



University of North Carolina Wilmington

connecting people to place
2024 CAMPUS MASTER PLAN

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UNIVERSITY of NORTH CAROLINA WILMINGTON

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2024 CAMPUS MASTER PLAN

University of North Carolina Wilmington

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The **UNCW 2024 Campus Master Plan** is an interactive document with buttons and links that allow you to go directly to areas of interest and to navigate through the plan in a linear or non-linear sequence. Click on any live links or buttons throughout the document, including the text titles in the Table of Contents or on the section divider pages. In Plan Focus Areas, navigate easily between chapters using the text buttons found along the bottom of the pages in that section. Use the arrow buttons at the bottom left of every page to return to the Table of Contents, go back to the previous page viewed, jump to the next chapter within the section, or advance to the next section.

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MESSAGE FROM CHANCELLOR DR. ASWANI VOLETY

The 2024 Campus Master Plan for the University of North Carolina Wilmington reflects our shared vision for the future, rooted in the values and aspirations of our strategic plan, *Soar Higher*. It signifies opportunity, serving as a roadmap for the next decade of growth, innovation and transformation. With this master plan, we are setting the stage for physical development that will enhance the student experience, foster interdisciplinary collaboration, and strengthen our connection to the region and community.

Crafted through a thoughtful and inclusive process, this plan is the culmination of 18 months of collaboration with the UNCW community and key stakeholders. It outlines strategic investments in academic programs, campus infrastructure and community engagement, all of which are designed to ensure that UNCW continues to be a beacon of excellence in education, research and service. The master plan also reflects our commitment to sustainability, resilience and the responsible stewardship of our natural and human resources.

The plan will guide us through the development of new facilities, the renovation of existing spaces, and the creation of more dynamic, accessible and welcoming environments across our campus. It is designed to be flexible, allowing us to adapt to changing conditions and future opportunities while staying true to our core mission of supporting the success of our students, faculty and staff.

I want to express my gratitude to the Executive Leadership Team, the Board of Trustees, and the numerous campus and community members who contributed their insights and expertise to this master plan. Together, we have created a vision that will shape the future of UNCW, positioning North Carolina’s coastal university to continue soaring in the years ahead.

This is an exciting moment in UNCW’s history, and I look forward to the transformative changes that this master plan will inspire on our campus and in our region.



Acknowledgments

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plan vision



INTRODUCTION

STRATEGIC ALIGNMENT

ENROLLMENT GROWTH + SPACE ASSESSMENT

PLAN OVERVIEW

MAIN CAMPUS PROGRAM ACCOMMODATION

CENTER FOR MARINE SCIENCE CAMPUS PROGRAM ACCOMMODATION



Introduction

The UNCW Strategic Plan “Soar Higher” is a bold institutional vision that inspired this plan for the future of the campus. The 2024 Campus Master Plan will provide direction for physical improvements to help realize the vision of the strategic plan.

The 2024 Campus Master Plan is the result of an 18-month collaborative process with the campus community and the university’s host community. The principles, program, and placemaking strategies outlined in the plan represent an intentional synthesis of interrelated ideas and goals in order to begin the process of physically embodying the goals of the university’s strategic plan. The Campus Master Plan is a road map for future growth, while allowing flexibility in its implementation. The plan is based on a series of historical, land use, and natural frameworks that guide the recommendations laid out in this document.

Data collection and research for the Campus Master Plan commenced in the spring of 2023. Over the following year, the planning team developed multiple iterations of analysis and options informed by input from the Executive Leadership Team and broader university community. The Plan Vision was presented to the Board of Trustees and unanimous approval was given on August 1, 2024.



Process Overview

The purpose of the 2024 Campus Master Plan is to create a holistic framework for the highest and best use of the university's physical assets to meet UNCW's strategic goals. In addition to recommendations for the built and natural campus environments, the planning team looks for opportunities to increase the campus's overall resilience culturally, financially, and within the broader community. Key outcomes of this process include:

Establish overall goals, objectives, and drivers to create a conceptual framework for sustainable growth and responsible development over the 10-year planning horizon.

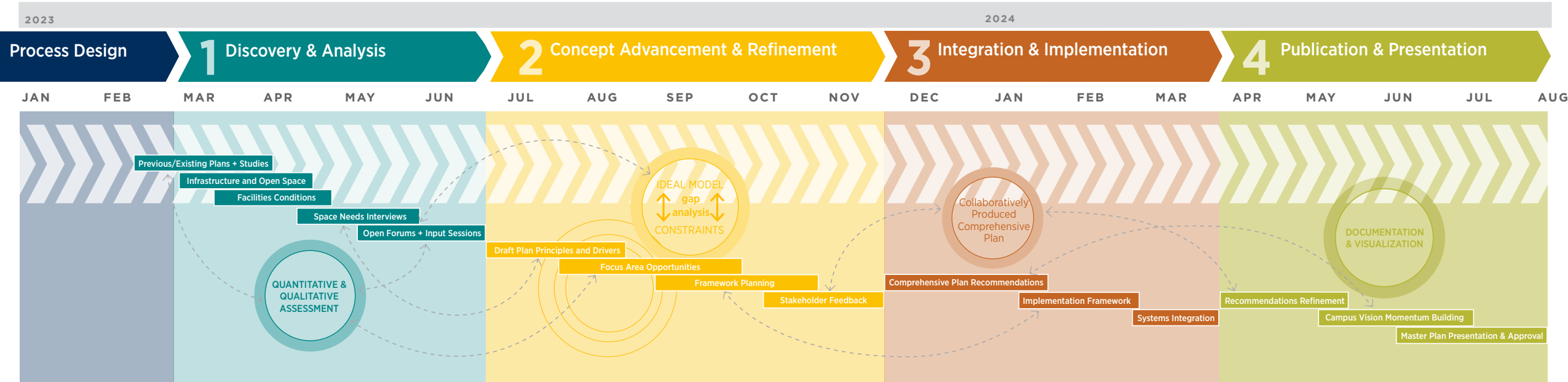
- » Campus Master Plan goals are in alignment with institutional strategic initiatives, providing long-term views that can inform day-to-day decision-making.
- » Recommendations are data-driven and rooted in UNCW's unique campus culture.

Create a holistic vision for UNCW that promotes stewardship of natural, human, and fiscal resources.

- » Concepts are visionary and practical, built on historic growth patterns, and tailored to address campus needs at a variety of scales.
- » Integration of campus systems is thoughtfully reflected in land use, space use, architecture, landscape, utilities, circulation, and parking recommendations.

Build consensus around the vision through an open, inclusive, and transparent process.

- » Collaborative engagement with various stakeholders throughout the process provides a deep understanding of UNCW's challenges and opportunities.
- » Regular engagement with UNCW's Core Planning Team and Executive Leadership Team (ELT) creates more direct feedback loops and allows leadership to engage as true thought partners.



Master Plan Schedule

Discovery & Analysis

- » The planning team tours existing facilities, reviews previous and current capital initiatives/studies, and meets with a comprehensive cross-section of campus stakeholders to establish a deep understanding of existing conditions, assets, issues, program needs and aspirations.
- » In parallel with campus user interviews and meetings, the planning team analyzes existing campus infrastructure, buildings, landscapes, systems, and conducts a thorough utilization and space needs assessment.
- » Initial concepts for land use, open space, circulation, and infrastructure are developed as planning themes and drivers emerge.

Concept Advancement & Refinement

- » A summary of key findings from Phase 1 and initial concept opportunities are presented to UNCW’s Core Team, ELT, and stakeholder groups. These concepts are vetted through a series of stakeholder workshops and the planning team refines the scenarios into preferred concepts.
- » Preferred concepts address strategies for program accommodation, highlight opportunities for synergistic adjacencies, and create connected open space networks that also enhance campus gateways.

Integration & Implementation

- » Natural and man-made campus systems are coordinated to reinforce the overall land use strategy and campus framework. The final plan, recommendation narratives, digital modeling, and visualization graphics are created to illustrate proposed projects and implementation strategies.

Publication & Presentation

- » The 2024 Campus Master Plan Vision is presented to UNCW Board of Trustees for approval in August 2024.
- » Development and finalization of interactive master plan publication.

Stakeholder Engagement

More than 1,700 students, faculty, alumni, staff, and Wilmington community members participated in the Campus Master Plan open forums and online surveys. A website was created with UNCW's Office of University Relations to effectively share progress on the plan's development, obtain feedback on plan priorities, and encourage participation in on-campus and virtual input sessions. Throughout the process, the planning team facilitated over 70 campus meetings to include a wide range of stakeholders and campus users, some of which included:

- » Chancellor

» Provost and UNCW Vice Chancellors

» Board of Trustees

» College Deans and Leadership

» Undergraduate Education & Faculty Affairs

» Student Engagement, Enrollment & Retention

» Global Partnerships & International Education

» Institutional Research & Planning

» Research and Innovation

» Community Engagement & Impact

» Graduate, Continuing & Lifelong Education

» Teaching, Learning & Library Services

» Center for Marine Sciences

» University Advancement

» Athletics
- » University Police Department

» Information Technology

» Business Affairs

» Student Affairs

» Student Government

» Dining Services

» Parking Services/Transportation

» Student Recreation

» Housing and Residence Life

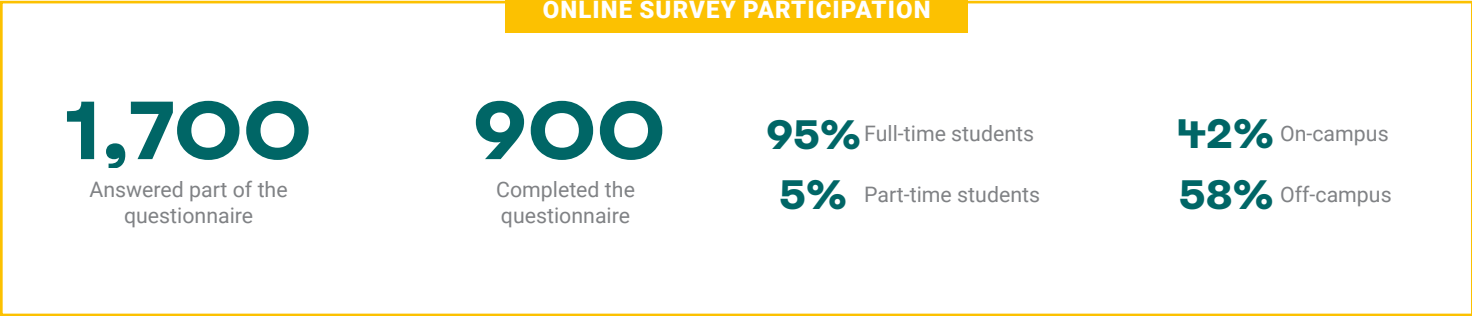
» Campus Life

» Executive Leadership Team

» Core Planning Team

» Faculty Senate

» Staff Senate



Online Student Survey

KEY TAKE-AWAYS

50%

50% of off-campus student respondents & 60% of on-campus student respondents have difficulty finding a parking spot

25%

25% of off-campus student respondents can't always find parking

25%

25% of student respondents use a bike or board to get around campus

16%

16% of off-campus student respondents live off-campus due to lack of on-campus housing availability

Nature

The trees, greenery, and lakes are by far everyone's favorite aspect of campus

Campus Commons

While the Campus Commons was unanimously the heart of campus and many respondents' favorite place on campus, it was also the #1 area respondents felt needed improvement

1/3

1 out of every 3 respondents perceived the Suites parking lot to be the most unsafe place on campus

TOP REQUESTS

all RESPONDENTS

Dining/Coffee Lounge/Study WiFi/Tech

on-campus STUDENTS

Social spaces Convenience to stores

off-campus STUDENTS

Convenient parking Places to spend time in between classes

REOCCURRING THEMES

LIBRARY

Most visited place for off-campus students when not in class.

CHANCELLOR'S WALK

Top requested enhancements include dedicated routes for pedestrians, shaded seating and walking paths, and additional landscaping.

CMS

There is a lot of interest in interdisciplinary research on CMS.

STAFF

There was a greater emphasis on wellness and wayfinding in staff responses than in faculty responses.

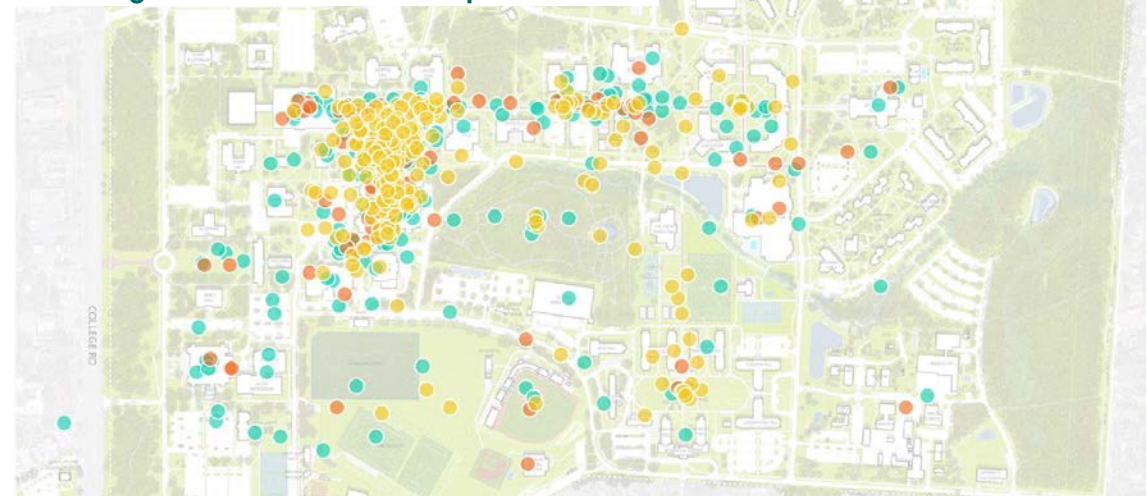
FACULTY COMMONS

Top requested amenities were Pub/Coffee/Food and Lounge/Meeting.

WELCOME CENTER

75% of respondents said they would or might go to an Welcome/Alumni Center if it existed.

Where do you think the heart of campus is located?



● Students ● Faculty/Staff ● Alumni



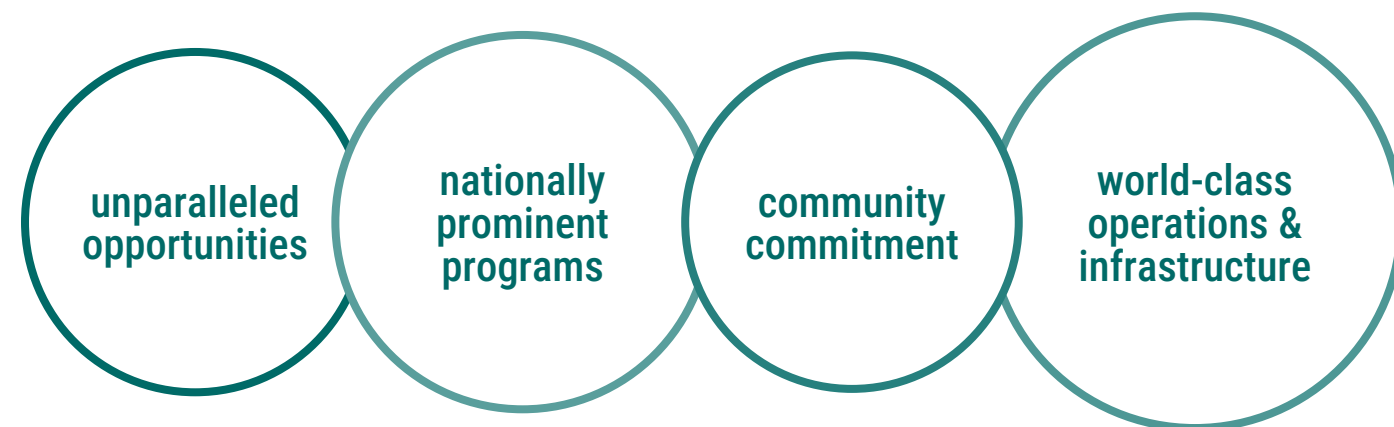
The infographic diagram to the left visually describes what survey respondents view as a positive or neutral sentiment about campus (teal) and what areas need additional support or improvement (orange). The relative size of the word denotes the frequency with which these topics arose in the survey responses.



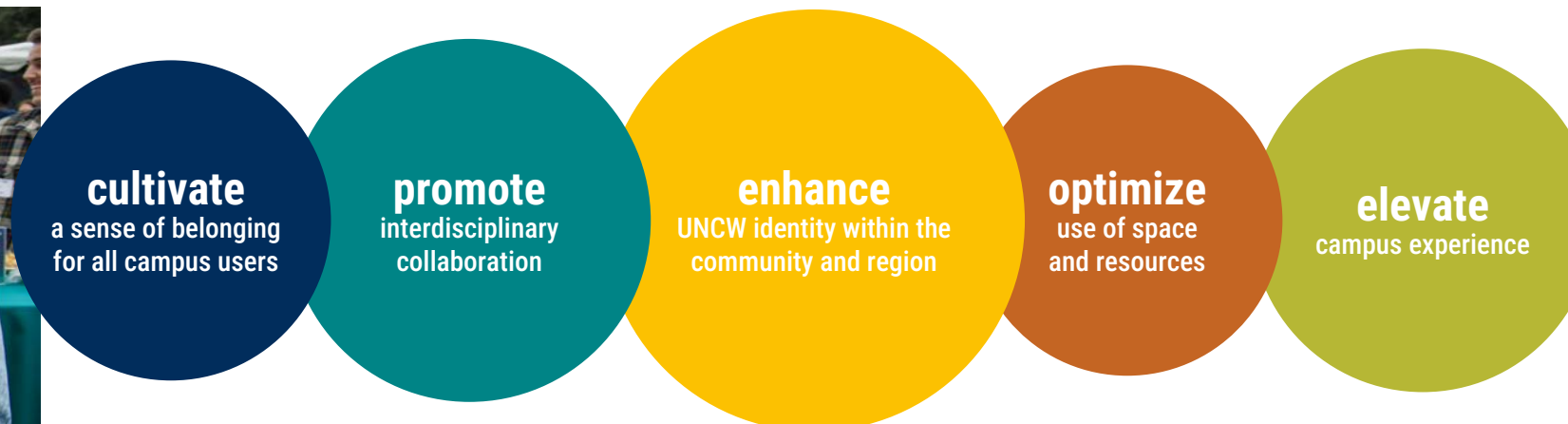
Strategic Alignment

Plan Themes and Drivers

The 2024 Campus Master Plan supports the university's newly adopted "Soar Higher" Strategic Plan. As stated by Chancellor Volety, "UNCW's most important asset is its people, and this plan focuses fully on the continued success of our students, faculty and staff... From enhanced academic advising, career readiness opportunities and support for cutting-edge academic programs and research endeavors to elevated investments in workplace services, campus infrastructure and community engagement, this plan outlines our commitment to transforming Seahawks' lives and this region, now and in the years to come." The updated strategic plan outlines four strategic pillars:



As a result of the aforementioned input process and in support of the strategic plan pillars, the following five master plan principles have been created to provide alignment and focused strategies for the master plan:

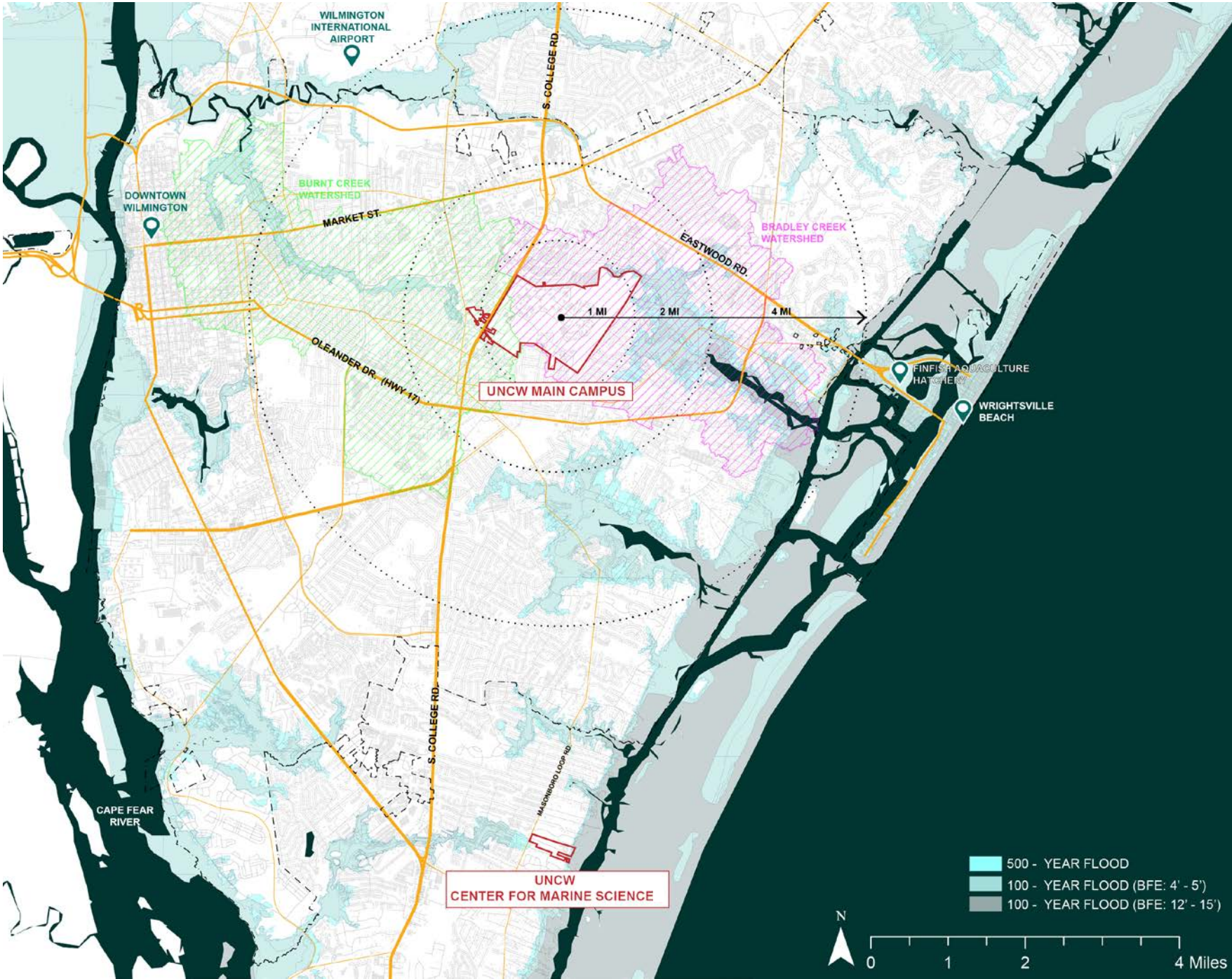


STRATEGIC PILLARS

PLAN PRINCIPLES

PLAN DRIVERS

- Centralized Student Services
- Expanded Housing Options
- Multi-Cultural Spaces
- Engaging Gathering Spaces at Building Thresholds
- Flexible Classroom and Office Use
- Enhanced Arts Facilities and Engagement
- Enhanced Athletics Facilities and Experience
- Faculty and Staff Support and Common Space
- Connection: Circulation, Wayfinding, and Orientation
- Outdoor Placemaking and Amenities
- Edge and Gateway Development
- Fully Accessible for All Campus Users
- Flexible Outdoor Classroom Space
- Interdisciplinary Research and Learning Hubs
- Visibility of Programs, Learning, and Success Stories
- Equity in Experience, Support, and Collaboration among Staff
- Leverage Coastal Context to Enhance UNCW Brand
- Leverage CMS as a Regional Asset
- Improve CMS Facilities and Space Optimization
- Promote Access to Maker Spaces to Spark Creativity
- Clarity in Future Plan for West Property and Staff
- Edge and Gateway Development
- Downtown Wilmington Presence
- Resilient Utility and Transportation Systems
- High Performance Landscape and Conservation
- Define Campus Land Use Districts
- Reimagine Tin City/Staff Space/Admin Annex



Regional Context

The university community desires to build on its historic presence in, and engagement with, the Wilmington community and seasonal Wrightsville Beach visitors. The 2024 Campus Master Plan seeks to celebrate and leverage the university’s unique regional and coastal context through:

- » Enhancing awareness, connections, and partnership opportunities with downtown Wilmington and other campus locations at the Center for Marine Science (CMS) and the Finfish Research facility on Harbor Island at Wrightsville Beach.
- » Reinforcing multimodal connectivity with the recreational resources in the region via means such as trails, Cross City bike trail/routes, and Greenway connections.
- » Enhancing visibility of community resources like the Bradley Creek Watershed, Cape Fear River, along with campus resources like performing arts, educational and recreational camps, and lifelong learning initiatives.



Regional Context Diagram

Enrollment Growth + Space Assessment

Purpose

Space needs analysis for the purpose of master planning is a process that estimates space amounts likely to be needed by various units of an institution at current and projected enrollment, staffing, and activity levels. The findings from the Space Needs Analysis provide insights to inform the development of the Master Plan.

Hanbury conducted the following as components of the Space Needs Analysis:

- » Space Assessment
- » Peer Benchmarking
- » Instructional Space Analysis
- » Projected Space Needs

The university provided the following data to inform this analysis:

- » Current and projected enrollment levels
- » Fall 2022 course data
- » Faculty and staff personnel, including teleworking status
- » Room-by-room facilities file
- » Research expenditures
- » Distance education students

Additional documents were provided to inform the planning concepts but had limited impact on the Space Needs Analysis. Meetings were held on campus and virtually April 10 through May 31, 2023, with the vice chancellors, deans and key stakeholders to discuss specific needs of the individual colleges and administrative divisions. A virtual meeting in November 2023 provided an opportunity to present the initial results of the Space Needs Analysis to the Executive Leadership Team for review and comment.



Strategic Planning

The four key pillars identified in the UNCW Strategic Plan, along with the 18 key strategic priorities for the next 10 years, are used as the foundation for this analysis and the development of the Master Plan. The qualitative input of these strategic goals helped inform the quantitative output of this analysis to ensure the future projected space needs support the strategic priorities for the campus.

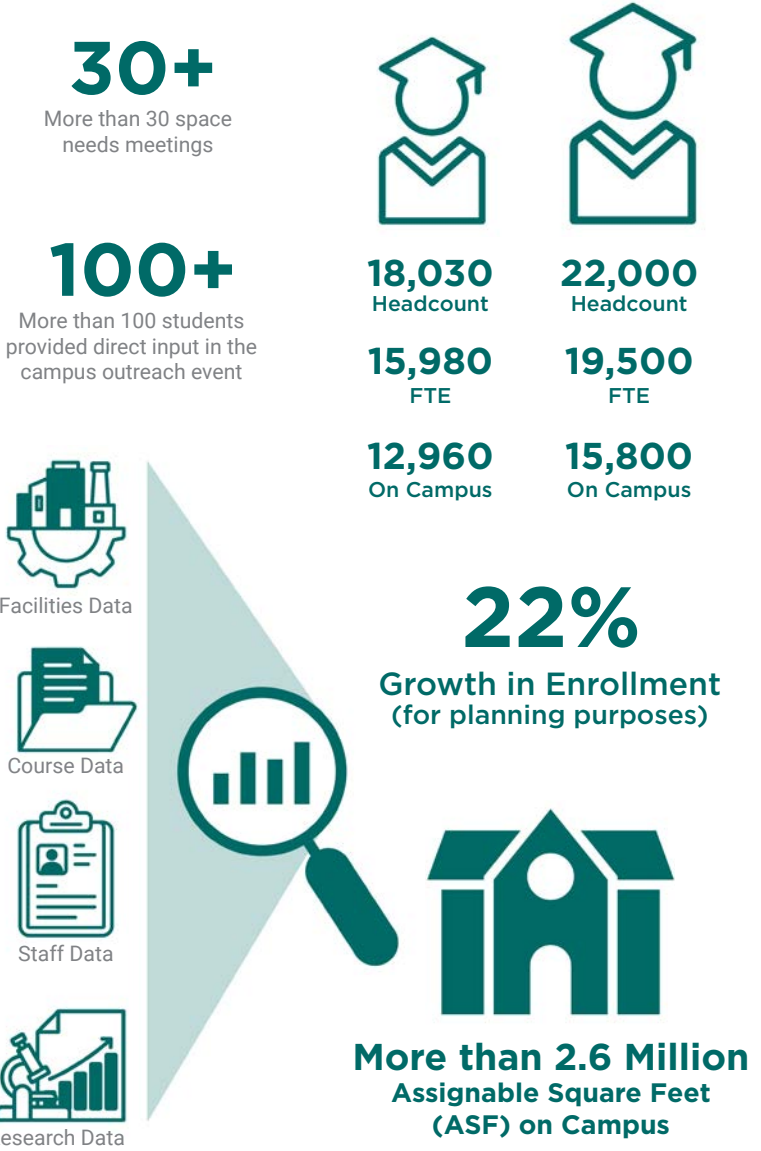


Methodology + Projections

The following describes this report’s parameters for establishing space needs in the future.

- » The goal of the Campus Master Plan is to provide direction and clarity for future campus development.
- » The enrollment utilized in this analysis is converted from the total headcount to Full Time Equivalent (FTE) then further modified to represent FTE of students who come to campus
- » Ratios from existing enrollment accessed from the UNCW Fall Enrollment: 5 Year Trend dashboard from the Office of Institutional Research & Planning were used to determine FTE On Campus enrollment for both the baseline and future projection. The same ratios were used for the future projections as well. 12,960 was used as the baseline enrollment for FTE On Campus. The projected future headcount of 22,000 translates to 15,814 FTE On Campus, which equates to a 22% growth.
- » It should be noted that this analysis has been performed at a master plan level and has not been performed at a program level to provide numbers and types of rooms to meet the requirements of the projections.
- » The Space Needs Analysis findings should be viewed as tools and information for decision making and planning, and not as entitlements to space for individual schools or as a defined plan to correct unmet present and future space needs.
- » All space in the analysis was projected in assignable square feet (ASF), defined as the area measured within interior walls which can be used by people or programs for a specific use. It did not include circulation and building service space, such as corridors and restrooms, nor did it include the thickness of walls or columns.

SPACE ASSESSMENT HIGHLIGHTS



TIME-OF-DAY SPACE NEEDS CHART

Time of Day	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Monday-Thurs Average	
	# Rooms	% Rooms	# Rooms	% Rooms	# Rooms	% Rooms	# Rooms	% Rooms	# Rooms	% Rooms	# Rooms	% Rooms	# Rooms	% Rooms
6:00 AM	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
6:30 AM	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
7:00 AM	0	0%	2	1%	4	2%	1	1%	0	0%	0	0%	2	1%
7:30 AM	0	0%	2	1%	4	2%	1	1%	0	0%	0	0%	2	1%
8:00 AM	28	17%	50	30%	32	19%	46	27%	19	11%	2	1%	39	23%
8:30 AM	29	17%	51	30%	34	20%	46	27%	19	11%	2	1%	40	24%
9:00 AM	90	53%	55	33%	93	55%	57	34%	76	45%	2	1%	74	44%
9:30 AM	95	56%	125	74%	98	58%	133	79%	77	46%	2	1%	113	67%
10:00 AM	110	65%	124	73%	112	66%	134	79%	96	57%	2	1%	120	71%
10:30 AM	110	65%	122	72%	111	66%	132	78%	96	57%	2	1%	119	70%
11:00 AM	103	61%	120	71%	105	62%	121	72%	84	50%	2	1%	112	66%
11:30 AM	103	61%	120	71%	105	62%	124	73%	84	50%	2	1%	113	67%
12:00 PM	73	43%	118	70%	75	44%	122	72%	49	29%	3	2%	97	57%
12:30 PM	77	46%	120	71%	82	49%	123	73%	46	27%	3	2%	101	59%
1:00 PM	90	53%	120	71%	95	56%	123	73%	50	30%	0	0%	107	63%
1:30 PM	89	53%	117	69%	94	56%	119	70%	49	29%	0	0%	105	62%
2:00 PM	93	55%	110	65%	94	56%	105	62%	21	12%	0	0%	101	59%
2:30 PM	92	54%	110	65%	94	56%	105	62%	21	12%	0	0%	100	59%
3:00 PM	79	47%	109	64%	82	49%	103	61%	9	5%	0	0%	93	55%
3:30 PM	74	44%	82	49%	74	44%	76	45%	8	5%	0	0%	77	45%
4:00 PM	66	39%	81	48%	74	44%	74	44%	3	2%	0	0%	74	44%
4:30 PM	64	38%	79	47%	72	43%	71	42%	3	2%	0	0%	72	42%
5:00 PM	26	15%	31	18%	41	24%	25	15%	1	1%	0	0%	31	18%
5:30 PM	26	15%	34	20%	40	24%	26	15%	1	1%	0	0%	32	19%
6:00 PM	28	17%	35	21%	40	24%	27	16%	0	0%	0	0%	33	19%
6:30 PM	15	9%	17	10%	22	13%	10	6%	0	0%	0	0%	16	9%
7:00 PM	15	9%	16	9%	20	12%	10	6%	0	0%	0	0%	15	9%
7:30 PM	12	7%	14	8%	19	11%	8	5%	0	0%	0	0%	13	8%
8:00 PM	8	5%	8	5%	16	9%	6	4%	0	0%	0	0%	10	6%
8:30 PM	7	4%	7	4%	11	7%	6	4%	0	0%	0	0%	8	5%
9:00 PM	6	4%	5	3%	10	6%	4	2%	0	0%	0	0%	6	4%
9:30 PM	0	0%	2	1%	4	2%	1	1%	0	0%	0	0%	2	1%
10:00 PM	0	0%	2	1%	4	2%	1	1%	0	0%	0	0%	2	1%

% Rooms Used		# Rooms Used	
low	high	low	high
45%	60%	76	101
60%	70%	101	118
70%	100%	118	169

*Classroom: This includes any space where classes are scheduled which can be used by any subject or discipline.

**Class Lab: This includes any space where classes are scheduled which is restricted to a specific subject or discipline due to the equipment or configuration of the room.

Utilization Analysis + Recommendations

Course data was analyzed to understand current utilization of classrooms and class labs, which informs the future space needs for those two space types.

