

IVY CORRIDOR STRATEGIC PLANNING STUDY

UNIVERSITY OF VIRGINIA | FALL 2016

DUMONTJANKS
BIOHABITATS
VHB
LANDWISE

IVY CORRIDOR STRATEGIC PLANNING STUDY

CONTENTS

INTRODUCTION

Executive Summary	09
Board of Visitors Resolution	11

PLANNING AND DESIGN

Analysis	14
Framework Plan	28

MOBILITY

Analysis	52
Smartscale	54
Recommendations	58

UNIVERSITY NEEDS

Proximity	62
Summary of finding	66

MARKET STUDY

Overview	71
Hospitality	72
Retail	76
Residential	78

CONCLUSIONS

Next Steps	81
------------	----

APPENDIX

Open space scale comparisons	84
Circulation	88
Emmet St. and Ivy Rd. intersection studies	96
Market analysis	106
Hospitality analysis	116
University needs summary	135

INTRODUCTION

- | Executive Summary
- | Board of Visitors Resolution



Existing Site Conditions Plan

INTRODUCTION

This stunning site lies at the strategic center of Central, North and West grounds. Therein lies great opportunity to manifest, on many fronts, the strategic aspirations of the university.

1. The University enhance its reputation as a leading place of scholarship in the American campus landscape.
2. Towards that mission, it organizes curricula and the physical campus enabling interdisciplinary scholarship and thought on the world's most pressing issues, essentially a great reinvestment in the Jefferson idea.
3. This specific site offers the unique opportunity to manifest the environmental goals of the institution. The site is a rare opportunity to integrate a collaborative academic and mixed use idea around a bold restorative ecological idea.
4. It is the responsibility of the UVA Foundation, as partner in this effort, to realize the highest and best use for the 14 acres. Ultimately the solution must create value through the choreography of Grounds stewardship, academic aspirations, and a phased mixed use idea.
5. The site's geography demands that the solution be connective and create a vital university enclave that unites north, central and west Grounds.
6. The site is the western gateway to the historic central Grounds, a World Heritage Site. The idea and the final result must recognize the need to serve as introduction to the university.

These are the challenges and opportunities of the work before us. This document serves as summary for this initial effort.

EXECUTIVE SUMMARY

The University of Virginia, in association with the University of Virginia Foundation outlined a process for developing a long-term strategy for redeveloping 14.5 acres of land west of the intersection of Ivy Road (U.S. 250 and Emmet Street /U.S. 29).

At the juncture of two U.S. highways, this parcel of land is a significant entry to the University Grounds as well as a critical link between North Grounds, Arts Grounds and Central Grounds.

In June 2015, the Board of Visitors directed the University and UVAF to undertake a comprehensive planning study for the redevelopment of this strategic area for uses to benefit the University, including the potential for residential, academic, commercial and hospitality functions.



Proposed Framework Plan

BOARD OF VISITORS RESOLUTION

Ivy Corridor Landscape Framework Plan

WHEREAS, the University has developed a long-term framework plan to redevelop the Ivy Corridor from Emmet Street west to Copeley Road; and

WHEREAS, the City of Charlottesville has been awarded a grant by the Commonwealth of Virginia Department of Transportation to implement various safety and connectivity improvements along Emmet Street from Ivy Road to Arlington Boulevard; and

WHEREAS, the City's planned project will contribute to improvements in the safety, appearance, and functionality of the Ivy/Emmet intersection for all modes of transportation and aligns with the University's proposed streetscape improvements;

RESOLVED, the Board of Visitors approves the landscape framework plan for the phased development of the Ivy Corridor area to advance the goals adopted by the Board of Visitors in March 2015 to:

- enhance the safety and connectivity between the redevelopment area and Grounds while providing an opportunity for interaction with the Charlottesville community;
- identify green space potential;
- accommodate current transportation, parking, and stormwater functions;
- optimize economically viable development and University support activities; and
- WHEREAS, the City's planned project will contribute to improvements in the safety, appearance, and functionality of the Ivy/Emmet intersection for all modes of transportation and aligns with the University's proposed streetscape improvements;
- provide appropriate screening of the parking garage; and

RESOLVED FURTHER, the Board of Visitors authorizes the University to proceed with planning Phase I of the redevelopment effort, which includes the area from the Ivy/Emmet intersection to 2015 Ivy Road on the following schedule:

- September 2016: Begin planning streetscape and infrastructure improvements; and
- June 2017: Present recommended schedule for the future of the Cavalier Inn.

PLANNING & DESIGN

| Analysis
| Framework Plan

GROUND AND CONTEXT

The University of Virginia, established in 1819, comprises 1,135 Acres in the Piedmont region of Virginia. At the time of its founding, this land, one mile west of Charlottesville, consisted of farm fields and woodlands amidst the rolling countryside of Albemarle County. Today, the University and the City of Charlottesville are intertwined, and much of the land is developed. As the geographic center of Grounds and University land-holdings, the development of the Ivy-Corridor site has the potential to unite Central and North Grounds in a profound way.

 UVA FOUNDATION PROPERTY
 UNIVERSITY OF VIRGINIA PROPERTY





250

NORTH GROUNDS

Ivy Road

Emmet Street

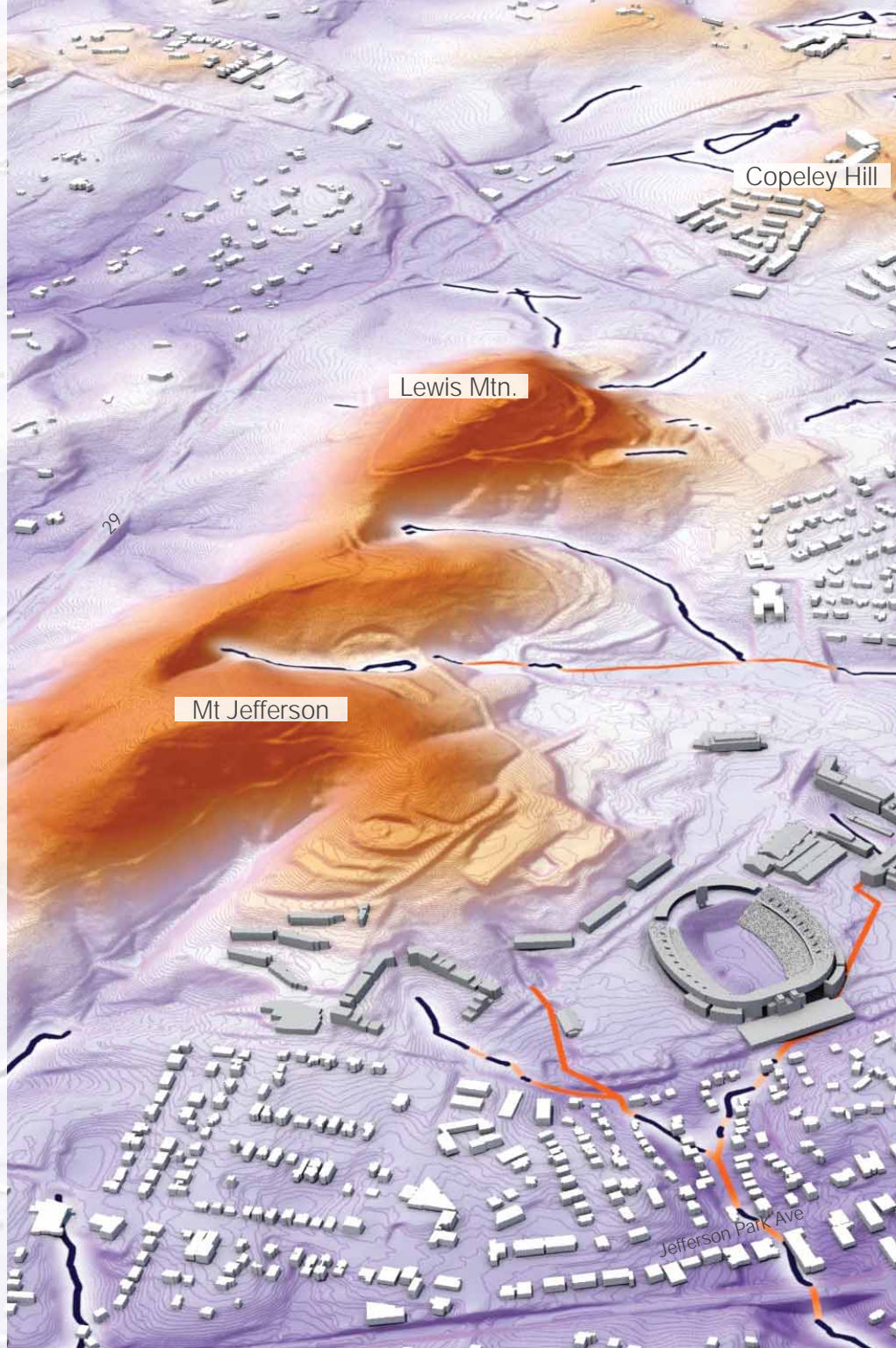
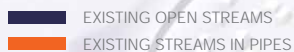
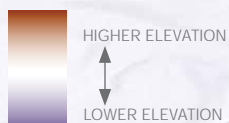
University Ave

CENTRAL GROUNDS

Jefferson Park Ave

TOPOGRAPHY AND HYDROLOGY

As part of the Piedmont region of Virginia, the topography of Grounds and the Ivy-Corridor site is defined by a series of dramatic hills and valleys with a connective pattern of streams and tributaries.





250

Emmet Street

Ivy Road

Carr's Hill

University Ave

Monroe Hill

Jefferson Park Ave

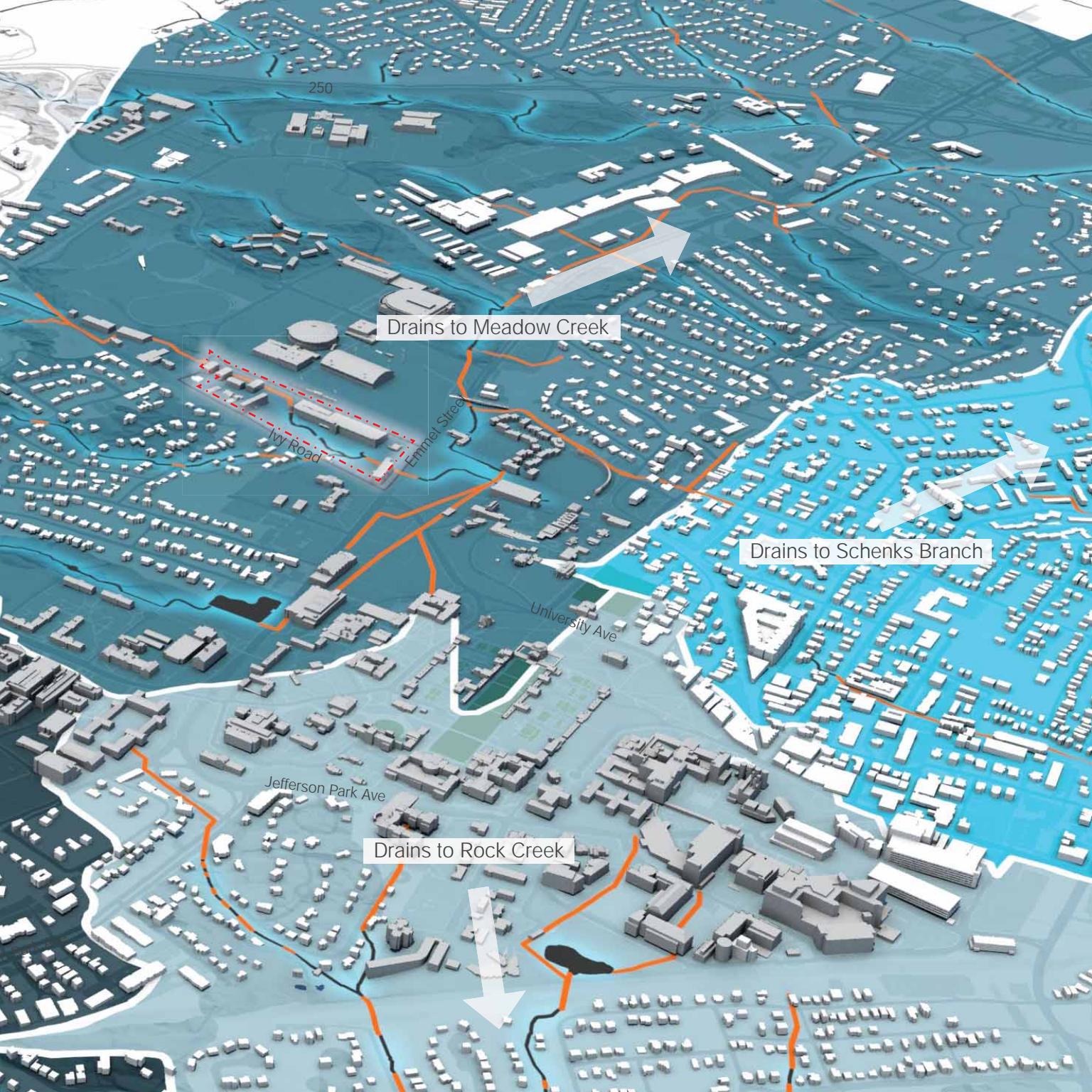
TOPOGRAPHY AND HYDROLOGY

Watersheds

The Ivy-Corridor site sits within a watershed that drains north toward Meadow Creek. The existing stream within the site is a tributary of Meadow Creek, which ultimately drains into the Rivanna River.

- EXISTING OPEN STREAMS
- EXISTING STREAMS IN PIPES
- MOORES CREEK CATCHMENT AREA
- LODGE CREEK CATCHMENT AREA
- ROCK CREEK CATCHMENT AREA
- SCHENKS BRANCH CATCHMENT AREA
- MEADOW CREEK CATCHMENT AREA





250

Drains to Meadow Creek

Ivy Road

Emmet Street

Drains to Schenks Branch

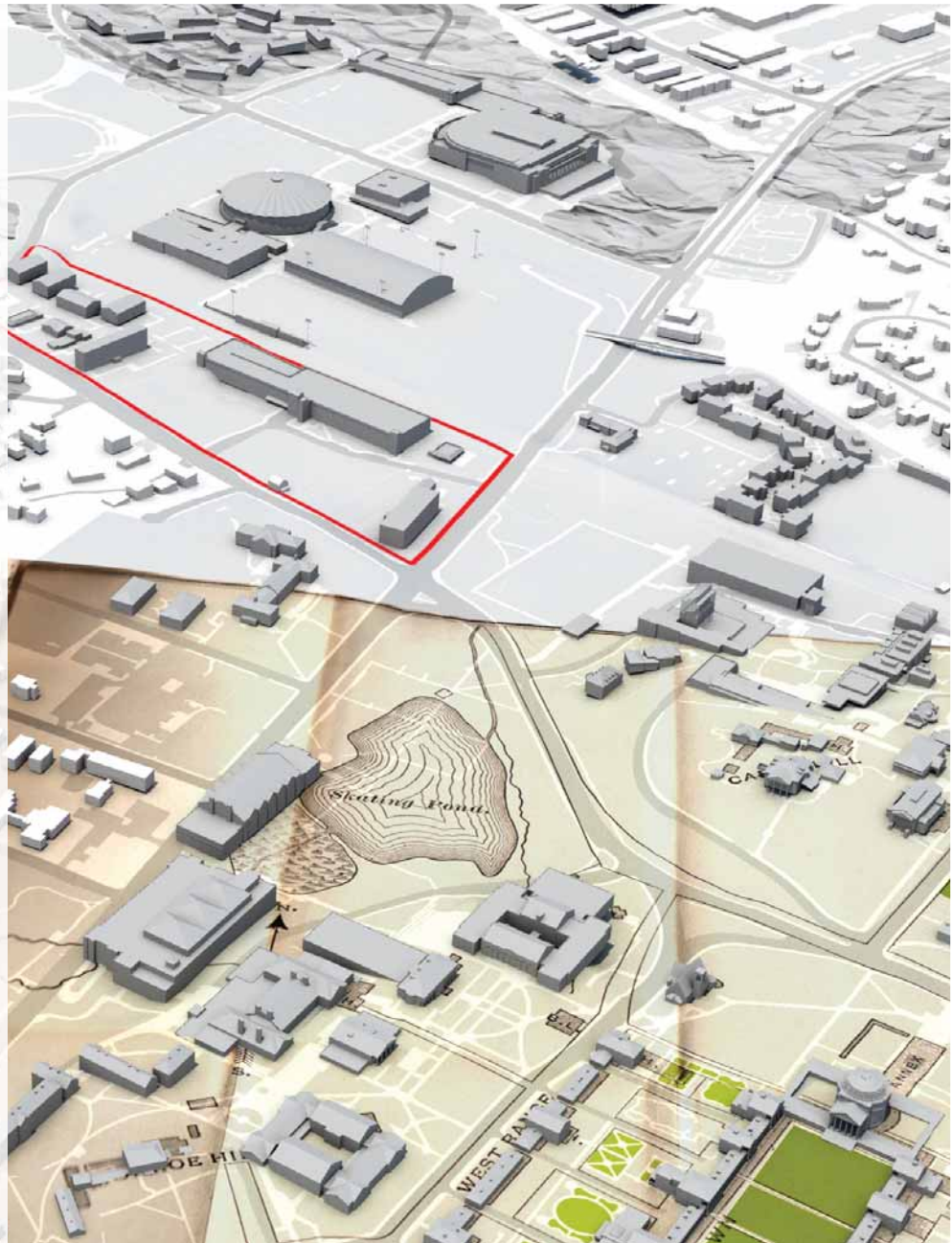
University Ave

Jefferson Park Ave

Drains to Rock Creek

HYDROLOGY IN 1895

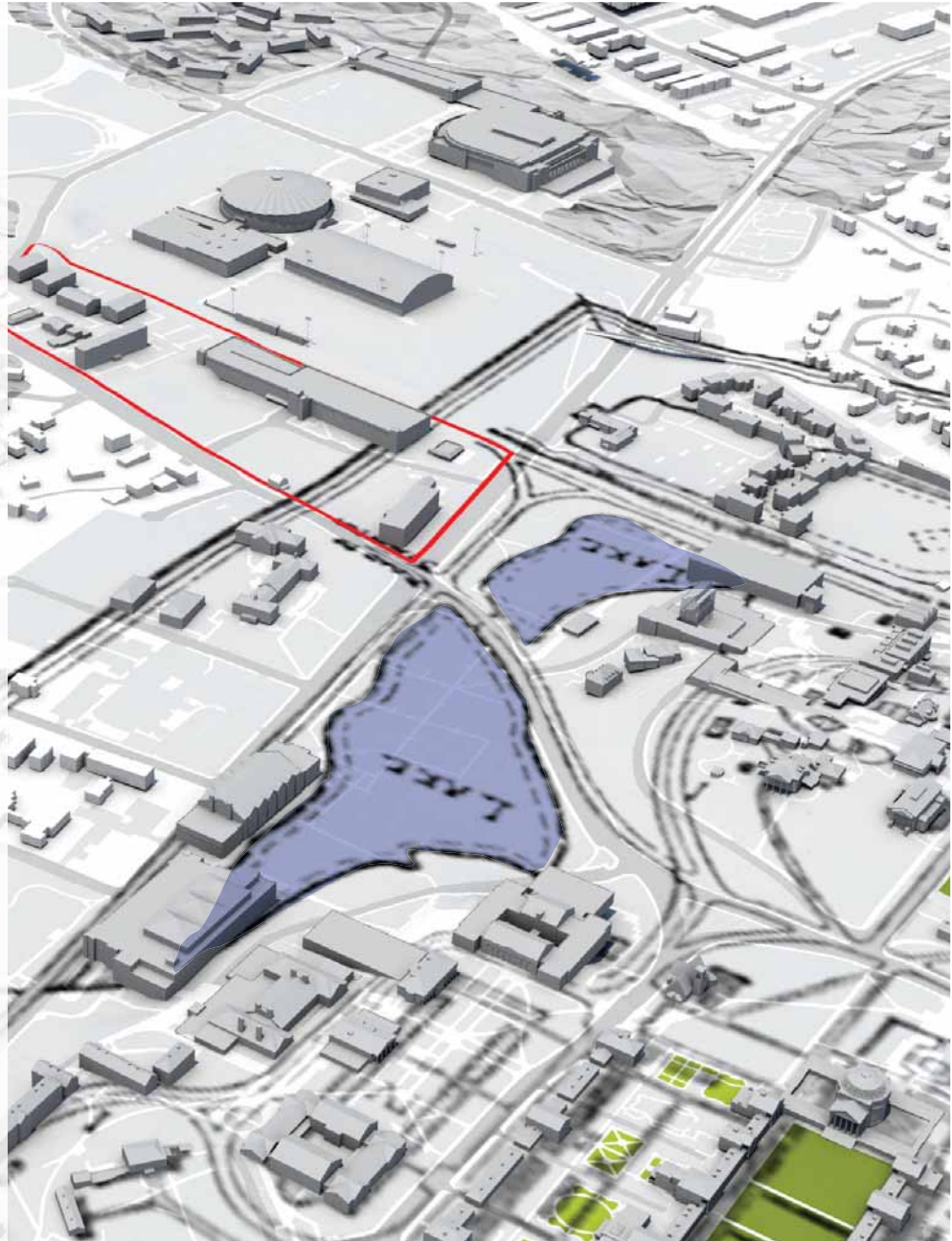
Various historic photographs, as well as this 1895 Existing Campus Plan map confirm that the valley area around Nameless Field historically has been inundated with wetlands and a surface body of water. This plan shows a wetland area at the terminus of Meadow Creek that feeds into a surface pond and continues as a creek beyond.



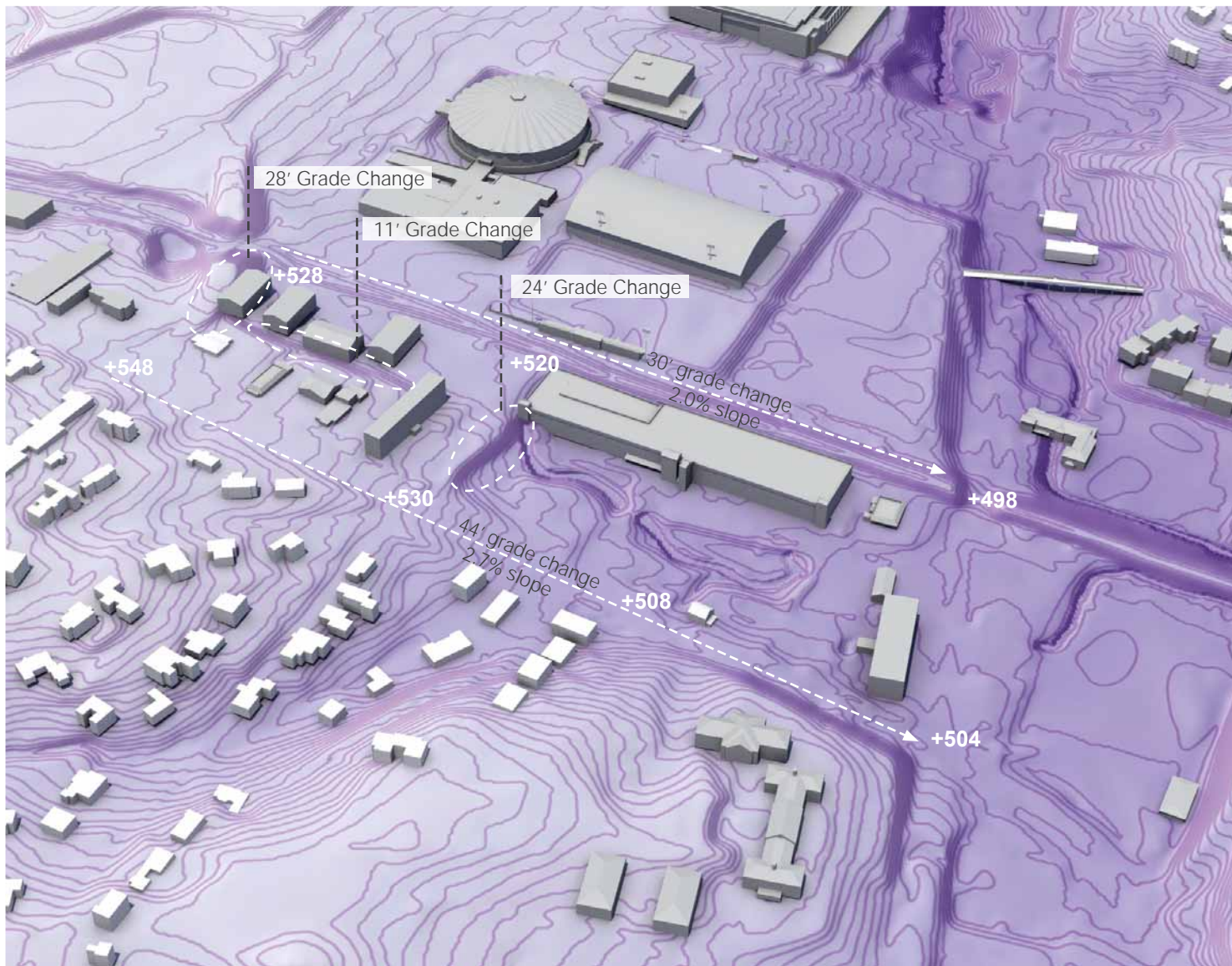
1913 WARREN MANNING PLAN

The first President of UVA, Edwin Alderman, hired Warren Manning, one of the nation's leading landscape architects of the time, to design a master plan that reorganized the grounds and created new centers and spaces beyond McKim, Mead & White's suggestions. In this plan, Manning proposed a series of new walks, axes, lawns, roads, and quadrangles that optimized views and dramatized approaches, most of which were never built. A profound proposal for physical change noted in the 1913 Master Plan was the expansion of the surface hydrology system in the valley as a bold lake feature in the landscape.

Manning, presumably, sought to unify the valley and take advantage of existing wetland and pond hydrology systems, formalizing them into large bodies of surface water that would define the valley and establish a landscape as a threshold to the University. The plan was never completed, and the Construction of Memorial Gymnasium after World War 1 formalized the pre-existing wetland into a reflecting pool on the east side of the building. In the 1950's, this reflecting pool was filled in and the open stream was routed into below-grade pipes to establish the open recreation space that today makes up Nameless Field and the Sheridan Snyder Tennis Center.



TOPOGRAPHY



HYDROLOGY

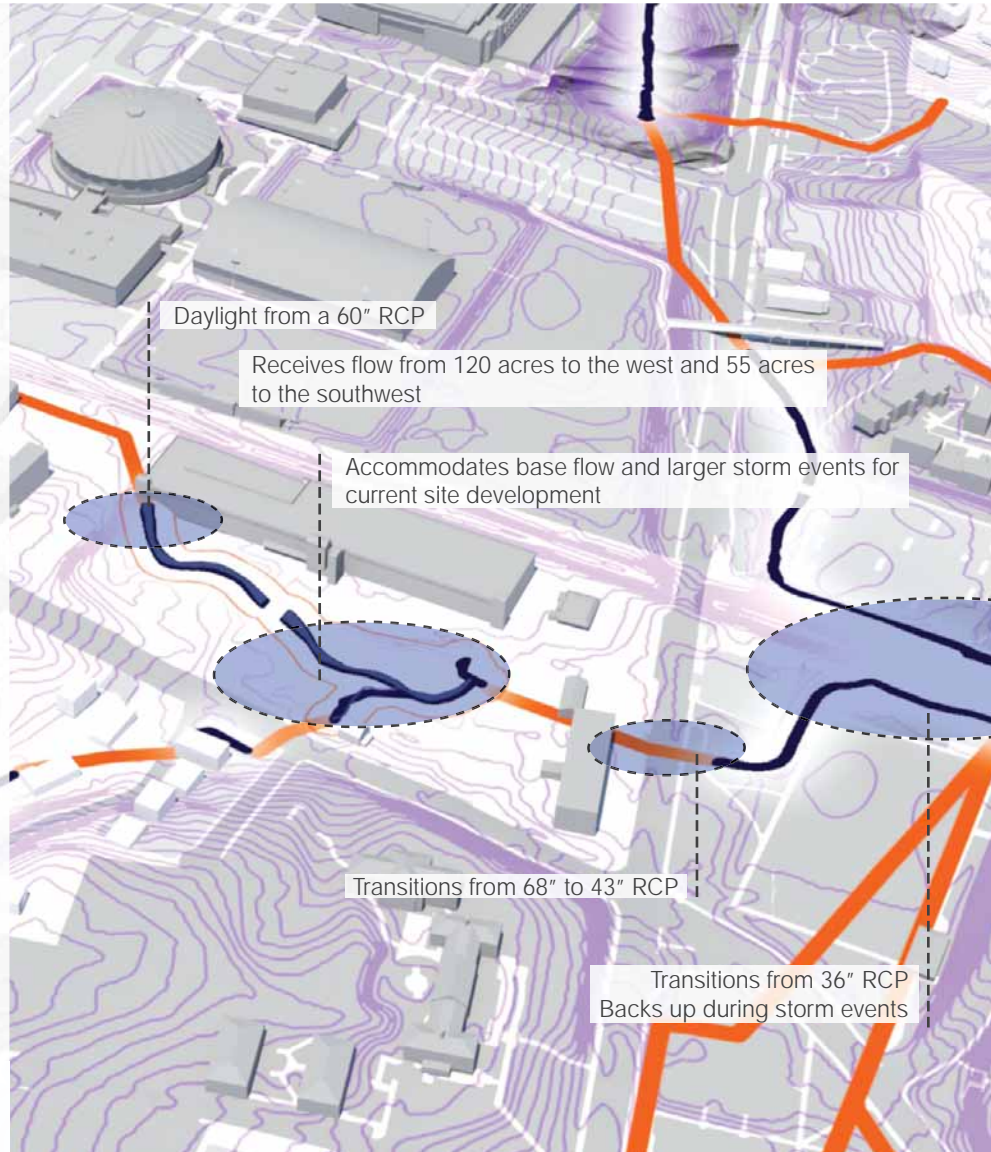
Surrounding Hydrology

Opportunity for creating a holistic approach to storm water management issues at the Ivy Corridor Site

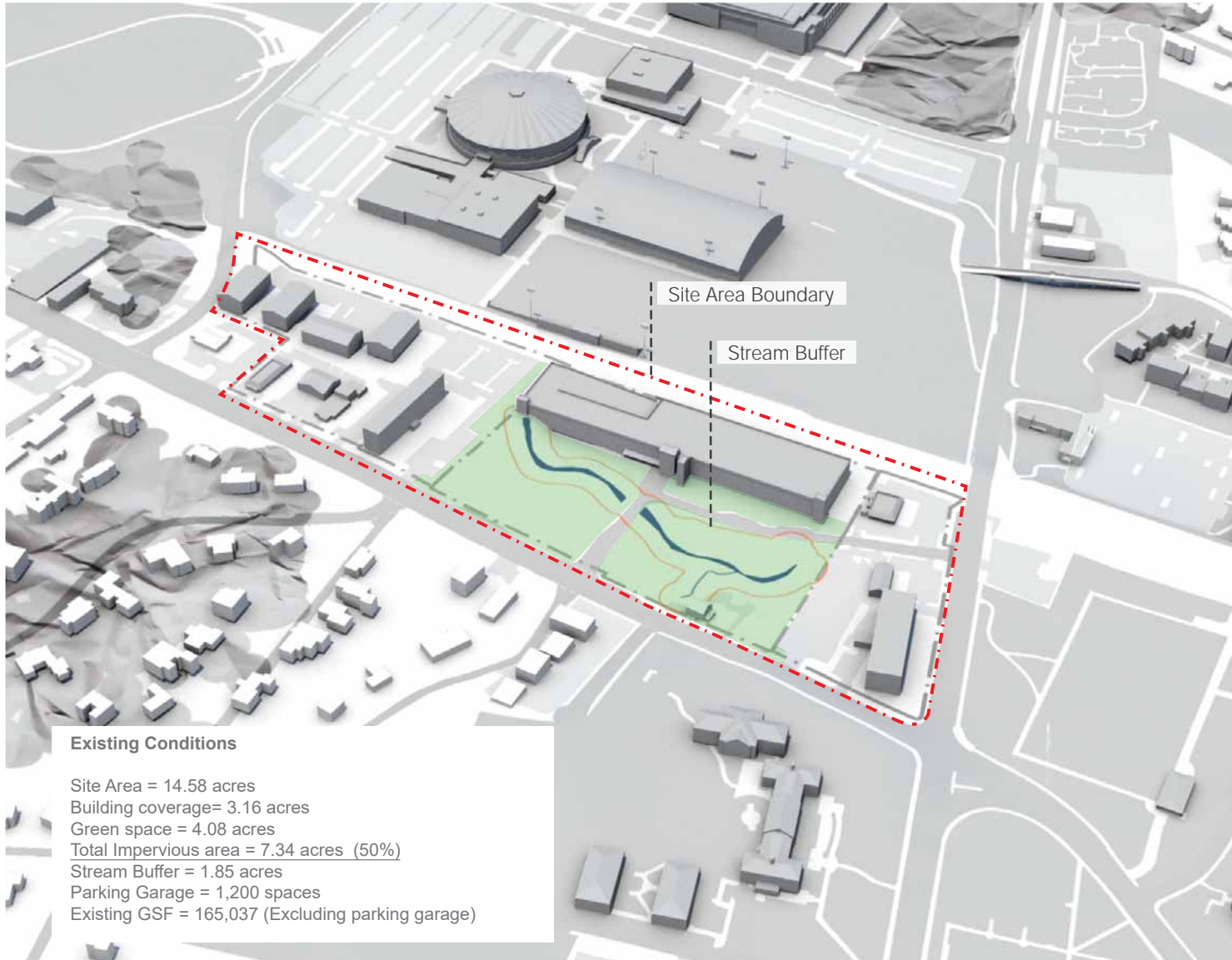
Hydrology as a potential connector of North and Central Grounds

