RUTGERS UNIVERSITY PHYSICAL MASTER PLAN

RUTGERS 2030

VOLUME 1: NEW BRUNSWICK

JUNE 18, 2015

PREFACE

Rutgers University embarked on Rutgers 2030 in May 2013, the first comprehensive master plan in over a decade, and the first to incorporate Rutgers Biomedical and Health Sciences (RBHS), created from the integration of the University of Medicine and Dentistry of New Jersey (UMDNJ) with Rutgers University in July 2013. The physical master plan complements the Rutgers University Strategic Plan, prepared in conjunction with the Boston Consulting Group, and approved by the Board of Governors in February 2014, and the strategic plans of each of Rutgers' component institutions.

Rutgers 2030 envisions development at Rutgers over a 15-year time frame, 2015 to 2030, and is comprehensive in its scope; taking into account buildings, the natural and constructed landscape, transportation, and infrastructure. The report consists of three volumes:

- Volume 1: Rutgers University–New Brunswick
- Volume 2: Rutgers University–Newark
- Volume 3: Rutgers University–Camden

RBHS is considered primarily within Volume 1 although constituent elements are found across Rutgers.

The scope of input was broad, involving survey responses from approximately 8,000 members of the community, over thirty presentations and town hall meetings, and meetings with many administrators, faculty, and student groups.

This study would not have been possible without the leadership of Rutgers University President Robert L. Barchi and support of Chancellors Nancy Cantor, Richard Edwards, Phoebe Haddon, and Brian Strom. In addition, the Physical Master Plan Executive Steering Committee, Rutgers University Facilities and Capital Planning members, Deans, staff, faculty and students contributed invaluable insight to the development of the project.

The master plan consulting team included Robert A.M. Stern Architects, Sasaki Associates, VHB, Buro Happold, and Toscano Clements Taylor.

Volume 1: New Brunswick

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4 DISTRICT FRAMEWORKS

Introduction

Based on the vision and principles outlined in Chapter 3, Rutgers 2030 plans for each individual district, including Rutgers Biomedical and Health Sciences (RBHS), as an element within the overall Rutgers University–New Brunswick campus. While the districts are collectively considered within the context of "One Rutgers," linked by means of the road network and the surrounding open space structure, the unique identities of each district remain a distinctive asset to the University. The master plan proposes detailed plans for College Avenue, Cook/Douglass, Busch, Livingston and RBHS. The following sections provide an detail for the planning and design recommendations of each district and addresses the following:

- The place and context of the district;
- A vision for the district, in keeping with the master plan principles;
- Three integrated frameworks: land use, open space and natural systems, and mobility.

4.1 COLLEGE AVENUE

4.1.1 College Avenue District Vision and Principles

College Avenue is what many think of when picturing Rutgers University. Old Queens, the first building built at Rutgers dates back to 1807 and is sited on a historic block with other architecturally significant buildings, surrounded by tree lined lawn and curved driveway. Four historic gates welcome all to the Old Queens block into a world of academic excellence and advanced research. Today, Old Queens is the home of the University administration and is the southern gateway to the College Avenue campus.

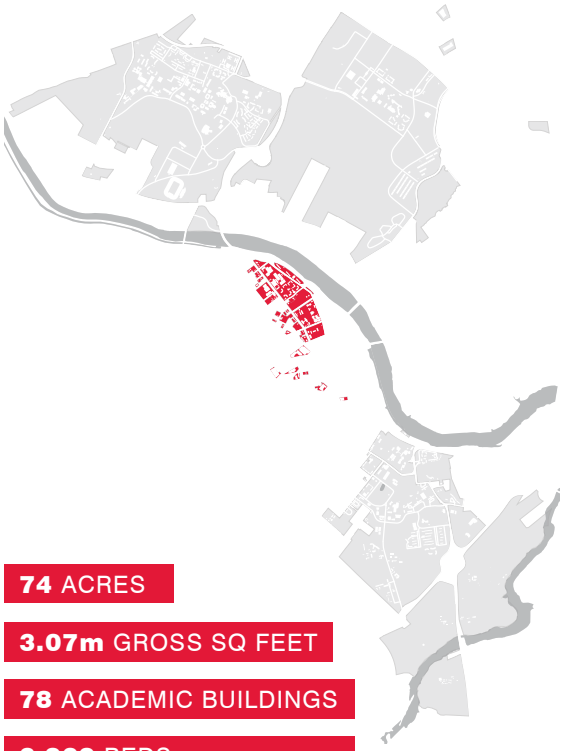
Easily accessible from the Northeast Corridor, it is 45 minutes from New York City and approximately 70 minutes from Philadelphia by train. The district is a short walk from downtown New Brunswick and is bounded to the west by a residential neighborhood and to the east by the Raritan River. The recent merger with the University of Medicine and Dentistry of New Jersey (UMDNJ) extends College Avenue to the southwest along Somerset Street. The acquisition of the northwest parcel at the New Brunswick Theological Seminary and subsequent development of the academic buildings and honors college infills a missing link that now connects the campus from north to south.

COLLEGE AVENUE: THE VISION

The master plan builds upon recent work at Seminary Place and at Hamilton Street to provide new academic buildings, an honors college, and a residential building. The master plan turns the focus on north campus, starting at Morrell Street, at the dining hall Brower Commons, and student services building Records Hall, to Alexander Library and Rutgers Club at George Street and College Avenue to reorganize the northern campus to be a vibrant hub of activity, with its buildings, functions and outdoor space relating to the southern part of district. The River Dorms and Deiner Park are also studied, in order to provide a connection to the Raritan River.

The master plan is guided by the following principles and goals:

- **Reinforce College Avenue as the heart** of Rutgers University – New Brunswick through continued investment to provide classrooms, services and amenities that serve a University-wide purpose, like a cultural center and multi-purpose event venue,
- **Transform the student experience** by providing a centralized student service venue and increased student organization and programming space,
- **Elevate and inspire academic excellence** and discourse by providing meeting and programming space suitable for internal and external events,
- **Enhance the user experience** by providing a comprehensive network of pedestrian and bicycle paths, interwoven with an open space network that connects College Avenue from north to south and east to west,
- **Extend resources** by engaging with the surrounding city and state parks and with the Raritan River.



74 ACRES

3.07m GROSS SQ FEET

78 ACADEMIC BUILDINGS

3,909 BEDS

5,651 CLASSROOM SEATS

114,693 WKLY STUDENT CONTACT HOURS

The vision for College Avenue is organized by the five overarching planning principles:

LEARNING AT COLLEGE AVENUE

The new academic building under construction at Seminary Place provide space for the School of Arts and Sciences (SAS) with approximately 2,500 classroom seats and a lecture hall. It is the first academic building to be constructed in the College Avenue campus since 1961 and is targeted to open in 2016, coinciding with the University's 250th anniversary.

The building provides needed expansion space for classrooms and relieves the heavy use of classrooms at Scott Hall and New Jersey Hall, which are both proposed to be renovated and upgraded with new finishes and technology features consistent with the new classrooms on campus.

Rutgers 2030 also proposes a new high tech classroom and student lounge building at Senior Street and College Avenue, in close proximity to student services and transit hub.

LIFE AT COLLEGE AVENUE

A Campus Center for the University – A 300,000 gsf campus center is proposed to replace the Rutgers Student Center, the Student Activities Center and Brower Commons Dining Hall. This expanded student center will include dining, event space and student organization meeting space. This new campus center is located adjacent to the Alexander Library, and is part of a configuration of new buildings including a cultural center, classrooms and student lounge space, accessed directly from the George Street Transit Hub.

George Street Transit Hub – A transit hub at George Street provides a gateway into College Avenue via the Rutgers bus network. The transit hub is connected to the proposed campus center and opens into the lawn to the west and Deiner Park to the east. A transit pavilion is proposed for the east side of George Street.

Lawn – The Lawn at the proposed campus center provides a central space for the Rutgers Community for events and passive recreation. It is also imagined as a new iconic space for Rutgers University – New Brunswick, one that has a view of the proposed

pedestrian and bicycle bridge across the Raritan River.

Rutgers Gymnasium and Deiner Park – Access to recreation and physical fitness space on College Avenue is enhanced by the proposal to expand and renovate the Rutgers Gymnasium and to improve access to Deiner by the replacement of Hardenbergh Hall, thus opening up views of the park and of the river.

Undergraduate housing – Current efforts to renovate existing housing and provide new housing at the Honors College and Hamilton Street Residential Building provide updated housing on College Avenue, improving quality of the student experience. Displaced from the reorganization of the Records Hall site, Stonier Hall and Hardenbergh Hall are replaced elsewhere on the campus.

NAVIGATING COLLEGE AVENUE

Proposed improvements related to mobility include clarifying traffic circulation at the north end of George Street, improving bicycle connections north to Route 18 and south through downtown New Brunswick, and transforming College Avenue into a pedestrian and bicycle friendly street, with limited access for vehicles during business hours. Under this plan, the open space on campus is connected throughout campus along a north-south axis, leading to a more pleasant walking experience across the district.

STEWARDSHIP AT COLLEGE AVENUE

College Avenue, with its west boundary running along the Raritan River and easy access to the Delaware and Raritan (D&R) canal and to Boyd Park allows for opportunities to engage and showcase the Raritan River. Partnerships with neighboring communities and stakeholders including Johnson and Johnson, the City of New Brunswick, and the Friends of the Raritan are in order to provide riverfront access and boardwalk along a stretch between the heart of College Avenue and the Rutgers boathouse at Douglass. A proposed pedestrian bridge across the Raritan also will be developed in concert with public authorities having jurisdiction over the area in order to maintain requirements for maintaining boat clearance requirements and ecology of the river.

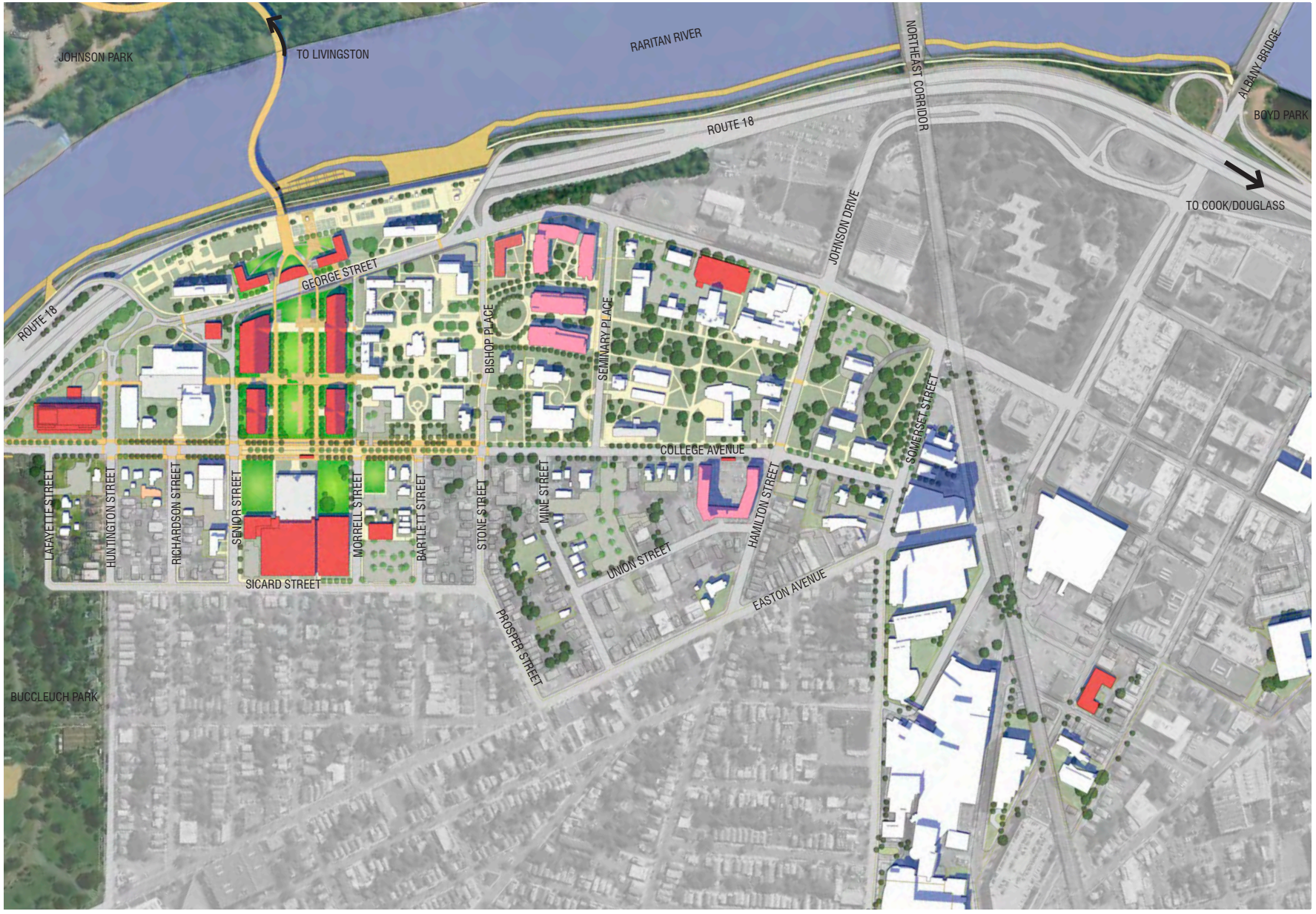
PERSONALIZING COLLEGE AVENUE

The campus center proposed at College Avenue is intended to provide student organizations with ample and suitable space for programming and events. A cultural center adjacent to the campus center brings together the cultural centers currently spread across the New Brunswick campus.

COLLEGE AVENUE TODAY

SCALE 1" = 600'

0 200 400 800



COLLEGE AVENUE 2030

SCALE 1" = 600'

0 200 400 800

Proposed aerial view of College Avenue

4.2.2 LAND USE FRAMEWORK

The Land Use framework for College Avenue builds upon recent investments in the district, including the Academic Building and Honors College at Seminary Place proposed to be completed Spring 2016, and housing development at Hamilton Street and College Avenue on a surface parking lot, scheduled to open Fall of 2016. Rutgers 2030 recognizes that College Avenue is the heart of the New Brunswick campus, and is in a unique position to provide amenities to the entire Rutgers Community. With its central location between Busch-Livingston and Cook/Douglass, College Avenue is poised to be home to a student center and event venue that would provide much needed student service and programming space for the University.

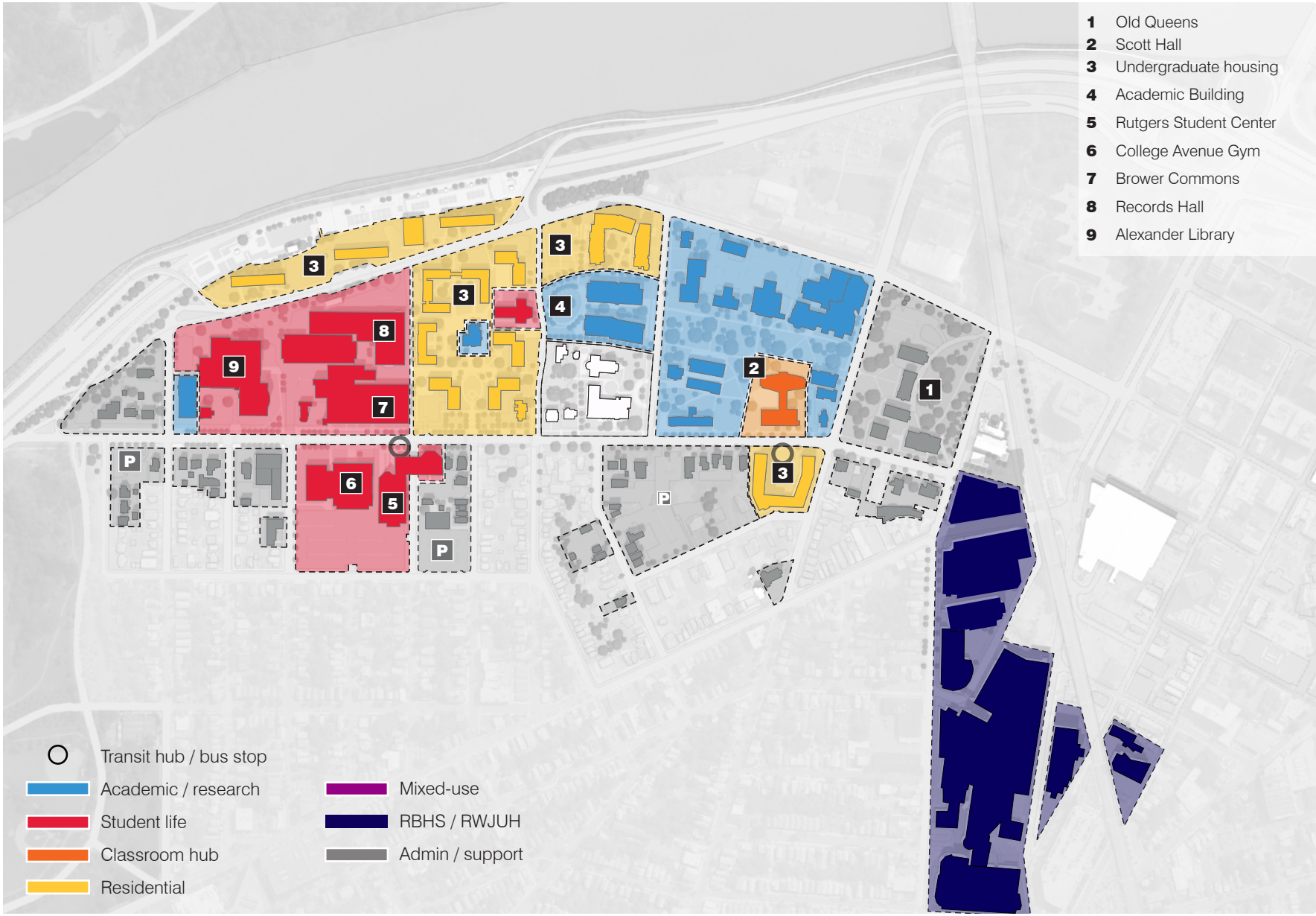
A NEW GATEWAY

For many, coming to Rutgers means arriving at Old Queens, home to the University administration, and taking a stroll through Voorhees mall, the central lawn surrounded by classroom and administrative buildings. College Avenue is easily accessible from the northeast corridor train station due to the development of the Gateway building at Somerset Street, providing a connection directly from southbound platform to Somerset Street and to Old Queens. Rutgers 2030 proposes an anchor building at the north end of College Avenue. This north gateway building could support retail or community functions on the street levels, and a parking garage on the lower levels. Upper levels could provide market-rate housing, for the RBHS community since this site will be near the Robert Wood Johnson hospital and surrounding medical buildings, and to Busch with easy access to Route 18. This building would be visible from Route 18 and serve as the major gateway into College Avenue from the north end.

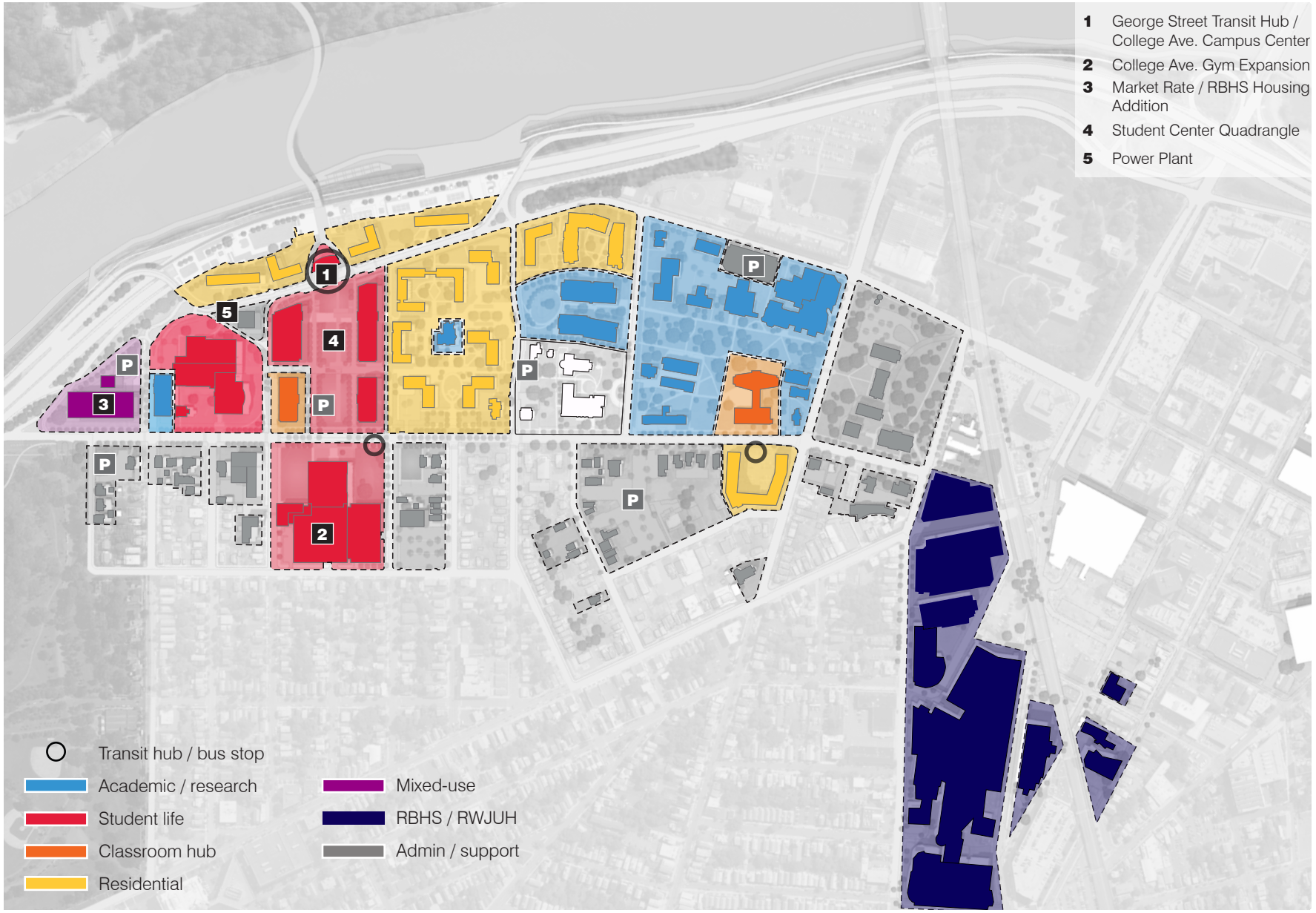
THE HEART OF COLLEGE AVENUE

A New Student Quadrangle – Rutgers 2030 proposes the creation of a new quadrangle bordered by College Avenue, George Street, Morrell Street and Senior Street. The quadrangle will replace the current jumble of buildings on this block, many of which are in poor repair or have exceeded their useful lives. A broad lawn will be centered on the iconic facade of the College Avenue Gymnasium to the southwest, and to the northeast will bridge across George Street and will restore Rutgers' historical connection to the Raritan River. The quadrangle will be lined with new buildings including a University-wide campus center, with large performance and meeting venues currently lacking at Rutgers, as well as enhanced meeting space for student organizations. A new dining hall will replace outmoded Brower Commons. Classroom spaces and a building housing the many clubs and organizations representing Rutgers' cultural diversity will flank the new lawn, and will be proximate to a centralized student services building. The creation of this new quadrangle can be accomplished in stages as described in Chapter 5.

Rutgers Gymnasium – Rutgers Gymnasium is proposed to be renovated and expanded to hold six basketball courts and to integrate health and wellness into recreation. As part of the proposal for expansion of gymnasium, Rutgers 2030 proposes to demolish the outmoded gymnasium annex and replace its functions in a new addition to the west. The area occupied by the annex would be left open as a memorial to the first college football game ever played between Rutgers and Princeton University.



COLLEGE AVENUE TODAY



COLLEGE AVENUE 2030


Rutgers Dining Hall
College Avenue Gym
Lawn
High Tech Classroom and Student Lounge
Rutgers Cultural Center
College Avenue
Rutgers Student Center
George Street Transit Hub
George Street

Alexander Library – The creation of the new quadrangle will make the Alexander library more accessible to the rest of College Avenue. Rutgers 2030 proposes to provide a new entrance at the south side of the library, and to reconfigure the interior of the library to provide a north-south gallery space to supplement the existing entry from the west from College Avenue. This north-south connection through the library will connect the quadrangle to the north gateway building one block north.

ROTC – ROTC currently occupies the corner of College Avenue and Senior Street. The building is a Queen Anne residence in good condition, with a recent addition towards the west. Rutgers 2030 proposes the University explore opportunities to relocate the building along College Avenue, possibly to Richardson Street and adjacent to Air Force ROTC, instead of demolishing it entirely. This would contribute to the architectural character of the neighborhood and the campus.

RBHS - NEW BRUNSWICK

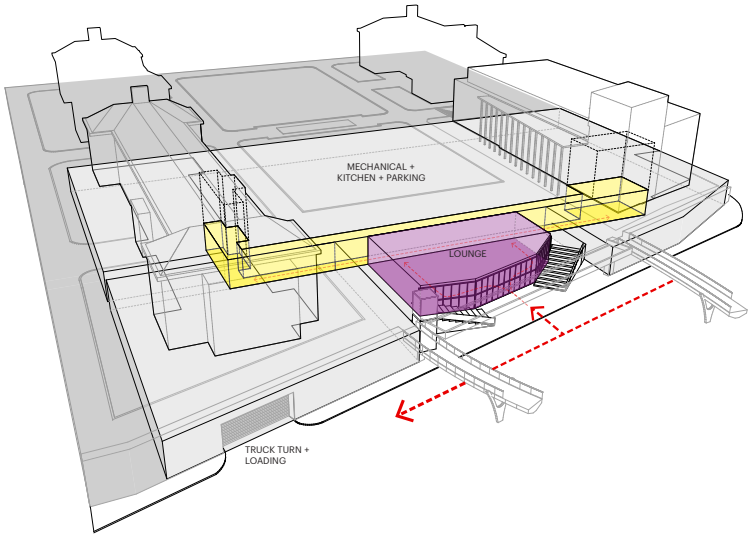
The 2014 RBHS strategic plan calls for growth in areas that would affect departmental and academic space in New Brunswick, adjacent to the Robert Wood Johnson University Hospital (RWJ). Rutgers 2030 recognizes Somerset Avenue as a main street that connects RBHS space to College Avenue, and proposes to improve streetscape along this street. Adjacent to the School of Nursing and Institute for Health, Health Care Policy and Aging Research, a site at Paterson Street and Joyce Kilmer Avenue, south of the Northeast Corridor railroad tracks, is identified as future RBHS academic expansion.

STUDENT RESIDENCES

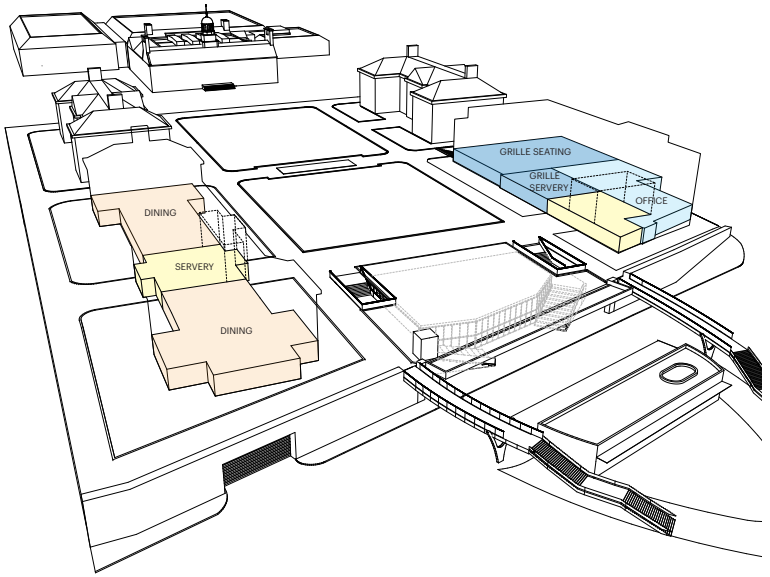
Rutgers is currently building student residences at Seminary Place and on Lot 8. The proposed new quadrangle and Raritan River connection will displace two residential buildings: Stonier Hall and Hardenbergh Hall. Replacement housing for these two displaced buildings are proposed for the site of Hardenbergh Hall, in a configuration that allows for views to the river from the student center and student lawn. A potential site for future expansion of student residences is identified north of the Honors College currently under construction at Seminary Place.

INFRASTRUCTURE

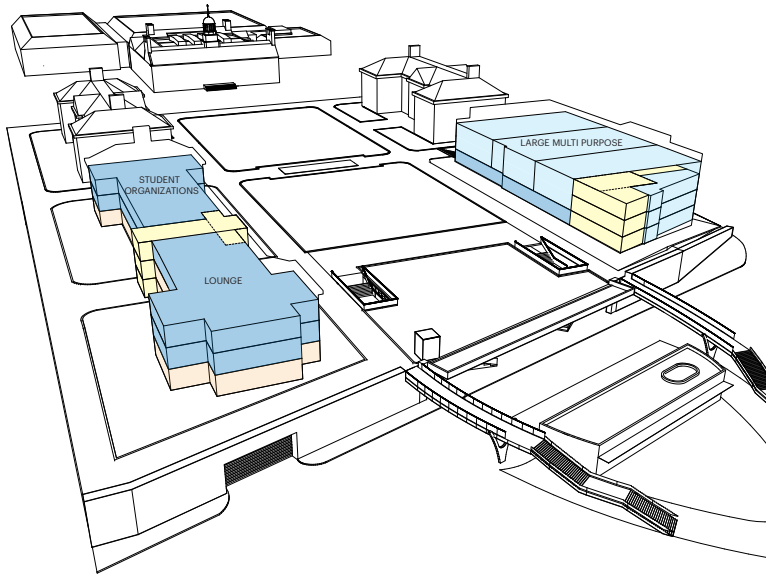
The University has completed a feasibility study to replace the College Avenue central heating plant, which is approaching the end of its useful life, and is inefficient. A replacement plant is proposed to be located directly west of the Alexander Library. The site was selected due to its proximity to the current location of the plant, thereby keeping costs for relocating and extending utilities at a minimum. The building can be discreetly nestled into the steep grade at this site. Above grade utility lines along George Street should be relocated underground, especially in the vicinity of the proposed bridge across George Street.



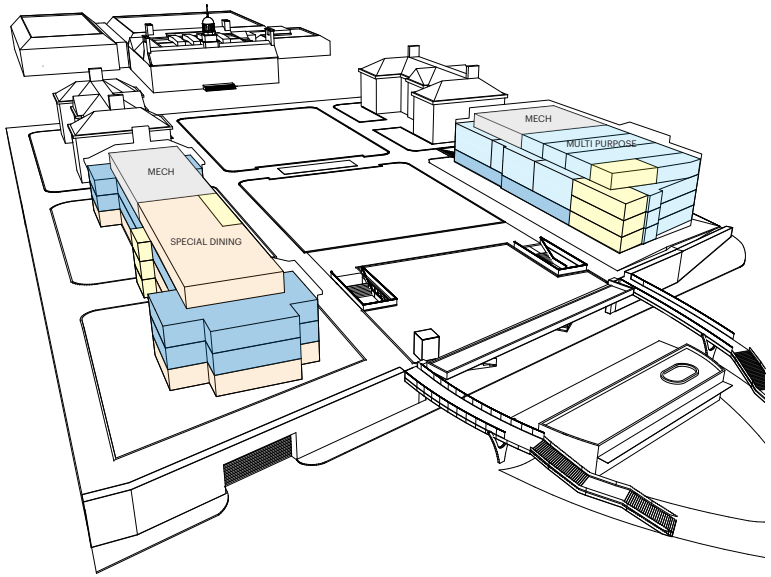
Lower Level



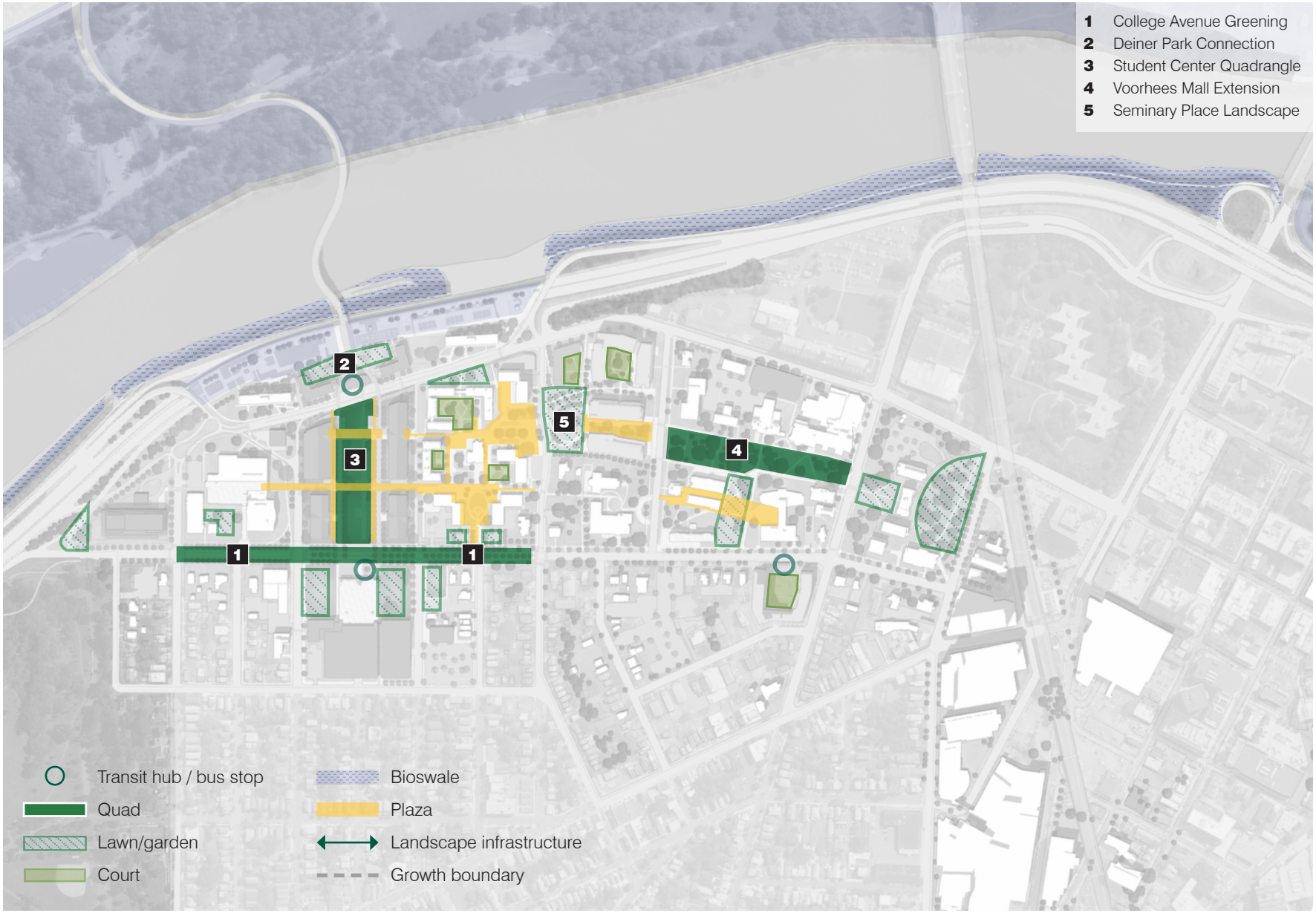
Courtyard Level



Typical Floor



Top Floor


1 College Avenue Greening
2 Deiner Park Connection
3 Student Center Quadrangle
4 Voorhees Mall Extension
5 Seminary Place Landscape
Transit hub / bus stop
Quad
Lawn/garden
Court
Bioswale
Plaza
Landscape infrastructure
Growth boundary
SCALE 1" = 600'
0 200 400 800

4.2.3 OPEN SPACE / NATURAL SYSTEM FRAMEWORK

College Avenue's urban setting does not provide as much open space as Busch, Livingston or Cook/Douglass. However, the open space that does exist at College Avenue represents some of the most beautiful and memorable at Rutgers. Old Queens and Voorhees mall, with their mature trees, imbue a sense of history and grandeur. The soon-to-be-completed academic buildings at Seminary Place extend Voorhees mall visually to the North to Bishop Place. The proposed open space framework for College Avenue aspires to build upon these outdoor spaces and provide continuity across the campus moving north-south, and also east-west to the Raritan River.

New Quadrangle - The lawn flanked by the proposed student center provides outdoor space for gatherings, programming, and passive recreation. This open area is lined with allees of trees on the periphery. This lawn serves to orient visitors arriving at the George Street Transit Hub, and will provide space for students coming to the student center and guests at events.

Deiner Park - Deiner Park currently provides inadequate outdoor recreation space for College Avenue campus. Access to the park is limited through one entry from a road off of Hardenbergh Hall parking lot. The park is unattractive, under-utilized, and often does not feel safe. The grade change from George Street to Deiner Park is also significant, adding to its sense of isolation. Rutgers 2030 proposes to open access to the park, by linking it directly to both George Street and the new quadrangle. George Street at the location of Hardenbergh Hall is also the transit hub for northbound busses where a pavilion is proposed to provide shelter and meeting place, with an outdoor terrace with views of the river.