CLASSROOMS*

- » An average of 62% of available classrooms are in use for face-to-face classes Monday – Thursday from 9am to 3pm, with the highest usage on Tuesdays and Thursdays.
- » 1 building currently exceeds the system guidelines for weekly room hours in classrooms and 9 of the remaining 25 buildings are within 5 hours of the target.
- » While the target for classroom usage is 35 weekly room hours, the average among peers is 21.8. 77% of UNCW’s buildings surpass the average weekly room hours among peers within the UNC system.
- » The average percentage of student station occupancy in classrooms is below the target of 65% at 61%, but within the range of 60% 75% identified by the system guidelines.
- » The classrooms in highest demand seat 40-50 students.

CLASS LABS**

- » 7 of the 31 departments exceed the system target for weekly room hours in a class lab, 2 of which are almost double the target.
- » About half of the buildings with class labs exceed the system target for weekly room hours and student station occupancy.

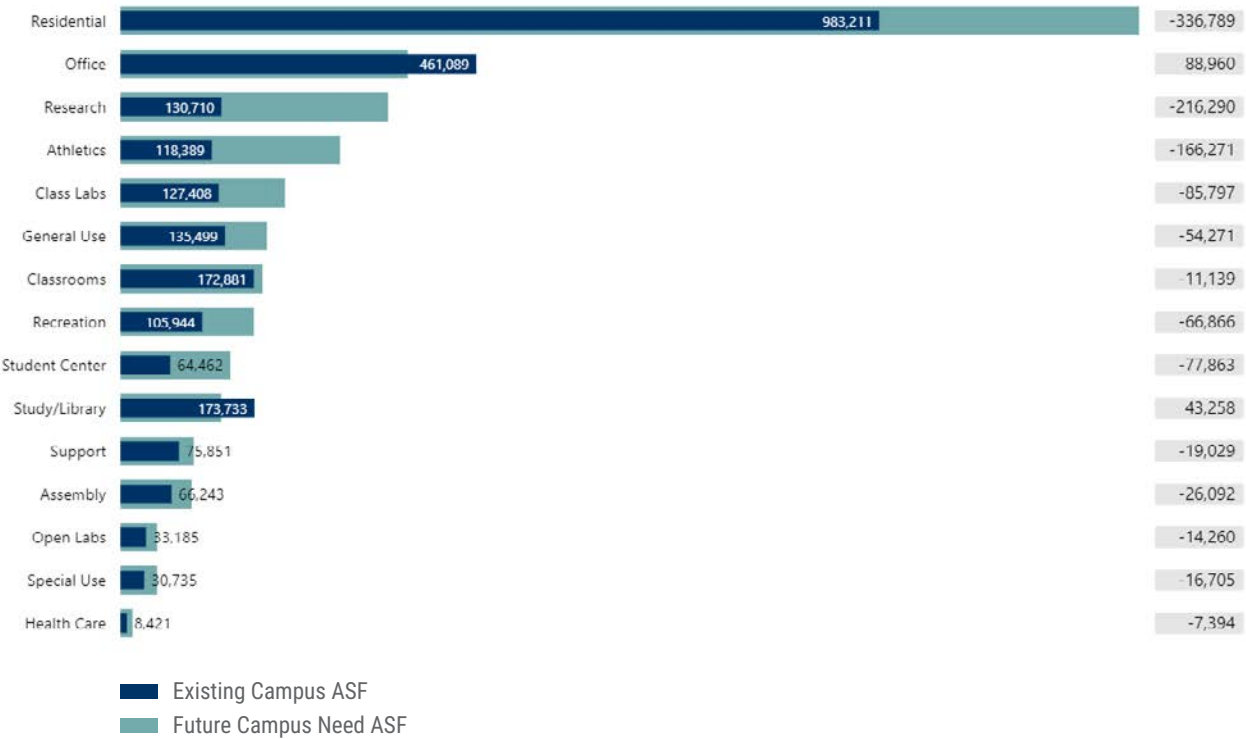
- » All the metrics are averages summarized by building and department. When considering usage of individual rooms, some of the Biology and Chemistry labs are at almost triple the UNC system target for WRH and at almost full capacity.

Below lists recommendations to address and respond to the aforementioned utilization findings:

- » While outperforming UNCW's peers, there is still opportunity to better utilize classrooms on campus by scheduling more classes on Mondays and Wednesdays, aligning class sizes with room capacity, and utilizing classrooms as a shared resource across all colleges.
- » Since most classrooms are not at 100% occupancy, some seats can be removed to accommodate more active learning environments without impacting the quantity of students scheduled in the room. This will increase student station occupancy, weekly seat hours, and ASF per student station.
- » To meet the immediate need for class lab space, some classrooms with lower utilization could potentially be converted into class lab space. This will also improve the percentage of rooms used at any given time of day, as displayed in the time-of-day chart.
- » Additional recommendations are discussed in the full SNA document under section 7.4 Recommendations.



SPACE NEEDS BY TYPE



Space Needs Key Findings + Recommendations

The calculations for current and projected future space needs combined with the understanding of how classrooms and class labs are utilized yields the following results:

- » There is sufficient classroom space on campus currently to accommodate near-term growth.
- » Class labs are heavily utilized and could benefit from additional space on campus to meet not only future needs, but also address current space needs.

The spaces with the greatest future delta are:

- » Residential, Research, Athletics

The following space types could also benefit from additional space on campus to support future goals:

- » Class Labs, General Use, Recreation, Student Center

There are some space types currently experiencing constraints in the existing space on campus, with a noticeable existing delta prior to factoring in growth:

- » Athletics, Class Labs, Student Center

CSE has the greatest need for additional space of all the colleges, as they are currently experiencing a significant need for class lab and research space prior to future growth.

Additional information can be found in the full SNA document including: tables with projected space needs by college and administrative division as well as by space use category; classroom and class lab utilization to review percent occupancy of student stations, weekly room hours, weekly student contact hours, and weekly seat hours by room, building, department, and capacity, displayed both in tables as well as through charts; peer benchmarking to recognize areas of effective and efficient use of space as well as to identify opportunities for optimizing existing space through maximizing scheduling and aligning pedagogical needs; and additional details about the methodology and insights gleaned from the analysis.

SPACE NEEDS SUMMARY

2,627,592

Existing ASF

3,654,309

Future Need ASF

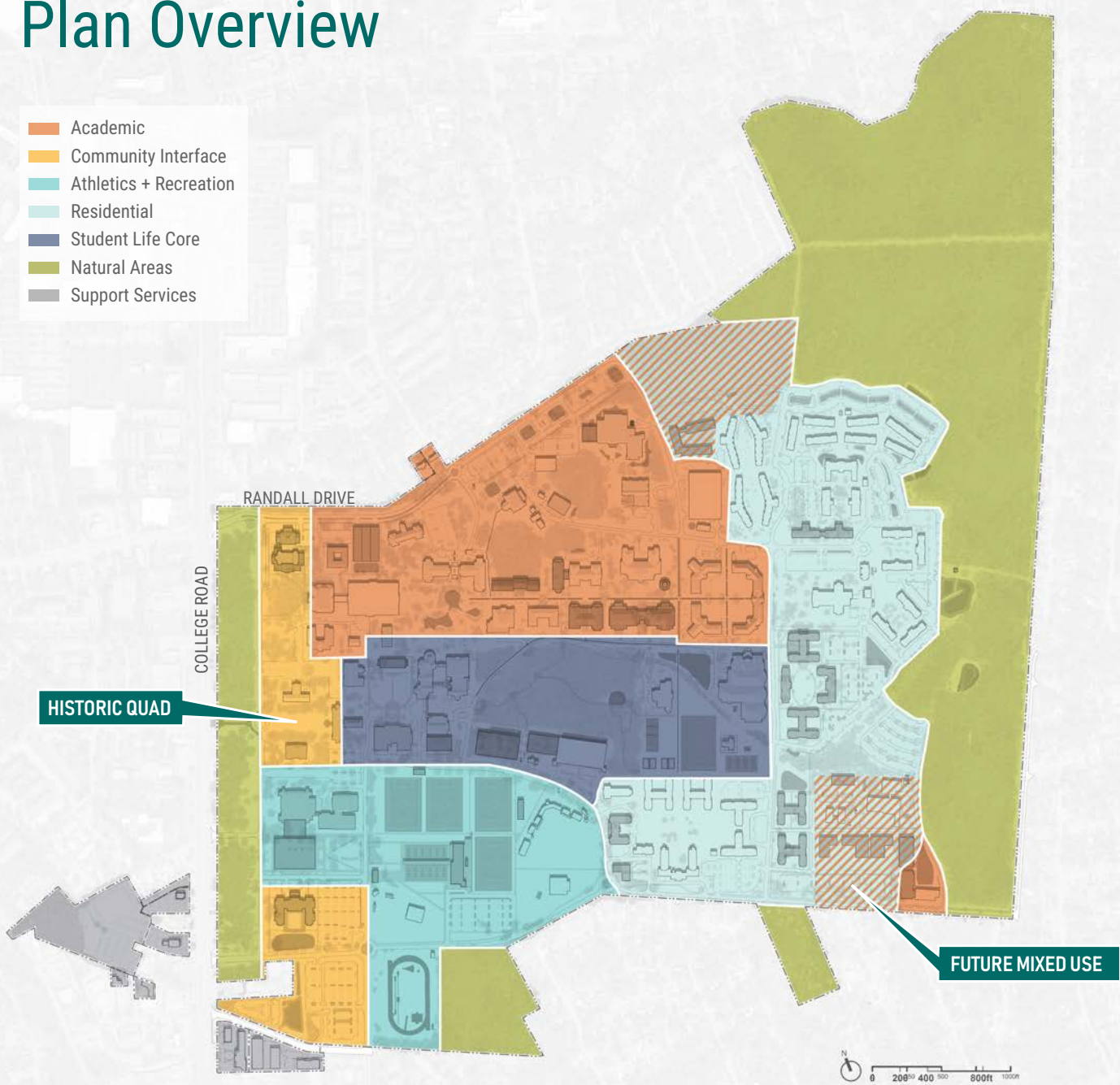
-966,548

Delta

-36%

Percent Difference

Plan Overview



Future Land Use Diagram

Land Use

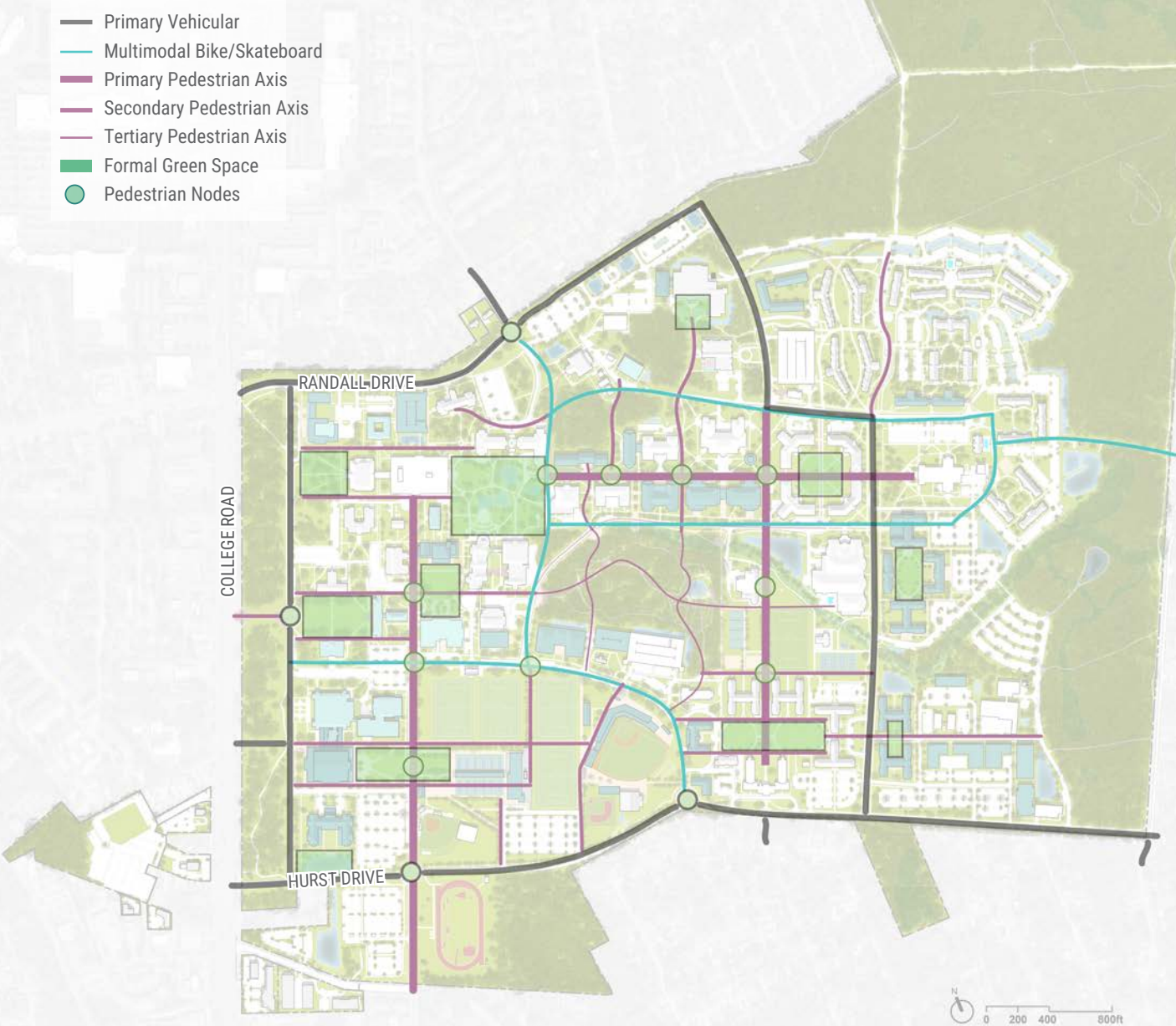
The plan defines place and program-based opportunities to promote the concept of “connecting people, experiences, and places” across multiple overlapping districts.

Reinforce and grow the academic core: A relatively compact academic core that is currently organized physically around Chancellor’s Walk and the Campus Commons will see significant transformation through the infill of new facilities on sites adjacent existing academic buildings. This concept will allow for needed growth while reinforcing the pedestrian-oriented nature of campus. Most new academic facilities will be within a ten-minute walk of Chancellor’s Walk. This approach to reinforcing the core allows complementary and overlapping districts to continue to develop around it while maintaining a clear academic zone of campus.

Enhance the UNCW identity with the community and region: As the academic core is strengthened through higher density, the area north at Randall Drive adjacent Kenan Auditorium will be transformed into a north campus gateway anchored by a new welcome center, enhanced branding, and wayfinding. To complement this entry experience, a south gateway along Hurst Drive will be developed, anchored by a new hotel and conference center, revitalized athletic facilities, and an expansion of Hurst Drive to enhance vehicular circulation. These developments at each corner of campus will transform the campus identity to the surrounding community and will be welcoming, social, and provide cultural enhancements to campus, further embedding UNCW in the community. This investment in Athletics extends to the student recreation experience as well with a new student recreation facility at the existing visitors lot and contributing to the student life corridor.

Student life corridor: As the academic core is strengthened through higher density, the area south of Chancellor’s Walk is developed as a multimodal corridor along Price Drive to connect the residential district to the east over to the student life hub on the west side of campus. The existing residential portion of campus will see growth in overall student bed count with new buildings at the Galloway, Suites and Seahawk Village locations expanding the living and learning environment. Connections from the residential district will be achieved through improvements to Bluethenthal Preserve, adding pedestrian routes through to the west portion of campus. The existing parking lot adjacent to the Fisher Student Center will be transformed into a campus greenspace referred to as the Seahawk Support Quad anchored by academic and student life support functions.

Land Bank of Potential Development Zones: Other university properties not immediately needed or in use for mission critical activities should remain as currently used until a new need or opportunity arises.



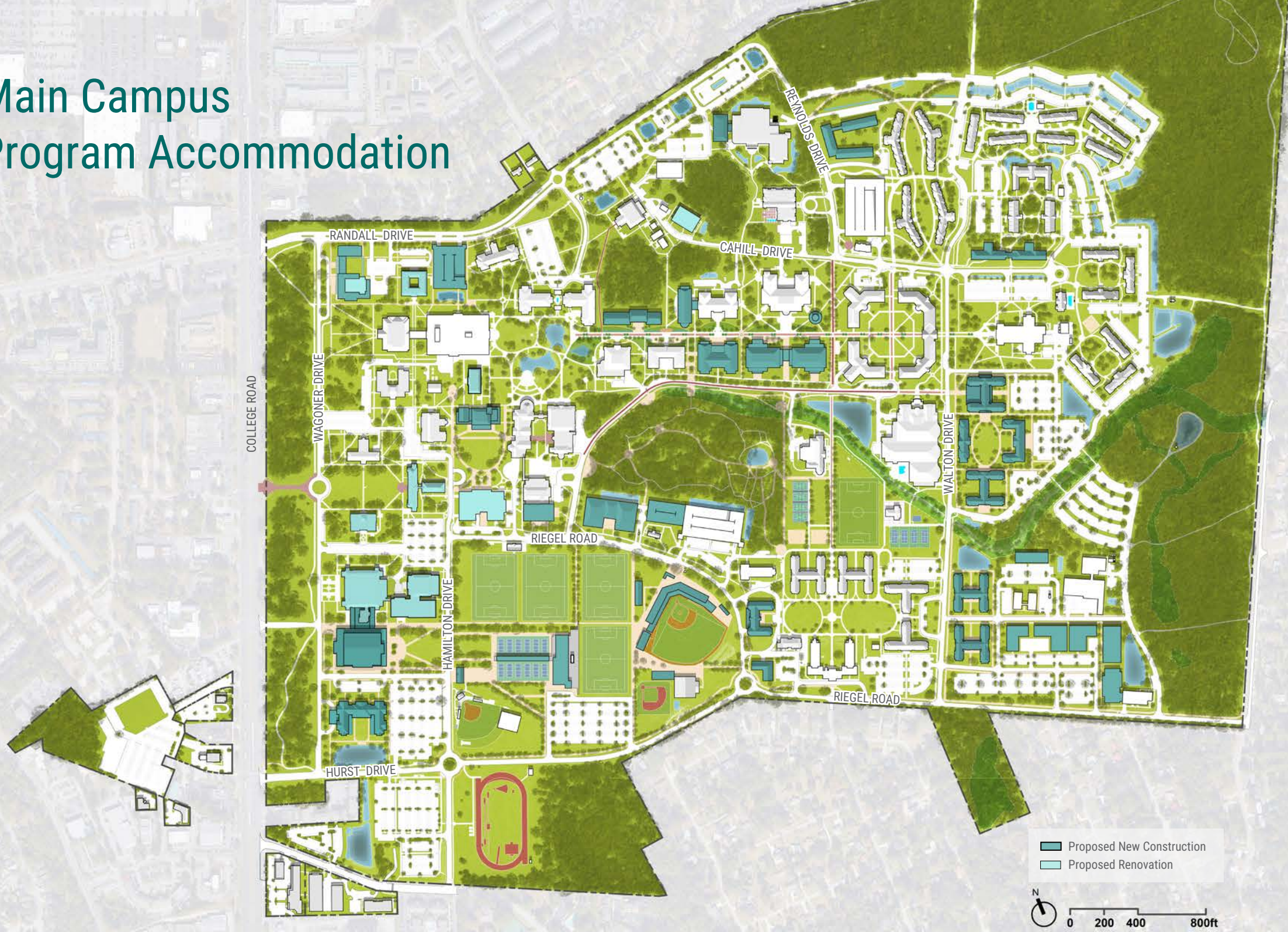
Future Circulation and Open Space Framework Plan Diagram

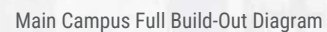
Organizational Framework

Individual proposed projects will provide new and renovated program space to help reconcile space needs. Through integrated planning, larger framework concepts will inspire the stewardship of resources, functional adjacencies and place-making on campus. The Framework Plan outlines the basic structure for future campus growth and allows for flexibility in its implementation. Elements of the Framework Plan are graphically depicted in the diagram to the left and listed below:

- » Focuses campus academic growth within the Academic core and student life growth within the residential district.
- » Expands the existing roadway loop to minimize pedestrian conflicts and maximize adjacent land resources.
- » Enhances the vibrant campus commons in the core of campus by expanding the support resources for student life, academics, and adding collaborative study spaces.
- » Recommends ways to implement academic department growth aspirations and increase the utilization of classrooms.
- » Expands the residential character of campus with a new housing accommodations at the Galloway, Suites and Seahawk Crossings site locations with approximately 1,600 future beds.
- » Re-envision the Randall Drive and Hurst Drive entry points with new Gateways and community engagement along College Road.
- » Strengthens the Open Space Network; creating more usable outdoor spaces and better connections across campus.
- » Proposes a new southern and northern campus loop road to reduce congestion and pedestrian conflicts.
- » Addresses parking capacity issues through strategic placement of new and expanded parking facilities as well as potential policy initiatives.
- » Enhances the campus infrastructure capacity to align with growth projections and functional needs through sustainable measures.
- » Develops an implementation strategy for new campus projects.

Main Campus Program Accommodation





NEAR-TERM (1-5 YEARS)

- A** Business + Technology Center
- B** Integrated Science and Technology (ISAT) Building #1
- C** Burney Center Utility Plant Expansion
- D** Welcome Center
- E** Kenan Auditorium Expansion
- F** Parking Structure
- G** Campus Services Hub (Parking Structure ground floor)
- H** Academic Success Center
- I** Renos/Reshuffles assoc. w/ Seahawk Support/Academic Success
- J** Sports Performance Center (Partnership Opportunity)
- K** Arena Expansion
- L** Trask Arena Renovation for Basketball/Volleyball Practice
- M** Renovate Hanover Hall for Volleyball Competition
- N** Hotel & Conference Center
- O** Residence Hall on former Galloway Hall site
- P** Isaac Bear Early College High School Planning
- Q** Veterans Hall Anatomy Lab
- R** Alderman Hall and King Hall Renovations

LONG-TERM (6-10 YEARS)

- S** Academic Health Sciences
- T** Central Parking Deck Expansion
- U** Student Recreation
- V** Warwick Renovation
- W** Hoggard Hall Program Reshuffling
- X** Residence Life Support

FULL BUILD-OUT (11+ YEARS)

- Z** Cultural Arts Building Addition
- AA** Future Academic Support
- BB** Future Academic Building
- CC** Integrated Science and Technology (ISAT) Building #2
- DD** Collaboration Hub
- EE** Film Studies Addition
- FF** Consolidation of Facilities + Support
- GG** Police Station
- HH** Student Housing



Landscape Project List

- i Chancellor's Walk Enhancements
- ii Randall Drive West Entry Enhancements
- iii Seahawk Support Quad Green
- iv Price Drive Recreation Corridor
- v Bluethenthal Pedestrian Enhancements
- vi UNCW Experiential Landscape Trail
- vii Hurst Drive Extension
- viii Outdoor Tennis Complex
- ix Soccer Complex and Fields
- x Geothermal under Fields
- xi South Gateway Boardwalks
- xii Outdoor Recreation Fields + Facilities Improvements
- xiii Wagoner/Hurst/Hamilton Roadways + Stormwater Refurbishment
- xix Randall Drive East Enhancements
- xv Wagoner Outdoor Dining and Social Hub

Main Campus Full Build-Out Diagram



Chancellor's Walk Concept Imagery

plan principles »

Promote Interdisciplinary Collaboration
Elevate Campus Experience

Chancellor's Walk Enhancements

The existing academic corridor is reinforced through several interdisciplinary building projects while a series of landscape interventions soften the pedestrian linear promenade. Building threshold spaces are activated by new outdoor gathering/seating areas and coastal-inspired art installations. User comfort is enhanced by new landscape plantings that provide much needed shade, while reimagined storm-water strategies create didactic landscapes that reinforce UNCW's brand as a national leader in sustainable coastal living.



Existing Chancellor's Walk

Bluethenthal Wildflower Preserve

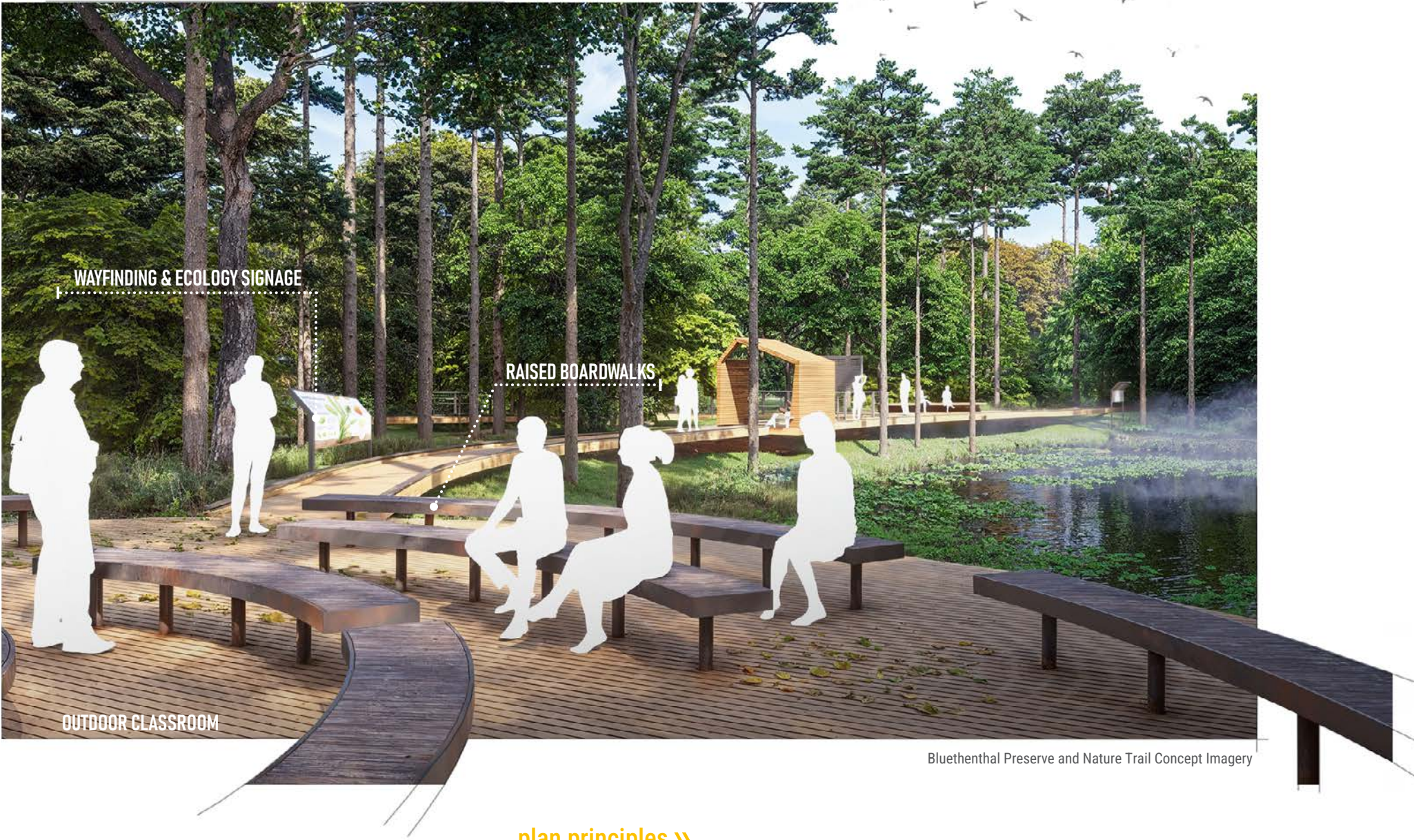
Several ecologically sensitive interventions are proposed within and around the Bluethenthal Preserve to enhance opportunities for outdoor recreation, to highlight living laboratory ecosystems, and provide accessible pedestrian circulation through this beautiful natural amenity in the heart of the Student Life Core. Intentional moments for outdoor learning, study, meditation, and connection with nature can improve wellness for all campus users and visitors.



Existing Entry Point and Perimeter Fencing



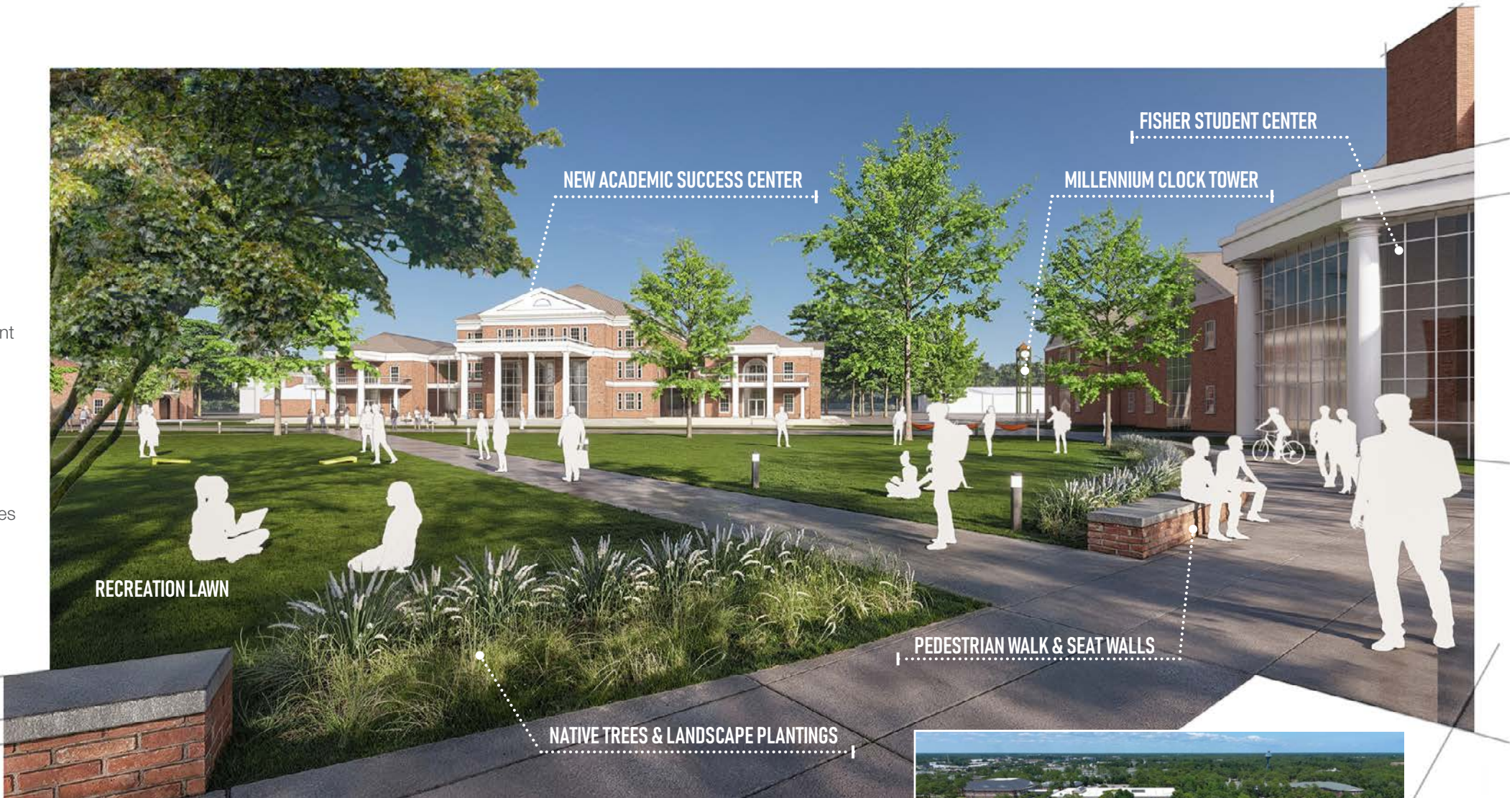
Existing Bluethenthal Preserve Trail



plan principles »
Optimize Use of Space & Resources
Elevate Campus Experience

Seahawk Support Quad

Repurposing the parking lot next to Fisher Student Center into a new greenspace not only alleviates existing pedestrian/vehicular conflicts and congestion in the campus core, but also creates a more sustainable signature landscape geared toward health, wellness and community building. The new Academic Success Center anchors the north end of the new quad and provides resources and space for interdisciplinary collaboration and student support services.



Seahawk Support Quad Concept Imagery

- plan principles »
- Cultivate a Sense of Belonging for All Campus Users
 - Optimize Use of Space & Resources
 - Elevate Campus Experience



Existing Parking Lot Adjacent to Fisher Student Center Looking North



Existing Campus Entry at Corner of Wagoner and Randall Drives



Existing Bird's Eye Aerial

North Campus Gateway Experience

Throughout the planning process, every stakeholder group expressed a pressing need for a more intentional, easily navigable and welcoming visitor experience. The proposed Welcome Center reinforces Randall Drive as the formal, primary entrance to campus for prospective students, arts patrons and general campus visitors. A new parking garage along Randall Drive will support this area of campus and reduce vehicular circulation and storage in the campus core.

plan principles »

- Cultivate a Sense of Belonging for All Campus Users
- Enhance UNCW Identity within the Community and Region
- Elevate Campus Experience



North Campus Gateway and Welcome Center Concept Imagery



North Campus Gateway and Welcome Center Concept Imagery



South Gateway Hotel and Conference Center Concept Imagery

plan principles »

- Cultivate a Sense of Belonging for All Campus Users
- Enhance UNCW Identity within the Community and Region
- Elevate Campus Experience

South Campus Gateway Experience

The campus entry at Hurst Drive is reimagined to embody the spirit of southern hospitality. The proposed University Hotel and Conference Center at the corner of Wagoner and Hurst Drives creates a visually striking and engaging entry experience for daily commuters, campus guests and athletics event attendees.