Create a positive impact on downstream issues and accommodate future growth

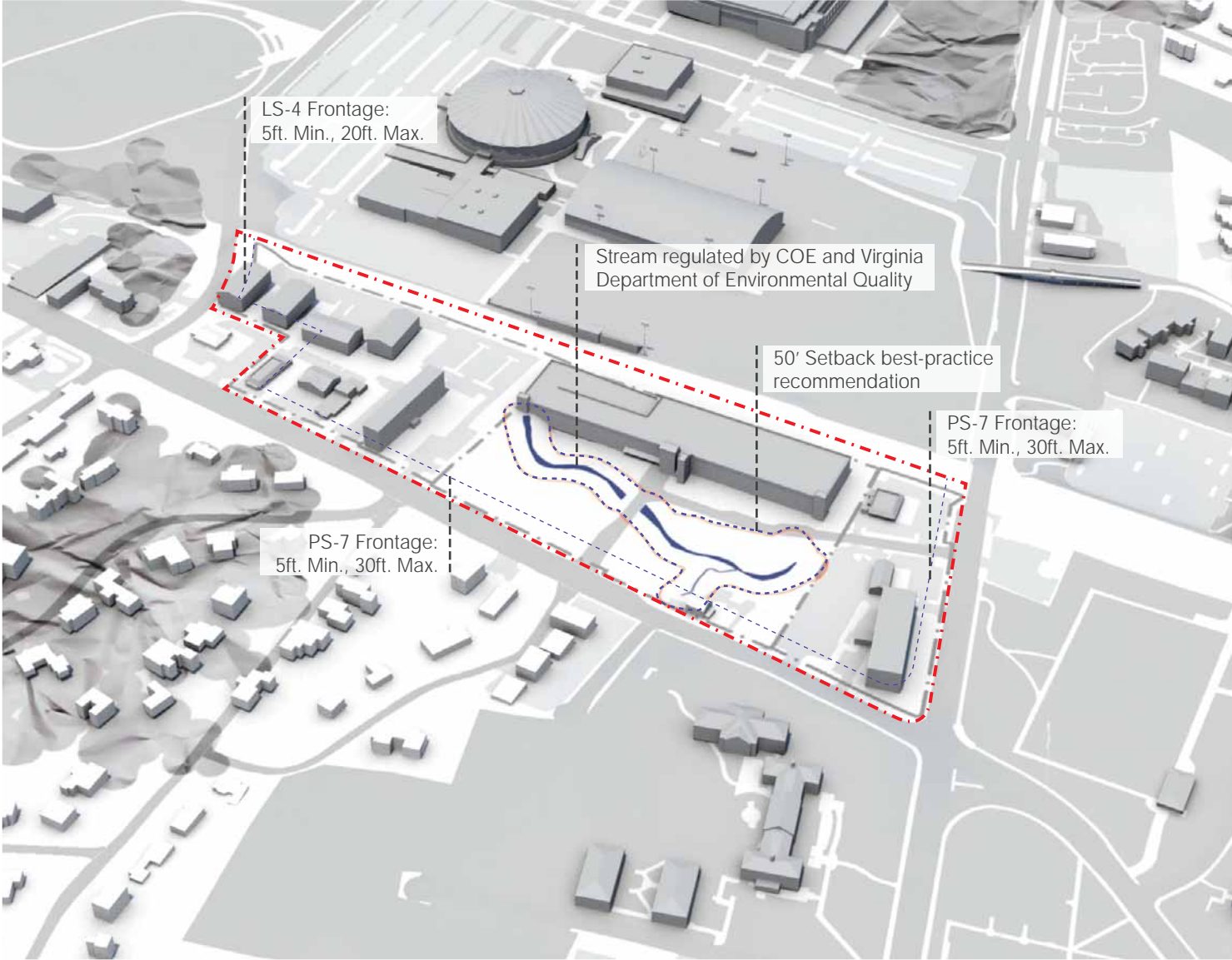
Provide environmental, educational and economic benefit to the University and Community

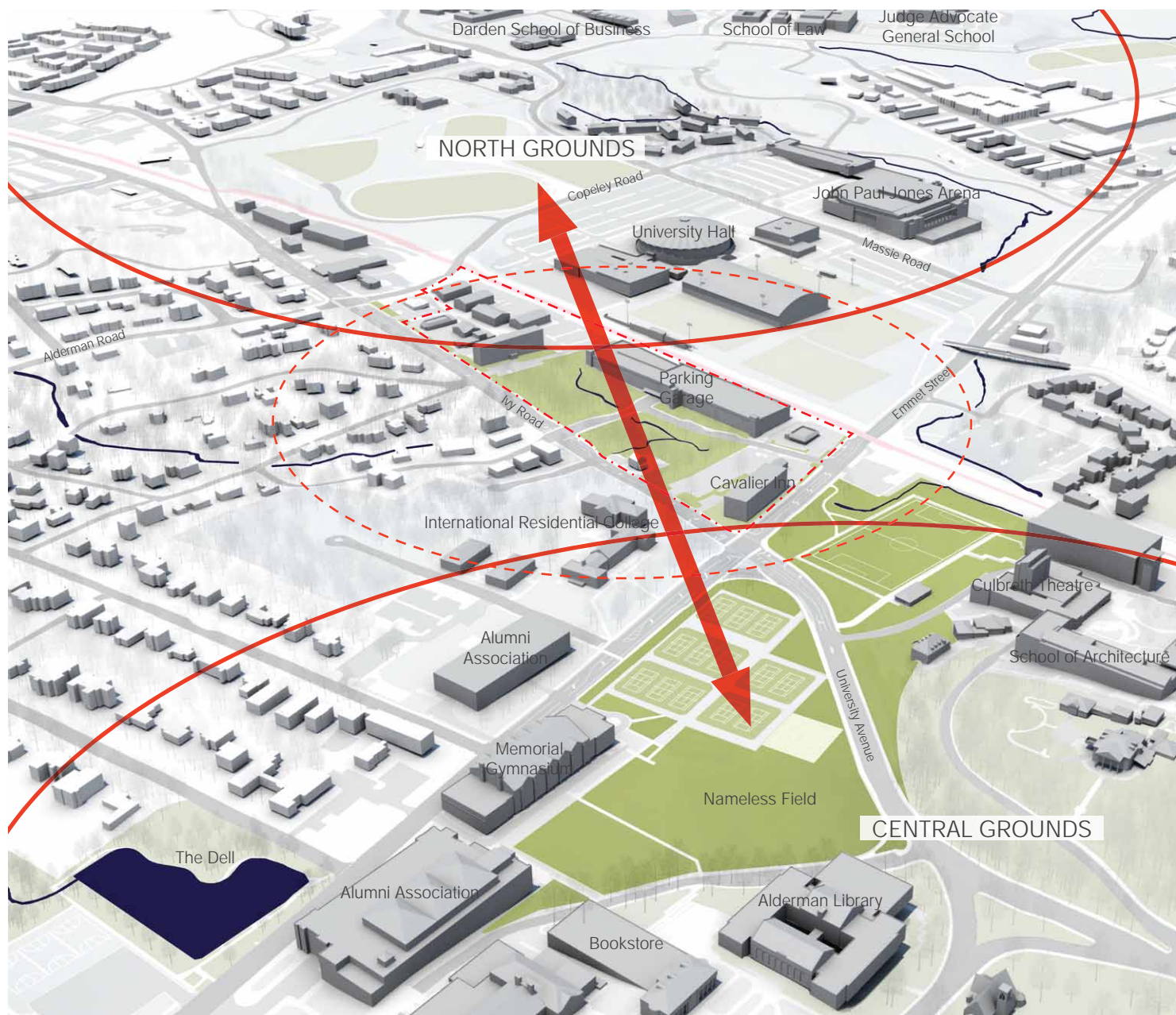


SITE AREA



REGULATORY FRAMEWORK





STRENGTHEN CONNECTIONS & IDENTITY

Ultimately, the Framework for Ivy Corridor will serve as a catalyst for enhanced connectivity to North Grounds. The landscape framework is a significant component of the broader valley landscape, hydrology network, and pedestrian connectivity. The plan capitalizes on, and improves, the existing hydrology function while creating bold new pedestrian corridors to and from North Grounds. It treats sustainability not as an overlay, but as an organic component.

As a significant new neighborhood within the University, the connective landscape framework will serve as a living learning laboratory with strong connections to Central and North Grounds. It will improve current infrastructure and plan for long-term infrastructure needs. It promotes flexibility for unknown program needs and phasing. The landscape seeks to create an exceptional environment that fosters dialogue and transparency, encourages interdisciplinary collaboration, and promote active and engaged learning.

Conclusions

Improve arrival experience to Grounds

Improve pedestrian, bicycle, and vehicular circulation through intersection, and connection to North Grounds
Create a Landscape Framework to maximize identity, value, frontage, address on site

Enhance stormwater ecology with a single big move versus several phased disconnected stormwater projects, with each building project

Develop a phasing plan approach to development.
Enhance mixed use on the site: academic/arts, hospitality, residential, retail.



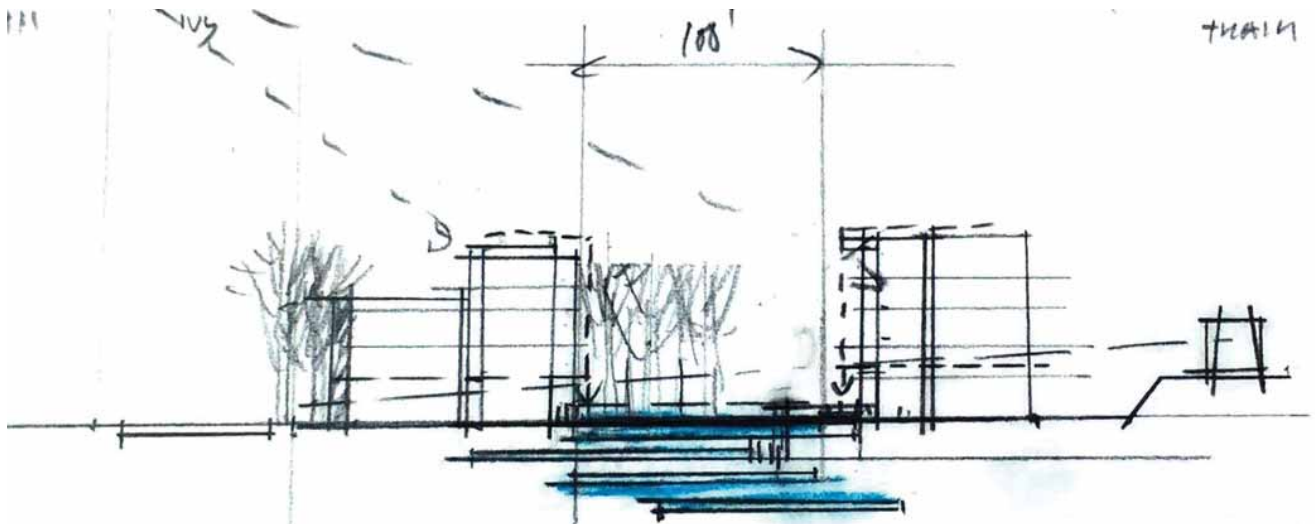
Proposed Framework Plan

CIVIC FRAMEWORK

The Framework principles embody the strategic goals from the Board of Visitors to enable a dynamic, economically viable development that supports the University's mission and provides significant open green spaces for community benefit.

The Framework is driven by a strategy to celebrate and utilize the existing hydrology function as a central, connectivity open space, while also establishing a rational grid of streets and development blocks, scaled appropriately, to achieve maximum flexibility for future development. Future buildings along the streets will have lower building heights to respond appropriately to surrounding context, with the potential for taller buildings along the Railroad track. Additionally, the potential exists for bridges to connect across the Railroad track to future buildings within the athletics district.

The framework posits stormwater and hydrology as one connected feature, as opposed to various disconnected projects associated with each new building. The simple network of streets and pedestrian walks will allow a phased approach to development, always building toward the larger vision.





Alternative 1: "Big Green"



Alternative 2: "Corner Green"



Alternative 3: "Pavilions"

FRAMEWORK SCENARIOS

Various scenarios for the Framework were studied, with respect to the open space at the Emmet / Ivy Intersection. The exploration studied the scale and frontage of the open space as it relates to the broader Valley looking back toward the Academical Village. The analysis of other open spaces throughout Grounds, and their inherent relationship to the buildings engaging them, determined that the appropriate balance resided in the scheme of the "Corner Green," which is the recommended alternative. (See Appendix)

The scale, program and character of this open space will be studied in further detail in subsequent phases.

EXISTING DEVELOPMENT



Existing Conditions

Site Area = 14.58 acres

Building coverage= 3.16 acres

Green space = 4.08 acres

Total Impervious area = 7.34 acres (50%)

Stream Buffer = 1.85 acres

Parking Garage = 1,200 spaces

Existing GSF = 165,037 (Excluding parking garage)



Existing Garage

Villa Diner

Outdoor
Recreation
Center

Cavaller Inn



POTENTIAL FIRST-PHASE PLAN

19,250 SF

**Note:* Building area square footage applies to ground floor footprint only



19,800 SF

15,000 SF

POTENTIAL LONG-TERM PLAN

21,250 SF

20,825 SF

19,250 SF

33,600 SF

34,800 SF

24,000 SF

Development Parcels = 216,875 SF
Development = 600-750,000 GSF
(3-6 Floors) 1.25 FAR
Existing Development = 165,000 GSF

Open Space = 4.80 Acres **+24%**

Impervious Surface = 3.26 Acres **-55%**

**Note:* Building area square footage applies to ground floor footprint only



19,800 SF

15,000 SF

9,000 SF

17,850 SF





EMMET / IVY INTERSECTION

The potential removal of the Cavalier Inn puts forth a powerful opportunity to extend the landscape of Central Grounds into the Ivy Corridor as a new open green, showcasing vibrant student life with future academic program.

Coupled with traffic mitigation improvements across grounds, the proposed changes to the Emmet/Ivy intersection will simplify movements, prioritize the pedestrian and establish a memorable, park-like threshold to the University.



Existing Emmet/Ivy Intersection looking north-west





EMMET STREET

Consistent with the goals of creating a welcoming, park-like arrival experience for visitors, the streetscape along Emmet Street is re-envisioned to have clear and comfortable pedestrian spines, shaded below a robust urban plantation. The new streetscape will open up view corridors into the broader valley, enabling visibility of the vibrant student life within. Dedicated bike lanes and broad pedestrian walks will simultaneously enable greater connections and strengthen the institution's identity.



Existing conditions at Emmet St., looking south





IVY RD / COPELY RD CORNER

Given the surrounding commercial context, along with great exposure at Ivy and Copeley Roads, the western corner of the Ivy Corridor has the potential for transformative change from a low-density suburban condition to a vibrant street edge and threshold to the University. The frontage at this corner provides the opportunity for possible retail to support athletic facilities and the Lewis Mountain Neighborhood.



Existing conditions at Ivy/Copeley intersection





CORNER GREEN

As an extension of the broader open landscape of Central Grounds, this new open green will provide a dynamic, flexible forum for student life. Envisioned as a central lawn with social terraces at the base of future buildings, the lawn will be an iconic, pedestrian oriented, civic convening space for the University and Charlottesville community alike.

The removal of the Cavalier Inn will dramatically change the perception of grounds by physically and visually connecting North and Central Grounds by creating an inviting and open threshold. It has the potential to integrate the long disparate geographic areas of the University with a vibrant, iconic forum for Grounds.



Existing conditions, looking South-East





CENTRAL CORRIDOR

The central green corridor will be the physical and social heart of the district. This space has the potential to unify the district as it develops over time. The future building program fronting this green will create a dynamic and vibrant pedestrian-oriented neighborhood aimed at educating the whole student and moving towards the long-term vision of campus and community.



Existing conditions at Parking Garage, looking west





CENTRAL CORRIDOR

The transformed riparian corridor has the potential to be an active research and learning laboratory, a vibrant student-life zone and a possibly a highly efficient infrastructure conduit. The open space will enable best-practice stormwater management while providing significant new ecosystem services for the environment.

MOBILITY

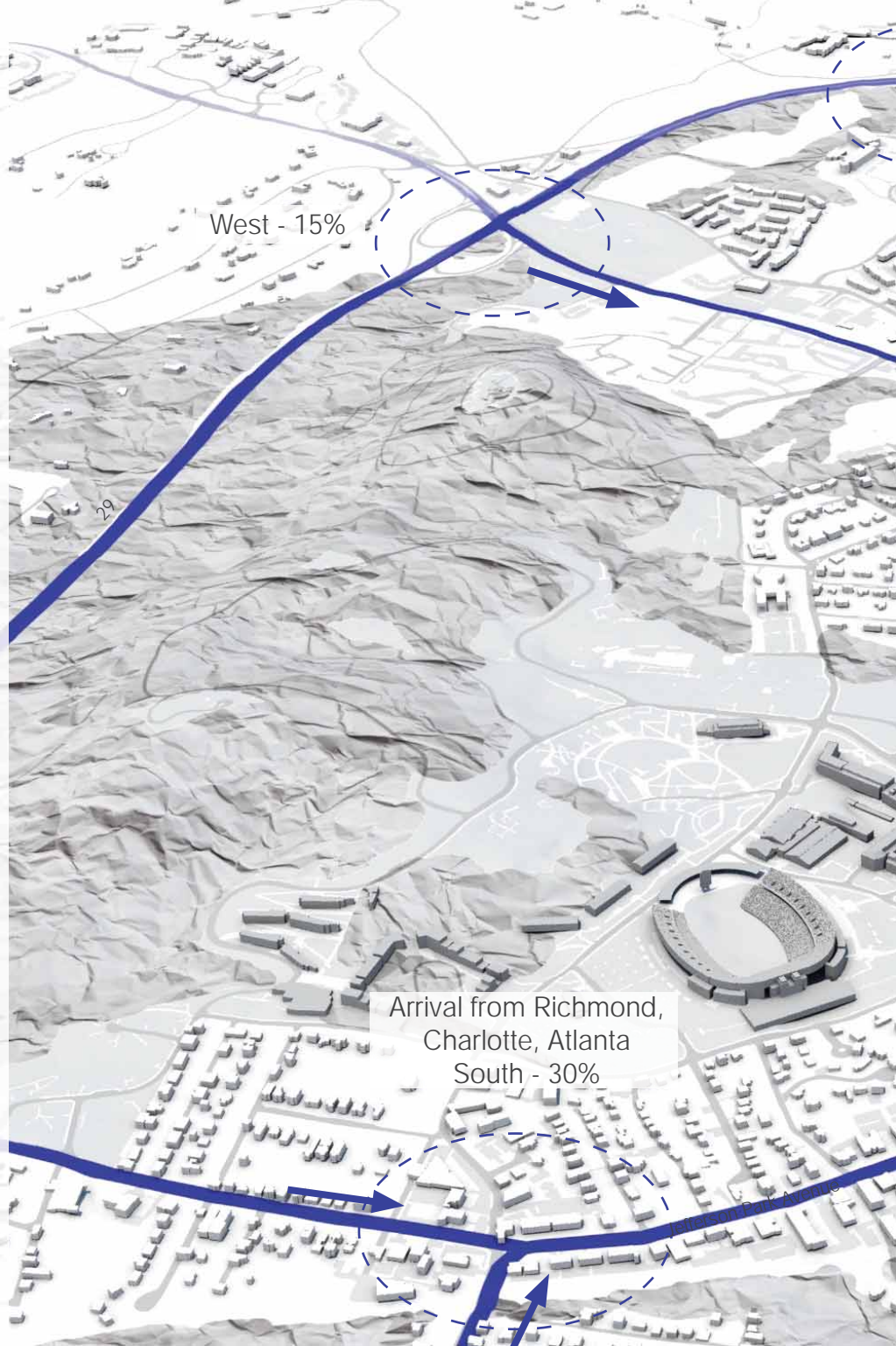
Analysis
Smartscale Opportunity
Recommendations

MOBILITY AND PARKING ANALYSIS

Mobility to Grounds

Opportunities:

- Improve entry experience for Visitors to Grounds
- Regional approach to mitigate traffic constraints on Grounds and future growth
- Potential interceptor parking garages and shuttle service to Grounds
- Improvements at the Ivy/Emmet intersection to improve pedestrian and entry experience for visitors to Grounds





Arrival from Washington
North - 25%

250

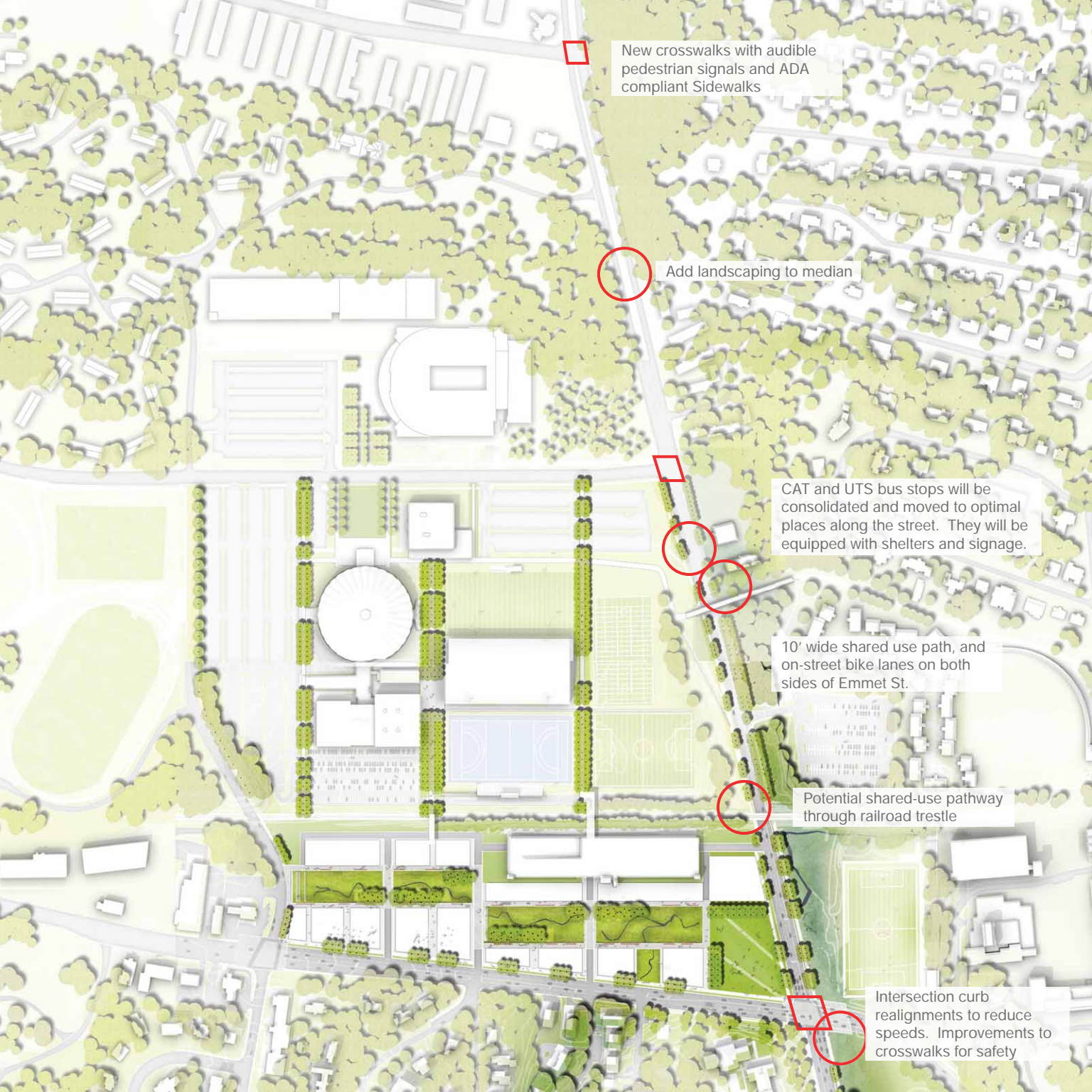
Emmet Street

Ivy Road

University Ave

Jefferson Park Avenue

Arrival from Richmond
East - 30%



New crosswalks with audible pedestrian signals and ADA compliant Sidewalks

Add landscaping to median

CAT and UTS bus stops will be consolidated and moved to optimal places along the street. They will be equipped with shelters and signage.

10' wide shared use path, and on-street bike lanes on both sides of Emmet St.

Potential shared-use pathway through railroad trestle

Intersection curb realignments to reduce speeds. Improvements to crosswalks for safety

SMARTSCALE FUNDING OPPORTUNITY

Emmet Street Improvements

As part of the new Smartscale legislation enacted in 2014, the City of Charlottesville has planned improvements for Emmet Street. The initiative will focus on improving congestion, addressing safety concerns and encouraging economic development. The University, in accordance with the Ivy-Corridor project, is collaborating with the City of Charlottesville to make additional improvements to Emmet Street that build toward a larger vision. The goals outlined for Emmet St under the Smartscale legislation include:

Total Budget = \$12,115,000

- Improve pedestrian and bike connections and safety
- Consolidate bus stop locations
- Shared-use path under railroad trestle
- Traffic and pedestrian improvements at Ivy/Emmet street intersection

EXISTING EMMET / IVY INTERSECTION

ANALYSIS:

- Existing AM average vehicular delay 28.8 sec and PM average vehicular delay is 47.4 sec
- Significant growth in pedestrian movement along Ivy Road in the past 10 years
- Lack of safety and clarity to pedestrian and bicycle movement
- Pedestrian crossing is interrupted at the intersection by traffic island
- Inefficient transit circulation
- Not an appealing visual experience and arrival to Grounds

PEDESTRIAN WALK
BIKE LANE



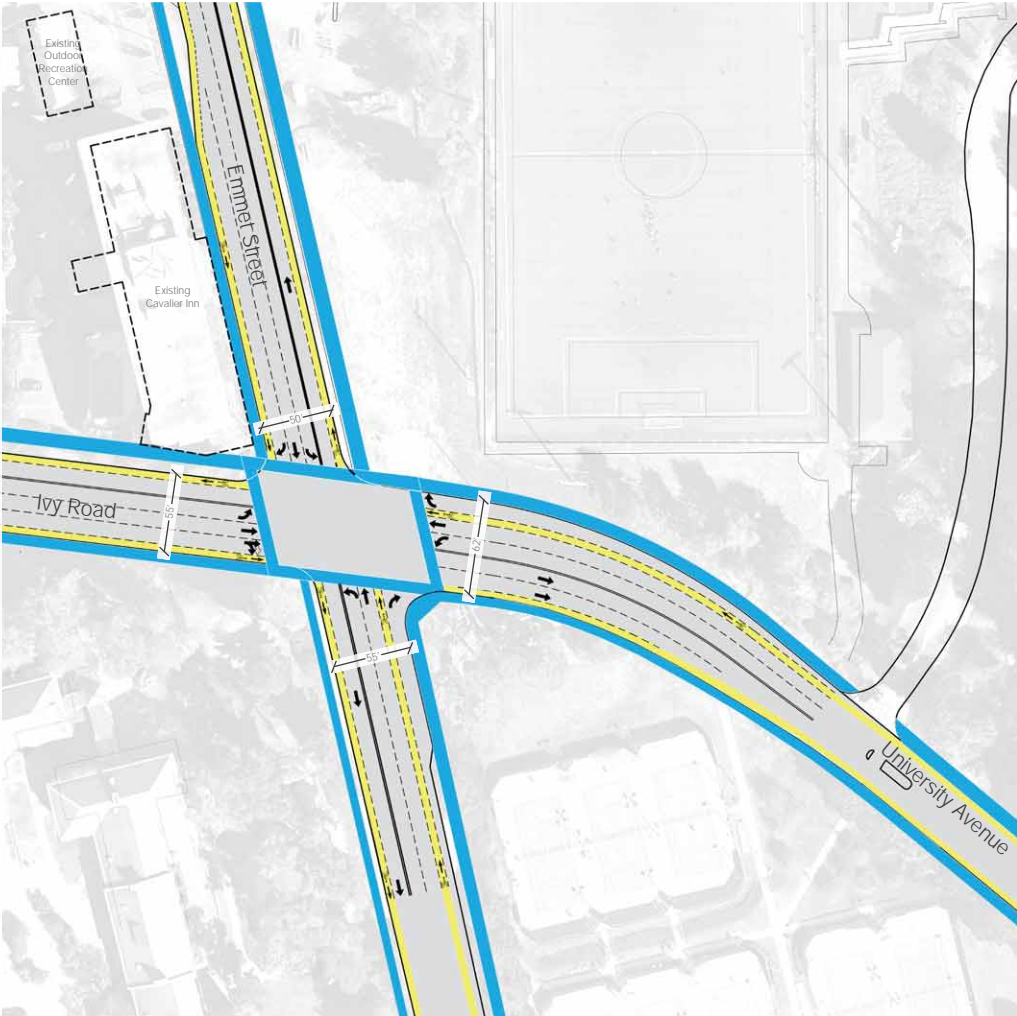
PROPOSED EMMET/IVY INTERSECTION

RECOMMENDATION:

- Additional SB right and NB right turn lane on Emmet street
- Revise traffic signal timing
- Designated, continuous bike lanes on Ivy Rd. and Emmet St.
- 10' wide pedestrian walkways and a reduced crossing distance. Max pedestrian wait time is 98 seconds
- Existing AM vehicular delay is reduced to average 24.1 sec and PM average vehicular delay is 36.9 sec (including future growth)
- Significant improvement in safety and clarity to pedestrian and bicycle movement
- Pedestrian crossing is not interrupted at the intersection by traffic island
- Improves visual experience and arrival to Grounds

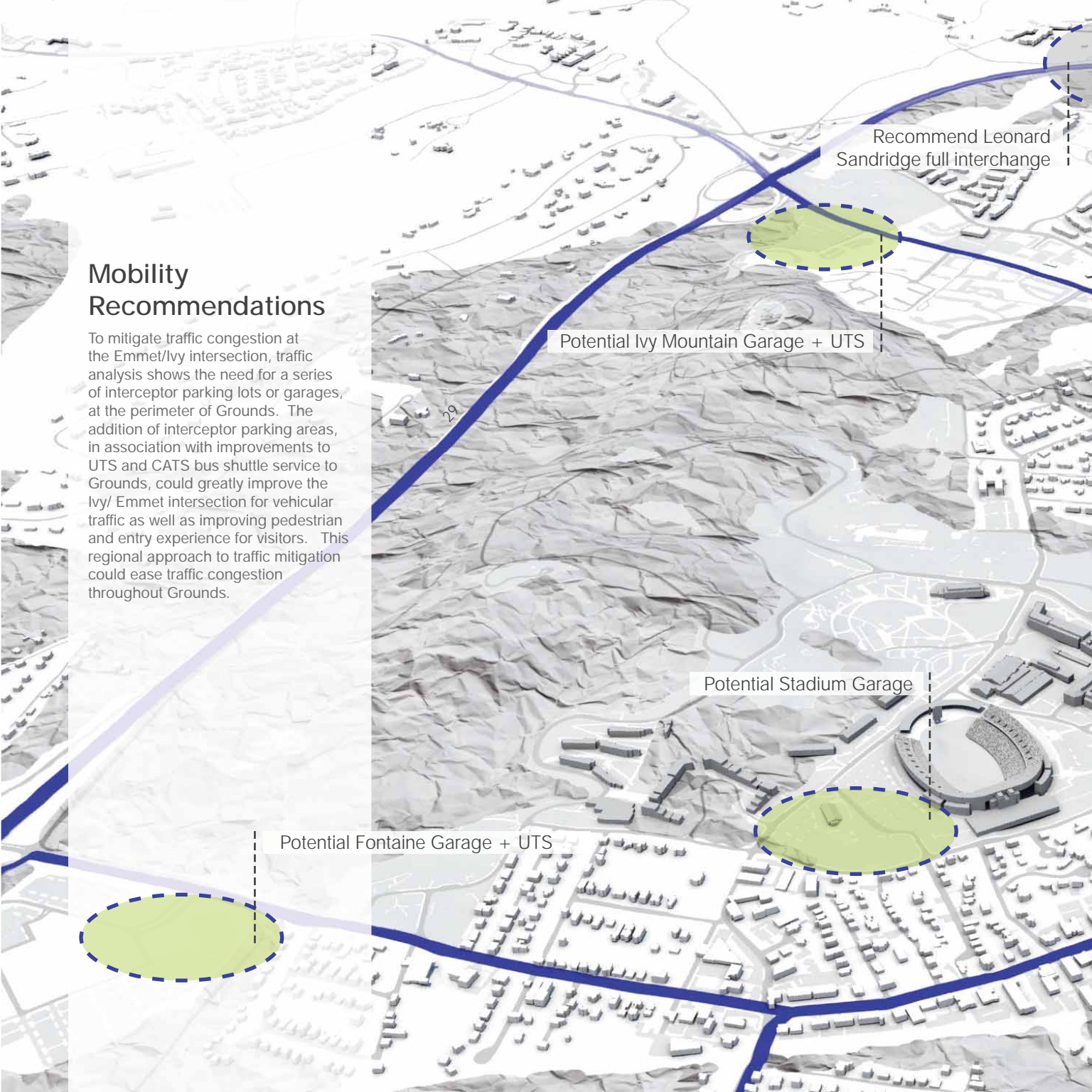
Note: Many alternative intersection configurations were studied, and these analyses can be found in the Appendix.