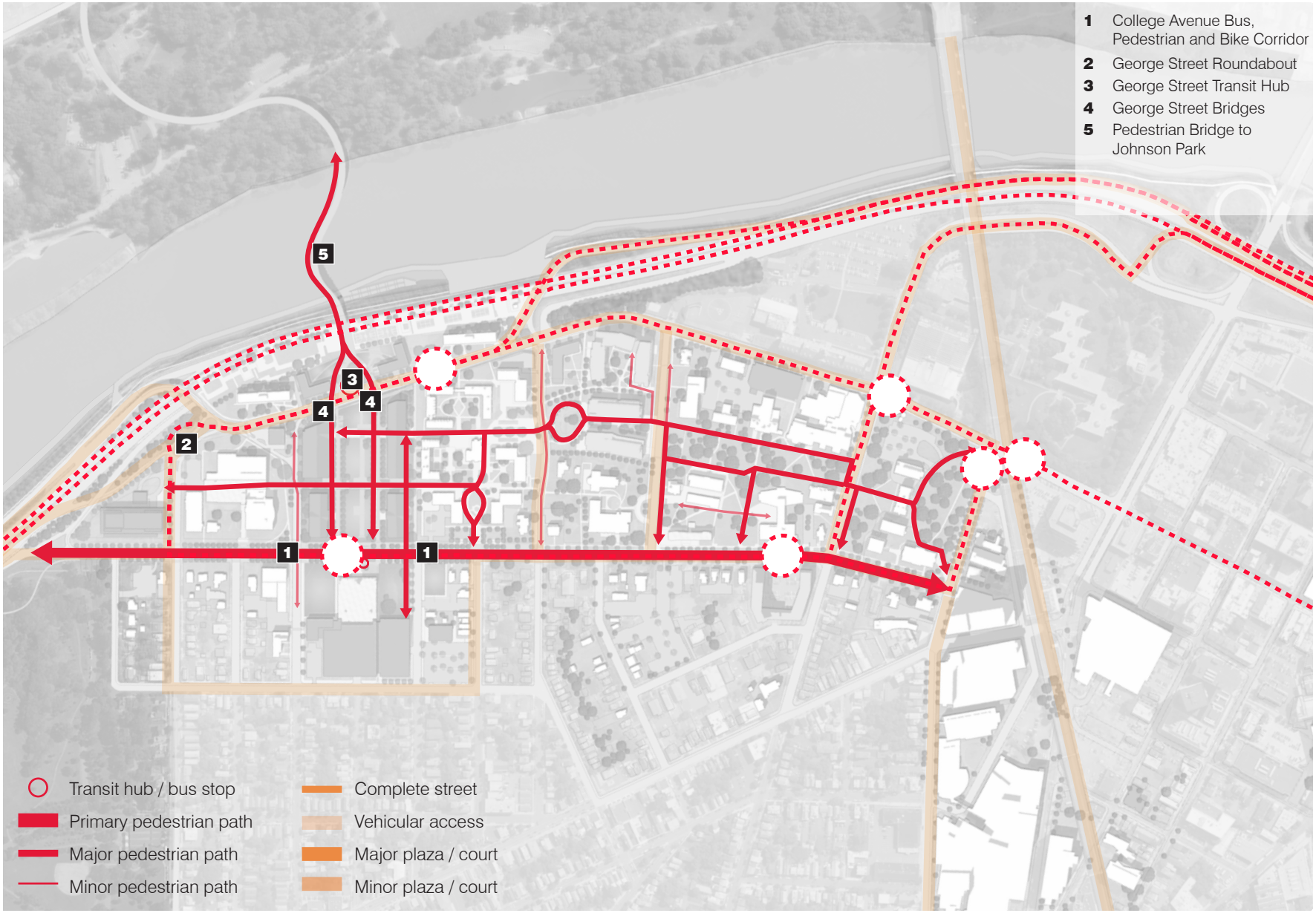
A new stair and ramp between the park and the river will provide access to the park from the east, and connect the park to the rest of the network of parks along the river, and to the DNR canal.

Boardwalk and Bridge across Raritan - The city of New Brunswick recently invested in upgrading Boyd Park, which extends from Cook/Douglass to the Route 27 Bridge. There is a trail through Boyd Park, with highlights including three-quarter mile tow path and historic swing bridge. Access to the river north of the Route 27 bridge is limited, and the river edge is very close to Route 18. Rutgers 2030 envisions a boardwalk along the west river edge to provide safe and enjoyable pedestrian and bicycle access along the river, with areas of seating and activity along the boardwalk. The boardwalk is connected to the proposed pedestrian and bicycle bridge across the Raritan. The proposed bridge provides access to Johnson Park from College Avenue, and extends north to the Livingston.

COLLEGE AVENUE LAWN

A new quadrangle is proposed for the heart of the College Avenue. It is flanked on north and south by the campus center, the cultural center and a classroom building with student lounges and will provide a place suitable for events and passive recreation. Trees flanking the lawn provide shaded paths while maintaining the openness of the lawn. The quadrangle is connected to the proposed George Street Transit Hub, and will connect an expanded Rutgers Gymnasium with the Raritan River.

Existing view of College Avenue Quadrangle


1 College Avenue Bus, Pedestrian and Bike Corridor
2 George Street Roundabout
3 George Street Transit Hub
4 George Street Bridges
5 Pedestrian Bridge to Johnson Park
Transit hub / bus stop
Primary pedestrian path
Major pedestrian path
Minor pedestrian path
Complete street
Vehicular access
Major plaza / court
Minor plaza / court
N
SCALE 1" = 600'
0 200 400 800

4.2.4 MOBILITY FRAMEWORK

The mobility framework for College Avenue includes proposed enhancements within the College Avenue boundary and beyond to its north and south in order to connect two large gaps in the overall New Brunswick campus system – to its north the Route 18 bridge over the Raritan River and to the south, Downtown New Brunswick. The experience of moving about College Avenue includes gateways and iconic imagery like that of Old Queens and Bishop House, and recognizes that the College Avenue campus, being close to the Northeast corridor train system, serves as the central node from which Busch, Livingston, and Cook/Douglass are connected.

PEDESTRIAN NETWORK

At College Avenue, there are two strong pedestrian spines: the first along College Avenue, and the second interior to the district, from Old Queens to Voorhees Mall, northward to Bishop Place through the soon-to-be-completed lawn at the Academic Buildings at Seminary Place. Recent investments in landscaping along College Avenue in the area directly adjacent to Brower Commons, Rutgers Gymnasium and directly west of Bishop Place have enhanced the pedestrian experience along College Avenue. Rutgers 2030 proposes to continue to prioritize the greening of College Avenue, with a partial closing of the Avenue, from Huntington Street to Bartlett Street, restricting vehicular traffic to buses and bicycles, and redirecting cars to Sicard Street for the hours of 8 am to 5 pm. Increased landscaping with mature shade trees along College Avenue shape the space and pedestrian experience at an already established pedestrian spine.

Walking and crossing at George Street north of Seminar Place is discouraged due to significant grade changes and fast-moving vehicles.

Within College Avenue, Rutgers 2030 proposes to extend walkways north past Bishop Place, into the proposed quadrangle at the site of Records Hall and farther north to the Alexander Library and the proposed North Gateway building at George Street and College Avenue. This north-south pedestrian corridor will physically link Old Queens and Voorhees Mall with the northern portion of the campus.

Rutgers 2030 also proposes a connection from the proposed quadrangle at the site of Records Hall eastward, towards Deiner Park and to a proposed pedestrian and bicycle bridge across the Raritan River. This proposed bridge provides a connection to a proposed boardwalk along the Raritan River between the DNR Canal and Boyd Park. This pedestrian bridge is a central element to connecting College Avenue with Piscataway through Johnson Park and northwards to the Ecological Preserve, forming a recreation axis extending north to the Livingston.

BICYCLE NETWORK

The City of New Brunswick began work summer 2013 to implement dedicated bicycle lanes through downtown New Brunswick, to Route 27 and the Albany Bridge, providing a critical link for bicycle riding between College Avenue and Cook/Douglass for the Rutgers community. Together with efforts by RUDOT to increase bicycle ridership, Rutgers 2030 proposes enhancing existing bicycle routes and providing connections at locations where bicycle routes currently end:

At the north end of College Avenue and Buccleuch Park – in conjunction with closing College Avenue to

vehicular traffic during business hours, Rutgers 2030 proposes to add dedicated bicycle lanes to north and southbound lanes, and using a median with planting to separate traffic and reduce vehicular speed. At the north end of College Avenue, a bicycle route is proposed to continue into Buccleuch Park through an existing trail, ascending with a gentle slope within the natural topography of the park to an elevation of approximately ten feet above street level on the north side of the park, at the existing bicycle ramp on to Route 18 bridge. A pedestrian and bicycle bridge is proposed to span over George Street, directly connecting to the Route 18 bicycle ramp to provide a safe way to cross George Street at a location of high speed and high volume vehicular traffic. From this bridge, the bicycle network connects to Busch through an existing bicycle path that ramps off the Route18 bridge over the Raritan River and sharrows along Bartholomew Road.

VEHICULAR NETWORK

George Street is a major thoroughfare at College Avenue and connects the district to Route 18 Bridge and to Downtown New Brunswick and to Cook/Douglass. Rutgers 2030 proposes several initiatives related to George Street:

Roundabout at George Street north - An elongated roundabout is proposed at the north end of George Street at College Avenue in order to reduce vehicular speeds and to allow traffic to move northward from George Street.

George Street Transit Hub - George Street is well suited for the express bus route since it is easily accessible from Route 18 to connect to and from Busch-Livingston, and extends continuously south towards Cook/Douglass campus. Rutgers 2030 proposes a gateway and transit hub at George Street, at the approximate location of Hardenbergh Hall and Records Hall. This will provide an efficient drop off and pick up on both northbound and southbound routes. A drop off at this location also improves accessibility to Deiner Park and to the proposed Raritan River pedestrian bridge. Existing bus stops at College Avenue will be retained, and one may be added at approximately French and George Streets in order to provide service to downtown New Brunswick.

PARKING

The recent integration of UMDNJ and recent developments at College Avenue campus has increased the demand for parking. Rutgers community working with the Robert Wood Johnson Hospital and the medical community along Somerset Street travel each day between Busch and Somerset Street. Rutgers 2030 proposes to implement a proposal from a recent study to provide parking at Lot 16, east of Murray Hall. This parking garage provides 300 cars and will serve the south side of the College Avenue campus, located suitably close to the RWJ hospital.

At the north end of College Avenue, Rutgers 2030 proposes a major destination and gateway to Rutgers University through the College Avenue campus, including new structured parking. In conjunction with the proposed new quadrangle, the efficacy of associated underground parking should be studied.

COLLEGE AVENUE GREENING

Building upon work to improve landscape and to provide outdoor plazas along College Avenue, Rutgers 2030 proposes to continue the greening of College Avenue by limiting vehicular access to College Avenue between Hamilton Street and Bartlett Street. The street is re-spaced to include a median with planting and bicycle lanes and refinished with pavers. Existing sidewalk and crossings widths are maintain. Street trees are spaced evenly and continued southward along the street, with ample seating areas interspersed between trees. Rutgers banners on street lamps are proposed to be elongated to provide a stronger sense of place and intensify campus pride and spirit.

Existing view of College Avenue


RUTGERS

GEORGE STREET TRANSIT HUB

George Street is transformed at the location of Records Hall and Hardenbergh Hall into a bustling transit hub, with sheltered access to the campus through a lower level campus center entry on the southbound route and with a transit pavilion with waiting, meeting and cafe service on the northbound route. Two pedestrian and bicycle bridges extend over George Street to connect the proposed Cultural Lawn at the upper level to Deiner Park at the east. George Street is re-spaced to include bus lay-by lanes and a high planter median to discourage crossings at street level. Signage consistent with campus standard is proposed for the transit pavilion to announce location of stop.

Existing view of George Street towards bus stop


GEORGE STREET at COLLEGE AVENUE
EE COLLEGE AVE

COLLEGE AVENUE TODAY

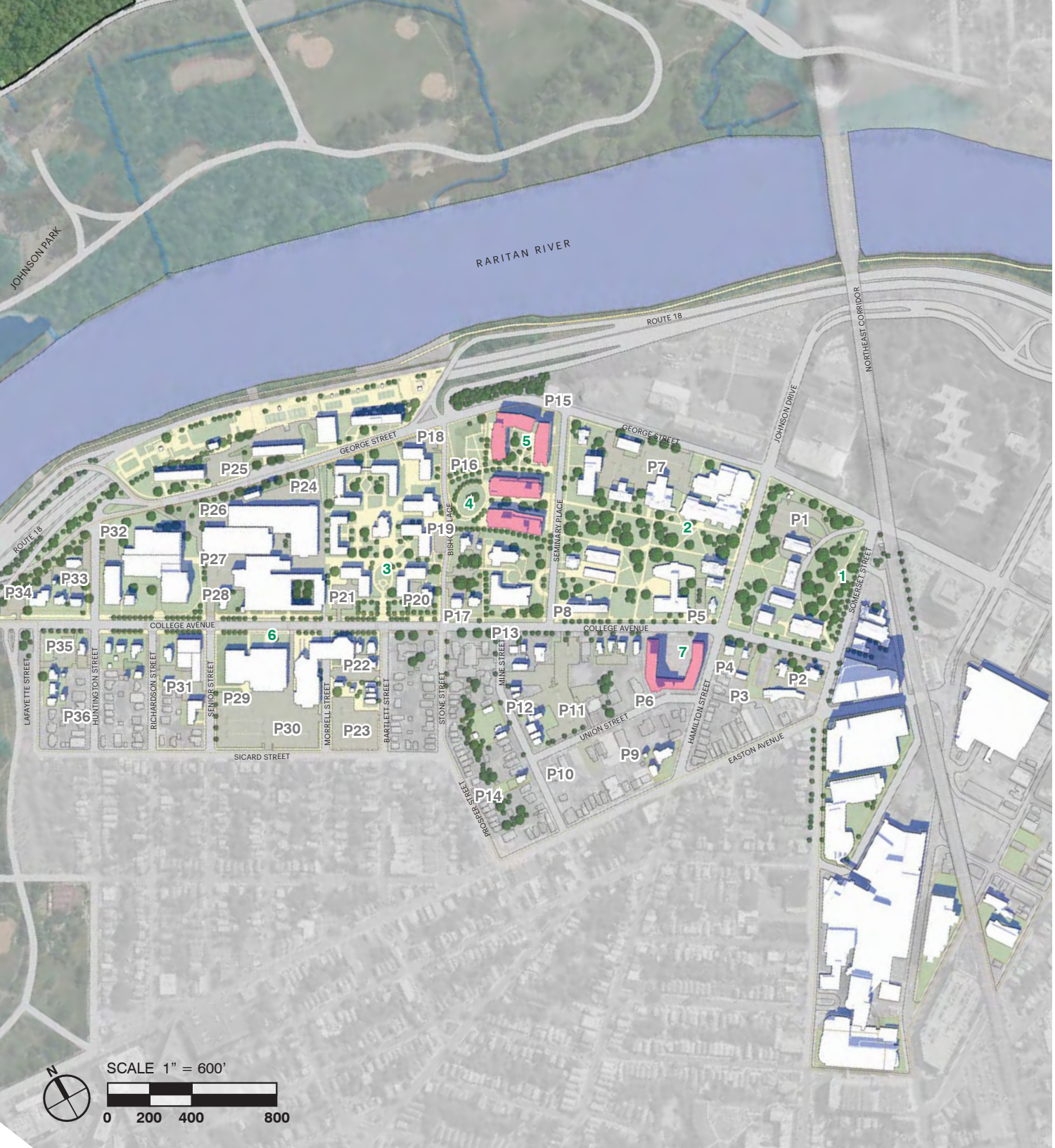
- Existing Building
- Projects Under Construction or in Design

- # Buildings
- # Major Parking Lots
- # Athletics, Recreation +Open Space

BUILDINGS

1. Schanck Observatory
2. Kirkpatrick Chapel
3. Old Queens
4. Geology Hall
5. Winants Hall
6. Van Nest Hall
7. Alexander Johnston Hall
8. Miller Hall
9. Bildner Center for the Study of Jewish Life
10. Voorhees Hall/Art Library/Zimmerli Art Museum
11. School of Social Work Annex
12. New Jersey Hall
13. School of Arts & Sciences/Dean's Office

14. School of Arts & Sciences/Office of Undergraduate Education
15. McKinney Hall
16. Scott Hall
17. Career Services
18. 73 Easton Avenue
19. Murray Hall
20. School of Social Work
21. Milledoler Hall
22. 542 George Street
23. Graduate School of Education
24. Van Dyck Hall
25. Language Lab
26. Linguistics
27. Ford Hall
28. Career Services Administration
29. 60 College Ave
30. 64 College Ave
31. 36 Union Street
32. 1 Seminary Place
33. 3 Seminary Place
34. Center for Cultural Analysis
35. New Brunswick Theological Seminary
36. Graduate Admissions
37. Hillel
38. Italian House
39. 26 Mine Street
40. IEEE History Center
41. Global Programs
42. Rutgers Federal Credit Union
43. Canterbury House
44. Center for Historical Analysis
45. 17 Mine Street
46. 29 Mine Street
47. 43 Mine Street
48. Frelinghuysen Hall
49. Clothier Hall
50. Hurtado Health Center
51. Brett Hall
52. Tinsley Hall
53. Graduate School-New Brunswick Dean
54. Hegeman Hall
55. Pell Hall
56. Leupp Hall
57. Wessels Hall
58. Demarest Hall
59. Bishop House
60. Mettler Hall
61. CTAAR
62. 3 Bartlett Street
63. Fraternity & Sorority Affairs
64. Center for Latino Arts and Culture
65. IT Office of Undergraduate Education and Student Affairs
66. Student Activities Center
67. Hardenbergh Hall
68. Records Hall/RPO/Financial Aid



COLLEGE AVENUE TODAY

BUILDINGS - CONTINUED

69. Kreeger Learning Center
70. Stonier Hall
71. Rutgers Student Center
72. Brower Commons
73. Army ROTC
74. Campbell Hall
75. Archibald Stevens Alexander Library/East Asian Library
76. Les Turchin Chabad House
77. 172 College Ave
78. Jewish Studies
79. Rutgers Counseling Center
80. School of Communication & Information
81. Simeon De Witt Building
82. Airforce ROTC
83. Huntington House
84. Center for International Faculty and Student Services
85. 191 College Avenue

86. Rutgers Club
87. 195 College Ave
88. SC&I Annex
89. Health Outreach, Promotion and Education
90. 12 Lafayette Street
91. 14 Lafayette Street
92. Gateway
93. University Center at Easton Avenue
94. Cancer Institute of New Jersey
95. RWJMS Medical Education
96. Robert Wood Johnson University Hospital
97. RWJMS Clinical Research Center
98. Core Pavilion
99. Bristol-Myers Squibb Children's Hospital RWJUH
100. Child Health Institute of New Jersey
101. Clinical Academic Building
102. Robert Wood Johnson Professional Center
103. College of Nursing
104. Institute for Health

MAJOR PARKING LOTS

1. Lot 1
2. Lot 2
3. Lot 4
4. Lot 5
5. Lot 9
6. Lot 8
7. Lot 16
8. Lot 14
9. Lot 6
10. Lot 7
11. Lot 11
12. Lot 11A
13. Lot 13
14. Lot 12
15. Lot 35
16. Lot 19
17. Lot 37
18. Lot 18
19. Lot 18A
20. Lot 17
21. Lot 35
22. Lot 25
23. Lot 26
24. Lot 22
25. Lot 20
26. Parking Deck
27. Lot 24
28. Lot 23
29. Lot 27
30. Lot 30
31. Lot 32
32. Lot 34
33. Lot 33
34. P
35. Lot 36
36. Lot 38

ATHLETICS, RECREATION + OPEN SPACE

1. Old Queens Lawn
2. Voorhees Mall
3. Bishop Place
4. Academic Buildings Lawn
5. Honors College Quadrangle
6. College Avenue Gymnasium
7. Residence Hall Quadrangle


TO LIVINGSTON
JOHNSON PARK
RARITAN RIVER
NORTHEAST CORRIDOR
ROUTE 18
JOHNSON DRIVE
GEORGE STREET
BISHOP PLACE
SEMINARY PLACE
COLLEGE AVENUE
SOMERSET STREET
LAFAYETTE STREET
HUNTINGTON STREET
RICHARDSON STREET
SENIOR STREET
MORRELL STREET
BARTLETT STREET
STONE STREET
MINE STREET
HAMILTON STREET
UNION STREET
EASTON AVENUE
PROSPER STREET
SICARD STREET
BUCCLEUCH PARK
A
B
C
CAC Proposed Conditions
SCALE 1" = 600'
0 200 400 800

COLLEGE AVENUE 2030

- Existing Building
- Projects Under Construction or in Design
- Proposed Buildings

- A Projects Under Construction or in Design
- # New Construction + Renovation
- # Infrastructure + Parking
- # Landscape + Stormwater

Projects Under Construction or in Design/Planning

- **A** 1 & 3 Seminary Place
- **B** New Brunswick Theological Seminary
- **C** Career Services

New Construction + Renovation

- **1** George Street Transit Hub
- **2** Dining and Student Organizations
- **3** Cultural Center and Student Space
- **4** High-tech Classroom Building
- **5** Events Venue
- **6** Undergraduate Housing
- **7** College Avenue Gym Renovation
- **8** College Avenue Gym Expansion
- **9** Health Center
- **10** Ford Hall Renovation
- **11** Alexander Library Renovation
- **12** North Gateway Building - Housing with Retail
- **13** RBHS School of Nursing Expansion

Infrastructure + Parking

- **1** George Street Garage
- **2** College Ave Bus Stop
- **3** Morrell Street Garage
- **4** Facilities Maintenance Building
- **5** Campus Center Underground Garage
- **6** Power Plant
- **7** George Street Roundabout
- **8** North Garage
- **9** College Avenue Greening and Bicycle Lane
- **10** Bicycle Bridge at Buccleuch Park

Landscape + Open Space

- **1** College Avenue Greening
- **2** Bishop Place South
- **3** College Avenue North + South
- **4** Cultural Lawn + Social Green
- **5** Deiner Park
- **6** Pedestrian + Bicycle Bridge over Raritan River
- **7** Boardwalk along Raritan River

4.2 COOK/DOUGLASS

4.2.1 Cook/Douglass District Vision and Principles

Cook/Douglass, originally separate colleges with origins dating back to 1864 and 1918 respectively, are now physically intermingled while each retains something of their original characters. Both are set in a natural landscape of ravines, wetlands and heavily forested areas, with buildings nestled in clusters of development. Cook, established as the land grant institution of New Jersey straddles Route 1, and has much of its land at the south devoted to agricultural research. Douglass, originally a women's college is in some ways a counterpoint to Cook, with a more urban setting, closer to downtown New Brunswick. Together they make up a district that is truly unique from the rest of Rutgers University – New Brunswick.

COOK/DOUGLASS: THE VISION

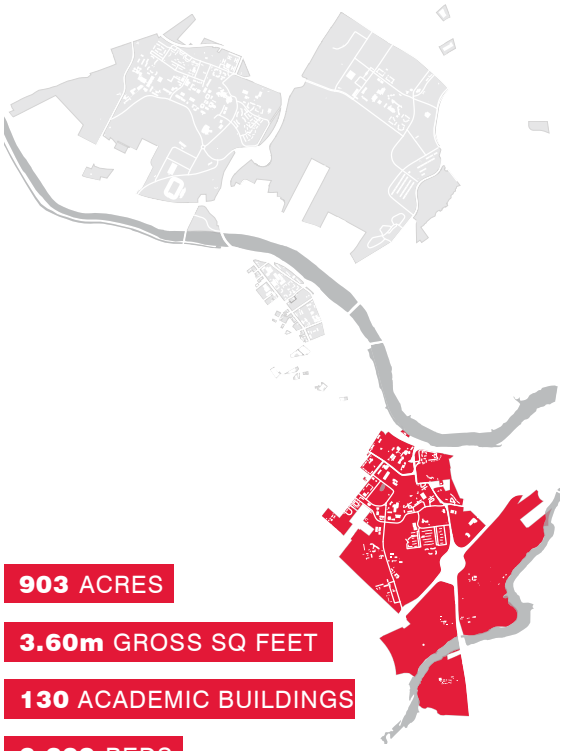
Rutgers 2030 proposes to strengthen the functional organization of Cook/Douglass, which currently suffers from inefficiencies caused by its widely distributed, non-walkable built environment, and to strengthen its historical cores and iconic open spaces.

Proposed development is concentrated in the district's core, north of Dudley Road. Developments outside of this core focuses on the creation of new playing fields and housing for junior faculty and graduate students.

The master plan addresses the edge of campus along Nichol Avenue as an opportunity to redefine the University's boundary with New Brunswick. An expanded hub along Nichol Avenue at the gateway to Cook/Douglass is close to classrooms, is centrally located and provide much needed amenities for the district. Housing is reimagined to provide more residences for underclassmen close to the hub. The district is supported by a network of bicycle and pedestrian connections to improve access between different areas of the district.

The master plan for Cook/Douglass is guided by the following principles and goals:

- **Shift distribution of residences and classrooms** to create a series and denser living-learning hubs, and a more open, park-like landscape,
- **Define the campus boundary along Nichol Avenue** to engage the community,
- **Strengthen the student center** as a place that is more central to student life
- **Foster communities through clustering of underclass housing** in close proximity to proposed hub
- **Reserve land** for research that supports the mission of the University
- **Create housing for faculty** to improve hiring and retention



903 ACRES

3.60m GROSS SQ FEET

130 ACADEMIC BUILDINGS

3,609 BEDS

5,011 CLASSROOM SEATS

95,816 WKLY STUDENT CONTACT HOURS

The proposed vision for Cook/Douglass is organized by the overall master plan principles:

LEARNING AT COOK/DOUGLASS

Rutgers 2030 considers a phased replacement of several of Douglass' classroom and administrative buildings over the next fifteen years. These buildings are replaced along Nichol Avenue, in close proximity to an expanded district hub. Several under-utilized or remote classroom and administrative buildings along Lipman Drive are proposed to be replaced. A future building to the east of the recently completed Institute for Food, Nutrition and Health provides for future expansion of the Cook academic core.

In an internal reorganization of departments, Rutgers has identified opportunities to re purpose ASB III for the Department of Continuing Studies (DOCS), a fast growing academic and administrative unit providing extension classes. ASB III, located close to Route 1 and with its own parking areas is well-suited for this function.

LIFE AT COOK/DOUGLASS

Residential and student life at Cook/Douglass is improved by an expanded student center, and with the addition of recreational and intramural sports facilities. Housing is proposed to be upgraded over time, and clustered along Nichol Avenue. Graduate, married, and junior faculty housing is proposed in a large new "academic village" close to the southern gateway to Rutgers at Route 1.

NAVIGATING COOK/DOUGLASS

As proposed throughout Rutgers University – New Brunswick, a bicycle and pedestrian friendly network of paths, trails and roads provide increased mobility and safer connections throughout Cook/Douglass. Because of the district's large scale, supporting increased bicycle usage is critical for connecting the core to the area of campus south of Route 1 where Rutgers Gardens is located. The landscape and topography of the campus also lends itself to a bicycle circuit of off-road bicycle riding, for recreational purposes.

Recent improvements to the George Street entry have made it possible to walk to the Rutgers Boathouse along Route 18. This connection will provide access from Cook/Douglass to the Raritan River, and north to the College Avenue, through Boyd Park and proposed boardwalk on the Raritan.

STEWARDSHIP AT COOK/DOUGLASS

Rutgers 2030 proposes to adopt stormwater management strategies proposed by Biohabitats' recently completed study, and to focus development on disturbed land to minimize disruption to existing ecology. By slowly reclaiming land disturbed by campus "sprawl", and decreasing the development footprint by concentrating program, environmental degradation may be reversed.

PERSONALIZING COOK/DOUGLASS

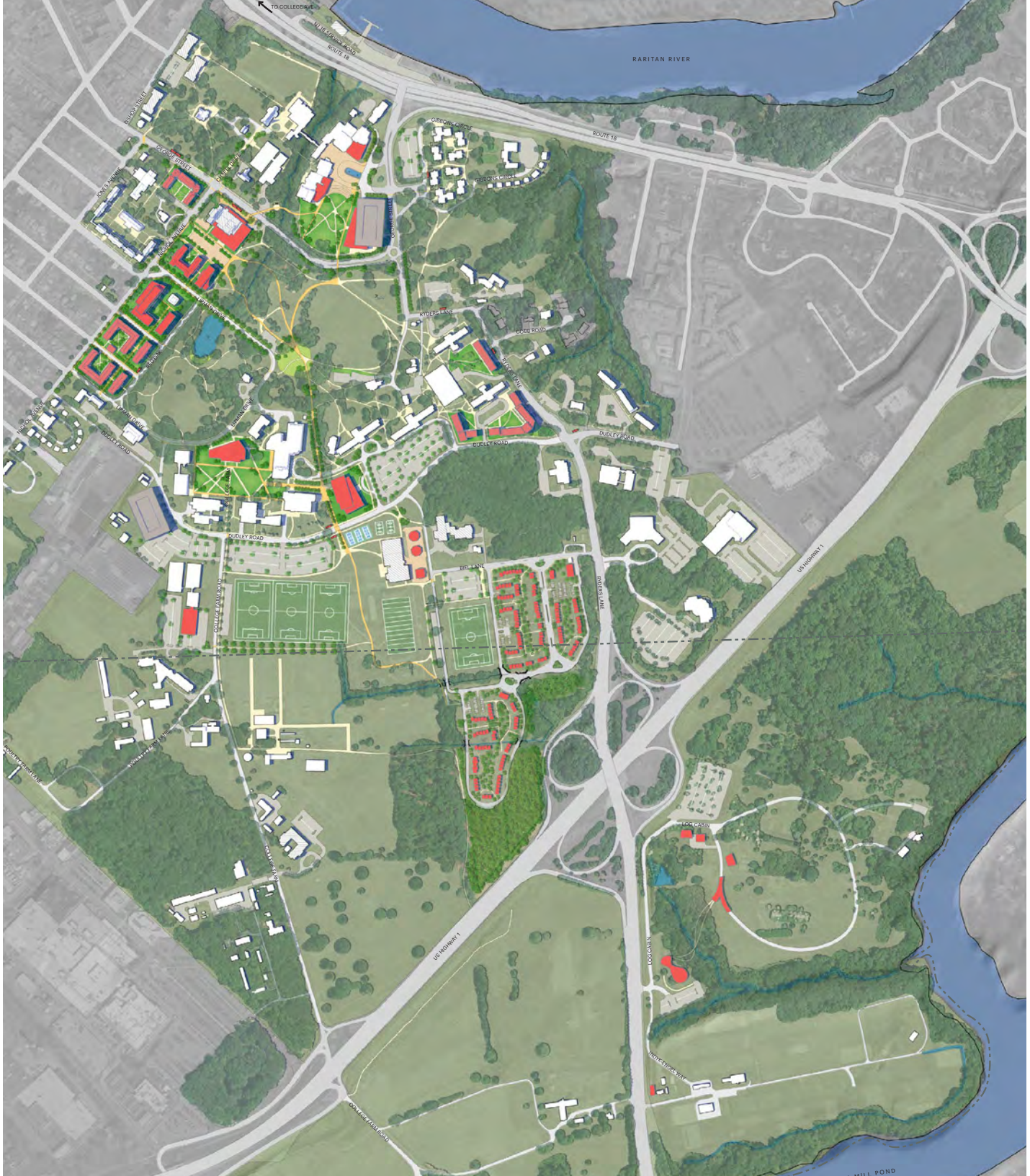
The relatively isolated location of Cook/Douglass can provide students with a sense of community within the larger University. Technology improvements described elsewhere can be very cost effective at Cook/Douglass, diminishing the time spent in transit and in other non-productive activities, and connecting the community more robustly to the University as a whole. For example, intra-campus distance learning may be particularly effective at Cook/Douglass.

COOK/DOUGLASS TODAY

SCALE 1" = 1000'

N

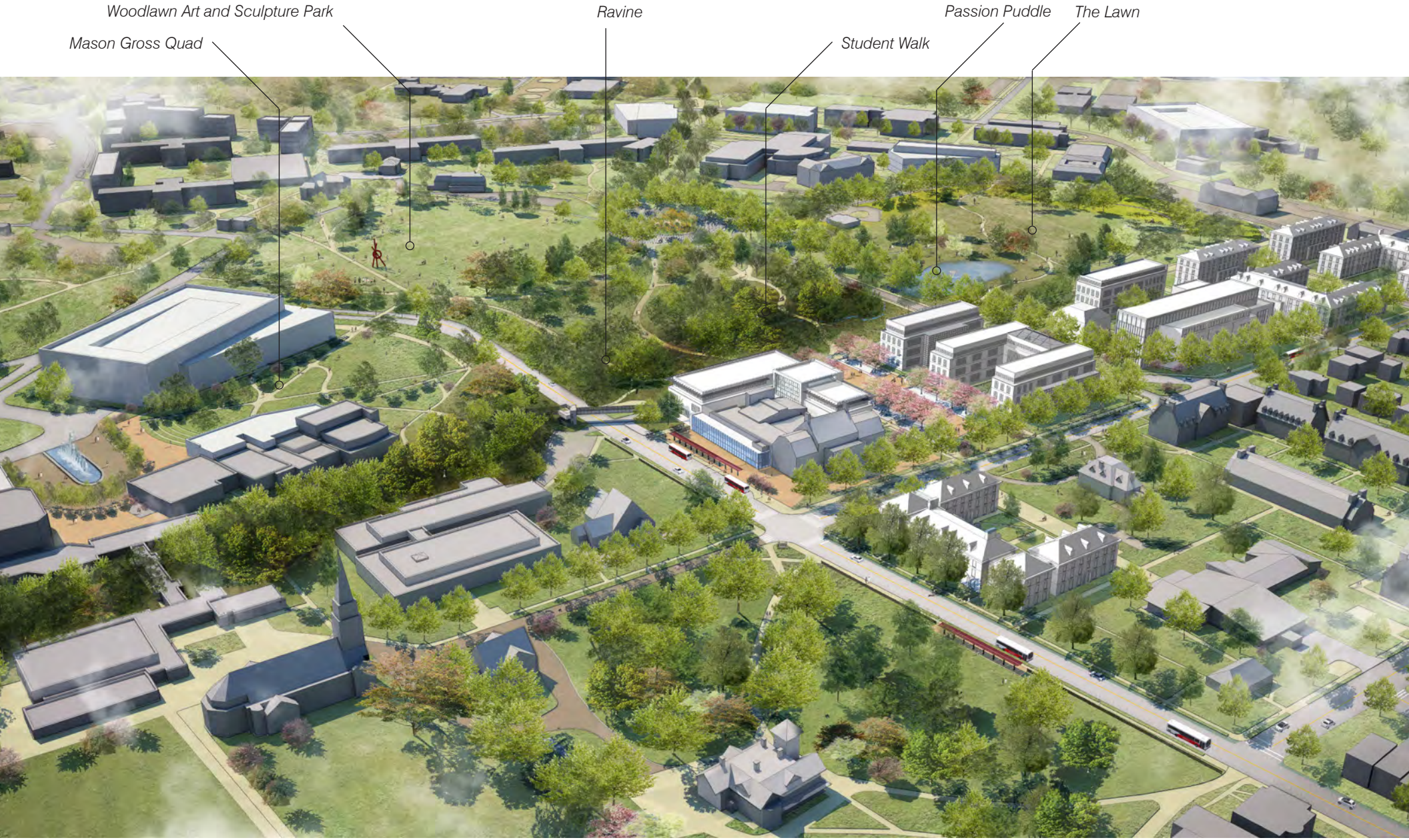
0 200 400 800



COOK/DOUGLASS 2030

SCALE 1" = 1000'

0 200 400 800


Woodlawn Art and Sculpture Park
Mason Gross Quad
Ravine
Student Walk
Passion Puddle
The Lawn

4.2.2 LAND USE FRAMEWORK

Cook/Douglass currently is home to two major schools, the School of Arts and Sciences (SAS) and the School of Environmental and Biological Sciences (SEBS). Facilities are broadly distributed throughout, with the SAS buildings mostly located to the north while the SEBS buildings are clustered to the south and along College Farm Road. Land towards the south of the campus is primarily used for academic research. The Mason Gross School of Arts also calls Douglass its home. Recent investments in Livingston and College Avenue and imminent work on Busch campus now allow the University to direct their attention to Cook/Douglass. Rutgers 2030 creates a more compact district that is easily traversed and for renewal of facilities.

Projects currently under development and in discussion for Cook/Douglass include a Living-Learning Community at the Douglass Jameson Residential College, phases 2 and 3 of the 2007 master plan for Mason Gross, reuse of the Agriculture Museum along College Farm Road, and a new visitor and experience center at the Rutgers Gardens south of Route 1.

