Overall Long Term

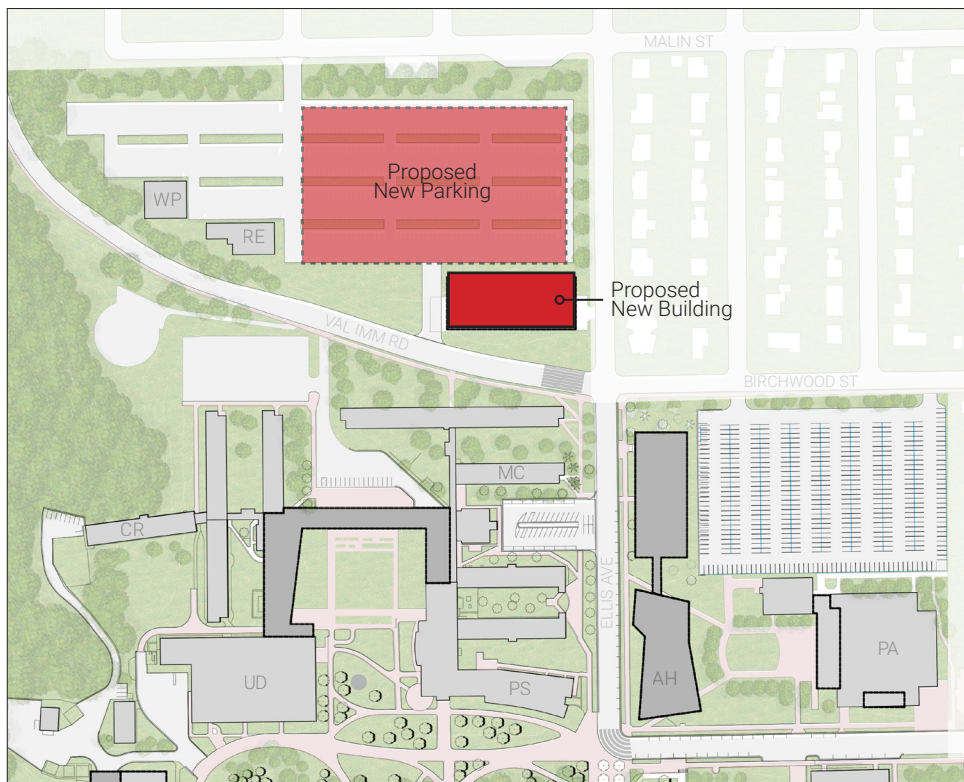
11+ years

- | | | |
|--|---|---|
| C42 Entry Gateway | B45 Nelson Hall Replacement | B48 Connection between Nelson Hall Replacement & Morris Hall |
| B43 Wiecking Center Replacement + Parking | R46 Parking Ramp & Transit Stop Upgrades | R49 CSU & Sears Skyway Connection |
| C44 Parking Lot #17 Repairs | C47 Transit Stops | B50 New Academic Building - TBD |

B43 Wiecking Center Replacement + Parking

Wiecking Center is one of the oldest academic buildings on campus and unlikely to meet energy consumption reduction goals regardless of any investment due to outdated building envelope design. Cost to fully renovate to current B3 standards is anticipated to approach the cost of demolition and construction. Wiecking Center, with maintenance shops included, is over 100,000 GSF in a single story facility that consumes a large amount of campus land resources with a huge footprint on the northern edge of campus. This building was the original campus laboratory school and designed to

support K-12 instruction in the 1960's. The building has generally very low ceilings and an inflexible structural column layout to support modern technology and teaching pedagogy. The long range concept is to replace this building with a smaller footprint multistory building closer to the campus core and relocate more parking to the outer northern edge of the campus. While the program is far from developed, consideration to locate labs that have large space requirements or access to outdoor space could be achieved in this building.



Enlarged Plan

B45 Nelson Hall Replacement

Nelson Hall faces the same challenges as Wiecking in that it is one of the oldest academic buildings on campus and likely to not meet current energy consumption reduction goals, despite renovations to the building envelope and upgrades to MEP systems.

Nelson currently houses labs and shops like the Industrial Shops and Automotive Engineering labs that function as "dirty" labs. Some may produce loud sounds, such as vehicle chassis dynamometer testing, or smelly fumes, such as the fiberglass fabrication lab, and are often dirty, such as the art labs and welding functions that create a lot of waste, not ideal in the campus core.