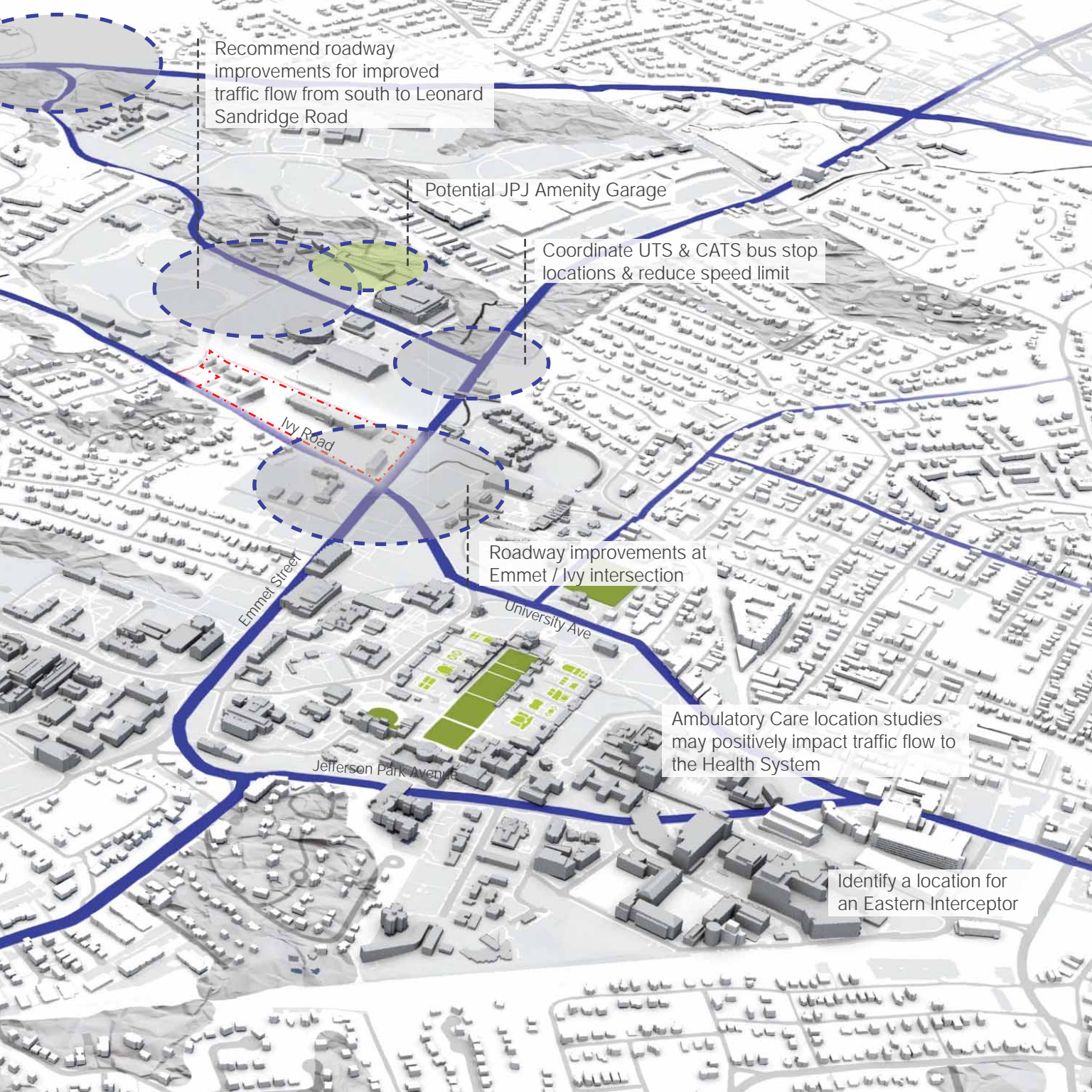
- PEDESTRIAN WALK
- BIKE LANE



Mobility Recommendations

To mitigate traffic congestion at the Emmet/Ivy intersection, traffic analysis shows the need for a series of interceptor parking lots or garages, at the perimeter of Grounds. The addition of interceptor parking areas, in association with improvements to UTS and CATS bus shuttle service to Grounds, could greatly improve the Ivy/ Emmet intersection for vehicular traffic as well as improving pedestrian and entry experience for visitors. This regional approach to traffic mitigation could ease traffic congestion throughout Grounds.





Recommend roadway improvements for improved traffic flow from south to Leonard Sandridge Road

Potential JPJ Amenity Garage

Coordinate UTS & CATS bus stop locations & reduce speed limit

Ivy Road

Emmet Street

Roadway improvements at Emmet / Ivy intersection

University Ave

Jefferson Park Avenue

Ambulatory Care location studies may positively impact traffic flow to the Health System

Identify a location for an Eastern Interceptor

UNIVERSITY NEEDS

| Proximity
| Summary of Findings

PROXIMITY

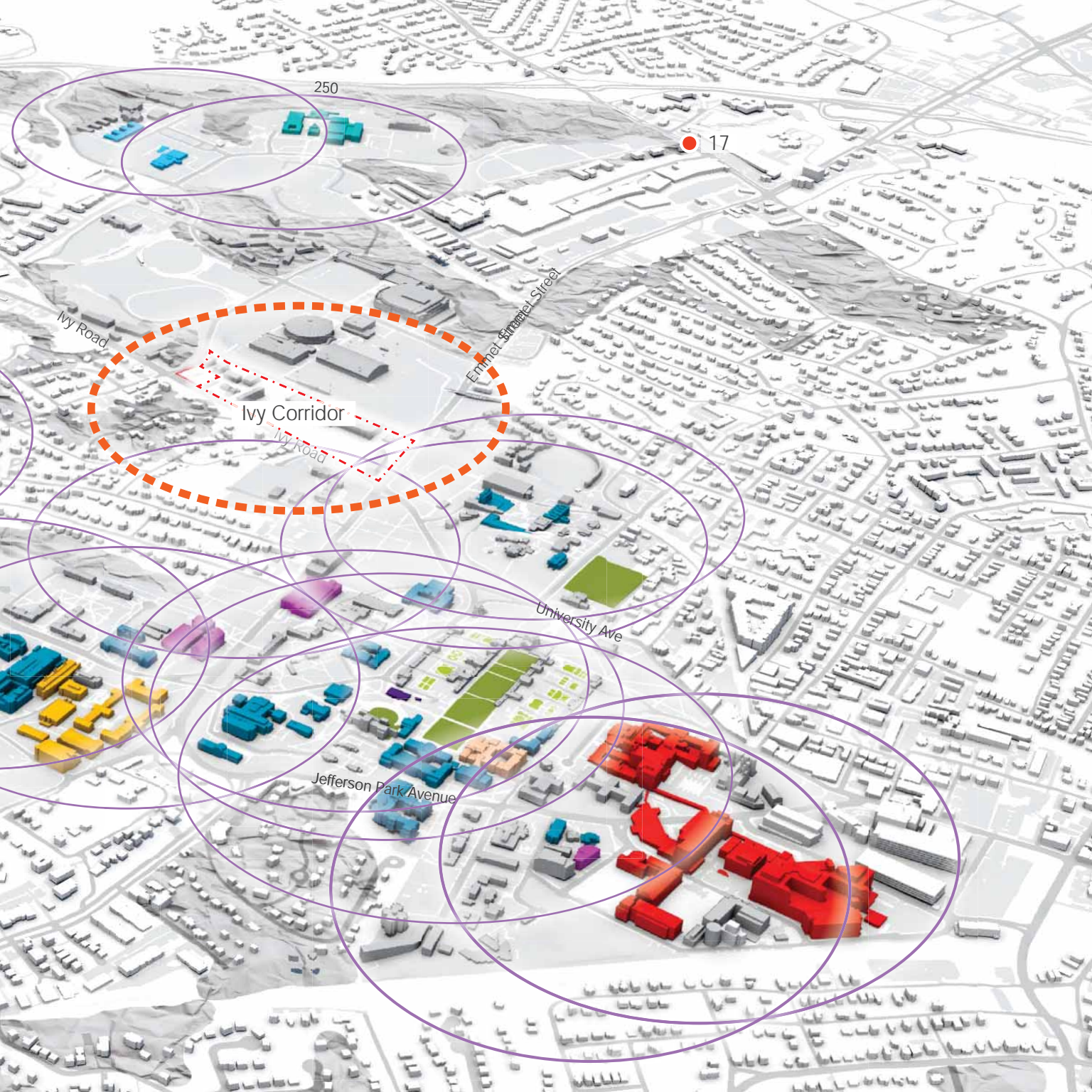
Proximity to Existing Schools

The Universities eleven schools are mostly concentrated within Central Grounds, however, two are located in North Grounds, separated by the University Athletics District. The circles here show roughly 10-minute walking distances from the geographic center of each school.

Inherent in its physical location, the Ivy Corridor Site has the potential to be a clear connector and convening space between the Schools on Central Grounds and those on North Grounds, and to be a vibrant 24/7 neighborhood unifying Grounds.

- COLLEGE AND GRADUATE SCHOOL OF ARTS & SCIENCES
- CURRY SCHOOL OF EDUCATION
- DARDEN SCHOOL OF BUSINESS
- FRANK BATTEN SCHOOL OF LEADERSHIP AND PUBLIC POLICY
- MCINTIRE SCHOOL OF COMMERCE
- SCHOOL OF ARCHITECTURE
- SCHOOL OF CONTINUING / PROFESSIONAL STUDIES
- SCHOOL OF ENGINEERING AND APPLIED SCIENCE
- SCHOOL OF LAW
- SCHOOL OF MEDICINE
- SCHOOL OF NURSING





Proximity to Centers & Institutes

The University is fortunate to be the home to many vibrant international centers and institutes that enrich the student experience and advance the Universities mission. The Centers and Institutes, however, are often spread across Grounds.

As a centrally located Convening space, the Ivy Corridor site has the potential to be a dynamic home to many Institutes and Centers that would benefit from better proximity and visibility.

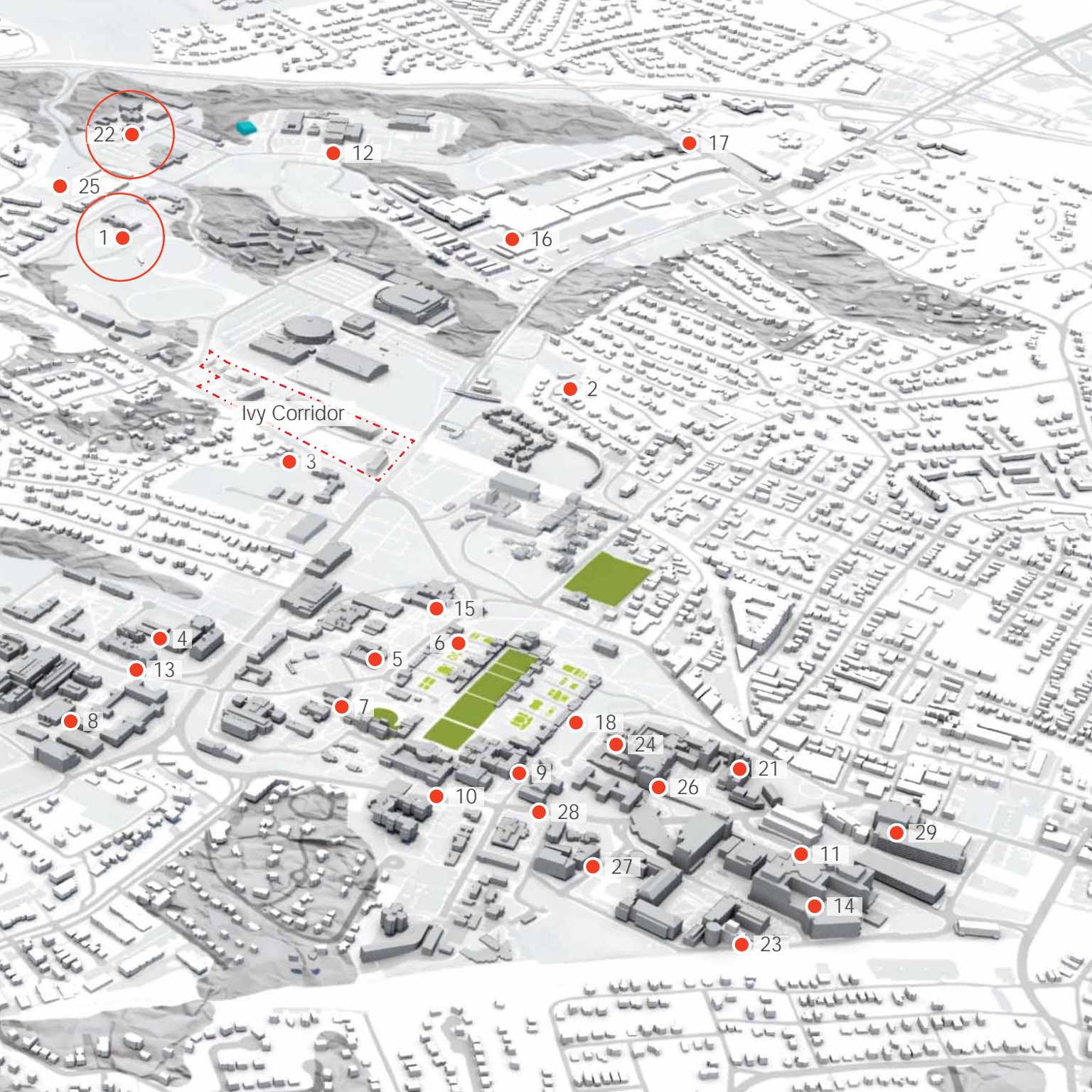
1. Miller Center for Public Affairs
2. Lorna Sundberg International Center
3. Center for the Liberal Arts
4. Center for American English Language and Culture
Center for Advanced Study of Teaching and Learning
Center for Effective Teaching of Higher Education
5. Center for Undergraduate Excellence
Center for Study of Local Knowledge
Jefferson Public Citizens Program
6. Center for Global Inquiry and Innovation
7. Carter Woodson Institute for African-American Studies
Center for South Asian Studies
Tibet Center
8. Center for Risk Management of Engineering Systems
Center for Electromechanical Science and Engineering
9. CMIT School of Commerce
McIntire Center for Financial Innovation
10. East Asia Center
Middle East Studies Program
11. Cancer Center
12. Center for National Security Law
Center for Oceans Law and Policy
13. Center for Nanoscopic Materials Design
MRSEC
Institute for Nuclear and Particle Physics
14. Center for Public Health Genomics
Charles O. Strickler Transplant Center
The Children's Hospital Heart Center of Excellence
Children's Hospital Heart Center
The Digestive Health Center of Excellence
Digestive Health Research Center
Heart Center
Kluge Children's Rehabilitation Center
Cardiovascular Research Center
15. Institute for Advanced Technology in the Humanities
16. Institute on Aging
17. Institute of Law, Psychology, and Public Policy
18. Teaching Resource Center
19. Vestibular and Balance Center
20. Weldon Cooper Center for Public Service
Sorenson Institute
21. Women's Center
Center for Global Health
22. Tayloe Murphy Center
Batten Institute for Entrepreneurship and Innovation
23. Asthma and Allergic Diseases Center
24. Center for Biomedical Ethics and Humanities
25. Center for Politics
26. Center for Cell Signaling
Center for Immunity, Inflammation and Regenerative Medicine
Myles H. Thaler Center for AIDS and Human Retrovirus Research
27. Center for Nursing Research
28. General Clinical Research
29. Outpatient Surgery Center

- Center for Russian and East European Studies
- Center for Research in Contraceptive and Reproductive Health
- Institute for Environmental Negotiations

• No address information

20





Summary of Findings

Our discussions with various Schools, Institutes and Centers has yielded an initial series of potential program opportunities for the Ivy-Corridor Site.

Conversations and analysis for program needs across the University in relation to the Ivy Corridor Site are ongoing. The Ivy/Emmett site occupies a crucial connective position between Central and North Grounds. It is proximate to every one of the university's existing schools, and also has good access for external audiences. As such, the site's convening power is second to none. It is therefore critical for the site's mix of uses to include academics.

Given the collaborative nature of interdisciplinary research, the academic idea for the site moves away from a single model of ownership. Anchor academic tenants could be placed so as to make feasible significant shared resources, particularly those associated with meeting and additional maker spaces like Open Grounds and iLab.

Good potential fits include the Batten School of Leadership and Public Policy and arts related uses, particularly those less directly connected to the learning and research mission, like the university's museums. STEM uses are likely better suited to other sites more proximate to engineering and medicine.

Stakeholder Groups Interviewed:

Batten / IT

Allen Stam, Bill Ashby, Ron Hutchins

UVAF

Tim Rose, Fred Missel, Todd Marshall, Pat McCann, Bill Cromwell, Matthew Harris

College/Arts

Jody Kielbasa, Matthew Burtner, Francesca Fiorani, Steven Warner, Bruce Boucher, Margo Smith, Anna Towns

Research/Entrepreneurship

Bill Sherman, Jeff Blank

Provost

Tom Katsouleas

Board of Visitors

Bill Goodwin, Kevin Fay

UVAF Board

Jim Todd, Matt Richardson, L.F. Payne

Housing and Student Services

Gay Perez, Christina Morell, Jill Krantz

Alumni Association

Tom Faulders, Nargis Cross

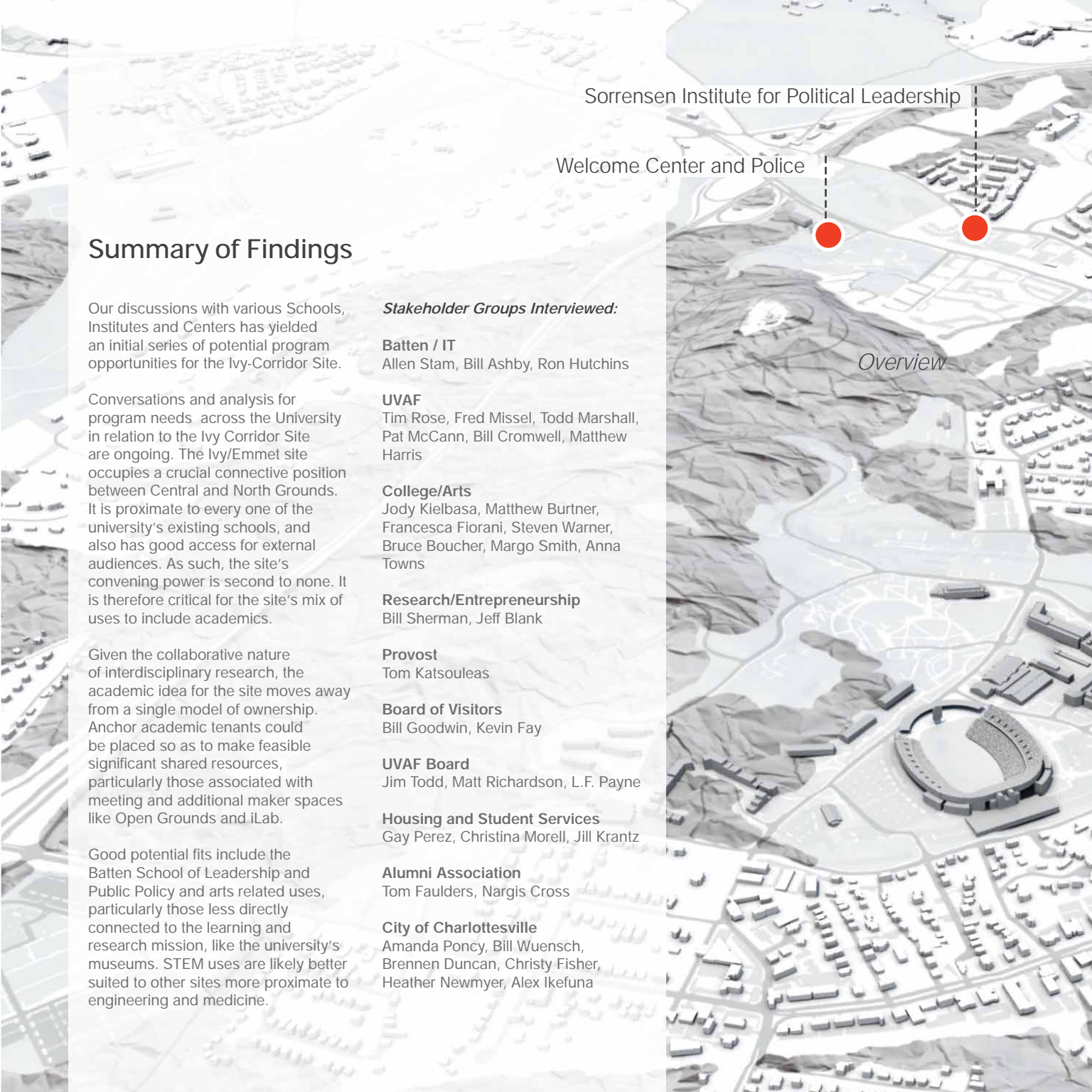
City of Charlottesville

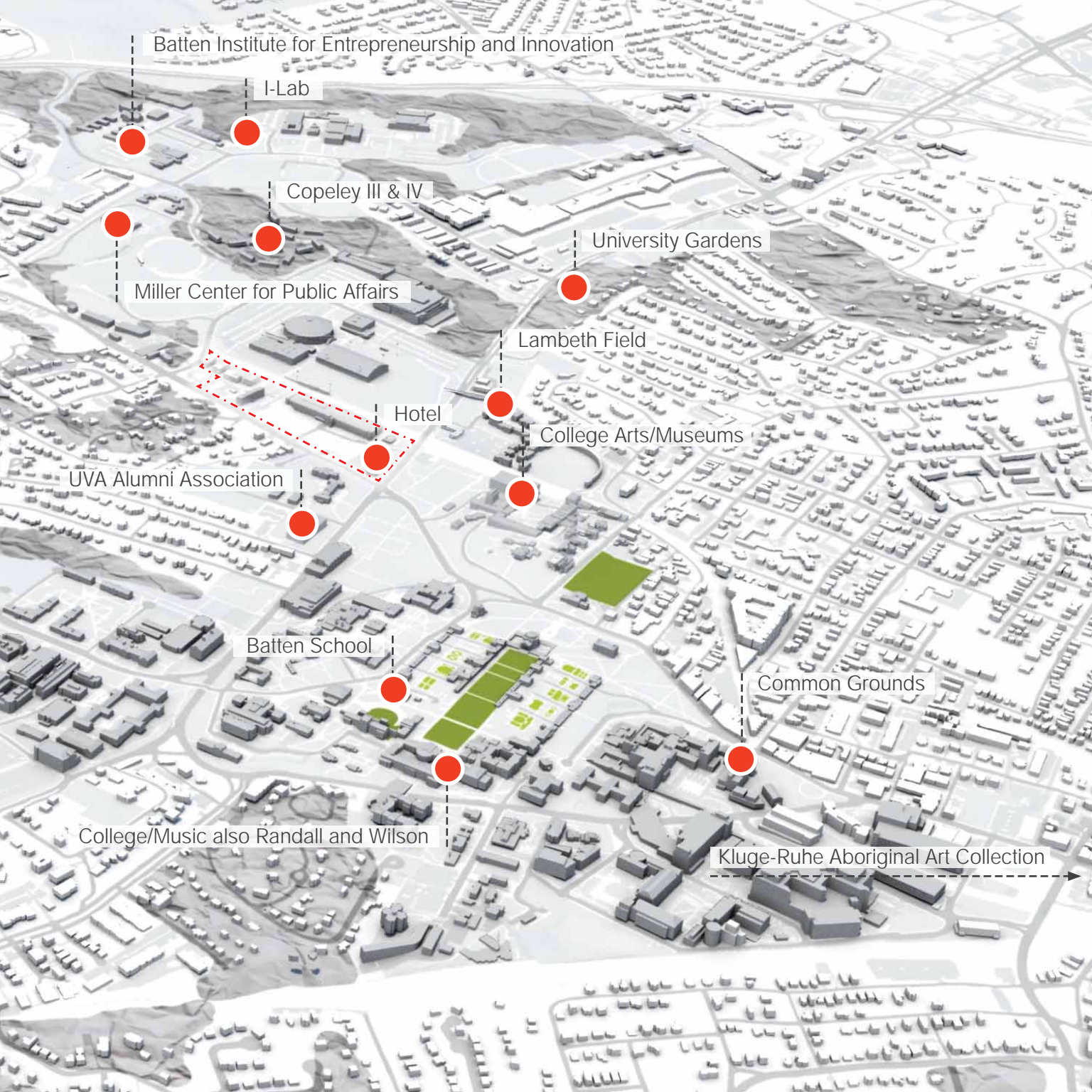
Amanda Poncy, Bill Wuensch, Brennen Duncan, Christy Fisher, Heather Newmyer, Alex Ikefuna

Sorrensen Institute for Political Leadership

Welcome Center and Police

Overview





Batten Institute for Entrepreneurship and Innovation

I-Lab

Copeley III & IV

University Gardens

Miller Center for Public Affairs

Lambeth Field

Hotel

College Arts/Museums

UVA Alumni Association

Batten School

Common Grounds

College/Music also Randall and Wilson

Kluge-Ruhe Aboriginal Art Collection

MARKET STUDY

- Hospitality
- Retail
- Housing
- Precedents

MARKET ANALYSIS

Overview

The analysis examines the balance of supply and demand for three candidate land uses including residential, commercial/retail, and hotel. Academic uses were also considered as part of the overall study.

The analysis for each of the land uses is presented separately in this study but it is important to remember that the value of the Ivy Corridor site will largely be driven by the integration of the multiple land uses (including academic) into a vibrant mixed-use site serving a broad group of users.

The program figures shown in this study are intended to represent aggregate figures that are likely to 'come on-line' in multiple phases

The robust model of multiple academic centers and programs sharing the often underutilized lecture, performance, and collaborative work space should inform a unique hotel and conference opportunity for the site. An integrated idea of shared academic workspace and symposia space coupled with hotel accommodation, food, catering, concierge, and conference space at this stunning Grounds setting will offer much needed and gracious convening space at the geographic center between North and Central Grounds.

HOSPITALITY

Summary of Findings

Charlottesville hotel market is very healthy

Occupancies strong at 70% with substantial pricing growth over the last five years

Hotels in close proximity to Grounds outperform others with 6% annual REVPAR (revenue per available room) growth

Large quantity of planned supply with 950 rooms in the pipeline (need to closely monitor)

Market should be able to absorb 700 to 2,000 rooms over the next two years based on a range of 2% demand growth to 5% demand growth

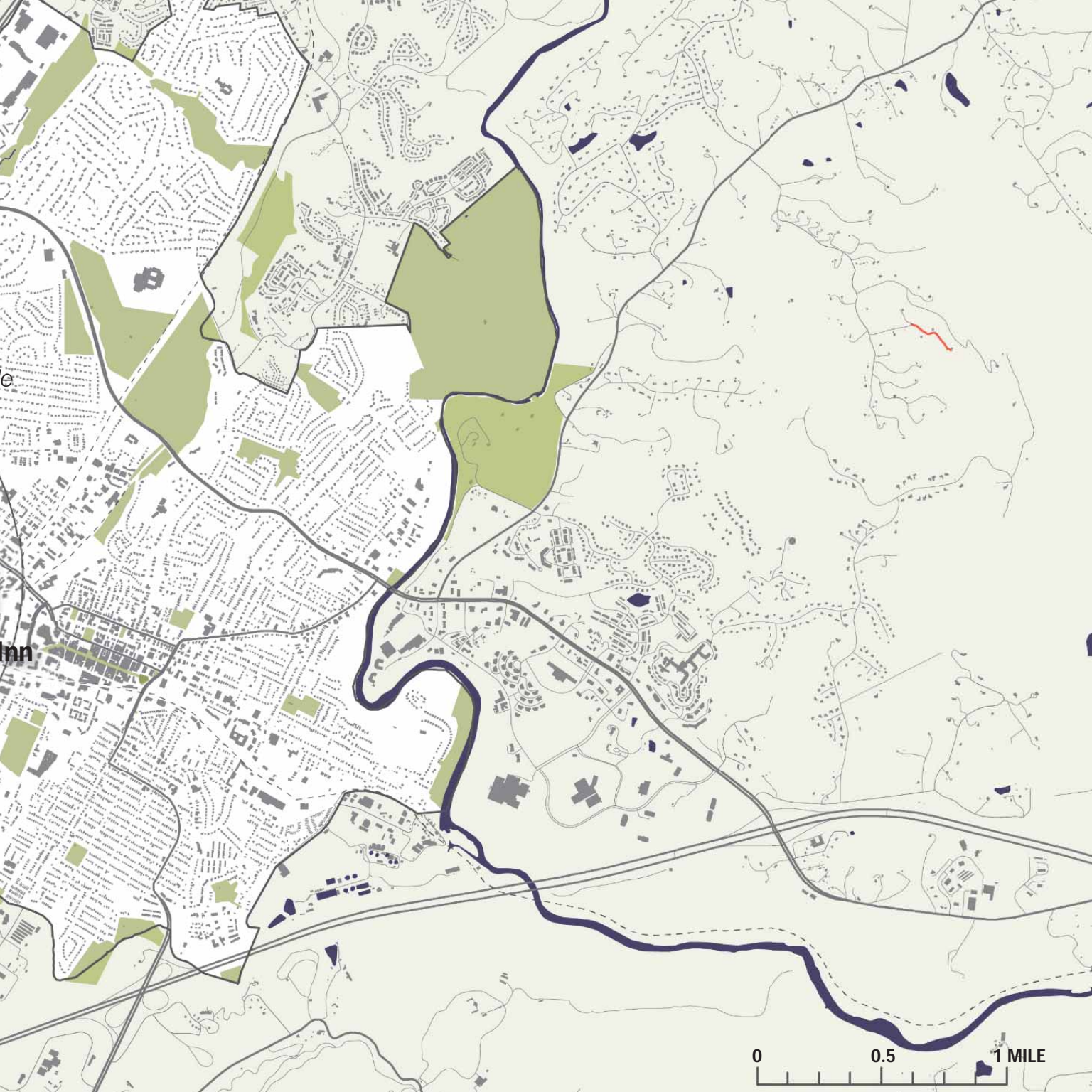
Believe a non-flag unique brand/ concept catering to UVA community could be preferable

Additional needs for UVA related meeting space

HOSPITALITY DEMAND FINDING

Demand Finding: Support for a 200 bed hotel concept with 5,000 – 6,000 square feet of conference space. Should serve UVA audiences and meeting space needs and complement Boars Head and Darden Inn.