ACADEMIC CORE

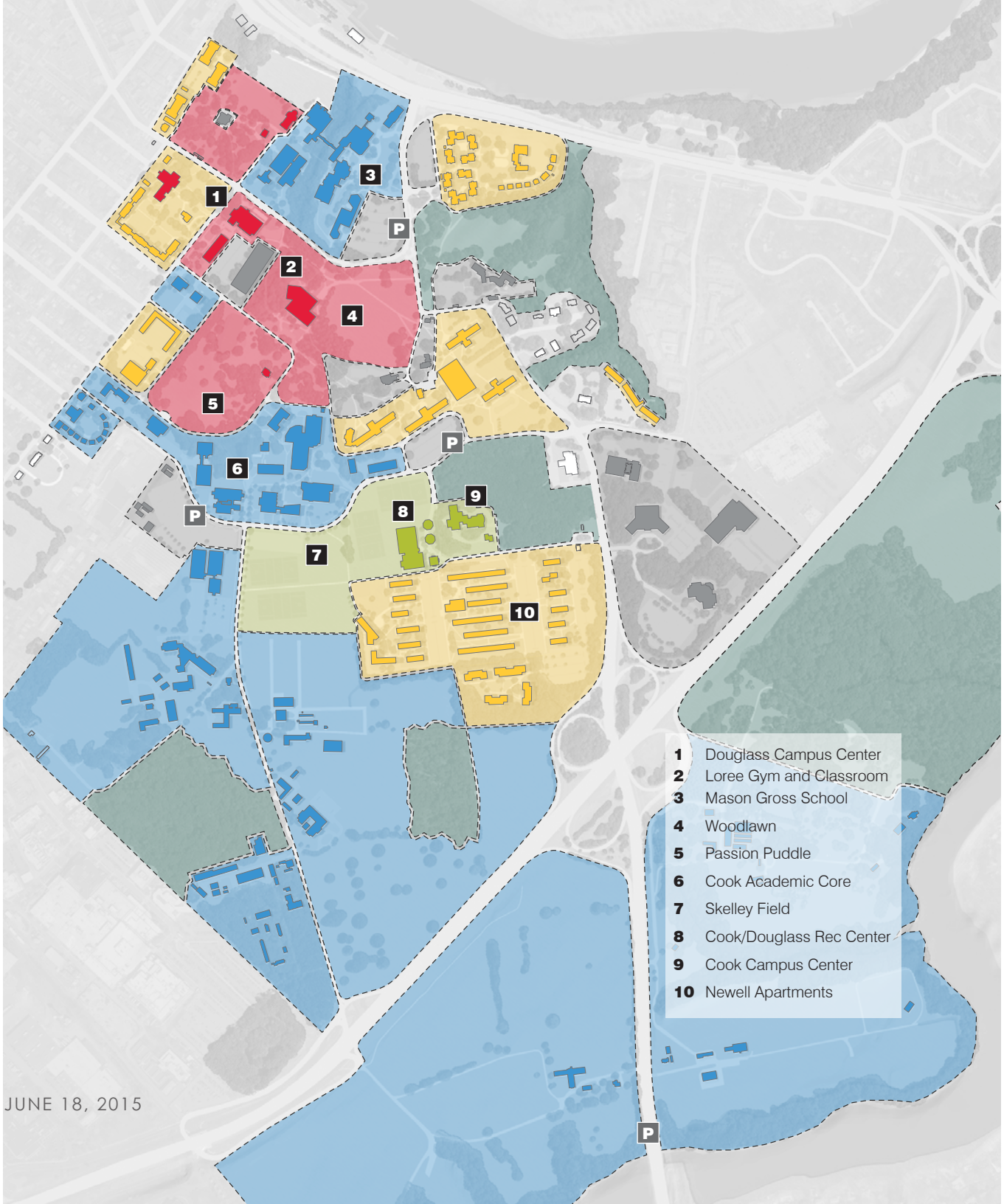
Rutgers 2030 proposes a decommissioning of outdated academic facilities throughout Cook/Douglass and their replacement with new and renovated buildings in close proximity to the proposed transit hub. Mixed used buildings with high-tech classrooms, academic departments, and student services like gyms, food service or meeting space bring life to hubs and these buildings throughout the day.

The group of academic buildings at the northwest corner of Douglass -- Ruth Adams Building, Biological Sciences Building and the Heldrich Science Building & Annex date back to 1920s and contribute to the character of the historic quad around College Hall. These buildings are no longer suited for academic use. Rutgers 2030 proposes these buildings be renovated as residences for upperclassmen.

Loree building and gymnasium is located in a low-lying area with frequent flooding. The building no longer serves its mission successfully. Rutgers 2030 proposes to demolish this building and to replace its functions in closer proximity to Nichol Avenue. The site of Loree could then be restored.

Mason Gross School of the Arts (MGSA) occupies a site that is isolated from Douglass by a ravine and the Route 18 entry and exit. MGA recently completed a master plan for a three phase expansion to their campus, with the first phase completed in 2013. Two future phases are anticipated. Rutgers 2030 proposes to strengthen MGA and its connection to the rest of the district by relocating Hickman Hall closer to Nichol Avenue and reconfiguring phases two and three to create a central green space facing south and opening towards the rest of Cook/Douglass. Two new bridges are proposed to cross over George Street from Woodlawn to the new MGA quadrangle, and another from the student center towards the Mabel Smith Library and eastward to MGA.

With the recently completed Institute for Food, Nutrition and Health, the Cook academic core along Dudley road continues to take shape, increasing its density in an area already established with a library, classrooms and academic departments. Rutgers 2030 proposes to complete the quadrangle by removing the temporary classroom building that is the Cook/Douglass Lecture Hall and the low-density Plant Physiology Building, and replacing them with a new SEBS building with two important facades, one facing College Farm Road to

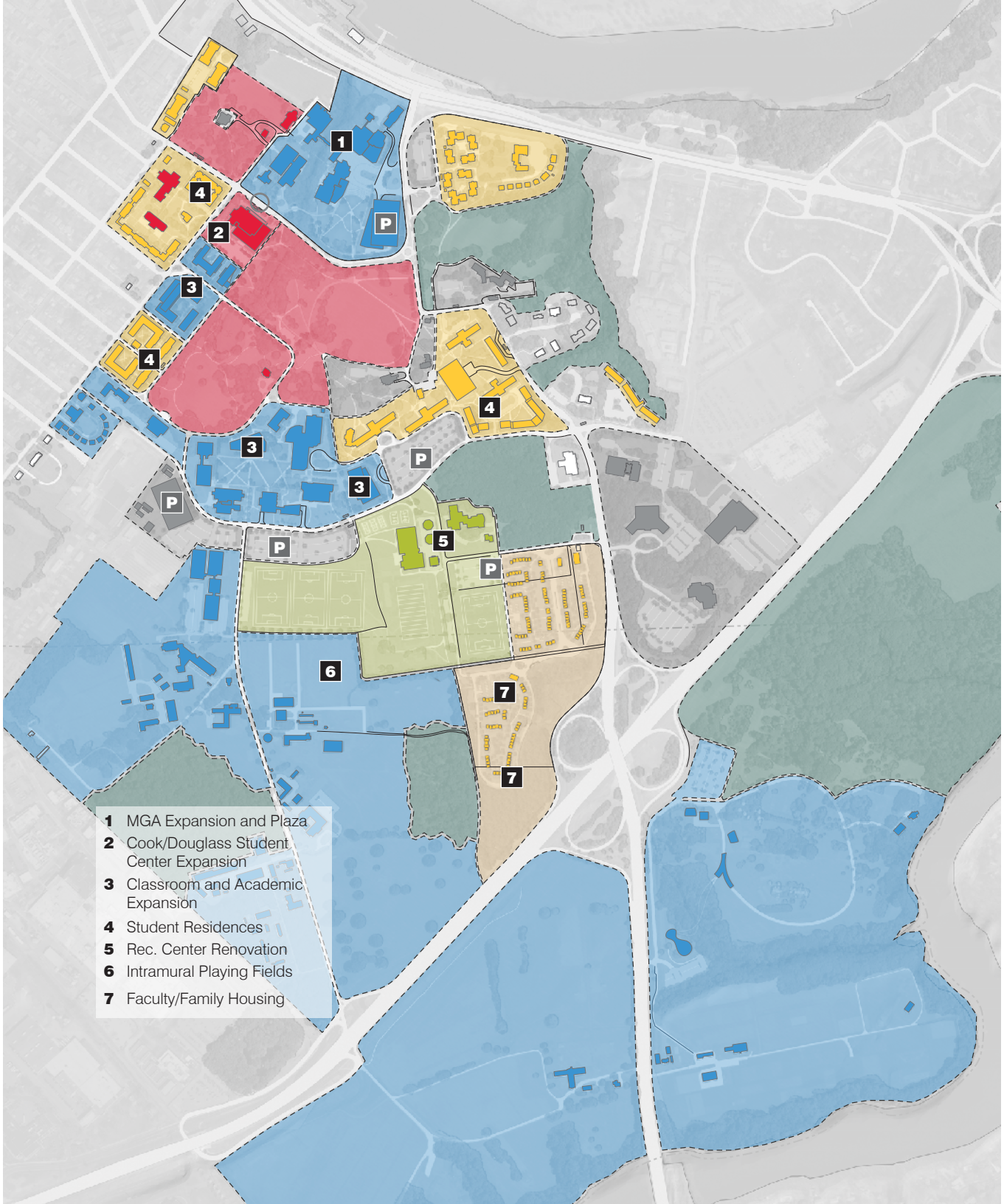


COOK/DOUGLASS TODAY

- Transit hub / bus stop
- Academic / research
- Student life
- Classroom hub
- Residential
- Athletics / recreation
- Forested
- Admin / support
- Campus core

SCALE 1" = 1000'

0 200 400 800



COOK/DOUGLASS 2030

- Transit hub / bus stop
- Academic / research
- Student life
- Classroom hub
- Residential
- Athletics / recreation
- Forested
- Admin / support
- Campus core

N

SCALE 1" = 1000'

0 200 400 800

the south and the other facing Passion Puddle to the north and along Lipman Drive. A future building to the east continues the expansion of the academic core along Dudley road, anchoring a new path north to the student center from Dudley road.

NICHOL AVENUE - DISTRICT EDGE

Nichol Avenue forms the west edge of campus and is on axis with the Voorhees Chapel. South of the Jameson Residence Quadrangle, the west side of the avenue is lined with residential buildings while the east side of the avenue has a mixture of low density buildings, interspersed between surface parking lots and empty fields. Buildings are set back from the street, often times hidden behind mature trees and shielded from view.

Rutgers 2030 proposes to develop this edge of campus to have larger mixed-use buildings. Directly south of the Douglass Campus Center, across the campus center plaza, two high-tech classroom and academic buildings are proposed to complete the hub.

At the terminus of Suydam Street, a high-tech classroom building is proposed with a ground floor function that would benefit the neighboring community, like a grocery store or a coffee shop.

Farther south along Nichol Avenue, a series of wood frame houses dating back to the beginnings of the Douglass campus offer a glimpse of what the campus was back then. These houses unfortunately no longer serve the University well since they are not accessible and do not have the necessary mechanical, electrical and network infrastructure. The University plans to demolish these houses.

HOUSING

As with Busch, the planning models for much of the housing is suburban, which today is considered wasteful of land resources, car dependent, and inconveniently distant from the center of activity. Rutgers 2030 proposes to replace housing inventory over time, to relocate undergraduate housing that is on the periphery of campus closer to transit hubs and amenities, and in close proximity to other undergraduate housing.

Junior faculty, married and graduate student housing is proposed near the Ryder's Lane exit off of Route 1, in a comprehensive development, with a community center, day care and playground.

FARMLAND AND RESEARCH PARCELS

South of Dudley Road and extending past Route 1, land is designated for research use. Rutgers Gardens is undertaking a feasibility study for an expanded visitor center.

RECREATION AND INTRAMURAL SPORTS

The area currently occupied by Newell Apartments as well as vacant land to its west have been identified as a potential area for intramural sports fields, with support from the adjacent Cook/Douglass Recreation Center. Rutgers recently completed a feasibility study for Skelley Field; Rutgers 2030 adopts this plan with some minor adjustments. A pair of picnic houses and a field house is proposed for the area between the Cook/Douglass Recreation Center and the Cook Campus Center, and in lieu of an expansion to the Cook/Douglass Recreation Center, Rutgers 2030 considers

renovating and reusing the Cook Campus Center to support a recreation program. Approximately 23 acres of land vacated from the Newell Apartments, Perry Hall and Voorhees Hall and Skelley Field offer playing fields for the Rutgers Community.

Rutgers 2030 also seeks to revitalize the Rutgers Boathouse at the north edge of the campus, along the Raritan River as the southern terminus of the riverwalk network, providing an alternate route for connecting the New Brunswick districts. Current plans for the boathouse include a larger boat launching dock and expansion of the boathouse with a second level, which will provide much needed event space for the University.

NICHOL AVENUE REVITALIZATION

The master plan proposes a strengthened campus boundary along Nichol Avenue, with a series of mixed - use academic and residential buildings. This street is proposed to be a major thoroughfare with amentities like a coffee shop and grocery store, providing opportunities for engaging the neighboring New Brunswick community.

Existing view looking north on Nichol Avenue


RUTGERS


1
2
3
4
5
6
7
7
Transit hub / bus stop
Quad
Lawn/garden
Court
Bioswale
Plaza
Landscape infrastructure
Growth boundary
1 Campus Hub
2 MGA Quad
3 Woodlawn Sculpture Park
4 The Lawn
5 Education Gardens
6 Cook Academic Quadrangle
7 Campus Walk
N
SCALE 1" = 600'
0 200 400 800

4.2.3 OPEN SPACE / NATURAL SYSTEM FRAMEWORK

Cook/Douglass has some of the most iconic landscapes at Rutgers. Antilles Field is on the National Register of Historic Places and offers views of the Raritan River from the oldest part of Douglass. Graduation ceremonies for Douglass graduates are held here. From Antilles Field west, a ravine forms an natural divide between Douglass and the Mason Gross School, connected by the Bridge of a Thousand Kisses. The remainder of Douglass still has traces of its roots as a bucolic Women's College on the model of the "Seven Sisters", where fresh air and a pleasant environment were considered as essential elements of the college experience.

On Cook, the Passion Puddle offers a peaceful place to pause between classes. An allee of mature trees mark the boundary between two former farm properties. The Woodlawn Mansion with its gate house, carriage house and stables remains largely as they were when they were inherited by the University. Wetlands, forests and open agricultural research land define the periphery of the district.

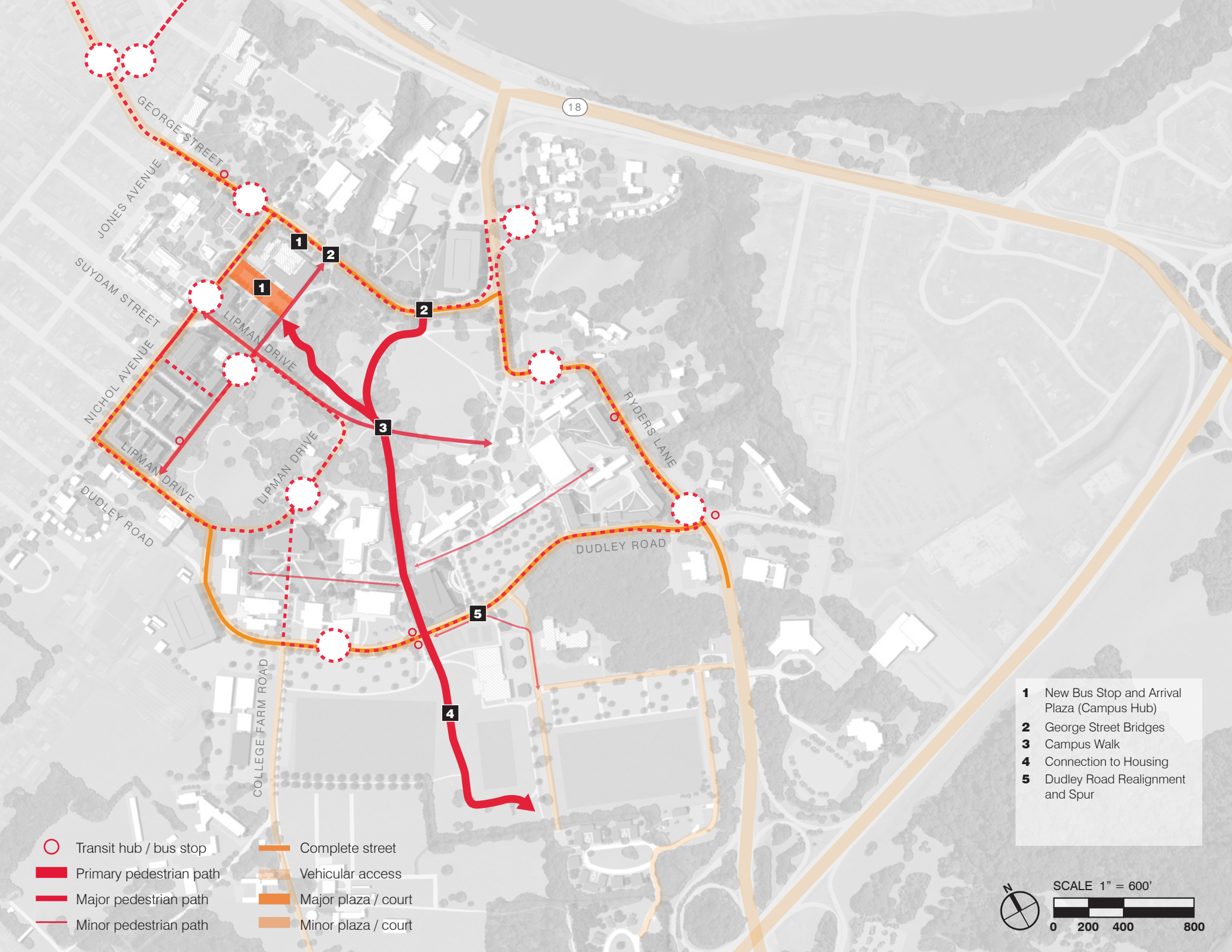
NATURAL LANDSCAPES

Rutgers 2030 proposes where possible to undo the environmental damage caused by poor planning and building siting decisions, and conceive this district as an integrated ecosystem, reinforcing the mission of SEBS.

Woodlawn Art and Sculpture Park – The Woodlawn property is currently maintained as open land; following the original intent of preserving a view of the Raritan River. Rutgers 2030 proposes to better define the edges of this space by planting trees along its periphery. Building upon the Art at Rutgers Program, a sculpture park is proposed for this area, in conjunction with the University and Mason Gross School of the Arts.

Stormwater management strategies – The Biohabitats report suggests different ways of managing run-off throughout the campus. The master plan adopts these strategies and builds upon this study and proposes development in areas already disturbed to minimize disruptions to existing ecology. Buildings interfering with existing water courses should be decommissioned and removed over time.

Wetlands, agricultural research land and natural landscapes – Rutgers 2030 proposes to maintain the majority of open space around the periphery of Cook/Douglass, to preserve wetlands and forested areas, and retain agricultural research parcels to support the academic mission of the University.


GEORGE STREET
JONES AVENUE
SUYDAM STREET
NICHOL AVENUE
LIPMAN DRIVE
LIPMAN DRIVE
LIPMAN DRIVE
DUDLEY ROAD
DUDLEY ROAD
RYDERS LANE
COLLEGE FARM ROAD
18
1
2
1
2
3
4
5
1 New Bus Stop and Arrival Plaza (Campus Hub)
2 George Street Bridges
3 Campus Walk
4 Connection to Housing
5 Dudley Road Realignment and Spur
Transit hub / bus stop
Primary pedestrian path
Major pedestrian path
Minor pedestrian path
Complete street
Vehicular access
Major plaza / court
Minor plaza / court
N
SCALE 1" = 600'
0 200 400 800

4.2.4 MOBILITY FRAMEWORK

Cook/Douglass is the southern gateway into Rutgers University, accessed off of Routes 1 and 18, but separated from the rest of the University by downtown New Brunswick, and by the Raritan River. Buses to and from Cook/Douglass often encounter heavy traffic through downtown New Brunswick and on Route 18 during rush hour.

The proposed mobility framework is closely linked to the open space framework and seeks to strengthen pedestrian and bicycle corridors and reduce reliance on the bus system by identifying campus walks and bicycle routes that are safe, well-lighted, and clearly marked.

PEDESTRIAN NETWORK

The pedestrian experience that Rutgers 2030 proposes for Cook/Douglass is one that is enhanced by paths through the natural landscape. From the gateway at the Douglass Student Center transit hub on the express bus route, a network of pedestrian paths emanate into the rest of the district, extending north, south and east. To the north, two new land bridges are proposed to provide connections to Mason Gross and the Library across George Street. A major pathway winding through the mature growth of trees north of Passion Puddle and around Woodlawn connects south across Dudley Road and extends to the Cook Student Center, Cook/Douglass Recreation Center and onward to the proposed residential community for junior faculty. A direct north-south connection is created with a path directly linking the Douglass Student Center to Blake Hall at the entry to Cook Campus. A major east – west connection is aligned with Suydam Street and extends east to the Nelson Dining Hall.

BICYCLE NETWORK

The proposed downtown New Brunswick bicycle route will bring riders to the northwest corner of Cook/Douglass. From here, Rutgers 2030 proposes to extend this bicycle route along George Street to Jones and Nichol Avenues, which then connects to the district at Dudley Road or Lipman Drive. Dudley Road accommodates a sharrow connecting to College Farm Road and to Ryders Lane, across Route 1 towards Rutgers Gardens.

VEHICULAR NETWORK

Entry to Cook from Nichol Avenue – University efforts to provide clarity to the vehicular network include a proposal to provide a new gateway to Cook from Lipman Drive, instead of at Dudley Road. This new entry off Nichol Avenue by Thompson Hall allows for a direct connection east, and keeps vehicular traffic on campus limited to buses and authorized vehicles.

College Farm Road – As part of the new gateway to Cook at Dudley Road, a spur is also proposed to connect Lipman Drive to Dudley Road, directly west of Bartlett Hall. This allows College Farm Road to be terminated at Dudley Road and to eliminate vehicular traffic heading north through the Cook academic core, allowing for a central quadrangle to be created in its place.

Dudley Road – With the exception of development along College Farm Road, Dudley Road marks the edge of the Cook/Douglass academic core. The long term plan for Dudley is to ease the curve of the road north of the Cook/Douglass Recreation Center to accommodate future buildings north of Dudley, and

maintain non-academic functions relating to open space south of Dudley.

PARKING

The master plan considers current and anticipated needs, both surface parking lots and garages. The need for more parking is strongest at the north side of campus, to serve the Mason Gross School and the academic core of Cook/Douglass.

Mason Gross Garage – Additional parking is required to support the growth of Mason Gross as embodied in its 2007 precinct plan, which proposes enlarged public performance venues. A new garage associated with Mason Gross is prioritized.

Douglass Student Center Parking Garage – with the increase in activity from the proposed expansion of the student center and added density of the academic core, the need for parking in the vicinity of the Douglass Student Center is anticipated to increase. A below-grade parking garage is proposed as part of the expansion of the student center and redevelopment of the site of Davison Hall, to replace lost parking spaces from the existing above grade parking garage and at Lot 70. A parking garage at this location, accessed off of George Street, provides convenient approach both from the north and south, and will reduce the number of vehicles entering campus. Existing topography allows for one level of below-grade parking with minimal excavation.

South Garage – A third garage at the vicinity of Dudley and College Farm Roads is proposed for the future to support future development. The short term proposal is to provide surface parking in this vicinity, to serve the south side of Cook. Skelley Field may be repurposed as surface parking in the short term, depending on phasing of proposed work.

Recreational Field Parking – Parking in the area surrounding the Cook/Douglass Recreation Center is reconfigured to provide parking to the proposed playing fields. These parking areas are close to the field house.

COOK/DOUGLASS TODAY

- Existing Building
- Projects Under Construction or in Design

- # Buildings
- # Major Parking Lots
- # Athletics, Recreation +Open Space

BUILDINGS

1. Biological Sciences Building
2. Ruth Adams Building
3. Heldrich Science Building & Annex
4. Writing Center
5. College Hall
6. 132 George St
7. Federation Hall
8. Cooper Dining Hall
9. Jameson Residence Campus
10. Willets Health Center
11. Agora
12. Cabaret Theater
13. Dean's Residence, Douglass Campus

14. Graduate Music Building
15. Voorhees Chapel
16. May Duff Walters Hall
17. Mabel Smith Douglass Library
18. Art History Building
19. Blanche & Irving Laurie Music Library
20. Carpender House
21. Victoria J. Mastrobuono Theater
22. Nicholas Music Center/Rehearsal Hall
23. Philip J. Levin Theater
24. Music Annex
25. Marryott Music Building
26. Robert E. Mortensen Hall
27. Hickman Hall
28. Douglass Campus Center
29. Davison Hall
30. Co-op Bookstore
31. Counseling & Psychological Services
32. Waller Hall
33. Floriculture Greenhouses
34. Blake Hall
35. Thompson Hall
36. Little Theater
37. Corwin Buildings
38. Martin Hall
39. Lipman Learning House
40. Loree Building
41. New Gibbons Residence Campus
42. Douglass Developmental Disabilities Center School
43. Old Gibbons Residence Campus
44. Farm Crop Greenhouses
45. Chiller Building
46. Institute of Marine & Coastal Sciences
47. Bartlett Hall
48. Plant Physiology
49. Lipman Hall
50. Chang Science Library
51. Foran Hall
52. Cook/Douglass Lecture Hall
53. Food Science Building
54. Eagleton Institue of Politics/Wood Lawn
55. Ruth Schillin Hennessy Alumnae Center
56. Carriage House
57. Woodbury Residence Hall
58. Bunting-Cobb Residence Hall
59. Cook Office Building
60. Facilities Maintenance/Key Shop
61. Wood Lawn Gatehouse
62. Katzenbach Hall
63. Neilson Dining Hall
64. Nicholas Residence Hall
65. Lippincott Hall
66. University Inn & Conference Center
67. 176 Ryder Lane
68. Wittenborn Scholars Residence
69. Ruth Dill Johnson Crockett Building

COOK/DOUGLASS TODAY

BUILDINGS - CONTINUED

70. Center for Women's Programs
71. NJ Federation of Women's Clubs
72. Henderson Apartments
73. NJAES Research Greenhouses
74. Avian Research Building
75. Endocrine Research Facility
76. Environmental & Natural Resource Sciences Building
77. Dairy Barn & Creamery
78. Perry Hall
79. Cook Campus Center
80. Douglass Developmental Disabilities Center
81. Labor Education Center
82. School of Management & Labor Relations
83. NJ Law Center
84. ASB II/University Human Resources
85. ASB III
86. PAL/CPO

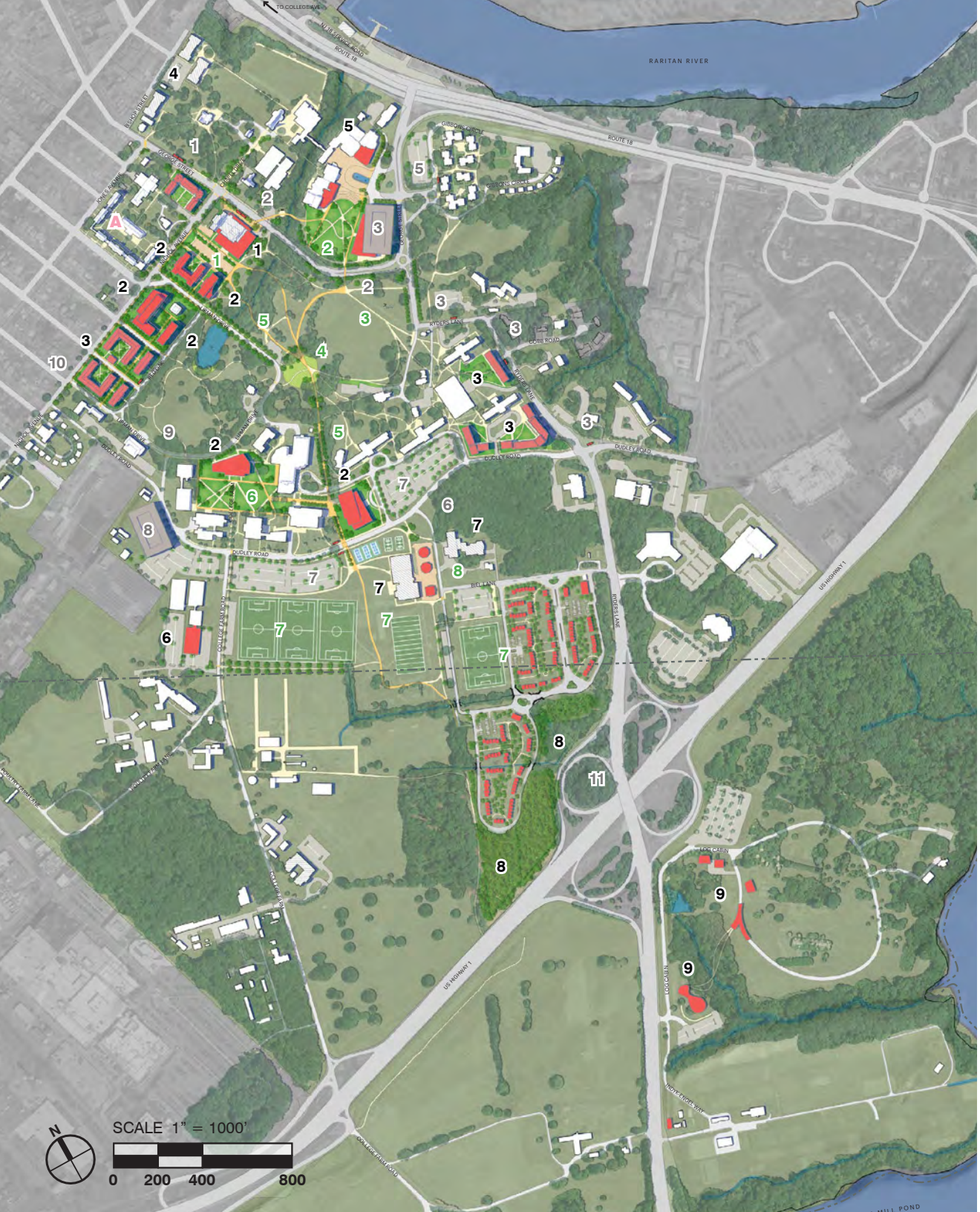
87. Newell Apartments
88. Starkey Apartments
89. Livestock Research & Teaching Facility
90. Piggery
91. Livestock Granary Barn
92. Round House
93. Livestock Barn
94. Heifer Barn
95. Animal Nutrition Barn
96. Blacksmith Shop
97. Operator Training Center
98. RCE Resource Center
99. Helyar House
100. Holly House
101. Horticulture Research
102. Welshman's Farmhouse
103. Log Cabin
104. Thompson House
105. Rutgers Gardens Office
106. Equine Research Facility
107. Rutgers NJAES Office of Continuing Professional Education
108. Ralph Geiger Turfgrass Education Building
109. Institute for Food, Nutrition, and Health

MAJOR PARKING LOTS

1. Lot 69
2. Lot 73
3. Lot 72
4. Lot 79A
5. Lot 79
6. Lot 74A
7. Lot 74
8. Lot 70
9. Parking Deck
10. Lot 82
11. Parking
12. Lot 89
13. Lot 87
14. Lot 86
15. Lot 91
16. Lot 78
17. Parking
18. Lot 81
19. Lot 76
20. Lot 71A
21. Lot 80
22. Lot 98A
23. 98B
24. Lot 97
25. Lot 90
26. Lot 88
27. Lot 96
28. Lot 96A
29. Lot 99A
30. Lot 99B
31. Lot 99C
32. Lot 99D
33. Lot 83
34. Lot 84
35. Lot 85
36. Lot 94
37. Parking
38. Parking

ATHLETICS, RECREATION + OPEN SPACE

1. Class of 1914 Boathouse
2. Antiles Field
3. Ravine
4. Woodlawn
5. Skelley Field
6. Passion Puddle
7. Cook/Douglass Recreation Center


RARITAN RIVER
ROUTE 18
US HIGHWAY 1
DUDLEY ROAD
RYDERS LANE
SCALE 1" = 1000'
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200
400
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COOK/DOUGLASS 2030

- Existing Building
- Projects Under Construction or in Design
- Proposed Buildings

- A Projects Under Construction or in Design
- # New Construction + Renovation
- # Infrastructure + Parking
- # Landscape + Stormwater

Projects Under Construction or in Design/Planning

A Global Village Learning Center at the Jameson Dormitory Complex

New Construction + Renovation

1 Douglass Campus Center Expansion + Transit Hub
2 High-tech Classroom Building
3 Undergraduate Housing
4 Graduate Housing
5 Mason Gross Phase 2 + 3 Expansion
6 Greenhouse
7 Recreation Center Renovation + Expansion
8 Faculty + Graduate Housing
9 Rutgers Gardens Visitor Center and Expansion

Infrastructure + Parking

1 George Street Bus Stop
2 Pedestrian + Bicycle Bridge over George Street
3 Parking Garage
4 Mason Gross Arrival + Drop Off
5 New Bus Stop
6 Dudley Road Realignment
7 Parking (Future expansion sites)
8 West Parking Garage
9 Lipman Drive Connection
10 Nichol Avenue Bicycle Lane
11 Shared Path along Ryders Lane

Landscape + Open Space

1 Campus Plaza
2 Mason Gross Quadrangle
3 Sculpture Park
4 Education Gardens
5 Campus Walk
6 Cook Academic Quadrangle
7 Intramural Playing Fields
8 Picnic Area + Field House

4.3 BUSCH

4.3.1 Busch District Vision and Principles

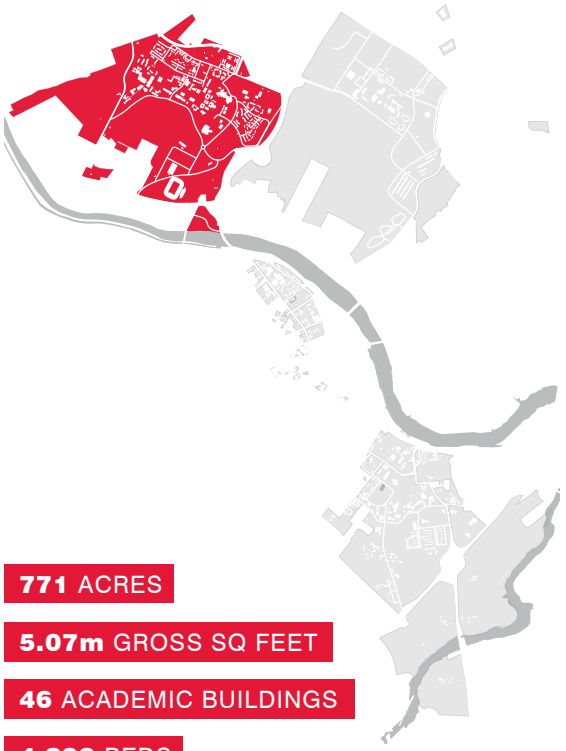
From its beginnings in the 1950s, the Busch district has evolved to become a major center of medical, science and engineering academic and research activity at Rutgers. It is now home to the School of Engineering; science departments of the School of Arts and Sciences; the Graduate School of Applied and Professional Psychology; and as of July 1, 2013, Rutgers Biomedical and Health Sciences (RBHS), of which the Ernest Mario School of Pharmacy is now a member. It is also home to the largest residential community of the New Brunswick, with nearly 5,000 undergraduate and graduate students.

BUSCH: THE VISION

Rutgers 2030 proposes a renewed vision for Busch. In doing so, it is anticipated that Busch will play an increasingly important role in supporting the focus areas identified in the Strategic Plan: medicine, engineering and health sciences. The proposed vision provides a flexible approach for improvement and development; it responds to known facility needs and anticipates responses to future programmatic requirements that cannot be fully predicted at this time.

The vision for Busch focuses on near-term strategies that will improve its character and enhance the experience of its residents. It also provides a framework for transformation over the long term as key facilities and areas are redeveloped. The master plan is guided by the following principles and goals:

- **Enhance the landscape and open space structure** to unify the Busch, improve aesthetics and enhance pedestrian connectivity as well as overall mobility;
- **Reinforce the Busch Student Center** as the location for gathering and amenities;
- **Create a new graduate commons** in the Library of Science & Medicine, to better serve the west end of Busch and to integrate RBHS into the district;
- **Reimagine existing dormitories** as neighborhoods with improved centers for learning and collaboration as well as other social amenities; provide a long-term strategy for redevelopment;
- **Integrate RBHS** by reorienting RBHS to relate to



771 ACRES

5.07m GROSS SQ FEET

46 ACADEMIC BUILDINGS

4,899 BEDS

4,368 CLASSROOM SEATS

107,402 WKLY STUDENT CONTACT HOURS

the rest of Busch in a sense of connections and student amenity hubs

- **Encourage renovation, redevelopment and decommissioning** of buildings as appropriate;
- **Establish a robust physical and programmatic connection between Busch and Livingston** in support of broader strategic goals for the University.

The proposed vision for Busch is organized by the five overarching master plan principles:

LEARNING AT BUSCH

The major classroom centers of the Busch district, including Allison Road Classroom Building (ARC), the Hill Center and the Science & Engineering Resource Center (SERC) are maintained in the master plan for the foreseeable future but are slated for upgrades and improvements to the quality of the facilities and technology. They are also better connected by means of improvements to the broader pedestrian and landscape context. The Library of Science and Medicine is also reimagined as a learning commons focused on the graduate experience, complemented by food service and lounge amenities.

LIFE AT BUSCH

The quality of the Busch experience is enhanced in Rutgers 2030 by means of several major initiatives:

Student Center Improvements – the student center is reimagined as part of a new gateway to the Busch. Specifically, a new building entry landscape and plaza is proposed in conjunction with a reconstructed northwest corner of the building featuring the "Busch Forum," a new lounge space that provides a more generous and inviting entrance to the building. The Forum is intended to provide a greater sense of place for students who live on Busch, those who travel to Busch from College Avenue, Cook/Douglass and Livingston, and those who commute to the campus.

Allison Road Transit Hub – the primary transit hub for express services to and from Busch will be located on Allison Road for the foreseeable future, given the concentration of major classroom and academic support facilities in this area. To enhance the transit experience, new pavilions are proposed directly adjacent to the Allison Road Classroom Building, and on the opposite side of the road. The pavilions are envisioned to include waiting and socializing areas, as well as convenience food service facilities.

Graduate District – improvements to graduate housing and the addition of amenities are proposed to establish a graduate district on the west side of Busch. The phased redevelopment of graduate housing will bring it closer to Bevier Road and the academic core, as undergraduate housing is shifted to the east. The Library of Science and Medicine is re-envisioned as a graduate and research commons, providing a home base for graduate students, dining options providing them additional, and with close proximity to the academic core.

Werblin Center – the Busch recreation center is expanded and enhanced, with a new entry oriented to the north, where a majority of the daytime population is located. The location of the proposed South Garage and surface parking immediately south of Werblin will improve access to the facility, in addition to a new bus lay-by on Frelinghuysen that will replace the existing

bus stop.

Undergraduate Housing – Rutgers 2030 plans ahead for the long-term repositioning and replacement of housing at Busch. The strategy calls for a consolidated undergraduate experience on the east side of the district, in which existing housing is supplemented by new facilities proposed to the north of the student center on the new gateway road. The overall strategy is to concentrate the undergraduate residential experience with the amenities offered in the student center and the Werblin Center; as existing residence halls reach their replacement age, they will be replaced in closer proximity to amenities. The intent is to establish a critical mass of resident students sufficient to support the retail, food service and other amenities envisioned for the student center.

NAVIGATING BUSCH

Mobility improvements are a key component of the vision for Busch. The primary portal into and out of Busch for express transit services is proposed on Allison Road. This transit hub will serve as the arrival and departure point for students traveling to Busch from the other districts. Over the long term, the transit hub could be transitioned to the student center.