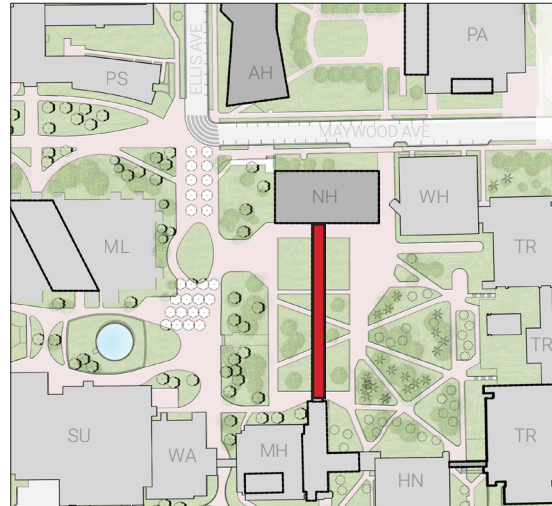
With the demolition of Armstrong Hall MSU is creating more of an internal collegiate mall and would look to relocate these noisy, smelly, and dirty functions to a less central location on campus. These could be programs that get relocated to the Wiecking Center Replacement building.



Enlarged Plan

B48 Connection between Nelson Hall Replacement & Morris Hall

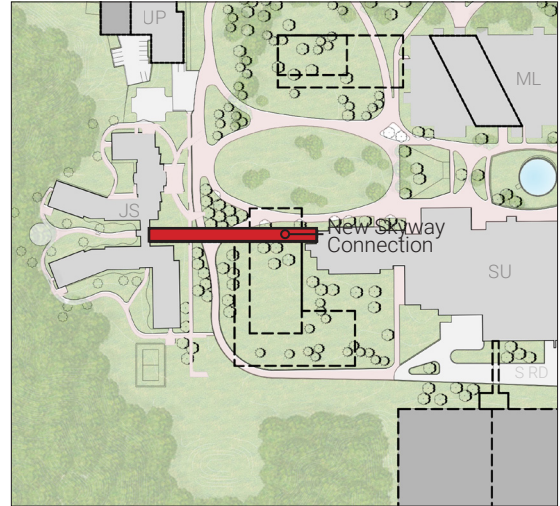
This project proposes a connection between proposed new Nelson Hall & existing Morris Hall. This project will give students a sheltered space to walk from building to building since Armstrong hall has been demolished. The proposed project can either be an underground tunnel, skyway, or outdoor covered connection. A predesign is suggested to analyze the need and provide a safe solution.



Enlarged Plan

R49 CSU & Sears
Skyway Connection

A new skyway connection is proposed between Julia Sears Residence Community & Centennial Student Union, essentially closing the connection of internal circulation between the residence communities and the campus core. This skyway could happen in conjunction with an addition to CSU.



○ Enlarged Plan

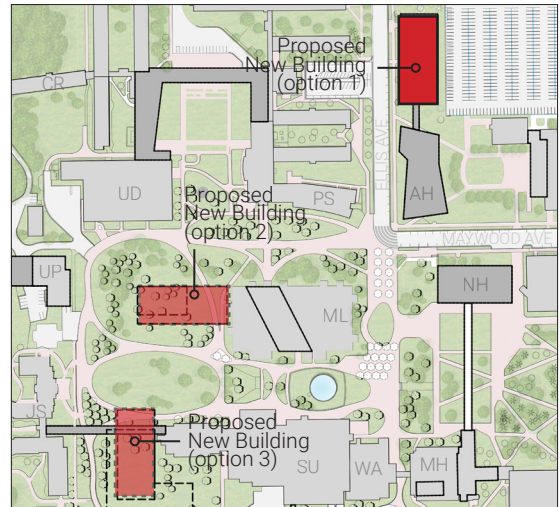
B50 New Academic Building -
TBD

It is expected that in long range planning, enrollment will increase at MSU Mankato. In response to a growing student population, the University will be prepared with potential locations for a yet to be determined new academic building. It is important to MSU that the existing sectors or zones are kept intact, so that academic functions are kept in the campus core.

Two location options are identified;
Option 1 offers connectivity off the north end of the proposed Armstrong Hall Replacement building, taking over some of existing parking lot 16.

Option 2 looks at the site west of Memorial Library, while maintaining a substantial setback from the pedestrian mall.

Option 3 proposes the site west of CSU, which could tend towards a more student services program.