HOSPITALITY

Case Studies Summary

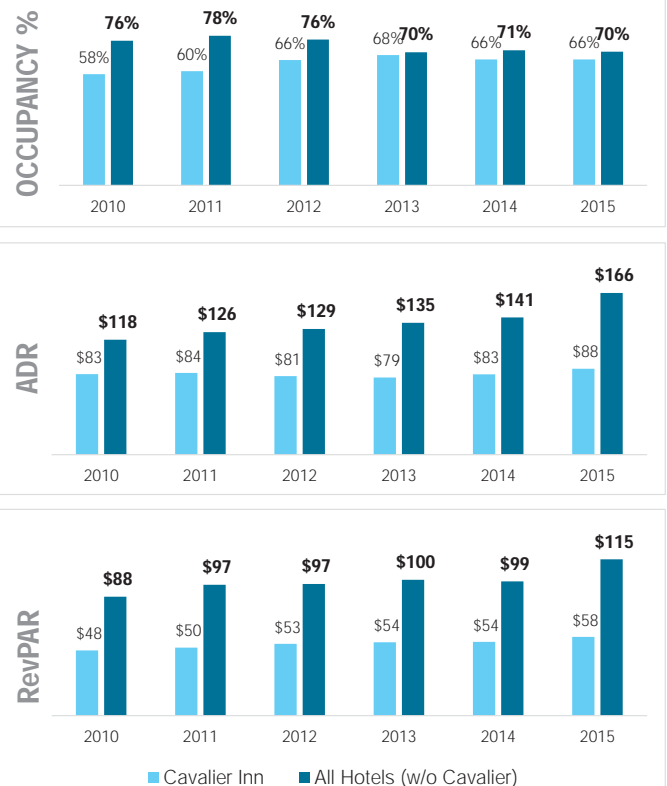
Purpose is to highlight campus adjacent hospitality properties that are uniquely entwined with the campus community

Show properties that function as an extension of the university environment and cater to the needs of specific colleges

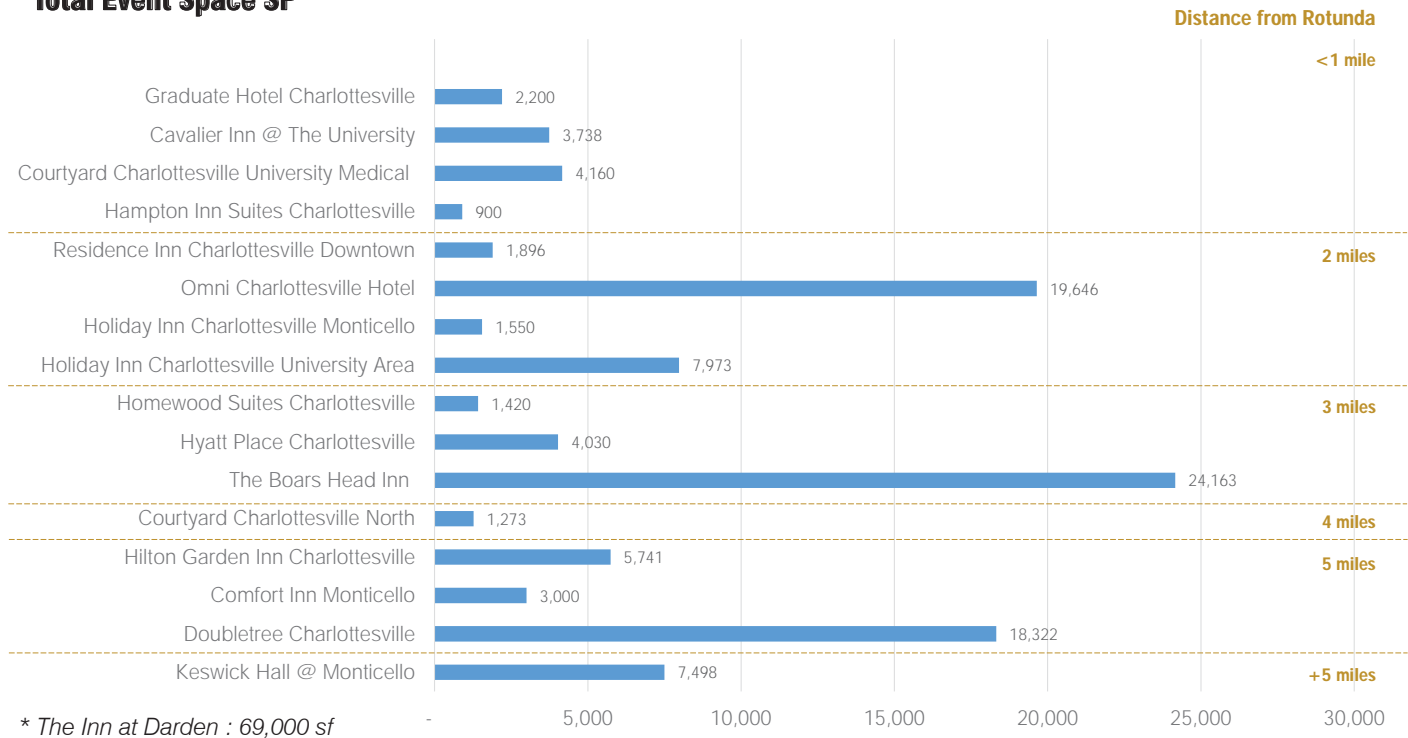
Properties are developed, owned, and managed under a variety of arrangements

Properties with mixed-use environments and campus adjacencies have a built-in locational advantage due to 'captive' market audiences

Most case study properties are the 'flagship' conference facility adjacent universities but there are several smaller scale properties that could serve as a model for a smaller Ivy Corridor property/larger Boars Head arrangement



Total Event Space SF



A detailed map of the Charlottesville in-town retail market. The map shows a dense network of streets, building footprints, and green spaces. Three large, overlapping red circles are drawn across the map, representing the 'sphere of walkable demand' for different retail sites. The circles are centered on various parts of the urban core, with one circle in the upper right, one in the center, and one in the lower right. The map uses a color palette of light green for parks and open spaces, light grey for streets and building footprints, and various colors (red, orange, yellow, green, blue) for different types of buildings or land uses. The text is overlaid on the left side of the map.

RETAIL

Summary of Findings

The Charlottesville in-town retail market is extremely healthy with a robust mix of offerings and extremely low vacancy (5%)

Site will be positioned primarily within the sphere of walkable demand (with additional support from drive by traffic and on-site uses)

Largest demand looks to be for restaurant uses (primarily fast casual and with one sit-down option affiliated with the hotel)

Additional demand for services (personal health, technology, fitness)

Some demand for convenience grocery (as replacement for 7-11)

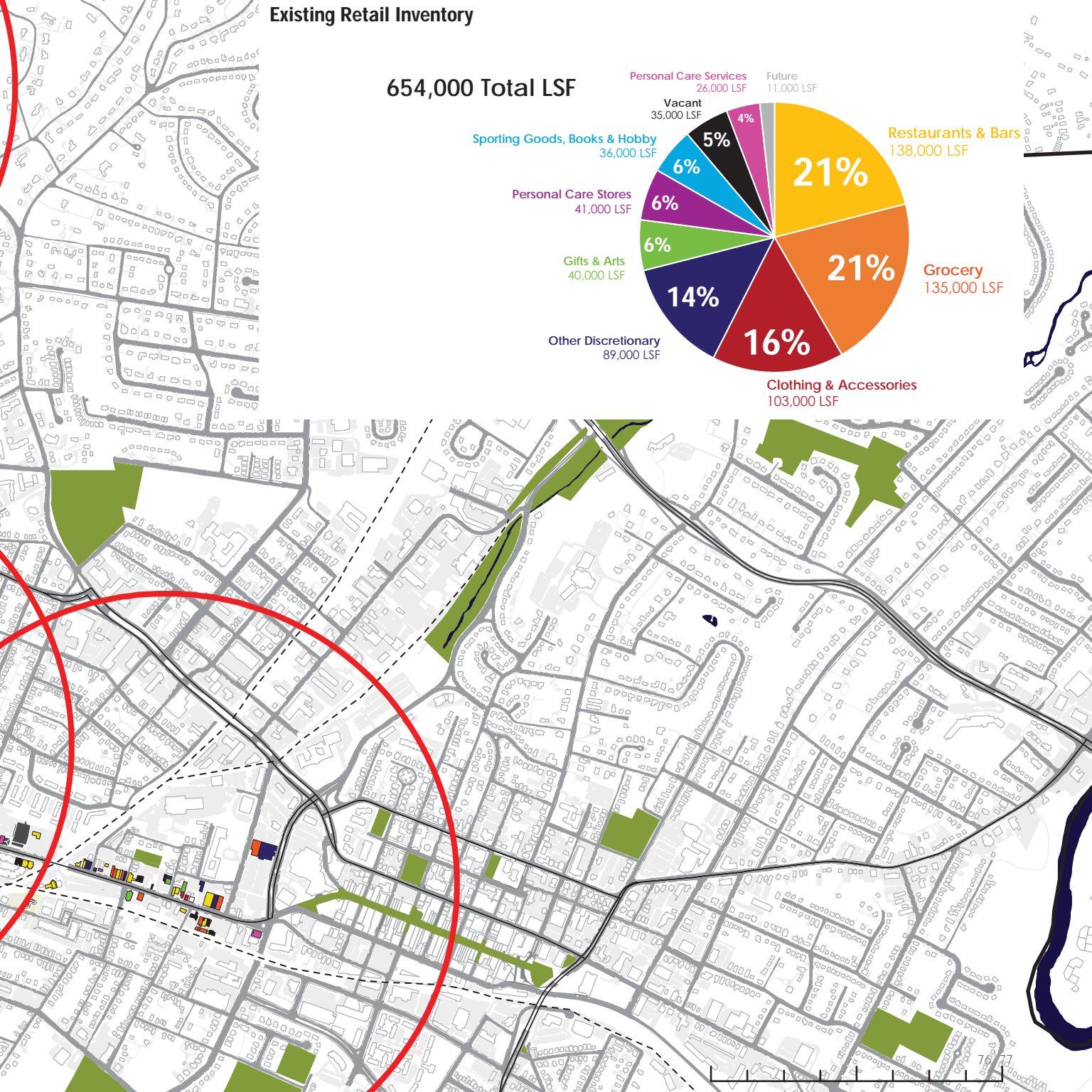
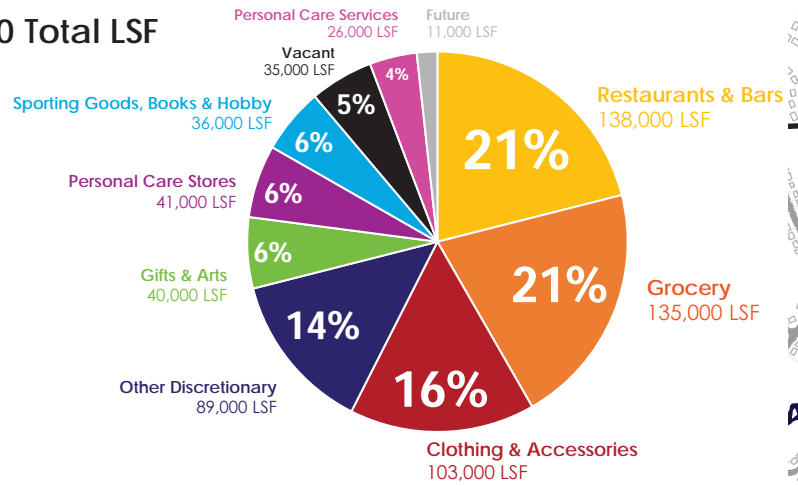
Not appropriate for apparel and other soft cost retailers

RETAIL DEMAND FINDING

Support for approximately 20,000 - 30,000 square feet of walkable retail, led by restaurant and service oriented tenants in addition to the approximately 40,000 square feet already located in this zone.

Existing Retail Inventory

654,000 Total LSF



RESIDENTIAL

Summary of Findings

Charlottesville residential market is very strong with adjacent areas showing high home values and price appreciation

Charlottesville has a robust multi-family market catering to both student and non-student populations. Rental product targeting students achieves a substantial premium (\$2.23 per square foot versus \$1.48 per square foot).

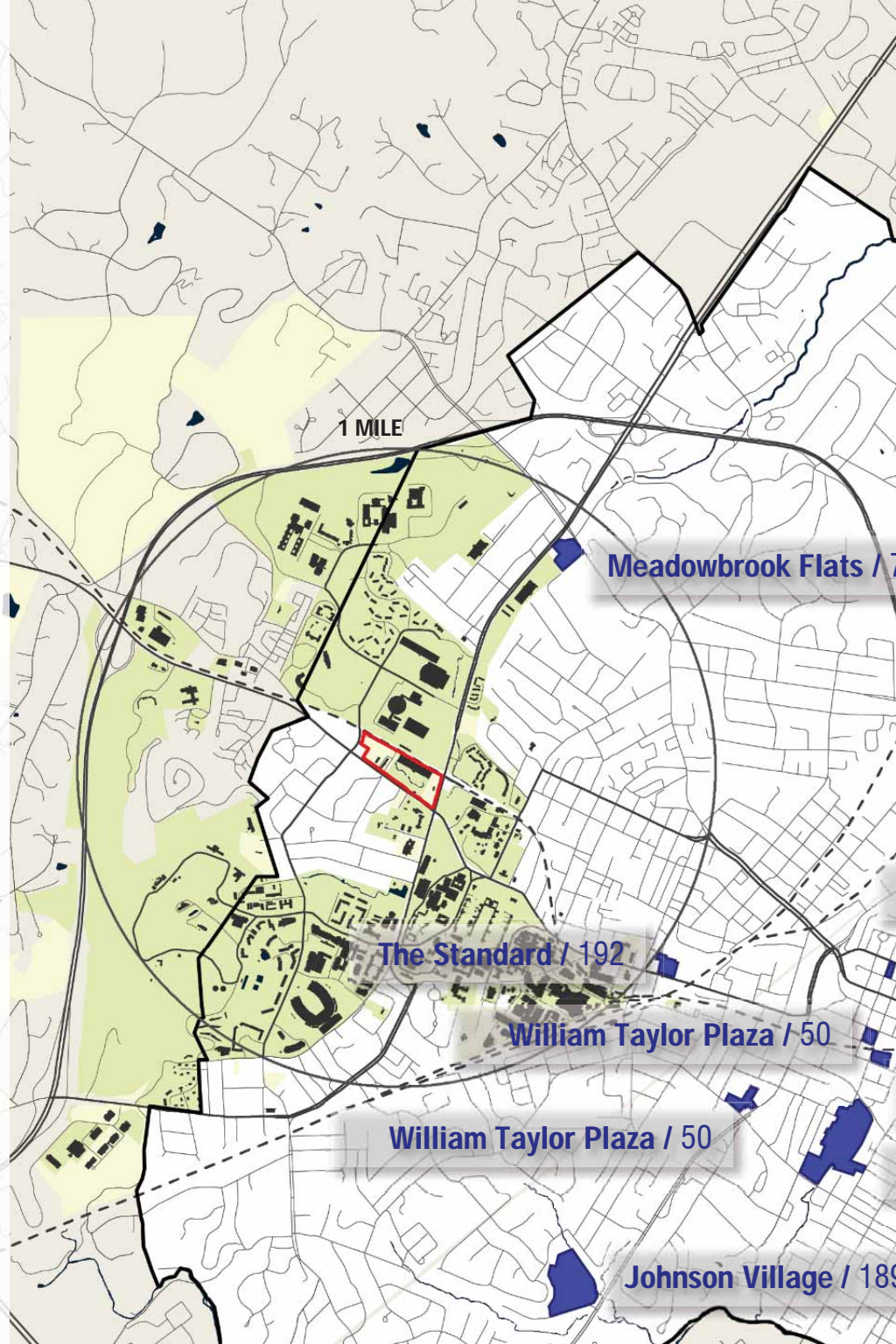
The Ivy corridor site is a prime location in a high cost, underserved market

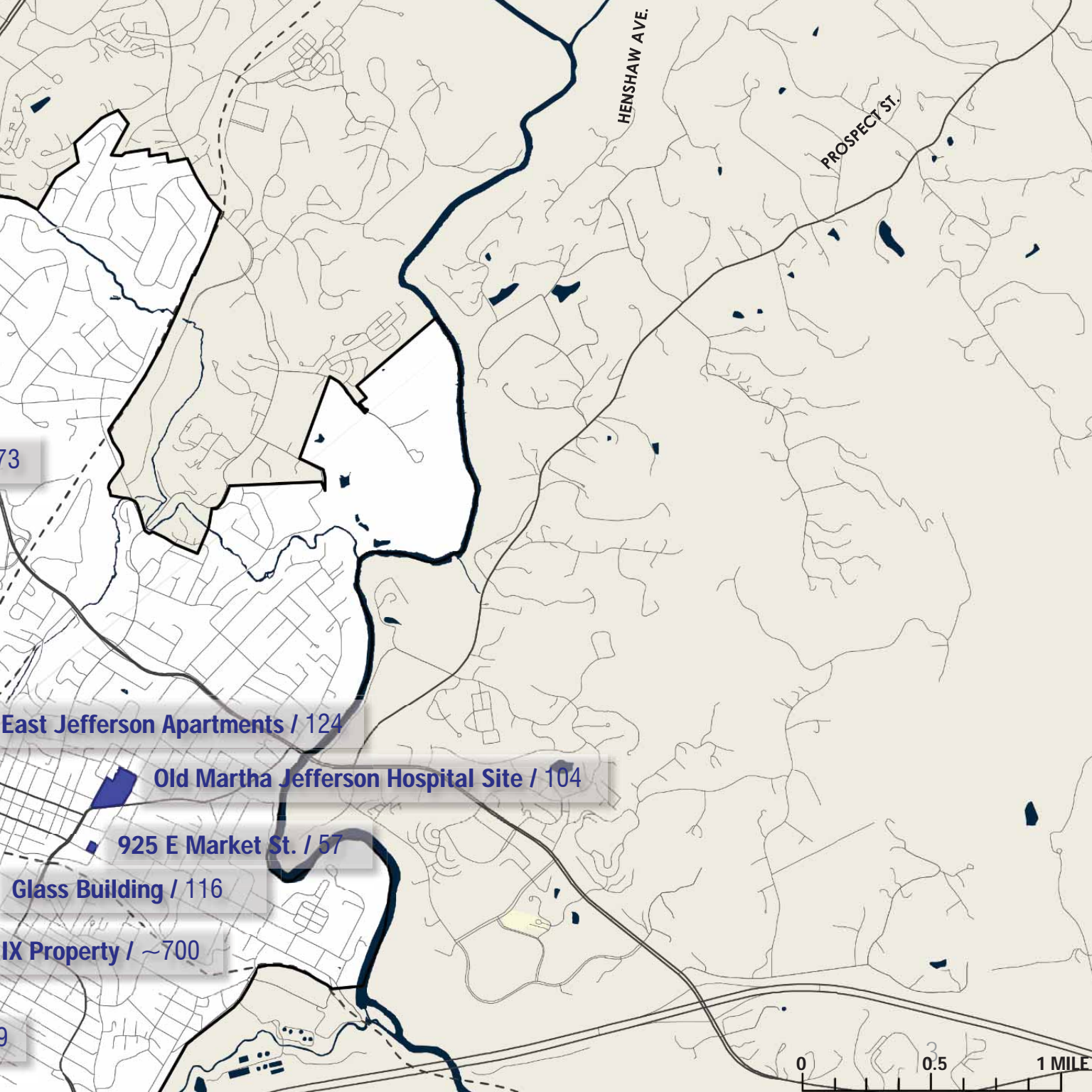
On-site housing could potentially serve (undergrad/grad students, faculty/staff, private market)

The University is in a position to choose which housing formats are most supportive of institutional objectives (social, financial, physical)

RESIDENTIAL DEMAND FINDING

Annual market rate demand for either 40 units of for-sale product between \$200-\$500k or 60 units market rate rental priced between \$900 and \$2,500 per month. Largest market audiences include graduate students (rental only), young professionals ages 35-44 and pre-retirees/retirees ages 65-74.





HENSHAW AVE.

PROSPECT ST.

73

East Jefferson Apartments / 124

Old Martha Jefferson Hospital Site / 104

925 E Market St. / 57

Glass Building / 116

IX Property / ~700

9

0

0.5

1 MILE

CONCLUSIONS

The ideas illustrated in the preceding pages put forth a bold, achievable composition that integrates a mixture of uses united by a restored stream ecology. It proposes a connective network of pedestrian, bicycle, bus, and automobile routes that link Central, North, and West Grounds, and the city of Charlottesville.

It envisions a phased strategic approach to physical development that is sensitive to the capital resources of the Foundation and the often dynamic program needs of the University. Ultimately, the ideas represented here are about making a vital academic and civic **place**, one worthy of and contributing to the very idea of the University.

NEXT STEPS

The Board of Visitors voted in August 2016, to proceed with an advanced study of a potential first phase.

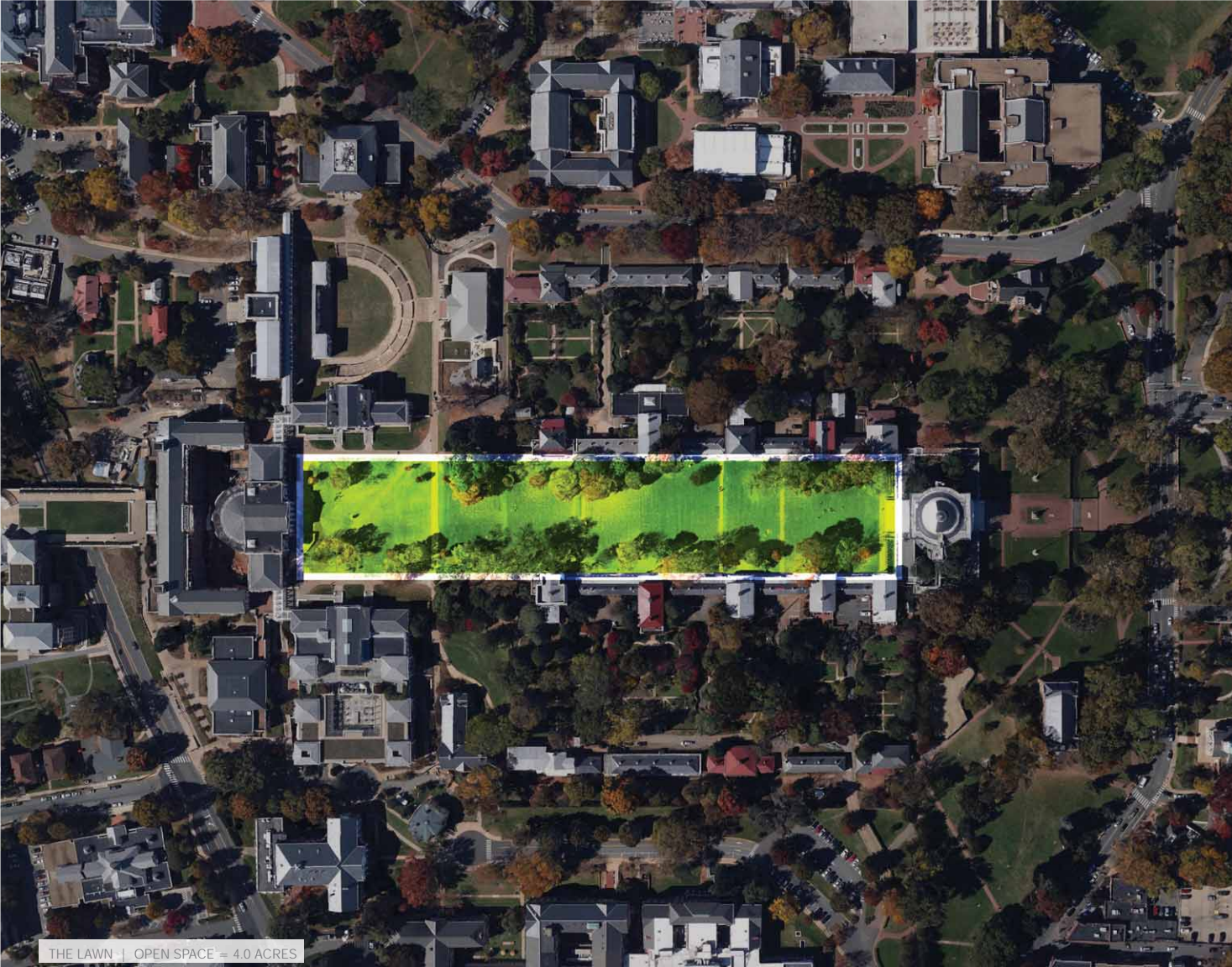
The critical next steps include:

- Capitalize on opportunity to coordinate with approved Smartscale funding for streetscape improvements
- Study phasing possibilities to achieve University goals
- Develop details of pedestrian, bicycle, and vehicular connectivity to North Grounds
- Develop plans for green space
- Present recommended schedule for the future of the Cavalier Inn at the June 2017 Board of Visitors Meeting

APPENDIX

- Open Space Scale Comparisons
- Circulation
- Emmet St. / Ivy Rd. Intersection Studies
- Market Analysis
- Hospitality Analysis
- Academic Needs Summary