At the district level, the mobility strategy focuses on the pedestrian and bicycle networks with the intent of discouraging the use of automobiles, and providing attractive and competitive alternatives to driving. The overall, convenience and safety of the pedestrian network are given particular focus in the master plan. A renewed network of coordinated interior/exterior walkways connectivity is proposed along with significant landscape improvements. To that end, the pedestrian network is coordinated with the landscape framework to ensure that pathways are well organized, follow the appropriate desire lines, and offer shade during the warmer months.

Bicycle connectivity is addressed by means of a policy to establish complete streets and a coordinated network of bicycle routes within Busch, in addition to offering connections to Livingston and the Raritan park system to the south.

Parking at Busch is relocated to the periphery, with a combination of surface lots and garages. Commuter parking is located on the periphery of Busch in the West Lot, from which a bus connection is required to get to the Busch core or to other districts. Rutgers 2030 proposes parking for commuters and visitors at the North Garage, with the intent of improving the commuter experience with better access to the amenities at the campus center. At this location, commuters will find bus and pedestrian connections to destinations within the Busch campus, as well as express bus services to College Avenue and Cook/Douglass. In general, commuters will be encouraged to “park once and walk” to their destinations via the enhanced pedestrian network. The proposed garage is envisioned to include easily accessible campus visitor services and a waiting area for bus riders.

The proposed concentration of academic and student life uses in the core will eliminate the majority of existing surface parking. Existing parking, as well as additional spaces to accommodate growth, is replaced in two proposed garages, as well as consolidated surface lots outside the core. The proposed garages – the South and West Garages, located northwest of Werblin and east of the Library of Science & Medicine, respectively – have been sited to maximize convenience for users,

as well as provide additional flexibility for special events such as gamedays.

STEWARDSHIP AT BUSCH

The master plan for Busch is based on several sustainable planning and design strategies that will collectively assist Rutgers in achieving broader stewardship goals. These strategies are best described in the context of the physical planning frameworks for the campus including: mobility, land use, and open space.

PERSONALIZING BUSCH

Rutgers 2030 focuses on creating a more compact, better connected core at Busch. The creation of a transit hub at the student center supports this initiative, with proposed additional amenities clustered around each transit hub. New high-tech classroom buildings are proposed to be located in close proximity to the student center, shifting the concentration of undergraduate class-related activity towards the eastern side of the district over the long term. The vision for undergraduate housing reinforces this shift by bringing the residence halls closer to the campus student.

This master plan addresses Rutgers' need to provide a centralized student service building, thus improving efficiency and reducing travel demand. This building is proposed to be located at ASB-1 at Busch, and will be a place where the offices of Financial Aid, Admissions, Cashier Office, Residence Life, Counseling and Registrar could be co-located. The one-stop center could also include the relocation of the Busch-Livingston Health Center, which will be displaced by development at Livingston and needs a more accessible location.


BIOMEDICAL ENGINEERING
IRA S. GOTTSCHO PACKAGING ENGINEERING LABORATORY
599
Taylor Rd
Biomedical
Engineering


TO LIVINGSTON
ROUTE 18
DAVIDSON ROAD
HOES LANE WEST
BEVIER ROAD
ALLISON ROAD
FRELINGHUYSEN ROAD
FITCH ROAD
BARTHOLOMEW ROAD
CAMPUS ROAD
SCARLET KNIGHT WAY
SUTPHEN ROAD
BUSCH TODAY


TO LIVINGSTON
ROUTE 18
DAVIDSON ROAD
NEW CAMPUS ROAD
BUSCH-LIVINGSTON BRIDGE
HOES LANE WEST
BEVIER ROAD
ALLISON ROAD
BRETT ROAD
BARTHOLOMEW ROAD
FRELINGHUYSEN ROAD
FITCH ROAD
CAMPUS ROAD
SCARLET KNIGHT WAY
SUTPHEN ROAD
BUSCH 2030


TO LIVINGSTON
ROUTE 18
DAVIDSON ROAD
NEW CAMPUS ROAD
BUSCH-LIVINGSTON BRIDGE
HOES LANE WEST
BEVIER ROAD
ALLISON ROAD
BRETT ROAD
BARTHOLOMEW ROAD
FRELINGHUYSEN ROAD
FITCH ROAD
SCARLET KNIGHT WAY
CAMPUS ROAD
SUTPHEN ROAD
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SCALE 1" = 600'
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4.3.2 LAND USE

Rutgers 2030 plans for a transition in the land use pattern over the long term, towards improved mobility and walkability, a rich student experience, and a better experience for all users. To that end, the Allison Road area is designated as the transit hub for the near term. The hub will eventually be transitioned to the Busch Student Center, following the completion of the proposed North Garage, the Busch Forum, and new classroom facilities adjacent to the hub.

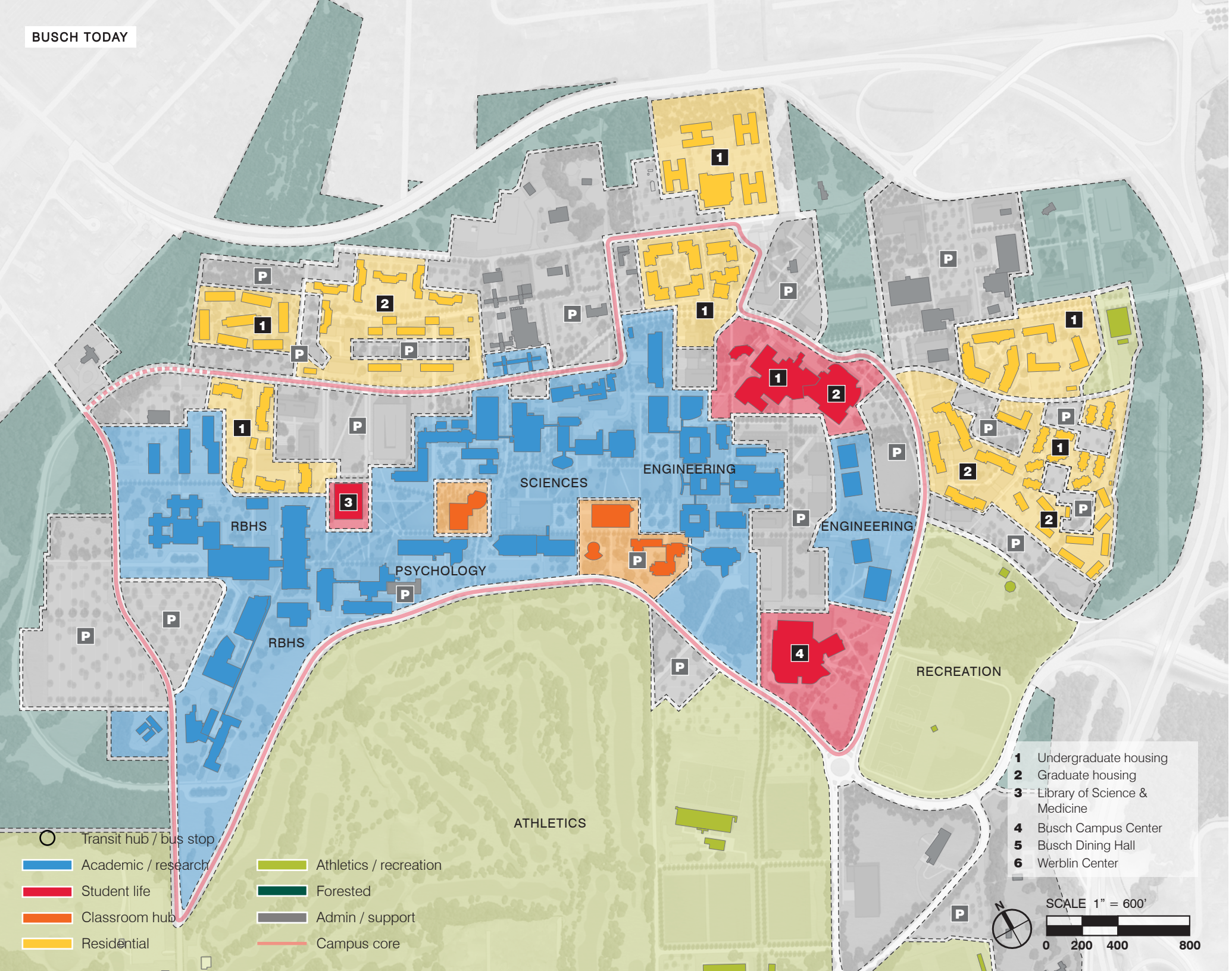
The proposed land use plan reinforces the established academic core and incorporates the concentration of academic and research facilities within a more compact area and fewer buildings, including the redevelopment of the School of Engineering complex. Along with the mobility and open space frameworks, the land use strategy integrates proposed facilities with projects currently under construction or in planning by Rutgers, including the new Chemistry, Engineering and Pharmacy buildings. The master plan is informed by previous studies for Engineering. A total of 300,000 gsf of new academic space is accommodated in the master plan, with the understanding that additional development is possible. Facilities under construction or in planning include:

- **Chemistry and Chemical Biology Building** – a new facility located north of the Wright Rieman Laboratories, with 145,000 sf of flexible research space and classrooms intended to facilitate collaborative research and learning.
- **Sustainable Systems Engineering Building** – imagined as a gateway to the School of Engineering, this 112,500 sf facility is located east of the Biomedical Engineering Building, with high visibility at the terminus of the new gateway road to Busch. The building is an interdisciplinary facility supporting the school's three major research initiatives: sustainability, wireless communication technologies, and advanced manufacturing research.
- **Ernest Mario School of Pharmacy expansion** – this 85,000 sf addition to the front of the existing Pharmacy building will provide the school with a new atrium with adjacent student commons, a range of new classrooms, and additional research lab space.
- **Busch Central Energy Plant** – the comprehensive replacement of the existing plant, which will not accommodate planned growth over the next 10 years, is reaching the end of its life and supplies both Busch and Livingston. The new facility will significantly improve energy efficiency, with a combination of combustion turbines, heat recovery steam generators, boilers, steam-driven chillers, electric centrifugal chillers, and an extraction generator.

The master plan proposes several initiatives to consolidate the Busch core, with respect to academic, student life, and administrative functions. These initiatives create a zones within the core that are linked by landscape improvements and an enhanced pedestrian network.

RBHS

Rutgers 2030 anticipates the potential redevelopment of the RBHS facilities on the west side of Busch. While the future needs of RBHS are under consideration, the land use framework offers the flexibility to accommodate a variety of renovation and redevelopment scenarios for the existing medical education and research complex. However, the intention of the master plan


BUSCH TODAY
SCIENCES
ENGINEERING
ENGINEERING
RBHS
RBHS
PSYCHOLOGY
ATHLETICS
RECREATION
1 Undergraduate housing
2 Graduate housing
3 Library of Science & Medicine
4 Busch Campus Center
5 Busch Dining Hall
6 Werblin Center
Transit hub / bus stop
Academic / research
Student life
Classroom hub
Residential
Athletics / recreation
Forested
Admin / support
Campus core
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SCALE 1" = 600'
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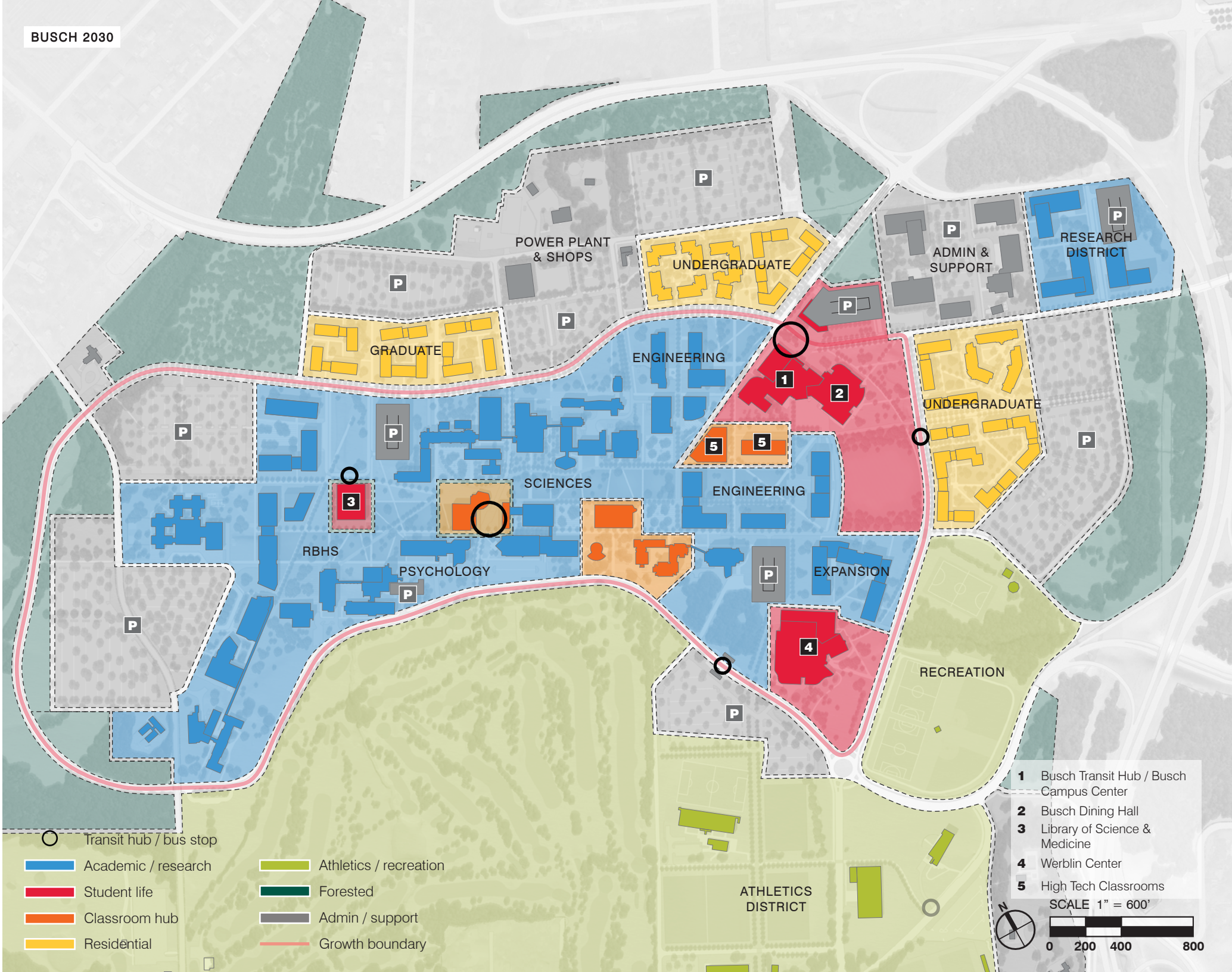
BUSCH 2030
POWER PLANT & SHOPS
UNDERGRADUATE
ADMIN & SUPPORT
RESEARCH DISTRICT
GRADUATE
ENGINEERING
UNDERGRADUATE
SCIENCES
ENGINEERING
RBHS
PSYCHOLOGY
EXPANSION
RECREATION
ATHLETICS DISTRICT
Transit hub / bus stop
Academic / research
Student life
Classroom hub
Residential
Athletics / recreation
Forested
Admin / support
Growth boundary
1 Busch Transit Hub / Busch Campus Center
2 Busch Dining Hall
3 Library of Science & Medicine
4 Werblin Center
5 High Tech Classrooms
SCALE 1" = 600'
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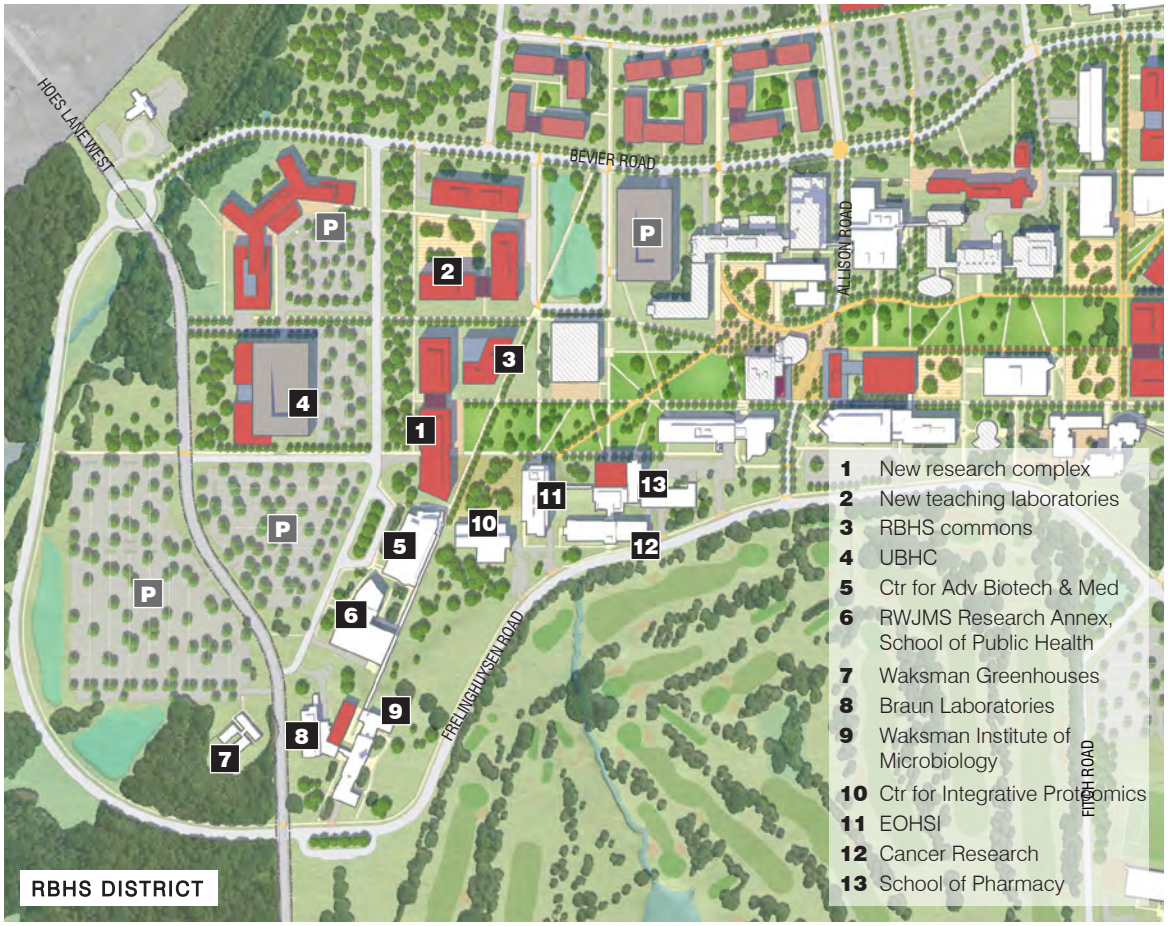
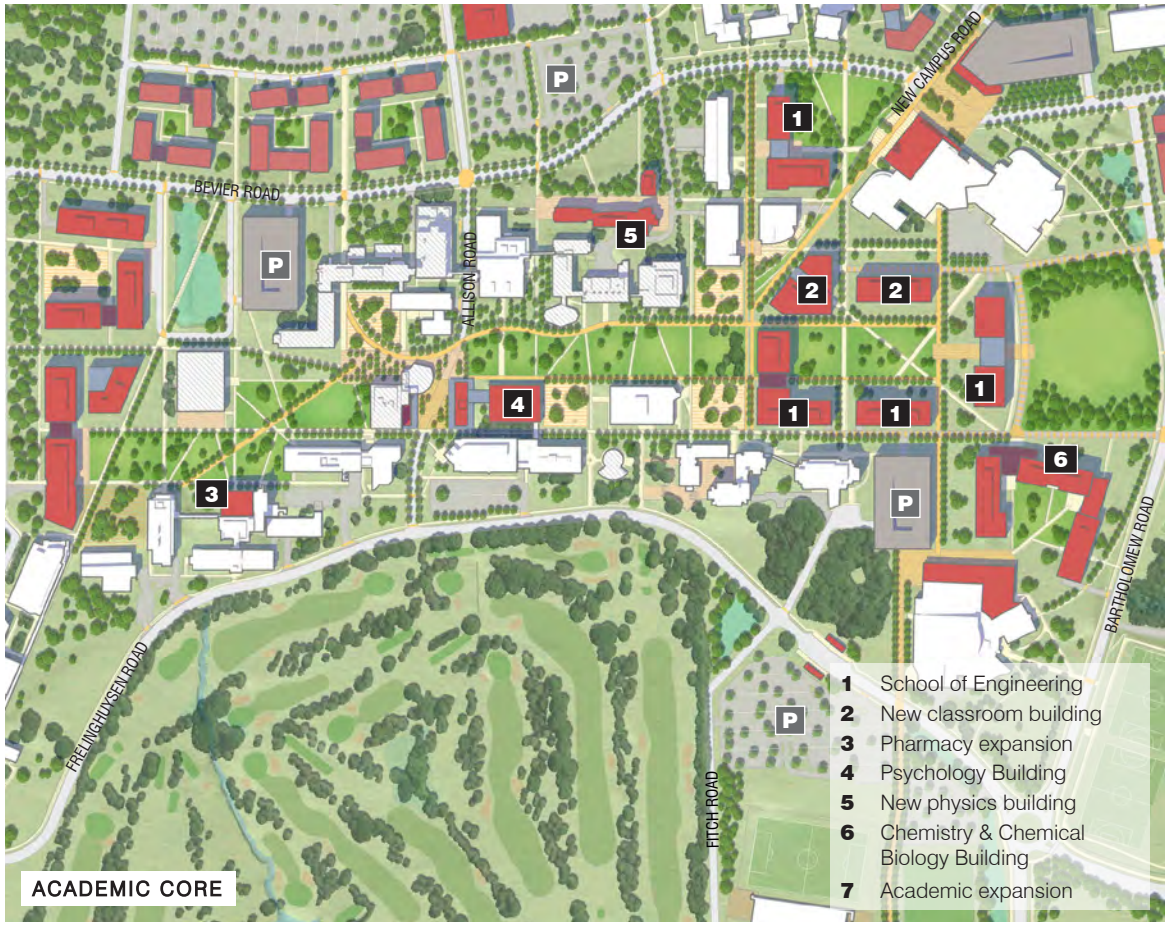
is to reorient RBHS to face east, relationg to the rest of Busch, and to redevelop RBHS facilities in a higher-density configuration, with closer proximity to science and engineering departments. The master plan physically reestablishes links between RBHS facilities, extending the pedestrian axis established by the Waksman Institute, the Research Annex, and the Center for Advanced Biotechnology & Medicine. This axis continues into the core through a new quad, terminating north of the Library of Science & Medicine, which is envisioned as a graduate and research commons. Proposed new buildings include replacement space for the Research Tower, Kessler Teaching Labs, and other RBHS space that is currently scattered across the northwest quadrant of Busch. A commons building dedicated to RBHS is located adjacent to the new quad, and could include collaboration space for interdisciplinary activities.

ACADEMIC CORE

The master plan incorporates elements of the School of Engineering master plan, including the original idea of a quadrangle at the eastern end of the academic core. This complex replaces the existing





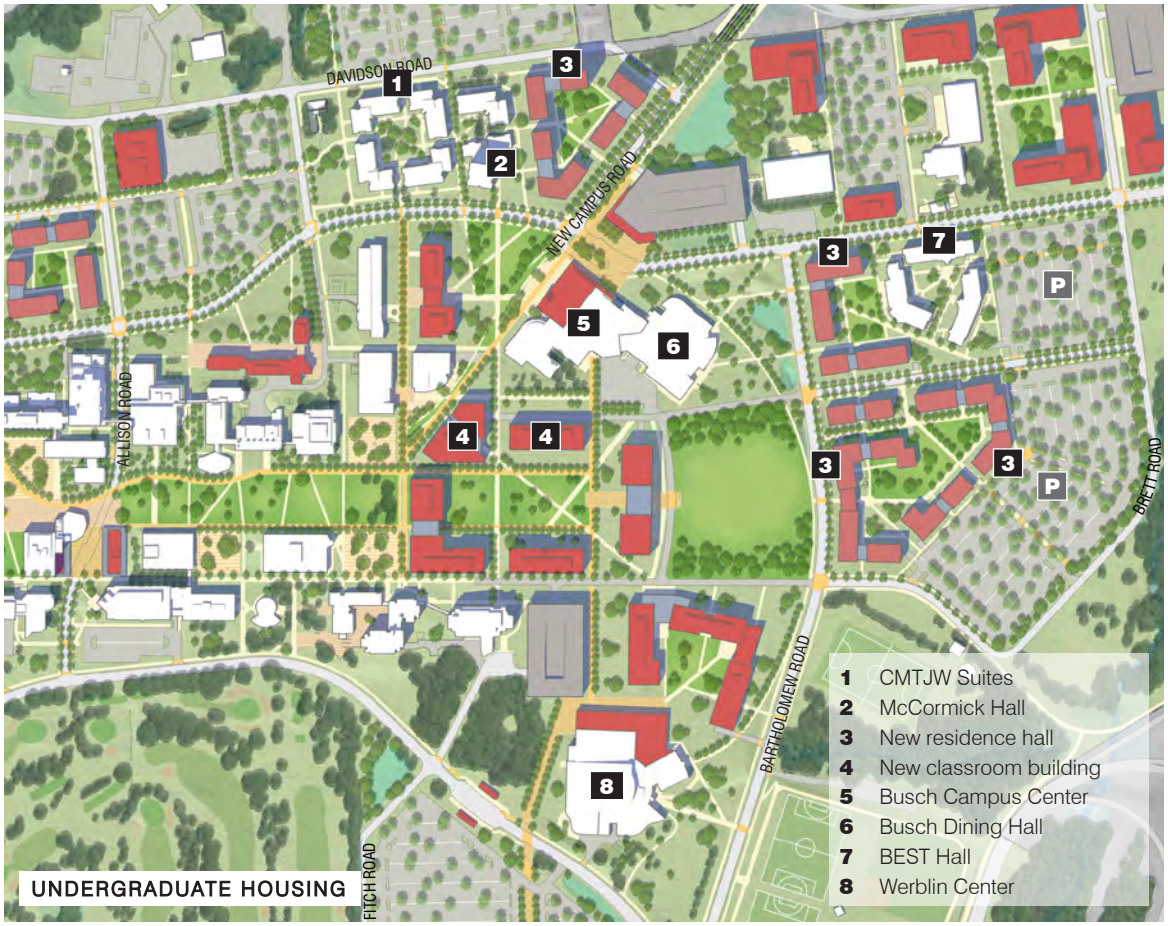
engineering buildings. This location allows the School of Engineering to terminate the new entry road, strengthening Busch's identity as the science and engineering district. The remaining buildings in the Engineering Quad will be built in a phased manner, as replacement parking can be built and as wings of the existing building are demolished. The Engineering Quad is completed by two high-tech classroom buildings, which will supplement the Hill Center and SERC classrooms. The Engineering Quad also forms an important part of the landscape redevelopment at Busch, and provides pedestrian link between the student center and Werblin.

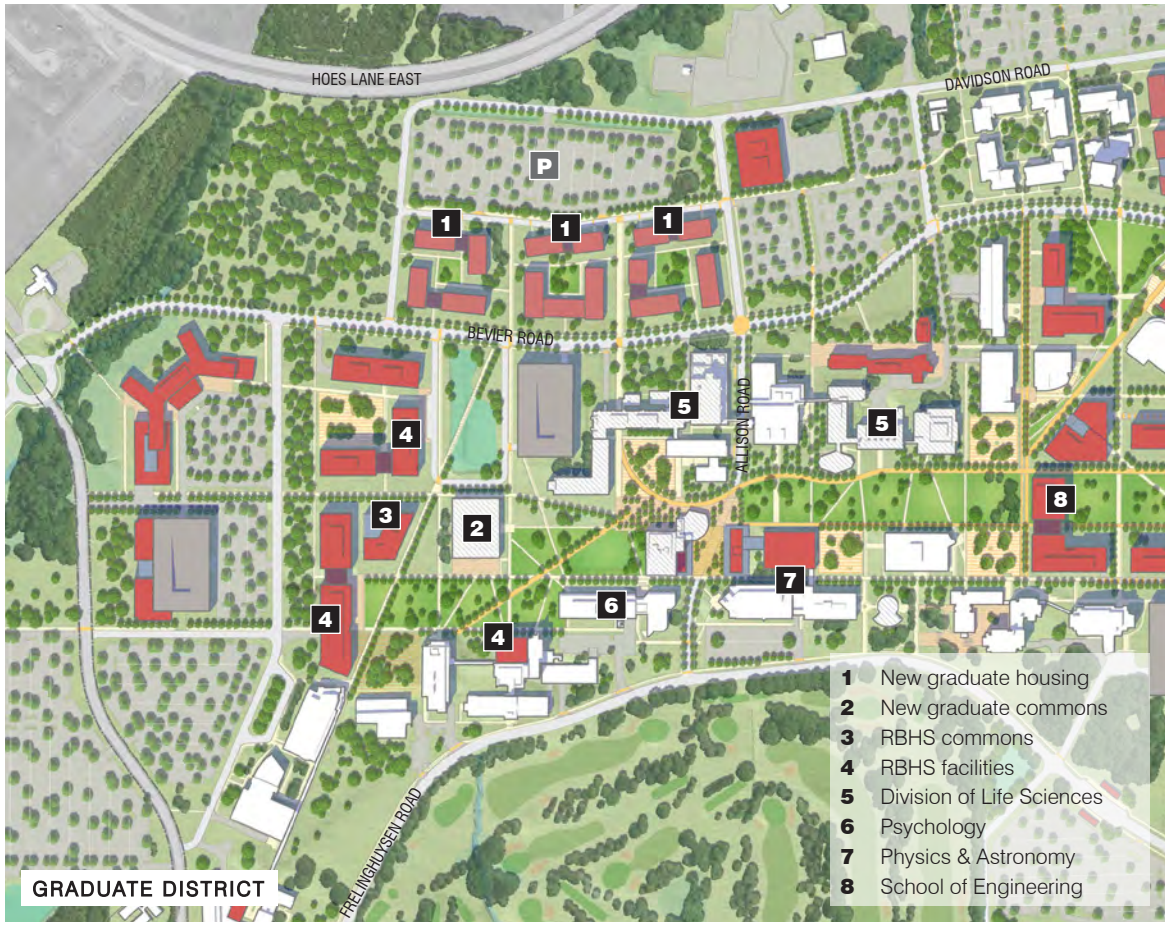
In addition to the Engineering Quad, the master plan incorporates growth in the School of Arts and Sciences, whose science departments are located on Busch. A new instructional facility for physics will allow existing facilities to be repurposed for research. Several building renovations are proposed, including the Nelson Biology Laboratories, the Wright Rieman Laboratories, and the Physics Lecture Hall. The department of Exercise and Sports Studies, currently located on Cook/Douglass, has research synergies with the Division of Life Sciences; the Graduate School

of Applied and Professional Psychology has outgrown its current building. These space needs could be accommodated in the long term at the Allison Road Classroom Building, as new classroom space is built. SAS is in the process of vetting its long-term needs; the master plan allows for academic expansion with two new buildings south of the Engineering Quad.

UNDERGRADUATE HOUSING

Over the long term, a redevelopment strategy for undergraduate housing is proposed at Busch. Recent investment resulted in BEST Hall, a suite-style residence hall with an integrated living-learning community. The CMTJW Suites and McCormick Hall, built in the 1980s, are in good condition, and are in proximity to the transit hub at the campus center; these residence halls have been maintained in the master plan. While no specific plans are in place for this redevelopment, Rutgers 2030 anticipates the need and provides a strategy for coordinating housing with other planning strategies for the transit hubs and the Student Center. The master plan proposes to replace residence halls built in the 1960s and 1970s, as they wear out. The plan illustrates the potential for a series of new residence halls to the east and north of





the campus center. Residence halls that are currently located on the west side of Busch – the Nichols and Richardson Apartments – will be shifted to the east, creating more undergraduate housing in proximity to student services and amenities. The plan also brings residents closer to the Werblin Center for recreation, and to the stadium. The lawn east of the Engineering quad is envisioned as an open space that could be used for recreational activities that currently compete for time on the Rutgers Sports Club Field.

GRADUATE DISTRICT

The shift of undergraduate housing to the east facilitates the creation of a graduate zone on the west side of Busch. All graduate housing will be replaced over time, into a single area with easy access to the academic core. The Library of Science & Medicine (LSM) is reenvisioned as a graduate commons, including dining, group study space, and a research commons and library, while the adjacent RBHS commons could offer fitness facilities. The surface lots between the loop road and the LSM are proposed to be transformed into a wetland landscape; similarly, the site of the Nichols Apartments is proposed to be reforested.

BUSCH STUDENT CENTER TRANSIT HUB

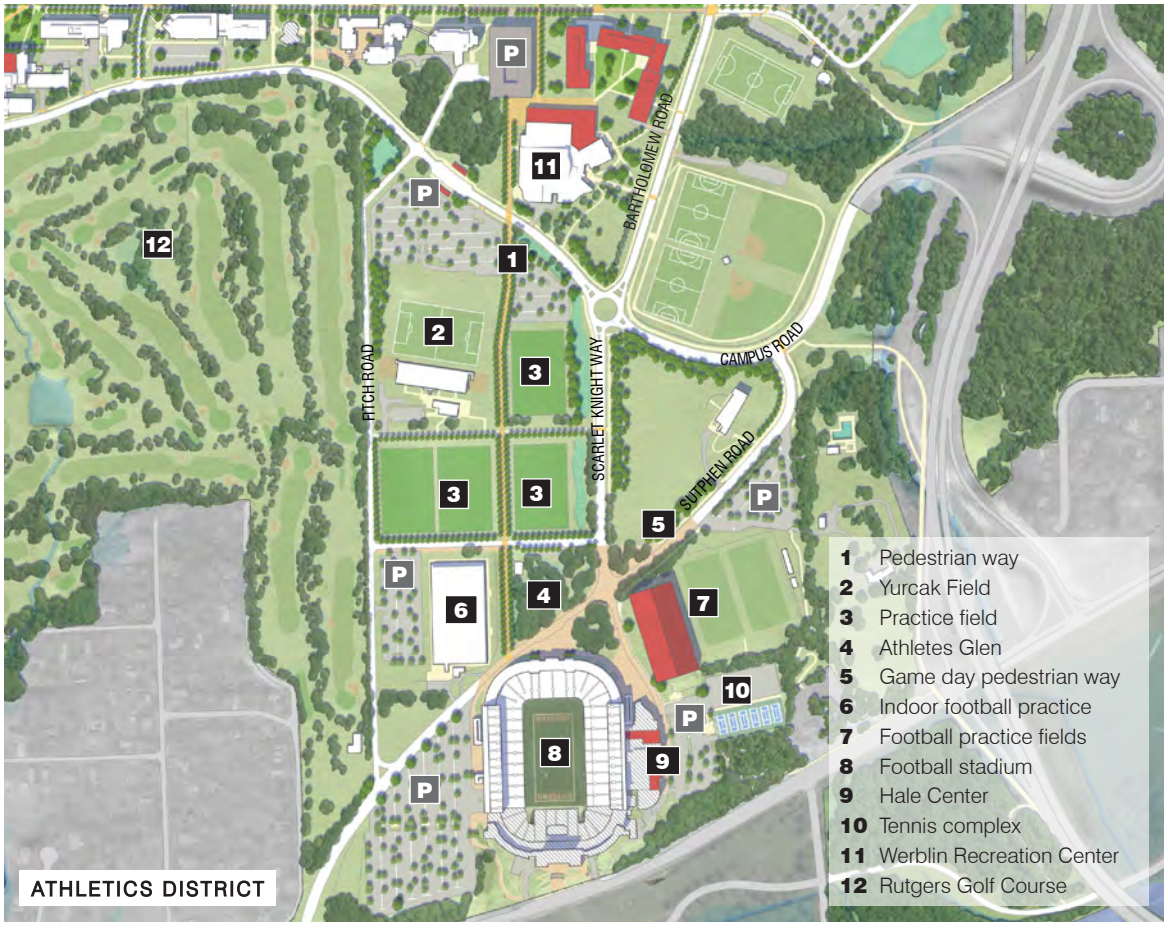
In the long term, the transit hub at Busch will transition to the Busch Student Center. The transit hub will be integrated with an addition to the center, providing a new entrance and waiting area to the building, and moving the meeting rooms to a new upper level. Outside the center,a plaza connects to the North Garage, a potential location for commuter parking that would bring them closer to both amenities and the Bush core. The new gateway road to Busch will provide access and views directly to the student center. Undergraduate residences are proposed to be replaced near to the hub, which will add to the already high level of student activity.