○ Enlarged Plan



6

Capital Budget Improvement Program

6.1 Proposed Project Budget

Proposed Project Budget 6.1

Overall Short Term

1-5 years

| | |
|------------------------|----------------------|
| TOTAL PROJECTS | \$135,408,910 |
| GO BONDING | \$81,591,250 |
| GO HEAPR | \$16,474,160 |
| REVENUE BONDING | \$8,175,000 |
| CAMPUS FUNDED | \$2,713,000 |
| OTHER FUNDS | \$26,455,000 |

| Project Funding Key | |
|---------------------|------------------------------|
| B | GO Bonding |
| H | GO HEAPR |
| R | Revenue Bonding |
| C | Campus Funded + Other Source |

| Campus Priority | Overall Project Name |
|-----------------|---|
| C1 | Exterior Wayfinding Study |
| C2 | Pedestrian Mall Study |
| C3 | Interior Wayfinding Study |
| H4 | Trafton Highland Link - Waterproofing |
| H5 | Nelson hall - Envelope + Infrastructure |
| H6 | Trafton Window Replacement |
| H7 | Stormwater Management Upgrade |
| H8 | Wigley Window Replacement |
| H9 | Trafton South - Casework Renewal |
| B10 | Armstrong Hall Solution |
| C11 | Campus Open Space Renovation |
| R12 | Parking Lot #1 Renewal |
| C13 | Safety Crossing Improvements |
| R14 | Otto Recreation Addition & Remodel |
| C15 | Replace Tennis Courts + New Pickleball Courts |
| C16 | Upper Class Apartment Housing |
| H17 | Performing Arts Center Renewal |
| H18 | Utility Plant Equipment Renewal #1 |
| H19 | Nelson Hall Roof |
| H20 | Emergency Generator Replacement |
| H21 | Underground Storage Tank |
| C22 | Solar Power - Location TBD |

| SHORT TERM PHASING PROJECTS | | | | | | | |
|-----------------------------|----------------|----------|-----------------|----------------|--------------|---------------------------------------|--------------|
| Type | Funding Source | | | | | Total Project GSF | Project Cost |
| | GO Bonding | GO HEAPR | Revenue Bonding | Campus Funded* | Other Funds* | | |
| study | | | | X | | campus wide | \$60,000 |
| study | | | | X | | - | \$100,000 |
| study | | | | X | | campus wide | \$60,000 |
| renewal | | X | | | | - | \$610,000 |
| renewal | | X | | | | - | \$403,860 |
| renewal | | X | | | | - | \$1,210,000 |
| renewal | | X | | | | - | \$500,000 |
| renewal | | X | | | | - | 940,000 |
| renewal | | X | | | | 40,000 | \$2,400,000 |
| renovation | X | | | | | 331,100 | \$81,591,250 |
| on grade site improvement | | | | X | o | 45,000 | \$1,462,500 |
| renewal | | | X | | | - | \$1,300,000 |
| on grade site improvement | | | | X | | - | \$576,000 |
| new | o | | X | | | 9,000 sf weight room 5,000 remodel | \$6,875,000 |
| on grade site improvement | | | | X | | 36,800 | \$455,000 |
| new | | | | | X | 74,000 | \$26,455,000 |
| renewal | | X | | | | 95,900 | \$7,010,300 |
| renewal | | X | | | | - | \$750,000 |
| renewal | | X | | | | | \$1,800,000 |
| renewal | | X | | | | | \$300,000 |
| renewal | | X | | | | | \$550,000 |
| new | | | | | X | - | TBD |

*Campus Funded and Other Funds combined in map graphic

Proposed Project Budget 6.1

Overall Mid Term

6-10 years

| | |
|------------------------|----------------------|
| TOTAL PROJECTS | \$155,068,567 |
| GO BONDING | \$19,613,750 |
| GO HEAPR | \$26,829,000 |
| REVENUE BONDING | \$46,655,000 |
| CAMPUS FUNDED | \$3,099,000 |
| OTHER FUNDS | \$58,871,817 |