OPEN SPACE
SCALE COMPARISONS

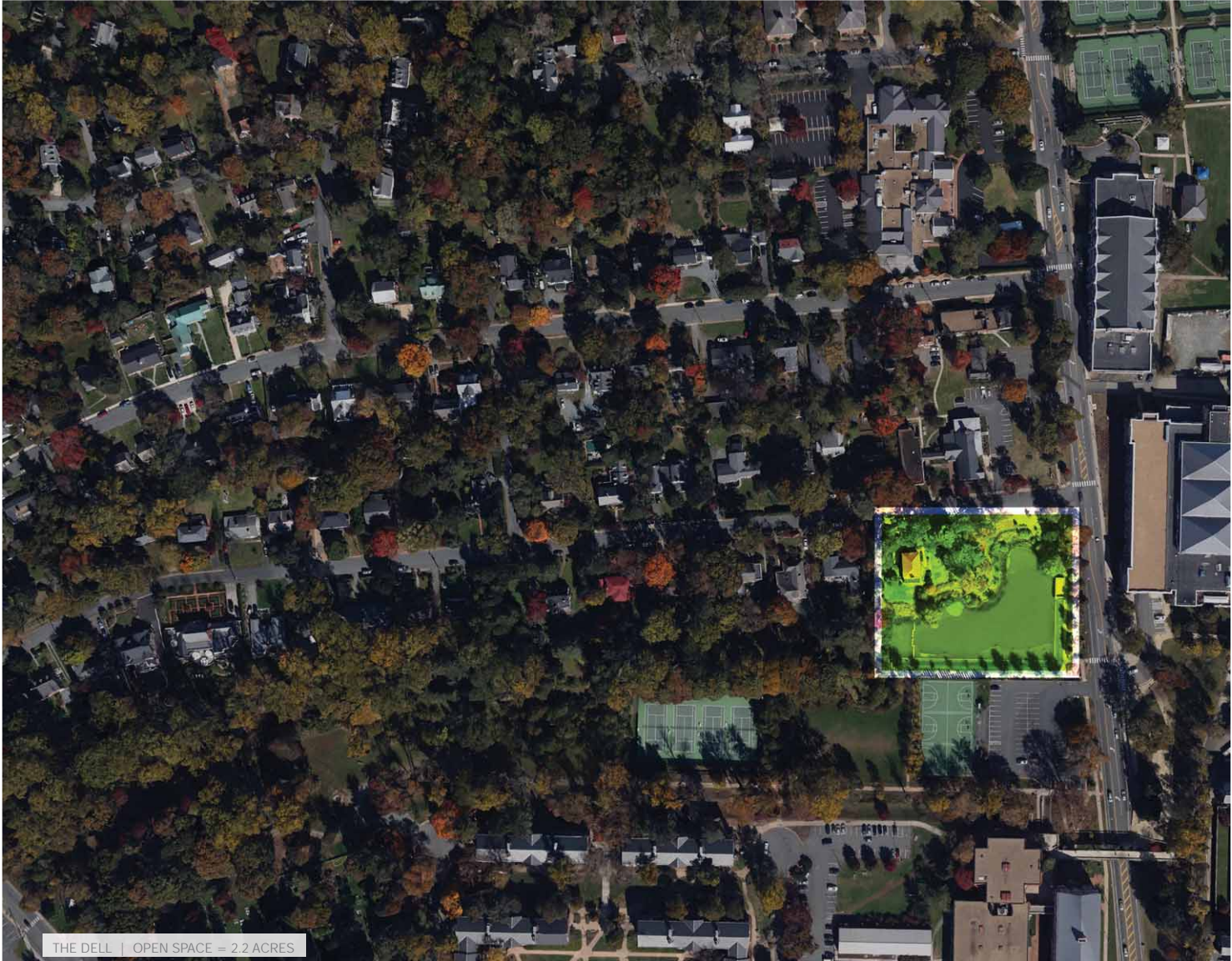


THE LAWN | OPEN SPACE = 4.0 ACRES



IVY CORRIDOR SITE | OPEN SPACE = 5.70 ACRES

OPEN SPACE
SCALE COMPARISONS

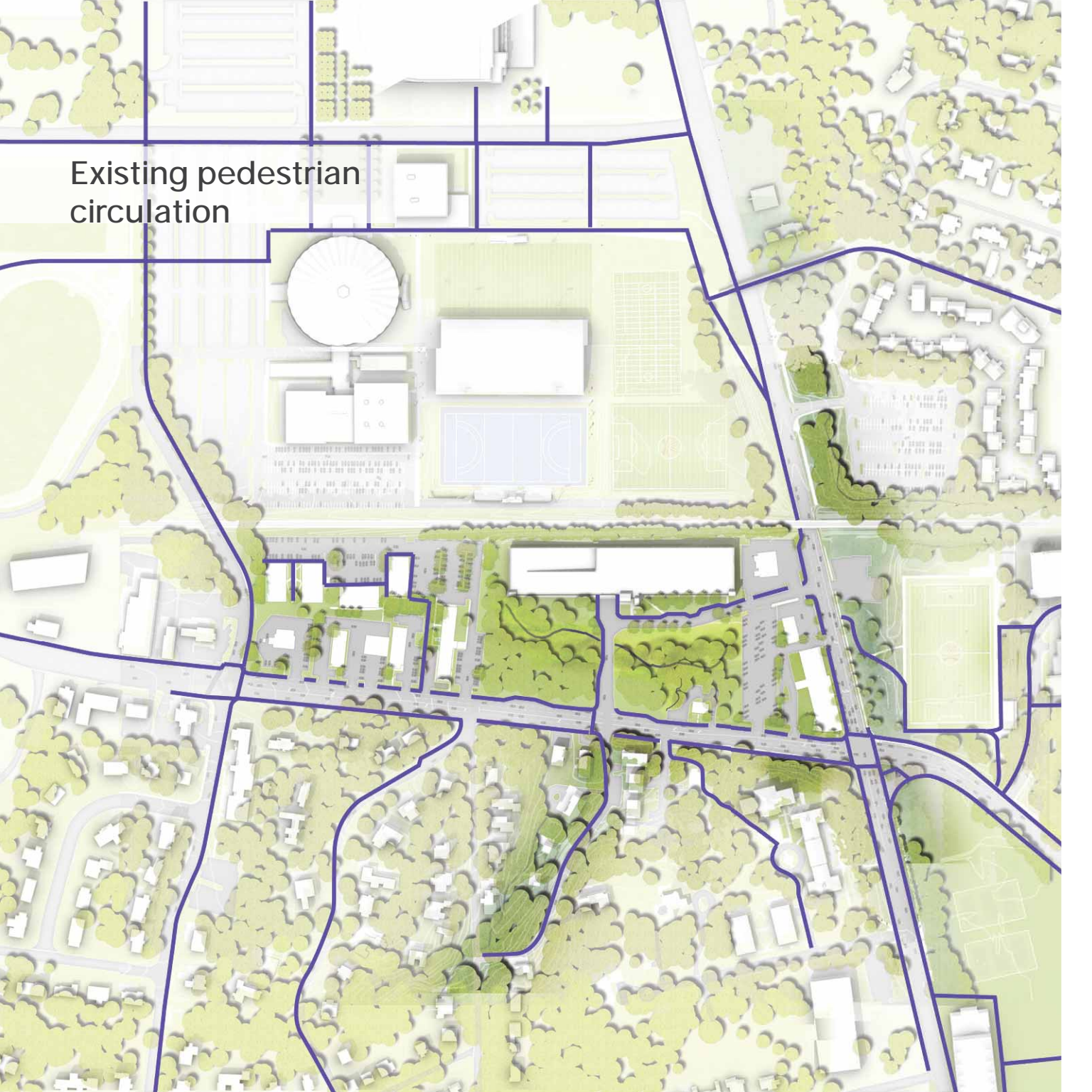


THE DELL | OPEN SPACE = 2.2 ACRES



IVY CORRIDOR SITE | OPEN SPACE = 4.80 ACRES

Existing pedestrian
circulation



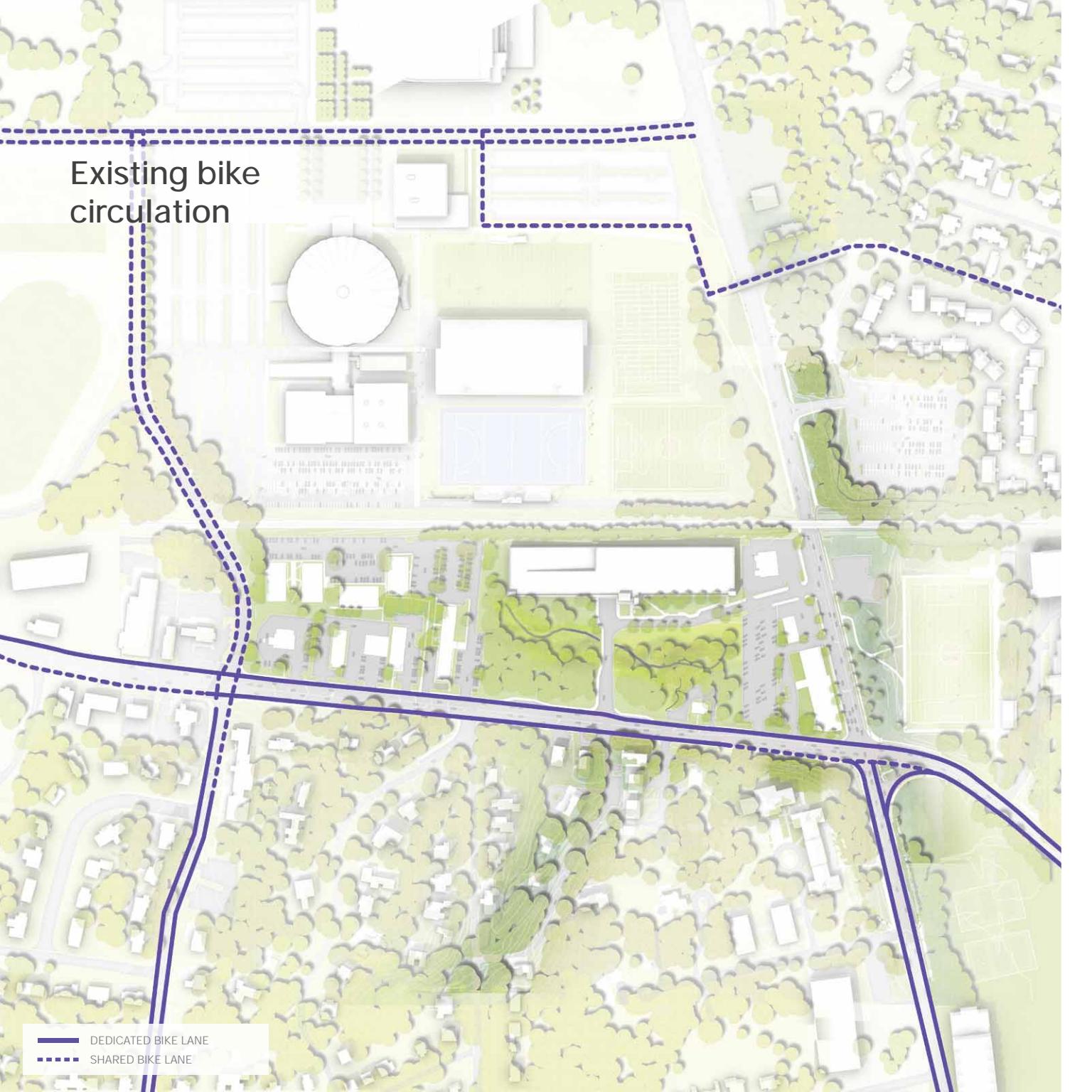
Proposed pedestrian
circulation

Potential Bridge

Potential Bridge

Existing bike
circulation

- DEDICATED BIKE LANE
- SHARED BIKE LANE



Proposed bike
circulation

Potential Bridge
Accommodating Bikes

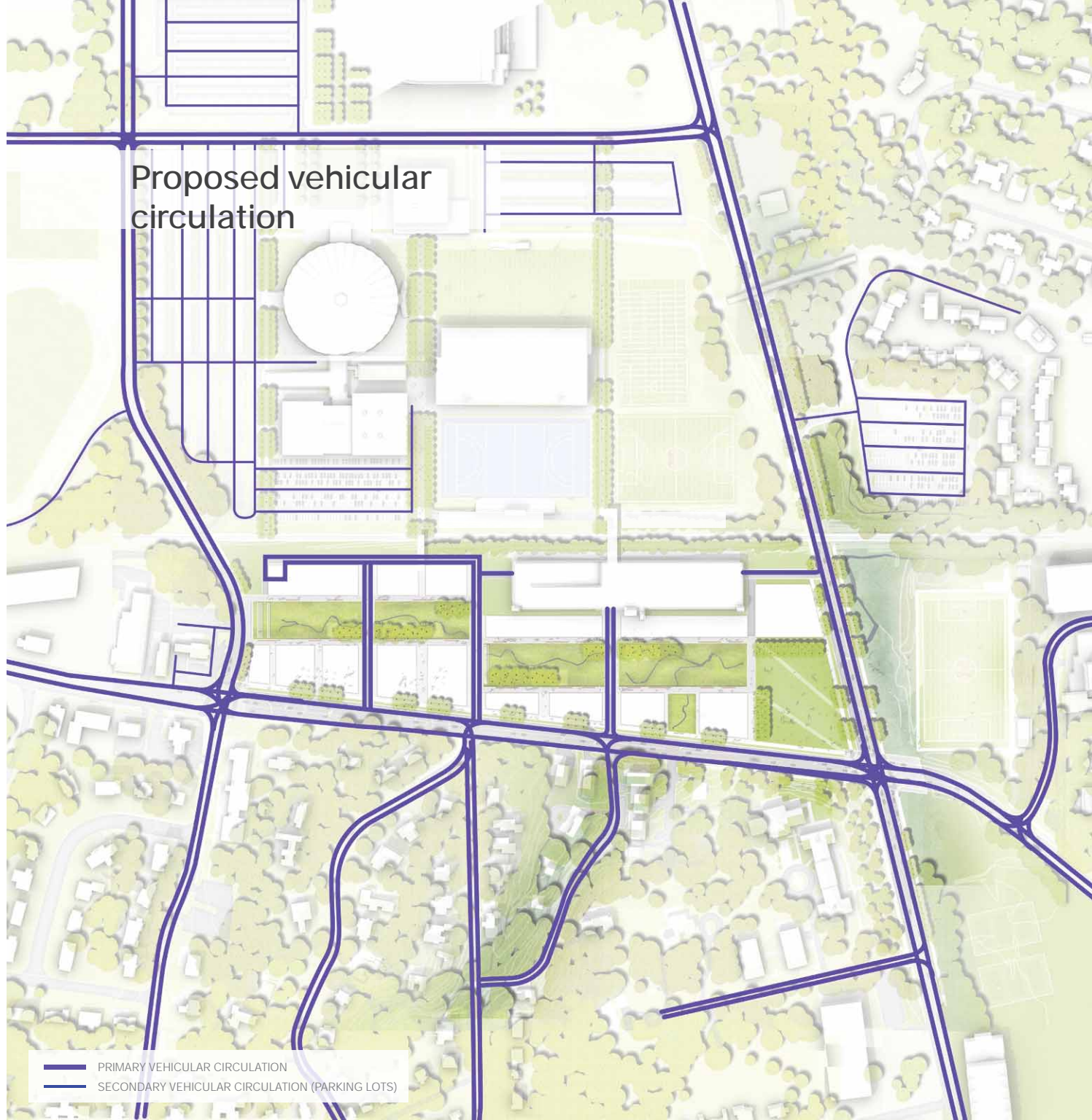
DEDICATED BIKE LANE

SHARED BIKE LANE

Existing vehicular
circulation

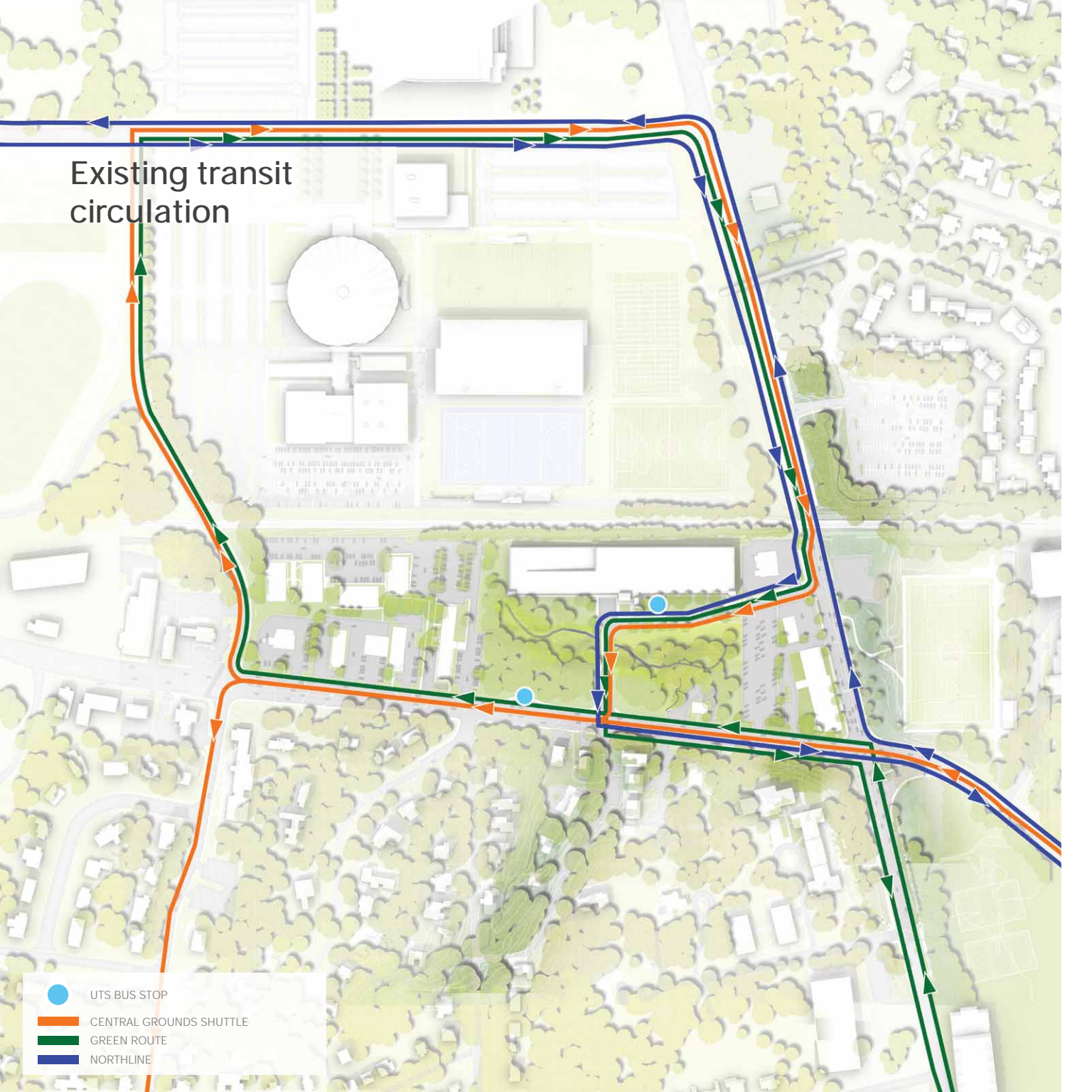
- PRIMARY VEHICULAR CIRCULATION
- SECONDARY VEHICULAR CIRCULATION (PARKING LOTS)

Proposed vehicular circulation



- PRIMARY VEHICULAR CIRCULATION
- SECONDARY VEHICULAR CIRCULATION (PARKING LOTS)

Existing transit
circulation



UTS BUS STOP



CENTRAL GROUNDS SHUTTLE



GREEN ROUTE



NORTHLINE

Proposed transit circulation



UTS BUS STOP



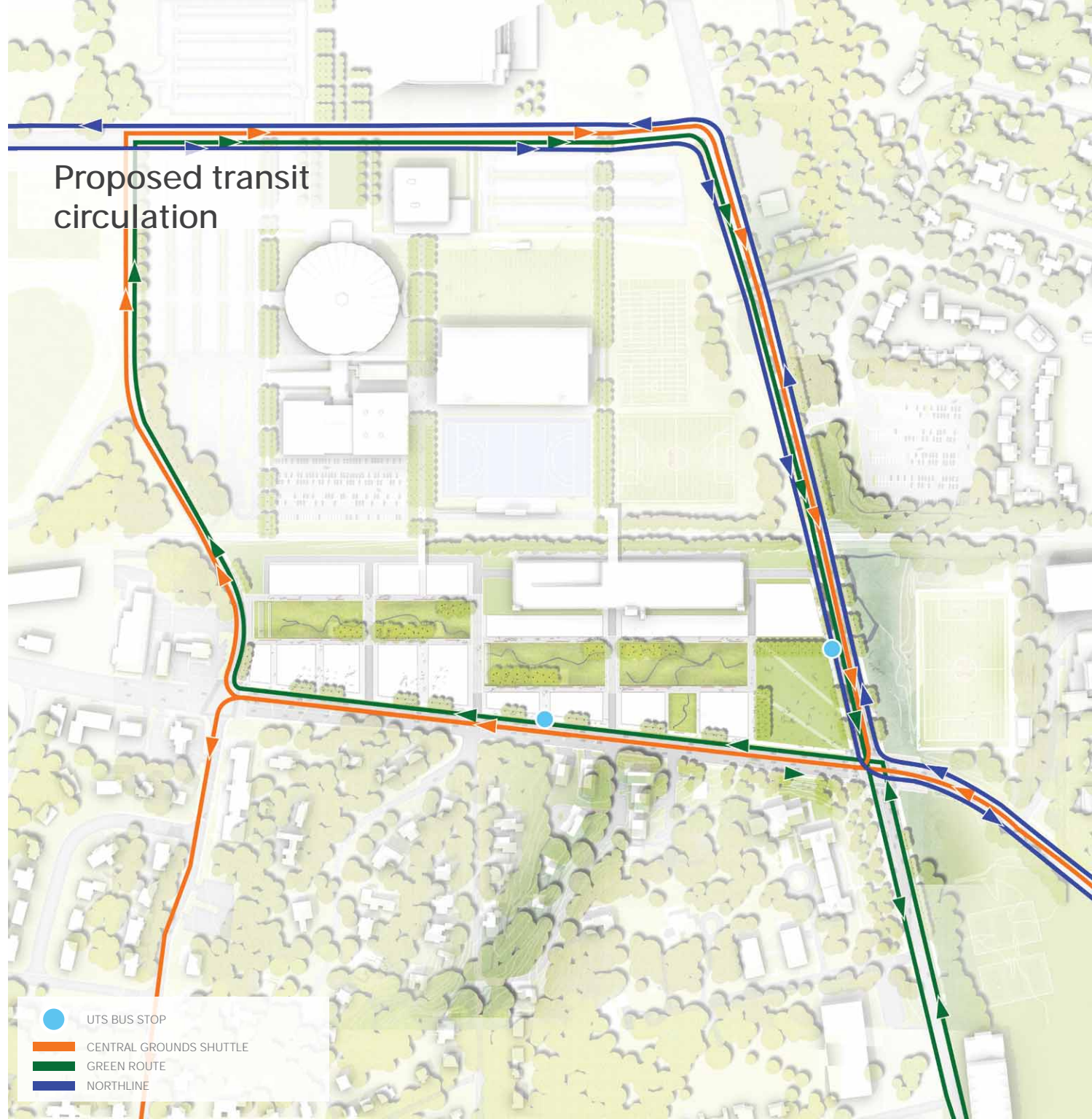
CENTRAL GROUNDS SHUTTLE



GREEN ROUTE



NORTHLINE

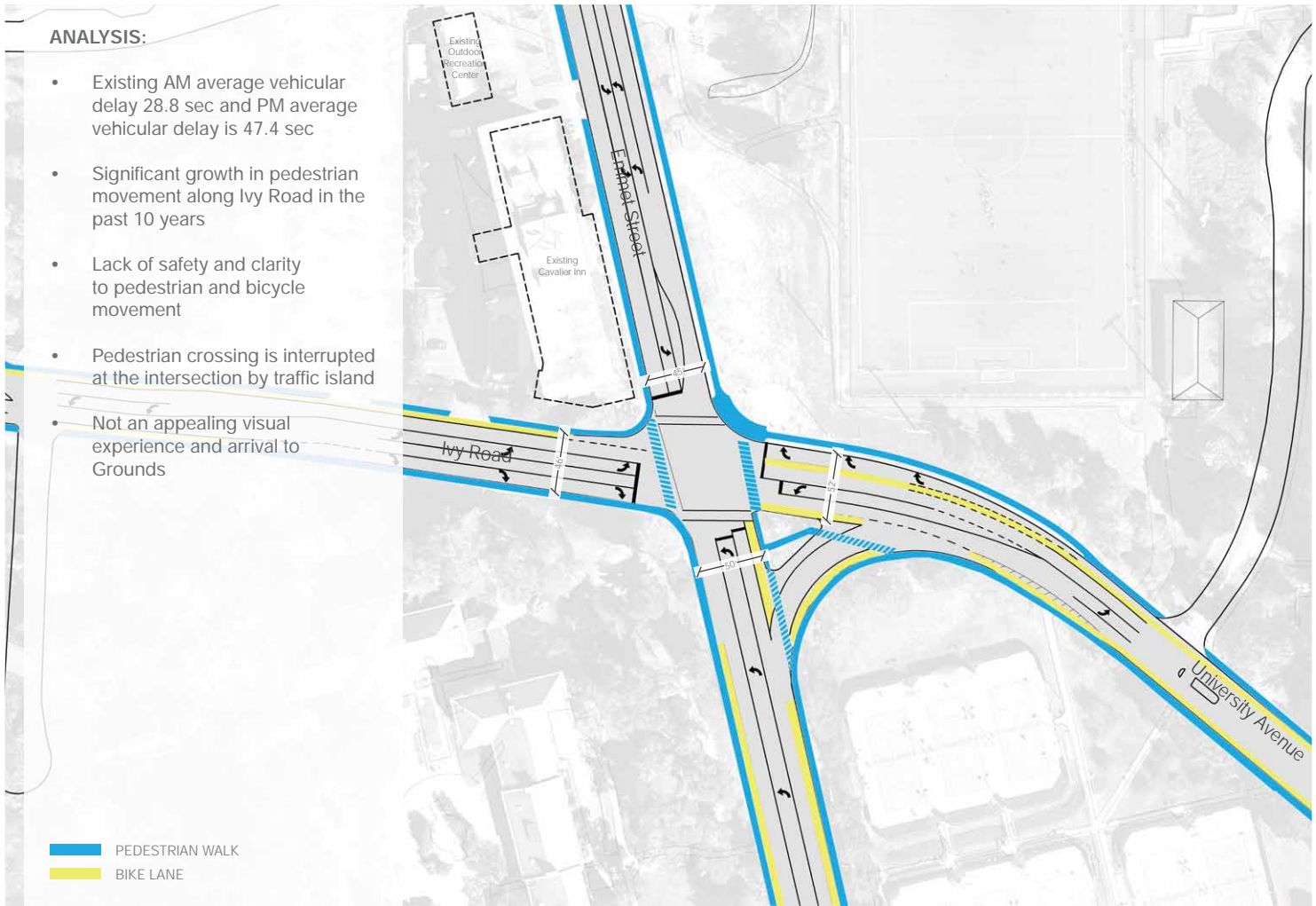


Existing Emmet / Ivy Intersection

ANALYSIS:

- Existing AM average vehicular delay 28.8 sec and PM average vehicular delay is 47.4 sec
- Significant growth in pedestrian movement along Ivy Road in the past 10 years
- Lack of safety and clarity to pedestrian and bicycle movement
- Pedestrian crossing is interrupted at the intersection by traffic island
- Not an appealing visual experience and arrival to Grounds

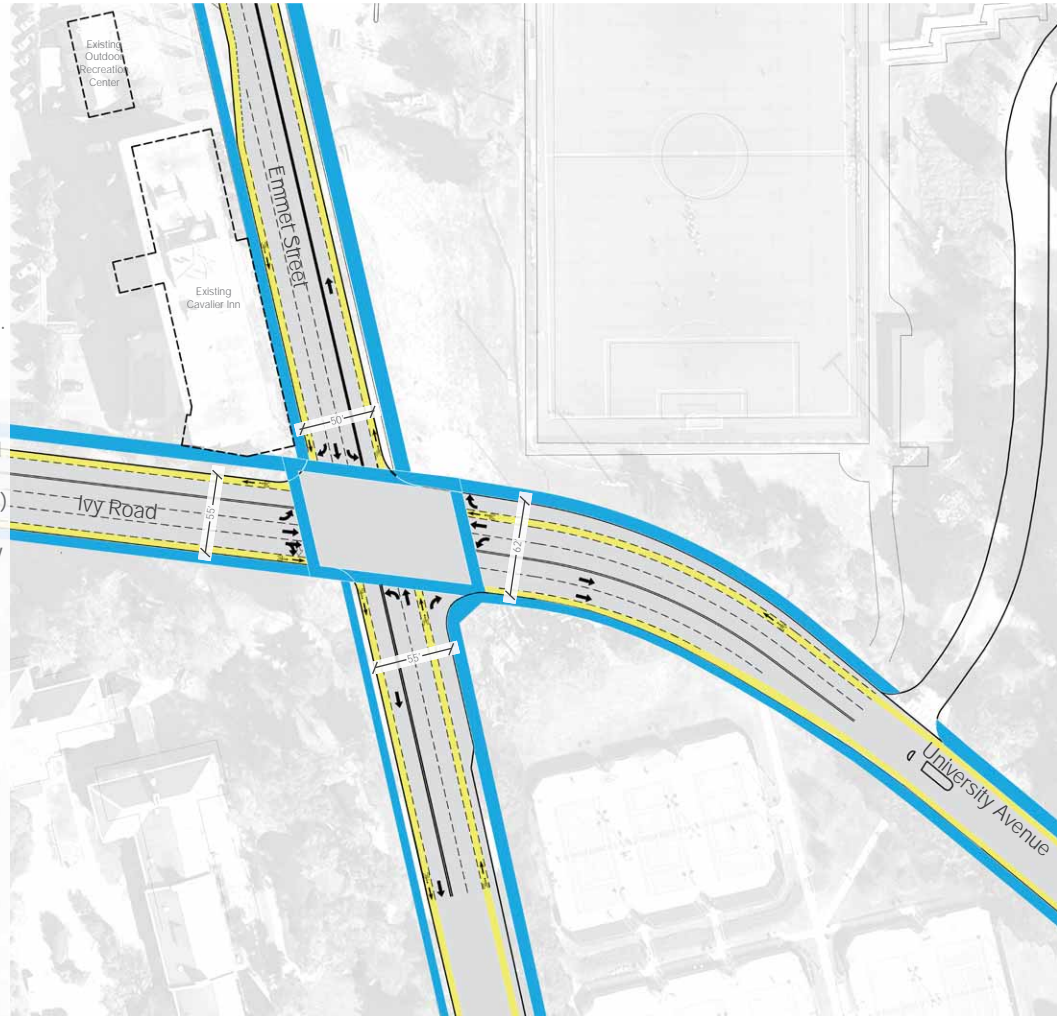
PEDESTRIAN WALK
BIKE LANE



Intersection Alternative 1 (Recommended)

ANALYSIS:

- Additional SB right and NB right turn lane on Emmet street
- Revise traffic signal timing
- Designated, continuous bike lanes on Ivy Rd. and Emmet St.
- 10' wide pedestrian walkways and a reduced crossing distance. Max pedestrian wait time is 98 seconds
- Existing AM vehicular delay is reduced to average 24.1 sec and PM average vehicular delay is 36.9 sec (including future growth)
- Significant improvement in safety and clarity to pedestrian and bicycle movement
- Pedestrian crossing is not interrupted at the intersection by traffic island
- Improves visual experience and arrival to Grounds

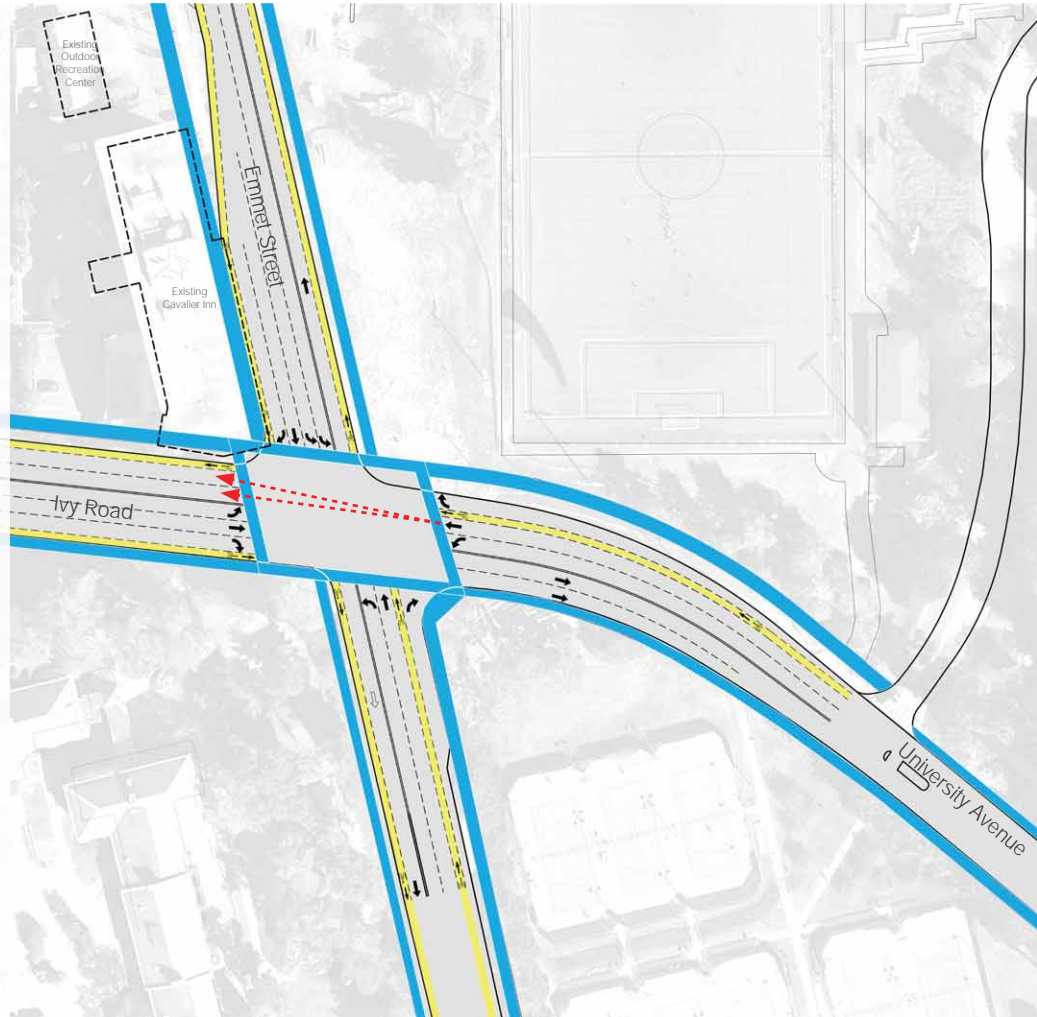


Intersection Alternative 2

ANALYSIS:

- Additional SB left, and SB right turn, and NB right turn lane on Emmet St.
- Additional WB through lane on Ivy Rd.
- Continuous and designated bike lanes on Ivy Rd. and Emmet St.
- 10' wide pedestrian walkways and a reduced crossing distance
- Existing AM vehicular delay is reduced to 25.0 sec and PM vehicular delay is 41.1 sec (includes future growth)
- Safety concern with vehicular traffic WB from single lane to double lane at intersection
- Significant addition to overall width of Emmet street, requires the demolition of Cavalier Inn to accommodate the roadway lane changes
- Pedestrian crossing is increased due to enlarged roadway width

PEDESTRIAN WALK
BIKE LANE

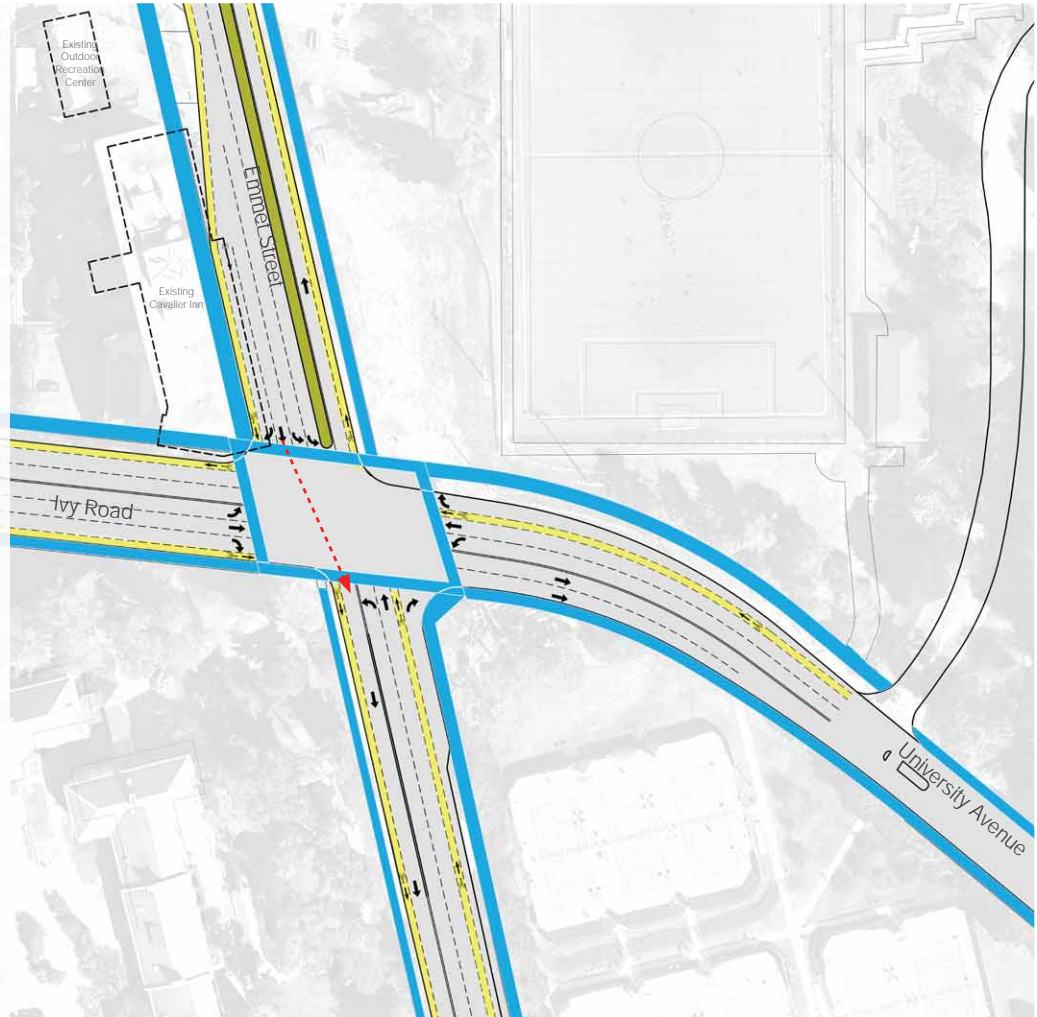


Intersection Alternative 3

ANALYSIS:

- Additional SB left, and SB right turn, and NB right turn lane on Emmet St
- Additional WB through lane on Ivy Rd. and additional median on Emmet St.
- Continuous and designated bike lanes on Ivy Rd. and Emmet St.
- Existing AM vehicular delay is reduced to 25.0 sec and PM vehicular delay is 41.1 sec (includes future growth)
- Safety concerns with SB vehicular movement and lack of clear sight line
- Significant addition to overall width of Emmet St, requires the demolition of Cavalier Inn to accommodate the additional lanes and slope at IRC
- Pedestrian crossing is increased due to enlarged roadway width

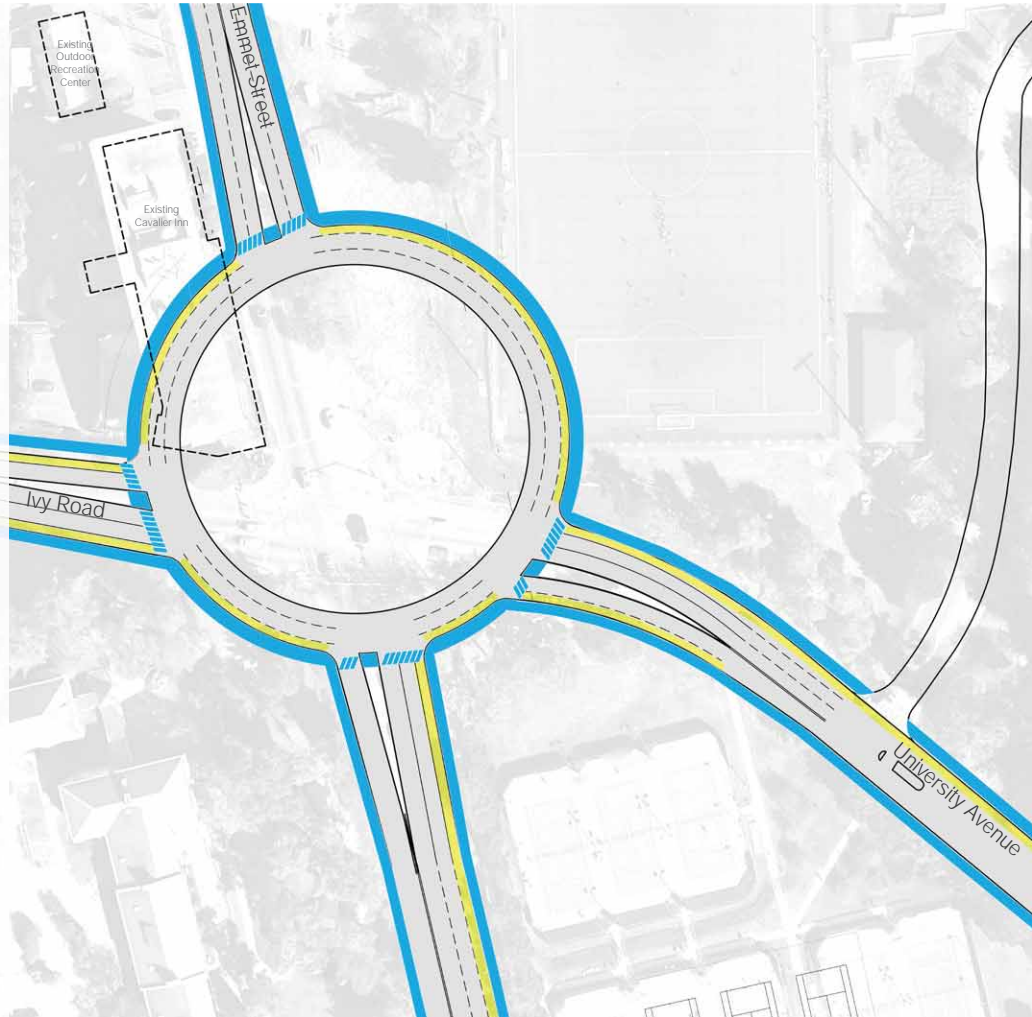
PEDESTRIAN WALK
BIKE LANE



Intersection Alternative 4

ANALYSIS:

- Significant land area required, encroaching on neighboring land uses
- Requires significant site work to accommodate roundabout, given grade change and existing conditions
- Crosswalk locations and uncontrolled traffic on multi-lane approaches exacerbate pedestrian conflicts and safety issues. Diversion of pedestrian traffic would require further study
- Roundabout will exacerbate vehicle-bicycle conflicts

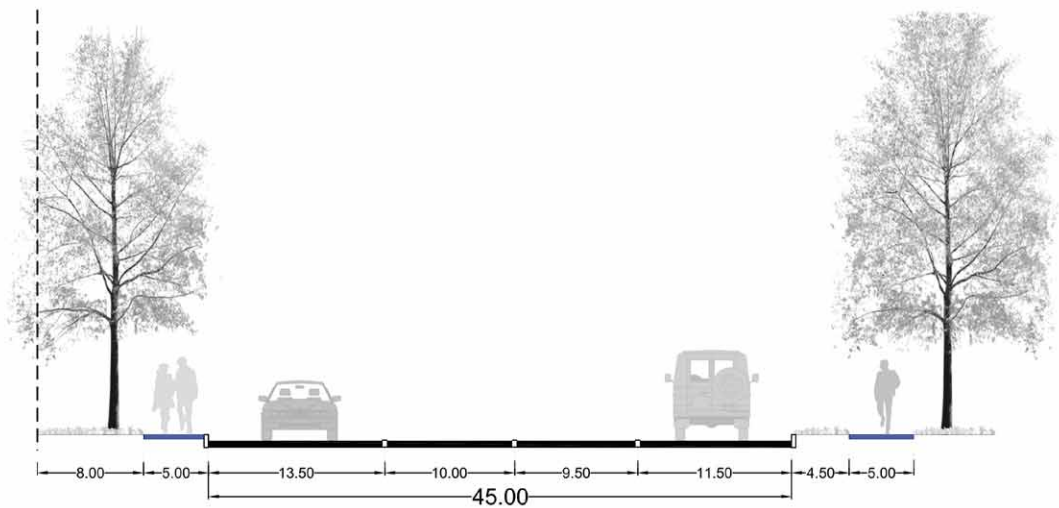


PEDESTRIAN WALK
BIKE LANE

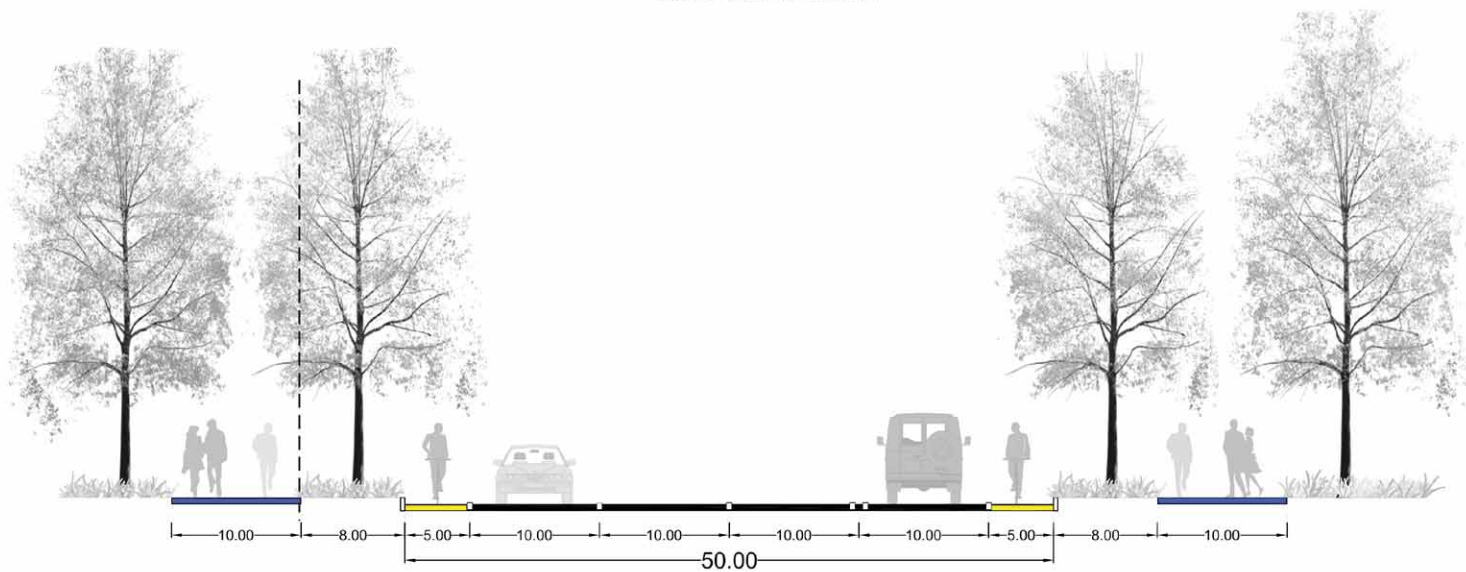
Traffic Analysis Summary (HCM 2010)

Option	Intersection configuration	Morning Peak Hour Results		Evening Peak Hour Results	
		Delay (sec)	LOS	Delay (sec)	LOS
1	Existing	28.8	C	47.4	D
2	Add: SB Left, protected/permisive EB/WB lefts	30.6	C	49.2	D
3	Add: SB right, protected/permisive EB/WB lefts	24.1	C	36.9	D
4	Add: SB Left, SB right, protected/permisive EB/WB lefts	27.4	C	41.9	D
5	Option 4 with Pedestrian Scramble *	78.8*	F*	137.3*	F*

* Results are based on Synchro



EMMET ST. LOOKING NORTH
EXISTING SECTION



EMMET ST. LOOKING NORTH
PROPOSED SECTION



Section at Ivy Road looking East, Proposed Framework



Section at Ivy Road looking East, Existing Conditions



Section at Ivy / Emmet Intersection looking East, Proposed Framework



Section at Ivy / Emmet Intersection looking East, Existing Conditions

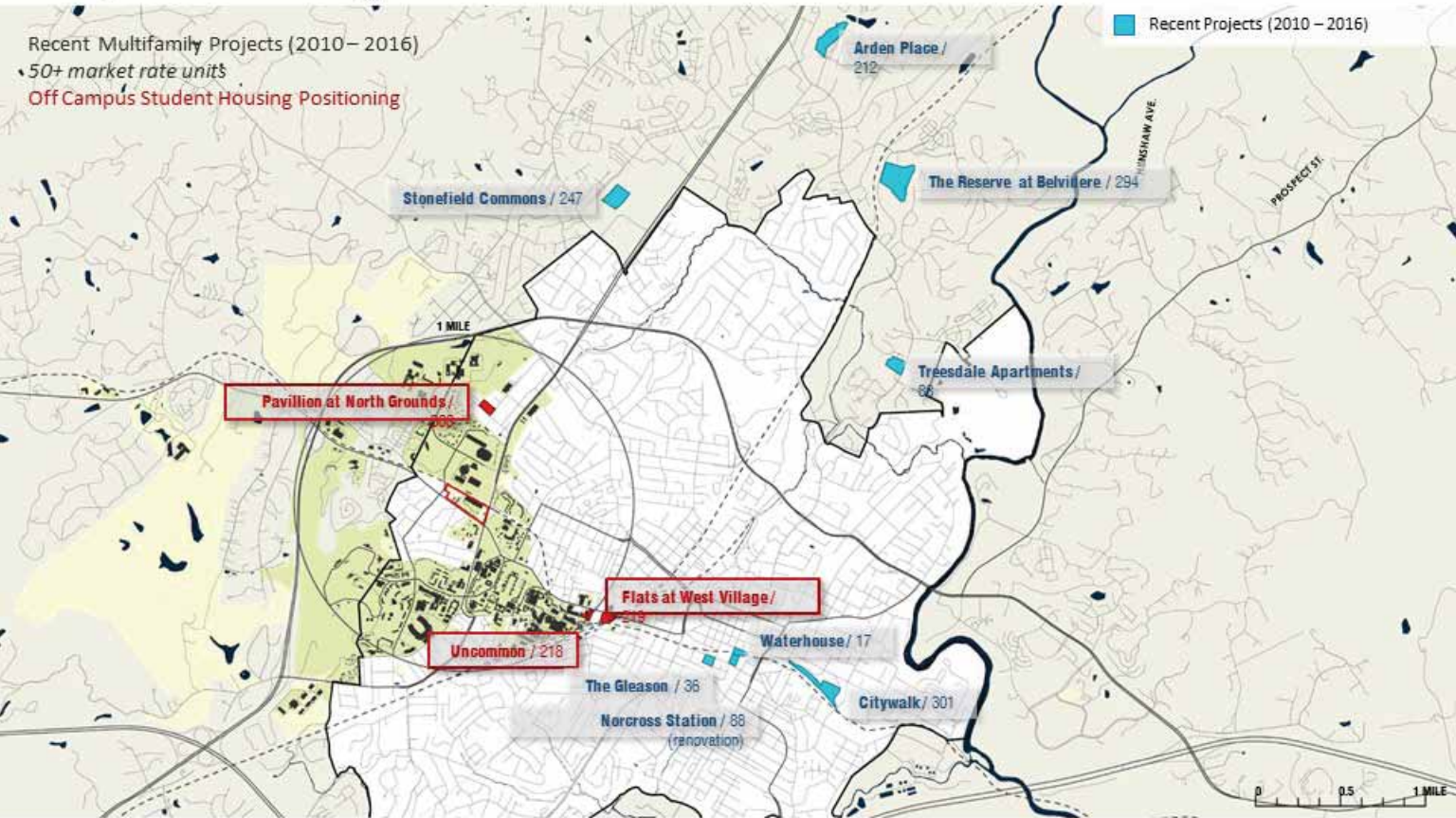


Section through Ivy Corridor looking East, Proposed Framework

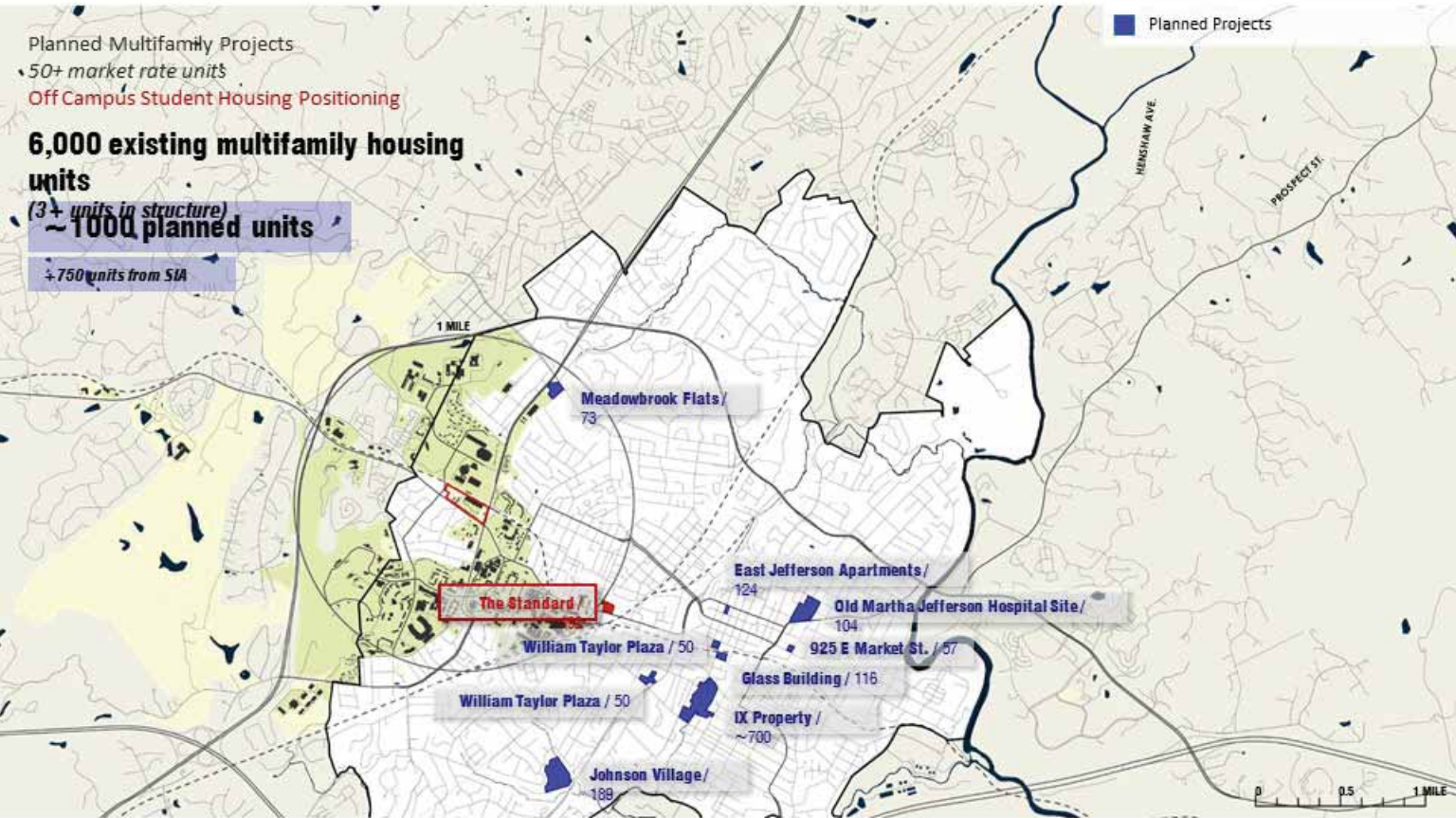


Section through Ivy Corridor looking East, Existing Conditions

Residential Summary – Multifamily market growing in C’ville, projects closest to campus student-targeted

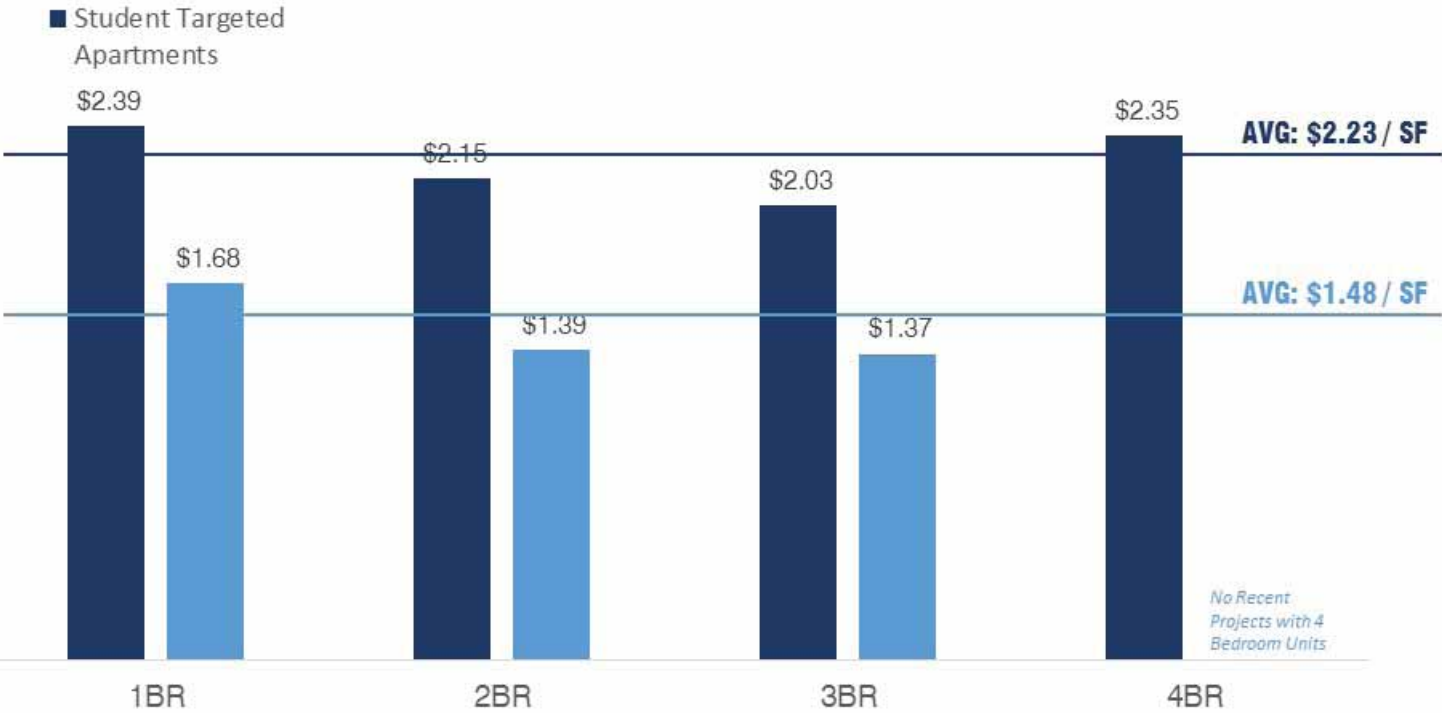


Large pipeline of planned units mostly in downtown area, outside of 1-mile from Grounds



Residential Summary – Student-targeted projects achieve premium per square foot pricing

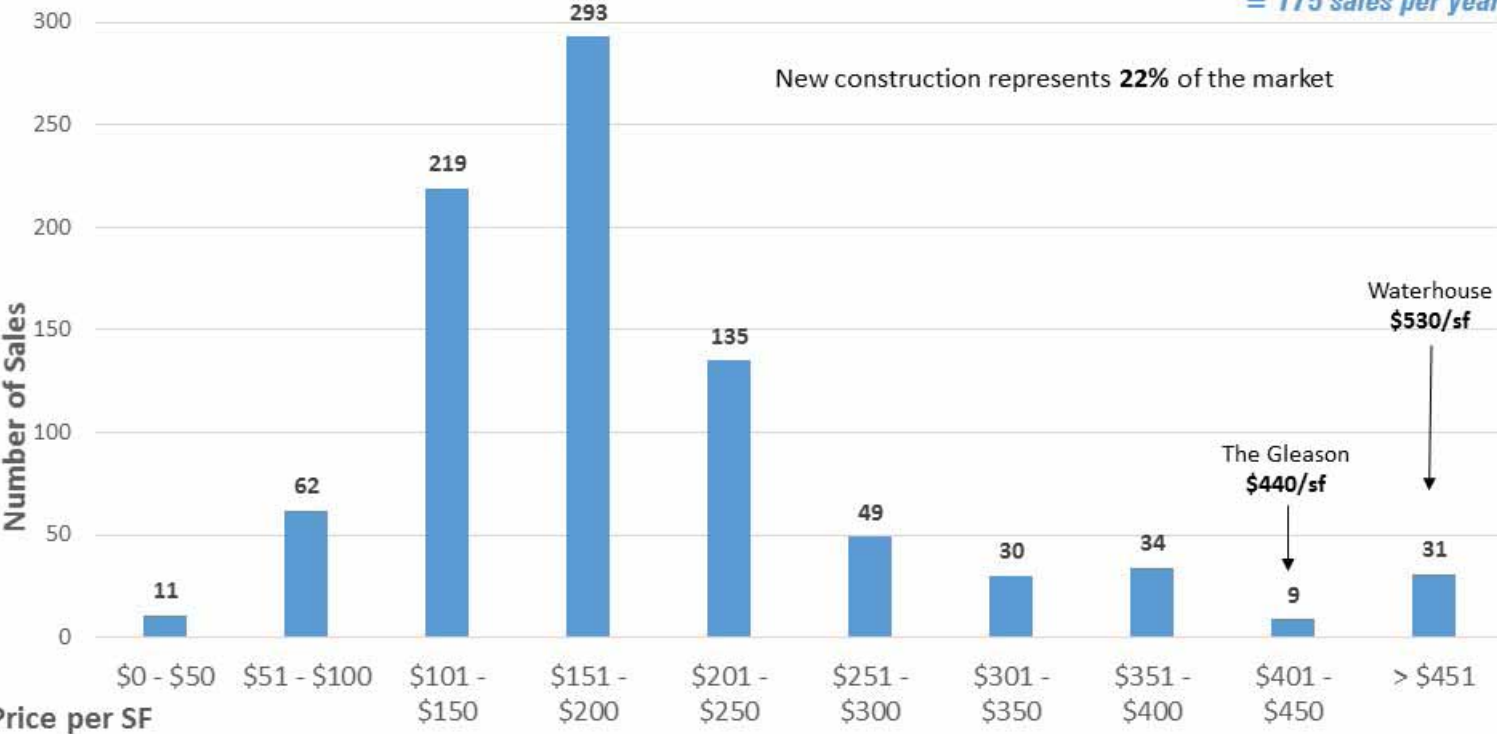
Average Rents Per SF
Recent Apartment Projects (2010– 2016)



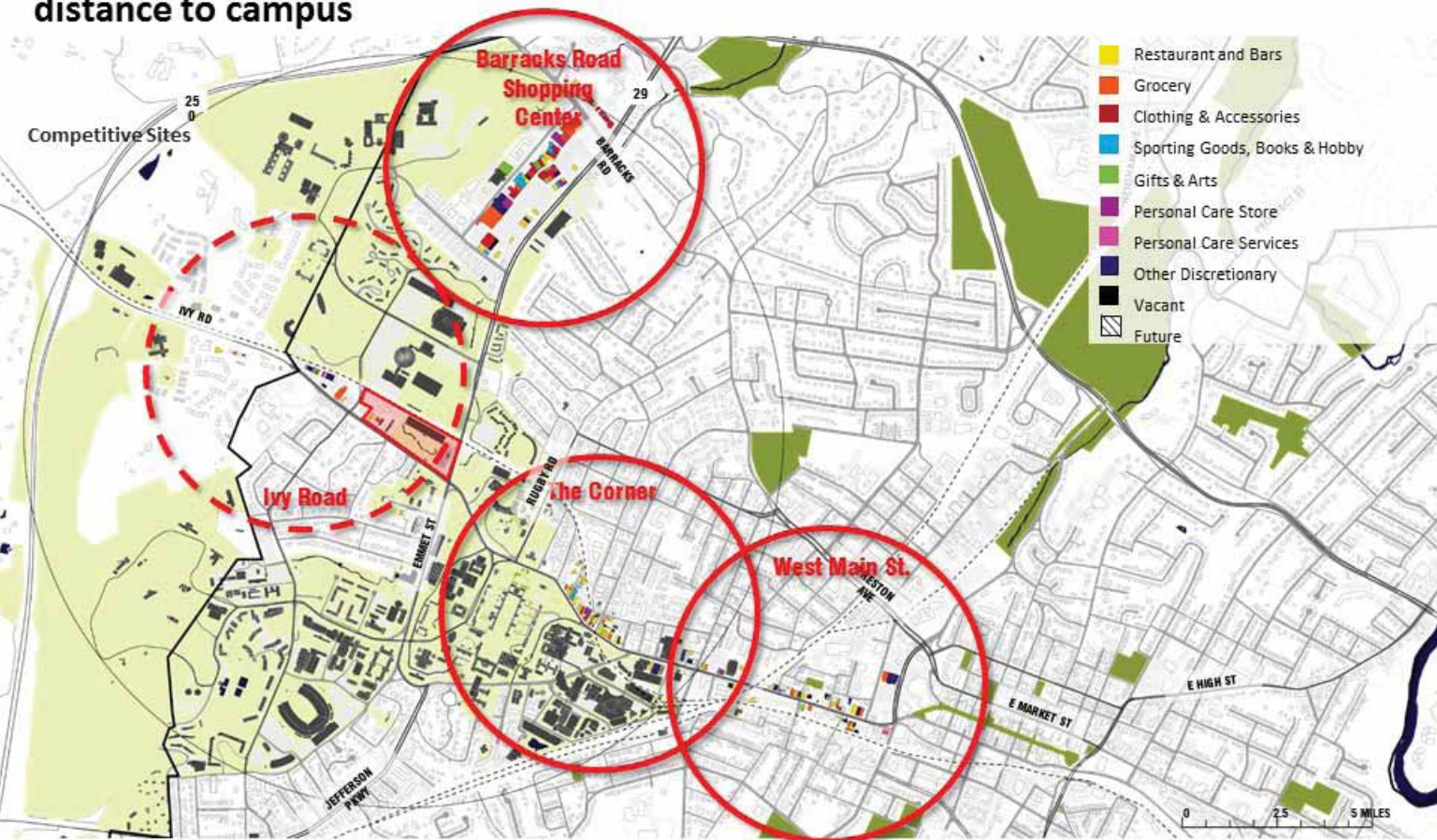
Residential Summary – Charlottesville has a nascent condominium market

Price Per SF
Recent Sales (2011-2015)
For Sale Multifamily – All Building Ages

Total Sales: 873
= 175 sales per year

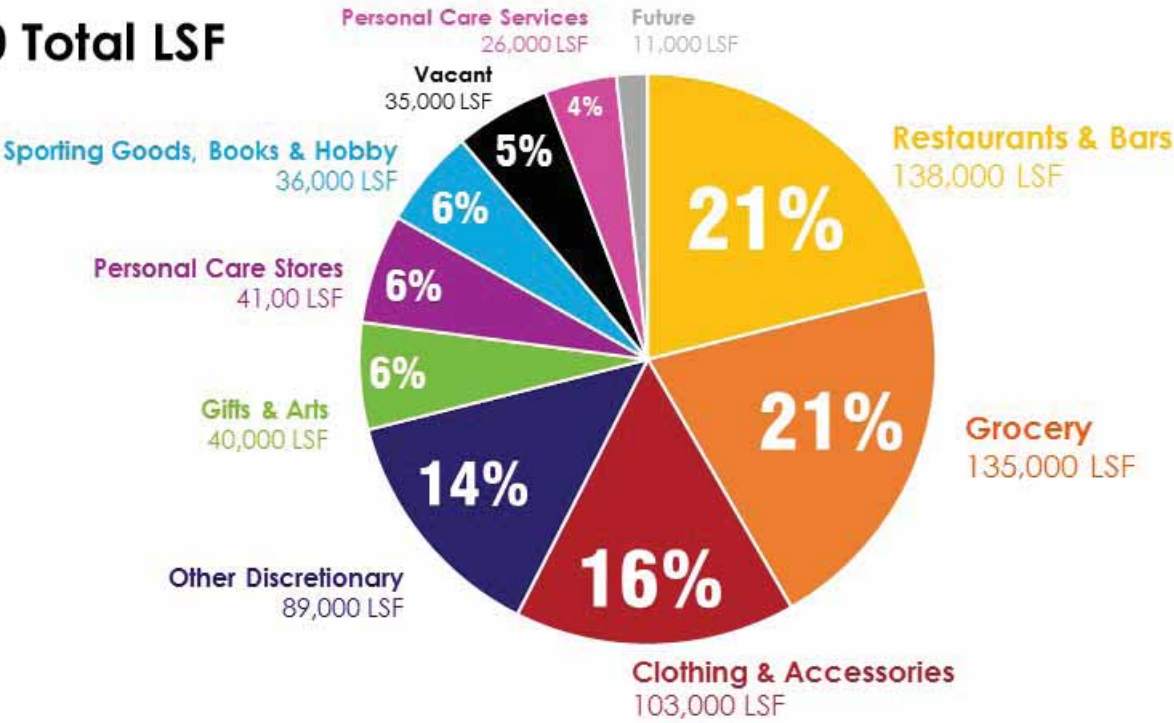


Retail Summary – Today the market has three distinct retail clusters within walking distance to campus