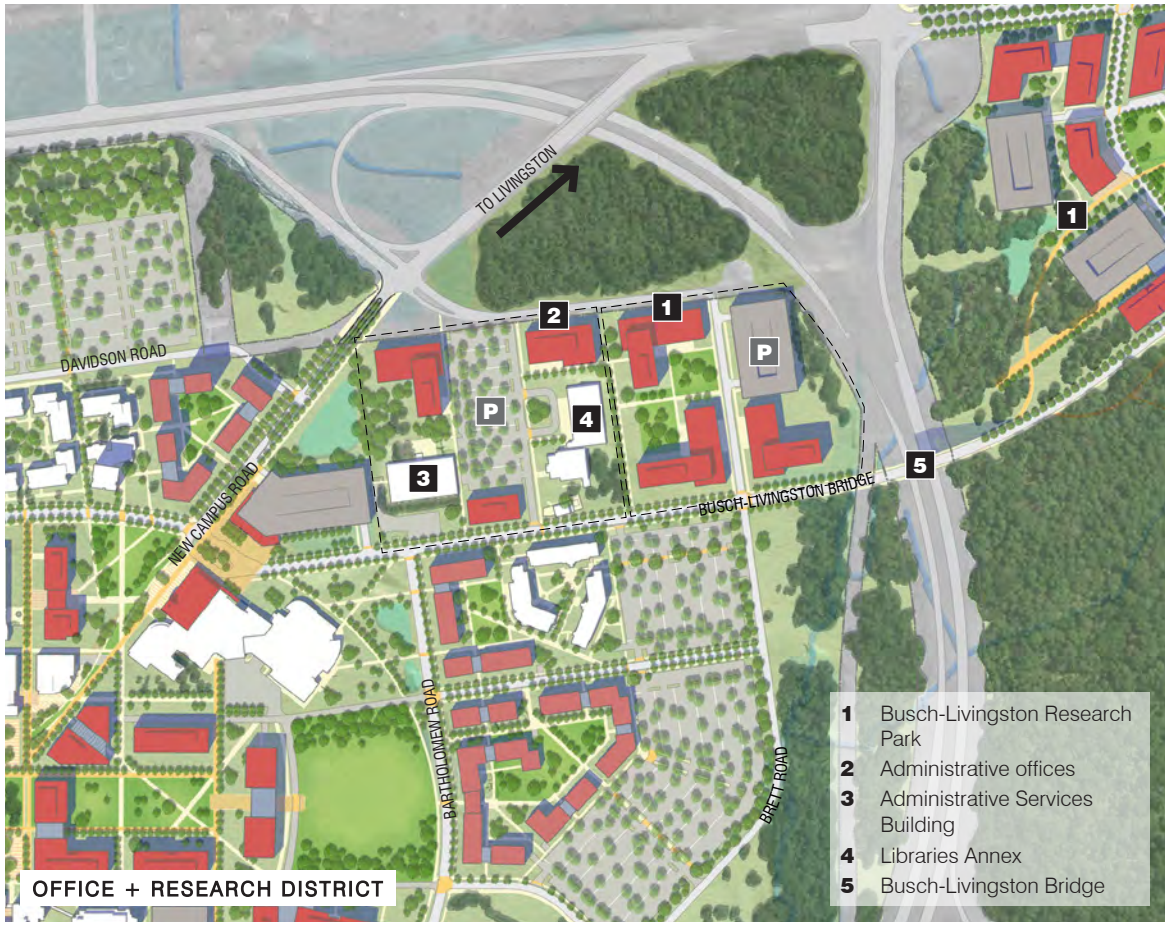
Existing view from Busch Student Center entrance towards bus stop

Proposed transit Hub at Bush Student Center

ATHLETICS COMPLEX

The existing athletics area at the south side of Busch is enhanced in this master plan. New pedestrian pathways, landscape edges, and stormwater management features give structure to the practice fields and buildings facilities required to support the athletics program. The Busch core is connected to the athletics complex by new walkways, enhancing the fan experience for game days, and for student athletes on their way to practice. Fitch Road is improved to help limit congestion on game days. Surface parking lots are located to provide operational flexibility on game days; proposed North and South Garages add further options. A list of proposed projects associated with athletics is provided in Chapter 4.6.





OFFICE AND RESEARCH

A new group of office and research building are proposed in the northeast corner of Busch. Back-of-house administrative offices are be consolidated at this location, offering increased operational efficiency. This area is also a potential location for the one-stop student services center for the campus, including the Busch-Livingston Health Center. Proposed new research building, anchor the Busch side of the Busch-Livingston bridge, while are a programmatic link to Livingston.


1 Busch Mall
2 LSM Quad
3 RBHS Quad
4 Engineering Quad
5 Gateway Quad
6 East Lawn
7 The Garden
8 Waksman Lawn
Transit hub / bus stop
Quad
Lawn/garden
Court
Bioswale
Plaza
Landscape infrastructure
Growth boundary
N
SCALE 1" = 600'
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4.3.3 OPEN SPACE + NATURAL SYSTEMS

The open space and natural systems framework for Busch acknowledges and maintains the underlying factors of the land: topography, streams and wetlands. The existing pattern of vegetation and wooded areas informs the proposed framework; wherever possible, these assets are preserved and enhanced as part of the broader stormwater and landscape strategy. The framework builds on the existing central mall and more loosely defined quadrangles. These areas are the focus of landscape improvements intended to enhance the appearance and function. The framework consists of three primary areas: major landscape interventions, supporting landscapes, and landscape infrastructure.

MAJOR LANDSCAPE INTERVENTIONS

The Mall – the mall features a rejuvenated landscape, activated by east-west pedestrian routes that lend a more human scale to the open space. The mall is the centerpiece of the landscape network at Busch, giving the campus a sense of place, and providing visitors with a way to orient themselves. The edges of the mall walkway are defined by trees and paving, located on the north edge of the mall, serves as the primary east-west route of travel, connecting RBHS to the Engineering Quad.

The Garden – the Garden, located between the mall and the Nelson Biology and Wright Rieman Laboratories, is a zone of more densely planted landscape. This zone features a bold pattern of tree planting on a 20'x20' grid, in addition to native species ground cover, and is designed to unify the varied architectural styles that define the north side of the mall.

Busch Gateway – as part of a coordinated strategy of new development around the student center, a new access road is proposed from the Route 18 interchange to the north. This new road is envisioned as a landscaped corridor, featuring a central median planted with street trees, and a pond adjacent to the North Garage. The road terminates in lawn bounded by the student center and the first School of Engineering building. The corridor continues, diagonally into the campus, and connects to the mall. A visual axis links the mall to the campus center, providing views of the campus interior, and serving as a wayfinding guide.

SUPPORTING LANDSCAPES

The Quads – the two connected quads located west of Allison Road are enhanced by new planting diagonal walkways and a new stormwater detention area is proposed adjacent to the Allison Road Classroom building.

The RBHS Quad – this quad, located at the western end of Busch, links to diagonal walkway from the Center for Advanced Biotechnology & Medicine, the RWJMS Research Annex and School of Public Health, and the Waksman Institute, integrating these facilities into the rest of open space structure.

Library of Science & Medicine Quad – this landscape component includes a new drop-off from Bevier Road, which will provide an address for RBHS. The landscape is a constructed wetland.

The Engineering Quad – designed as a more traditional quad, it will provide links between the campus center, the Mall, and to the Werblin Center. Walkways along the north side of the quad links it to the residence halls to the east.

East Lawn – located to the east of the Engineering Quad, a lawn is proposed as the foreground and the automobile entrance for the School of Engineering. It is also intended to serve as recreation space for the residence .... east of Bartholomew Road.

Plazas and Courts – along the perimeter of the mall and quads, spaces between buildings are filled by shaded plazas and courts. These intimate and human-scaled spaces contrast with the open and large-scale quads.

Residential Quads – the new undergraduate housing on the east side of Busch and the graduate housing on the west, are designed to complement Rutgers recent investment at BEST Hall .

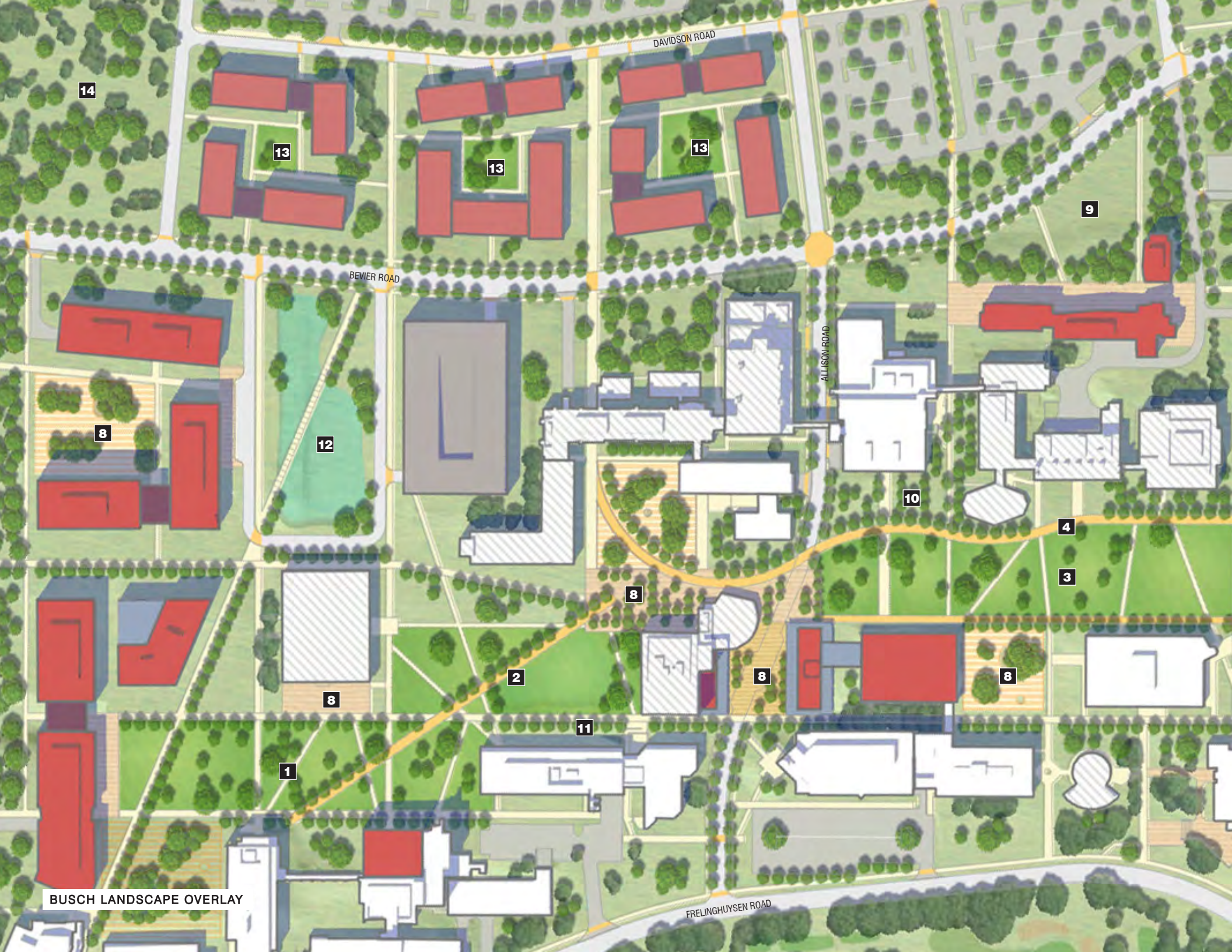
The Allée - the existing allée of trees passing east-west between Allison Road and the Nanophysics Lab is maintained. The tree line and pedestrian corridor is extended east to the School of Engineering complex and west to RBHS.

LANDSCAPE INFRASTRUCTURE

Beyond the district's core, existing forested and wetland areas are rehabilitated, reverting to a more natural state where possible.

In the athletics district south of the campus core, a framework of new landscape corridors are proposed, integrated with pedestrian and bicycle routes. These corridors are intended to better link existing and future athletic venues into the campus core and to enhance the fan experience on game days.

Large expanses of developed land on which buildings are demolished may reclaimed through reforestation. These areas include the Nichols Apartment site and the area behind Davidson Hall.


DAVIDSON ROAD
BEVIER ROAD
ALLISON ROAD
FRELINGHUYSEN ROAD
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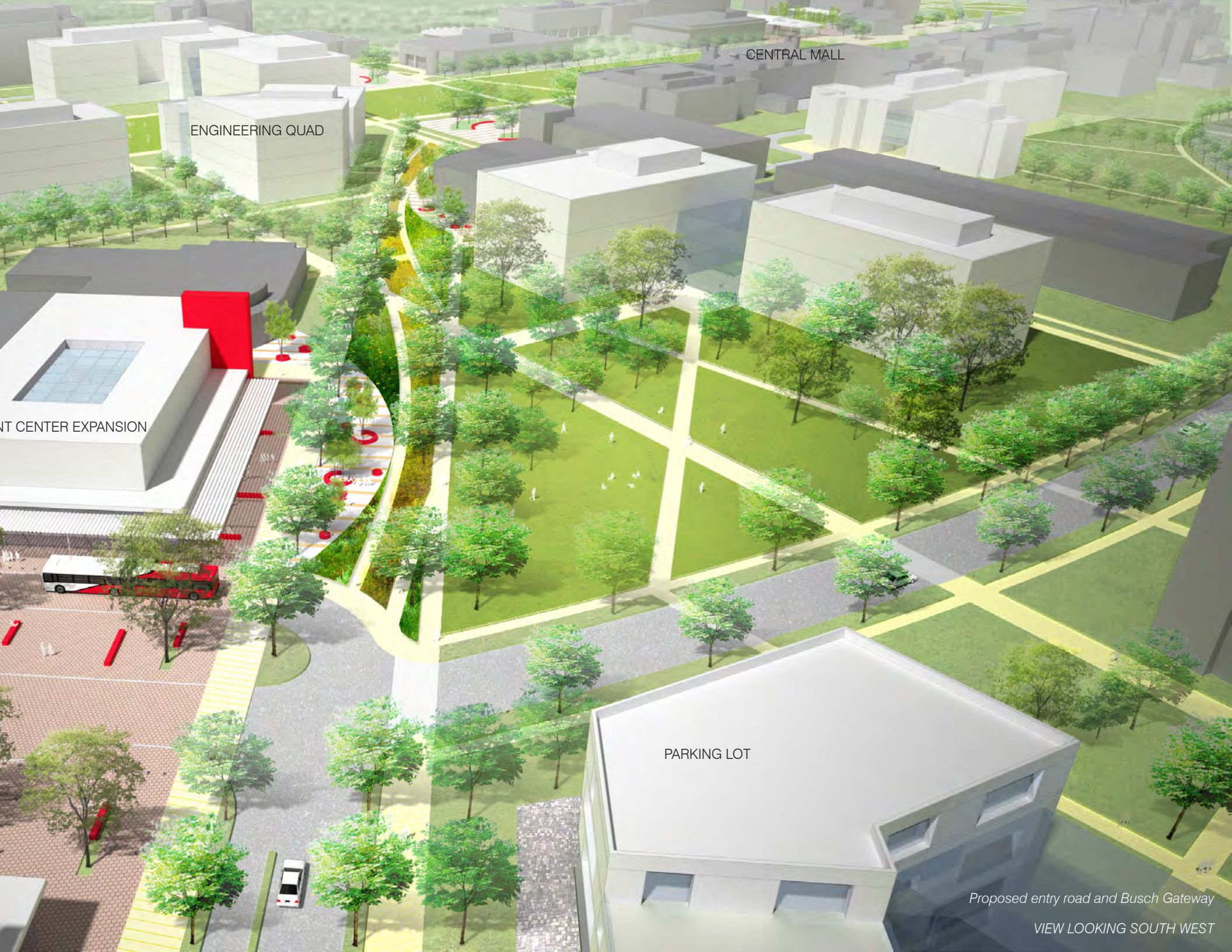
11
1
BUSCH LANDSCAPE OVERLAY


NEW CAMPUS ROAD
BARTHOLOMEW ROAD
7
8
12
13
8
6
13
5
8
1 RBHS Quad
2 LSM Quad
3 The Mall
4 The Spine
5 Engineering Quad
6 East Lawn
7 Gateway Lawn
8 Plaza/court
9 CCB Lawn
10 The Garden
11 The Allée
12 Bioswale/wetland
13 Residential quad
14 Reforested area

BUSCH GATEWAY

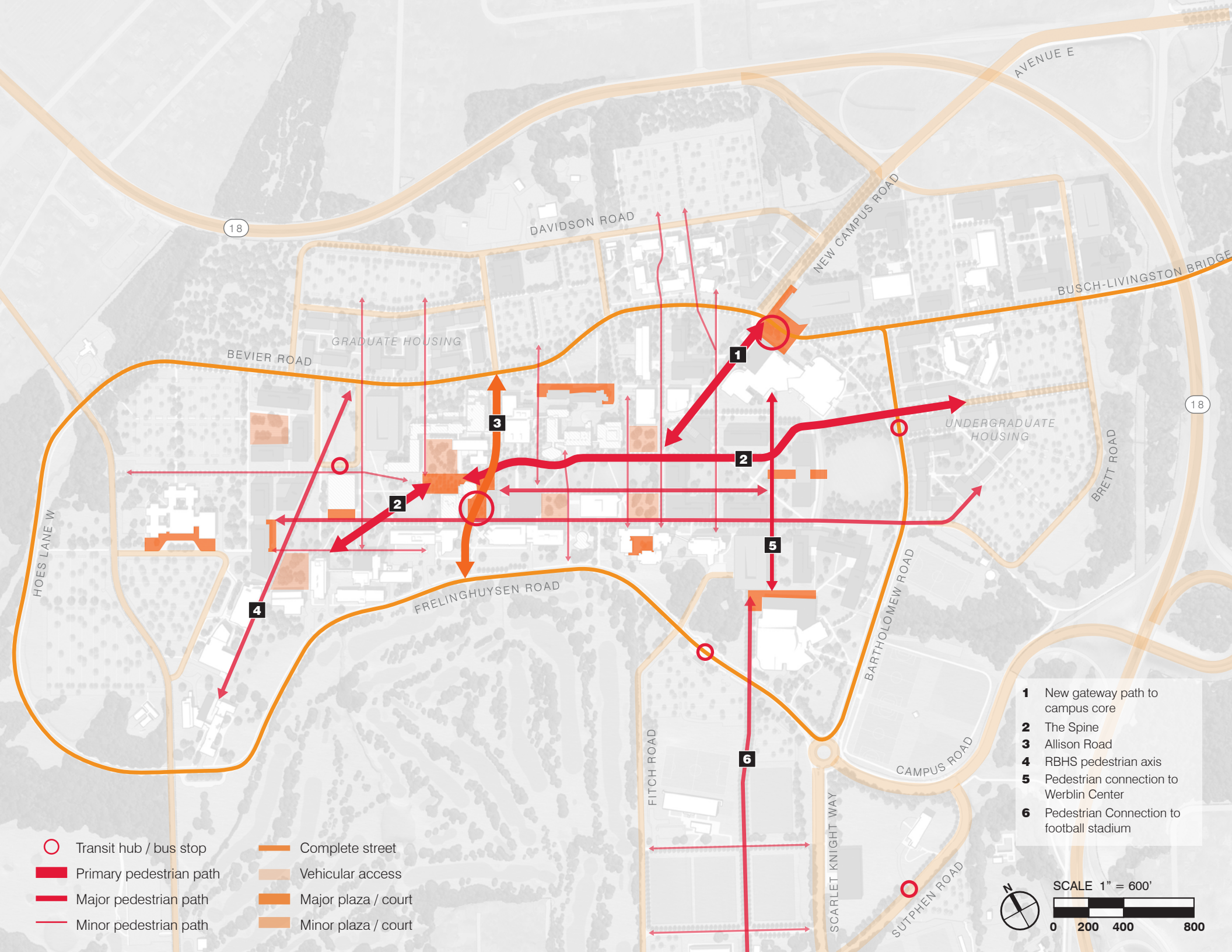
The proposed gateway to Busch integrates the mobility, land use, and landscape frameworks, creating a new road alignment that links the Student Center, Engineering Quad and malls at the Busch district core.

Existing view from Busch Campus Center towards Biomedical Engineering Building



Proposed entry road and Busch Gateway

VIEW LOOKING SOUTH WEST


AVENUE E
18
DAVIDSON ROAD
NEW CAMPUS ROAD
BUSCH-LIVINGSTON BRIDGE
GRADUATE HOUSING
BEVIER ROAD
UNDERGRADUATE HOUSING
BRETT ROAD
HOES LANE W
FRELINGHUYSEN ROAD
BARTHOLOMEW ROAD
FITCH ROAD
CAMPUS ROAD
SCARLET KNIGHT WAY
SUTPHEN ROAD
1
2
3
4
5
6
1 New gateway path to campus core
2 The Spine
3 Allison Road
4 RBHS pedestrian axis
5 Pedestrian connection to Werblin Center
6 Pedestrian Connection to football stadium
Transit hub / bus stop
Primary pedestrian path
Major pedestrian path
Minor pedestrian path
Complete street
Vehicular access
Major plaza / court
Minor plaza / court
N
SCALE 1" = 600'
0 200 400 800

4.3.4 MOBILITY

The mobility framework proposed for the Busch campus is closely linked to the land use and open space frameworks, and includes three components: pedestrian, bicycle, and vehicular. The proposed land use strategies associated with the transit hubs are intended to concentrate activities and population density around these key portals into-and-out-of the Busch district, and the mobility framework is based on land use. The circulation pattern is coordinated with proposed landscape improvements to ensure that pleasant, safe and attractive pedestrian and bicycle routes are reinforced and established.

PEDESTRIAN NETWORK

Pedestrian routes are targeted for improvement across the Busch campus, taking into account existing and anticipated desire lines. Pedestrian movement is considered comprehensively, both inside buildings and outside. Traffic calming measures are proposed where pedestrians cross major roads, including the proposed loop road. Major improvements to the pedestrian network include:

The Spine – an east-west circulation route, extending from RBHS past the reimagined School of Engineering, to the undergraduate housing district, is proposed as the central corridor of the district.

The Busch Gateway – a new pedestrian link from the Busch mall to the student center is imagined to better integrate the center into the daily patterns of movement on the campus.

Allison Road – this route is reimagined as a transit corridor, bicycle and pedestrian route and as the main north to south connector through the district.

North-South routes – these routes will provide direct access across the central academic core in key areas. Of particular note is the pathway linking the Student Center to Werblin, a route that currently lacks a direct path, instead requiring pedestrians to walk through a series of service areas and surface parking lots.

BICYCLE NETWORK

Existing bicycle routes are expanded and enhanced with a combination of dedicated bike lanes and shared use paths, with the goal of promoting bicycle use within Busch and to Livingston. In addition to the routes proposed through the core, roads at the perimeter of the core are imagined as complete streets – streets designed to accommodate pedestrians, bicycles and vehicles in a coordinated and safe manner.

VEHICULAR NETWORK

The vehicular network proposed for Busch proposes several changes of significance. Key changes are as follows:

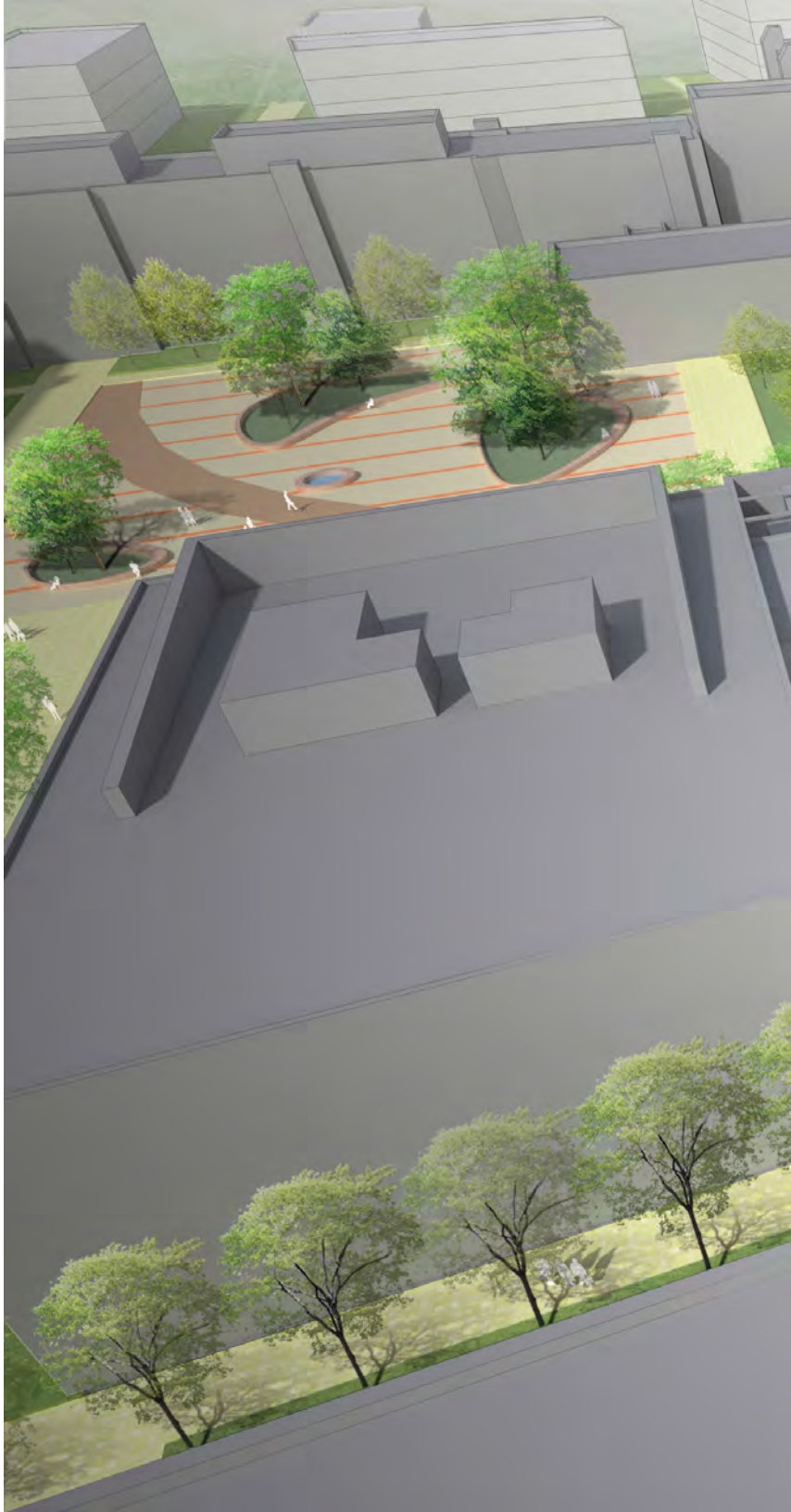
Busch Gateway Road – a realigned gateway road is proposed from the Avenue E/Davidson Road intersection, at the Route 18 off ramp located north of the student center. It is designed to define a new undergraduate housing district, a new parking garage, and an arrival landscape integrated with an expanded and enhanced Campus Center.

Loop Road – the master plan endorses a longstanding planning goal to complete the loop road around the established core of Busch. To that end, a new segment is proposed to connect Bartholomew Road to Bevier Road, a missing link needed to complete the northern portion of the loop. Two additional segments are proposed to link Bevier Road to Hoes Lane West, and to realign Hoes Lane West and Frelinghuysen

ALLISON ROAD IMPROVEMENTS

Allison Road Classroom Building (ARC) is a major bus stop and classroom hub at Busch. Rutgers 2030 plans for all modes of transportation, reimagining Allison Road as a complete street with integrated transit, bicycle, and pedestrian routes and decreased vehicular traffic. The existing bus stop is transformed into a transit hub, with an at-grade lay-by. Vehicles, buses, and bicycles share the road, while the paving design indicates crosswalks to pedestrians; vehicular access into the core from Allison Road is limited to service deliveries. Bicycle racks surround the transit hub.

Existing bus stop and crosswalk along east side of Allison Road



Proposed transit Hub at Allison Road

Road following the realignment of Hoes Lane West. The Chemistry and Chemical Biology Building has been sited to take into account the loop road, with its frontage on the future road. The proposed School of Engineering Phase 1 building is also oriented to take advantage of its high-visibility location on the loop road as well as the gateway road.

Improvements to Bevier Road, including a consistent street width, new sidewalks, and a dedicated bike lane, will improve access to the core from undergraduate and graduate residences to the north. In the long term, the loop road will function as a complete street, supporting coordinated pedestrian, bicycle and vehicular circulation.

Busch-Livingston Bridge – a new Rutgers-controlled bridge is proposed to connect Busch and Livingston. The bridge is a physical expression of the potential synergies between science, engineering, and RBHS at Busch, and business at Livingston, anchored by the proposed Research District on either side. The new bridge is intended to provide more direct pedestrian, bicycle and bus connections between districts. The bridge is an internal campus road thereby eliminating traffic lights, a condition on the current public road connection, Avenue E. Students traveling between Busch and Livingston, who have observed that the bus ride can take up to 40 minutes when the class change time is only 20 minutes, will find it easier to get to class both by bus and by bike. Students at Busch will also have improved access to amenities on Livingston, including the student center, dining commons, and the Eco Preserve and vice versa.

Campus Road – this road will continue to function as a key southern gateway to the campus from Route 18, serving the existing Visitor Center and athletics district. Landscape enhancements are proposed along this important visitor entrance to the campus.

TRANSIT

Two transit hubs are proposed at Busch: one at Allison Road Classroom Building (ARC) and one at Busch Student Center. The hub at ARC proposes a new glassy pavilion on either side of Allison Road, providing a waiting area with soft seating, and a café in the eastern enclosure. The hub takes advantage of the critical mass of students who travel there for class, giving them a more efficient connection to other campuses. It also adds a potential dining option to the western side of campus, where Woody's at RBHS is the only current dining venue. The hub at Busch Student Center re-envisions the entrance to the center, replacing it with the Busch Forum, a new lounge that is open and lit with natural light. The existing bus turnaround is reconfigured with the new gateway road, providing a more coordinated bus stop for pedestrians, buses, and other vehicles.

In addition to the proposed transit hubs at ARC and the campus center, several improvements are targeted towards improving transit operations. The Hill Center and Werblin Center bus stops will be replaced with a new lay-by between the existing stops, east of the access road to the proposed South Garage. This will streamline bus service at Busch, and eliminate bus-pedestrian conflicts at the existing Hill Center stop. To support transit users who walk along Frelinghuysen Road, as well as gameday visitors, a new sidewalk on the north side of the road will provide safer movement. The improvement of Fitch Road will also improve gameday bus operations. A proposed bus turnaround at the realignment of Frelinghuysen and Hoes Lane West will add flexibility.

PARKING

Parking at Busch serves the resident, commuter, faculty, and staff population, as well as the broader Rutgers community. The master plan takes into consideration the demand generated by current and future activities at Busch, and provides a strategy for improving parking for all users. Parking is shifted to the periphery of the established campus core, outside the loop road lots and garage are connected to the center of Busch enhanced walkways.

In order to maintain sufficient parking as the core of Busch is redeveloped, a combination of garages and surface lots are proposed: the North Garage at the Busch Student Center; the South Garage at the Werblin Recreation Center; and West Garage at the Library of Science & Medicine. The timeline for implementing the garages is flexible, although the North Garage is a priority. Surface parking has been sited in close proximity to transit hubs and amenities.

North Garage – located north of the campus center, this garage is intended to serve the demands associated with student center and to provide parking for commuters. Currently, commuters are required to park in the West Lot, which is located adjacent to the stadium far from major bus routes. The proposed North Garage will provide commuters convenient express bus connections to Livingston, College Avenue and Cook/Douglass. The garage will also support convenient visitor parking.

South Garage – located immediately west of the Werblin Recreation Center, this garage replaces large surface parking lots displaced by the redevelopment of the Engineering Quad. The garage takes advantage of the topography, which rises northward from Frelinghuysen Road into the campus core. Garage entrances are located at the north and south ends of the building, providing at-grade pedestrian access into both the campus core and the Werblin Center. This facility will serve day-to-day parking needs, as well as the need associated with events at the Werblin Center and on game days.

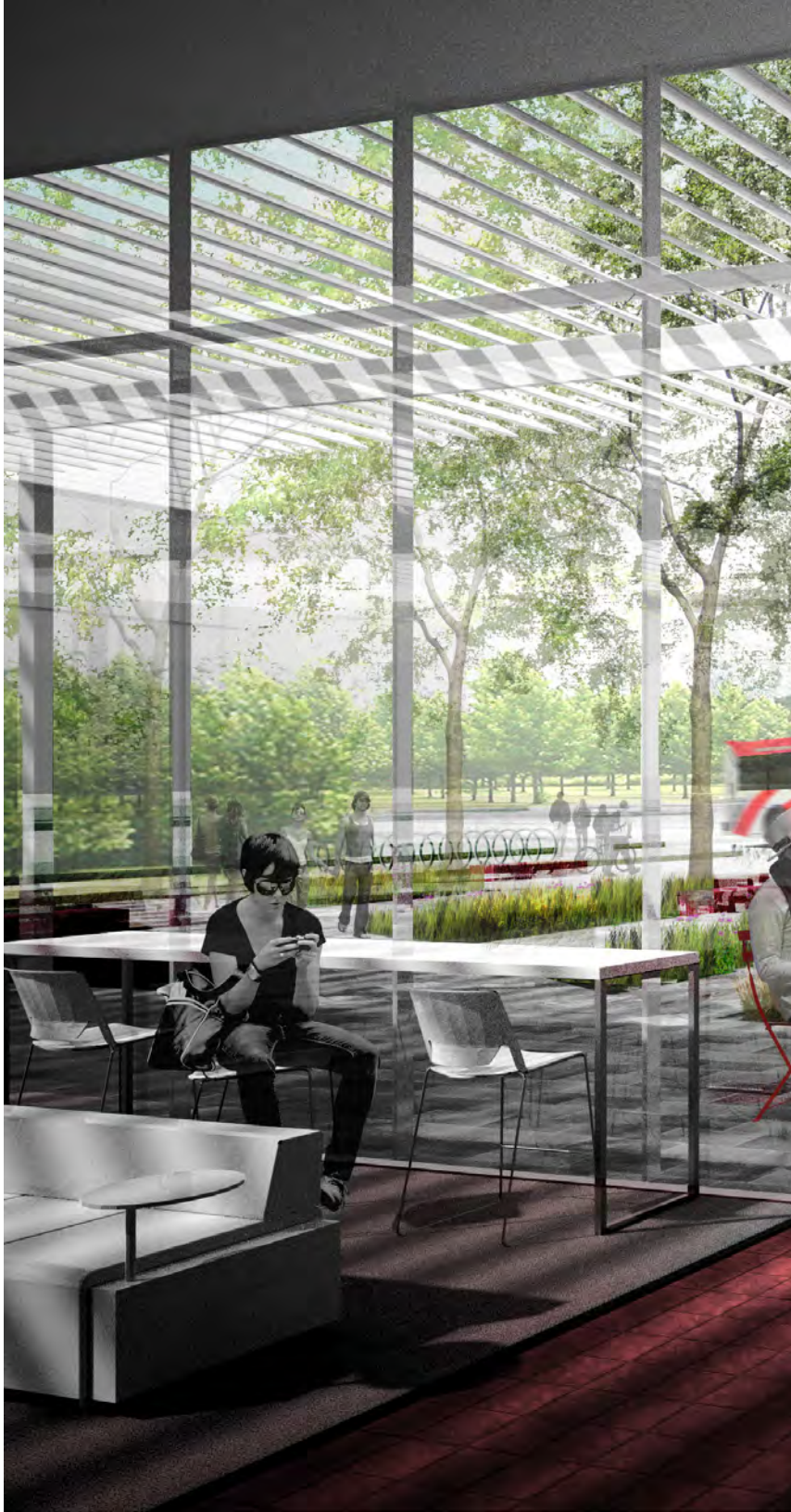
West Garage – this garage, located immediately east of the Library of Science and Medicine, is imagined as a long-term opportunity as new development creates demand for replacement of existing parking or increased level at RBHS.

Stormwater Management – surface parking and garages contribute to the campus' impermeable surface area and capacity to handle stormwater. Consistent with the 2010 Biohabitats plan, bioswales and constructed wetlands have been integrated into the landscapes adjacent to large surface lots and the North Garage, to help mitigate the impacts of stormwater runoff.

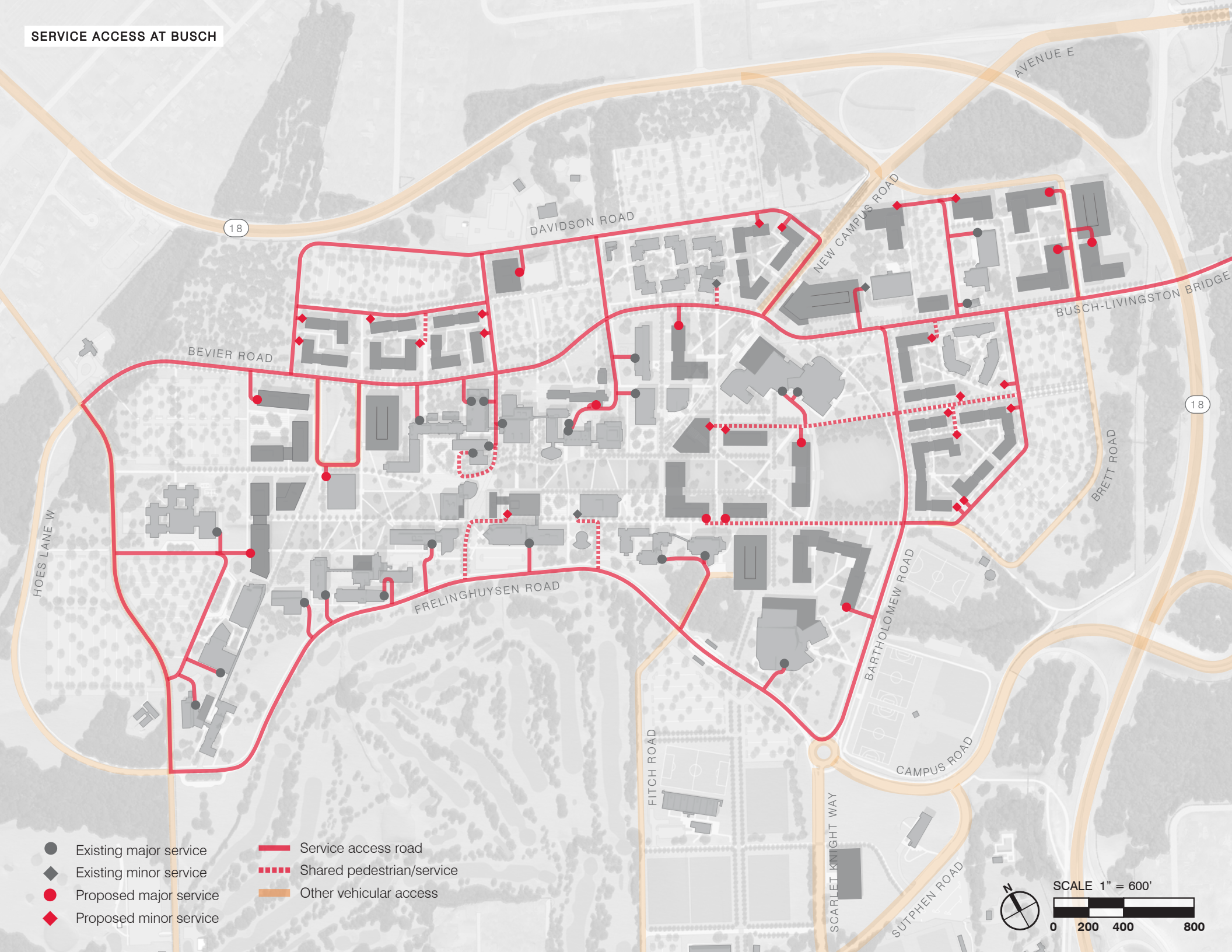
ALLISON ROAD TRANSIT HUB

Rutgers 2030 proposes to transform Allison Road Classroom Building into a transit hub for Busch. The existing bus stop is replaced by enclosed pavilions on either side of Allison Road, with sheltered waiting areas supplemented by a cafe. The pavilions are glassy and transparent so students can see approaching buses, and they are also equipped with real time schedule displays. The plaza between the pavilions includes crosswalks. There is additional shaded seating outside for use in good weather. Buses stop at grade, in order to minimize loading and, consequently, travel times.