Existing View from Hurst Drive Looking toward Trask Parking Lot

Center for Marine Science Campus Program Accommodation



Building Project List

- A** Relocated Gatehouse
- B** Center for Marine Science – MEP Renovation
- C** Research Building (+/- 50,000 GSF)
- D** Future Lab and Storage Expansion
- E** Visiting Scholar Accommodations
- F** Facilities Equipment Maintenance Space

Landscape Project List

- i** Enhanced Entry Signage + Drive
- ii** Boatyard Expansion Area
- iii** Interpretive Coastal Landscapes + Trail
- iv** Enhanced Courtyard + Shade Structure
- v** Updated Boardwalk and Dock

■ Proposed New Construction
■ Proposed Renovation





plan framework



CONTEXT + ANALYSIS

IMPLEMENTATION

NEAR-TERM PHASING

LONG-TERM BUILD-OUT

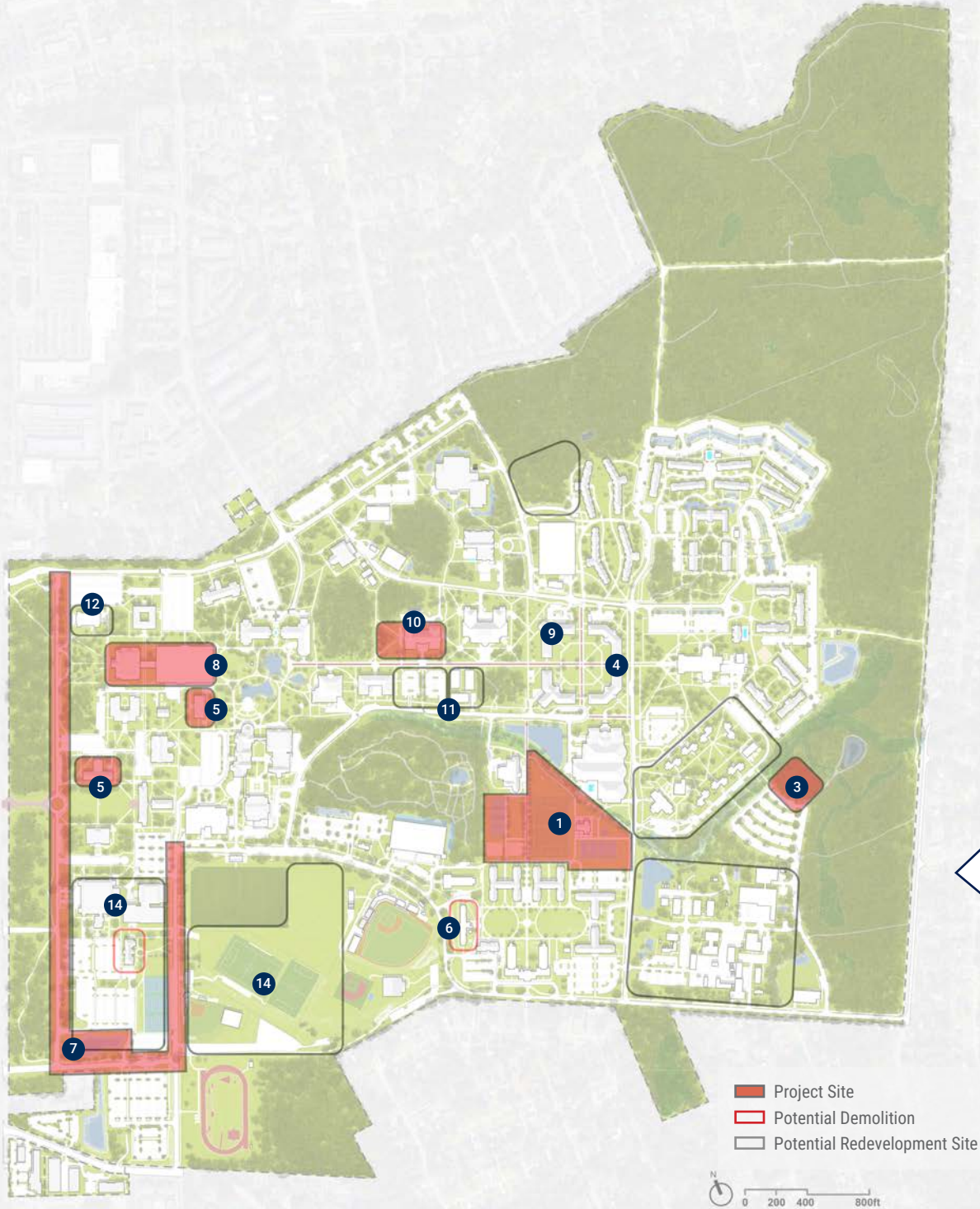
FULL BUILD-OUT

CENTER FOR MARINE SCIENCE

Context + Analysis

Development Sites + Potential Building Demolition

Early in the planning process, the plan identified sites that should be considered for preservation, demolition and redevelopment. Physical campus conditions, development patterns and natural systems were initially mapped and documented to generate an understanding of the campus and its historical growth. Existing use and circulation patterns have an important impact on growth strategies for the campus. Many campus buildings are located within a 10-minute walk from one another, which strengthens a pedestrian oriented campus. All campus housing is within that 10-minute walk of the core. New facilities, sited as infill projects where possible in and around the core, will keep the campus compact and easily walkable. A series of landscape enhancement strategies will provide much-needed additional shade and areas for respite along Chancellor’s Walk.



PROJECTS IN DESIGN

- 1 Outdoor Recreation Fields + Facilities Improvements
- 2 Center for Marine Science – MEP Renovation
- 3 Isaac Bear Early College High School Planning
- 4 Veterans Hall Anatomy Lab
- 5 Alderman Hall and King Hall Renovations
- 6 Galloway Hall Demolition
- 7 Wagoner/Hurst/Hamilton Roadways + Stormwater Refurbishment

PROJECTS UNDER CONSTRUCTION

- 8 UNCW Library Renovation + Expansion

PROJECTS IN PRE-DESIGN

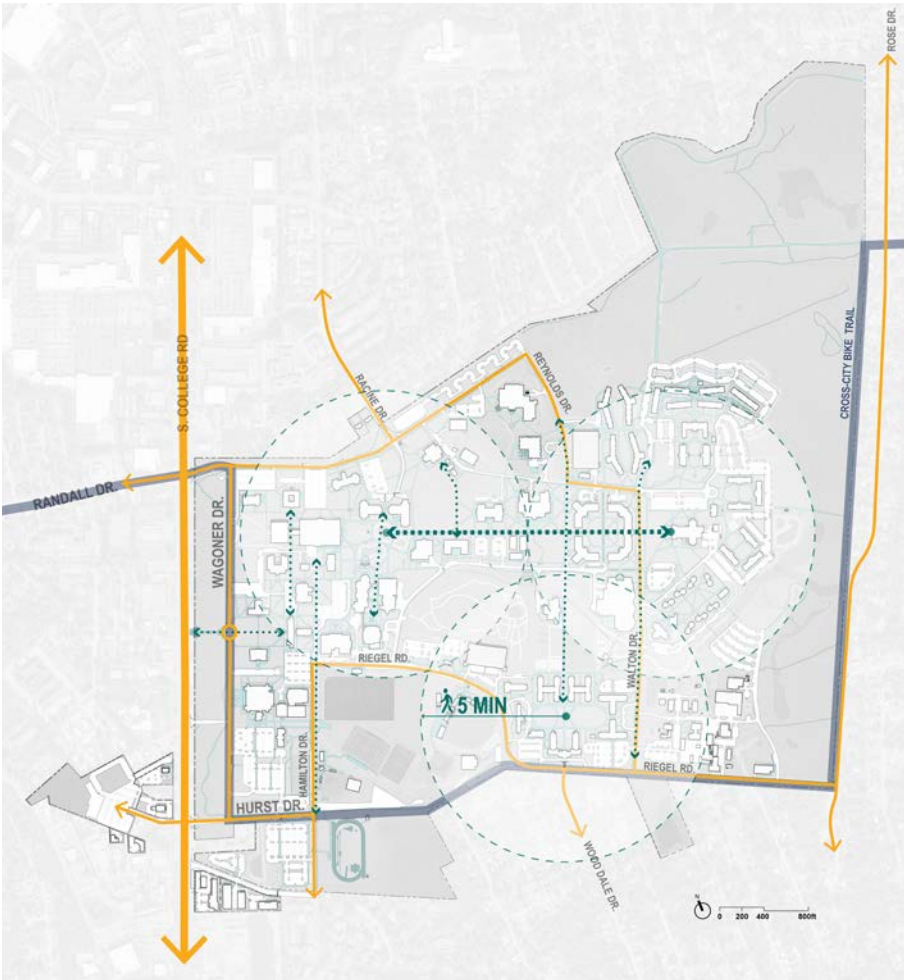
- 9 McNeill Hall Simulation Lab Expansion
- 10 Cameron Hall Addition Conceptual Study

POTENTIAL FUTURE PROJECTS

- 11 Integrated Science + Technology Building
- 12 Kenan Auditorium Improvements
- 13 Wise House Improvements
- 14 Trask Renovation or Replacement + Athletics Expansion



Existing Land Use Diagram



Five-minute Walking Circle Diagram

Main Campus Context

The main campus framework plan builds on existing campus strengths and organizational axes with particular emphasis around:

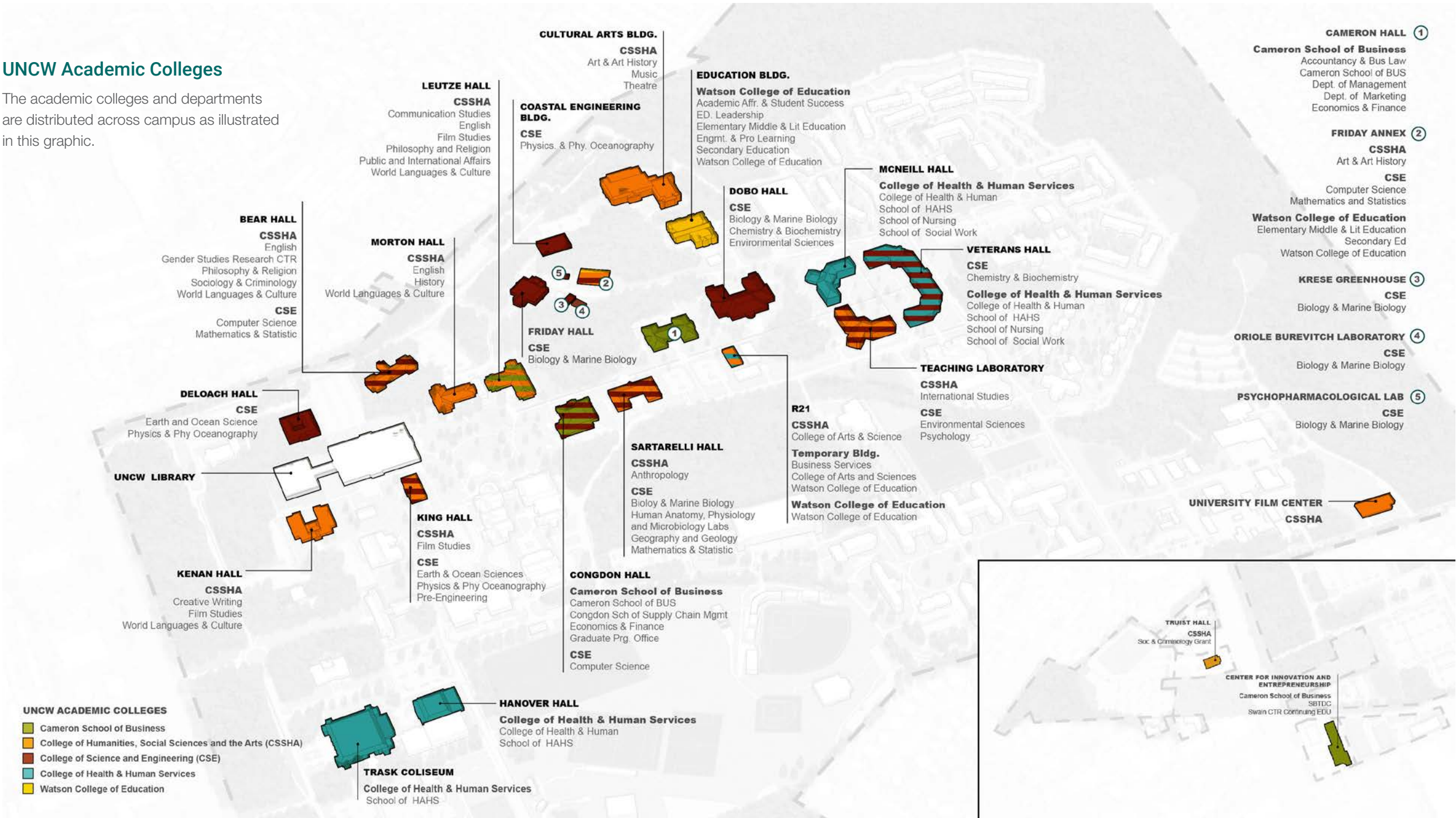
- » Chancellor’s Walk pedestrian experience improvements
- » Place-making and circulation wayfinding enhancements
- » Stewardship of land resources and utilization of infill sites

The existing campus land use diagram reflects institutional growth over time. A linear historic district along Wagoner Drive houses a mix of administrative, academic and student support functions. As enrollment grew and the need for additional facilities increased, the campus academic core shifted its orientation away from College Road toward the new linear spine of Chancellor’s Walk. This linear arrangement increases efficiency of pedestrian movement within a 10-minute walking circle.

Chancellor’s Walk acts as a connective thread between historic west campus and the student and residence life components occupying east campus. athletics facilities, fields and additional student recreation spaces are the primary programs along the southern gateway into campus.

UNCW Academic Colleges

The academic colleges and departments are distributed across campus as illustrated in this graphic.



UNCW Growth Over Time

The growth of campus, beginning with historic core on the west edge of campus, slowly expanding to the east along Chancellor's Walk.



UNCW Student Life Inventory

Residential communities form the east and southeast edges of campus and are supported by Wagoner Dining and Shore Dining Halls. Additional eateries are dispersed throughout core campus.





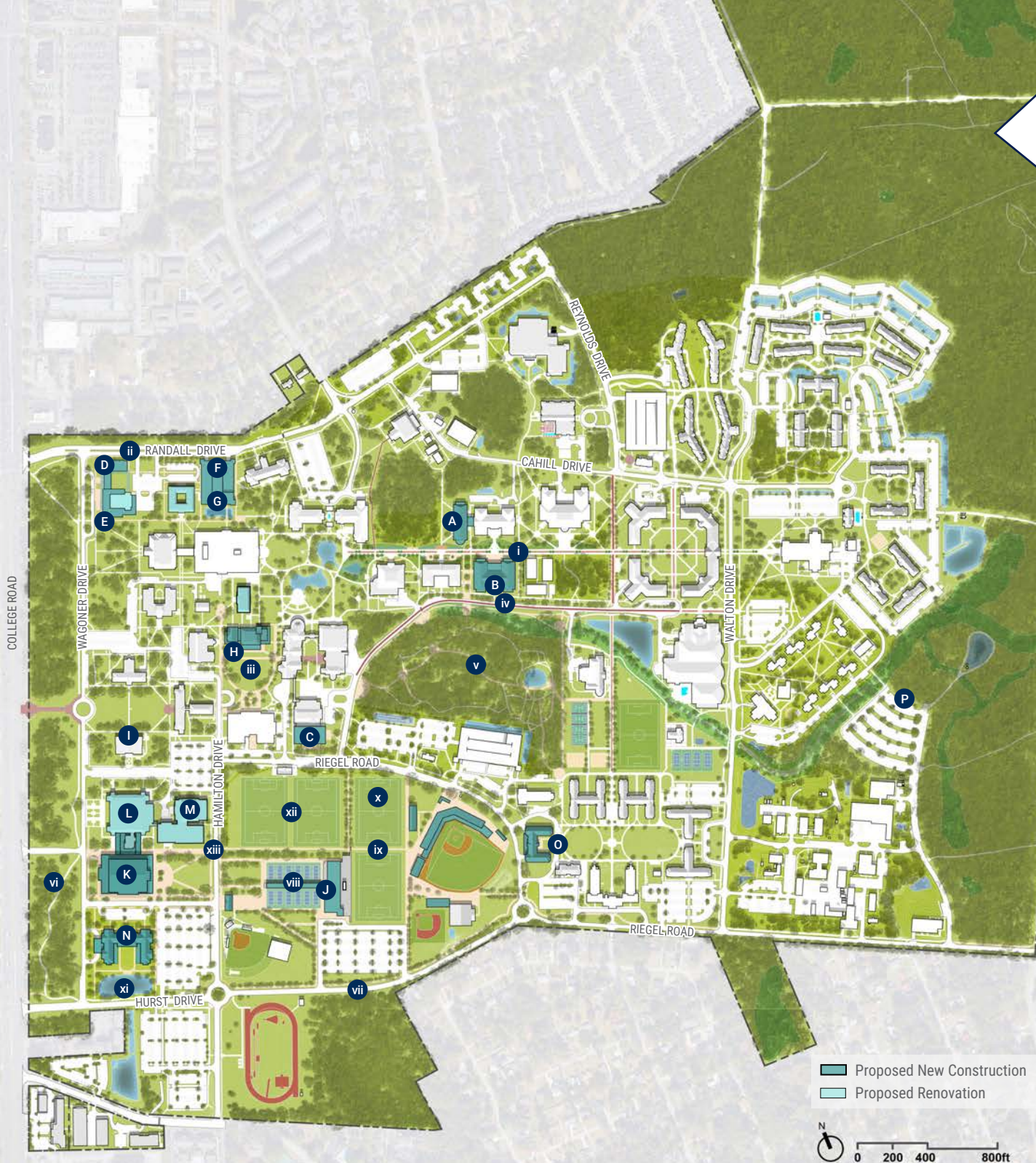
Axon View of Full Build-Out

Implementation

The Master Plan proposes new and renovated facilities to support year 2034 enrollment projections and to comprehensively address program aspirations, organization and space needs – both quantitative and qualitative. Proposed recommendations are for near-term implementation of current and planned capital projects as well as for long-term strategic growth initiatives. Proposed buildings are sited to complement existing land use zones and enhance the campus framework of open space, circulation and infrastructure. Recommendations are designed to initiate physical transformation of the UNCW campus to better reflect its mission and vision.



Near-Term Plan Diagram



Near-Term Phasing

The Near-Term Plan projects include current capital projects and subsequent projects that will position UNCW to fulfill its strategic vision for a 22% enrollment growth to 22,000 students. This plan provides new and renovated teaching spaces, expanded research capability, renewed athletic facilities, additional on-campus student residences and student life amenities. In order to build flexibility into the plan, more projects are shown in this phase than are likely to be realized. Within the context of this near-term period, implementation logistics may dictate that some projects happen before others. The Near-Term Plan transforms the Academic District with infill projects along an extended and connected open space network along Chancellor's Walk. Proposed gateway projects to the north and south re-envision the west edge of campus along Walton Drive which will change UNCW's identity from College Road. The Welcome Center, Hotel Conference Center and new athletic facilities anchor these zones and can be implemented flexibly as funding and donor support is created.

- | | |
|--|--|
| A Business + Technology Center | P Isaac Bear Early College High School Planning |
| B Integrated Science and Technology (ISAT) Building #1 | Q Veterans Hall Anatomy Lab |
| C Burney Center Utility Plant Expansion | R Alderman Hall and King Hall Renovations |
| D Welcome Center | i Chancellor's Walk Enhancements |
| E Kenan Auditorium Expansion | ii Randall Drive West Entry Enhancements |
| F Parking Structure | iii Seahawk Support Quad Green |
| G Campus Services Hub (Parking Structure Ground Floor) | iv Price Drive Recreation Corridor |
| H Academic Success Center | v Bluethenthal Pedestrian Enhancements |
| I Renos/Reshuffles Assoc. w/ Seahawk Support/Academic Success | vi UNCW Experiential Landscape Trail |
| J Sports Performance Center (Partnership Opportunity) | vii Hurst Drive Extension |
| K Arena Expansion | viii Outdoor Tennis Complex |
| L Trask Arena Renovation for Basketball/Volleyball Practice | ix Soccer Complex and Fields |
| M Renovate Hanover Hall for Volleyball Competition | x Geothermal Under Fields |
| N Hotel & Conference Center | xi South Gateway Boardwalks |
| O Residence Hall on Former Galloway Hall Site | xii Outdoor Recreation Fields + Facilities Improvements |
| | xiii Wagoner/Hurst/Hamilton Roadways + Stormwater Refurbishment |
| | xv Wagoner Outdoor Dining and Social Hub |



Long-Term Plan Diagram

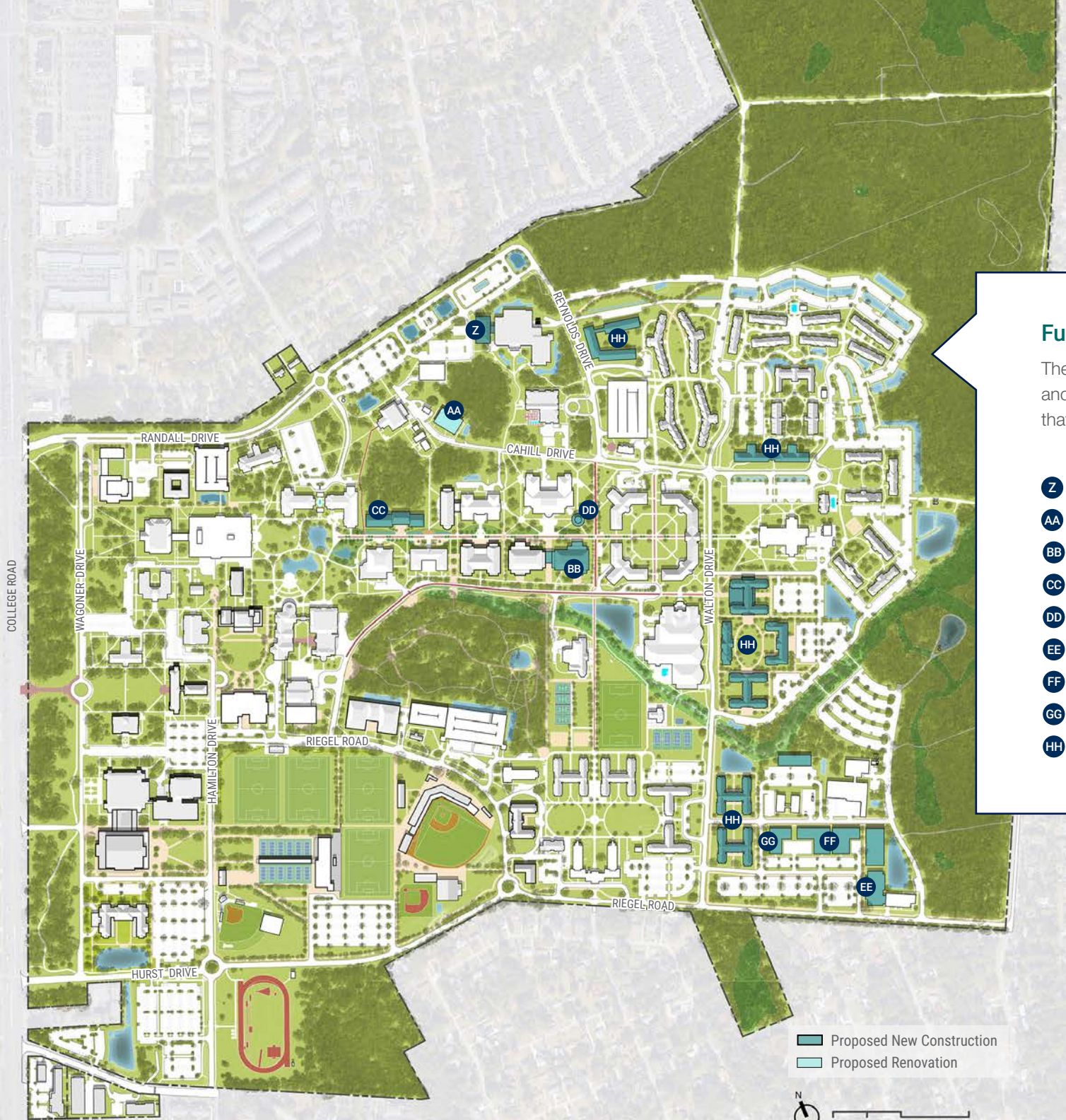
Long-Term Build-Out

The Long-Term Plan continues to build on the near-term framework as infill continues within the Academic and Student Life Districts providing future teaching, student life, administration and housing support facilities.

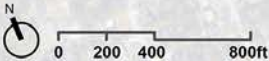
- S** Academic Health Sciences
- T** Central Parking Deck Expansion
- U** Student Recreation
- V** Warwick Renovation
- W** Hoggard Hall Program Reshuffling
- X** Residence Life Support
- xii** Outdoor Recreation Fields + Facilities Improvements
- xiii** Wagoner/Hurst/Hamilton Roadways + Stormwater Refurbishment
- xix** Randall Drive East Enhancements



Full Build-Out Plan Diagram



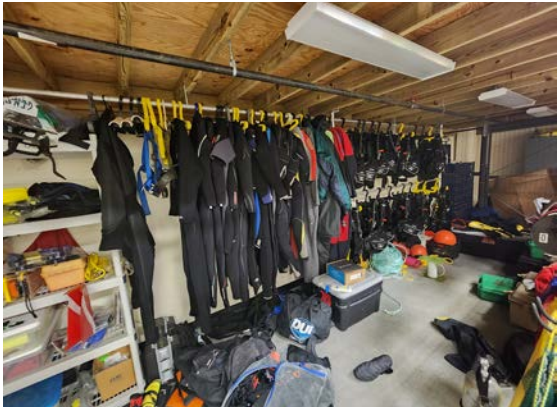
Proposed New Construction
Proposed Renovation



Full Build-Out

The Full Build-Out Plan extends beyond the 10-year horizon of this master plan and is intended to cast a vision for the development potential of several sites that currently do not have a priority for capital improvements and investments.

- Z Cultural Arts Building Addition
- AA Future Academic Support
- BB Future Academic Building
- CC Integrated Science and Technology (ISAT) Building #2
- DD Collaboration Hub
- EE Film Studies Addition
- FF Consolidation of Facilities + Support
- GG Police Station
- HH Student Housing



Center for Marine Science Campus Photos



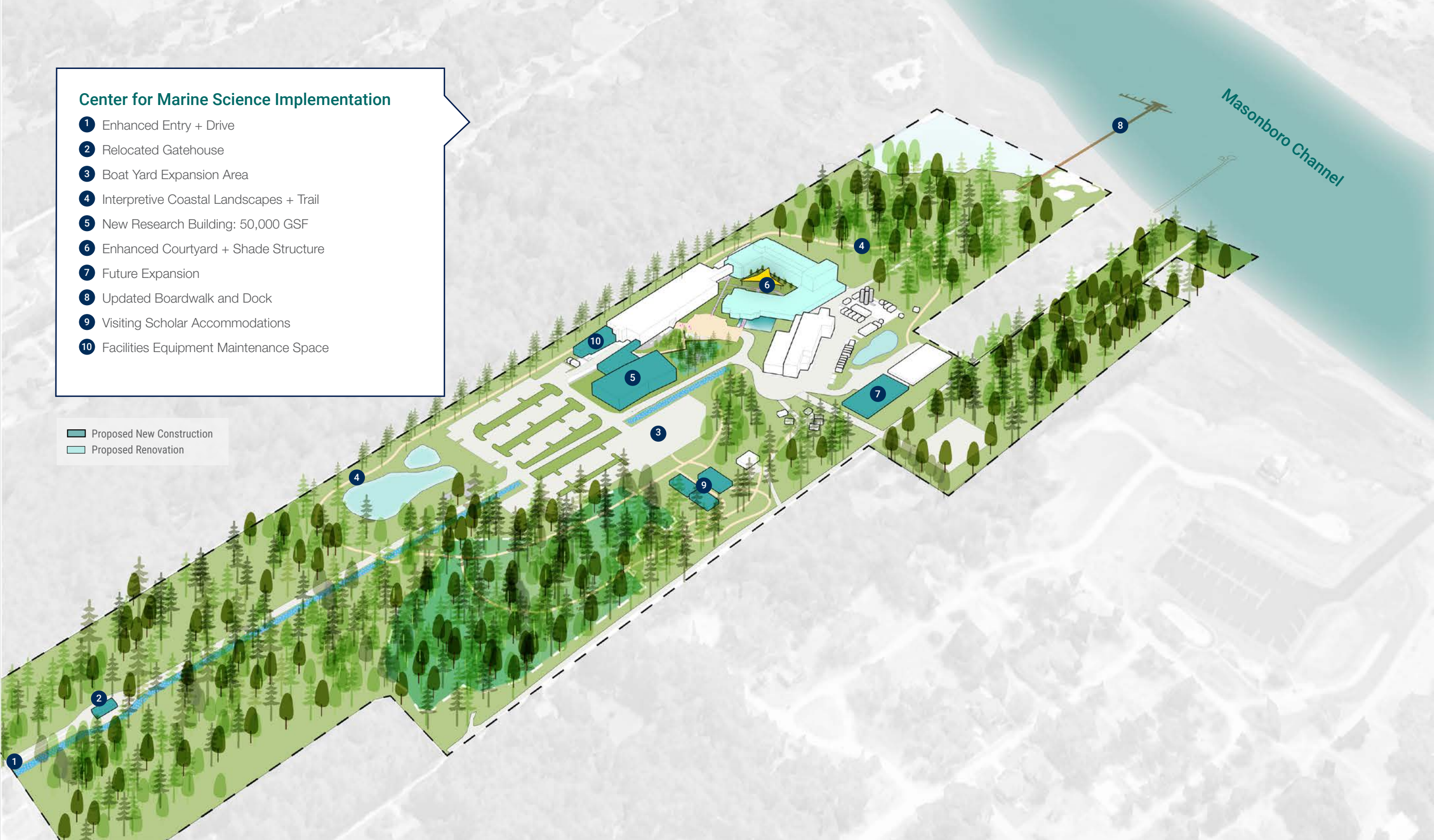
Existing Center for Marine Science Diagram

Center for Marine Science Context

Established in 2000, the Center for Marine Science (CMS) campus is located six miles and approximately a 15-minute drive from the main campus in the Myrtle Grove neighborhood of Wilmington with deep water access along the Masonboro Channel. The original CMS classroom and research facilities have grown over time to include additional office, support, research and small business startup space.

Existing Building List

- A Main Building (2000)
- B Operations Building (2008)
- C Shellfish Research Hatchery (2010)
- D MARBIONC/Biotechnology (2013)
- E Wet Laboratory
- F South Annex/Ross House
- G Guard House



Center for Marine Science Implementation

- 1 Enhanced Entry + Drive
- 2 Relocated Gatehouse
- 3 Boat Yard Expansion Area
- 4 Interpretive Coastal Landscapes + Trail
- 5 New Research Building: 50,000 GSF
- 6 Enhanced Courtyard + Shade Structure
- 7 Future Expansion
- 8 Updated Boardwalk and Dock
- 9 Visiting Scholar Accommodations
- 10 Facilities Equipment Maintenance Space

Proposed New Construction
Proposed Renovation



plan focus areas



OVERVIEW

NORTH GATEWAY | WELCOME + CULTURAL ENGAGEMENT

SOUTH GATEWAY | SEAHAWK COMMUNITY + ATHLETICS

CHANCELLOR'S WALK | ACADEMIC HUB

STUDENT LIFE CORE | CONNECTION + WELLNESS

RESIDENTIAL VILLAGES | COMMUNITY LIFE



Plan Focus Areas Diagram

Overview

Each campus district builds on existing land use zones, expands related programming within the district and infuses complementary activities to enhance the daily campus experience.

These areas of focus for the plan are envisioned to reinforce master plan principles to:

- » Cultivate a sense of belonging for all campus users
- » Promote interdisciplinary collaboration
- » Enhance UNCW identity within the community and region
- » Optimize use of space and resources
- » Elevate campus experience and connection

Through campus infill growth, the identity of each focus area will become stronger by siting synergistic programs and facilities in compact, walkable districts. Each focus area is also designed with spatial qualities to strengthen its sense of place. Near-term projects are sited within a larger framework to be built out over time based on strategic initiatives.

Focus areas are not intended to be single use but to create a critical mass of activity to strengthen efficiency and experience. Each focus area intentionally contains elements of other uses to promote interdisciplinary and social interaction among district users.

Enhanced connections between districts will better knit the internal campus fabric into a seamless whole. Outwardly facing intellectual and cultural assets will catalyze partnerships with the local governments, communities and businesses.

Where focus area overlap occurs, the opportunities for synergistic, collaborative and interdisciplinary projects are greatest. These types of projects will act as connectors between focus areas by bringing diverse user groups together.

North Gateway | Welcome + Cultural Engagement

Vision

The reimagined campus gateway will enhance the campus arrival experience with iconic UNCW branding, enhance the campus arrival experience and provide community engagement development opportunities. Road improvements along Randall Drive with expanded parking will provide ease of access and wayfinding for campus visitors and daily users.

The North Gateway district boasts a new Welcome Center at the most prominent campus corner of Randall and Wagoner Drives and unites with a renovated Kenan Auditorium for performing arts to intentionally bring together campus visitors, alumni, community and academics. Along with the newly expanded library, this will frame a new outward facing civic green events space. This new green space will strengthen the frontage along Wagoner Drive in combination with enhancements to the historic quad at Hoggard Hall. The pine buffer along College Road, a unique landscape feature containing the Cross City Trail, will be preserved for its cultural significance and enhanced with interpretive historical/public art displays.

plan principles »

North Gateway district recommendations stem directly from the five planning principles and support UNCW's Strategic Plan: "Soar Higher." The North Gateway will transform the main entry to campus and provide a welcoming presence for campus and community.

PRINCIPLES AND DRIVERS

CULTIVATE A SENSE OF BELONGING FOR ALL CAMPUS USERS

- » Create a welcoming, user friendly, and accessible environment.
- » Utilize flexible, multi-use spaces open to the campus community.

PROMOTE INTERDISCIPLINARY COLLABORATION

- » Gallery, assembly, and meeting spaces support academic collaboration.
- » Collocated administrative, student support, academic, and outreach programming.