Retail Summary – Charlottesville has a healthy and balanced retail and restaurant market

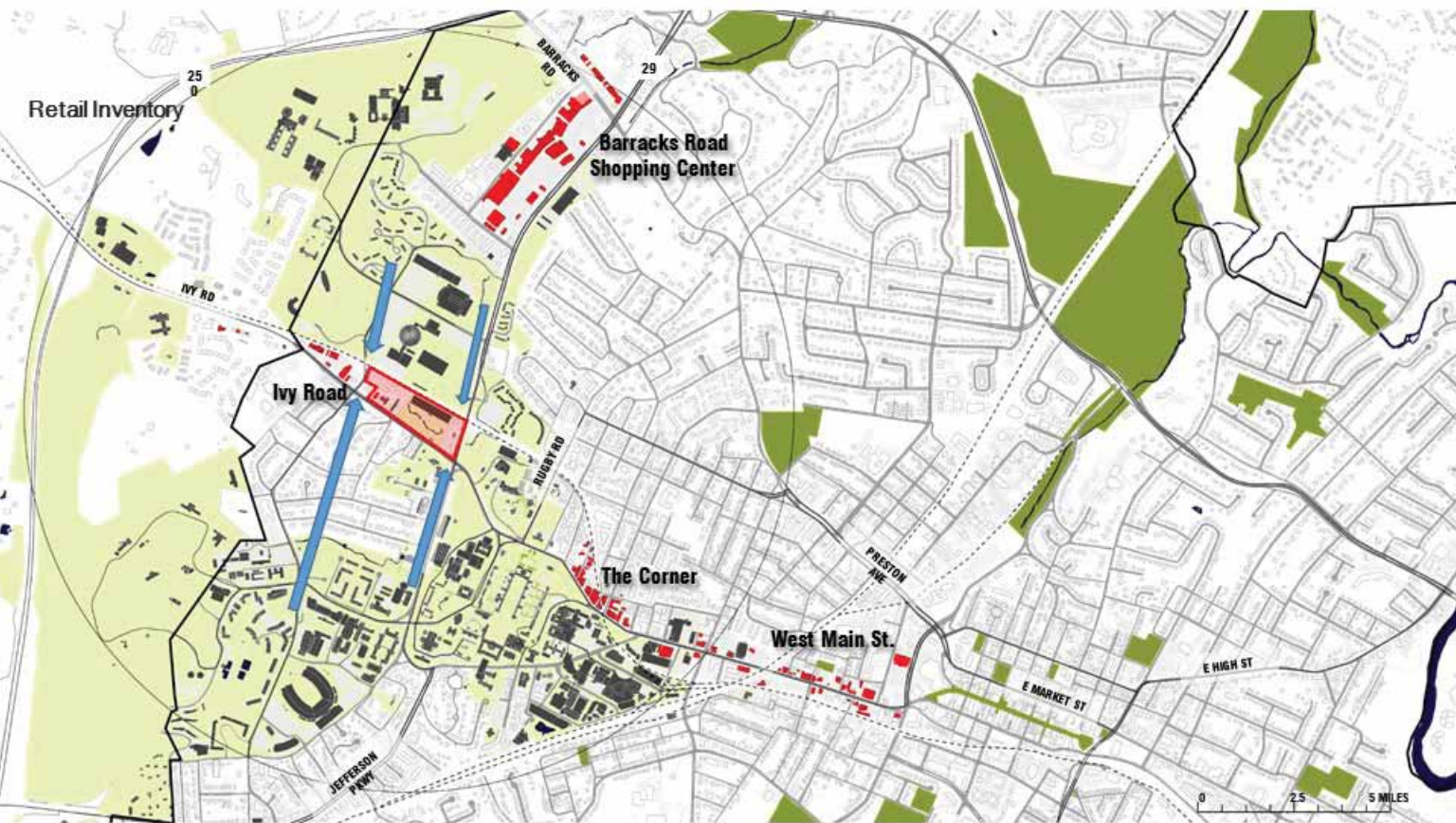
654,000 Total LSF



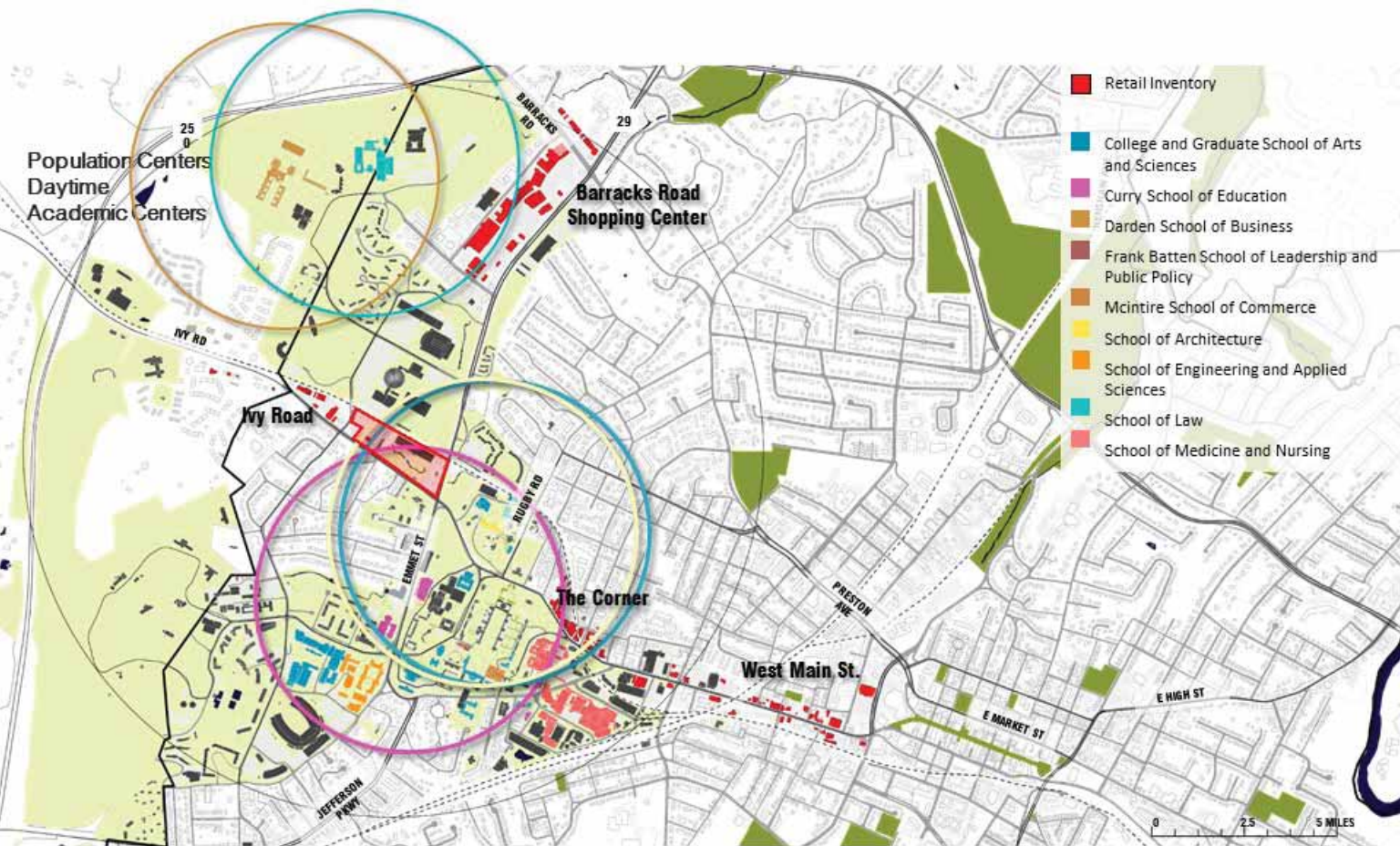
Methodology

The team estimated the gross square feet (GSF) for each store by measuring building takeoffs using GIS and Google Earth Pro. Space efficiency assumptions (which vary by retail category) were applied to the GSF to determine leasable square feet (LSF).

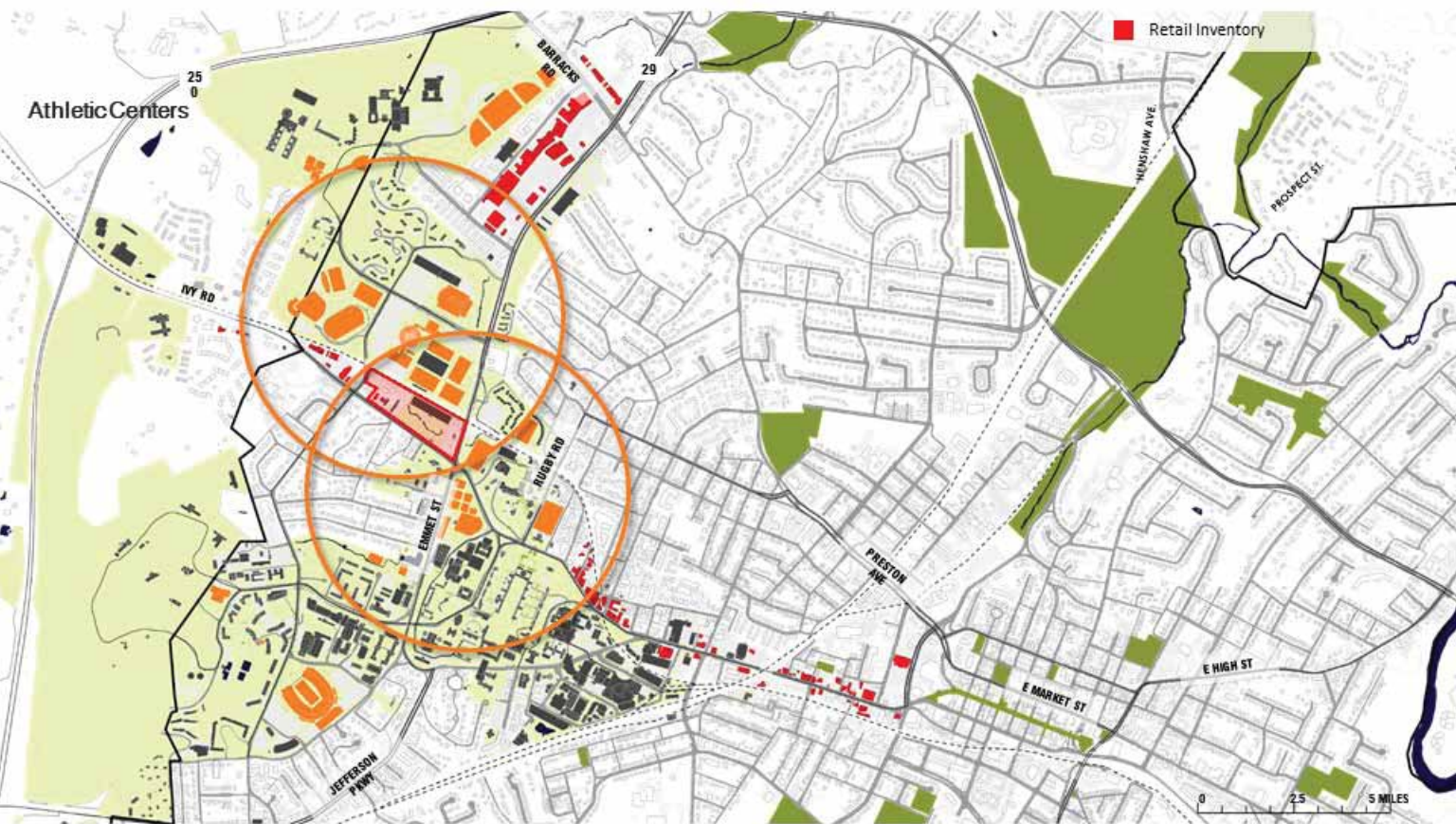
Retail Summary – Ivy Site has great visibility and access to North/South movements



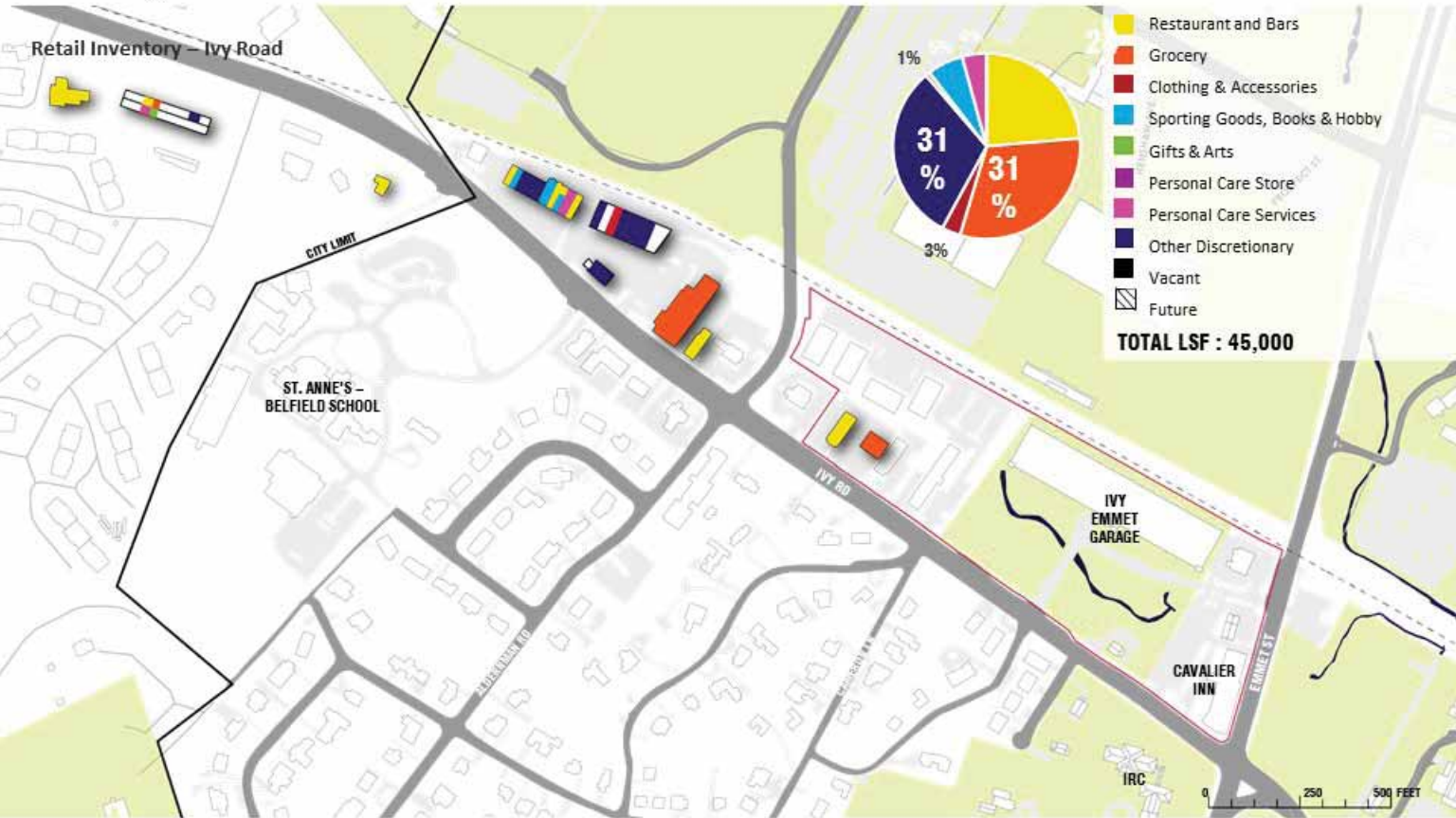
Retail Summary – Ivy Site is walkable to a variety of daytime population clusters



Retail Summary – Ivy Site adjacent to significant athletics activity



Retail Summary – More restaurant and personal services would complement existing uses



Hospitality – Summary of Findings

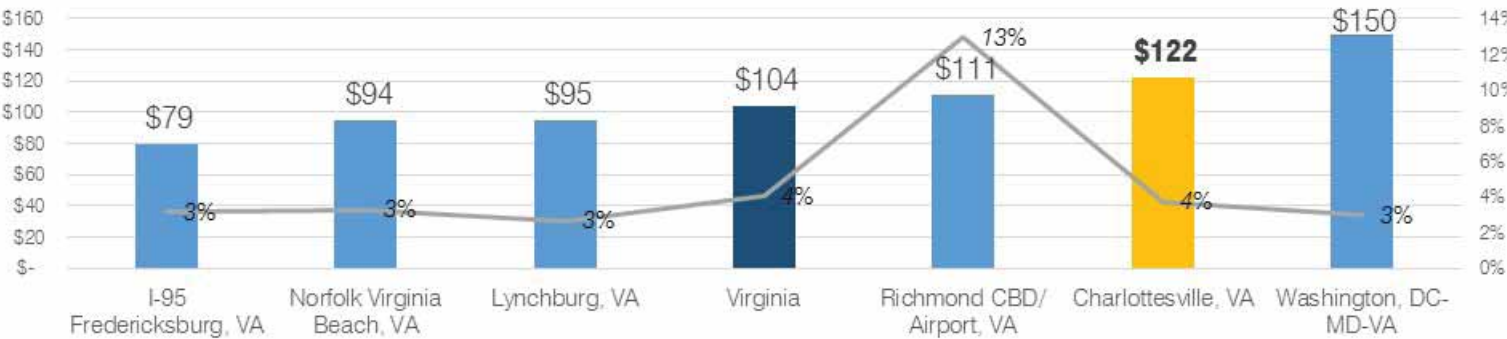
- Charlottesville hotel market is very healthy
- Occupancies strong at 70% with substantial pricing growth over the last five years
- Hotels in close proximity to Grounds outperform others with 6% annual REVPAR (revenue per available room) growth
- Large quantity of planned supply with 950 rooms in the pipeline (need to closely monitor)
- Market should be able to absorb 700 to 2,000 rooms over the next two years based on a range of 2% demand growth to 5% demand growth
- Believe a non-flag unique brand/concept catering to UVA community could be preferable
- Additional needs for UVA related meeting space

DEMAND FINDING:

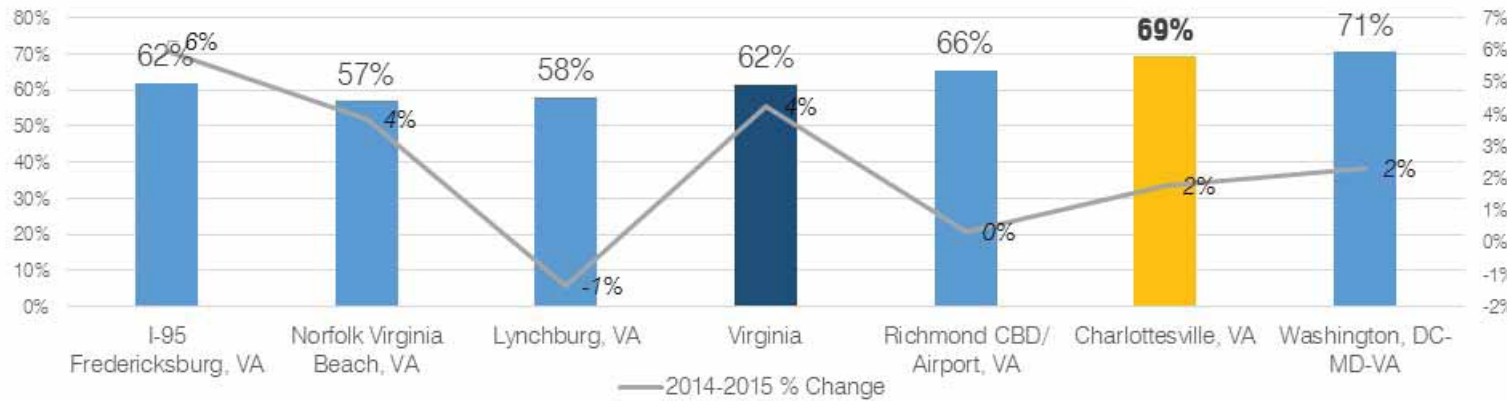
Support for a 200 bed hotel concept with 5,000 – 6,000 square feet of conference space. Should serve UVA audiences and meeting space needs and complement Boars Head and Darden Inn.

Hospitality Summary – Charlottesville market outperforming many Virginia markets

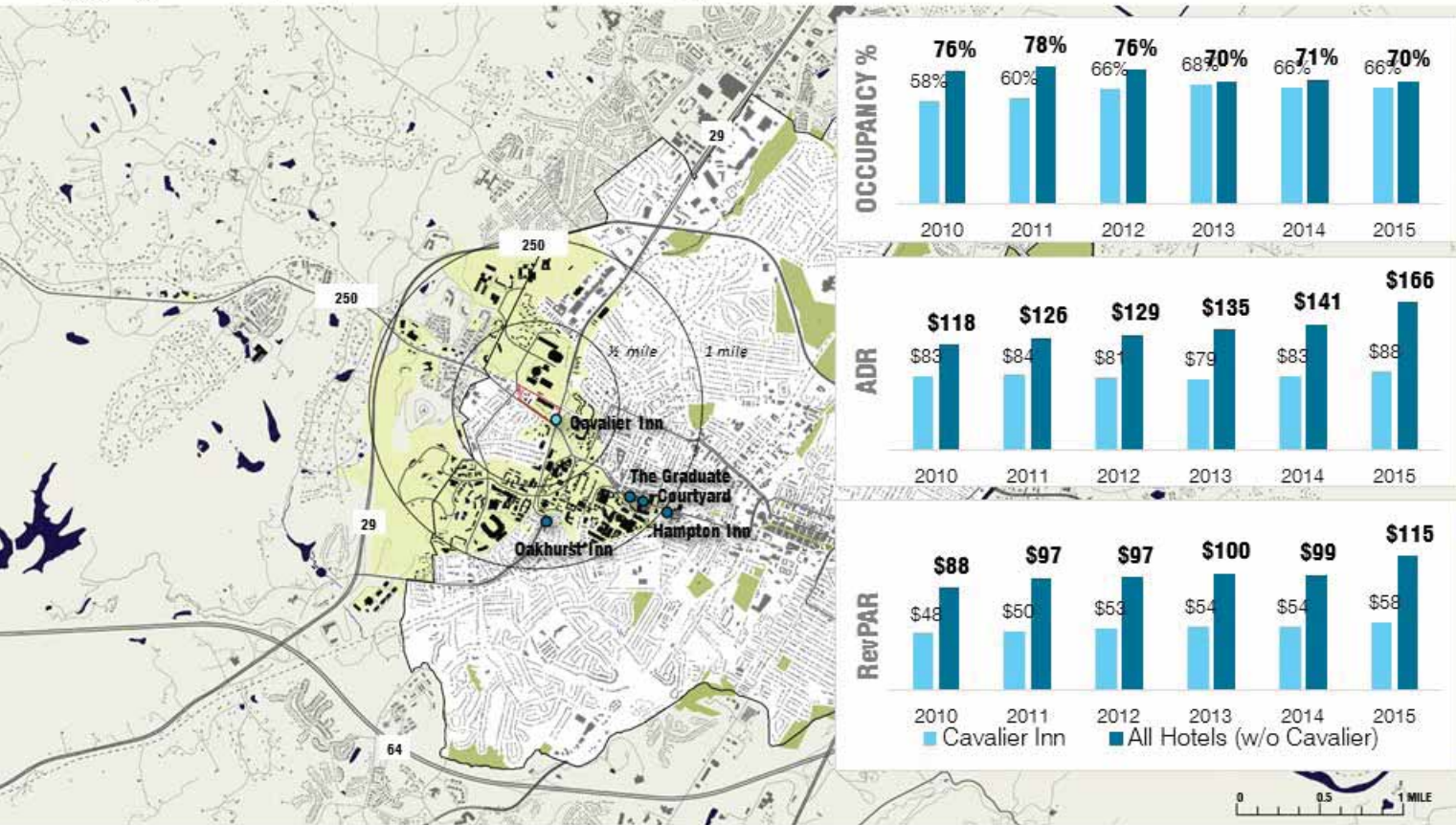
2015 Average Room Rates



2015 Occupancy Percent



Hospitality Summary - Potential to improve performance at Ivy Site, Cavalier Inn lagging other properties within walking distance of Grounds



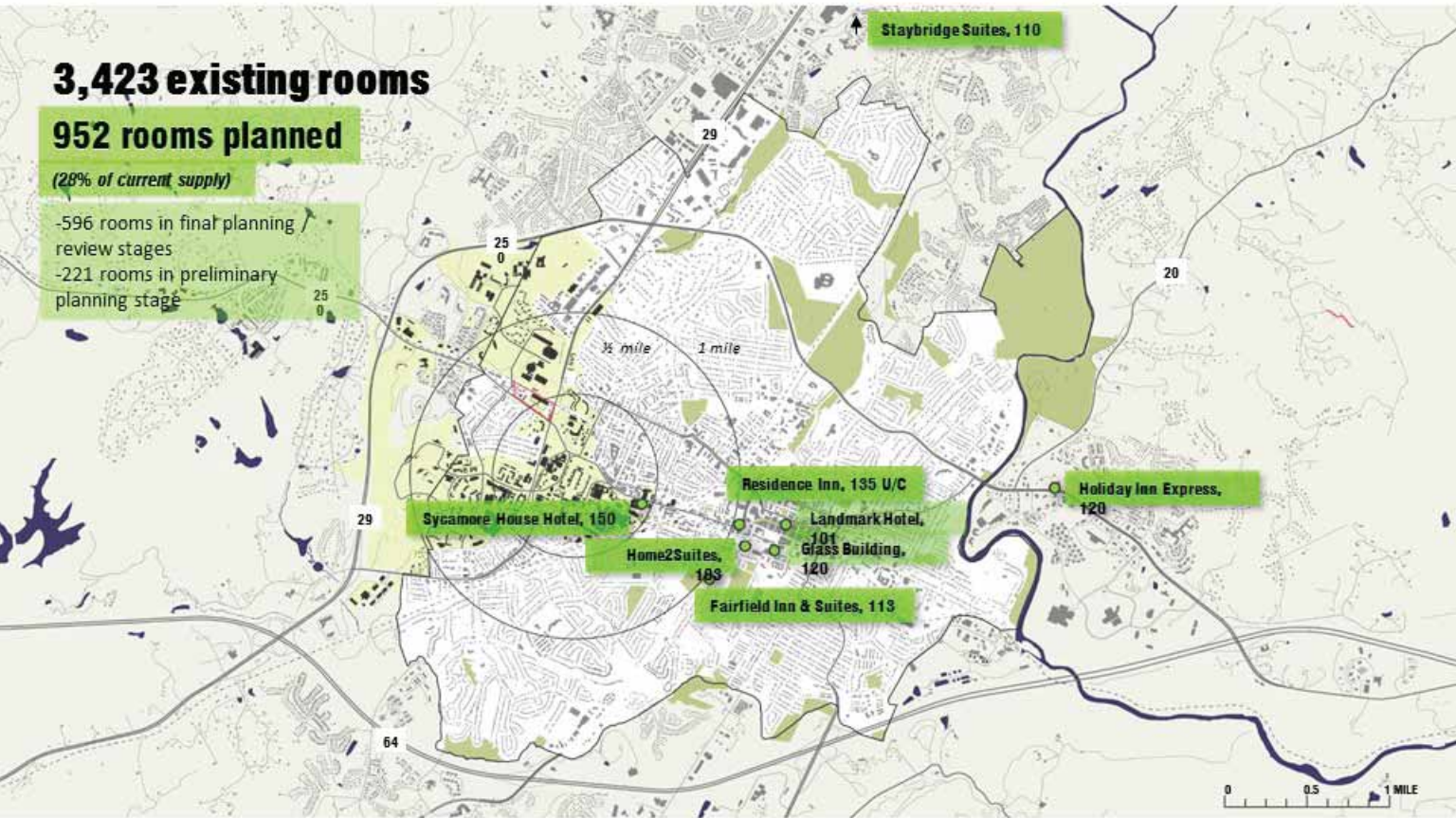
Hospitality Summary – Large pipeline of planned projects should be closely monitored

3,423 existing rooms

952 rooms planned

(28% of current supply)

- 596 rooms in final planning review stages
- 221 rooms in preliminary planning stage



Hospitality Summary – Market’s ability to absorb future supply depends on growth

Estimated Additional Supportable Rooms (cumulative)

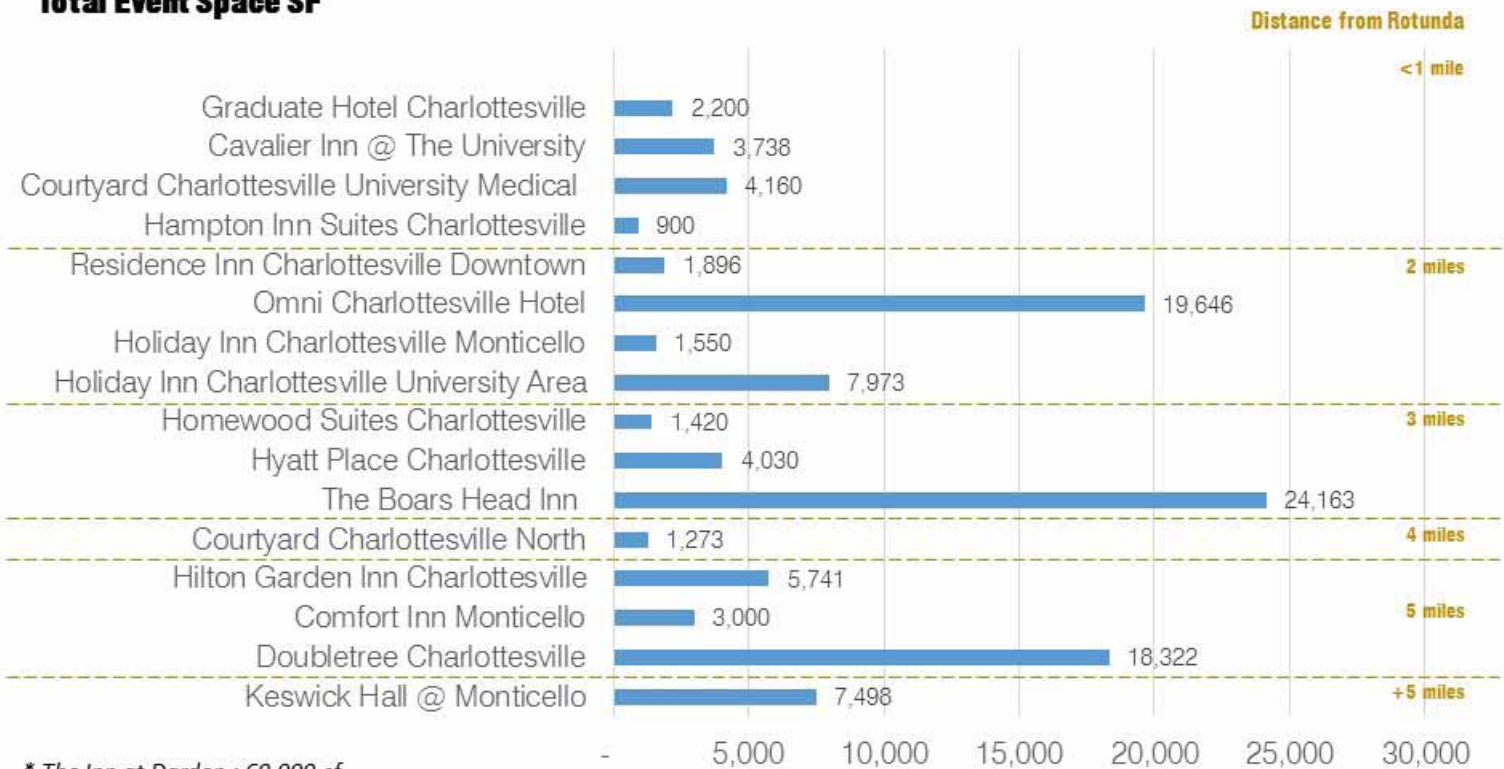
- Additional Supportable Rooms at 2%
- Additional Supportable Rooms at 5%