Existing view of Allison Road Classroom Building and bus stop




RUTGERS


SERVICE ACCESS AT BUSCH
AVENUE E
DAVIDSON ROAD
NEW CAMPUS ROAD
BUSCH-LIVINGSTON BRIDGE
18
BEVIER ROAD
HOES LANE W
FRELINGHUYSEN ROAD
BRETT ROAD
BARTHOLOMEW ROAD
CAMPUS ROAD
FITCH ROAD
SCARLET KNIGHT WAY
SUTPHEN ROAD
Existing major service
Existing minor service
Proposed major service
Proposed minor service
Service access road
Shared pedestrian/service
Other vehicular access
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SCALE 1" = 600'
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SERVICE ACCESS

Service access to buildings on Busch is vital to the academic mission, supporting research and teaching activities, in addition to regular building operations. Major service access is needed at Busch for delivery of gases, research equipment, office supplies, and other materials specific to the departments located on Busch. Food service operations also require significant access and space for service. Minor service access includes activities like trash and recycling pickup.

Whereever possible, service drivers and hooding docks are separated from pedestrians. Service in existing buildings is maintained, with the exception of the Fiber Optic Materials Research Building, whose service access will need to be relocated to make way for new access into the core. Proposed buildings are sited to respond to service needs. Service docks have been located to minimize their frontage on major roads.

Major existing service and pedestrian conflicts are resolved in the master plan, including the service yard on the south side of the Busch Student Center and Dining Hall.

Existing service yard and parking lot at Busch Dining Hall and Busch Campus Center


HOES LANE EAST
HOES LANE WEST
DAVIDSON ROAD
AVENUE E
BEVIER ROAD
ALLISON ROAD
FRELINGHUYSEN ROAD
FITCH ROAD
BARTHOLOMEW ROAD
SCARLET KNIGHT WAY
CAMPUS ROAD
SUTPHEN ROAD
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SCALE 1" = 600'
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BUSCH DISTRICT TODAY

- Existing Building
- Projects Under Construction or in Design

- # Buildings
- # Major Parking Lots
- # Athletics, Recreation +Open Space

BUILDINGS

1. Nichols Apartments
2. Children's Transitional Residence
3. KinderCare
4. UBHC - North Building
5. RWJMS Research Annex
6. RWJMS Staged Research Building
7. Richardson Apartments
8. SHRP - Physician Assistant Building
9. University Behavioral Health Care (UBHC)
10. Research Tower
11. Center for Advanced Biotechnology & Medicine
12. RWJMS Research Building/Sch. of Public Health
13. Waksman Greenhouse
14. Braun Laboratory
15. Waksman Institute of Microbiology
16. Center for Integrative Proteomics
17. Kessler Teaching Laboratories
18. Environ. and Occupational Health Sci. Institute
19. Cullman Laboratory for Cancer Research
20. Ernest Mario School of Pharmacy
21. Library of Science & Medicine
22. Silvers Apartments
23. Russell Apartments
24. Nelson Biology Laboratories
25. Allison Road Classroom Building
26. Psychology Building
27. Physics & Astronomy Building / Serin Physics Building
28. Nanophysics Laboratory
29. Life Sciences Building / Smithers Hall
30. Wright-Rieman Laboratories
31. Doolittle Building / Geological Sci. Lab Building
32. Center for Packaging Engineering
33. Central Heating Plant
34. Facilities Maintenance & Operations
35. Power grid / Environmental Services
36. Fire and Emergency Services
37. Facilities Maintenance & Operations
38. Davidson Hall
39. CMTJW Residence Halls
40. McCormick Residence Hall
41. Rutgers Federal Credit Union
42. Biomedical Engineering Building
43. Paul Robeson Cultural Center
44. McLaren Center for Ceramic Research
45. Fiber Optic Materials Research Building
46. Science & Engineering Resource Center (SERC)
47. Physics Lecture Hall
48. Hill Center Building
49. Computing Research & Education Building


HOES LANE EAST
DAVIDSON ROAD
AVENUE E
HOES LANE WEST
BEVIER ROAD
ALLISON ROAD
FRELINGHUYSEN ROAD
FITCH ROAD
BARTHOLOMEW ROAD
SCARLET KNIGHT WAY
CAMPUS ROAD
SUTPHEN ROAD
P1
P2
P3
P4
P5
P6
P7
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SCALE 1" = 600'
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50. Electrical Engineering Building
51. School of Engineering complex
52. Center for Advanced Infrastructure & Transportation
53. Civil Engineering Laboratory
54. Busch Campus Center
55. Busch Dining Hall
56. CBIM Modular Building
57. Civil & Environmental Engineering Modular Building
58. Center for Advanced Energy Systems Modular Building
59. RUTCOR Modular Building
60. Werblin Recreation Center
61. Rutgers Welcome Center
62. Silvers Apartments
63. Marvin Apartments
64. Buell Apartments
65. Busch Tennis Center
66. BAMM Residence Halls
67. Busch Science, Engineering & Technology Residence Hall (BEST Hall)
68. Administrative Services Building Annex II
69. Administrative Services Building Annex I
70. Administrative Services Building
71. Libraries Annex

MAJOR PARKING LOTS

1. RWJMS Parking Lots
2. Lots 55, 58, 58A, 58B
3. Lot 54
4. Lot 51
5. Lots 59, 60A, 60B, 64
6. West Lot (commuter)
7. Lots 67, 67B

ATHLETICS, RECREATION + OPEN SPACE

1. Waksman Institute Lawn
2. Busch Mall
3. Scarlet Knights Sports Club Field
4. University Park & Recreation Complex
5. Yurcak Field
6. Rutgers Golf Course


TO LIVINGSTON
ROUTE 18
DAVIDSON ROAD
NEW CAMPUS ROAD
BUSCH-LIVINGSTON BRIDGE
HOES LANE WEST
BEVIER ROAD
ALLISON ROAD
BRETT ROAD
BARTHOLOMEW ROAD
FRELINGHUYSEN ROAD
FITCH ROAD
SCARLET KNIGHT WAY
CAMPUS ROAD
SUTPHEN ROAD
SCALE 1" = 600'
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BUSCH 2030

- Existing Building
- Projects Under Construction or in Design
- Proposed Buildings

- A Projects Under Construction or in Design
- # New Construction + Renovation
- # Infrastructure + Parking
- # Landscape + Stormwater

Projects Under Construction or in Design/Planning

- **A** Chemistry + Chemical Biology Building
- **B** School of Engineering Phase 1
- **C** School of Pharmacy Addition
- **D** Power Plant Replacement

New Construction + Renovation

- **1** Allison Road Hub + Pavilion
- **2** Library of Science + Medicine renovation
- **3** Undergraduate Housing
- **4** Werblin Center addition
- **5** School of Engineering Phases 2-4
- **6** High-tech classroom building
- **7** Physics Lecture Hall renovation
- **8** University Behavioral Healthcare Center (UBHC)
- **9** Ambulatory Care Center and Parking Garage
- **10** New teaching laboratories and classrooms
- **11** New research complex and RBHS expansion
- **12** RBHS Commons / Graduate Fitness Center
- **13** Braun Laboratory Addition
- **14** Administrative Complex
- **15** Research District
- **16** Graduate Housing

Infrastructure + Parking

- **1** North Garage
- **2** South Garage
- **3** West Garage
- **4** Bevier Road (loop road)
- **5** New road from Livingston
- **6** Busch-Livingston Bridge
- **7** Fitch Road realignment
- **8** Bevier Rd/Hoes Lane W connection
- **9** Frelinghuysen north sidewalk
- **10** New bus stop
- **11** Bus turnaround
- **12** Realigned gateway road
- **P** Parking Lot (new or restriped)

Landscape + Stormwater

- **1** Busch Mall
- **2** Busch Campus Center
- **3** School of Engineering Quad
- **4** East Lawn
- **5** RBHS Quad
- **6** Stormwater detention
- **7** Athletics pedestrian axis
- **8** Athletics Practice Field
- **9** Reforestation

4.4 LIVINGSTON


STARBUCKS COFFEE
HANDLES
RUTGERS CINEMA
STOP
Livingston Campus
RUTGERS

4.4.1 Livingston District Vision and Principles

Livingston was the site of Camp Kilmer, a logistics facility built during World War II. Rutgers acquired the land in the 1960s, and by the end of that decade, had completed the initial phases of development for Livingston College including Lucy Stone Hall, the Quads, and the Lynton Towers. In the past decade, significant investment in the student center, housing and retail amenities has transformed Livingston into an emerging model for the other Rutgers University – New Brunswick districts. Today, Livingston features the types of housing and retail sought after by students and exemplifies the level of density and activity imagined for the transit hubs throughout the Rutgers University – New Brunswick campus.

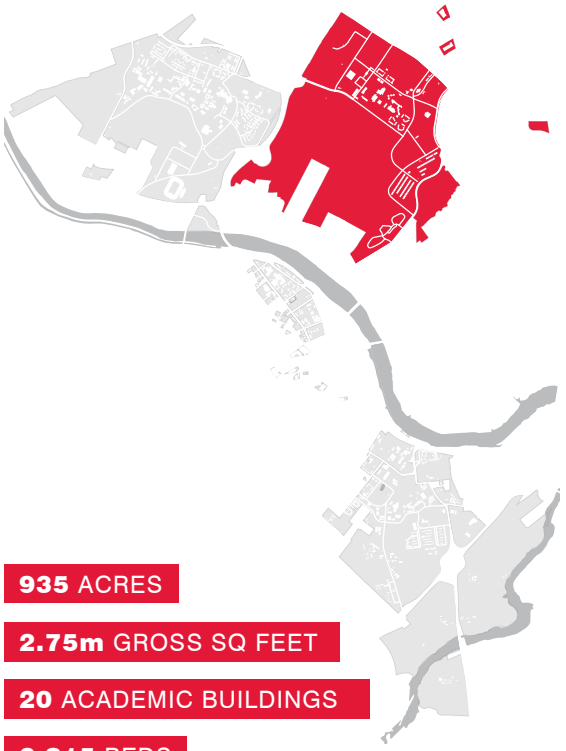
In addition to student life facilities, Livingston is also home to major a new academic building: the Rutgers Business School, located at the roundabout at Avenue E and Rockefellar Road. Bridging over Rockefellar Road, the building frames the major gateway into Livingston.

The emerging identity of Livingston is more urban in character, featuring a higher density of housing with ground floor retail, restaurants, cafes and social spaces surrounding a dynamic student center. The district is enhanced by quality investment in the landscape and pedestrian environments. It is also notable for its sustainable planning and design elements, including a 8.5-megawatt solar farm, bioswales and other elements taken from the 2010 Stormwater & Landscape Master Plan.

Livingston is also defined by the 316-acre Eco Preserve, located to the south of the established district. The Eco Preserve is integrated into the overall landscape and open space structure of Livingston as an recreational amenity, featuring walking, jogging, bicycling and cross country trails. The Eco Preserve is also used as a teaching resource. Proposed improvements to this natural resource include new gateways along its north boundary, and linkages to Johnson Park to the south.

LIVINGSTON: THE VISION

Rutgers 2030 builds upon the emerging planning direction and identity of Livingston. The the positive qualities of recent plan extends investments, and provides increased connections to the Eco Preserve.



935 ACRES

2.75m GROSS SQ FEET

20 ACADEMIC BUILDINGS

3,815 BEDS

3,483 CLASSROOM SEATS

83,320 WKLY STUDENT CONTACT HOURS

It also seeks to enhance the planned pattern of development through additional infill and density, and illustrates two new development areas in response to the University's evolving needs. These include a hotel and conference building, located on Avenue E west of the Rutgers Business School, and a future research district north of the Eco Preserve on Avenue E. The research district is planned to accommodate Rutgers' research and partnership initiatives. The athletics zone on the west side of Livingston is also transformed, taking into account the optimal orientation for the fields and the fan experience.

The long-term vision for Livingston is to connect the district physically and programmatically to Busch.

The master plan is guided by the following district specific principles and goals:

- **Enhance the landscape and open space to unify the campus,** improve aesthetics and enhance pedestrian connectivity as well as overall mobility
- **Integrate the Eco Preserve** into the district
- **Reinforce the Livingston Student Center** as the location for gathering and amenities
- **Integrate the hotel and conference center** into the existing and potential activity patterns of Rutgers University – New Brunswick
- **Reserve land** for future research partnerships

The proposed Vision for Livingston is organized by the overall master plan principles:

LEARNING AT LIVINGSTON

Recent investments in Rutgers Business School and the renovation of Tillett Hall has enhanced and improved the learning environment at Livingston. The Livingston Classroom Building, in reality a temporary trailer, is slated for demolition in the coming years; this space will need to be replaced elsewhere on campus. Looking ahead, it may be beneficial to transform the Kilmer Library into a learning commons and state-of-the-art technology facility linked into the broader network of libraries across Rutgers.

LIFE AT LIVINGSTON

The overall quality of the Livingston experience has been greatly enhanced by recent investment in housing, the student center and other retail/food service projects. The effectiveness of these investments is apparent in the shift in activity towards Livingston, including not only its resident population, but also the broader Rutgers community. Looking ahead, additional investment is proposed to further contribute to the campus experience:

Student Center – the Livingston Student Center is the model for future renovations at Rutgers. Minor enhancements are proposed to make this facility function more smoothly with the expansion of the new transit hub. To that end, the bus drop off area is reconfigured to align with a proposed addition to the student center, which would feature indoor and outdoor waiting areas, as well as a covered outdoor concourse. The existing building entrance and C-store space will be combined into a more spacious entry to the student center, with the C-store relocating to an addition on the east corner of the building. Both C-store and building entrance will be visually and physically open to the

bus lay-by. These changes also create a conditioned waiting area for Rutgers Bus passengers.

Livingston Recreation Center – an addition is proposed to the Livingston Recreation Center, to provide additional program space and to create a better entrance to the building. The existing building is sited in a topographic bowl, making it difficult to see from Road 3, its primary access route; the addition will create a more prominent entry that welcomes users into the building, and is visible from afar. The addition includes an indoor track, tennis courts inside the track, and additional administrative space. A new outdoor recreation equipment distribution center is located in an existing storage building south of the recreation fields. The master plan adds restrooms to serve both the distribution center and play fields to the north.

NAVIGATING LIVINGSTON

Circulation at Livingston has benefited from the recent improvements. The Master Plan expands upon these improvements by extending pathways outward from the core to enhance connections to the Recreation Center, the Eco Preserve, the athletics complex, and to new development zones proposed for the hotel/ conference center and research district.

Bike lanes are proposed along existing campus streets. In the case of Avenue E, a dedicated bike trail is proposed along the south side of the street adjacent to the Eco-Preserve. This trail would continue along the proposed new road and proposed Busch-Livingston Bridge. Recreational bike trails are augmented in the Eco-Preserve.

PERSONALIZING LIVINGSTON

Recent investment at Livingston has transformed it into a hub of activity where students can reliably find what they need at the student center and dining commons. The master plan builds on this success in the campus core, proposing investment in the library, a new classroom building east of the library that could feature new technology.

LIVINGSTON TODAY


SUTTONS LANE
CLIF PRESCOD LN
HOSPITAL ROAD
ROCKAFELLAR ROAD
ROAD 4
ROAD 3
KILMER AVE
KILMER RD
ROAD 2
ROAD 3
METLARS LANE
POSTAL PLAZA
AVENUE E
AVENUE E
STREET 1603
ROAD 1
CEDAR LANE
ROAD 3
NEW CAMPUS ROAD
WAREHOUSE RD
BUSCH-LIVINGSTON BRIDGE


SUTTONS LANE
CLIF PRESCOD LN
HOSPITAL ROAD
ROCKAFELLAR ROAD
ROAD 4
ROAD 3
KILMER AVE
ROAD 2
KILMER RD
METLARS LANE
ROAD 3
POSTAL PLAZA
AVENUE E
AVENUE E
ROAD 1
STREET 1603
CEDAR LANE
ROAD 3
WAREHOUSE RD
BUSCH-LIVINGSTON BRIDGE
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4.4.2 LAND USE FRAMEWORK

Rutgers 2030 reinforces the existing compact land use pattern established within the core of Livingston. Future academic, housing and student life facilities are sited in close proximity of existing development in the campus core and along Kilmer Avenue, and is intended to both strengthen the core as well as complete the frontage on major campus roads. New development proposed on Livingston is limited in Rutgers 2030.

The potential for additional infill development is indicated around the quad west of the student center, and in the development zones identified for the hotel/conference center and the research district. In addition to these zones, two other areas are identified for future development. The master plan proposes the reorganization of the athletics zone to more optimally arrange existing and future fields, and provide for a better fan experience. Rutgers 2030 incorporates elements of the Ten Arcquitectos plan for the area between the Rutgers Business School building and the student center/dining complex, integrating it into the larger campuswide and New Brunswick-wide framework. The zones are as follows:

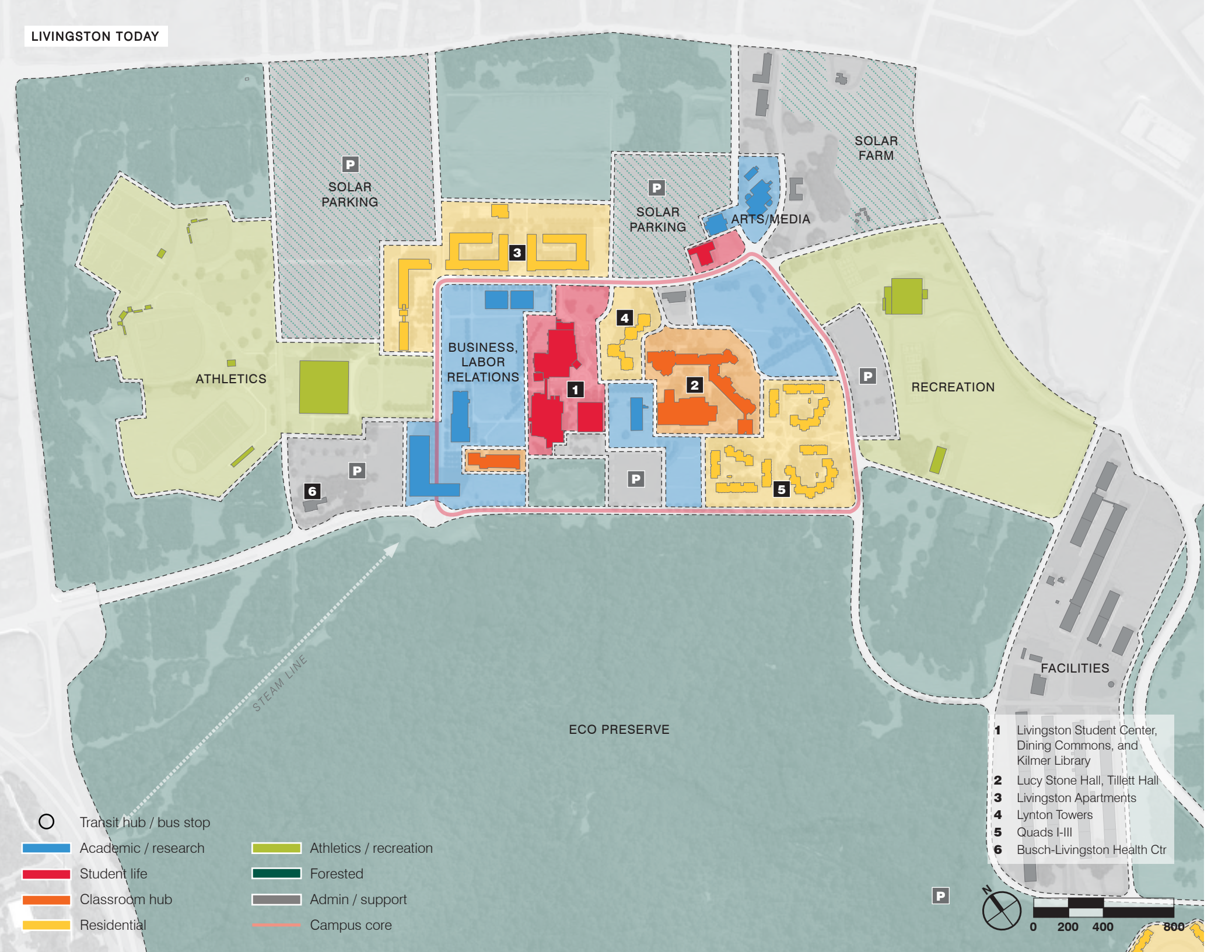
HOTEL/CONFERENCE CENTER – A Rutgers hotel and conference center is proposed directly west of the Rutgers Business School (RBS) building on Avenue E. The facility is planned to serve the needs of the entire Rutgers community, including athletic events, RBHS executive education, academic conferences, and other events. Its location near the Route 18 exit, in proximity to RBS and the proposed Research District, is intended to further support the success of the facility. The hotel also includes a new plaza to the east, bounded by the RBS building; this plaza will allow for outdoor events. Enhanced walkways are proposed to the student center and the restaurants and retail located on Rockefellar Road. The complex includes a garage that connects to the hotel.

RESEARCH DISTRICT – A new research park is proposed at the Avenue E entrance to the Livingston campus. The district is located on a triangular parcel of land defined by Avenue E on the north and on the south by a new road linking the Avenue E/Rockafeller Road roundabout to the proposed Busch-Livingston Bridge. The district is envisioned as the location for private sector businesses and other organizations who may want to locate in close proximity to the academic and research activities of the University. It is provided in direct response to the objectives set out in the Strategic Plan to[1]:

- *Reach out and cooperate with the business communities that will employ students and translate Rutgers research into practice (p 36);*
- *Enhance corporate partnerships and relationships through a variety of avenues that include: creating a single, business friendly portal of entry to Rutgers;*
- *Engage with the State and higher education partners to develop a shared location for business and technology innovation; and,*
- *Consider innovative ways in which public-private partnerships can build and support the interface between the University and economic entities.*

The district is planned around a central open space. It will define the entry to Livingston along Avenue E, and will offer views over the Eco Preserve to the south. In keeping with recent development at Livingston, the central open space incorporates bioswales and native plantings. The district also has direct pedestrian

1. *A Strategic Plan for the New Rutgers*, February 2014: p 36.


LIVINGSTON TODAY
SOLAR PARKING
SOLAR PARKING
SOLAR FARM
ARTS/MEDIA
ATHLETICS
BUSINESS, LABOR RELATIONS
RECREATION
FACILITIES
ECO PRESERVE
STEAM LINE
1 Livingston Student Center, Dining Commons, and Kilmer Library
2 Lucy Stone Hall, Tillett Hall
3 Livingston Apartments
4 Lynton Towers
5 Quads I-III
6 Busch-Livingston Health Ctr
Transit hub / bus stop
Academic / research
Student life
Classroom hub
Residential
Athletics / recreation
Forested
Admin / support
Campus core
N
0 200 400 800

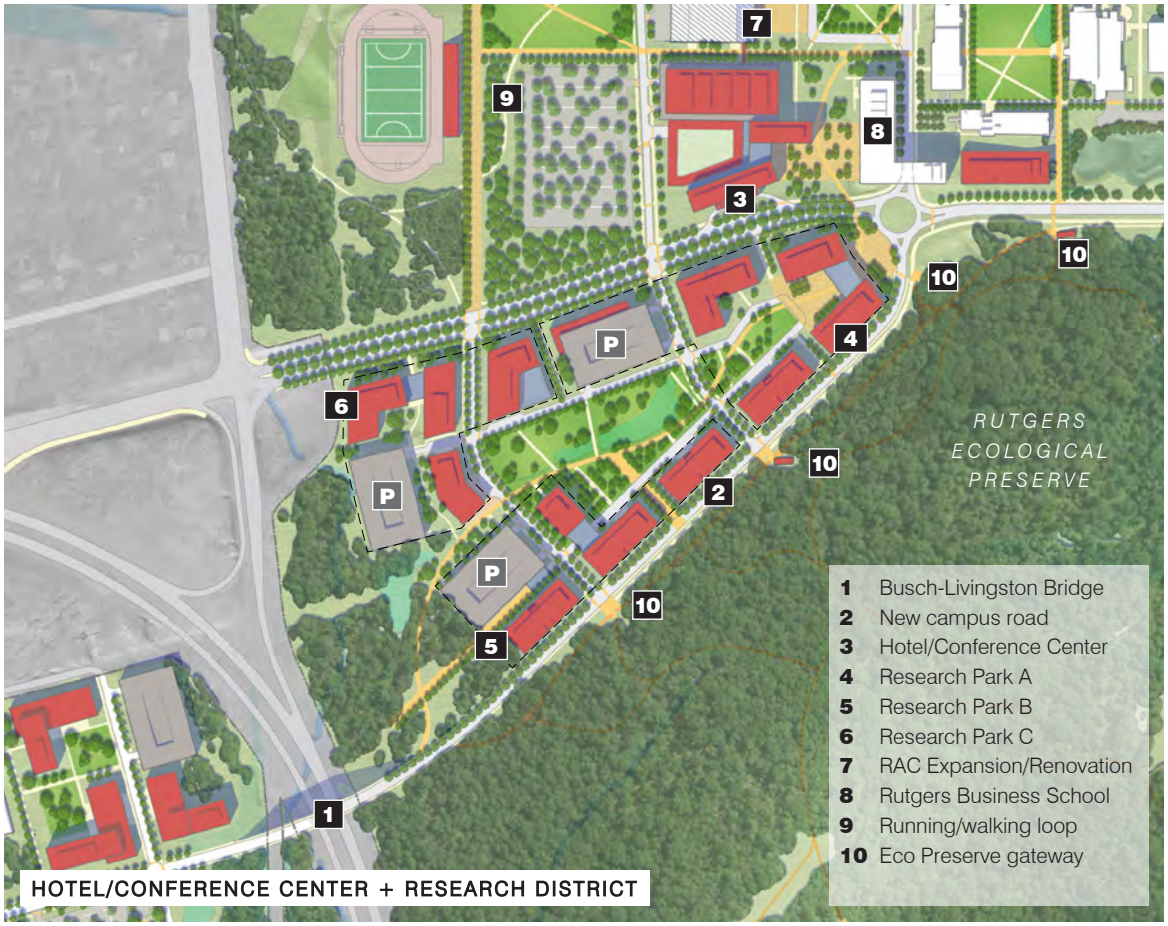
LIVINGSTON 2030

access to the 1.1-mile walking/running loop that circumscribes the athletics complex.

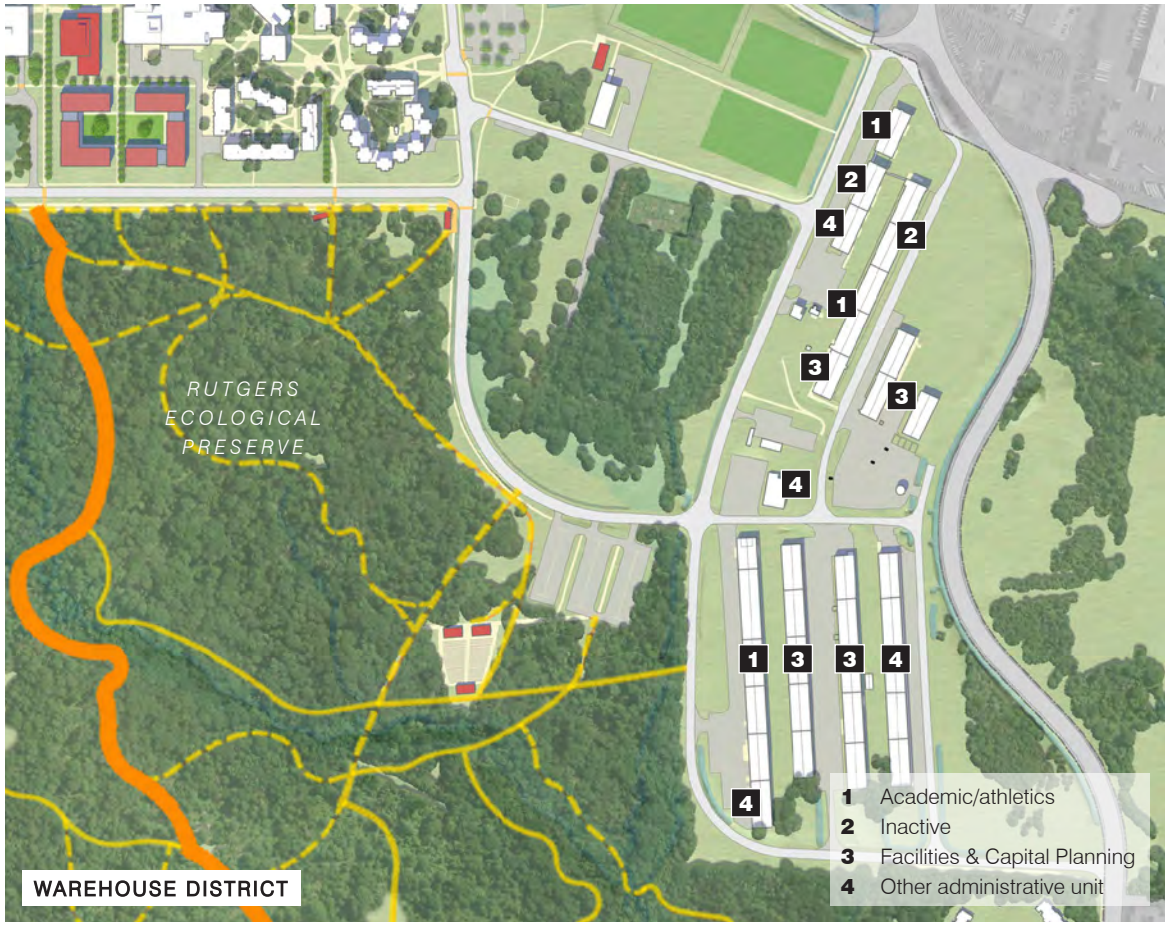
On Livingston, the research park will accommodate in the range of 1.2 million gsf and 3,000 parking spaces. An additional phase of development on the Busch campus adds 400,000 gsf to the research park, anchoring the district between the two campuses on either side of the Busch-Livingston Bridge.

The research district is planned for incremental and flexible implementation over several decades, during which surface parking would be built until the development can support each garage. The development area includes an underground steam line between Busch and Livingston, and buildings in its vicinity have been sited to avoid conflicts with it.

ATHLETICS COMPLEX – the existing athletics complex west of the RAC is reimagined over time, as facilities need to be replaced or improved. The proposed plan is intended to provide optimal orientation for the fields, and create a cohesive complex of athletics venues, with pedestrian improvements and new landscape amenities intended to enhance the



HOTEL/CONFERENCE CENTER + RESEARCH DISTRICT



visitor experience. A detailed list of proposed projects is described in Chapter 4.6.

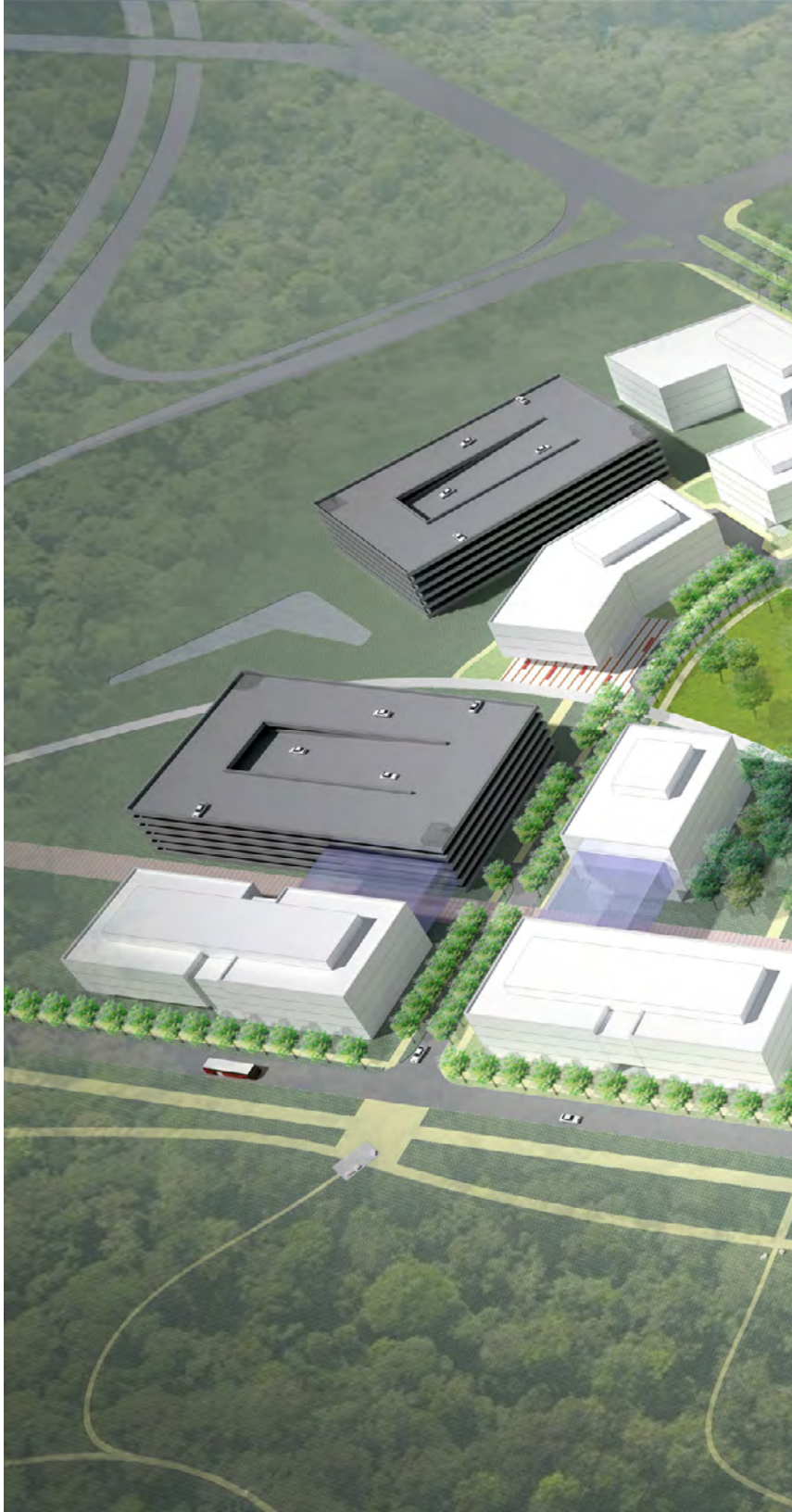
MIXED USE VILLAGE – the area north of the Livingston Apartments is reserved in the master plan for the potential development of a mixed use village featuring market rate housing and other amenities. This proposal was included in the 2003 Physical Master Plan, and is reintroduced in Rutgers 2030 as a strategy to enhance the vibrancy of the Livingston district and as a way to establish a stronger retail presence. Retail in the "village" would supplement the retail at the Livingston Apartments. The sites identified in Rutgers 2030 will support approximately 350-400 living units, assuming development similar to the Livingston Apartments. Surface parking for residents is provided north of the buildings.

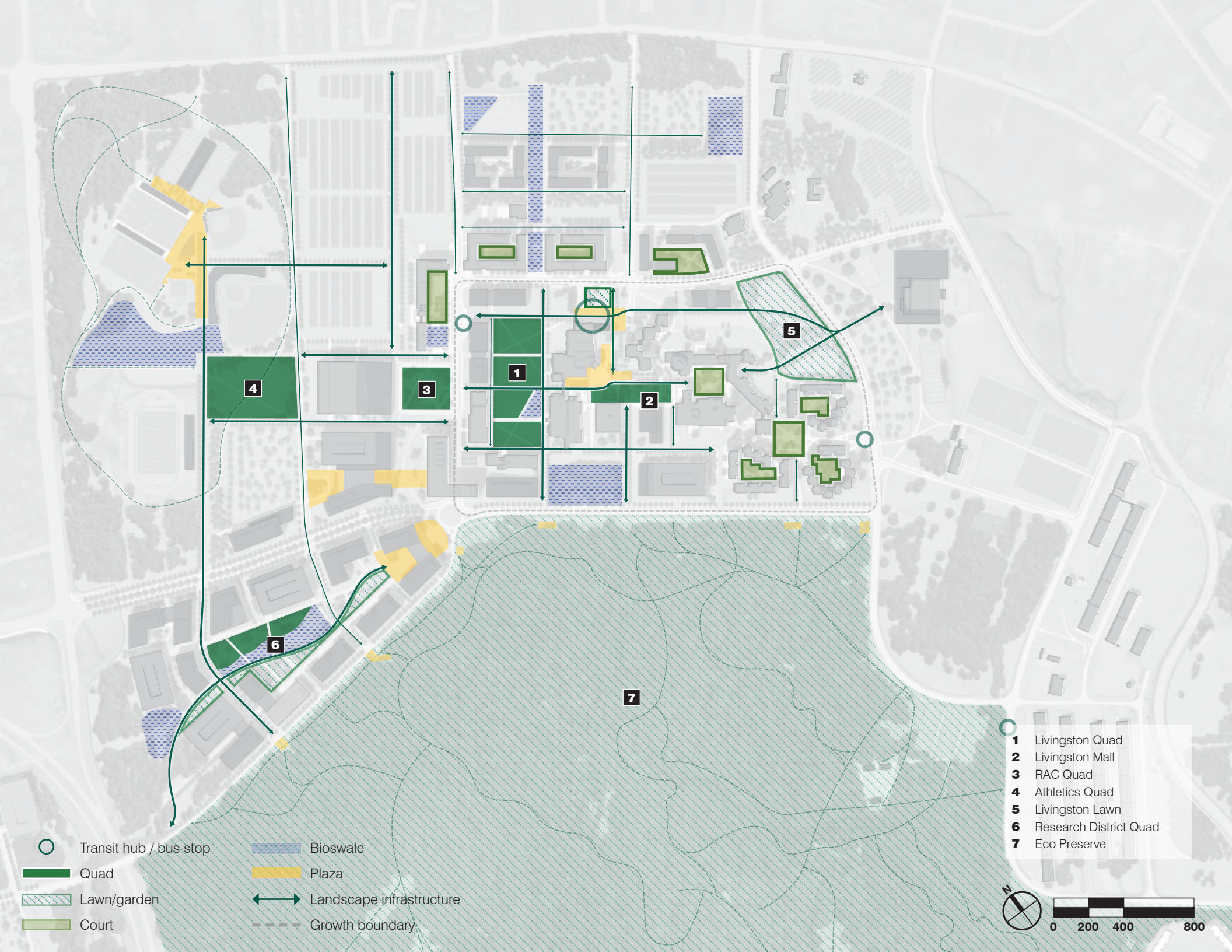
WAREHOUSE DISTRICT – the former Camp Kilmer facilities are maintained in the Master Plan for use by University Administration. A handful of warehouses are used for storage by dining services, housing, and academic departments. These spaces may be available as swing space for offices, shops, or storage.