ENHANCE UNCW IDENTITY WITHIN COMMUNITY + REGION

- » Make a strong first impressions at Randall Drive gateway and along South College Road inviting campus use.
- » High-impact location for civic engagement to feature history, culture, academic programs and coastal context.
- » Promote community engagement through public-facing programs and facilities in the arts and outreach.

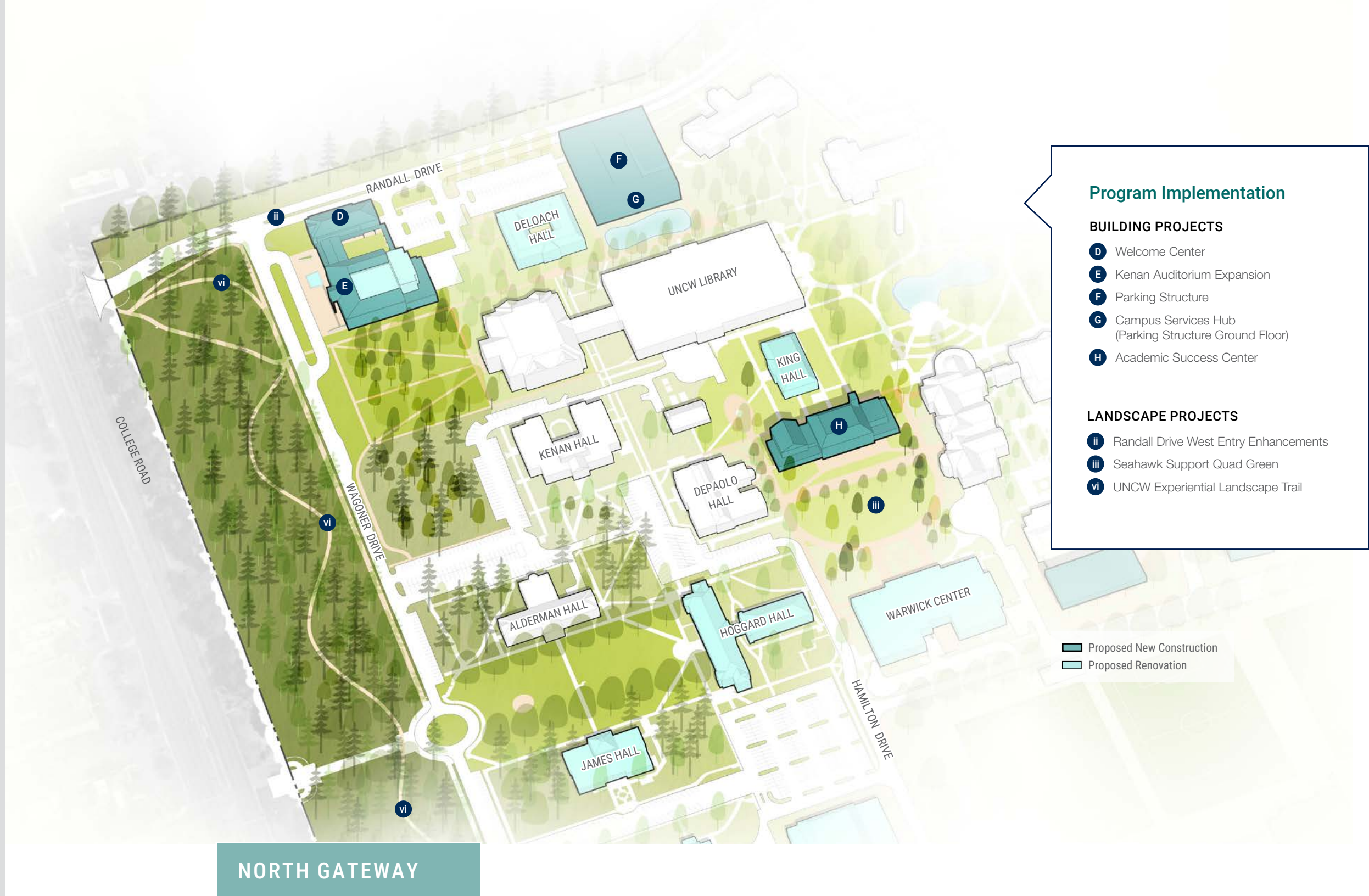
OPTIMIZE USE OF SPACE AND RESOURCES

- » Share resources and program space between Welcome Center and Kenan Auditorium.
- » Promote greater use of the west side of campus, especially along Wagoner Drive.

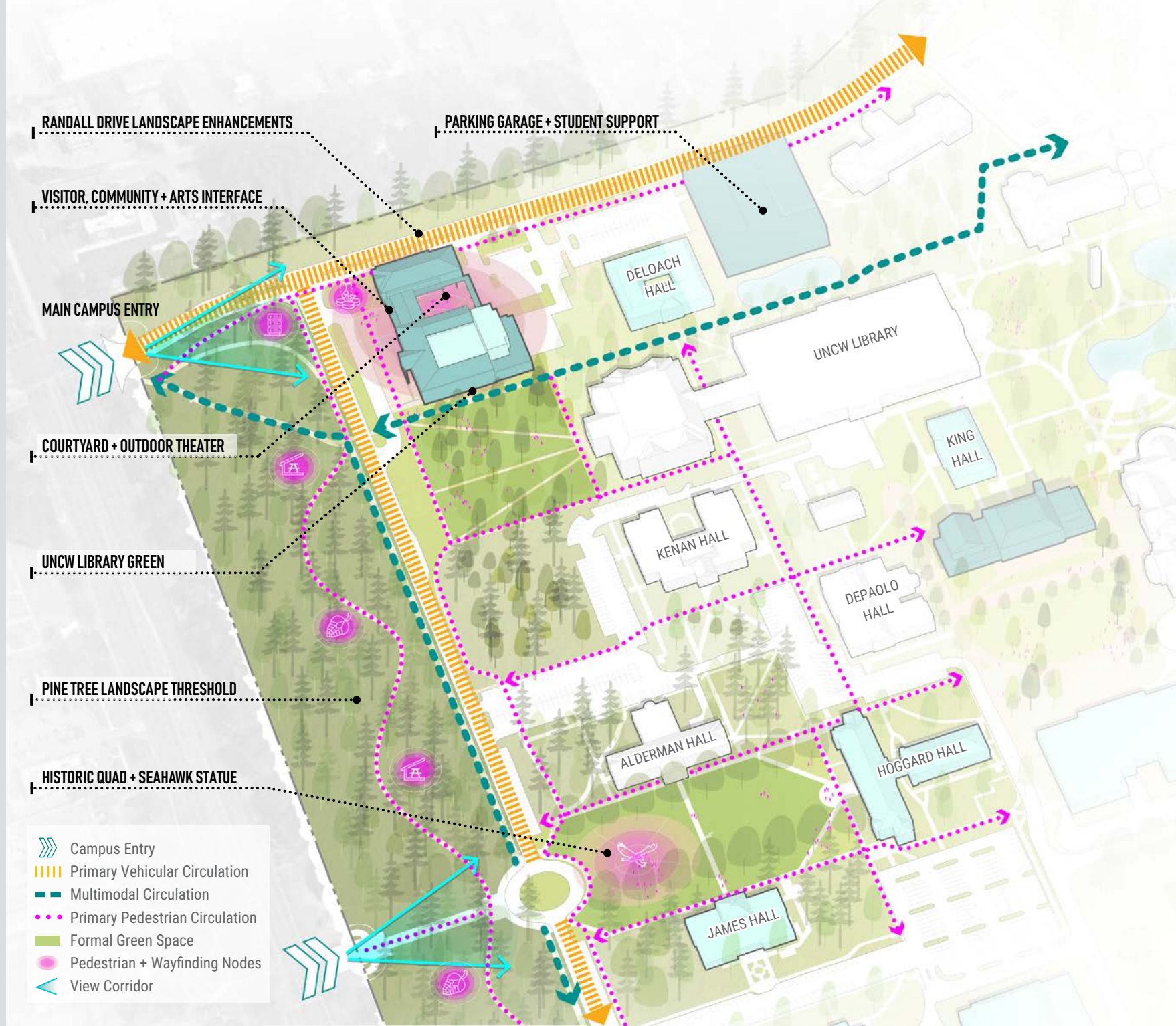
ELEVATE CAMPUS EXPERIENCE AND CONNECTION

- » Provide clear wayfinding and orientation to enhance the visitor experience.
- » Improve auto and pedestrian circulation to ease congestion and improve safety.
- » Create new and enhance existing outdoor spaces and amenities.





NORTH GATEWAY



NORTH GATEWAY

Framework + Key Concepts

New North Campus Entry and Visitor Experience

- » Creates an iconic first impression in combination with additional entry and exit lanes and landscaping on Randall Drive.
- » Randall Drive expansion from two to four lanes will alleviate current traffic congestion while creating an attractive boulevard incorporating sustainable stormwater management features and landscape.
- » A highly visible and welcoming destination for visitors and community arts patrons is prominently located at the northwest corner of campus and will provide a range of multipurpose meeting, event and admissions focused space.

Optimized Parking Structure along Randall Drive

- » Promotes the concept of parking at the perimeter of campus to discourage driving through campus.
- » Location is convenient to serve both first time campus visitors, arts patrons and provides easy access for daily commuters to the academic core.

Reinforced Civic Edge along Wagoner Drive facing South College Road

- » This concept strengthens the “front” of the UNCW campus and its visible community presence with new public facing facilities and open spaces.
- » A new Library Green is created to sponsor arts related activities.
- » Hoggard Lawn improvements, including shaded site seating and the relocation of the Seahawk statue, will create more pedestrian activity in the historic heart of campus.
- » The pine tree buffer between South College Road and Wagoner Drive is activated with an enhanced trail system and art walk with interpretive exhibits and installations.

Campus Connections and Sustainable Landscapes

- » Pedestrian links to and from the campus core are strengthened to encourage greater utilization of all campus spaces.
- » A simple gridded path network simplifies district wayfinding.
- » Parking areas are directly linked to major campus destinations.
- » New sustainable outdoor spaces will be designed to embody the coastal context, create safe and comfortable microclimates, and act as outdoor learning laboratories.

Key Project Recommendations

KEY BUILDING RECOMMENDATIONS

- D Welcome Center**
A new Welcome Center at the corner of Randall and Wagoner Drive presents an inviting UNCW identity and clear orientation for visitors. A flexible multi-use facility, the Welcome Center includes spaces for admissions, educational outreach, career development, alumni and advancement. The Welcome Gallery will feature regional attractions and UNCW accomplishments from academics and research to athletics and artistic endeavors. With a connection to the Kenan Auditorium redevelopment, the Welcome Center offers additional campus-wide events and meeting spaces, and a food service and merchandise outlet. A central courtyard space promotes outdoor events surrounded by covered walkways and native coastal plantings.
- E Kenan Auditorium Renovation/Addition**
This community-wide asset presents a new identity at the North Campus Gateway with a larger grand entry and lobby space. Connected to the Welcome Center, new events spaces provide the flexibility to hold more and larger campus events. An upgraded auditorium and support spaces include expanded office space, backstage additions for performers and an expanded service area. A new black box theater opens onto Library Green and creates more opportunities for more diverse performances.
- E UNCW Library Green**
Framed by the new library addition on the east and the new black box theater on the north, Library Green presents a civic presence at the front edge of campus. An outdoor theater and events space extends the Kenan Auditorium and Welcome Center programming. Paths through this space connect to the Cross City Trail and off campus locations. Preserving the existing pine trees provides an informal but grand setting and complements the open green at historic Hoggard Lawn.



Existing Bird's Eye Aerial



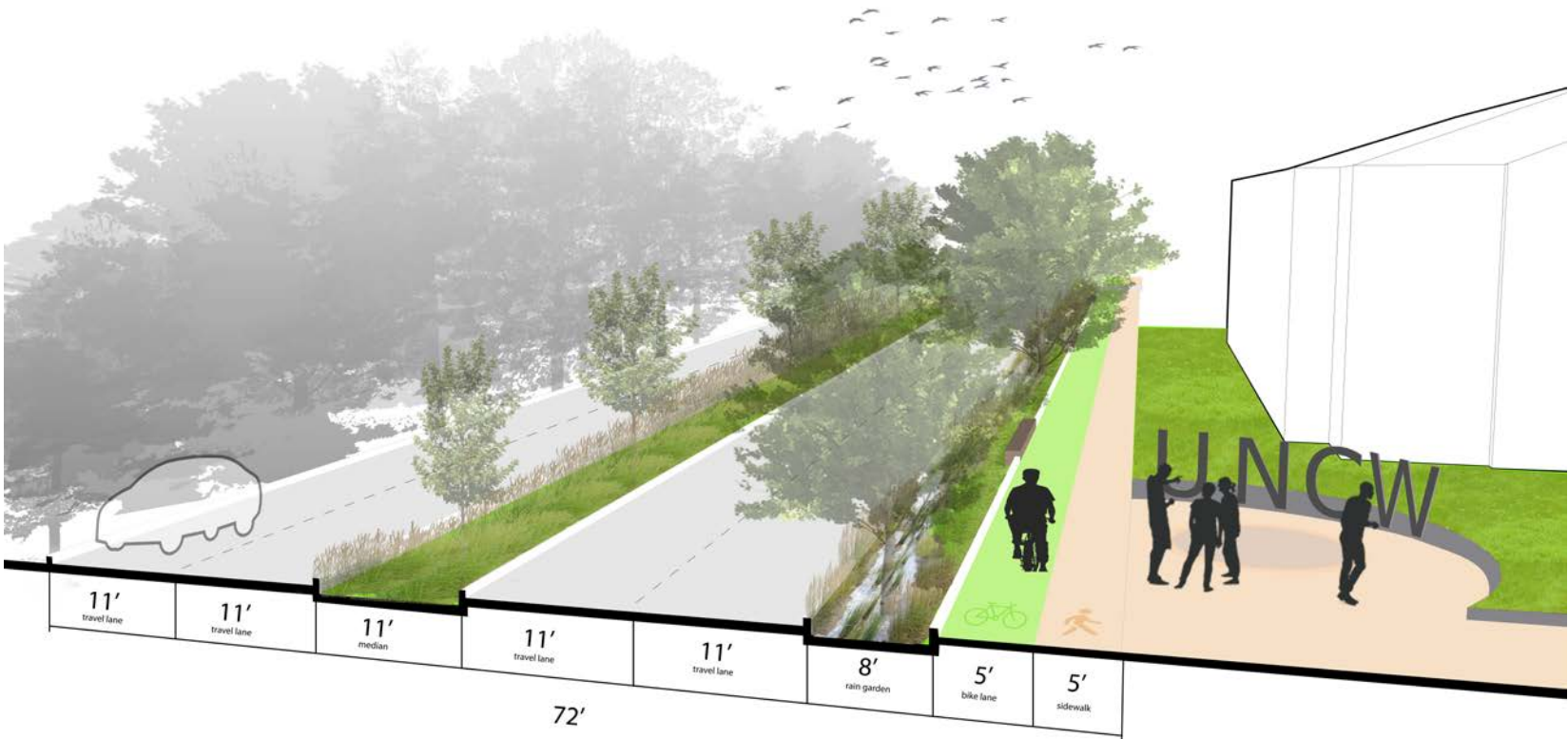
Existing Campus Entry at Corner of Wagoner and Randall Drives



North Campus Gateway and Welcome Center Concept Imagery



North Campus Gateway and Welcome Center Concept Imagery



KEY LANDSCAPE RECOMMENDATIONS

ii Campus Entry and Randall Drive Enhancements

The gateway to campus at South College Road and Randall Drive features new monumental signage, landscaping and enhanced pedestrian crossings. Additional turn lanes in and out of campus and an expanded Randall Drive enhance traffic flow creating a four-lane treed boulevard. A multi-use path along the south side promotes sustainable micro-modal commuting. A new parking structure at the Library Lot serves the Welcome Center, Kenan Auditorium, and academic campus users.

vi UNCW Experiential Landscape Trail

The pine buffer between South College Road and Wagoner Drive creates a unique campus identity and includes a portion of the Cross City Trail. The opportunity exists to add public art and interpretive historical and educational exhibits to encourage greater use by students, faculty/staff, community members and their families.



South Gateway | Seahawk Community + Athletics

Vision

The new South Gateway will feature the UNCW coastal brand, enhance the campus arrival experience, feature athletics and hospitality destinations and provide multiple future development opportunities. This reimagined district of campus will house a hotel and conference center serving as a hub for visitors and the campus community, with the ability to host large events overlooking the newly expanded pond and boardwalks.

A new arena connected to the renovated Trask Coliseum fronts Wagoner Drive, expanding the civic presence of UNCW at this important campus edge while providing much needed space upgrades. An expanded Athletics Village will serve as a connection between athletics, the community and the core of campus.

A more pedestrian friendly district is created by rethinking street hierarchy, limiting access to internal streets and promoting multimodal use. The Hurst Drive extension from the South College Road entry to the east side of campus will provide a southern leg to a loop road, keeping cars at the perimeter of campus.

plan principles »

South Gateway district recommendations stem directly from the five planning principles and support UNCW’s Strategic Plan: “Soar Higher.” The South Gateway will become a main entry to campus and provide a welcoming presence to connect campus and community.

PRINCIPLES AND DRIVERS

CULTIVATE A SENSE OF BELONGING FOR ALL CAMPUS USERS

- » Create a welcoming, user friendly, and accessible environment
- » Utilize flexible, multi-use event and meeting spaces open to the campus community

PROMOTE INTERDISCIPLINARY COLLABORATION

- » Social, assembly and meeting spaces support academic collaboration
- » Athletic, academic support and outreach facilities collocated promote varied interactions

ENHANCE UNCW IDENTITY WITHIN COMMUNITY + REGION

- » Strong first impression at Hurst Drive gateway and along Wagoner Drive facing South College Road invites campus use
- » High-impact location to feature athletics, culture, visitor amenities and coastal context
- » Public-facing programs and facilities in athletics and outreach promote community engagement

OPTIMIZE USE OF SPACE AND RESOURCES

- » Shared resources between athletics and hospitality creates opportunities to benefit event attendance, promote greater use of southwest campus land and improve overall campus experience

ELEVATE CAMPUS EXPERIENCE AND CONNECTION

- » Clear wayfinding and orientation enhance the visitor experience
- » Improved auto and pedestrian circulation ease congestion and improves safety
- » Create new and enhance existing outdoor spaces and amenities





SOUTH GATEWAY

Program Implementation

BUILDING PROJECTS

- J Sports Performance Center (Partnership Opportunity)
- K Arena Expansion
- L Trask Arena Renovation for Basketball/Volleyball Practice
- M Renovate Hanover Hall for Volleyball Competition
- N Hotel & Conference Center

LANDSCAPE PROJECTS

- vi UNCW Experiential Landscape Trail
- vii Hurst Drive Extension
- viii Outdoor Tennis Complex
- ix Soccer Complex and Fields
- x Geothermal Under Fields
- xi South Gateway Boardwalks
- xii Outdoor Recreation Fields + Facilities Improvements
- xiii Wagoner/Hurst/Hamilton Roadways + Stormwater Refurbishment



Framework + Key Concepts

New South Gateway and Hurst Drive Extension and Improvements

- » Creates a memorable sense of arrival with new entry signage at South College Road, the reinvigorated pine buffer and art walk, and an expanded pond water feature and coastal landscape
- » Hurst, along with the Cross City Trail, will extend east to Riegel Road, creating a new multimodal connection to east campus with parking distributed along the way
- » Hamilton Drive will become limited access north of the softball complex to create a safer pedestrian environment within the Athletics Village

Prominent Location for New Arena and Hotel/Conference Center

- » A new hotel and conference center will serve as a hub for visitors and the campus community, with the ability to host large events overlooking the newly expanded pond.
- » The hotel will front Wagoner Drive, create a strong civic presence at Hurst Drive, and provide a close connection to athletics for game day events.

Unified Athletics Village

- » An Athletics Village concept creates a unified district from Wagoner Drive across Hamilton Drive to baseball on the east side
- » A new arena and Trask Coliseum renovation anchor the west side with expanded game and practice facilities
- » A new performance center surrounded by playing fields provides centralized locker room and training facilities

Sustainable Landscapes

- » New sustainable outdoor spaces will be designed to embody the coastal context, create safe and comfortable microclimates, and act as outdoor learning laboratories

Campus Connections

- » Hamilton Drive is reimagined as a multimodal street with enhanced pedestrian connection to the campus core
- » A primary east-west path connects the Athletics Village and allows greater access to athletics and recreation fields from the east
- » The Cross City Trail provides active recreation through the district and connects to the broader Wilmington community
- » Parking areas are directly linked to major campus destinations

Key Project Recommendations

KEY BUILDING RECOMMENDATIONS

N Hotel + Conference Center

A new boutique hotel and conference center fronting Wagoner Drive and opening to Hurst Park completes the South Gateway with a community facing amenity. Well positioned adjacent to the Athletics Village and plentiful parking, this new facility will bring new vitality to campus beyond game day activities. Opportunities exist for partnerships with the tennis and performance centers to provide amenities and services for guests. A restaurant and pub will serve visitors and provide an outlet for faculty and staff. Indoor and outdoor banquet and meeting spaces serve functions from academic conferences to alumni weddings and events. The central courtyard utilizes the new South Gateway Boardwalks and sustainable stormwater feature as an extension of usable space, and its coastal landscape connects people to place.

L K Trask Renovation + Arena Expansion

A new arena for basketball and renovations to Trask Coliseum provide state of the art facilities for athletics. The arena fronts Wagoner Drive on the west and an events space on the east that connects across Hamilton Drive to the Athletics Village. See Athletics Master Plan for more information.

J Sports Performance Center

This Athletics Village concept puts the performance center in the middle of Athletics fields and sponsors seating and viewing terraces for new tennis and soccer complexes. The facility houses coaches’ offices, locker room and meeting facilities, and a training center, with the ability to partner with a local healthcare provider. See the 2024 Athletics Master Plan for more information.

KEY LANDSCAPE RECOMMENDATIONS

ii Hurst Drive Campus Entry and Extension

The Hurst Drive campus gateway features new monumental signage, landscaping and enhanced pedestrian crossings at South College Road. Hurst Drive and the adjacent Cross City Trail will extend through the Athletic Village to connect with Riegel Road and the east side of campus, keeping traffic at the perimeter of campus. The extension also allows access to parking for athletics’ new venues and performance center. Traffic circles at Hamilton Drive and Riegel Road enhance flow.



South Gateway Hotel and Conference Center Concept Imagery



Existing View from Hurst Drive Looking Toward Trask Parking Lot

xi South Gateway Boardwalks

This newly conceived space at the northeast corner of Hurst and Wagoner Drives greets campus visitors and provides a stately outdoor campus amenity. With an expanded and enhanced water feature and overlook, the Cross City Trail, and an outdoor events space associated with the new hotel and conference center, this will be a unique and dynamic space at the campus gateway.

Chancellor’s Walk | Academic Hub

Vision

Chancellor’s Walk is conceived as the academic Main Street of campus. The plan strengthens this concept with new facilities proposed on infill sites to complete this iconic and heavily traveled spine. New facilities are designed to foster interdisciplinary collaboration and showcase academic programs through shared meeting and social spaces at the ground level.

Outdoor spaces along Chancellor’s Walk and throughout the district are activated to provide more teaching resources through outdoor classrooms and further promote a shared sense of social belonging. By concentrating new facilities along Chancellor’s Walk, existing natural areas are preserved and usable as a learning lab.

Enhanced north-south paths through the district create clear connections to campus hubs within and beyond the Academic District and provide activity nodes along the way. Micro-modal transportation is restricted along Chancellor’s Walk and focused along Cahill Drive to the north and Price Drive to the south. Extended Randall Drive enhancements keep auto traffic at the perimeter of campus and include a new traffic circle at the Racine Drive entry.

plan principles »

Academic District recommendations stem directly from the five planning principles and support UNCW’s Strategic Plan: “Soar Higher.” The Academic District will better serve the campus community through synergistic program proximity, enhanced connectivity, and sense of place to showcase academic excellence and a collaborative spirit.

PRINCIPLES AND DRIVERS

CULTIVATE A SENSE OF BELONGING FOR ALL CAMPUS USERS

- » Create a welcoming, user friendly and accessible environment at building entries and within buildings.
- » Utilize flexible, multi-use spaces at the ground level to promote collaboration and increase visibility of learning/interacting.
- » Create more engaging outdoor spaces for classrooms and social gathering.

PROMOTE INTERDISCIPLINARY COLLABORATION

- » Promote collaboration nodes along Chancellor’s Walk, inside and outside buildings.
- » New buildings are programmed to collocate synergistic disciplines and support academic collaboration.

ENHANCE UNCW IDENTITY WITHIN COMMUNITY + REGION

- » Design outdoor space as an extension of building program and highlight coastal connections.
- » Utilize wayfinding, displays and branding opportunities to communicate academic and research accomplishments.
- » Incorporate sustainable building elements and landscapes to demonstrate institutional leadership.

OPTIMIZE USE OF SPACE AND RESOURCES

- » Preserve natural areas and construct new facilities on previously developed parcels when possible.
- » Promote shared use of classrooms between disciplines and utilize space in front of/between buildings for outdoor classrooms.
- » Maximize available building sites by building new facilities to three levels.

ELEVATE CAMPUS EXPERIENCE AND CONNECTION

- » Promote campus as a living laboratory within the coastal context.
- » Create building transparency to showcase academic studies and activate threshold spaces as gathering spaces.
- » Implement a variety of walkway characters to enhance campus identity and sense of place.
- » Strengthen north-south connections within the district, especially to the Cultural Arts Building.



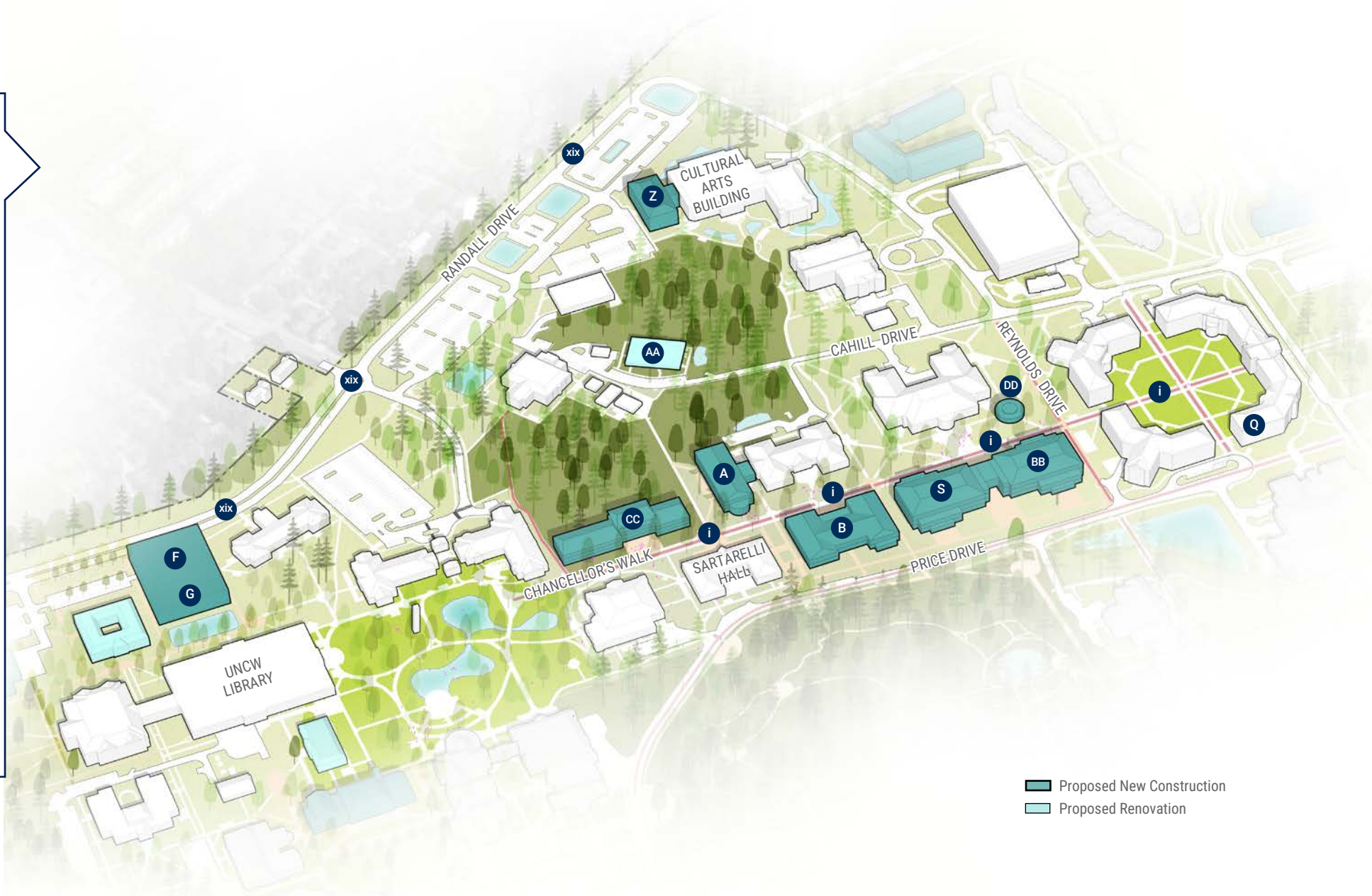
Program Implementation

BUILDING PROJECTS

- A Business + Technology Center
- B Integrated Science and Technology (ISAT) Building #1
- F Parking Structure
- G Campus Services Hub (Parking Structure ground floor)
- S Academic Health Sciences
- Q Veterans Hall Anatomy Lab
- Z Cultural Arts Building Addition
- AA Future Academic Support
- BB Future Academic Building
- CC Integrated Science and Technology (ISAT) Building #2
- DD Collaboration Hub

LANDSCAPE PROJECTS

- i Chancellor's Walk Enhancements
- xix Randall Drive East Enhancements



Framework + Key Concepts

Chancellor's Walk

- » As the main pedestrian thoroughfare to most academic and student life spaces, adding outdoor classrooms, interpretive art and social spaces will foster greater academic engagement and collaboration.
- » Infill sites provide opportunity for program growth while elevating the Chancellor's Walk pedestrian experience.
- » More shade and areas of respite along the walk invite people to linger and interact.
- » Greater building transparency, indoor/outdoor connection and active outdoor learning spaces will allow academic programs to showcase their work.

North Academic District

- » A Cultural Arts Building addition creates a new public front with public spaces, performance venue and gallery space.
- » An enhanced Arts Plaza on the south side of the Cultural Arts Building creates an outdoor events space to promote and celebrate the arts.
- » The Randall Drive extension is rerouted to the north of parking lots to minimize pedestrian/vehicular circulation conflicts.
- » A new traffic circle at the Racine Drive campus entry increases traffic flow and creates a more formal entry to campus.

Sustainable Landscapes

- » Natural areas are preserved and utilized for academic/research purposes as well as interpretive campus exhibits.
- » High performing coastal landscapes replace expansive lawn throughout the district and serve to educate and inspire sustainability, while lessening the maintenance burden on Facilities.

Campus Connections

- » Multimodal paths along Price and Cahill Drives alleviate pedestrian and bicycle/skateboarder conflict at peak times along Chancellor's Walk.
- » New multimodal paths create connections to off-campus locations, encouraging more micro-modal forms of transportation.
- » North-south pedestrian movement is clarified through a hierarchical grid connecting to other districts.