The avg. annual growth rate from 2011 to 2015 was **5.4%**



Hospitality Summary – Market has fairly robust conference space offering but does not fully satisfy needs of UVA community

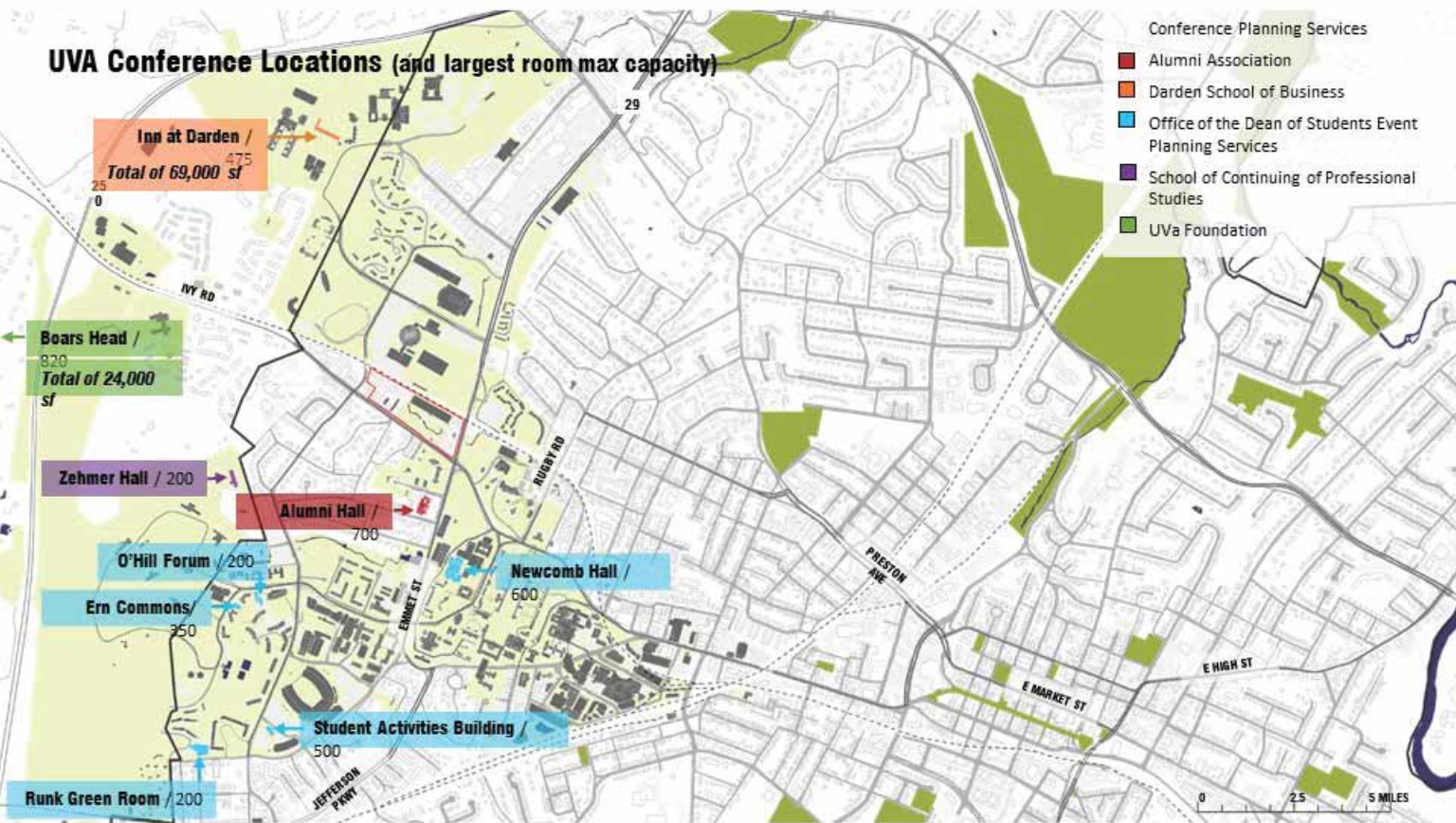
Total Event Space SF



* The Inn at Darden : 69,000 sf

Hospitality Summary – Additional on-campus meeting spaces

UVA Conference Locations (and largest room max capacity)



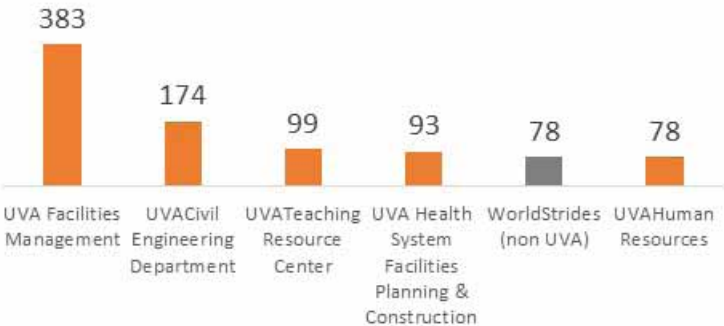
Hospitality Summary – Zehmer Hall is used frequently but is outdated, and not appropriate in terms of quality or scale for a variety of university needs

Zehmer Conference Space Stats

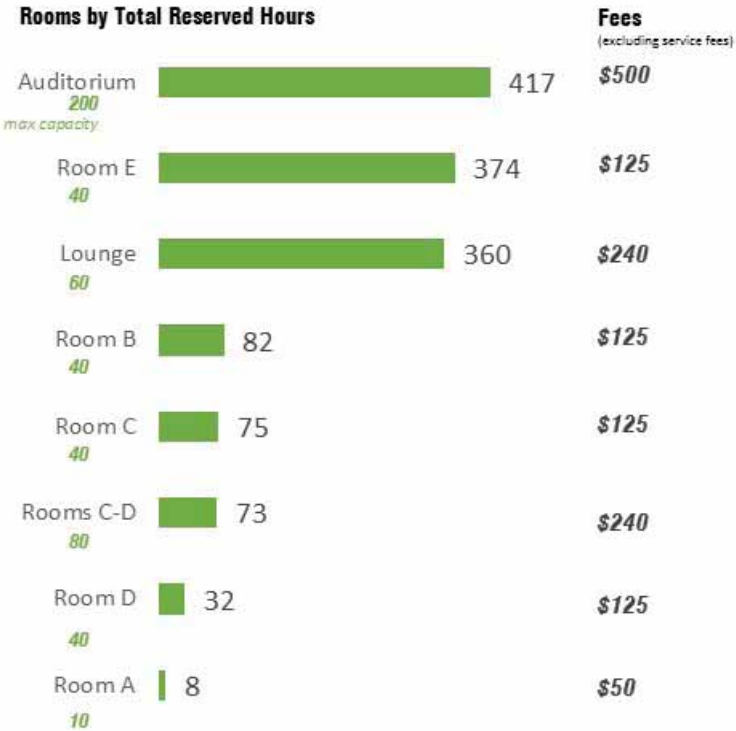
Data from 4/1/2015 – 4/1/2016

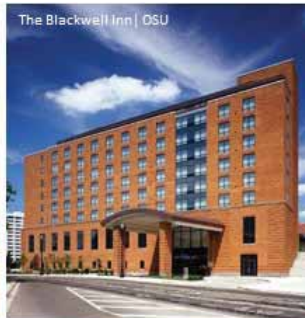


Top Groups by Total Reserved Hours



Rooms by Total Reserved Hours





Hospitality Case Studies – Summary

- Purpose is to highlight campus adjacent hospitality properties that are uniquely entwined with the campus community
- Show properties that function as an extension of the university environment and cater to the needs of specific colleges
- Properties are developed, owed, and managed under a variety of arrangements
- Properties with mixed-use environments and campus adjacencies have a built-in locational advantage due to ‘captive’ market audiences
- Most case study properties are *the* ‘flagship’ conference facility adjacent universities but there are several smaller scale properties that could serve as a model for a smaller Ivy Corridor property/larger Boars Head arrangement

The Charles Hotel Cambridge, MA



Metrics

- Owner - Carpenter & Company
- Management - Interstate Hotels and Resorts
- Proximate Program - Kennedy School of Government
- Opening year - 1985
- Significant renovations - 2009
- Building GSF – 231,960 sf.
- Number of rooms - 295
- Total event space – 18,000 sf. (15 rooms)
- Event space max capacity – 600 (4,700sf. Largest room)
- 4 Diamond

Georgetown University Hotel & Conference Center Georgetown, DC



Metrics

- Owner - Georgetown University
- Management - Aramark Conference Centers Mgt.
- Proximate Program - Georgetown University Hospital
- Opening year - 1988
- Number of rooms - 146
- Total event space – 13,500 sf. (22 rooms)
- Event space max capacity – 1200 (10,573 sf. Largest room)

The Blackwell Inn Columbus, OH



Metrics

- Owner - The Ohio State University
- Management - The Ohio State University
- Proximate Program - Fisher College of Business
- Opening year - 2002
- Number of rooms - 151
- Total event space – 30,000 sf. (22 rooms)
- Event space max capacity – 500 (3,900 sf. Largest room)

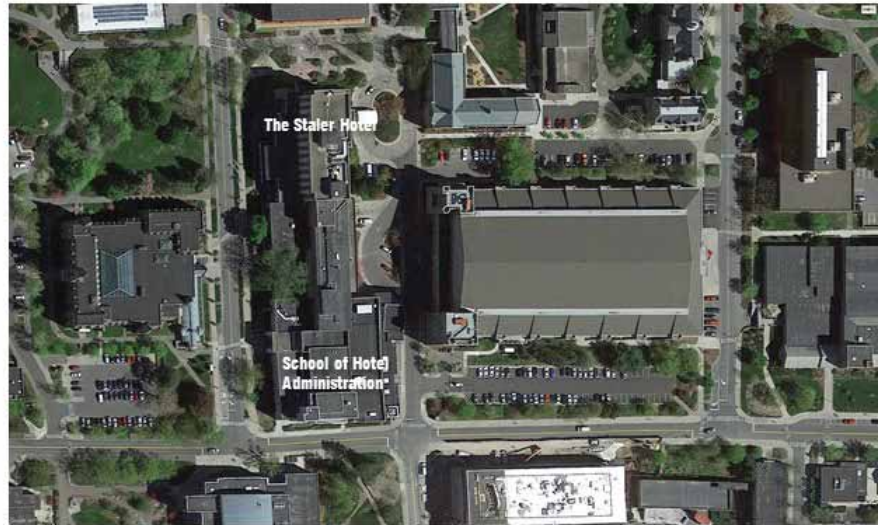
Steinberg Conference Center Philadelphia, PA



Metrics

- Owner – University of Pennsylvania
- Management - Aramark Conference Centers Mgt.
- Proximate Program – Wharton School of Business
- Opening year - 1986
- Number of rooms – 103
- Total GSF – 158,500 sf.
- Total event space – 25,000 sf. (21 rooms)
- Event space max capacity – 200 (2352 sf. Largest room)

The Statler Hotel Ithaca, NY



Metrics

- Owner - Cornell University
- Management - Cornell University
- Proximate Program – School of Hotel Administration
- Opening year - 1989
- Number of rooms - 153
- Total event space – 17,800 sf. (18 rooms)
- Event space max capacity – 700 (4,140 sf. Largest room)
- 4 Diamond

Carolina Inn Chapel Hill, NC



Metrics

- Owner – University of North Carolina
- Management – Destination Hotels
- Proximate Program – School of Media and Journalism, School of Education
- Opening year – 1924
- Number of rooms - 185
- Total event space – 14,365 sf. (17 rooms)
- Event space max capacity – 375 (3,690 sf. Largest room)
- 4 Diamond

The Study New Haven, CT



Metrics

- Owner – Hospitality 3
- Management – Hospitality 3
- Proximate Program – Arts Campus
- Opening year – 2008
- Number of rooms - 128
- Total GSF – 67,918 sf.
- Total event space – 3,000 sf. (8 rooms)
- Event space max capacity – 150 (1,640 sf. Largest room)

The Inn at Virginia Tech and Skelton Conference Center Blacksburg, VA



Metrics

- Owner – Virginia Tech
- Management – Benchmark Hospitality/ Hilton Hotel
- Proximate Program – Alumni Center, Pamplin College of Business
- Opening year – 2005
- Number of rooms – 147
- Total GSF – 118,000 sf.
- Total event space – 24,000 sf. (11 rooms)
- Event space max capacity – 800 (8,832 sf. Largest room)

Georgia Tech Hotel & Conference Center Atlanta, GA



Metrics

- Owner – American Realty Capital Hospitality
- Management – Crestline Hotels and Resorts
- Proximate Program – Tech Square, Scheller College of Business
- Opening year – 2003
- Number of rooms - 252
- Total GSF – 207,141 sf.
- Total event space – 21,000 sf. (18 rooms)
- Event space max capacity – 800 (7,260 sf. Largest room)

Summary of University Program Discussions (23 conversations to date)

Alumni Association

Size and location meets current needs, but will be outgrown. Ideal location close to hospitality and welcome center, outward-looking functions, integrate with visitors and historic tours

Batten School

Create a University wide hub for collaboration, future partnerships with other Institutes – Darden's Batten Institute, Miller Center, Center for Politics and Weldon Cooper Center

Board of Visitors

Create a better arrival to the University, traffic flow, Reconfigured street network, intersection location is most precious

City of Charlottesville

Pedestrian and traffic flow at intersection, zoned as "architectural design control district"

Housing and Student Services

Residential colleges, growing demand for health and wellness

Provost

Priority is growing research, must contain academic use, coalition for entrepreneurship, larger venues for interaction, collaboration spaces

Research/Entrepreneurship

Center for Centers, grouping multiple Pan-U Institutes, iLab as a model for incubator space and link with Darden

The College & Arts

Arts as an entry point and connection to the community, Museums, Symphony, Performance Hall, Drama offices, studios, recital hall, Black box

UVAF

Hospitality, Food venues, Welcome Center and Admissions, Meeting Space, Mixed-Use, Phasing strategy, Entry to University, traffic flow at intersection pedestrian/traffic

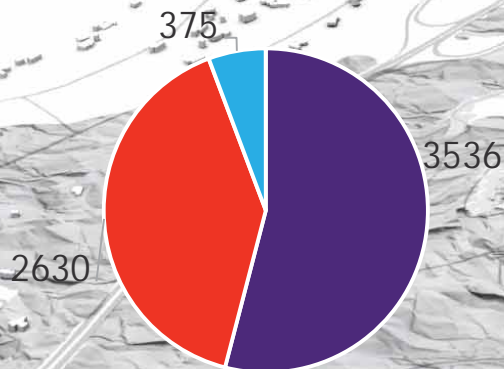
UNIVERSITY NEEDS ANALYSIS

Overview

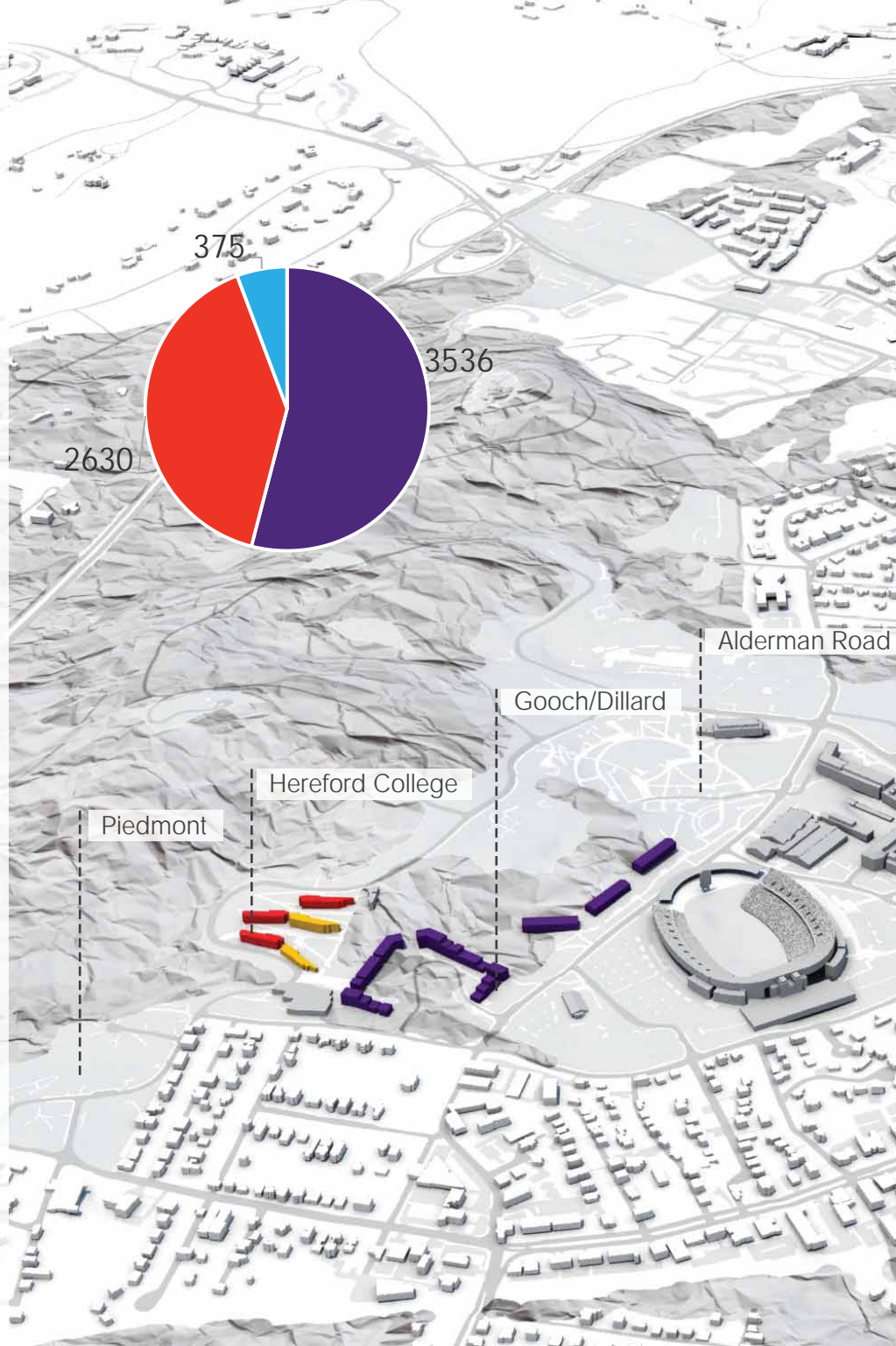
- The Ivy/Emmet site occupies a crucial connective position between Central and North Grounds. It is proximate to every one of the university's existing schools, and also has good access for external audiences. As such, the site's convening power is second to none. It is therefore critical for the site's mix of uses to include academics
- Given the collaborative nature of interdisciplinary research, the academic idea for the site moves away from a single model of ownership. Anchor academic tenants could be placed so as to make feasible significant shared resources, particularly those associated with meeting and additional maker spaces like Open Grounds and iLab
- Good potential fits include the Batten School of Leadership and Public Policy and arts related uses, particularly those less directly connected to the learning and research mission, like the university's museums. STEM uses are likely better suited to other sites more proximate to engineering and medicine.

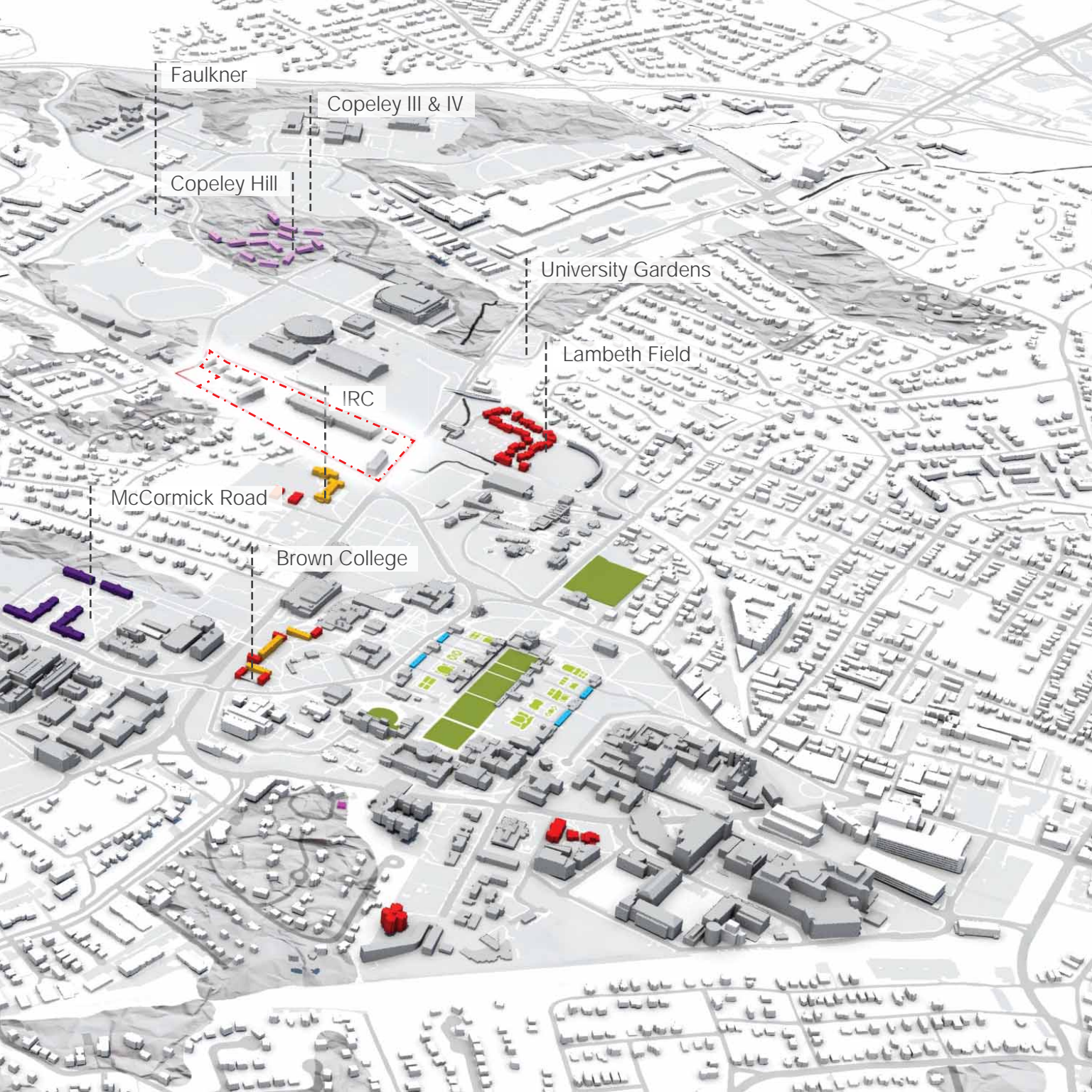
RESIDENTIAL LIFE ANALYSIS

Residential by occupancy



- FIRST YEAR HOUSING
- FIRST YEAR / UPPER-CLASS HOUSING
- UPPER-CLASS HOUSING
- GRADUATE HOUSING
- FAMILY HOUSING
- FACULTY HOUSING





Faulkner

Copeley III & IV

Copeley Hill

University Gardens

Lambeth Field

IRC

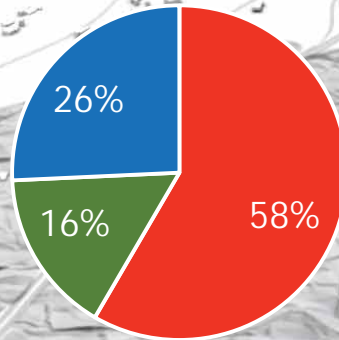
McCormick Road

Brown College

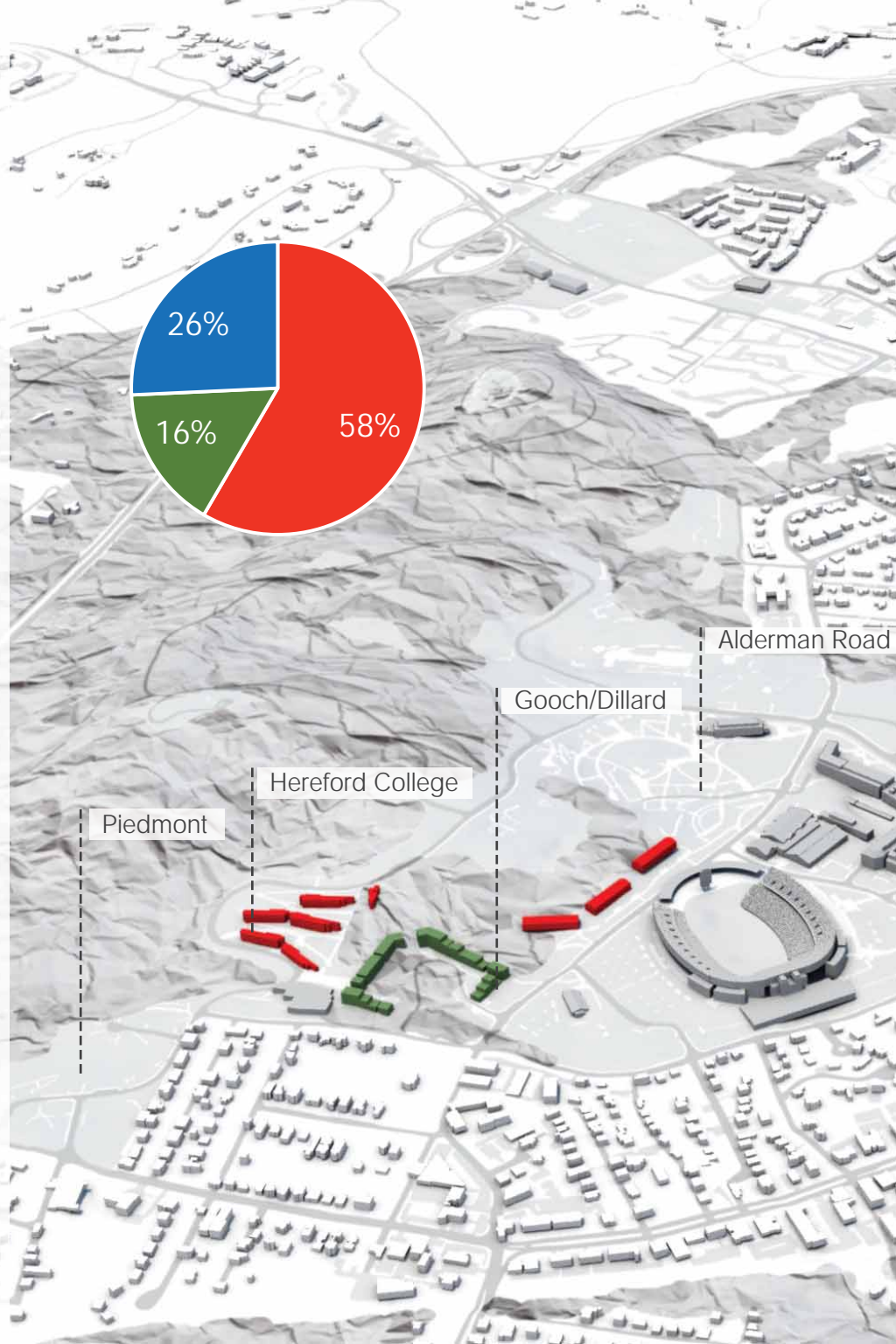
Residential by type

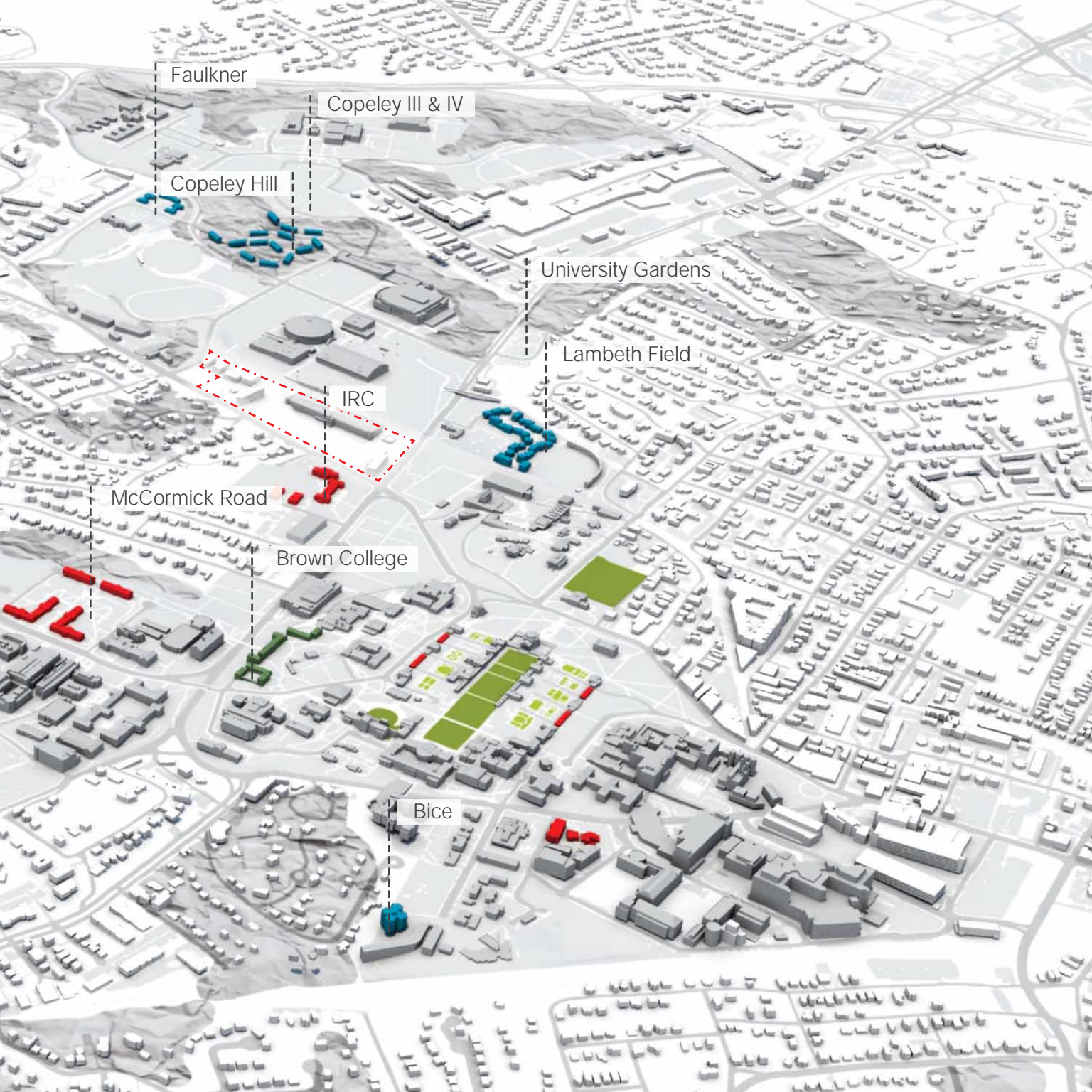
6,541 Beds

* (Not including resident staff)



TRADITIONAL
SUITE
APARTMENT





Faulkner

Copeley III & IV

Copeley Hill

University Gardens

Lambeth Field

IRC

McCormick Road

Brown College

Bice

TEAM

University of Virginia Foundation

Foundation

One Boar's Head pointe
Charlottesville, VA 22904
434.982.4848
www.uvafoundation.com

University of Virginia

Office of the Architect

O'Neil Hall
445 Rugby Road
Charlottesville, VA 22903
434.924.6015
www.officearchitect.virginia.edu

DUMONTJANKS

Landscape Architects and Planners

129 Kingston Street
Boston MA 02111
617.275.2355
www.dumontjanks.com

VHB

Civil Engineers

115 S 15th St #200
Richmond, VA 23219
804.343.7100
www.vhb.com

Biohabitats, Inc.

Fluvial Engineers / Hydrologists / Ecologists

36 Twin Lake Lane
Richmond, VA 23229
804.750.1082
www.biohabitats.com

Landwise Advisors

Real Estate Consultants

101 Walnut St
Watertown MA 02472
617.852.3581
www.landwise-advisors.com

DUMONTJANKS