Project Funding Key

| | |
|----------|---------------------------------|
| B | GO Bonding |
| H | GO HEAPR |
| R | Revenue Bonding |
| C | Campus Funded + Other Source |

| Campus Priority | Overall Project Name |
|-----------------|---|
| C23 | Blakeslee Stadium Replacement - TBD |
| H24 | Performing Arts Center Renewal P2 |
| R25 | New Residence Hall |
| C26 | Campus Open Space Upgrade - Preska |
| B27 | New Home for Health Services - TBD |
| R28 | Parking Lot #16 Repairs |
| C29 | Taylor Plaza & Connectivity Improvements |
| C30 | New Business Building / Welcome Center |
| C31 | Track & Field Turf |
| B32 | Campus Rec / Maverick Adventures Facility - TBD |
| H33 | Trafton South Connection Upgrade |
| C34 | Entry Gateway Enhancements |
| B35 | Agriculture Lab Addition |
| H36 | Sanitary / Sewer Renewal |
| H37 | Utility Tunnel Repairs |
| H38 | Taylor Center Roof |
| H39 | Campus Mall Replacement |
| H40 | Utility Plant Equipment |
| C41 | Track & Field Support Facilities |

| MID TERM PHASING PROJECTS | | | | | | | |
|---------------------------|----------------|----------|-----------------|----------------|--------------|--------------------------|--------------|
| Type | Funding Source | | | | | Total Project GSF | Project Cost |
| | GO Bonding | GO HEAPR | Revenue Bonding | Campus Funded* | Other Funds* | | |
| demo/new/site improvement | o | | | | X | 500,000 | \$27,070,000 |
| renewal | | X | | | | - | \$6,000,000 |
| demo/new | | | X | | | 120,000 | \$44,000,000 |
| on grade site improvement | | | | X | | 800 | \$96,000 |
| new | X | | | | | 20,000 | \$8,450,000 |
| on grade site improvement | | | X | | o | - | \$2,600,000 |
| addition/ reno | | | | X | o | 7,800 | \$1,385,800 |
| new / reno | | | | | X | 60,000 new 8,800 reno | \$29,780,000 |
| on grade site improvement | | | | X | | 167,000 | \$1,500,000 |
| on grade site improvement | X | | o | | | 12,000 | \$5,460,000 |
| renewal | | X | | | | 1,800 | \$1,370,000 |
| on grade site improvement | | | | X | o | - | \$97,500 |
| new | X | | | | | 13,500 | \$5,704,000 |
| renewal | | X | | | | 2,200 LF | \$1,800,000 |
| renewal | | X | | | | - | \$7,659,000 |
| renewal | | X | | | | - | \$6,000,000 |
| renewal | | X | | | | - | \$1,000,000 |
| renewal | | X | | | | - | \$3,000,000 |
| new | | | | | X | 12,200 | \$2,027,000 |

*Campus Funded and Other Funds combined in map graphic

Proposed Project Budget 6.1

Overall Long Term

11+ years

| | |
|------------------------|----------------------|
| TOTAL PROJECTS | \$134,943,600 |
| GO BONDING | \$93,369,00 |
| GO HEAPR | - |
| REVENUE BONDING | \$40,199,600 |
| CAMPUS FUNDED | \$975,000 |
| OTHER FUNDS | \$400,000 |

Project Funding Key

| | |
|----------|---------------------------------|
| B | GO Bonding |
| H | GO HEAPR |
| R | Revenue Bonding |
| C | Campus Funded + Other Source |

| Campus Priority | Overall Project Name |
|------------------------|---|
| C42 | New Entry Gateway- Val Imm & Ellis |
| B43 | Wiecking Center Replacement + Parking |
| C44 | Parking Lot #17 Repairs |
| B45 | Nelson Hall Replacement |
| R46 | New Parking Ramp - TBD |
| C47 | Transit Stops |
| B48 | Connection between Nelson Hall Replacement & Morris |
| R49 | CSU & Sears Skyway Connection |
| B50 | New Academic Building - TBD |

| LONG TERM PHASING PROJECTS | | | | | | | |
|---|----------------|----------|-----------------|----------------|--------------|-------------------|--------------|
| Type | Funding Source | | | | | Total Project GSF | Project Cost |
| | GO Bonding | GO HEAPR | Revenue Bonding | Campus Funded* | Other Funds* | | |
| new | | | | X | o | - | \$195,000 |
| demo/new/ on grade site improvement | X | | | | | 319,000 | \$23,335,000 |
| on grade site improvement | | | | X | | | \$780,000 |
| demo/ new | X | | | | | 112,000 | \$26,000,000 |
| new | | | X | | | 345,000 | \$31,500,000 |
| on grade site improvement | | | | | X | - | \$400,000 |
| new | X | | | | | 7,000 | \$3,500,000 |
| new | | | X | | | 7,000 | \$8,750,000 |
| new | X | | | | | 96,000 | \$40,500,000 |

*Campus Funded and Other Funds combined in map graphic