- » Campus Entry
- » Primary Vehicular Circulation
- » Multimodal Circulation
- » Primary Pedestrian Circulation
- » Formal Green Space
- » Pedestrian + Activity Nodes
- » View Corridor

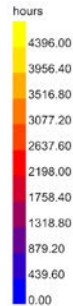
SOLAR ANALYSIS



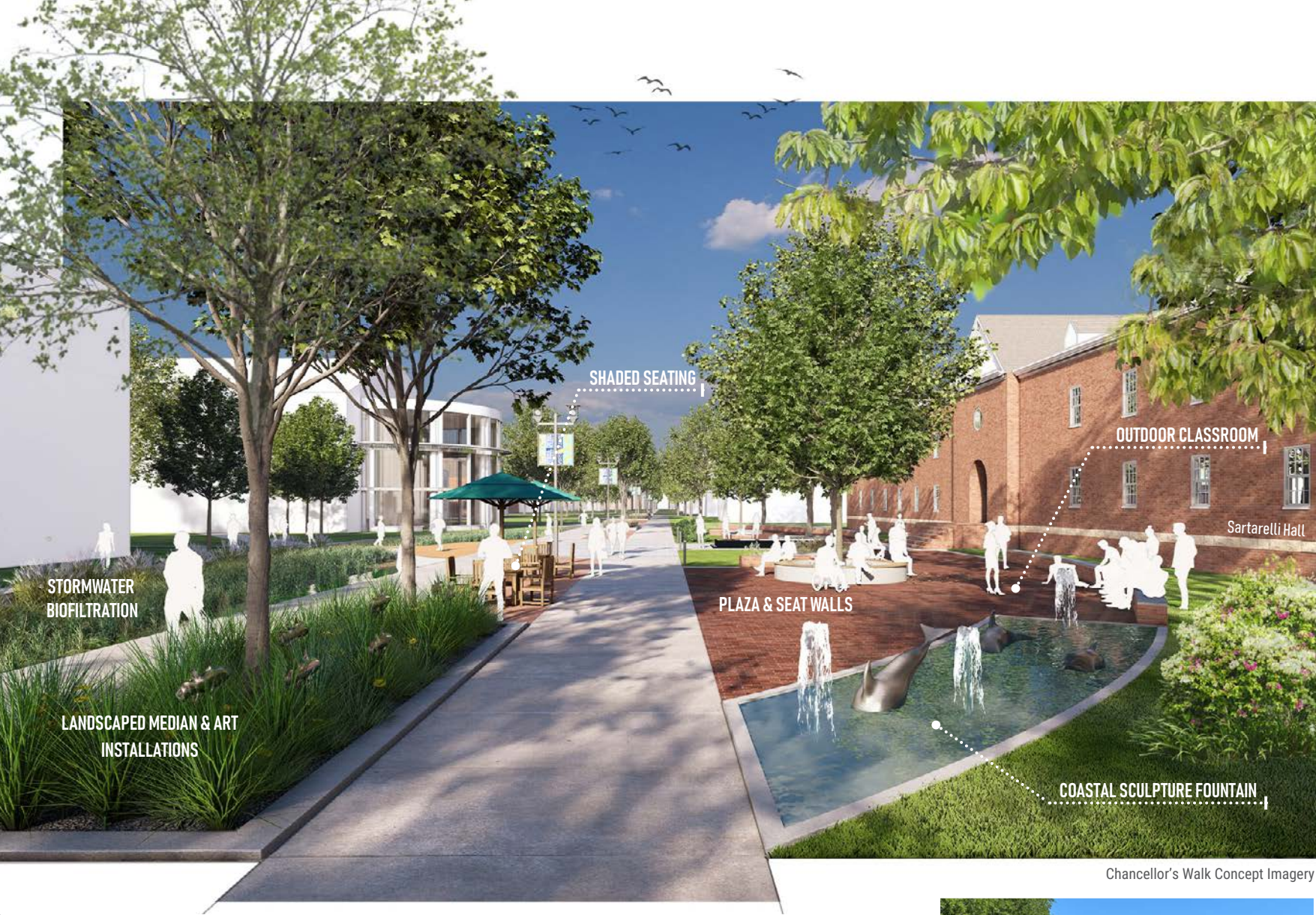
Annual Hours of Solar Radiation Along Existing Chancellor's Walk



Annual Hours of Solar Radiation with Proposed Plan Buildings



CHANCELLOR'S WALK



Chancellor's Walk Concept Imagery



Existing Chancellor's Walk

Key Project Recommendations

RECOMMENDATION GUIDELINES

A B S BB CC DD Chancellor's Walk Infill Buildings

- » New academic buildings are intended to be interdisciplinary hubs with major public spaces fronting and visible to Chancellor's Walk and the new recreation corridor along Price Drive.
- » New building facades are transparent and inviting at the ground level to display student collaboration and encourage indoor/outdoor engagement.
- » Shade structures, especially on south facing buildings encourage activity at the building threshold and reduce building energy demands.

i Chancellor's Walk Landscape Enhancements

- » Increase tree canopy along the center and edges of the paved walkway to lessen heat impacts and improve pedestrian experience.
- » Better leverage UNCW's coastal context with high performance and lower maintenance landscapes, including a stormwater biofiltration rain garden along the north side of Chancellor's Walk.
- » Create outdoor classrooms and/or social spaces at building entries with the opportunity for interpretive academic displays or interactive exhibits.
- » Activate Veterans Square with seating, programmable lawn and an iconic focal point in the center.
- » Enliven the Wagoner Dining Hall Plaza with more outdoor seating, shade structures and passive recreation. Examples could include outdoor ping pong, bocce ball court, swings and hammock poles.
- » Weave interactive and educational activity nodes along the linear path to help break down the perceptive length of Chancellor's Walk and provide moments for connection. Suggested locations include:
 - Pier at the terminus of Chancellor's Walk at Campus Commons
 - Fountain and seating area at Sartarelli Hall
 - Sculpture at the intersection with the path to the Cultural Arts Building
 - Interdisciplinary Hub Pavilion at Dobo Hall and Hawk Walk
 - Monument and fountain at Veterans Square
- » Designate Chancellor's Walk as a "Pedestrian Only" corridor to improve pedestrian safety. Relocate bike rack stations from current building entries to Price and Cahill Drives at convenient intersections to encourage riders to park their bikes before proceeding to Chancellor's Walk.

Student Life Core | Connection + Wellness

Vision

The Student Life Core is composed of three distinctly unique campus zones: the Campus Life Hub featuring social, dining, and student support spaces on the west, Bluethenthal Wildflower Preserve, and the Campus Recreation Hub on the east.

Bluethenthal is reconceived as a unique and accessible natural amenity in the middle of campus. An outdoor classroom on the pond and small areas for reflection, and interpretive signage throughout, provide educational opportunities. Price Drive is reconceived as Recreation Way, a multimodal corridor connecting east and west campus on the north side of Bluethenthal. Several overlook spaces provide shaded space along the path and views into the reserve.

The Seahawk Support Quad is a new concept to unite student services around a central space focused on wellness. The quad is surrounded by Student Health, Fisher Student Union, a reinvigorated Warwick Center for student engagement and a new Academic Success Center.

A new Campus Recreation facility brings a fitness/wellness outlet to the Campus Life Hub. Complementary to the Campus Rec Hub to the east, this location offers partnership opportunities with athletics, intramural and club sports, and private wellness groups. The recently completed outdoor recreation complex creates a dynamic outdoor environment adjacent to the residential villages.

plan principles »

Student Life Core recommendations stem directly from the five planning principles and support UNCW's Strategic Plan: "Soar Higher." Campus life is reinvigorated through connected social outlets, collocated student support services and experiential outdoor spaces.

PRINCIPLES AND DRIVERS

CULTIVATE A SENSE OF BELONGING FOR ALL CAMPUS USERS

- » Create a welcoming, user friendly and accessible environment with inviting, themed outdoor spaces around wellness, discovery and recreation.
- » Build a sense of community and school spirit through campus life and recreation programs.

PROMOTE INTERDISCIPLINARY COLLABORATION

- » Promote cross-cultural and student/faculty engagement with prominently placed social, assembly, meeting, dining and recreation spaces.
- » Create a strong, efficient and proximate network for student support.

ENHANCE UNCW IDENTITY WITHIN COMMUNITY + REGION

- » Leverage existing campus programs and places to communicate institutional history, culture and academic successes.
- » Create functional and inspirational spaces to foster campus and community activities centered on wellness.
- » Demonstrate institutional leadership in sustainability with special attention to reinvigorating Bluethenthal Wildflower Preserve as a living laboratory.

OPTIMIZE USE OF SPACE AND RESOURCES

- » Transform currently undervalued land resources in the heart of campus into impactful places.
- » Centralize student services in the new Seahawk Support Quad.
- » Reinforce and expand upon existing infrastructure to support the capacity for growth.

ELEVATE CAMPUS EXPERIENCE AND CONNECTION

- » Simplify daily campus life by collocating support functions in one area. Expedite clear, efficient and experiential campus connections through this central district in all directions
- » Elevate the daily campus experience outside the classroom through dynamic campus life and recreation spaces along reinvisioned Price Drive and Bluethenthal Preserve.





Program Implementation

BUILDING PROJECTS

- C** Burney Center Utility Plant Expansion
- H** Academic Success Center
- T** Central Parking Deck Expansion
- U** Student Recreation
- V** Warwick Renovation

LANDSCAPE PROJECTS

- iii** Seahawk Support Quad Green
- iv** Price Drive Recreation Corridor
- v** Bluethenthal Pedestrian Enhancements



Framework + Key Concepts

Seahawk Support Quad

- » Collocated programs around Seahawk Support Quad create a centrally located and efficient network of student support.
- » Creating a grand, functional lawn at the Seahawk Support Quad fosters campus and community scaled activities centered on wellness, and enhances the pedestrian-oriented campus core.

Bluethenthal Wildflower Preserve

- » New entry points into Bluethenthal Wildflower Preserve along with enhanced paths and educational amenities reinvigorate the identity of this unique natural asset in the middle of campus.
- » Outdoor classrooms, overlooks, and small-scale engagement nodes in and around the preserve expand learning resources and stimulate curiosity.
- » Balancing ecological preservation with intentional access points creates awareness around the importance of protecting the natural environment.

Connected Campus Recreation

- » Centrally locating recreation facilities adjacent to the Residential District encourages overall use and interactions with fellow residents.
- » Large open spaces and fields at the Campus Recreation Hub strengthen the ability to host major campus and community events and celebrations
- » Adjacency between fields and Student Recreation Center building creates a strong identity and functional program efficiencies.

Sustainable Landscapes

- » Natural areas are preserved and utilized for academic/research purposes as well as interpretive and didactic campus exhibits.
- » A balance of usable lawn and field spaces and high performing, native coastal landscapes spurs healthy lifestyles and enhances environmental resilience.

Campus Connections

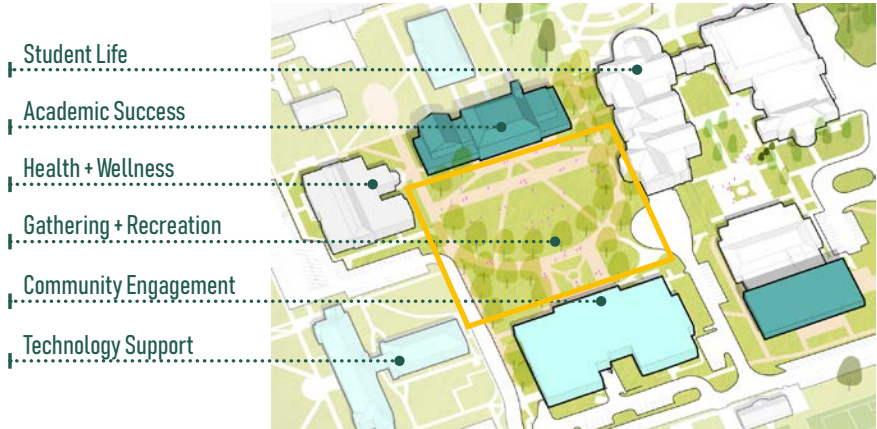
- » Newly enhanced pathways within Bluethenthal Wildflower Preserve connect campus in all directions while providing a unique campus experience through the nature preserve.
- » Hawk Walk, a bustling and north-south path, directly connects the Campus Recreation Hub to Chancellor's Walk via a new bridge over the district's pond.
- » The new Campus Recreation building on Riegel Road helps to bridge the connection between campus recreation and athletics while providing needed additional space.
- » The multimodal path along Price Drive known as Recreation Way brings an active corridor at the seam between Academic District and student life facilities.



Seahawk Student Support Quad Concept Imagery



Existing Parking Lot Adjacent to Fisher Student Center Looking North



Key Project Recommendations

iii Seahawk Support Quad

Reimagining the existing parking lot adjacent to Fisher Student Center as a central green space offers an opportunity to knit together student support facilities around a central organizing quad. Facilities reinforce existing support infrastructure and clarify the organization of programs to create a “one-stop shop” hub for student support. Related programs are collocated to share resources and provide synergistic collaboration.

Student Health and Counseling Center: DePaolo Hall

» Programs include Student Health, Counseling, Health Promotion, Collaboration for Assault Response and Education (C.A.R.E.)

Academic Success Center (ASC)

» The new facility complements the library and provides academically focused support spaces for advising, testing, tutoring, and career development.

» Building attributes:

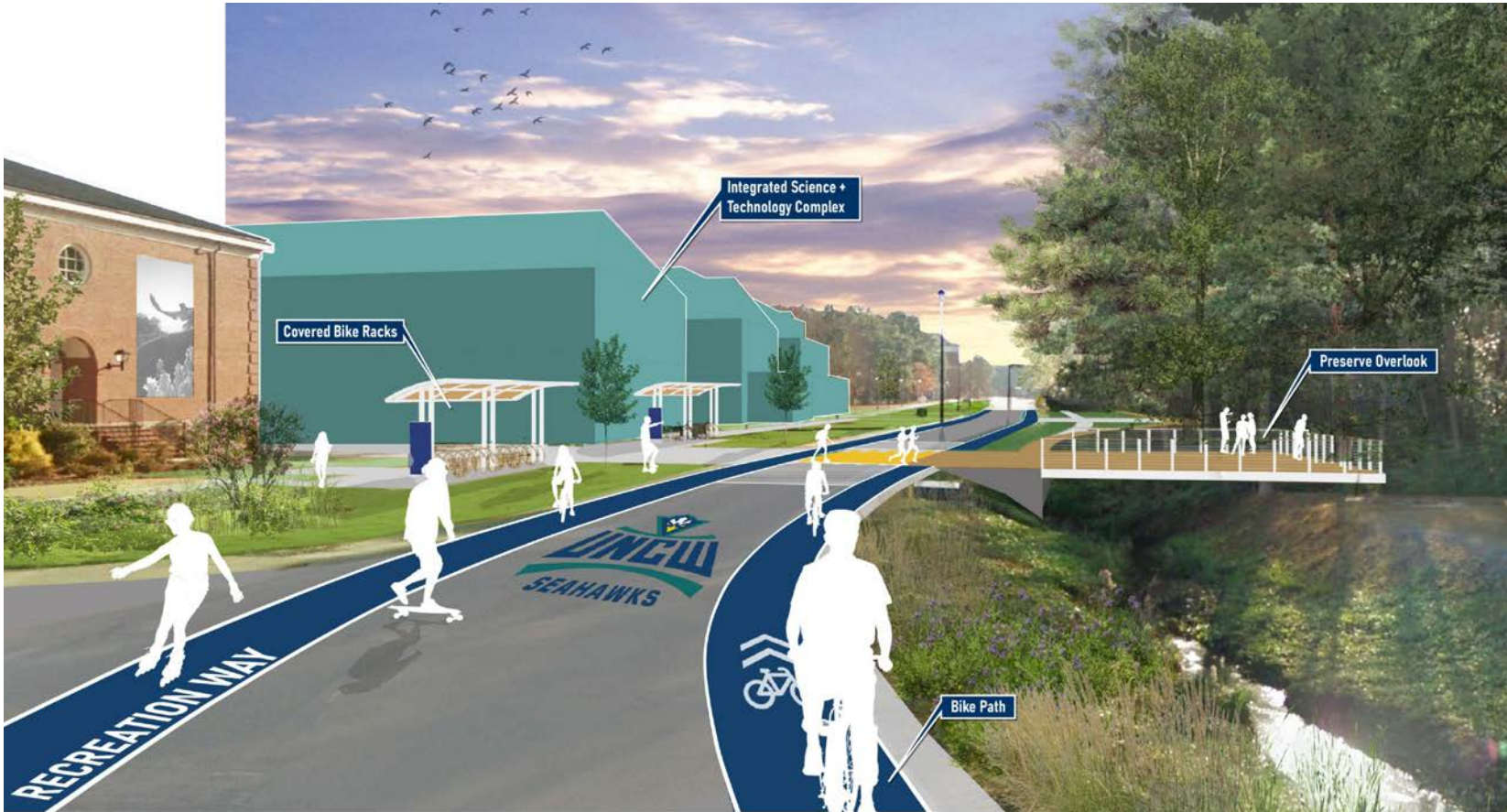
- South facing front porch and plaza
- Fronts both Campus Commons and new quad space
- Colonnade links DePaolo Hall and Fisher Student Center
- Portal links front of library to ASC and quad space
- Upper-level terrace

Student Life Programs: Fisher Student Center and Fisher University Union

» The Fisher buildings will expand social and cultural meeting spaces, faculty and staff support and common space, and bookstore and post office/passport offices

v Warwick Center Renovation: Student Engagement Programs

» A renovated Warwick Center will house student organizations with a focus on impacting campus and community through outreach.



Price Drive Recreation Corridor Concept Imagery



Existing Price Drive



Organic Landscape Trail



Covered Bicycle Rack Parking

C Burney Center Utility Plant Expansion

» Expanded utilities will support growth in the southwest area of campus and provide sustainable energy through geothermal wells under field spaces.

U Student Recreation

- » Future substantial need for recreation space is accommodated in a new facility collocated with athletics and the intramural fields along Riegel Road.
- » Wellness facilities dovetail with programs in the Seahawk Support Quad.
- » Respectful indoor/outdoor connection to Bluethenthal Wildflower Preserve provides unique opportunities for programming and views.

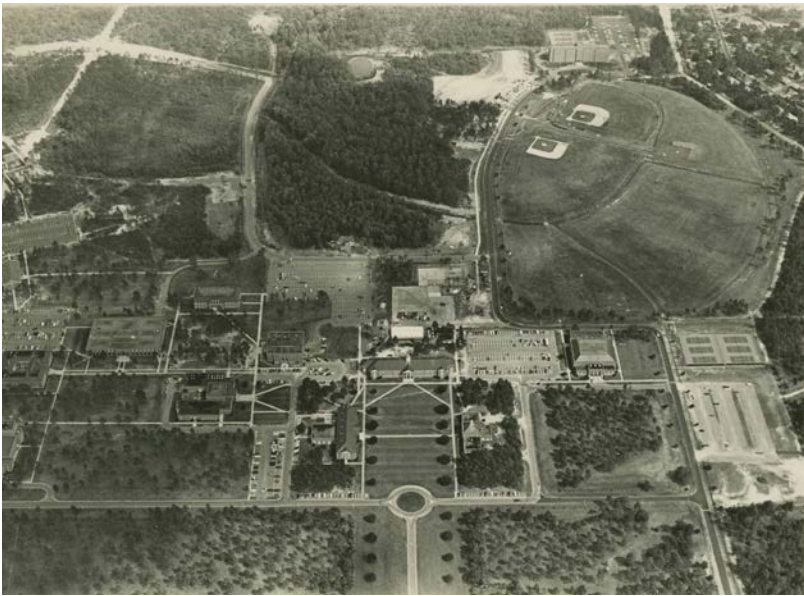
iv Price Drive Recreation Corridor

Price Drive is reconceived as a multimodal pathway to provide a safe and expedient route for bikes, skateboards, and scooters. It will provide limited use for service vehicles, transit vehicles, and short-term and accessible parking.

Bike parking facilities in key locations promote efficiency and prevent pedestrian conflicts. Integrated sustainable landscapes separate pedestrians and cyclists, and clearly marked paths incorporate wayfinding. New academic buildings on Chancellor's Walk also have frontage along the path to promote indoor/outdoor activity. Multiple landscaped seating nodes promote impromptu meetings, and two overlook spaces provide views into Bluethenthal Wildflower Preserve.



Historic Quad, 1964



Campus Aerial, 1974



Bluethenthal Preserve, 1991



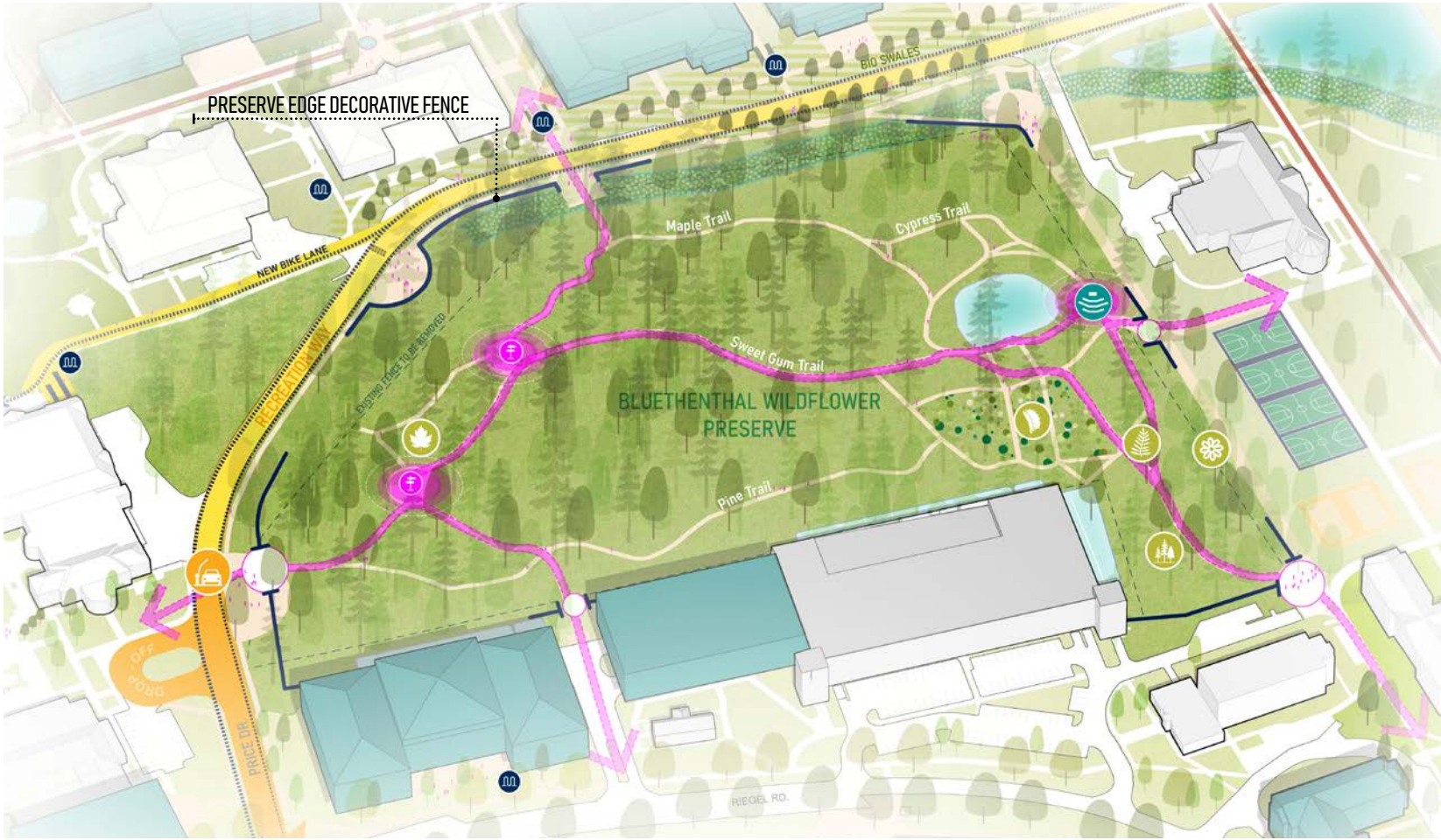
Bluethenthal Lily Pad Pond, 1991

BLUETHENTHAL WILDFLOWER PRESERVE HISTORY

Over the past 50 years, the university expanded eastward as the city of Wilmington grew, slowly reducing the quantity of the naturalized areas located around the periphery of campus. As this shift progressed, the naturalized areas of campus slowly consolidated to the campus core anchored by the Bluethenthal Wildflower Preserve in the heart of today's campus. The Campus Commons, Millennium Clock Tower and Amphitheater/landscaped stormwater ponds are located to the northeast; the student life and student support facilities directly east; the student recreation and dining to the west; and the Central Parking Deck to the south. An existing chain-link fence surrounding the Bluethenthal Wildflower Preserve limiting through access of this iconic campus space.

Originally dedicated in 1974, the Herbert Bluethenthal Memorial Wildflower Preserve was created to honor the memory of a successful Wilmington business owner.

"The university set aside about 10 acres of land behind Hoggard Hall and near the university's existing nature trail. New trails were created in order to grant easy access to areas that included excellent examples of the native flora of Southeastern North Carolina...The preserve is intended for use both by the public as well as students in fields such as biology." (Excerpt from "University dedicates Bluthenthal Wildflower Preserve," November 8, 1974, UNCW Special Collections and University Archives)



Enlarged Bird's Eye Diagram of Bluethenthal Preserve Enhancements



Existing Entry Point and Perimeter Fencing



Existing Bridge and Pond



Existing Bluethenthal Wildflower Preserve Trail

PRESERVE FEATURES

- | | |
|------------------------|------------------------|
| GATEWAY | BRACKEN FERN |
| BIKE RACKS | VENUS FLYTRAP |
| WAYFINDING + GATHERING | POCOSIN ECOLOGY |
| LIMITED ACCESS | CARNIVOROUS PLANT AREA |
| OUTDOOR CLASSROOM | INSECTIVOROUS GARDEN |
| RED MAPLE | WILDFLOWERS |

D Bluethenthal Wildflower Preserve

2024 is the 50th anniversary of Bluethenthal, providing the ideal moment to reimagine how its natural assets and research applications can be showcased for the campus and community. Greater but balanced access to Bluethenthal enhances campus connectivity with major paths conceived as raised boardwalks to provide accessible and environmentally sensitive routes. Formal and informal engagement nodes foster educational opportunities, research, and wellness within this unique campus resource.

Attributes include:

- » Four new gateway entries to allow connections to other campus districts
- » Outdoor classroom overlooking the pond
- » Smaller nodes for informal and educational gatherings
- » Interpretive signage and wayfinding telling the story of Bluethenthal and the regional context
- » Various garden spaces focused on native plants and ecosystems
- » Secondary discovery paths
- » Northwest and northeast overlooks into the preserve along Recreation Way
- » Limited fencing to direct visitors to dedicated entries and paths



OUTDOOR CLASSROOM + GATHERING



SHELTERED SEATING PAVILION



WAYFINDING, CAMPUS HISTORY,
+ PRESERVE INFORMATION DISPLAY



RAISED BOARDWALKS AT
PRIMARY CIRCULATION AXES



INTEGRATED SITE SEATING



ECOLOGICAL INFORMATION SIGNAGE

Residential Villages | Community Life

Vision

With a future goal to house approximately 40% of in-person students, the plan provides a flexible phased vision for short-term and long-term housing sites to add nearly 1,500 new beds. The overall vision is to strengthen the existing “Nest” Village with a new approximately 350-bed residence hall on the former Galloway Hall site and to provide multiple options for future housing communities. Potential redevelopment opportunities at the existing University Suites and Tin City sites would provide a denser and more efficient use of valuable campus land while creating distinct communities. Smaller infill sites provide longer term opportunities to expand and complement existing residential villages north of Wagoner Dining Hall.

The space in front of Wagoner Dining Hall at the terminus of Chancellor’s Walk is reconceived as an outdoor dining and social hub for the Residential District. Future buildings front the space and add ground floor student life spaces to further enliven the space. Connections to the Academic District are reinforced by multimodal paths at Cahill and Price Drives. The new Hawk Walk connects campus from north to south.

PRINCIPLES AND DRIVERS

CULTIVATE A SENSE OF BELONGING FOR ALL CAMPUS USERS

- » Create a welcoming, user friendly, and accessible environment at every scale from individual student rooms or suites to buildings and residential communities.
- » Utilize flexible, multi-use spaces open to the campus community at the ground level of buildings to foster community pride and to create distinct atmospheres for each residential community.

PROMOTE INTERDISCIPLINARY COLLABORATION

- » Promote cross-cultural and student/faculty engagement at the Wagoner Dining and Social Hub.
- » Program spaces at the ground floor of residential halls that invite innovation and collaboration beyond classrooms and social spaces such as maker spaces, music practice rooms and Esports venues.

ENHANCE UNCW IDENTITY WITHIN COMMUNITY + REGION

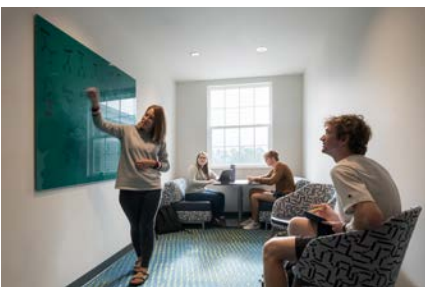
- » Create an outdoor dining and social hub at Wagoner Dining Hall for campus and community events.
- » Demonstrate institutional leadership in sustainability through woodlands and stream conservation and enhancing multimodal paths such as the Cross City Trail.

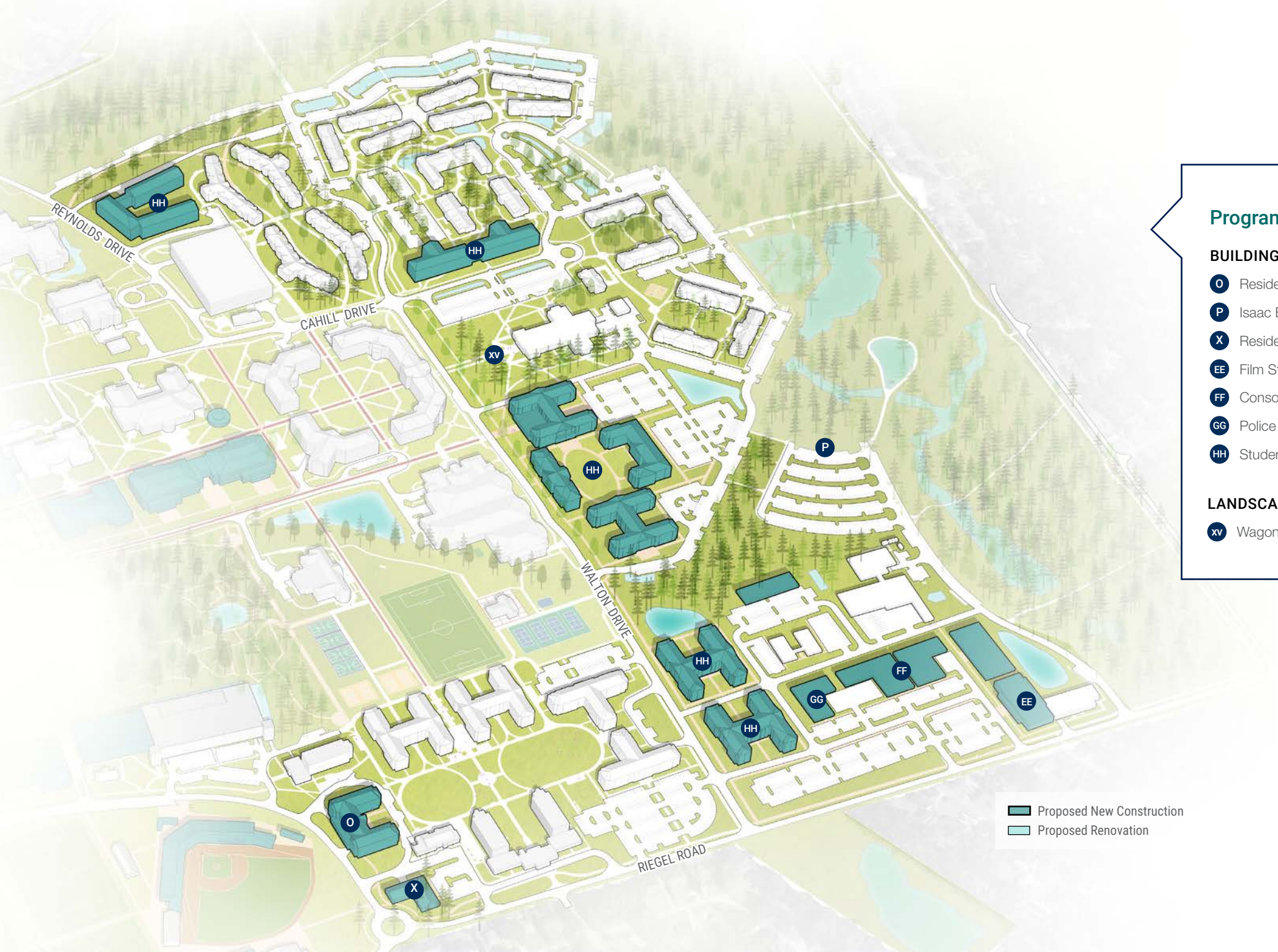
OPTIMIZE USE OF SPACE AND RESOURCES

- » Transform currently underutilized land resources into impactful living environments.
- » Consolidate support functions in Tin City into multilevel facilities with streamlined operations.
- » Preserve the natural buffer surrounding the Residential District for outdoor recreation and research.

ELEVATE CAMPUS EXPERIENCE AND CONNECTION

- » Strengthen multiple scales of community-building with a hierarchy of spaces ranging from civic scale to intimate courtyard.
- » Elevate the daily campus experience outside the classroom through dynamic residence life programming, vibrant social spaces, and creating strong connections to the campus core and natural areas.





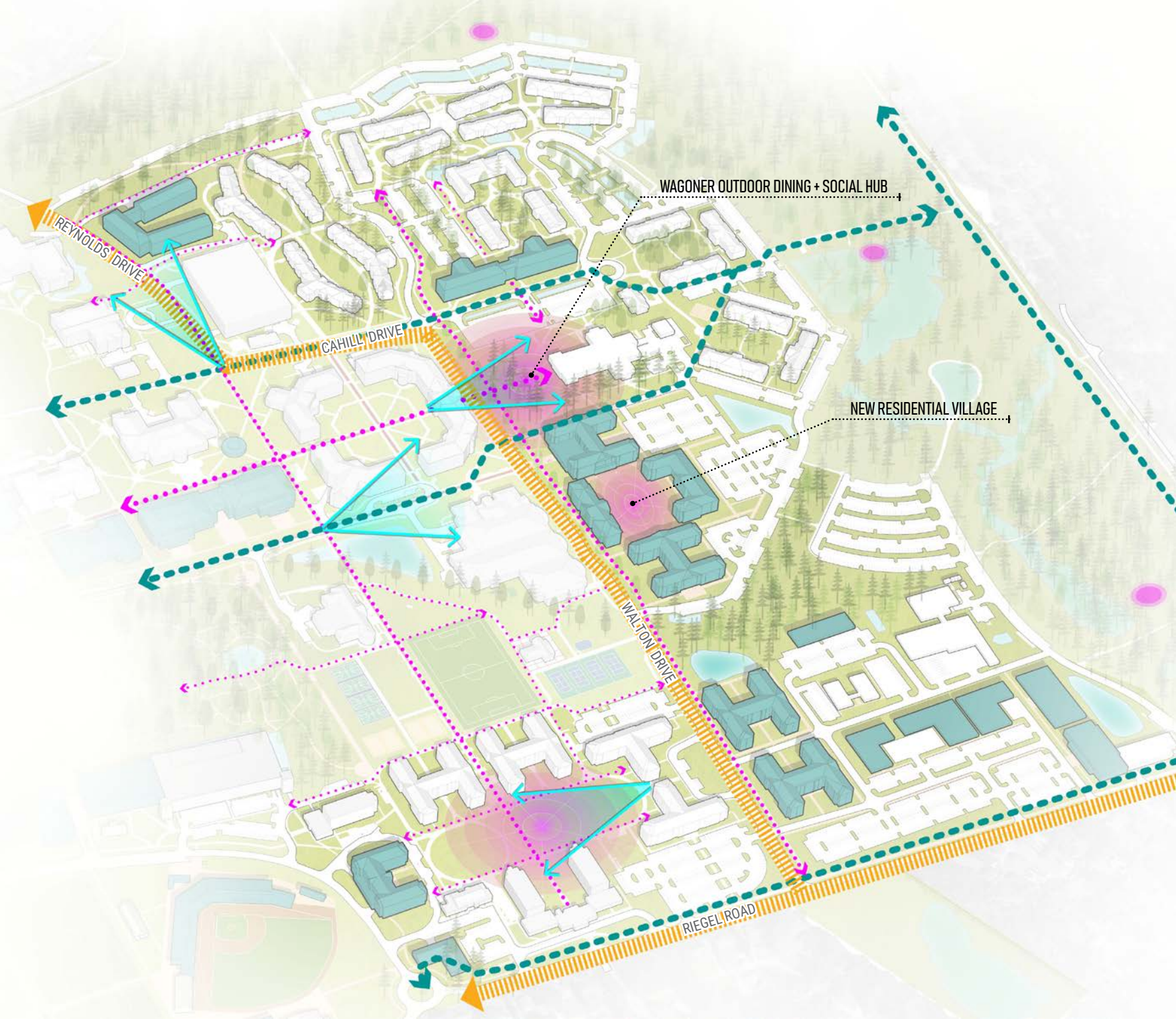
Program Implementation

BUILDING PROJECTS

- O Residence Hall on former Galloway Hall site
- P Isaac Bear Early College High School Planning
- X Residence Life Support
- EE Film Studies Addition
- FF Consolidation of Facilities + Support
- GG Police Station
- HH Student Housing

LANDSCAPE PROJECTS

- xv Wagoner Outdoor Dining and Social Hub



Framework + Key Concepts

Campus Edges

- » Stewardship of the natural woodland buffer preserves it as a valuable ecosystem and as a campus amenity for both outdoor recreation and research.
- » Enhanced entries along Riegel Road at Wood Dale Drive and Rose Avenue provide campus identity and aid in wayfinding.
- » The Cross City Trail runs along the south and east edge of campus providing a community amenity and is a convenient option for campus commuters.