BUSCH-LIVINGSTON RESEARCH DISTRICT

A new research district is proposed at the Avenue E entrance to Livingston. The district is proposed on a triangular parcel of land defined by Avenue E on the north and on the south by a new road linking the Avenue E/Rockefellar Road roundabout to the proposed Busch-Livingston Bridge. The research district also extends across the bridge into Busch, with additional development anchoring the west end of the bridge. The district is envisioned as the location for private sector businesses and other organizations who may want to locate in close proximity to the academic and research activities of the University, while the bridge provides access to both research district users and the Rutgers community.

Existing view of research district parcel looking southwest from the new Business Building




1
2
3
4
5
6
7
Transit hub / bus stop
Quad
Lawn/garden
Court
Bioswale
Plaza
Landscape infrastructure
Growth boundary
1 Livingston Quad
2 Livingston Mall
3 RAC Quad
4 Athletics Quad
5 Livingston Lawn
6 Research District Quad
7 Eco Preserve
N
0
200
400
800

4.4.3 OPEN SPACE AND NATURAL SYSTEMS FRAMEWORK

The open space and natural systems framework for Livingston acknowledges and maintains the underlying factors of the land: topography, streams and wetlands. The existing pattern of vegetation and wooded areas informs the proposed framework; wherever possible, these assets are preserved and enhanced as part of the broader stormwater and landscape strategy for the campus. The Eco Preserve is embraced as an important ecological environment, teaching resource, and recreational area for the broader Rutgers community.

CONNECTIVITY THROUGH LANDSCAPE

Landscape is used as a strategy to reinforce pedestrian connections all of the New Brunswick districts, especially at Livingston. While Livingston core is compact, it lacks sufficient connections to its peripheries. The result is that destinations like Bainton Field, the Recreation Center, and even the RAC appear to be far away, when in reality they are no more than a ten minute walk from the campus core. The Rutgers 2030 plan proposes a pedestrian framework that is bounded by sequences of buildings and open spaces that shortens the psychological distance to Livingston's athletic and recreational destinations. The framework provides a sense of scale on the campus that is oriented towards pedestrians, rather than vehicles.

The pedestrian framework also establishes better connections to the Eco Preserve. Currently, entrances to the Eco Preserve are uninviting and difficult to discern along the forest edge. The master plan proposes to create a permeable edge that invites visitors into the trail network within, while maintaining the character and intent of the preserve. The existing network is augmented by additional trails that traverse the entirety of the Eco Preserve, with two clearings at high points that can be used as gathering spaces. An amphitheater on the eastern side of the Eco Preserve, adjacent to Buell Brook, creates an additional event space, for use by the University and local community. The master plan also includes a potential bridge connection across River Road into Johnson Park, and to the bridge across the Raritan to College Avenue.

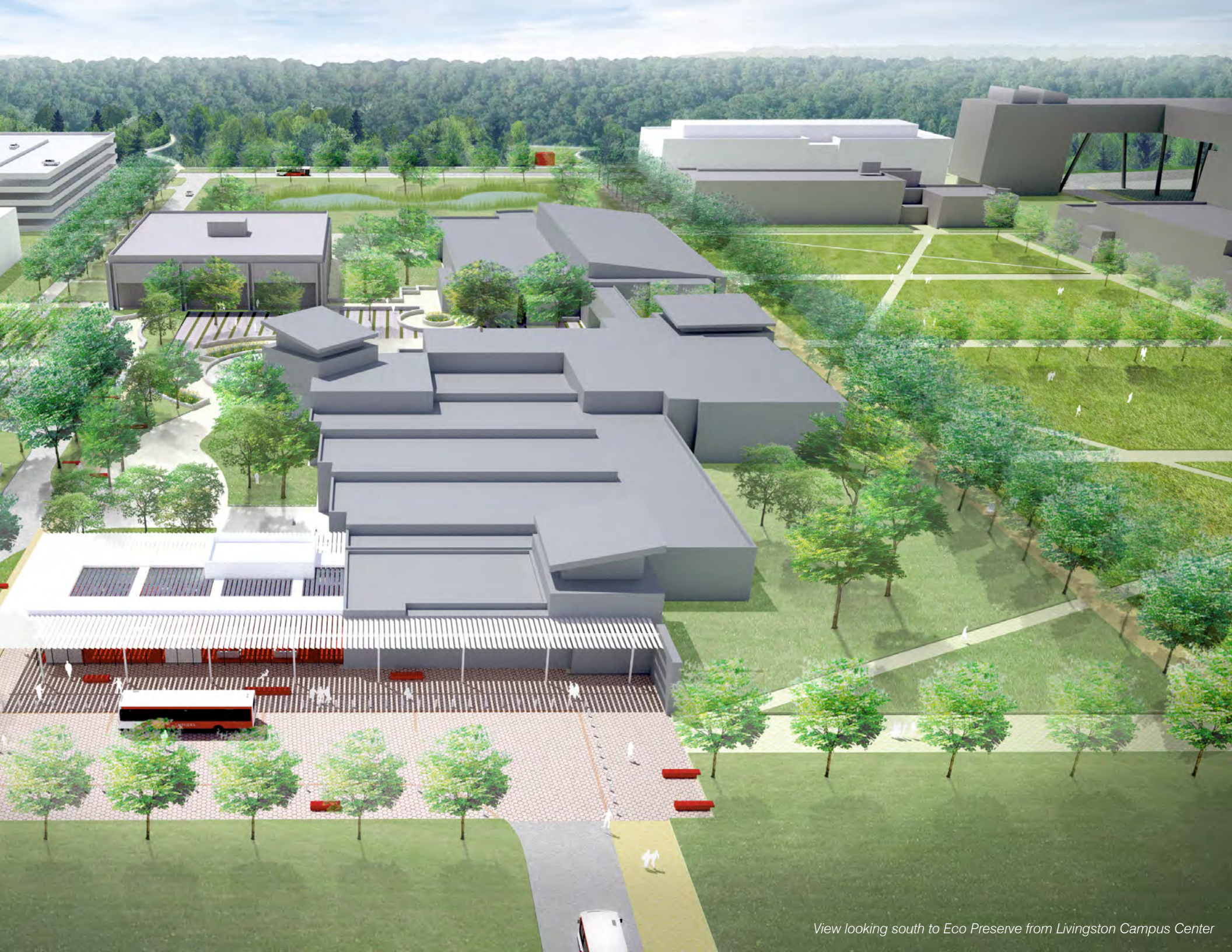
LANDSCAPE INFRASTRUCTURE

The master plan expands Livingston's initiatives with stormwater management. Potential runoff from new development is offset by extension of the bioswale system adjacent to the Livingston Apartments. Trees are added strategically to the larger open spaces. Improving the ability to handle stormwater.

CONNECTION TO THE ECOLOGICAL PRESERVE

The Rutgers Ecological Preserve (Eco Preserve) is currently underutilized. The master plan proposes to make the Eco Preserve legible and accessible from Livingston, through a series of gateways, including signage, open-air pavilions, plazas, and shaded seating. A new trail system is also proposed, linked to two new clearings and an amphitheater for programming and events.

Existing view of an entrance to the Ecological Preserve



View looking south to Eco Preserve from Livingston Campus Center

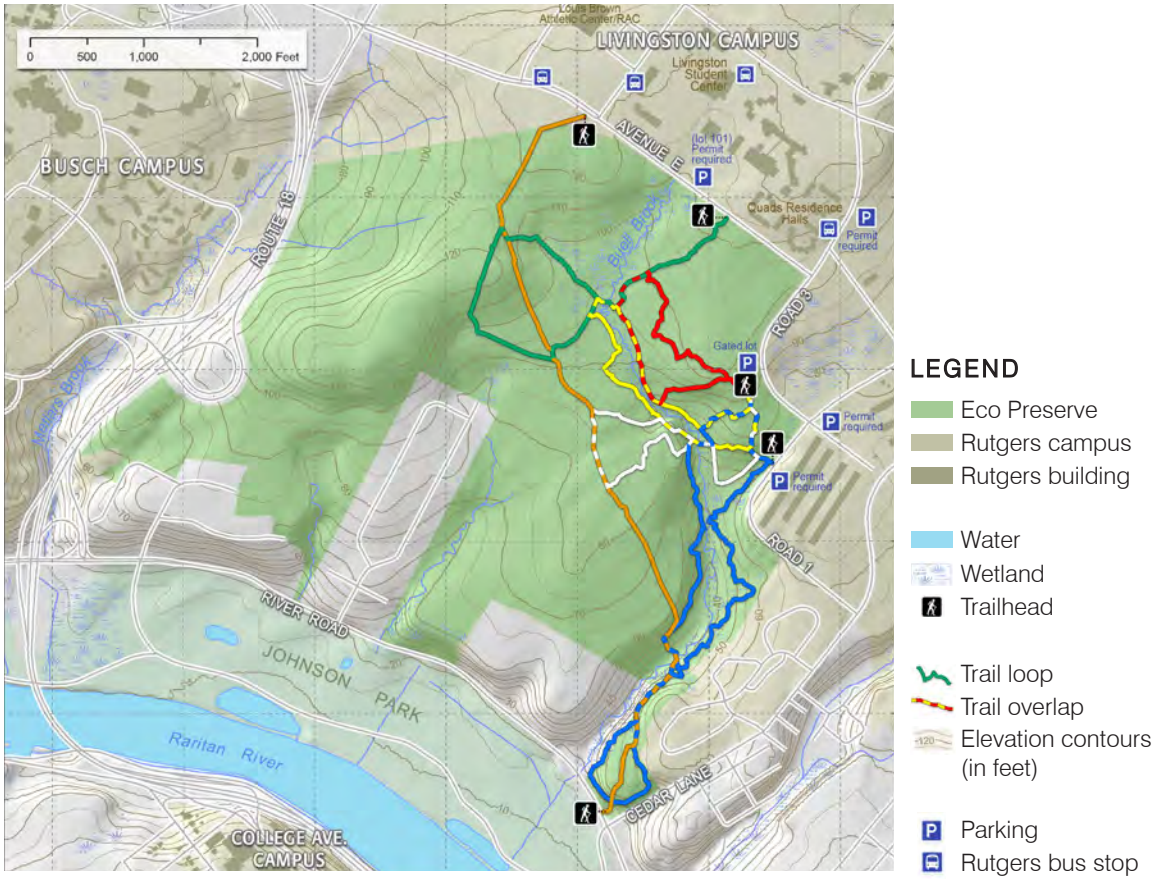
Buell Brook in the Ecological Preserve

Rutgers Ecological Preserve

Formerly owned by the members of the Johnson and Johnson family, the Rutgers Ecological Preserve was created in 1976 by the Rutgers Board of Governors, and encompasses 316 acres of upland forest, woodlands, wetlands, and meadows. The Board of Governors intended to preserve the land's natural ecology, and use it as an outdoor teaching resource.

TOPOGRAPHY + HYDROLOGY

The Eco Preserve's topography is closely linked to its hydrology. The eastern side is relatively flat, with the exception of the increasing slope of the Buell Brook stream corridor. The western half rises to a higher elevation, with a high point at a 125' elevation above the river. Smaller valleys are located along two unnamed streams that run within the preserve, adjacent to the Ross Hall development. The southern edge of the Eco Preserve is defined by the Raritan River's flooplain, with steep slopes abating only at the preserve's southeastern corner. Water from the Eco Preserve's streams flows into the Raritan River; the streams have been impacted by increased infiltration due to Route 18 and development at Livingston.



Existing trail network and topography in the Eco Preserve


ATHLETICS COMPLEX
LIVINGSTON CAMPUS CORE
RECREATION CENTER + FIELDS
OUTDOOR RECREATION
RESEARCH DISTRICT
KILMER WOODS
P
4
2
1
3
3
BUSCH CAMPUS
BUELL BROOK
TREETOPS
ROSS HALL
FOREST GLEN
PARKER AT STONEGATE
HILLCREST
JOHNSON PARK
CONNECTION TO COLLEGE AVENUE
Eco Preserve gateway
1 Existing trail network
2 Proposed trail network
3 Clearing/gathering space
4 Amphitheater
N
0 200 400 800

EXISTING HABITAT

Originally used for agriculture in the 1700s and the early 1800s, the Eco Preserve has since been reforested. The Kilmer Woods, bounded by Buell Brook to the south and Avenue E to the north, is the preserve's largest concentration of old-growth trees; it was reforested in the mid 1800s with oak, beech, maple, and hickory trees. Traces of the Eco Preserve's prior agricultural use are still present, in the pin oak, maple, and cherry trees that formed hedgerows between fields.

The Kilmer Woods attract multiple species of warblers and other birds. A primary concern with the Eco Preserve is the encroachment of invasive species; in particular, the preserve has been degraded by the large population of deer. The University has established a Deer Management Plan in 2012.

RECREATIONAL USE

The master plan seeks to improve access to the Eco Preserve, both for recreation and research. The visibility of the preserve will be increased through a creation of new entrances and gateways.

The gateways will create a permeable edge to the preserve and improve wayfinding to and within the preserve.

A major gateway at the corner of Avenue E and Road 3 connects the Eco Preserve to the Recreation Center, and is also in proximity to the new Outdoor Recreation equipment facility. Two gateways are included at the southern edge of the Preserve.

Inside the Eco Preserve, the existing trail network will be augmented by a new trails. On the eastern side of the preserve, two trails generally follow the path of Buell Brook. Two clearings, at the preserve's two high points, will provide views, as well as programmable space. An amphitheater is proposed at the eastern edge of the Eco Preserve. The amphitheater is envisioned being fully integrated into the landscape, similar to the amphiteater at Swarthmore College.

EDUCATION + RESEARCH

Establishing the Eco Preserve as a center for research will integrate it into the University's core missions. The Eco Preserve is a particularly unique resource

Entrance to Bristler's Hill at Walden Woods in Concord, Massachusetts

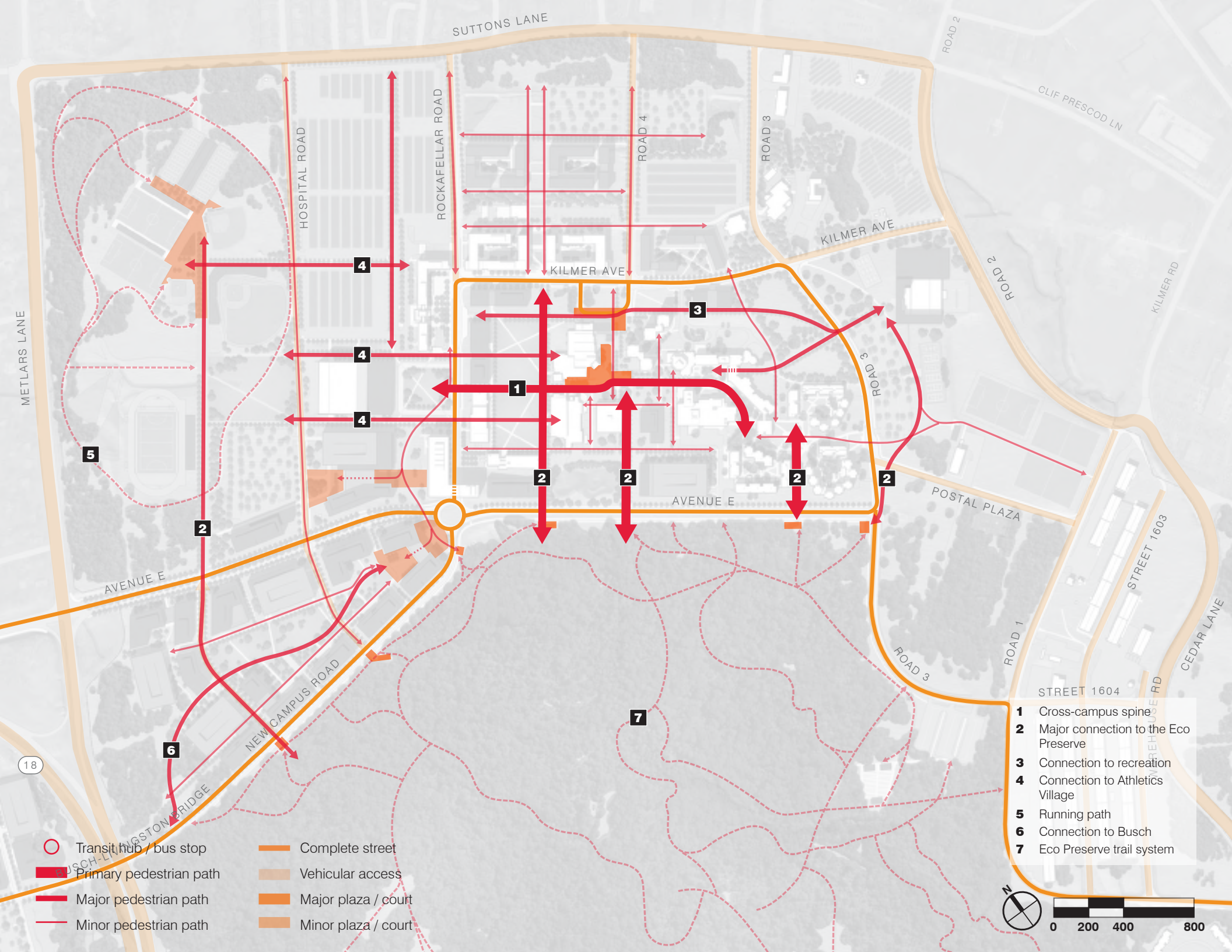
Amphitheater in the Scott Arboretum at Swarthmore College

to the University as a resource for research, given its accessible location on campus. A plan identifying strategies in these areas was developed in 2012 by the Rutgers Ecological Preserve Task Force. The plan emphasized the untapped potential of the Preserve for academic use as an outdoor laboratory, including academic courses, research, community outreach, and public education.

The Eco Preserve already sees some academic use, including research by the Center for Remote Sensing and Spatial Analysis (CRSSA), as well as through lab assignments in introductory classes, including General Biology 102. Rutgers' ROTC program also uses the Eco Preserve in its land navigation and survival training. The Task Force recommended the creation and maintenance of a database for the Eco Preserve, including GIS mapping and other data related to natural resource monitoring.

Research activities are related to the effort to restore the Eco Preserve's natural habitat. Restoration strategies related to the stream network, meadows, and wetlands were proposed by the RUEP Task Force, and would help manage stormwater flows in addition to the long-term management of invasive species. The master plan recommends further discussion within the University and with community stakeholders and development of a natural resource management plan.

Research activities in the Eco Preserve


SUTTONS LANE
ROAD 2
CLIF PRESCOD LN
HOSPITAL ROAD
ROCKAFELLAR ROAD
ROAD 4
ROAD 3
KILMER AVE
KILMER AVE
ROAD 2
KILMER RD
METLARS LANE
ROAD 3
AVENUE E
AVENUE E
POSTAL PLAZA
STREET 1603
ROAD 1
ROAD 3
CEDAR LANE
STREET 1604
NEW CAMPUS ROAD
BUSCH-LIVINGSTON BRIDGE
18
1 Cross-campus spine
2 Major connection to the Eco Preserve
3 Connection to recreation
4 Connection to Athletics Village
5 Running path
6 Connection to Busch
7 Eco Preserve trail system
Transit hub / bus stop
Primary pedestrian path
Major pedestrian path
Minor pedestrian path
Complete street
Vehicular access
Major plaza / court
Minor plaza / court
N
0
200
400
800

4.4.1 MOBILITY FRAMEWORK

At Livingston, the master plan is focused on expanding pedestrian and bicycle access to the campus. The plan proposes to improve access not only to the campus core, but also to campus resources like the Eco Preserve, athletics complex and recreation facilities. The plan reinforces the existing transit hub at the Livingston Student Center, with both improved access and more extensive connections to the rest of campus.

PEDESTRIAN NETWORK

Within the established core of the Livingston campus, two major north-south pedestrian corridors are proposed to improve circulation. Pedestrians have not always been prioritized at Livingston, although the Livingston Apartments have begun to transform the campus. The master plan seeks to extend this model.

Pedestrian Corridors – The master plan proposes a system of direct connections to the Eco Preserve, athletics village, and recreation facilities. These new corridors include:

- a route west of the Campus Center, linking Joyce Kilmer Avenue to Avenue E;
- a route east of the library, linking the transit hub to the Eco Preserve via a reimagined combined pedestrian-service pathway;
- a route connecting the quads to the Eco Preserve.

Enhanced east-west routes are proposed to link the quads to Rutgers Business School and the athletics village, and to link the campus core to the Recreation Center.

BICYCLE NETWORK

Bicycle access is improved throughout the campus, with dedicated bike lanes introduced into the roads around the campus core. Easier access to Busch will be available in the long term with the construction of the Busch-Livingston Bridge. This new link, which represents a safer bicycle route between the two campuses, may also attract more students to biking between Busch and Livingston, diverting them from Rutgers buses.

VEHICULAR NETWORK

The master plan reinforces the existing street network at Livingston. New development in the mixed use district follows the grid set up by the Livingston Apartments, while Berrue Circle is closed to traffic in order to rationalize the street network on the northeast side of campus. The new road connects the proposed Busch-Livingston Bridge to the campus core through the roundabout, thus preserving the corner of Avenue E and Rockefellar Road as the primary vehicular gateway into Livingston. The roads circumscribing the campus core are widened where necessary to create a complete street.

Busch-Livingston Bridge – a new bridge is proposed to connect Busch and Livingston. The new bridge is intended to provide more direct pedestrian, bicycle and bus connections between the campuses. The bridge will provide easier access to Livingston, potentially attracting more students, faculty, and staff to the Eco Preserve and other campus amenities.

TRANSIT

Livingston currently has a highly active transit hub at the Livingston Student Center. The master plan proposes to supplement this hub by creating a new addition to the east side of the student center. The addition creates additional space for the convenience store, and a more generous entrance to the building, where a waiting area for the bus will be located. Pedestrian routes from the bus stop will connect to the classroom hub at Tillett Hall and Lucy Stone Hall.

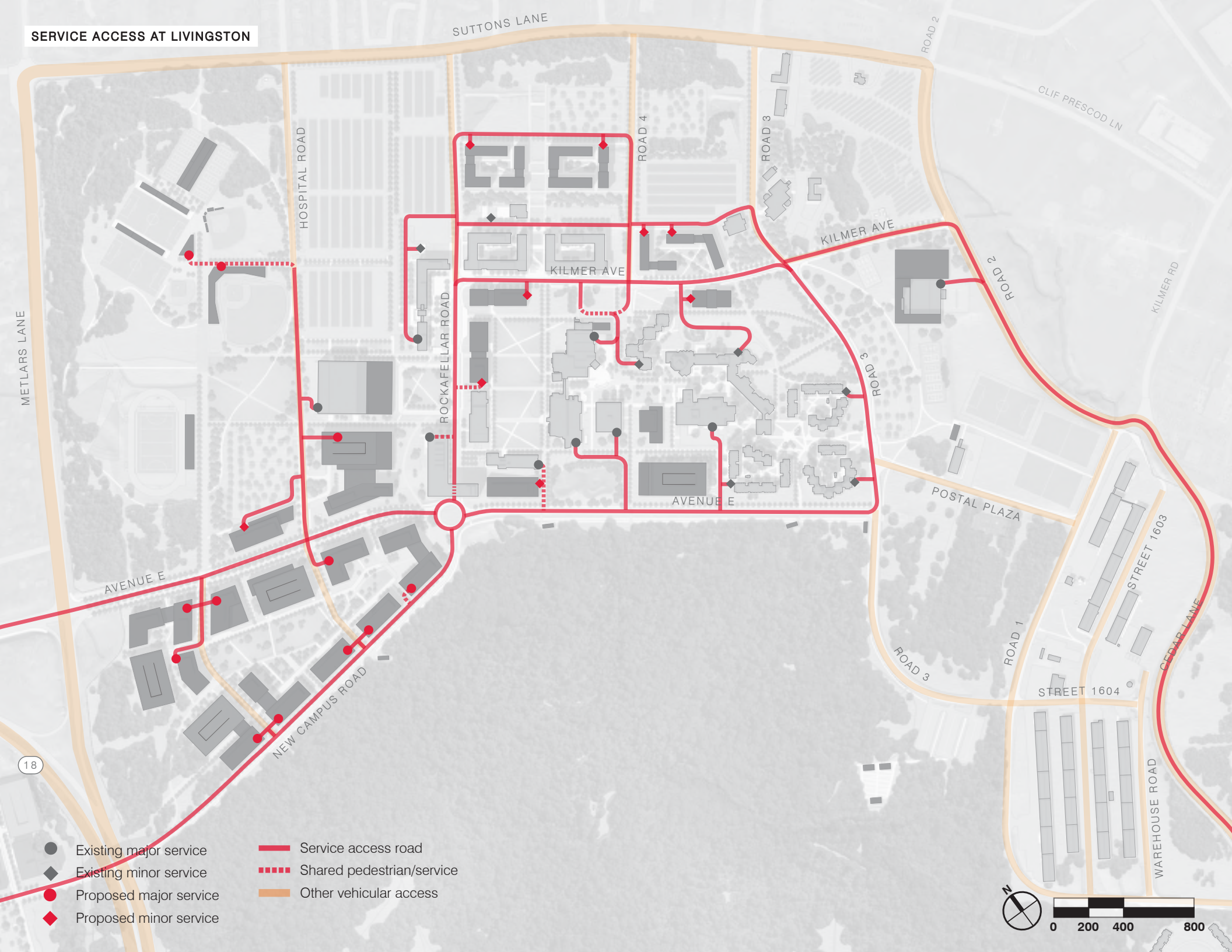
PARKING

Changes in parking will be implemented incrementally as needs change, and demand increases from continued development. Land that will eventually be developed could be used temporarily for other uses, including parking. For example, the land at the future mixed use district could be used as surface parking in the interim. Similarly, the solar panels at the Yellow and Green Lots and Lot 105 have an anticipated working life of about 25 years. While this sustainability-minded model has been very successful, new technologies are likely to be available in the long term.

A new deck is proposed on the site of Lot 101; the demand for this garage will be determined by the pace of academic and residential growth. The research district and the hotel and conference center will have local parking requirement and have been planned with appropriately sized garages.

SERVICE ACCESS

Service access is currently needed for food service operations; in the future, it will also be needed for the research district, hotel, and athletics village. Minor service access includes activities like trash and recycling pickup. The master plan seeks to separate service access from pedestrians and remove service yards from major roads. The pedestrian-service conflict at the Student Center is improved by the separation of service access and the pedestrian path.


SERVICE ACCESS AT LIVINGSTON
SUTTONS LANE
ROAD 2
CLIF PRESCOD LN
HOSPITAL ROAD
ROAD 4
ROAD 3
KILMER AVE
KILMER AVE
ROAD 2
KILMER RD
METLARS LANE
ROCKAFELLAR ROAD
ROAD 3
AVENUE E
POSTAL PLAZA
STREET 1603
AVENUE E
ROAD 1
ROAD 3
CEDAR LANE
STREET 1604
NEW CAMPUS ROAD
WAREHOUSE ROAD
18
Existing major service
Existing minor service
Proposed major service
Proposed minor service
Service access road
Shared pedestrian/service
Other vehicular access
N
0
200
400
800

LIVINGSTON STUDENT CENTER TRANSIT HUB

The master plan proposes enhancing the existing transit hub at the Livingston Student Center. An addition to the student center will house the existing c-store, allowing the entrance to be expanded and combined with the transit hub waiting space. Flows of pedestrian and vehicular traffic are improved. Walkways are separated and screened from service yards.

Existing view of Livingston Student Center pedestrian access and service area


SUTTONS LANE
ROAD 2
CLIF PRESCOD LN
HOSPITAL ROAD
P1
ROAD 3
ROAD 4
P5
KILMER AVE
ROAD 2
KILMER RD
METLARS LANE
P2
ROCKAFELLAR ROAD
P6
POSTAL PLAZA
P3
P4
AVENUE E
KILMER WOODS
ROAD 1
STREET 1603
CEDAR LANE
STREET 1604
WAREHOUSE ROAD
N
0
200
400
800

LIVINGSTON CAMPUS TODAY

- Existing Building
- Projects Under Construction or in Design

- # Buildings
- # Major Parking Lots
- # Athletics, Recreation +Open Space

BUILDINGS

1. Louis Brown Athletic Center (RAC)
2. Rutgers Business School Building
3. Livingston Apartments
4. Rutgers Business School Annex
5. Janice H. Levin Building
6. Beck Hall
7. Livingston Student Center
8. Livingston Dining Commons
9. Kilmer Library
10. Lynton Towers
11. Livingston Classroom Building
12. Former Livingston Bookstore
13. Lucy Stone Hall
14. Tillett Hall
15. Quad I Residence Hall
16. Quad II Residence Hall
17. Quad III Residence Hall
18. Livingston Day Care & Asian Amer.Cultural Center
19. 44 Road 3 Building
20. MGSA Visual Arts Building
21. ITV Studio
22. Facilities Operations Services
23. Housing Grounds Operation
24. Rutgers Computer Repair
25. Livingston Solar Farm
26. Livingston Recreation Center
27. Surplus & Material Services
28. Environmental Health & Safety
29. Livingston Art Studios
30. Facilities Grounds, Utilities Shops
31. RUNet Field Offices
32. Academic storage
33. Facilities & Capital Planning, Storage
34. Facilities & Capital Planning
35. Administration & Public Safety

MAJOR PARKING LOTS

1. Yellow Lot
2. Green Lot
3. Scarlet Lot
4. Lot 101
5. Lot 105
6. Lot 103

ATHLETICS, RECREATION + OPEN SPACE

1. Multi-purpose fields
2. Softball complex
3. Bainton Field
4. Bauer Track & Field/Field Hockey Complex
5. Rutgers Ecological Preserve
6. Outdoor basketball courts
7. Outdoor tennis courts
8. Grass track and multi-purpose fields


SUTTONS LANE
ROAD 2
CLIF PRESCOD LN
KILMER RD
METLARS LANE
HOSPITAL ROAD
ROCKAFELLAR ROAD
ROAD 4
ROAD 3
KILMER AVE
ROAD 2
POSTAL PLAZA
AVENUE E
STREET 1603
ROAD 1
CEDAR LANE
STREET 1604
WAREHOUSE ROAD
NEW CAMPUS ROAD
0
200
400
800

LIVINGSTON CAMPUS 2030

- Existing Building
- Projects Under Construction or in Design
- Proposed Buildings

- A Projects Under Construction or in Design
- # New Construction + Renovation
- # Infrastructure + Parking
- # Landscape + Stormwater

New Construction + Renovation

1. Livingston Student Center Pavilion + Hub
2. New Academic Building
3. High tech Classroom Building
4. Livingston Recreation Center addition
5. Recreation Fieldhouse
6. RAC expansion
7. Undergraduate housing
8. Multi-Use Facility and Integrated Parking
9. Hotel and Conference Center
10. Baseball and Softball Training Facility
11. Future Market Rate Housing
12. Research Park Phase 1
13. Research Park Phase 2
14. Research Park Phase 3

Infrastructure + Parking

1. Berrue Circle closure (no through traffic)
2. New Campus Road
3. Busch-Livingston Bridge
4. Livingston Student Center bus stop realignment

P Parking Lot (new or restriped)

Landscape + Stormwater

1. Livingston Mall
2. Ecological Preserve gateway + trails
3. Ecological Preserve Amphitheater
4. Multi-Purpose Fields
5. Picnic area
6. North Lawn
7. RAC Quad
8. Scarlet Knight Quad
9. Scarlet Knight Park
10. Scarlet Knight Park Pedestrian Axis
11. Stormwater detention
12. Research Park Quad

BUSCH-LIVINGSTON TODAY

4.5 RUTGERS BIOMEDICAL AND HEALTH SCIENCES (RBHS)

4.5 Rutgers Biomedical and Health Sciences (RBHS)

The 2012 New Jersey Medical and Health Sciences Education Restructuring Act established Rutgers Biomedical and Health Services (RBHS) in July 2013 as the health care education, biomedical research, and clinical division of Rutgers University, comprising most of the former University of Medicine and Dentistry of New Jersey (UMDNJ) and several existing Rutgers units with health-related missions. The integration resulted in eight schools, four centers and institutes and a behavioral health care network, spread across several locations, at Rutgers University – New Brunswick, Rutgers Health Sciences at Newark, Scotch Plains, Stratford, Rutgers University - Newark, Rutgers University - Camden, and at additional locations throughout New Jersey. RBHS is most closely aligned with Rutgers University – New Brunswick and is described in detail here in this section within Volume 1 of the Rutgers Physical Master Plan for Rutgers University – New Brunswick.

In 2014, upon completion of the Rutgers University-wide Strategic Plan, RBHS spent several months developing its own strategic plan, resulting in its release October 2014. The RBHS Strategic Plan sets out its mission and vision for the near term future, building on the University-wide strategic plan. The plan's mission is as follows:

RBHS aspires to be recognized as one of the best academic health centers in the US, known for its education, research, clinical care, and commitment to improving access to healthcare and reducing healthcare disparities.

The strategic plan is closely tied to changes in health care triggered by the Affordable Care Act, which has put an increased focus on preventive care and population health. The plan identifies signature programs built upon current programs of strength, where the primary focus of research investment will occur over the next five years:

- Cancer
- Environmental and Occupational Health
- Infection and Inflammation
- Neuroscience
- Community Health and Health Systems

Complementary programs, Educational and Clinical Initiatives, and other community service activities are also identified.

Beyond the Rutgers campus, the strategic plan notes the potential impact of RBHS activities on regional and statewide health care. As part of an initiative to increase RBHS' regional impact, the strategic plan sets out the goal of working with the Office of the Governor and state legislators to develop incentives to attract RBHS students to stay in New Jersey after graduation.

The master plan for RBHS is organized geographically to address RBHS space in Rutgers University – New Brunswick, in Rutgers Health Sciences - Newark, and in Rutgers University - Newark and described in detail here in this section.

4.5.1 RBHS Vision and Principles

Rutgers 2030 developed simultaneously with the RBHS strategic plan in the Fall of 2014. Rutgers 2030 takes into consideration existing RBHS space on the Rutgers University – New Brunswick and Rutgers University - Newark campuses, and the former UMDNJ campus in Newark. The master plan identifies the following principles and goals for RBHS:

- **Provide spaces that support the goals of the RBHS strategic plan -** while specific space needs are being discussed, Rutgers 2030 proposes zones of development for addressing RBHS's priorities and the replacement of aging facilities over time in order to address the state of its facilities. As identified in the RBHS Strategic Plan, overall space utilization across RBHS will be evaluated during the first year of the strategic plan and inform decisions on space needs. Housing for RBHS students is taken into consideration in this plan as part of a vision to transform student housing at Rutgers.

- **Strengthen physical connections to RBHS -** As the integration of RBHS brings about the potential reorganization of academic units in biomedical and basic science units across Rutgers and RBHS, Rutgers 2030 proposes to strengthen physical connections to and from RBHS facilities in order to enhance opportunities for inter-disciplianary collaboration. This is especially true at Busch - pedestrian and vehicular connections are improved between RBHS facilities, and also between RBHS and non-RBHS facilities. Initiatives range from landscape and streetscape improvements to provision for convenient and adequate parking to support RBHS needs. Additional study for current and future space needs will be necessary to determine efficient use and sharing of space.