Sustainable Landscapes

- » Natural areas are preserved and utilized for academic/research purposes, interpretive campus exhibits, and outdoor recreation.
- » A balance of usable lawn and field spaces and high performing coastal landscapes spur healthy lifestyles and enhance environmental resilience.

Campus Connections

- » The Residential District connects to the campus core via series of pedestrian paths, most importantly Chancellor’s Walk, and multimodal pathways at Cahill and Price Drives.
- » Riegel Road and Bluethenthal Wildflower Preserve pathways provide improved connections from the southeast corner of campus to the core.

Wagoner Outdoor Dining and Social Hub

- » As the east terminus of Chancellor’s Walk, this is a heavily trafficked area ripe for expanding its impact as an important campus space associated with a dining and events building.
- » Conceived as an outdoor extension of dining and event functions in Wagoner, this area could become a vibrant space to connect and socialize with informal seating among the trees, outdoor games, and a stage area for campus events.

- Proposed New Construction
- Proposed Renovation
- |||| Primary Vehicular Circulation
- Multimodal Circulation
- Primary Pedestrian Circulation
- Formal Green Space
- Pedestrian + Activity Nodes
- View Corridor



Key Project Recommendations

KEY BUILDING RECOMMENDATIONS

- O Residence Hall on former Galloway Hall site**
A new facility completes the Nest Residential Village, forming the west end of the quadrangle and fronting the east end of the Athletics Village. The ground floor houses student life and support spaces with an east facing programmable courtyard. The five-level building will have a similar density to Terrapin and Loggerhead Halls.
- X Residence Life Support**
A new Residence Life Administration Facility anchors the traffic circle at the Hurst Drive extension and Riegel Road intersection providing a prominent and identifiable location for this important support function adjacent to The Hub.
- FF Consolidation of Facilities + Support**
Conceived as a mixed-use environment, Tin City is redeveloped to include an extension of the Nest Residential Village with approximately 1,000 new beds, a more efficient institutional support campus, expanded and enhanced parking, and expansion of the University Film Center on Riegel Road
- HH Student Housing**
University Suites Site
A denser, more vibrant housing village of approximately 1,500 beds redevelops the University Suites site once the existing buildings reach the end of their usable life. This new residential village forms the south edge of the Wagoner Dining and Social Hub and features satellite student union space within close proximity to Chancellor's Walk, Recreation Way, and the Campus Recreation Hub. A central quad creates an outdoor community space for residents.

Additional sites provide expanded housing options within a small footprint, extend the identity of the residential village to which they are associated, and facilitate campus connections.



campus infrastructure



SUSTAINABILITY

MULTIMODAL ANALYSIS AND PARKING

UTILITIES + INFRASTRUCTURE

Sustainability

Goals and Values

The university is committed to sustainable design and practices. UNCW has developed an Office of Sustainability that frequently works with campus partners to collect data on campus activities to accurately report on UNCW's sustainability initiatives. The broad goal of creating a sustainable campus affects all aspects of this master plan. From sustainable land-use strategies, use of existing infrastructure and energy conservation, to sustainable transportation, this master plan emphasizes an integrated approach to infrastructure planning.

Core Values of the office are:

RESILIENT

- » With the support of campus community partners, we are working to conserve the natural beauty of our campus through nature-based infrastructure projects.

ENGAGED

- » Our Sustainability Peer Educators engage the campus community to educate and inform about sustainability initiatives across campus.

RESPONSIBLE

- » We offer applied learning opportunities to provide students the opportunity to see how they interact with the world through the lens of sustainability.

RESOURCEFUL

- » We sponsor events that allow students to give back and support the community through volunteerism, donations, and food drives.

The office currently:

- » Inventories greenhouse gases that focus on either carbon or nitrogen foot-printing.
- » Participates in The Association for the Advancement of Sustainability in Higher Education's STARS reporting. UNCW holds a Silver Ranking and will submit the summer of 2024 to renew the certification, which enhances UNCW's identity within the community and region.

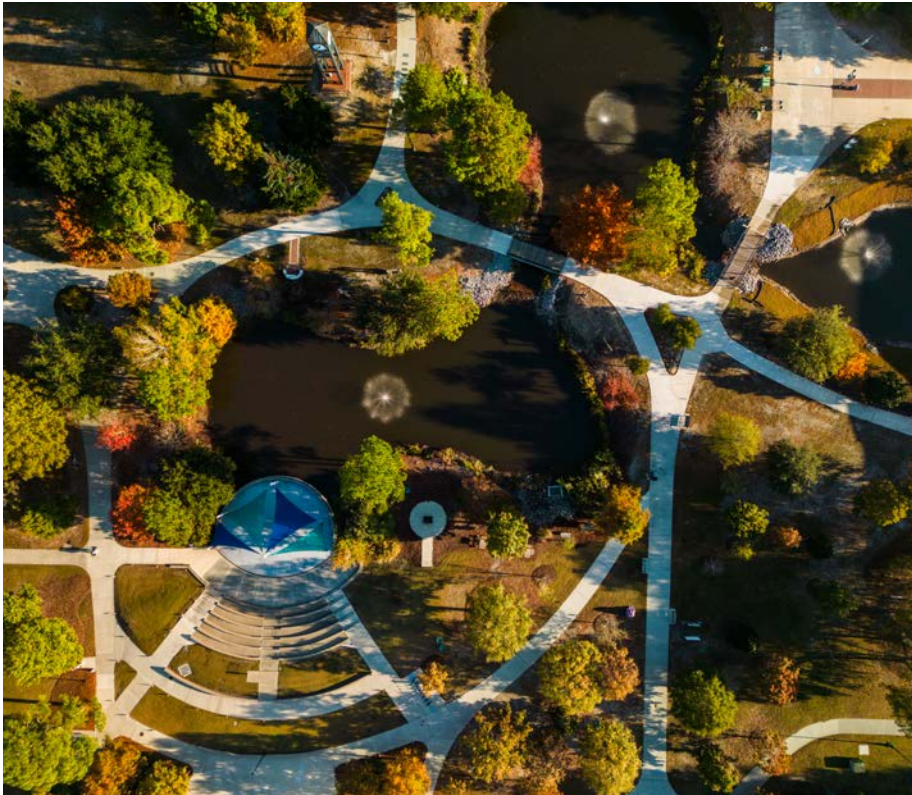


resilient

engaged

responsible

resourceful



Infrastructure Sustainability Summary

The following outlines recommendations for how sustainability initiatives for the various disciplines can be applied. Some of these installations are functional while others are used to provide hands-on educational opportunities. The university has already implemented many progressive technologies to decrease independence on non-renewable energy sources, including:

- » Geothermal wells under recreational and athletic fields
- » Photovoltaic polar panels
- » Carbon offsets sequestering ±173 metric tons of carbon annually
- » Reduced emissions planning
- » Rain gardens treating over 322,000 gallons of stormwater every time it rains



Landscape Sustainability Summary

GOALS

- » Improve overall campus environment and aesthetic appeal
- » Improve campus edges with landscape to strengthen UNCW identity/brand
- » Integrate parking into the campus environment more appropriately by incorporating visual buffering and green space within lots
- » Reinforce campus physical structure and primary circulation routes with landscape
- » Provide a variety of options of spaces for people (sizes and types) to gather that are visually appealing and desirable to use; promote social interaction
- » Enhance natural areas to encourage use by students and the community; promote campus environment as a unique asset within the community
- » Promote sustainability and be responsive to aesthetic, academic, function and maintenance capabilities
- » Continue best management practices for stormwater management into landscape design

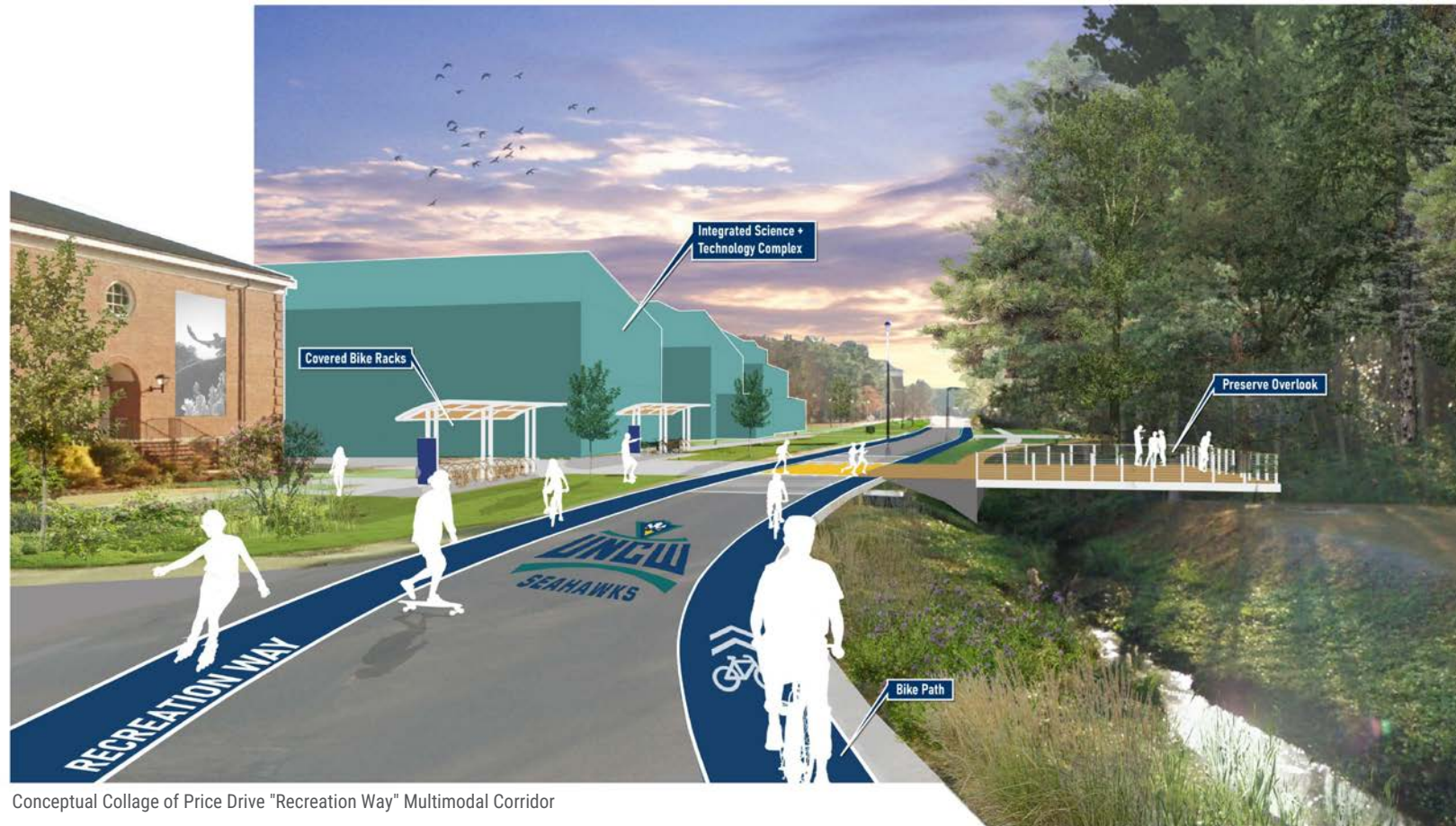
Sustainability practices for landscape can be achieved in multiple ways and to varying degrees. Landscape sustainability practices should be a consideration for every new development on campus.

- » When appropriate, provide attractive rain garden areas to reduce stormwater runoff and its effect on overall campus stormwater management
- » Consider stormwater infiltration systems in lieu of (or to minimize) stormwater piping and structures to manage stormwater

Sustainability practices associated with landscape design/planning should include:

- » Specification of shrub/plant varieties that are drought tolerant to reduce watering requirements. Also, specification of plant material that is naturally limited to grow to the desired size and form intended and not require extensive pruning to maintain size and/or shape.
- » Specification of drought tolerant seed mixes to minimize turf watering requirements. Use of meadow lawn mixes in lieu of finished lawn where appropriate.
- » Selectively review and plan which turf areas on campus get mowed. Often turf areas are mowed out of “habit” and could be left as meadow lawn. The definition of mowed finished lawn and unmowed meadow lawn should be done as a designed effort, providing a balanced interplay between the two.
- » Incorporation of “rain garden” or bio-detention areas for collection of stormwater runoff that are significant and designed as a feature of the landscape. These areas should be strategically located and designed as a part of an overall stormwater management strategy and landscape design concept. They should be visually attractive and include varieties of plants tolerant of wet and dry conditions. Recharging ground water and reducing the effect of overall stormwater runoff are benefits of incorporating bio-detention areas.
- » Strategically plan locations of retention ponds to hold water and utilize pond water for irrigation where appropriate. Include installing a well as part of the system to provide makeup water in the pond to maintain a desired water level.

Multimodal Analysis and Parking



Conceptual Collage of Price Drive "Recreation Way" Multimodal Corridor

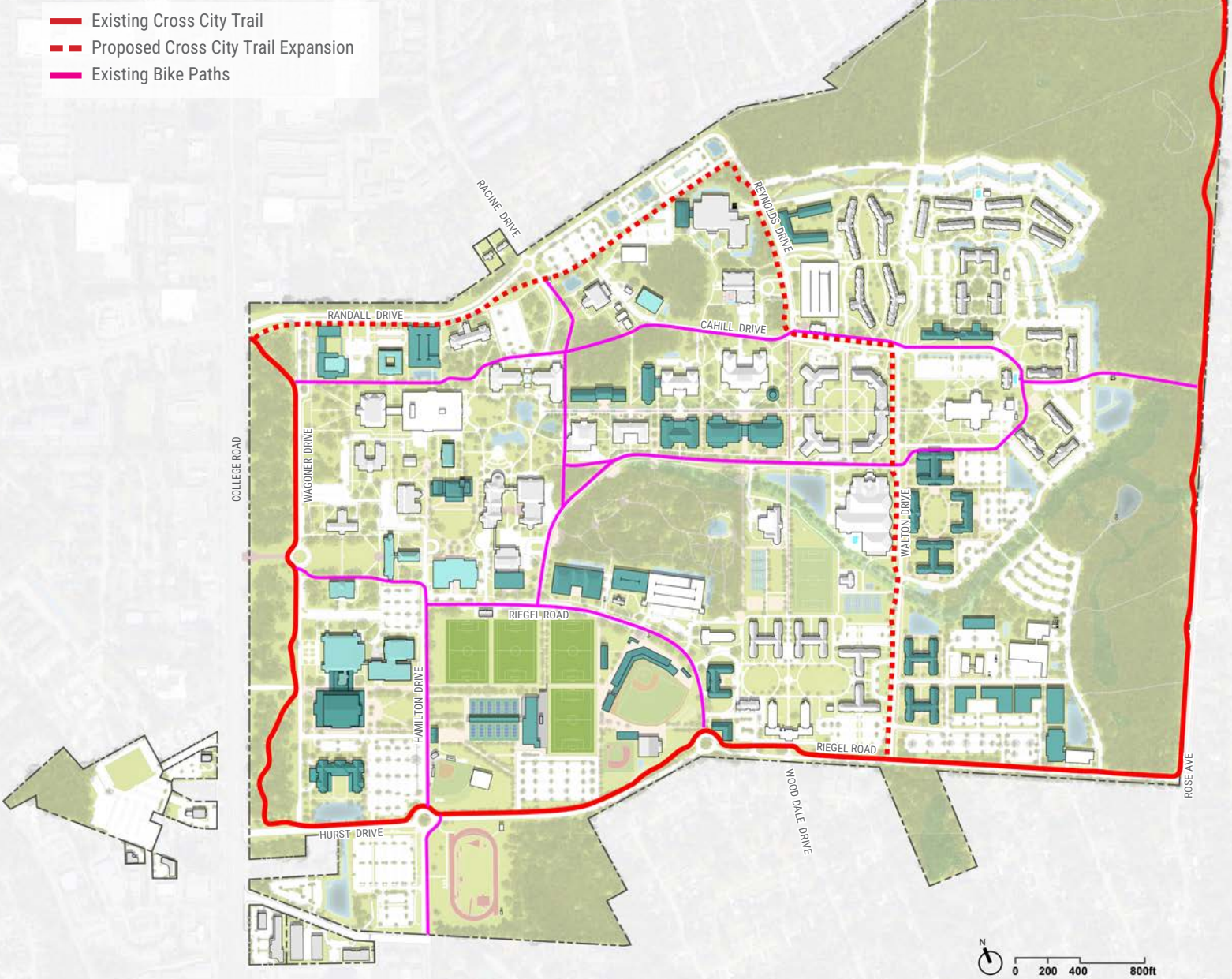
The multimodal transportation network was integrated into the master planning efforts, working to enhance existing circulation and create seamless connections within the campus and to the surrounding community. The Master Plan suggests an evolution of the transportation network on campus, focused on accommodating forecast enrollment growth through sustainable mobility, improving safety for pedestrians and bicyclists, and working to establish UNCW as a leader in sustainable transportation. This section addresses bikes and micromobility, vehicle circulation, parking and transportation demand management (TDM). To accomplish the vision for a sustainable, multimodal transportation network, the plan recommends numerous bicycle and micromobility network connections, continued emphasis on transit accessibility, and other demand management programs and policies outlined in this section.

Bikes and Micromobility

The plan addresses a number of improvements for bicycle and micromobility (scooters, skateboards, and other low-speed mobility devices) users.

PRICE DRIVE MULTIMODAL CORRIDOR

- » The central improvement for bikes and other micromobility devices is the further calming of Price Drive and restriction of general purpose traffic. The change helps to fill in a gap in the network and provide a higher-capacity connection near the campus core, adjacent to many key destinations. At the same time, the improvements eliminate the need for bicycles and micromobility devices to operate along the length of Chancellor's Walk, improving pedestrian safety and the overall pedestrian experience.
- » The plan recommends converting Price Drive to a multimodal corridor by controlling vehicular access and providing a new drop-off circle at the Fisher Student Union. This design also includes adding multi-use path connections at either end of the corridor, creating convenient access for micromobility users traveling through this area to destinations north and south. The design recommends key locations for bicycle and micromobility storage at entry points to Chancellor's Walk and Fisher Student Union.



CAMPUS BICYCLE CIRCULATION

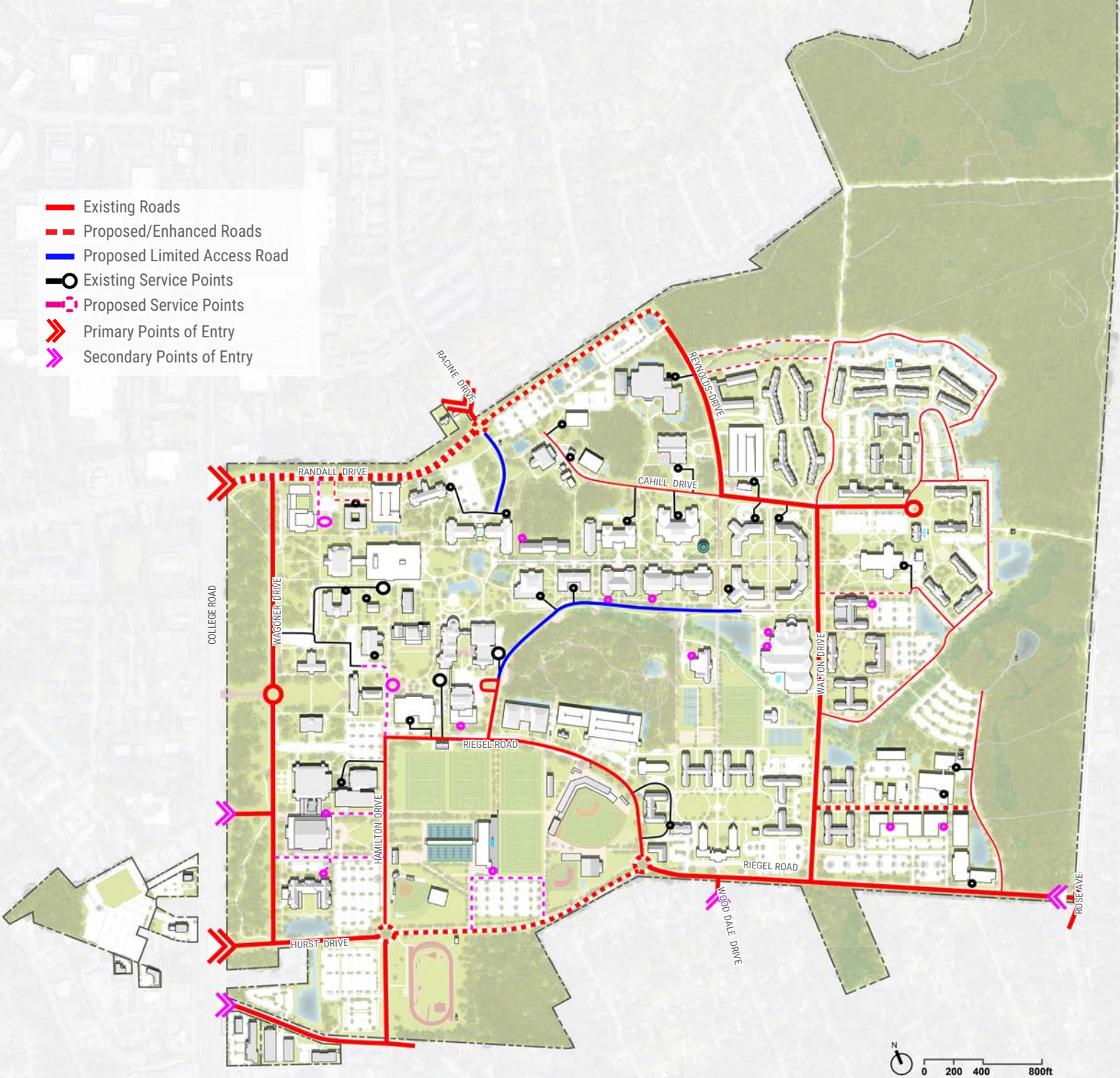
» The plan prioritizes the preservation and enhancement of the Cross City Trail multi-use path (MUP) along the new roadway connecting Riegel Road and Hurst Drive. Additionally, this plan calls for a new north-south connection from Reynolds Drive and Cahill Drive to the residence halls along Riegel Road. This provides a safe, convenient alternative to Walton Drive for bicycle and micromobility users and connects two existing MUPs.

CROSS SECTIONS AND RANDALL DRIVE

» The Master Plan calls for an enhanced vision for bicycle lanes on existing road segments where MUPs are not present. Additionally, the Randall Drive enhancements envision a bicycle and micromobility connection to the existing on-street bicycle lanes on Randall Parkway, west of College Road. The intersection of Randall Parkway/Randall Drive at College Road is a key gateway to the campus. This design prioritizes improving the safety and connectivity for micromobility users at this gateway, tying into existing city facilities.

BIKES AND MICROMOBILITY SUMMARY

These improvements provide key, seamless integration with the surrounding community, connecting the Cross City Trail, Randall Drive, and Racine Drive with navigable multimodal routes that limit conflict and preserve low-speed mobility activation on the interior of campus. Off-campus visitors from the south and east can utilize the Cross City Trail connections into the new Price Drive Multimodal Corridor, and off-campus visitors from the west will have improved facilities on Randall Drive, consistent with the Randall Parkway facilities, as well as a contiguous facility when coming from the Fountain Drive MUP extension. As users enter the interior of campus, they will have convenient storage options near their destinations to limit the conflict between users and keep Chancellor’s Walk a priority pedestrian zone.



Vehicular Circulation

Vehicular Circulation

The plan proposes limited modifications to the campus vehicular network. The plan aims to bolster the pedestrian-focused core of the campus by reducing the number of everyday vehicles using these streets. At the same time, enrollment growth is anticipated to require an increase in the amount of parking on campus, necessitating improvements to roadways to ensure that students and employees can continue to enter and depart the campus in a safe and efficient manner.

The most significant change will be the extension of the loop road from Hurst Drive to Riegel Road. This extension serves a dual purpose of facilitating access to destinations around campus and limiting the through traffic connecting to the interior of campus. The new road connectivity is intended to slow vehicular traffic in the interior of campus, as these destinations are primarily parking garages. Additionally, the conversion of loop road intersections to roundabouts is intended to facilitate circulation and slow vehicular through traffic. The widening of Randall Drive and the new parking deck at the northern gateway to campus is intended to ease congestion and limit the volumes on roads in the southern portion of campus. Traffic queues on westbound Randall Drive at the intersection with College Road routinely extend to the east, impacting movements at the intersection of Randall Drive at Wagoner Drive. It is recommended that the northbound left-turn movement from Wagoner Drive onto westbound Randall Drive be restricted. Shifting the roadway on Randall Drive to the north exterior of the parking lots is intended to facilitate circulation and access for users of this parking facility.

These improvements provide access and connectivity improvements to key destinations for vehicle travel, while also signaling a context change designed to reduce vehicle speeds to improve the travel experience of all road users. The use of roundabouts throughout the loop road will reduce travel speeds and overall delays for vehicles while enhancing the multimodal role of these roads.

Parking

While the plan aims to minimize the amount of new parking required, the program necessitates the construction of several new facilities to accommodate both enrollment growth and the loss of surface lots to new campus buildings.

PARKING SUPPLY

» The plan’s proposed parking facilities show a net gain of 358 spaces over the 10-year plan horizon. The plan builds nearly 3,000 new spaces to offset the loss of 2,600 spaces and accommodate modest growth in parking supply.

Parking Spaces	
Current Year (2024)	9,587
Plan Losses	-2,609
Plan Gains	+2,967
Net	+358
Build Year Total	9,945

PARKING DEMAND

» Parking demand was calculated based on current space allocation and estimated demand rates on a per capita basis. Overall enrollment is estimated to increase by 22%. However, there will be a non-proportional increase in on-campus housing beds suggesting that parking demand may not be proportional. Additionally, the 100-key hotel will necessitate approximately 100 dedicated spaces if it is to operate in line with industry standards. Note that parking for the conference center guests is assumed to be accommodated within existing transient parking supply. Using these demand calculations, the plan has a deficit of approximately 1,726 spaces, based on the current allocation and use of parking supply.

» For overall demand estimations, the plan evaluates and assumes to hold constant the existing breakdown of student and non-student spaces within the commuter and resident lots. The spaces for the hotel were extracted and held as reserved for the hotel. The following table summarizes the parking demand and supply by space type for each of the three time horizons (existing, five years and build-out). These calculations include faculty/staff spaces in residential lots. The overall shortfall is nearly 1,500 spaces, though the majority of this is on the residential side where there can be more flexibility in demand. It is worth noting that a proportional increase in spaces would have estimated a higher demand and greater shortfall (in excess of 1,700 spaces).

	Demand		Supply		Net	
	Commuter Spaces	Resident Spaces	Commuter Spaces	Resident Spaces	Commuter Spaces	Resident Spaces
Today (2024)	4,951	4,576	4,951	4,576	0	0
+ 5 Years (2029)	5,150	4,913	4,814	4,544	-336	-369
Build Year (2033+)	5,529	5,854	4,894	4,977	-635	-877





Parking Diagram

PARKING SUPPLY SUMMARY

The plan avoids substantial increase in the total campus parking by focusing net losses on residential parking supply. While lower than market rates, the overall provision of parking is well within peer institutions. In total, the plan reduces resident supply from roughly 89% of residents to 75% of residents. Moreover, as most resident cars are simply stored, the reduction in parking will go unnoticed by many and is often an inconvenience rather than a hardship. Many institutions park residents at lower rates and have achieved reductions in supply through the use of policies and pricing. This limitation in additional parking is often essential to keeping on-campus housing costs at or below market rates.

PROJECT PHASING

Parking deficits are further contextualized by looking at project phasing based on horizon year in the plan. Net losses and gains are summarized in the table below. It is essential, however, to continue to work closely with Parking & Transportation Services to understand phasing and ensure that projects are brought online in a timely manner. Particularly as the university nears full parking utilization, there will not be availability to take spaces offline without first replacing them elsewhere. It is also important to note that nearly all of the net gains in parking are slated to be realized after the 10-year plan horizon.

Horizon	Parking Supply Net	Demand Growth
0-5Y	-174	+536
5-10Y	+170	+1,320
10+	+362	0*
Grand Total	358	+1,856

OCCUPANCY

Based on conversations with staff, lots are currently 80-90% occupied for non-resident spaces, and nearly 100% occupied for resident spaces. Overall, campus parking spaces are about 87% occupied on a typical day. This amounts to a daily availability of about 1,150 to 1,250 spaces. This excess allows for daily churn of spaces, hosting of special events, and provides some buffer against lot closures (permanently or temporarily). A typical target ratio for a university is 90-95% occupancy, with occupancy varying by user-type. Overall, the current inventory represents some excess of space which could be used to help satisfy the anticipated parking shortfall.

If one assumes a conservative target occupancy of 90% for commuter spaces and 100% for resident spaces, the parking picture changes dramatically. At build-out, there would be a shortfall of just 82 spaces for commuters, a number that could be reduced through the use of demand management. (And at current occupancy levels of 88% the plan would yield a modest excess.) Similarly, additional commuter capacity could be gained through reassignment of existing or planned resident spaces. As noted previously, there would be a substantial reduction in the amount of per capita resident spaces, but one that should be achievable.

	Demand		Supply		Net	
	Commuter Spaces	Resident Spaces	Commuter Spaces	Commuter Spaces	Resident Spaces	Commuter Spaces
Today (2024)	4,456	4,576	4,951	4,576	+495	0
+5 Years (2029)	4,635	4,913	4,814	4,544	+179	-369
Build Year (2033+)	4,976	5,854	4,894	4,977	-82	-877

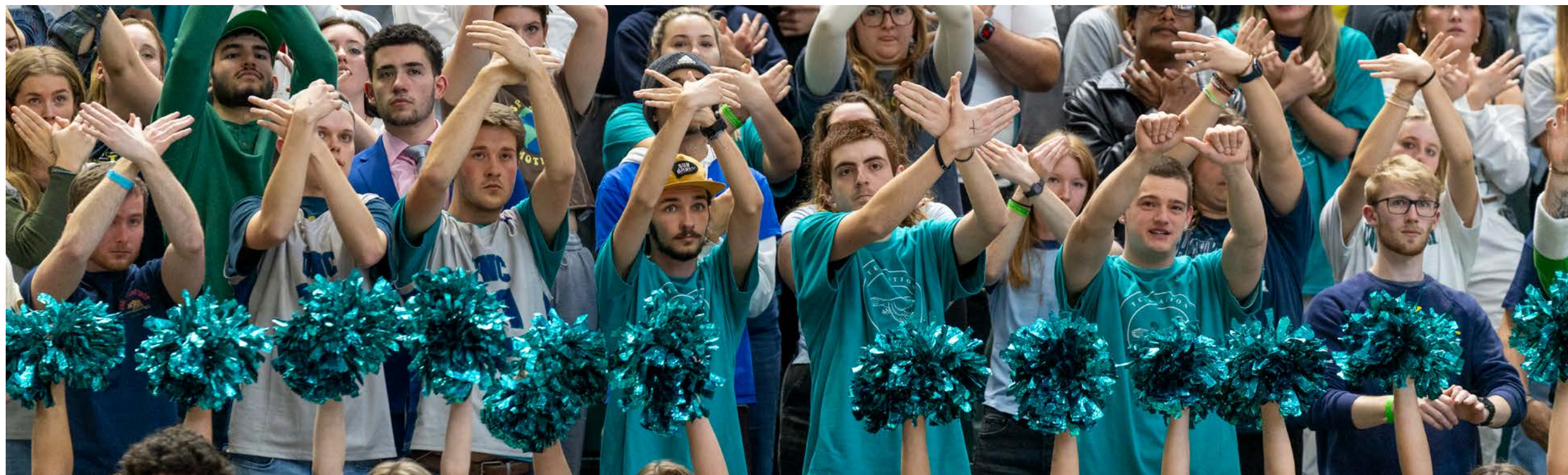


Special Events

While the plan proposes replacement of Trask Coliseum, the anticipated capacity is similar to the current capacity. Visitors may park in slightly different lots than at present but, operationally, there should not be a challenge accommodating Trask events during evenings and weekend.

As noted above, most of the existing excess parking capacity on campus will disappear over the course of the plan and demand increases will likely outstrip new supply. The arena will require approximately 1,600 parking spaces to accommodate patrons, well within the total campus supply. Whereas today, the excess of 1,100-plus spaces would allow for a reasonably-sized weekday daytime event at the Coliseum, such events in the future will be challenging, if not impossible, without changes to parking management to increase the amount of available parking on a typical day.

Similarly, other campus events will require ongoing management and coordination to ensure that they can be accommodated within the envelope of available spaces on a typical day.



Demand Management

In order to accommodate the sustainable vision for UNCW and the parking impacts outlined in the previous section, the university should emphasize demand management while focusing on the mobility of all modes of travel. Each of the strategies in this section includes action items arranged from lowest investment and potential return to highest investment and potential return.

TRANSIT

The Seahawk Shuttle, operated by WAVE Transit, connects nearby neighborhoods with the UNCW campus. To facilitate the continued and expanded use of transit to campus, the university should:

- » Optimize Seahawk Shuttle routes and service hours.
- » Improve existing on campus Seahawk Shuttle shelters/depots.
- » Improve off campus Seahawk Shuttle shelters.
- » Add new Seahawk Shuttle routes.
- » Add park-and-ride facilities and frequency.

OFF-CAMPUS MICROMOBILITY CONNECTIONS

Physically connecting the campus with the surrounding network of sidewalks and MUPs is a priority outlined in the previous section. The plan calls for robust consideration of on-campus multimodal facilities and connections. The university should also work with partnering agencies in Wilmington to ensure ease of access to campus for all modes:

- » Continue to promote bike-share; increase availability of bike-share and shared mobility options.
- » Optimize on-campus storage options for shared- and micromobility modes.
- » Partner with regional agencies to install wayfinding signage for different modes accessing campus from off-campus.
- » Ensure bicycle and micromobility access is prioritized for the new Kerr Avenue Trail extension and the Cross City Trail at Randall Parkway.
- » Work with NCDOT and regional agencies to add crosswalks, pedestrian signals and refuge islands at all approaches on College Road at Randall Parkway, University Drive, Crews Drive and Hurst Drive.

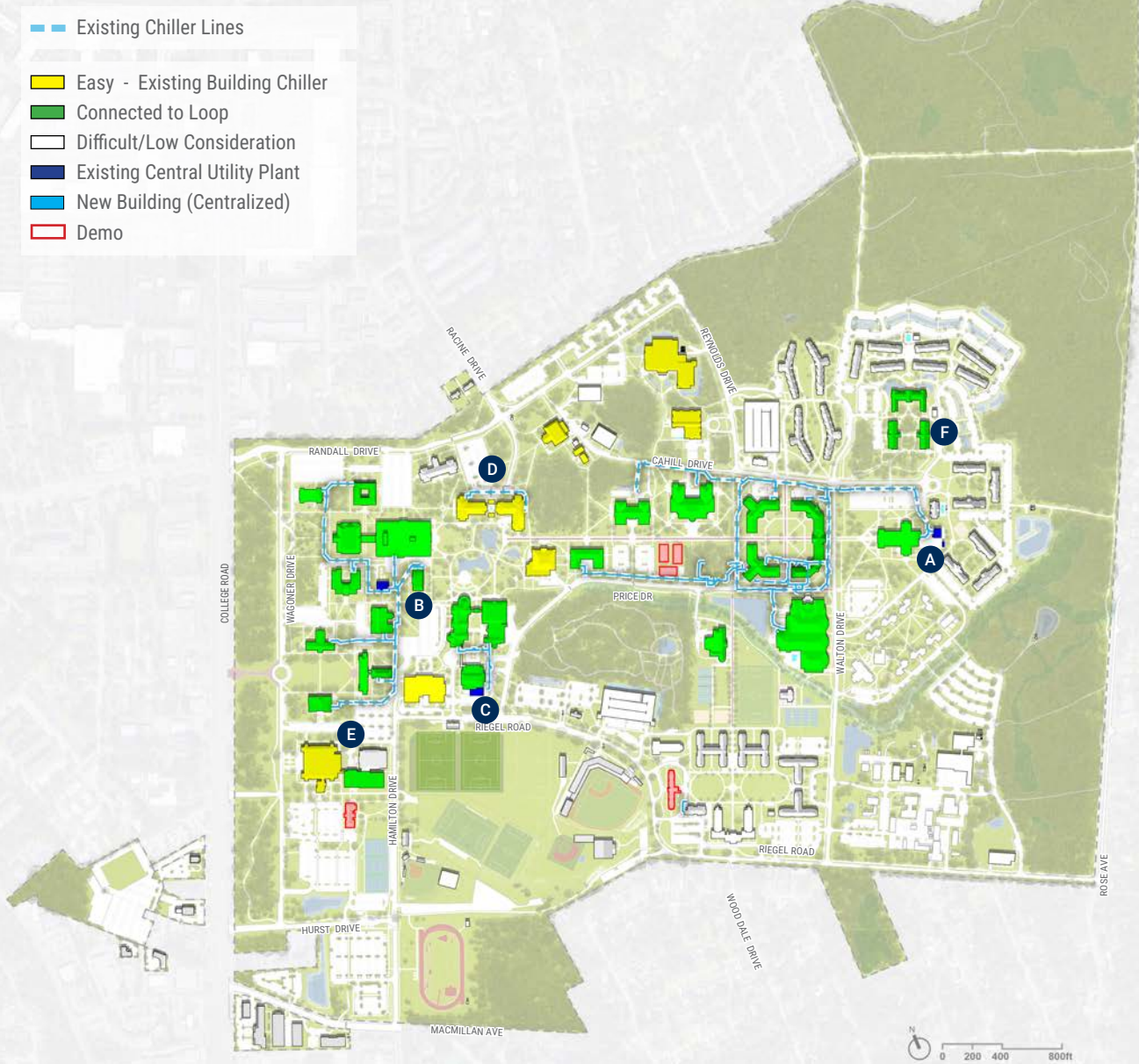


OTHER DEMAND MANAGEMENT STRATEGIES

- » Other strategies include parking policy updates, car-share and off-campus vehicle storage:
- » Explore updates to parking permit system, including limited or eliminating first-year permit access, changing permitting fees and demand pricing by storage location.
- » Increase promotion of carpool and ride-sharing, including priority parking location and drop-off.
- » Add car-sharing programs such as Zipcar.
- » Work with regional agencies to increase access to and amenities at off-campus park-and-ride locations.
- » Identify locations for new resident student storage parking facilities off campus.



Utilities and Infrastructure



Chilled Water Diagram

Chilled Water - Existing

SUMMARY

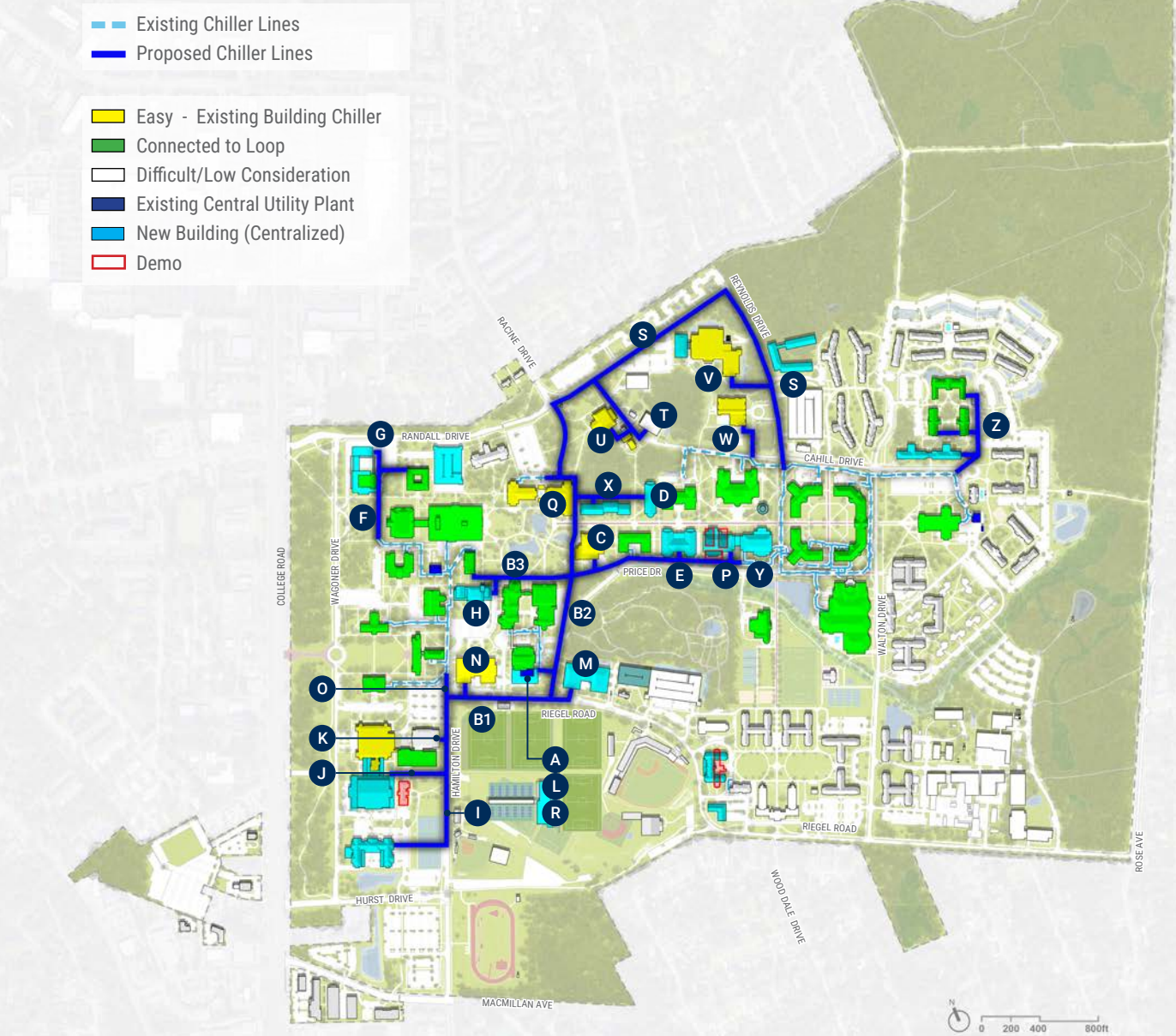
There are two regional central energy plants (CEP) that provide chilled to many campus buildings:

- A** Wagoner/Dobo CEP provides chilled and/or hot water to Cameron, Dobo, Leonard Student Rec, McNeil, Sartarelli, Shore, Teaching Lab, Veterans and Wagoner. The Wagoner/Dobo CEP work as a “virtual plant” to share the cooling load. Centrally produced hot water only occurs at the Wagoner CEP. The chilled water installed and firm capacities (N+1) at Wagoner/Dobo are 3,400 tons and 2,220 tons, respectively.
 - B** Westside CEP provides chilled and/or hot water to Alderman, DeLoach, DePaolo, Hoggard, James, Kenan Auditorium, Kenan, King and Randall. The chilled water installed and firm capacities at Westside are 1,800 tons and 1,200 tons, respectively.
- There are 4 small clusters of buildings that share locally generated chilled water. These buildings are candidates to connect to larger central chilled water systems.
- C** The Burney Center, Fisher Student Center and Fisher Union receive chilled water from Burney. The chilled water installed and firm capacities at Burney are 800 tons and 400 tons respectively. There is room at Burney for an additional 400 ton chiller and tower, and 2,000 MBH water heater. Conceptually, the chilled water installed and firm capacities at Burney could be 1,200 and 800 tons respectively.
 - D** Leutze and Morton share a common chilled water system served by chillers in Leutze. The chilled water installed and firm capacities are 260 and 135 tons respectively.
 - E** Allen Natatorium, Nixon Annex and Trask Coliseum receive chilled water from Allen Natatorium. There is 570 ton -hours of thermal ice storage as well.
 - F** Cornerstone, Innovation and Honors residence halls receive chilled water from a common plant east of Cornerstone. The chilled water capacity and firm capacity is 500 tons and 250 tons respectively.

Alderman, Bear, Cameron, Congdon, Cultural Arts, DeLoach, Dobo, Education, Friday and Warwick have a building level chillers and all are candidates to connect to larger central chilled and hot water systems.

Seahawk Crossing, Seahawk Landing, Seahawk Village, University Suites, P3 residential community and Tim City have highly decentralized HVAC systems that do not easily connect to chilled or hot water systems of any size and are not candidates to connect to central systems.

The Wagoner/Dobo and Westside CEPs are fully built out and unable to provide meaningful additional capacity. The 4 sets of cluster buildings that share local chilled water are too small and lack space to expand in a manner that support a centralized system. In aggregate, the central chilled water capacity and firm capacity are 5,200 and 4,000 tons respectively.



Chilled Water Diagram

Chilled Water - Future

The two regional CEPs described above will provide the backbone for continued development of central chilled water. The current chilled water demand is approximately 5,000 tons. This includes buildings connected to the Wagoner/Dobo and Westside CEPs, the cluster buildings referenced above and buildings with individual chillers. The masterplan identified 3 planning windows: 0 to 5 years, 6 to 10 years and 11+ years. The chilled water demand in these windows is estimated at 6,800, 8,100 and 9,400 tons, respectively.

Two critical infrastructure elements are required to support a central chilled water system. First, a new chiller plant with the appropriate scale and ability to expand is required. The parking area at Burney was identified as the preferred location. The Burney plant will be fully built out with 4 chiller bays, each sized for 1,500 ton chillers. The initial build will include two 1,500 ton chillers and subsequent phases will add the remaining chillers. Second, the Wagoner/Dobo, Westside and new Burney plants are to be interconnected. This will reduce the total amount of chilled water equipment, maximize resiliency and support extended preventive maintenance outages. The chilled water system will develop in response to the overall campus development. Aligning with campus development, the following is expected:

RECOMMENDATIONS - 0 TO 5 YEARS

- A** Phase 1 Burney CEP: 9,000 SF full build-out, 2 x 1,500 ton chillers, space for 2 x 1,500 ton chillers
- B1** Extend 12" to 16" chilled water mains from Burney to Hanover, Nixon Annex, Trask and Allen
- B2** Extend 20" to 24" chilled water mains from Burney and connect Wagoner/Dobo CEP at Sartarelli
- B3** Extend 12" to 16" chilled water mains and connect Westside CEP at Westside CEP
- C** Extend 16" main connect Congdon to the central system
- D** Extend 16" chilled water service and connect Business + Technology Center to the central system
- E** Replace chilled mains from Sartarelli with 12 to 16" and connect ISAT 1 to the central system
- F** Replace the existing chilled water service to 8" to support the Kenan Auditorium Addition
- G** Extend the existing chilled water service and connect the Welcome Center to the central system
- H** Connect the new Academic Success Center to the central system
- I** Extend 12 to 16' chilled water mains from Burney to the new Hotel and Conference Center
- J** Connect the new Indoor Sports Arena to the central system
- K** Connect Hanover, Nixon Annex, Trask and Allen to the central system

Recommendations continued on following pages.

RECOMMENDATIONS - 6 TO 10 YEARS

- L Phase 2 Burney CEP: Add a 1,500 ton chiller in the shell space – Burney capacity is now 4,500 tons
- M Connect new Student Recreation to the central system
- N Connect Warwick to the central system as part of the building renovation project
- O Connect chilled water loop going to James Hall to reinforce the loop
- P Replace chilled mains from ISAT 2 with 16” and connect the new Academic Health Science Building
- Q Extend 16” chilled mains from Congdon and connect Luetze and Morton to the central system

RECOMMENDATIONS - 11+ YEARS

- R Phase 3 Burney CEP: Add final 1,500 ton chiller in the shell space – Burney capacity is now 6,000 tons
- S Extend 16” chilled mains from Luetze along Racine/Randall/Reynolds to the main on Cahill
- T Connect Future Academic Support Building to the central system
- U Connect Friday Hall when Academic Support Building is constructed
- V Connect Cultural Arts to the central system with Cultural Arts Addition
- W Connect Education to the central system
- X Connect ISAT 2 to the central system
- Y Connect Future Academic Building to the central system
- Z Potentially connect new residential buildings and Cornerstone, Innovation and Honors residences

ADDITIONAL CONSIDERATIONS

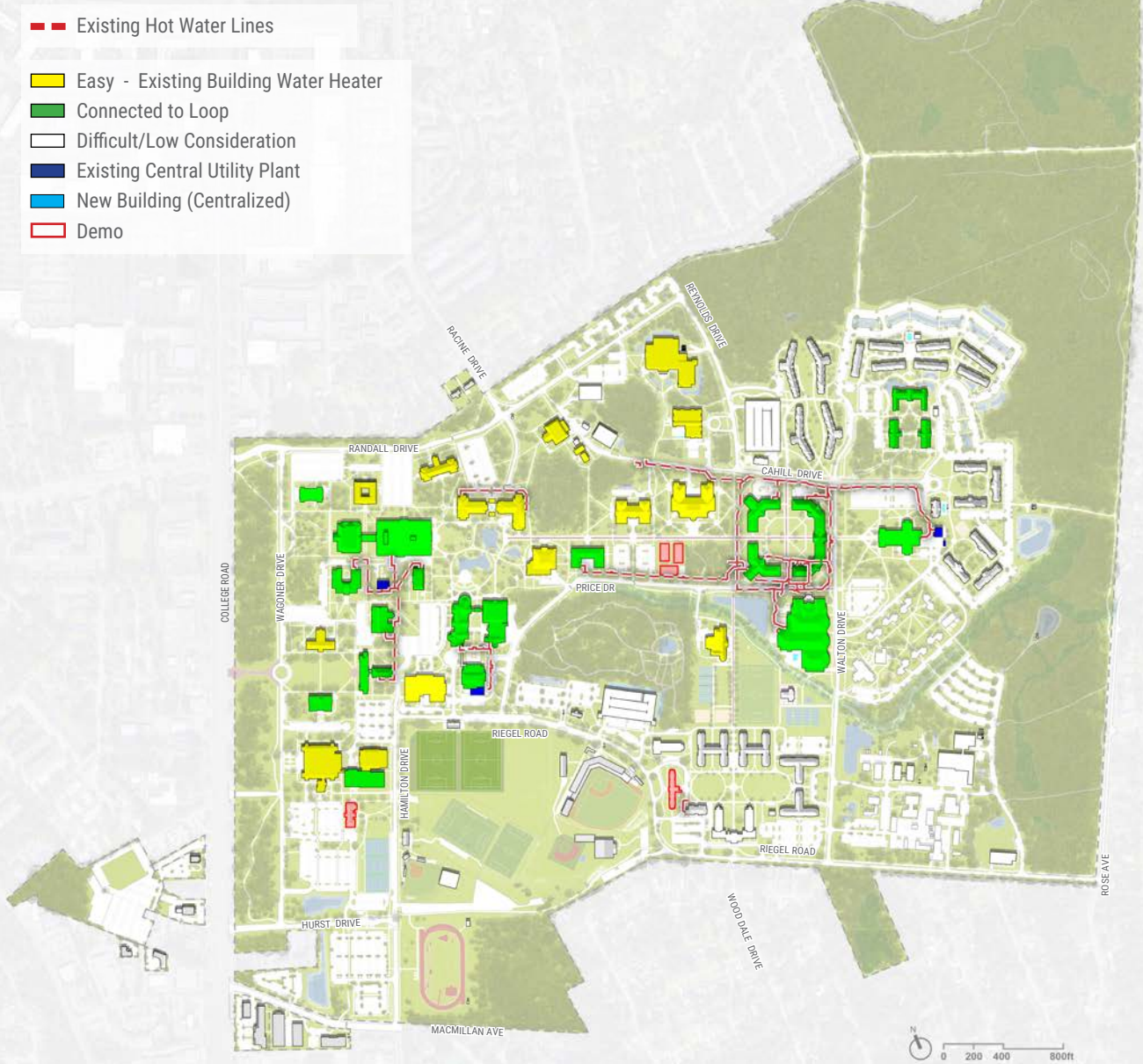
Connecting all the new residential buildings, including Cornerstone, Innovation and Honors is beyond the planning window as is the redevelopment of Tin City. Should all of this or similar development occur, there would be a need for a fourth chilled water plant in the 3,000 ton range. That location is likely within the footprint of Tin City. This plant would interconnect with the central system along Walton Drive.

UNCW provides building level cooling capacity for critical loads. Dobo contributes to the Wagoner/Dobo capacity under normal conditions but can operate in island mode to support just the labs in Dobo. UNCW Library Addition uses redundant packaged DX systems to condition the special collections area. Veterans Hall has exterior chilled water pipe connections and power source that readily connect a temporary chiller. Although not a frequent condition, this approach will continue on a case-by-case basis.

The Wagoner/Dobo and Westside CEPs use conventional chiller technology that pairs with cooling towers. That will remain. The new Burney CEP could employ the same technology, pair the cooling (and heating) capacity with heat recovery chillers, employ a geothermal based solution or even a hybrid combination. Geothermal uses deep wells to reject or adsorb geothermal heat. The adjacent sports and recreation fields as well as surrounding roadways are appropriate locations for a large geothermal field.

Seahawk Crossing, Seahawk Landing, Seahawk Village, University Suites, P3 residential community and the Tin City redevelopment could employ regional geothermal based cooling (and heating) system. In many cases, the building HVAC systems are air source heat pumps (ASHP) or DX or a combination. Several buildings pair water source heat pumps (WSHP) and cooling towers. These building distribution systems do not readily allow chilled (or hot) water but are good candidates for a WSHP connected to a geothermal loop.

The decision on the means to condition the existing and new residences along with the Tin City redevelopment should be carefully reviewed in 8 to 10 years so there is an purposeful approach.



Hot Water Diagram

Hot Water - Existing

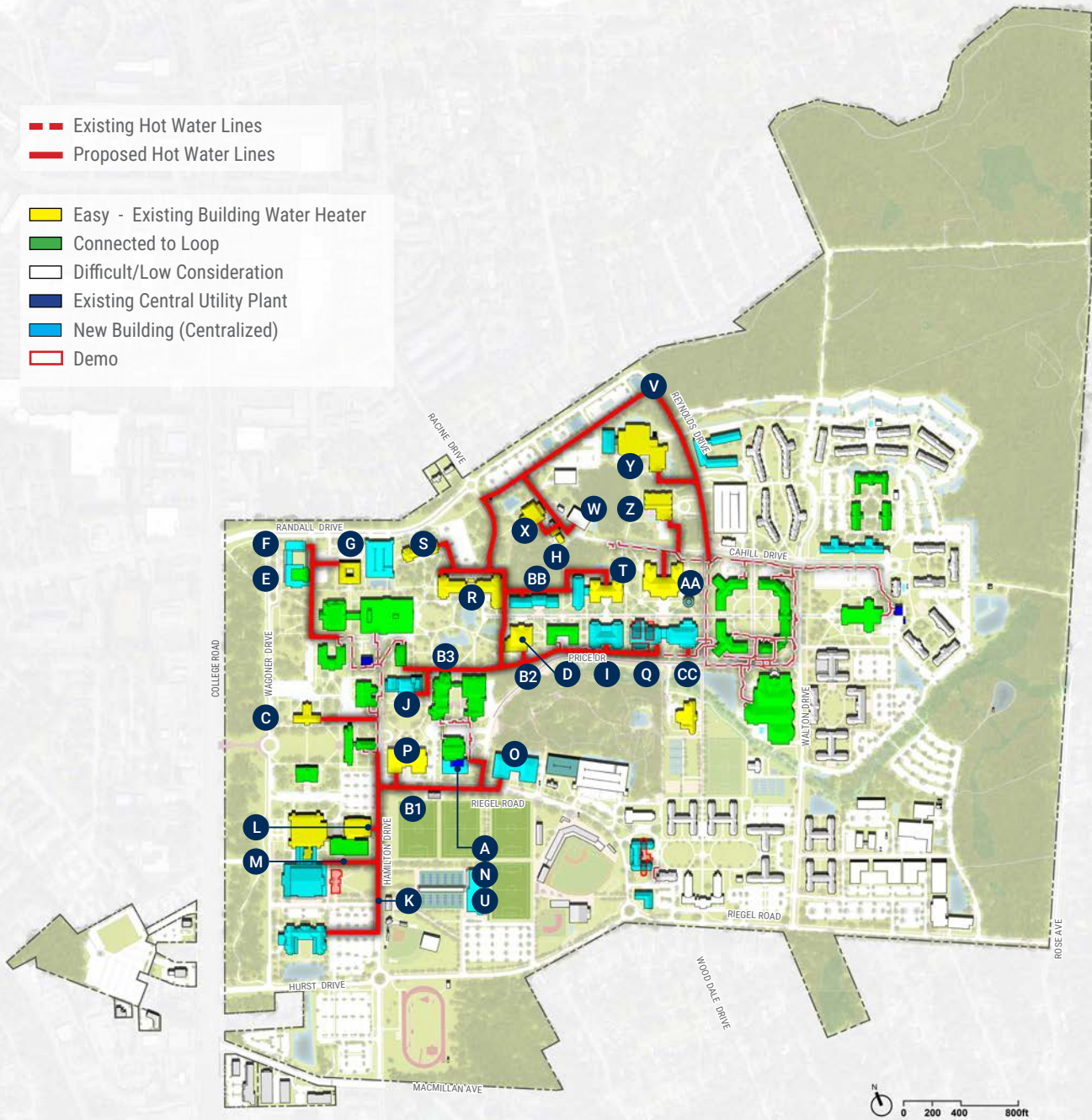
SUMMARY

The two regional CEPs described above will provide the backbone for continued development of central hot water. The Wagoner and Westside CEPs are fully built out and can only provide meaningful additional capacity by replacing existing water heaters and pumps. The 4 sets of cluster buildings that share local thermal utilities are too small and lack space to expand in a manner that support a centralized system.

The current hot water demand is approximately 24,000 MBH. This includes buildings connected to the Wagoner and Westside CEPs, the cluster buildings and buildings with individual water heaters. The master plan identified 3 planning windows: 0 to 5 years, 6 to 10 years and 11+ years. The hot water demand in these windows is estimated at 36,600, 46,300 and 57,400 MBH, respectively.

The installed and firm hot water capacities at Wagoner are 10,000 and 8,000 MBH, respectively. And unlike chilled water, the Dobo heating equipment is dedicated to Dobo and not connected to the central hot water system. The installed and firm hot water capacities at Westside are 9,000 and 6,000 MBH, respectively.

The installed and firm hot water capacities at Burney are 4,000 and 2,000 MBH respectively. There is room in Burney to expand to 6,000 and 4,000 MBH of installed and firm hot capacities respectively. Expanding Burney could support a transition to a campus wide system but is ultimately too small for a regional CEP. Instead, a replacement Burney Plant is recommended. Excluding the existing Burney CEP yields 19,000 and 16,000 MBH of installed and firm capacity in central hot water.



Hot Water Diagram

Hot Water - Future

Two critical infrastructure elements are required to support a central hot water system. First, a new hot water plant with the appropriate scale and ability to expand is required. The parking area at Burney was identified as the preferred location. The Burney plant will be fully built out with 5 bays, each sized for 10,000 MBH. The initial build will include three 10,000 MBH water heaters and subsequent phases will add the remaining water heaters. UNCW could consider slightly smaller 8,000 MBH water heaters but would then have to add capacity at Westside or Wagoner.

Second, the Wagoner, Westside and new Burney plants are to be interconnected. This reduces the total heating equipment while maximizing resiliency and the opportunity to support extended preventive maintenance outages. The decision on hot water capacity at Burney does not materially impact the interconnection as the new Burney CEP will be the primary source of heating. The hot water system will develop in response to the overall campus development. Aligning with campus development, the following is expected:

RECOMMENDATIONS - 0 TO 5 YEARS

- A** Phase 1 Burney CEP: 4,000 SF full build-out, 3 x 10,000 MBH water heaters, space for 2 x 10,000 MBH heaters
- B1** Extend 6" or 8" hot water mains from Burney to Hanover, Nixon Annex, Trask and Allen
- B2** Extend 10" to 12" hot water mains from Burney and connect Wagoner CEP at Sartarelli
- B3** Extend 8" to 10" hot water mains and connect Westside CEP at Westside CEP
- C** Connect Alderman to central system
- D** Connect Congdon to the central system
- E** Replace the existing hot water service with 6" mains to support the Kenan Auditorium Addition
- F** Extend the existing hot water service and connect the Welcome Center to the central system
- G** Connect Deloach to the central system
- H** Extend 8" to 10" hot water service and connect Business and Technology Center to the central system
- I** Replace hot water mains from Sartarelli with 10 to 12" and connect ISAT 1 to the central system
- J** Connect the new Academic Success Center to the central system
- K** 6" or 8" hot water mains the new Hotel and Conference Center
- L** Connect Hanover, Nixon Annex, Trask and Allen to the central system
- M** Connect the new Indoor Sports Arena to the central system

Recommendations continued on following pages.

RECOMMENDATIONS - 6 TO 10 YEARS

- N** Phase 2 Burney CEP: Add a 10,000 MBH water heater in the shell space – Burney capacity is now 40,000 MBH
- O** Connect new Student Recreation to the central system
- P** Connect Warwick to the central system as part of the building renovation project
- Q** Replace hot water mains from ISAT 1 with 10 to 12” and connect Academic Health Science Building to the central system
- R** Extend 8” to 10” hot water mains from Congdon to Luetze and Morton and connect Luetze and Morton to the central system
- S** Connect Bear to the central system
- T** Connect Cameron to the central system

RECOMMENDATIONS - 11+ YEARS

- U** Phase 3 Burney CEP: Add final 10,000 water heater in the shell space – Burney capacity is now 50,000 MBH
- V** Extend 8” to 10” hot water mains from Luetze along Racine/Randall/Reynolds to the main on Cahill
- W** Connect Future Academic Support Building to the central system
- X** Connect Friday Hall when Academic Support Building is constructed
- Y** Connect Cultural Arts to the central system with Cultural Arts Addition
- Z** Connect Education to the central system
- AA** Connect Dobo to the central system
- BB** Connect ISAT 2 to the central system
- CC** Connect Future Academic Building to the central system
- DD** Potentially connect new residential buildings and Cornerstone, Innovation and Honors residences

ADDITIONAL CONSIDERATIONS

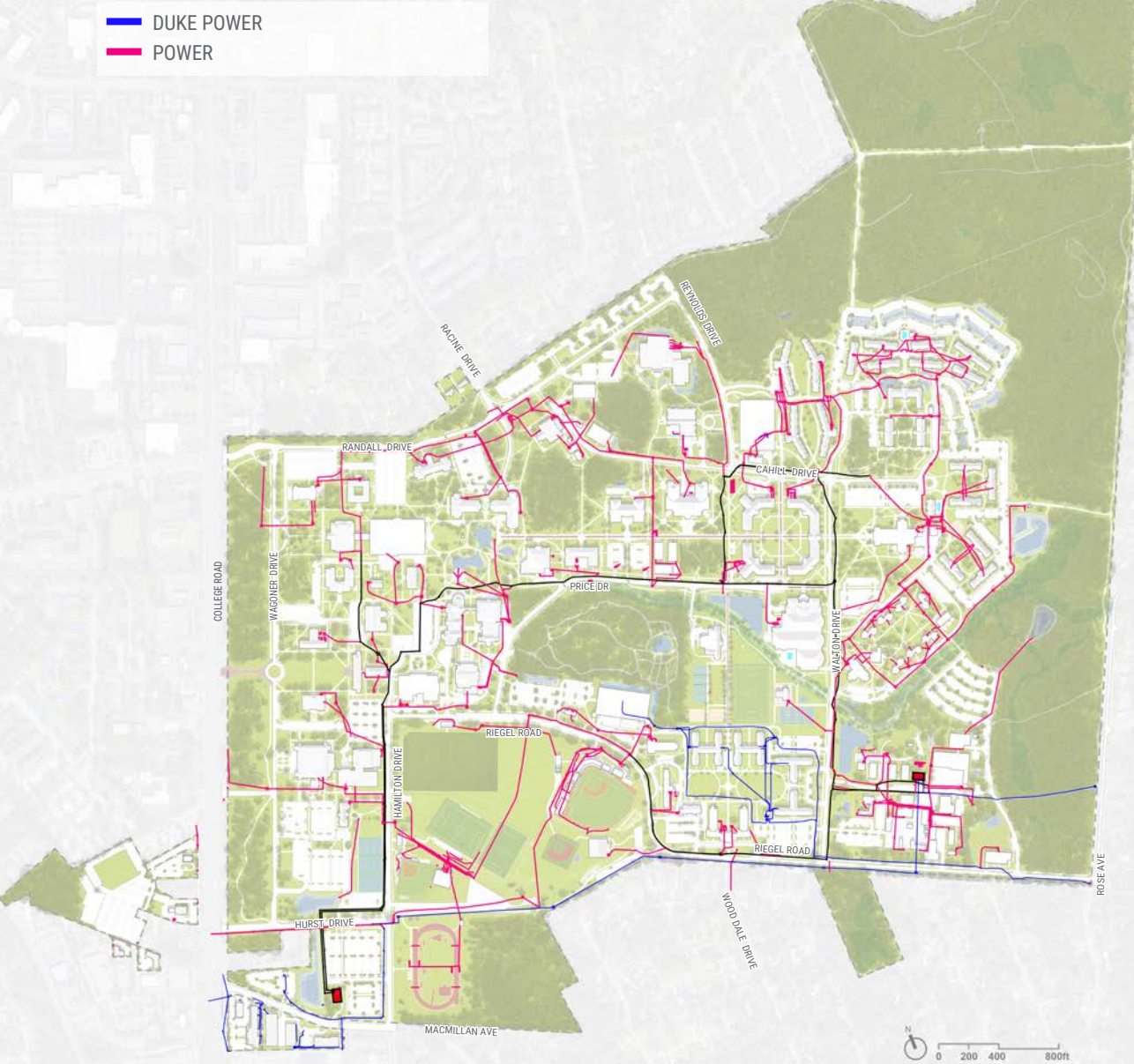
Connecting all the new residential buildings, including Cornerstone, Innovation and Honors is beyond the planning window as is the redevelopment of Tin City. Should all of this or similar development occur, there would be a need for a fourth hot water plant in the 25,000 MBH range. That location is likely within the footprint of Tin City. This plant would interconnect with the central system along Walton Drive.

UNCW provides building level heating capacity for critical loads. Generally, this takes the form of exterior hot water pipe connections. Although not a frequent condition, this approach will continue on a case-by-case basis.