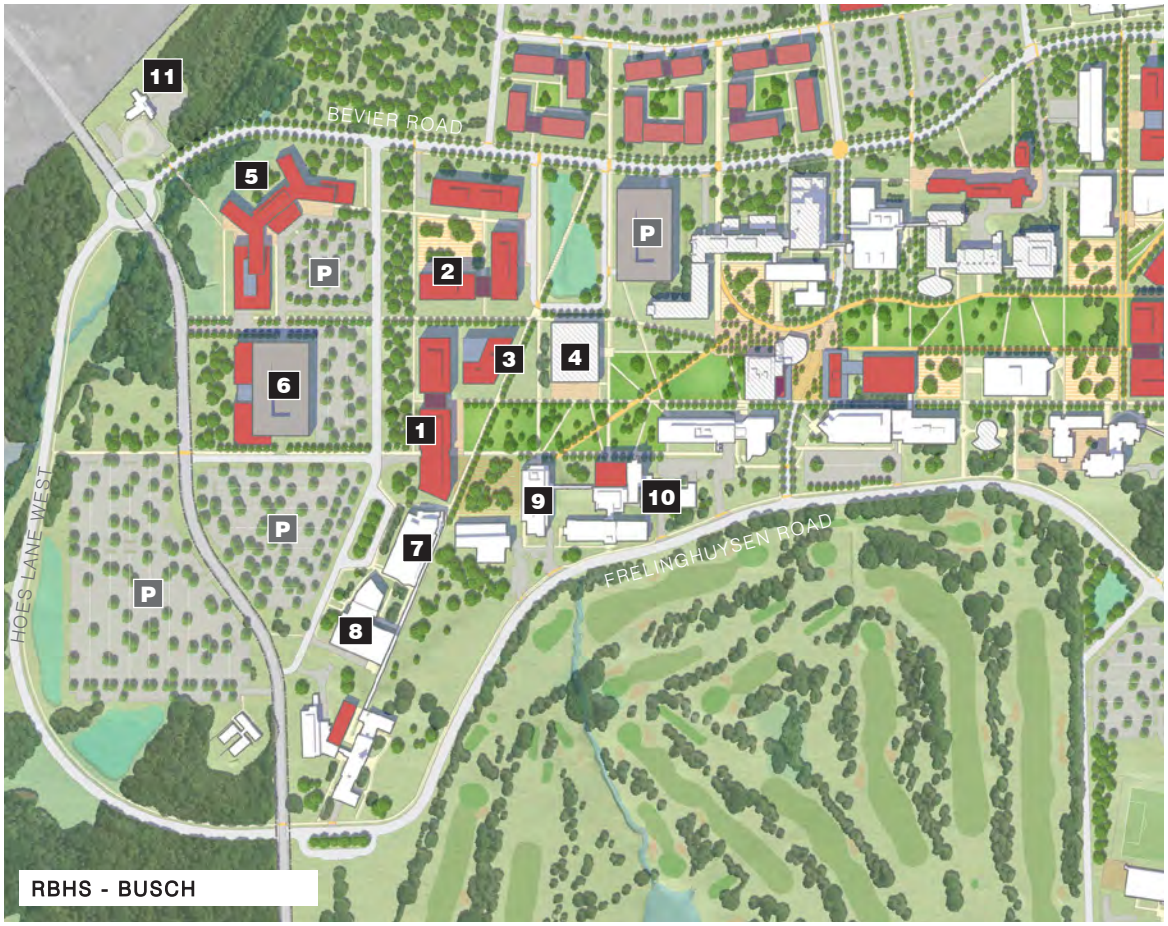
- **Strengthen collaboration among RBHS departments** - Rutgers 2030 proposes to provide cohesive campus environments for RBHS space, even as the eight Schools of RBHS remain unique in their cultures and programmatic elements. Common spaces are proposed to be centrally located among RBHS facilities, for example, at Busch.

The master plan proposes a flexible planning framework for RBHS, identifying future development parcels that accommodate current and future needs. Due to the technical nature of biomedical education and clinical facilities, including accreditation requirements, a detailed study of RBHS space is needed to fully assess space needs.

- Existing Building
- Projects Under Construction or in Design
- Proposed Buildings

BUILDINGS

1. New research complex and School of Public Health expansion
2. New teaching laboratories and classrooms
3. RBHS Commons
4. Library of Science and Medicine (LSM)
5. University Behavioral Healthcare Center (UBHC)
6. Ambulatory Care Center and Parking Garage
7. Center for Advanced Biotechnology and Medicine (CABM)
8. RWJMS Research Tower II, School of Public Health Building
9. Environmental and Occupational Health Sciences Institute (EOHSI)
10. School of Pharmacy and expansion
11. Children's Transitional Residence



4.5.2 New Brunswick Framework

RBHS is integrated into the Rutgers University – New Brunswick campus primarily at Busch and College Avenue, comprising 6.5 million square feet, not including space at the Robert Wood Johnson University Hospital which is an independent institution closely affiliated with RBHS. For RBHS programs at New Brunswick, Undergraduate, Graduate, Doctoral and Certificate programs are primarily located at Busch, while Graduate Medical Education is primarily located at College Avenue.

Originally established in Newark, the oldest pharmacy school in New Jersey, the Ernest Mario School of Pharmacy (EMSOP) is now housed primarily at Busch. Busch is also home to the Center for Advanced Biotechnology and Medicine (CABM), the Environmental and Occupational Health Sciences Institute (EOHSI), University Behavioral Healthcare Center (UBHC), School of Public Health and RWJMS Basic Science.

At College Avenue, RBHS is mostly located along Somerset Street, in a group of buildings clustered around the Robert Wood Johnson University Hospital (RWJUH).

Rutgers 2030 plans for RBHS at the Rutgers University – New Brunswick campus as part of the larger framework of land use, open space and mobility, and integrates RBHS space into the Rutgers University – New Brunswick campus. Proposals for RBHS conform with the planning principles of each district.

RBHS - BUSCH

RBHS space at Busch is clustered at the western edge of the district, bounded by Hoes Lane West to its west, Bevier Road to its north, Allison Road at east, and Frelinghuysen Road at its south. RBHS entities at Busch work closely with nearby engineering and other science departments.

Key components of Rutgers 2030 related to RBHS described in the Busch section are expanded upon here:

RBHS core at Busch

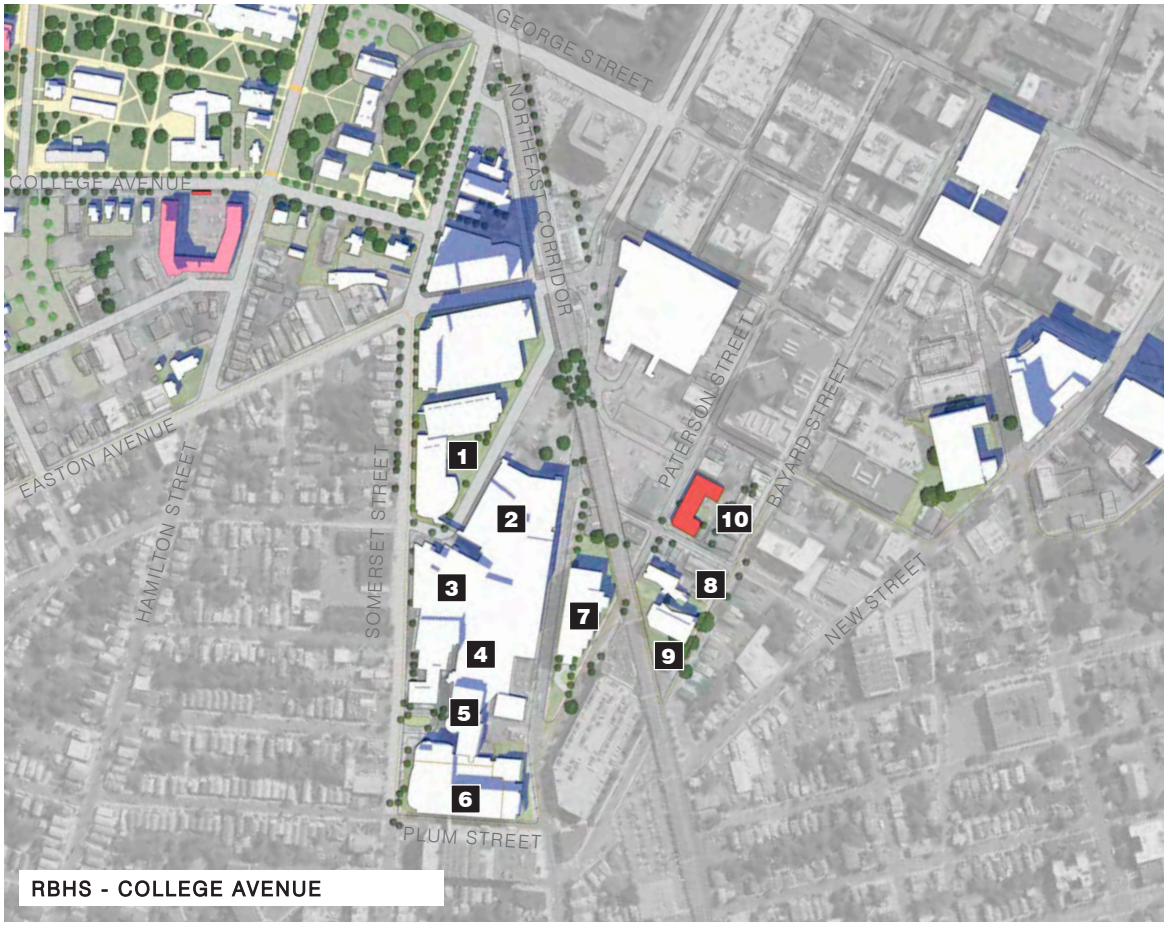
At Busch, the RWJMS Research Tower and Graduate School of Biomedical Sciences anchors the RBHS cluster of buildings. Built in 1966, the Tower has 9 floors and a lower level that connects to the Kessler Teaching Laboratories. Both the research tower and teaching laboratories are outdated and are proposed to be replaced in a reoriented configuration to face west and north. A reorganized, higher density plan for RBHS is proposed, with closer proximity and direct connections to the science and engineering departments. Proposed replacement buildings for teaching laboratories and for new classrooms and located closer to Bevier Road, providing RBHS with a stronger presence along its northern edge. A commons building dedicated to RBHS is located adjacent to the Library of Science and Medicine (LSM), providing collaboration spaces for interdisciplinary activities and possibly other amenities like fitness facilities for the RBHS community. Landscape and streetscape improvements proposed for the Busch campus extend to RBHS to strengthen access to the RBHS core.

The clinical functions of RBHS on Busch are expanded on the western edge of Busch, adjacent to the RBHS core. A replacement hospital for University Behavioral Health Care (UBHC) is provided, to replace the fifty-year old existing facility. A new Ambulatory Care

- Existing Building
- Projects Under Construction or in Design
- Proposed Buildings

BUILDINGS

1. Cancer Institute of New Jersey
2. RWJMS Medical Education Building
3. Robert Wood Johnson University Hospital
4. RWJMS Clinical Research Center
5. Bristol-Myers Squibb Children's Hospital RWJUH
6. Child Health Institute of New Jersey
7. Clinical Academic Building
8. School of Nursing
9. Institute for Health, Healthcare Policy and Aging Research
10. School of Nursing Academic Expansion



RBHS - COLLEGE AVENUE

Center is proposed, to the south of the proposed UBHC, providing an opportunity for outpatient clinical contact and revenues for RBHS on Busch. A new parking deck, allowing for clinical staff, patient, and visitor parking near these facilities is provided as well.

Graduate District

A major initiative for Busch is the reorganization of housing at this district, including increasing graduate housing for new RBHS students. Existing housing directly north of the RBHS district, at the Richardson Apartments, and north of Bevier Road, are outdated and are proposed to be replaced with new graduate housing over time, in a single area with easy access to the academic core of the district. The LSM, is reenvisioned as a graduate commons, with dining, group study space, research commons and library, offering complementary amenities to the proposed RBHS commons.

RBHS quadrangle

The RBHS quadrangle is an extension of the plaza proposed around the Allison Road Classroom building, to connect RBHS with the rest of Busch. It links diagonal walkways from the Center for Advanced Biotechnology & Medicine, the RWJMS Research Tower II and the School of Public Health, and the Waksman Institute, integrating these facilities into the rest of the district in a series of outdoor spaces.

A new gateway and LSM quadrangle

Modifications include a new drop-off from Bevier Road, providing an address for RBHS and allowing visitors to arrive deeper into the heart of RBHS at the intersection of the LSM, the proposed teaching laboratories and research tower.

Loop road and parking

As RBHS expands, the western edge of Busch will be transformed. Hoes Lane West is proposed to arc farther west, and will connect to a loop road system around Busch. A new entry to University Behavioral Health Center (UBHC) and a parking garage are proposed as part of the work to relocate Hoes Lane West. This area will provide for future growth for RBHS and Busch programs.

RBHS - COLLEGE AVENUE

RBHS and the Robert Wood Johnson University Hospital (RWJUH) anchor Somerset Street, starting at the northeast end with the Cancer Institute of New Jersey (CINJ), easily accessible from the New Brunswick Train Station. Adjacent to RWJUH to the west are the Clinical Research Center, the Bristol-Myers Squibb Children's Hospital RWJUH and the Child Health Institute of New Jersey. Three additional buildings front Paterson Street to the south of RWJUH: the Institute for Health, Health Care Policy and Aging Research (IFH), the School of Nursing (SON), and the Clinical Academic Building.

Cancer program (CINJ)

The Rutgers Cancer Institute of New Jersey (CINJ) serves the entire State, as its only National Cancer Institute (NCI)-designated comprehensive cancer center. Initiatives to expand the Cancer program include state-wide enhanced research and patient care, specifically to include the expansion of the cancer program to the Newark campus. Expansion opportunities for facilities at New Brunswick is limited in the immediate vicinity of the existing CINJ building,

and additional studies are being planned to assess space needs and funding sources for supporting this program.

School of Nursing (SON)

The integration with UMDNJ brought with it the integration of the Rutgers College of Nursing programs in Newark and New Brunswick with the Rutgers School of Nursing Newark to form the new Rutgers School of Nursing (SON). The SON is emerging as a key player in the development of the RBHS. Rutgers 2030 identifies a potential development site for academic expansion for the SON along Paterson Street, east of the existing nursing building.

RBHS Housing at College Avenue

With the creation of RBHS as a division of Rutgers, Rutgers 2030 anticipates the need to provide increased services for an expanded RBHS community. At College Avenue, a proposed mixed-use tower at the northern end of College Avenue is ideal for RBHS students, with close access to Route 18, parking at the lowest levels of the building, and housing above. This northern gateway building would connect to the bus rapid transit system, moving north to Busch, and south to downtown New Brunswick and the RWJUH district.

Pedestrian connections

The greening of College Avenue enhances this street as a major pedestrian and bicycle route, allowing for safe and efficient access from College Avenue to the RWJUH district. Proposed missing links to the bicycle network connect to Busch along Route 18 also serves to provide an alternate way for the RBHS community to travel between Busch and College Avenue.

Parking

The increased demand for parking in New Brunswick is proposed to be mitigated in the short term by parking at Livingston, with bus shuttle service to New Brunswick. For the long term, Rutgers 2030 proposes to provide structured parking east of Murray Hall, at Parking lot 16, to serve the southern portion of College Avenue, including RBHS.

4.5.3 Newark Framework

Formerly the Newark location of the University of Medicine and Dentistry of New Jersey, most of UMDNJ's Newark facilities were integrated with Rutgers following the July 2013 merger. Located west of the Rutgers University–Newark (RU–N) campus, between the University Heights and Fairmount neighborhoods, RBHS specializes in biomedical research and education, health related professions, public health, nursing, and dentistry at its Newark location. The integration also combined the separate School of Nursing at UMDNJ and at Rutgers University - Newark, into one organization with both undergraduate and graduate nursing programs. Today, undergraduate nursing education is taught by the SON on the RU–N campus, while graduate nursing education is headquartered at RBHS. RBHS is also affiliated with University Hospital, Newark's major academic hospital, which is adjoined with and amidst RBHS buildings. Future plans may include renovations and reuse of University Hospital for other purposes.

Specific to RBHS in Newark, the master plan framework follows the following principles:

- Complete the quad: intensify academic activity within the block bounded by 12th Avenue, West Market Street, Bergen Street, S Orange Avenue, and Norfolk Street
- Provide a place for students to gather and collaborate, with food service
- Identify sites for future partnerships and research
- Better define the corner of 12th Avenue and Bergen Street
- Improve pedestrian connections from parking to academic, research, and support buildings
- Improve the streetscape to enhance the pedestrian experience and define the campus boundary

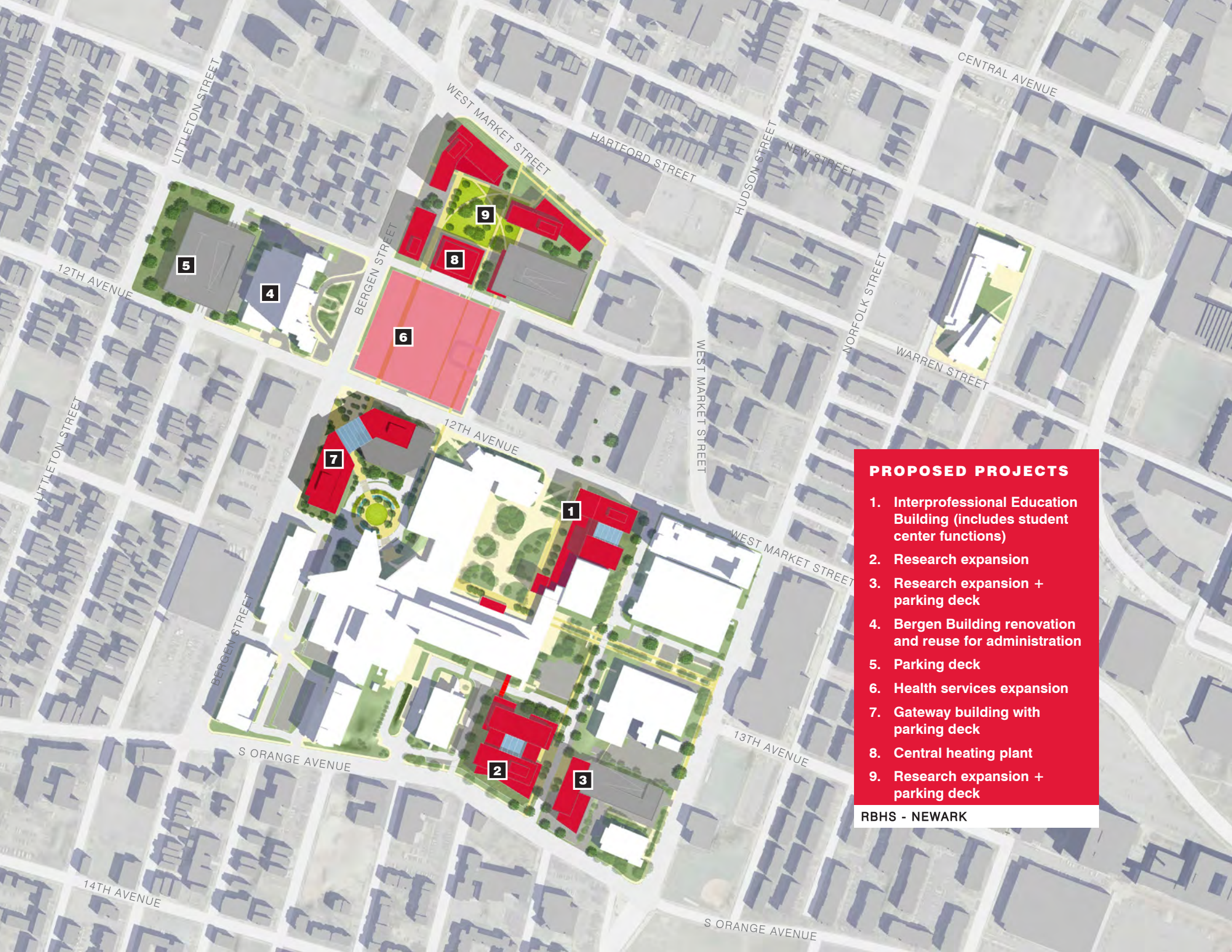
The following summarizes the proposed master plan framework.

PRIORITY NEEDS

A priority of the strategic plan is a new building for interprofessional education, as part of a strategic initiative for more interdisciplinary programs and collaborations that result in improved health outcomes. The simulation center, also identified in the strategic plan to improve the learning environment, will focus on introducing innovative learning environments to the campus. Multiple locations on the campus are available for this facility, and it should be studied in further detail.

Student life needs include a student center, as well as study, dining, and fitness space; the latter types of space are insufficient, while there is no student center. While there is a small gymnasium in the Medical Science Building, it is not sized to accommodate RBHS faculty, staff, and students.

Landscape improvements have been proposed in strategic locations to enhance the pedestrian connections from structured parking to academic buildings. Streetscape improvements have also been proposed, to better define and brand the campus boundary, and enhance the pedestrian realm. While the streetscape is fairly well defined along 12th Avenue, along Bergen Street, South Orange Avenue, and Norfolk Street, the campus boundary is not consistent.



PROPOSED PROJECTS

1. Interprofessional Education Building (includes student center functions)
2. Research expansion
3. Research expansion + parking deck
4. Bergen Building renovation and reuse for administration
5. Parking deck
6. Health services expansion
7. Gateway building with parking deck
8. Central heating plant
9. Research expansion + parking deck

RBHS - NEWARK

LONG TERM DEVELOPMENT

With regards to the long-term development of the campus, the master plan proposes a framework for future expansion and uses. Educational facilities will be concentrated on the quad, while ancillary, support, and partnership research space would be located on existing property adjacent to the quad. The expansion of academic facilities on the quad will enable the reuse of the Bergen Building for administration, opening up the existing administration complex to future development for health care services. Enclosed pedestrian bridges are proposed to link buildings on either side of 12th Avenue, in order to provide convenient and sheltered connections between buildings. The pedestrian bridges will also provide an alternative to the street-level crossing.

Future growth will also necessitate additional parking. Structured parking has been sited to accommodate this demand, in three locations: on the south side of the quad, north of the health services expansion parcel, and to the west of the Bergen Building. This parking will be phased, and the order will depend upon the sequencing of the proposed physical program.

As RBHS raises its profile in its signature research programs, additional research space will be needed; increased research activity may also attract opportunities for research partnerships. Potential sites for these facilities has been located on the south side of the quad, and north of the parcels proposed for health care services expansion.

Additionally, sites for research expansion exist to the east of RBHS, near its International Center for Public Health building, and near the New Jersey Institute of Technology. This area, known as University Heights Science Park, should be considered in future research planning efforts.

4.6 INTERCOLLEGIATE ATHLETICS

High Point Solutions Stadium
IMAGE COURTESY OF BEN SOLOMON, RUTGERS ATHLETICS

4.6 Intercollegiate Athletics

Planning for Rutgers University Intercollegiate Athletics has occurred within the context of its entrance to the Big Ten conference, as well as the broader framework of the Rutgers University physical master plan. Also known as the Scarlet Knights, Rutgers Athletics competes at the NCAA Division I level and became the newest member of the Big Ten Conference in November of 2013. This move to the Big Ten has planning and facility implications. For Rutgers Athletics, the master plan proposes a vision focused on enhanced accommodation of each sport; rationalizing space relationships, adjacencies, and efficiencies; and improving the overall fan experience. The result is a proposed framework that can accommodate changing priorities, funding sources, and phasing.

HISTORY AND TRADITION

Rutgers University is known as the Birthplace of college football, having hosted and won the first ever collegiate football game in 1869, as "the Queensmen" of Queens College. Since then, Queens College has transformed into Rutgers University, and has continued to build an athletic program based in a tradition of excellence in the classroom and in competition. The bell that hangs in the cupola of Old Queens, originally rung to mark the change of classes, has now taken on a more symbolic meaning and is rung only on special occasions – including athletic achievements; the term "the bells must ring" has become a common phrase during home football games. Rutgers team have earned multiple championships, including six recent post-season bowl game victories.

EXISTING RUTGERS ATHLETIC VENUES

Currently, Athletics precincts are adjacent to the district cores at Busch and Livingston. As proposed in Rutgers 2030, Athletics will continue to occupy its current precincts, but will have improved pedestrian, vehicular, and Rutgers bus connections, to better link these areas to the campus. The master plan aims to provide easy vehicular access to competition venues for spectators and visitors from Route 18, as well as better pedestrian access for members of the Rutgers community.

Rutgers Athletics offers 24 men's and women's sports, including:

- Baseball
- Basketball (Men's and Women's)
- Cross Country (Men's and Women's)
- Field Hockey
- Football
- Golf (Men's and Women's)
- Gymnastics
- Lacrosse (Men's and Women's)
- Rowing
- Soccer (Men's and Women's)
- Softball
- Swimming & Diving
- Tennis
- Track and Field (Men's and Women's)
- Volleyball
- Wrestling

Scarlet Knight fans at a Rutgers University football home game
IMAGE COURTESY OF BEN SOLOMON, RUTGERS ATHLETICS

4.6.1 Vision and Principles

Rutgers University has a variety of practice and performance venues that support each program. These facilities are primarily distributed between the Busch and Livingston districts of the Rutgers University–New Brunswick campus, with a small presence on College Avenue. Busch is currently home to High Point Solutions Stadium, the Hale Center, and the Rutgers Golf Course. Busch also hosts competition venues for soccer at Yurcak Field, and tennis at the Tennis Complex east of the stadium. Livingston is home to the Rutgers Athletic Center, the Bauer Track and Field/ Field Hockey Complex, Bainton Field, and the Rutgers Softball Complex.

An initiative of the master plan at both Busch and Livingston is to eliminate overlaps between varsity space and recreational space. Currently, volleyball and wrestling have practice and competition facilities at the College Avenue Gym, while gymnastics has its practice facility at the Livingston Recreation Center. By creating dedicated practice facilities for all varsity teams, previously shared spaces can be available exclusively for recreational users. The master plan aims to improve and enhance athletic facilities both qualitatively and spatially by expanding and reorganizing existing programs to create the best experience for students, student-athletes, spectators and staff.

Specific to Intercollegiate Athletics at the Rutgers University–New Brunswick campus, Rutgers 2030 builds upon recent efforts completed by the University to enhance its facilities and grounds for the twenty-four Division I athletics teams and for Scarlet Knight fans, and provides an updated overview of priorities for Athletics, aligning these priorities with available funding streams. In conjunction with University Administration and the Athletics Department, the physical master plan identifies the following vision and principles to guide these priorities for Intercollegiate Athletics:

- **Address existing deficiencies** – Rutgers is committed to providing and enhancing facilities that support greater opportunities under Title IX and best practices under the National Collegiate Athletic Association (NCAA) and Big Ten Conference. This plan provides a framework that allows a long term vision to be established, and for long term investments and fundraising efforts to be realigned or put in place.
- **Capitalize on parallel investments** – Proposed projects are encouraged to capitalize on available funding streams through incorporation of complementary functions other than athletics, whenever possible.
- **Prioritize flexibility in sequencing** – The process of upgrading existing facilities or providing new facilities should involve careful planning to avoid temporary construction and minimize disruption to teams and their operations.
- **Optimize access** – Projects are proposed to have functions that support athletics operations and the larger campus community, for example, providing easily accessible parking or event spaces that will be used by both Athletics and other campus groups, including visitors and academic departments. Rutgers 2030 identifies opportunities to take advantage of spaces readily available to be repurposed for Athletics use, in many instances identifying areas to be renovated in lieu of building new facilities for Athletics use.

Rutgers 2030 recommends consolidating the majority of varsity sports to Busch and Livingston, in order to enhance the athletics experience for both athletes and fans and to maximize operational efficiencies. The planning framework maintains optimal adjacencies currently in place and proposes to relocate several teams when funding becomes available. Specific projects are described in the following pages.


LIVINGSTON 2030
SUTTONS LANE
CLIF PRESCOD LN
KILMER RD
HOSPITAL ROAD
ROCKAFELLAR ROAD
ROAD 4
ROAD 3
KILMER AVE
ROAD 2
ROAD 3
METLARS LANE
POSTAL PLAZA
ROAD 1
STREET 1603
AVENUE E
AVENUE E
CEDAR LANE
WAREHOUSE RD
ROAD 3
BUSCH-LIVINGSTON BRIDGE
1 Multi-use facility and integrated parking
2 Scarlet Knight Park
3 Rutgers Tennis Complex
4 Bainton Field / Gruninger Baseball Complex
5 Rutgers Softball complex
6 Baseball/Softball Practice Facility
7 Bauer Track and Field Complex
8 RAC renovation and expansion
9 Gathering/event space
10 Major pedestrian path
11 Expanded wetland
12 Hotel and Conference Center
13 Livingston Recreation Center
N
SCALE 1" = 600'
0 200 400 800

4.6.2 Priorities

LIVINGSTON ATHLETICS DISTRICT

The area west of the Livingston academic core, bounded by Avenue E to the south, Metlars Lane to the west, Suttons Lane to the north and Hospital Road to the east is the athletics precinct, named the Scarlet Knight Park in the Athletics Master Plan completed in 2008. It is home to baseball, softball, field hockey, track and field teams. The Louis Brown Athletic Center, also known as the RAC, is home to the men's and women's basketball teams. This park is bordered to the north by large parking lots, and are separated from other activities occurring at the Livingston core.

Rutgers 2030 proposes to strengthen connections between the Scarlet Knight Park and the rest of Livingston through the introduction of facilities that will develop land between the park and Rockafeller Road, and by establishing clear pedestrian paths and landscape elements connecting the park to the academic quadrangle, student center and dining commons.

A new lawn is proposed directly west of the RAC, providing a central location for informal gatherings, as well as staging for athletics competitions and events.

Specific to Athletics, the following projects are identified as priorities:

- **Louis Brown Athletic Center (RAC) Multi-Use Facility and Integrated Parking Facility** – The proposed RAC Multi-Use Facility will satisfy program needs for Rutgers basketball program, and other varsity teams currently accommodated in recreation facilities. The new Multi-Use Facility, attached to the RAC, will be home to men's and women's basketball, gymnastics, wrestling and volleyball. These programs will have state-of-the-art locker rooms, practice venues, strength and conditioning and sport medicine suites, coaches' offices and meeting rooms. Wrestling and volleyball are proposed to be relocated from the College Avenue Gymnasium, while gymnastics will be relocated from the Livingston Recreation Center. The multi-use facility will be embedded within a four-story parking structure, with a direct connection from parking to the existing RAC at the second floor level. This multi-use facility will also house administrative offices for the Athletics Department.
- **Scarlet Knight Park** – The master plan proposes a reorganization of the facilities in the northern part of Livingston athletics district. Currently comprised of two multi-purpose fields, a softball complex, Bainton Field Baseball Complex and Bauer Track & Field/Field Hockey Complex, some of the facilities are partially located in environmentally sensitive areas. The new design proposes the implementation, over time, of a high quality practice and competition venues with optimal orientation for competition, connected by a central pedestrian spine and adjacent access from on Hospital Road. The newly configured complex will provide a distinctive and unique experience for student athletes, staff and spectators, with close proximity to surface parking. Tennis and soccer venues will be relocated from Busch to Livingston, to consolidate programs and provide dedicated practice and competition facilities Specific upgrades are proposed for these venues, as listed in the following pages.
  - **Rutgers Tennis Complex -** A new home for the tennis team with twelve outdoor courts is proposed to be located at Livingston. The

Rutgers Scarlet Knights men's basketball take on Wisconsin Badgers at the RAC, January 11, 2015.
IMAGE COURTESY OF BEN SOLOMON

tennis complex facility is anticipated to have exterior lighting and spectator seating.

- **Bainton Field / Gruninger Baseball Complex** – The baseball complex is proposed to be relocated and will allow for the reclamation and expansion of the existing wetland. A new facility and stadium will accommodate 2,000-3,000 seats, team rooms, press areas, suites and concessions, and a club house; a practice infield is located adjacent to the complex. The proximity of the new complex to parking provides convenient logistics for competitions.
- **Rutgers Softball Complex** – A new stadium is proposed to replace the existing softball complex, along with team rooms, press area and suites, club house and concessions area. The proposed improvements and enhancements to softball and baseball will allow these sports to host NCAA events.
- **Baseball/Softball Indoor Practice Facility** – An indoor practice facility is proposed, adjacent to the baseball and softball outdoor facilities, and will be shared by both teams. This facility will allow for indoor practice and training for hitting, pitching, and infield play. This facility and the baseball and softball complexes take advantage of their proximity to the RAC, where team locker rooms will be located
- **Bauer Complex** – track and field and field hockey share a relocated facility towards the south side of Scarlet Knight Park. The area is protected by adjacent growth of trees to the west. Additional seating, press boxes, locker rooms are planned for this complex, along with upgrades to the exterior lighting system enabling night competitions and practice.
- **Louis Brown Athletic Center (RAC) renovation and addition** – The Rutgers Athletic Center (RAC) is an 8,000 seat venue, home to the men's and women's basketball teams. The master plan proposes to renovate the RAC to accommodate evolving program needs and to address qualitative concerns within the facility. Upgrades to the existing RAC include plans to expand the concourse level of the RAC, increase seating capacity and club space, improve lighting and restroom facilities. The fan and visitor experience is also enhanced by an addition of new ticketing area and lobby and a spirit ware retail shop. The realignment of the drop-off road in front of the RAC building will accommodate walkways routes from the campus core to the RAC and into Scarlet Knight Park. By relocating training functions to the proposed new basketball facility, the RAC can be optimized for the fan experience.

MULTI-USE FACILITY

A new multi-use facility for men's and women's basketball, volleyball, wrestling and gymnastics is proposed to the south of the Louis Brown Athletic Center (RAC), with a connection between the two buildings. This facility also includes an integrated four-story parking structure accessed from Hospital Road, which will provide parking for events at the RAC, the adjacent Rutgers Business School and future hotel and conference center directly south of the training facility.

Existing view of proposed site for Basketball Training Facility with Louis Brown Athletics Center (RAC) at right, and Rutgers Business School at left.


R
R

MULTI-USE FACILITY

The top floor of the proposed multi-use facility will house courts for basketball, volleyball and training space for wrestling. The light-filled training areas are supported by strength and conditioning space, locker and team rooms and coaches offices.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RUTGERS
RUTGERS
RUTGERS


BUSCH 2030
1 High Point Solutions Stadium South End
2 Hale Center
3 Yurcak Field
4 Rutgers Golf Training Complex
5 Multi-purpose Field House
6 Werblin Recreation Center
7 Stadium west upgrades
8 Future Practice Fields
9 Major pedestrian way
10 Game day pedestrian way
11 Football Practice (existing)
12 Tennis Complex (existing)
ALLISON ROAD
HOES LANE WEST
FRELINGHUYSEN ROAD
FITCH ROAD
BARTHOLOMEW ROAD
SCARLET KNIGHT WAY
CAMPUS ROAD
SUTPHEN ROAD
ROUTE 18
RIVER ROAD
JOHNSON PARK
N
SCALE 1" = 600'
0 200 400 800

BUSCH ATHLETICS DISTRICT

Since 1938, the southeast sector of Busch has been home to the Rutgers football team. The original Rutgers Stadium was the first Rutgers facility to be built north of the Raritan River. Today, Busch is home to golf, soccer, lacrosse and tennis as well as football. Athletics projects proposed at Busch are as follows:

- **High Point Solutions Stadium South End**– High Point Solutions Stadium is the largest athletic venue on campus, with a seating capacity of 52,454, and is considered a key venue of Rutgers athletic facilities. The 2009 renovations to the stadium created seating at the south end of the field and created a large unfinished area below the seats. This area is proposed to be fitted out as locker rooms and athletics support space. Visiting team locker space will improve game operations management. Preliminary studies include a connection between the Hale Center and the south end.
- **Hale Center Renovations** – Directly adjacent and connected to High Point Solutions Stadium is the Hale Center, home to administrative and academic services, as well as training facilities for football, soccer, lacrosse, golf and tennis programs. The master plan proposes renovating the Hale Center to become a dedicated football training facility and shared academic center for all athletes. Working in conjunction with the south end fit-out at the High Point Solutions Stadium, the Hale Center will provide updated support spaces including an enhanced football locker room and student lounge, expanded sport medicine, a new training and hydro therapy suite, additional coaches' offices, meeting rooms, and an expanded academic center. The Hale Center will have a new entry, allowing for a more spacious Hall of Fame and entry for students; and will be easily accessible from the stadium. Rutgers 2030 also looks to improve spectator circulation to the stadium by creating continuous sidewalks along Sutphen Road, lined with red maples to enhance the Rutgers tradition and atmosphere along the approach to the stadium.
- **Yurcak Field Improvements** – A proposed addition to the existing facility will provide enhanced locker rooms, a training room, and general office space with meeting and administrative space.
- **Rutgers Golf Training Complex** – Busch is home to the Rutgers University Golf Course, a PGA sanctioned, par 71 course that is the competition and practice facility for the Rutgers University Golf team; it and also serves members of the public for nine months of the year. The master plan proposes a new team training center, additional course practice areas and parking, while minimizing disruption to existing wetlands.
- **Multi-purpose Field House** – the plan calls for a field house for field hockey, soccer, lacrosse, and track and field use, which will include locker rooms and restrooms.
- **Werblin Recreation Center** – The Sonny Werblin Recreation Center is home to the Rutgers Swimming and Diving teams. The master plan proposes an addition and renovation of the recreation center to expand recreational activity; however, the reoriented building entry will improve access to the facility from the north, for both athletics teams and recreational users.

Rutgers Scarlet Knights take on Penn State Nittany Lions at High Point Solutions Stadium, September 13, 2014.
IMAGE COURTESY OF BEN SOLOMON RUTGERS ATHLETICS

- **High Point Solutions Stadium and Practice Field Upgrades** - the west side of the stadium is proposed to be renovated for press boxes. Other enhancements include upgrading existing restroom facilities and fitting out of an elevator tower at the east end of the stadium.
  Just north of the football stadium, four proposed practice fields will provide additional future practice space for football and lacrosse, as well as other programs. They will be linked and organized by a central pedestrian corridor that connects the athletics precinct to Busch academic core.

While the majority of athletics is located in Busch and Livingston, the rowing program is located at Douglass, at the Rutgers Class of 1914 Boathouse. A potential expansion is an addition to the boathouse that will provide locker rooms, team rooms, administrative office space and support spaces, boat storage, a repair shop and a rowing tank. The expanded boathouse will not only support athletics but allow for recreational use, improving access to the Raritan River.

As Rutgers continues in the Big Ten Conference and evaluates its needs for athletics, in-depth programming and feasibility studies should be prepared to identify critical needs and maximum efficiencies. This master plan provides an integrated view of athletics within the context of the larger district and campus and offers a framework for implementation as funding becomes available. A separate phasing and implementation strategy has been developed for these athletics projects.

HALE CENTER REIMAGINED

The Hale Center is proposed to be renovated to provide upgraded facilities for student athletes. Its east entry is redefined to create a welcoming entry into a lobby and Hall of Fame, using high-quality building materials and clear glass.

Existing view of Hale Center


Big Time Academics • Big Ten Athletics
RUTGERS is BIG
Big Time Academics • Big Ten Athletics
RUTGERS is BIG

SASAKI | RAMSA | VHB