The Wagoner and Westside CEPs use conventional low temp condensing water heater technology. That will remain. The new Burney CEP could employ the same technology, pair the heating (and cooling) capacity with heat recovery chillers, employ a geothermal based solution or even a hybrid combination. Geothermal uses deep wells to adsorb or reject heat. As noted above, the adjacent sports and recreation fields as well as surrounding roadways are appropriate locations for a large geothermal field.

Seahawk Crossing, Seahawk Landing, Seahawk Village, University Suites, P3 residential community and the Tin City redevelopment could employ regional geothermal based heating (or cooling) system. In many cases, the building HVAC systems are air source heat pumps (ASHP) or gas furnace or a combination. Several buildings pair water source heat pumps (WSHP) and cooling towers. These building distribution systems do not readily allow hot (or chilled) water but are good candidates for a WSHP connected to a geothermal loop.

The decision on the means to condition the existing and new residences along with the Tin City redevelopment should be carefully reviewed in 8 to 10 years so there is a purposeful approach.



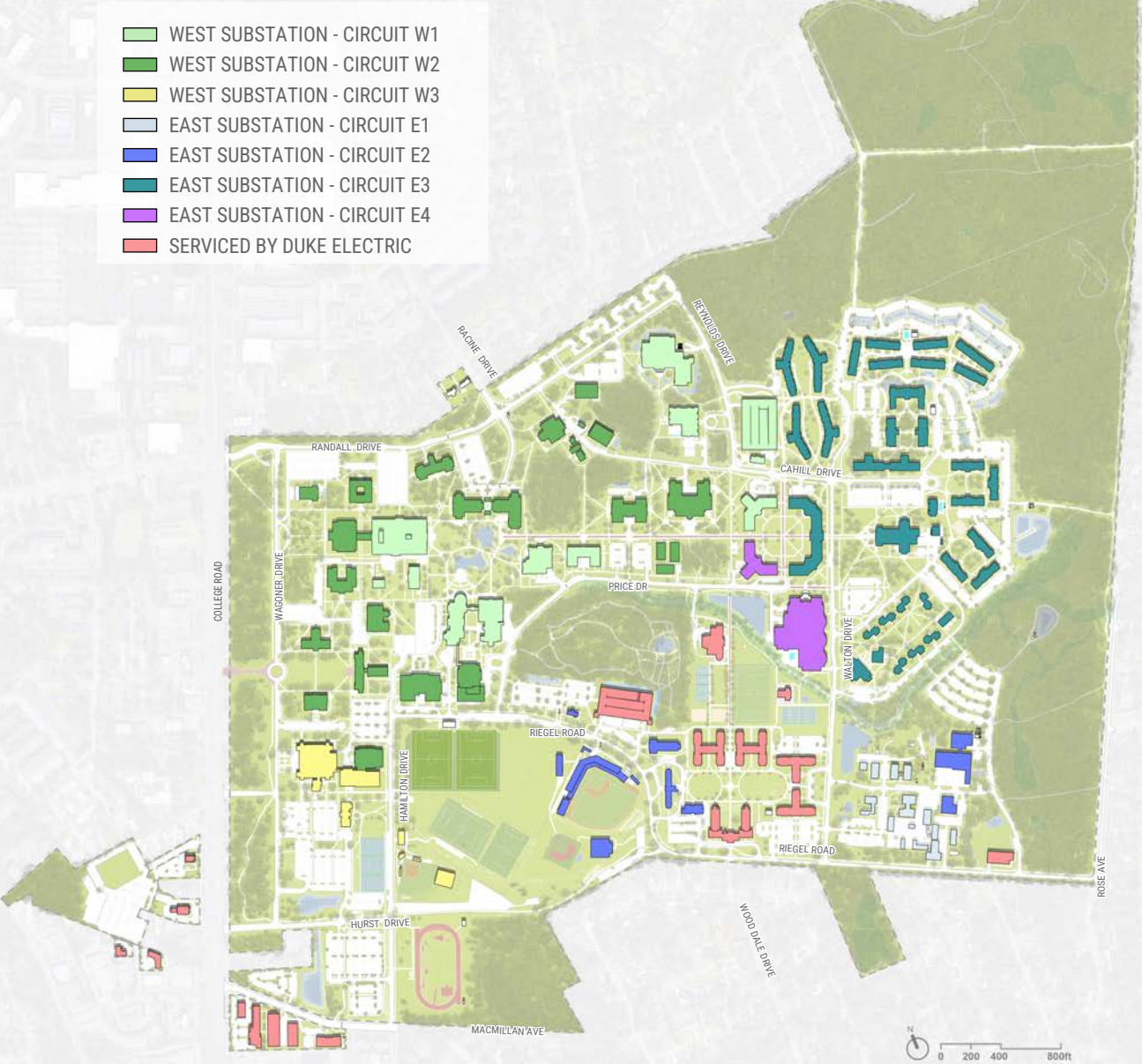
Electrical Diagram - Existing

Electrical - Existing

SUMMARY

Power to the campus is currently served by two utility circuits supplied by the same 50 MVA Duke Progress substation. The first circuit is dedicated to UNCW with a planned capacity of 14.8 MVA, the second (Rose Ave.) is shared between UNCW and the surrounding residential and commercial loads and is also rated for 14.8 MVA. The Duke Progress Rose Ave. circuit feeds a number of campus loads (including P3 Dorms, SE dining hall, Central Parking Deck, Film Studies Building and the new recreation fields) directly from the utility-owned distribution system.

The university's medium-voltage distribution system is supplied by two substations, one located on the west end of campus and the other on the east, both with a capacity of 7.5 MVA. Together, the 15 MVA capacity makes full use of the 14.8 MVA capacity available from the utility circuit. The west substation, fed from MacMillan Avenue, consists of three 2.5 MVA, 22.86 - 12.47Y/7.2 KV utility transformers which feed a single 600A, 5-way switch. The 5-way switch supplies the campus with three 300 A circuits via combination load-break/fault-interrupter switches. These three circuits will be designated 'W1', 'W2', & 'W3' for the purposes of this narrative. The east substation, fed from Lionfish Drive, consists of three 2.5 MVA, 22.86 - 12.47Y/7.2 KV utility transformers which feed a single 600A, 6-way switch. The 6-way switch supplies the campus with four 300 A circuits via combination load-break/fault-interrupter switches. These three circuits will be designated 'E1', 'E2', 'E3', & 'E4' for the purposes of this narrative.



Electrical Diagram - Existing

Campus-level peak demand load data was provided by Duke Progress for each of the substations. UNCW does not currently have a centralized database which to trend peak demand load building-level service equipment, so AEI used typical watts/sf. values to estimate the load at each building. The west substation has a current demand load of 7.2 MVA (approximately 95% of its 7.5 MVA capacity) distributed amongst circuits W1, W2, & W3 as follows:

- Circuit W1: 3.07 MVA (142 A)**
- » Feeds: Congdon Hall, Cultural Arts Building/Welding Building, East Parking Deck, Education Building/Mechanical Building, Fisher Student Center, Fisher University Union, King Hall, McNiell Hall, UNCW Library, Sartarelli (Osprey) Hall, Shops at the Crossing and the Westside CEP.
- Circuit W2: 3.77 MVA (175 A)**
- » Feeds: Alderman Hall, Bear Hall, Burevitch Laboratory, Burney Center, Burney CEP, Cameron Hall, Coastal Engineering, Deloach Hall, Depaolo Hall, Dobo Hall, Friday Annex, Friday Hall/Mech Building, Hanover Hall, Hoggard Hall, James Hall, Kenan Auditorium, Kenan Hall, Kresge Greenhouse, Leutze Hall, Morton Hall, PPH Lab, UNCW Library Discovery Wing, Warwick Center, Water Tower and the Westside CEP.

- Circuit W3: 0.48 MVA (22 A)**
- » Feeds: Allen Natatorium, Almkuist-Nixon Sports Medicine Building, Boseman Dugouts & Pressbox, Nixon Annex and Trask Coliseum.

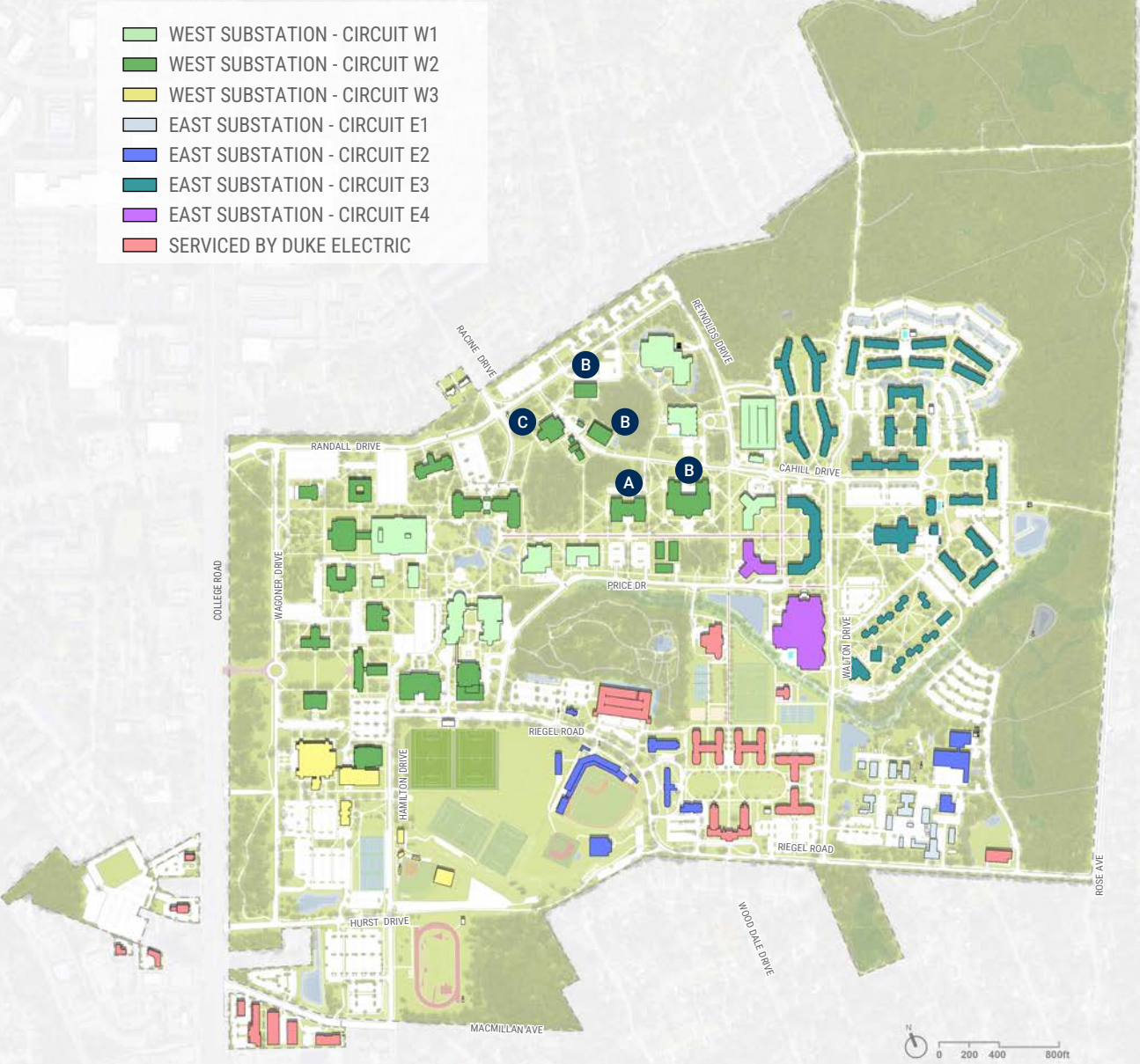
The east substation has a current demand load of 6.2 MVA (approximately 83% of its 7.5 MVA capacity) distributed amongst circuits E1, E2, E3, & E4 as follows:

- Circuit E1: 0.14 MVA (6 A)**
- » Feeds: Academic Support Center, Facilities Building, Housekeeping Building, Housing Warehouse A/B, Physical Plant, Police, Purchasing Services, and the Telecommunications Building.
- Circuit E2: 0.83 MVA (38 A)**
- » Feeds: Belk Hall, Brooks Field, EHS, East Entry Building, Fisher Field House, Graham Hall, Hewlett Hall, Hub Building, Johnson Hitting Facility, Physical Plant Landscaping Services, Printing Services, Residential Programs Support Facility, Lot M Visitors Booth and the Warehouse.
- Circuit E3: 4.50 MVA (208 A)**
- » Feeds: Cornerstone Hall, Housing and Resident Life Office, Innovation Hall, Keystone (Honors) House/Mechanical Building, Schwartz Hall, Seahawk Crossing Buildings 1-4, Seahawk Landing Buildings 1-7/Pool House, Seahawk Village Buildings 1-7, University Suites O/P/Q/R/S/T/U/Services, Veterans Hall, Wagoner CEP and Wagoner Hall.

- Circuit E4: 0.70 MVA (32 A)**
- » Feeds: Leonard Student Recreation Center, Modular R Buildings (R21/R22/R23) and the Teaching Laboratory Building.

Between the east and west substation, the campus is currently using 13.4 MVA of the 14.8 MVA Duke Progress circuit capacity, leaving 1.4 MVA available for growth. Duke Progress indicated that the Rose Avenue circuit also has approximately 4 MVA of remaining capacity.

* Section continues on the following page



Electrical Diagram - Existing

UNCW has expressed the desire to move away from the ownership of medium-voltage distribution on their campus, and instead prefers that the utility (Duke Progress) provide and maintain as much of the new distribution and infrastructure as possible. Duke Progress is not likely to take ownership of the existing medium-voltage distribution system but has expressed their willingness to serve new loads from their existing circuits, possibly providing another dedicated circuit to campus. This provides flexibility for serving new buildings and refeeding existing buildings directly from the utility as needed to support the planned expansion.

LOAD TRANSFER

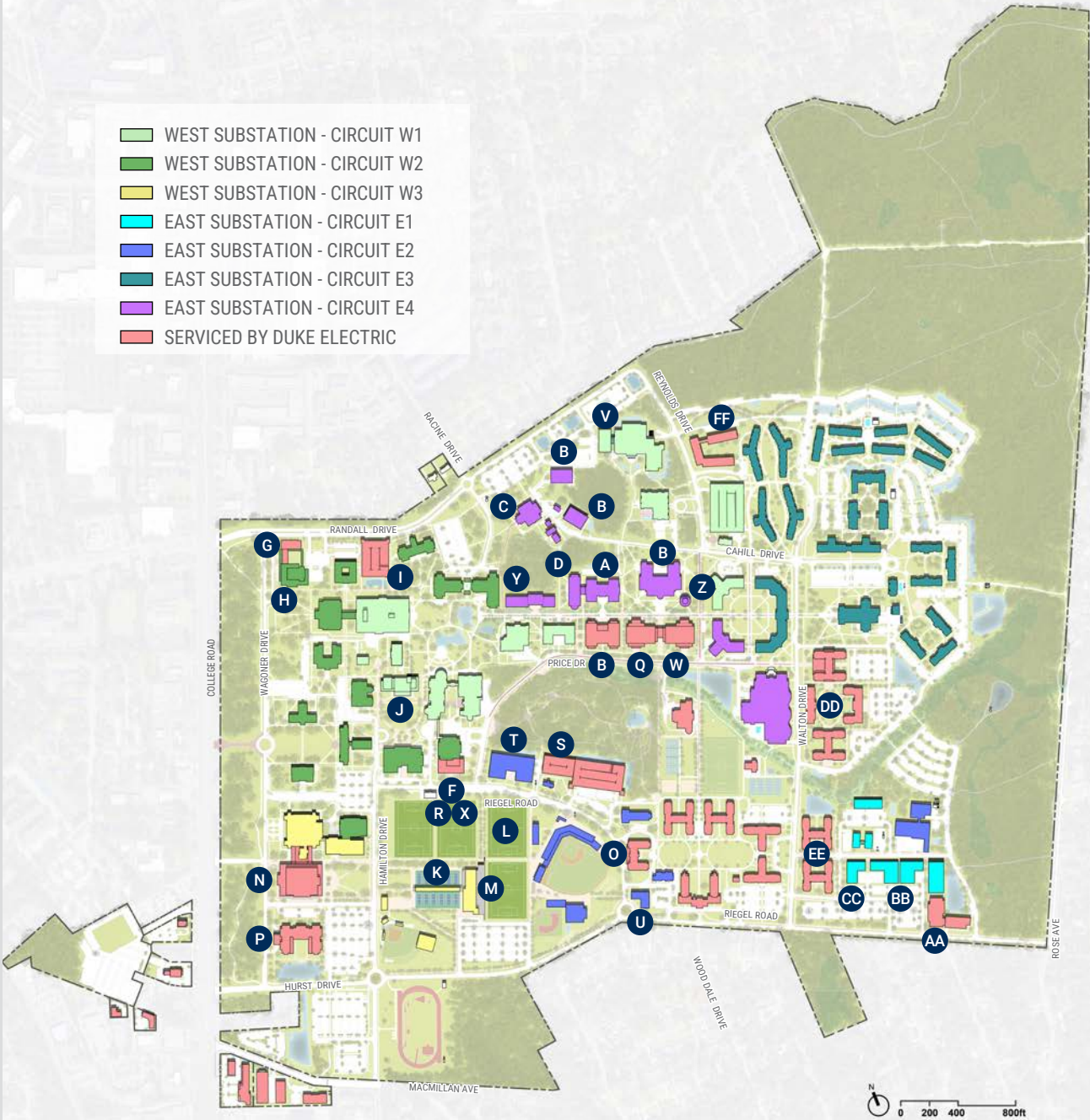
The existing medium-voltage system is close to reaching its capacity with some circuits responsible for the lion's share of the load on their respective substation. In order to support the new work, load from the West substation will first be transferred to the East substation from switch S-44. The load transfer will consist of the following:

- A** Transfer S-23 from circuit W2 to E4
 - Buildings transferred: Cameron Hall
 - Load transferred: 152 kVA
- B** Transfer S-34 from circuit W2 to E4
 - Buildings transferred: Dobo Hall, Friday Annex, Coastal Engineering
 - Load transferred: 378 kVA
- C** Transfer S-13 from circuit W2 to E4
 - Buildings transferred: Friday Hall, Friday Hall Mechanical Building, Burevitch Laboratory, PPH Lab & Water Tower
 - Loads transferred: 233 kVA

The transfers described above can be achieved without any added infrastructure; work will consist of a phased transition of existing switches to circuit E4 from circuit W2. The following will be the result of the load transfer:

- » West Substation
 - Circuit W1: 3.07 MVA (142 A)
 - Circuit W2: 3.02 MVA (140 A)
 - Circuit W3: 0.48 MVA (22 A)
 - Total West Substation Load: 7.03 MVA
- » East Substation
 - Circuit E1: 0.14 MVA (6 A)
 - Circuit E2: 0.83 MVA (38 A)
 - Circuit E3: 4.50 MVA (208 A)
 - Circuit E4: 1.48 MVA (68 A)
 - Total East Substation Load: 6.85 MVA

Given UNCW's preference for medium-voltage work on campus to be handled directly by the utility, the existing substations will remain adequate to handle the existing load and support the additions and expansions outlined below without the need for major, system-wide upgrades. Coordination of new Duke Progress ductbank and equipment with existing underground utilities will be required as the utility circuit makes its way further into campus. The perimeter of campus and buildings adjacent to existing utility circuits make for ideal candidates to connect to utility as additional easements will be limited.



Electrical Future Build-out

RECOMMENDATIONS - 0 TO 5 YEARS (PHASE 1)

- D Business + Technology Center – Feed from circuit E4 (S-23 spare way)
 - Upgrade S-23 to 6-way switch
- E Integrated Science & Technology Center (ISAT) Building #1 – Direct utility feed (Duke Progress)
- F Burney Center – Utility Plant Expansion – Direct utility feed (Duke Progress)
- G Welcome Center – Direct utility feed (Duke Progress)
- H Kenan Auditorium Expansion – Feed from circuit W2 (Use existing transformer)
- I Campus Services Hub (Parking Structure Ground Floor) – Direct utility feed (Duke Progress)
- J Academic Success Center – Feed from circuit W1 (new switch & transformer)
 - Building footprint disrupts main ductbank from west substation, Infrastructure modification is required.
- K Outdoor Tennis Complex – Feed from circuit W3 (S-35 spare way)
 - Upgrade S-35 to 6-way switch
- L Soccer Complex and Fields – Feed from circuit W3 (S-35 spare way)
- M Sports Performance Center (Partnership Opportunity) – Feed from circuit W3 (shared with Tennis Courts)
- N New Indoor Sports Arena – Direct utility feed (Duke Progress)
- O Residence Hall on Former Galloway Hall – Direct utility feed (Duke Progress)
- P Hotel + Conference Center – Direct utility feed (Duke Progress)

The following are the projected loads after Phase 1 is complete:

- » West Substation
 - Circuit W1: 3.13 MVA (145 A)
 - Circuit W2: 3.09 MVA (143 A)
 - Circuit W3: 0.81 MVA (37 A)
 - Total Load: 7.03 MVA
- » East Substation
 - Circuit E1: 0.14 MVA (6 A)
 - Circuit E2: 0.64 MVA (30 A)
 - Circuit E3: 4.50 MVA (208 A)
 - Circuit E4: 1.57 MVA (73 A)
 - Total East Substation Load: 6.85 MVA
- » Duke Progress
 - Added load: 4.64 MVA

Electrical Diagram - Future

Electrical Future Build-out

RECOMMENDATIONS - 6 TO 10 YEARS (PHASE 2)

- Q** Academic Health Sciences Building – Direct utility feed (Duke Progress)
- R** Burney Plant 3rd Chiller Block – Direct utility feed (Duke Progress)
 - Tied to Burney Center plant expansion (F)
- S** Parking Deck Expansion – Direct utility feed (Duke Progress)
- T** Student Recreation Facility – Direct utility feed (Duke Progress)
- U** Residence Life Support Building – Feed from circuit E2 (S-11 spare way)

The following are the projected loads after Phase 2 is complete:

- » West Substation
 - Circuit W1: 3.13 MVA (145 A)
 - Circuit W2: 3.09 MVA (143 A)
 - Circuit W3: 0.81 MVA (37 A)
 - Total Load: 7.03 MVA
- » East Substation
 - Circuit E1: 0.14 MVA (6 A)
 - Circuit E2: 0.70 MVA (32 A)
 - Circuit E3: 4.50 MVA (208 A)
 - Circuit E4: 1.50 MVA (69 A)
 - Total East Substation Load: 6.83 MVA
- » Duke Progress
 - Added load: 1.93 MVA

RECOMMENDATIONS - 11+ YEARS (PHASE 3)

- V** Cultural Arts Building Addition – Feed from circuit W1 (expand existing distribution system)
- W** Future Academic Building – Direct utility feed (Duke Progress)
- X** Burney Plant 4th Chiller Block – Direct utility feed (Duke Progress)
 - Tied to Burney Center plant expansion (F)
- Y** Integrated Science and Technology (ISAT) Building #2 – Feed from circuit E4 (S-23 spare way)
- Z** Collaboration Hub – Feed from circuit E4 (Feed from existing building)
- AA** Film Studies Addition – Direct utility feed (Duke Progress)
- BB** Consolidation of Facilities + Support – Feed from circuit E1 (Demolition work to free capacity to S-25)
 - S-25 could be upgraded to 6-way switch
- CC** Police Station – Feed from circuit E1 (Demolition work to free capacity to S-25)
- DD** New Suites Housing (10) – Direct utility feed (Duke Progress)
- EE** New Suites Housing (11) – Direct utility feed (Duke Progress)
- FF** New Suites Housing (12) – Direct utility feed (Duke Progress)

The following are the projected loads after Phase 3 is complete:

- » West Substation
 - Circuit W1: 3.19 MVA (148 A)
 - Circuit W2: 3.09 MVA (143 A)
 - Circuit W3: 0.81 MVA (37 A)
 - Total Load: 7.09 MVA
- » East Substation
 - Circuit E1: 0.22 MVA (10 A)
 - Circuit E2: 0.70 MVA (32 A)
 - Circuit E3: 3.86 MVA (179A)
 - Circuit E4: 2.06 MVA (95A)
 - Total East Substation Load: 6.84 MVA
- » Duke Progress
 - Added load: 3.84 MVA

The proposed projects add a total load of 12.0 MVA to the campus and as proposed, 11.0 MVA of which will be fed directly from the utility. With approximately 0.95 MVA being demolished the load on the existing campus medium-voltage distribution system will remain effectively unchanged, sitting at 13.9 MVA. Several of the steps call for replacement of existing 3- or 4-way pad-mounted switches with new, 6-way pad-mounted switches in order to support new work; however, the compatibility of existing ductbanks to support the proposed updates could not be validated.

ADDITIONAL CONSIDERATIONS

The transfer of existing buildings from the campus medium-voltage system to the utility is not suggested for any of the three phases of this plan as a direct refeed of existing equipment is not possible. In the future if an existing building is to be refeed directly from the utility, Duke Progress would replace the existing service transformer with their own. As existing UNCW-owned medium-voltage infrastructure reaches obsolescence or otherwise needs replacement, the transfer of associated loads to direct feeds off the utility circuit becomes a high-value option.



Fiber Diagram

Fiber - Existing

SUMMARY

The existing fiber distribution network on campus is not included in the scope of this Master Plan and is shown as existing conditions in the adjacent diagram. The fiber hub for the east portion of campus fiber is located in Hoggard Hall and is nearing capacity. New projects, major renovations or building additions should be used as opportunities to accelerate the implementation of fiber network upgrades.



Telecom + Time Warner - Existing

SUMMARY

The existing Telecom distribution service on campus is not included in the scope of this Master Plan and is shown as existing conditions in the adjacent diagram. New projects, major renovations or building additions should be used as opportunities to accelerate the implementation of telecom upgrades.

Gas Diagram

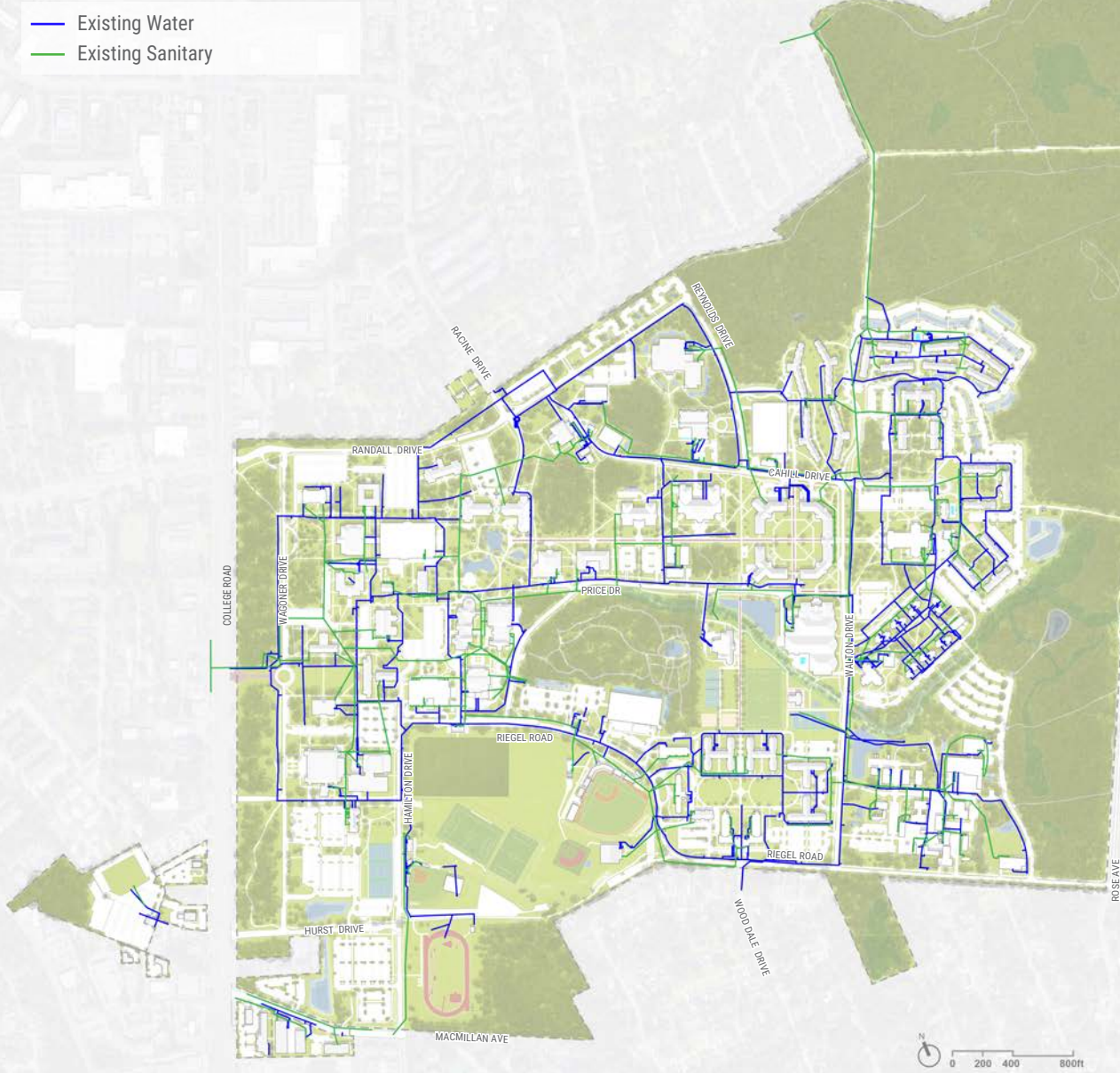


Gas - Existing

SUMMARY

The existing gas distribution service on campus is not included in the scope of this Master Plan and is shown as existing conditions in the adjacent diagram. New projects, major renovations or building additions should be used as opportunities to accelerate the implementation of natural gas upgrades.

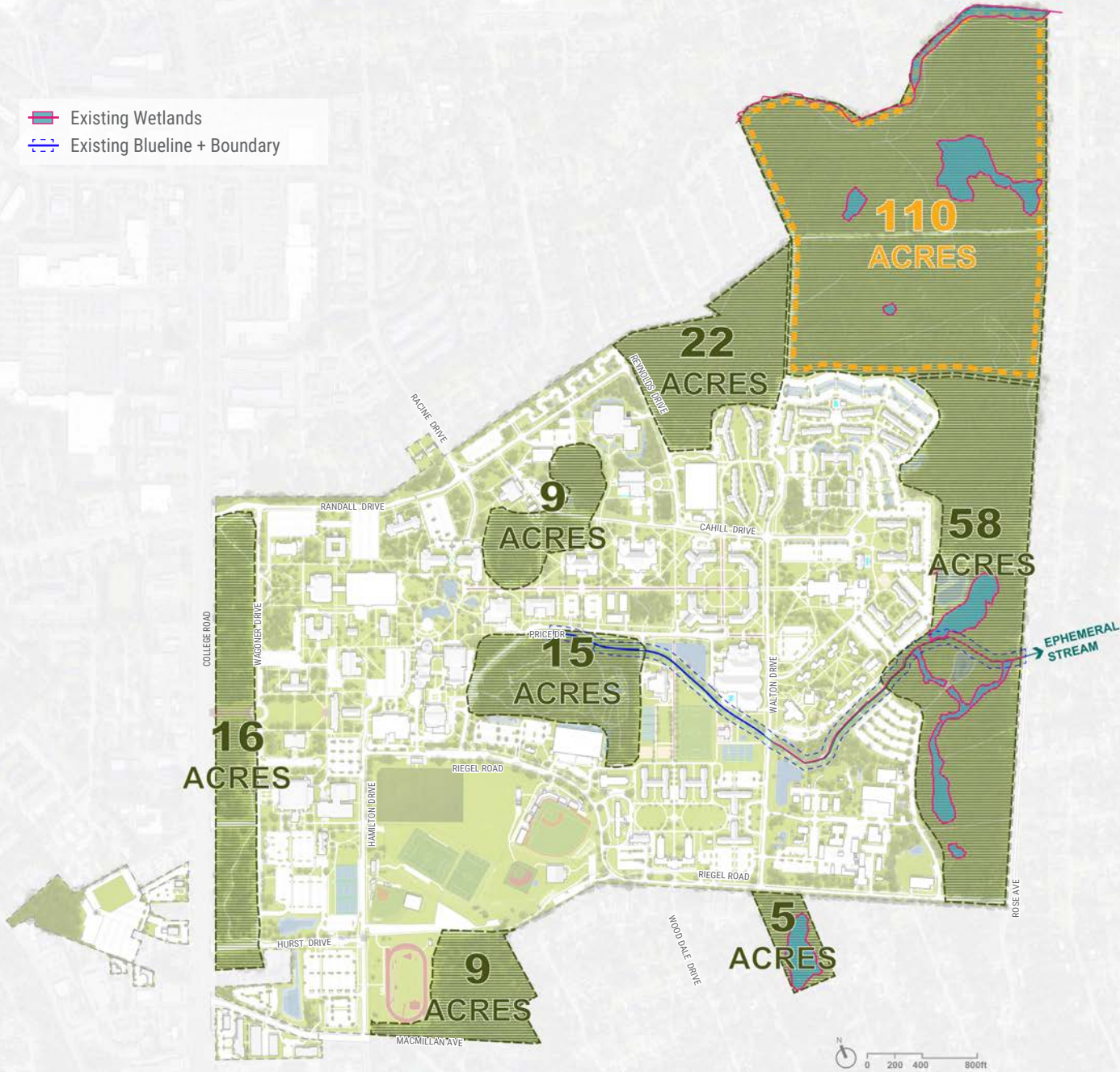
Water + Sanitary Diagram



Sanitary + Water - Existing

SUMMARY

The existing water and sanitary distribution services on campus are not included in the scope of this Master Plan and is shown as existing conditions in the adjacent diagram. New projects, major renovations or building additions should be used as opportunities to accelerate the implementation of water and sanitary upgrades.



Wetlands and Blueline Stream - Existing

SUMMARY

The Campus has two areas of wetland located in the wooded areas east of campus. A Blueline stream runs through the middle of campus along Price Drive flowing from west to east as it transitions off campus.

Wetlands + Blueline Diagram

appendix



SPACE ASSESSMENT

PROJECTED SPACE NEEDS