



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

2019 CAROLINA NORTH ANNUAL REPORT

REPORTING PERIOD: July 1, 2018 - June 30, 2019

Prepared by UNC-CH Facilities Planning & Design

8/30/2019

I. 2018-2019 Activities to Report

A. Housing

Units constructed: None.

Estimated number of residents living in Carolina North Housing: None.

Estimated number of Full Time Equivalent employees working on site at Carolina North, as of June 30, 2019:

- 1 FTE employee at Horace Williams Airport
- 2 FTE employees at Carolina North Forest Management office
- 3 FTE employees at the Chapel Hill Police Department substation
- 1 FTE Grounds Department employees

B. Parking, Traffic and Transit

Report on parking provided vs. baseline parking ratios: The University has not constructed any new facilities, nor provided any additional parking during this reporting period. The Chapel Hill Police continue to have nonexclusive use of parking adjacent to their leased building.

Current status of transit planning for Carolina North Project and coordination within Short Range Transit Plan process: The Town and the University continue to work on several transit planning efforts that will impact access to Carolina North. The Orange County Transit Plan, funded in part by a half-cent sales tax approved by Orange County voters, supports development of transit system enhancements throughout the County and Chapel Hill. The Chapel Hill Transit Partners have agreed upon the use of portions of the increased funding received by Chapel Hill Transit, including additional services that have been implemented since August 2013. Chapel Hill Transit is also analyzing bus rapid transit options along Martin Luther King, Jr. Boulevard and US 15-501 South. The transit improvements being analyzed, if funded, would serve Carolina North. A locally preferred alternative was selected by the Chapel Hill Town Council on April 27, 2016, and the project is currently in the Preliminary Engineering/Environmental Review phase.

Coordination with Transportation Management Plan: Transportation Management Plan coordination was not required because the University had no development during the reporting period.

Short Range Fiscal Plan—Actions taken to address recommendations in the most recent SRFP: No activity to report during this period. The initial SRFP is to be completed in conjunction with the issuance of an initial site development permit.

C. Land Use and Activities in Limited Development Area (5.5.2)

Chilled water, steam, electric ductbank, water and telecom lines: No activity on chilled water, steam lines, electric ductbank, water or telecom lines.

Reclaimed water line (with OWASA): No activity to report for this period.

Maintenance and improvements to existing utility lines: No activity to report for this period.

Stormwater lines and improvements: No activity to report for this period.

Stormwater structures: No activity to report for this period.

Public utility lines traversing site: Routine maintenance of PSNC utility corridor.

Utility structures without a building (e.g., electrical substation): No activity to report for this period.

Alterations to utility equipment (generator, other mechanicals): No activity to report for this period.

Site storage and construction staging areas: No activity to report for this period.

Stream restoration projects: No activity to report for this period.

Greenways and other paved trails: No activity to report for this period.

Public art: No activity to report for this period.

Site clearing for any other purpose: No activity to report for this period.

Alterations (but not expansion) in existing parking lots, including repaving, replanting for stormwater mitigation, etc.: No activity to report for this period.

Roads, internal service without exterior connections and not designed for vehicular circulation to serve buildings within Carolina North developed area: No activity to report for this period.

Exterior tennis and basketball courts: No activity to report for this period.

Athletic facilities and events that are not buildings and that do not involve land clearing or grading of more than 20,000 square feet:

- July-September 2018:
 - High School XC Training, Cedar Ridge XC Team
 - UNC Club XC Invitational Meet
 - Orienteering, ARDF Meet
 - Youth MTB Rides, Team Hammer, KOBRA
 - Meetup Rides, TORC
- October-December 2018:
 - Chapel Hill High School XC Meet, CHHS XC
 - Trail Run – Run for Peace
 - Orienteering, ARDF Meet
 - Trail Run – Pumpkin Run
 - Guided Walk, Friends of Bolin Creek
 - Weekly Runs, Trailheads
 - Youth MTB Rides, Team Hammer, KOBRA
 - Meetup Rides, TORC
- January-March 2019:
 - 1/19, Carrboro 5-k, Trailheads
 - Orienteering- BOK Meetup, Backwoods Orienteering Club
 - Youth MTB Rides, Team Hammer, KOBRA
 - Meetup Rides, TORC
- April-June 2019:
 - PWTR, Trailheads
 - Orienteering- BOK Meetup, Backwoods Orienteering Club

- Exercise for Xs and Ys- 4k, Focus Foundation
- Weekly Runs, Trailheads
- Youth MTB Rides, Team Hammer, KOBRA
- Meetup Rides, TORC

Gazebos and other open-air shelters, parks, children’s play areas, passive recreation features, and park site furnishings: No activity to report for this period.

Unpaved trail construction/maintenance (including volunteer work on paths, harvesting, etc.):

- July-September 2018:
 - Hurricane Florence! - Massive impact from storm; est. 3+ years of trail work affected/lost.
 - Trail Refurbishment & Relocations: Exit from Greenway to PSNC corridor/wetland protection
 - Trail Refurbishment & Relocations: general
 - Bridge Repairs: Replace rotten decking on east Approach Ramp
 - Trail Relocation: Create alternate alignment to fall line trail on Neverland, near WP 21
 - Bridge Repairs: Replace bridge crossing at Rockgarden Road; repaired damaged railings
 - Trail Refurbishment and Relocations: Storm recovery
 - Trail Refurbishment and Relocations: general by staff and volunteers
- October-December 2018:
 - Trail Refurbishment: Trail Refurbishment, Occoneechee Loop: by staff/volunteers and Crushers MTB Team.
 - Data Gathering: Recording information about trail & stream crossing structures.
 - Trail Refurbishment and Relocations: general by staff and volunteers
- January-March 2019:
 - Cut bamboo by pond.

- Repaired stream crossing at Farmhouse #5
- Trail tread improvements on Farmhouse/Wormhole connector
- Made mtn bike fixture on Occoneechee near #14
- Trail tread improvements on Wormhole between 12 & 13
- Mechanical control of bamboo by pond
- Cut-n-squirt Mahonia sp. on Farmhouse (single stems in drainage valley)
- Pumpkin Loop, near Meadow: Added gravel and graded for drainage
- Vine, near entrance to Wormhole at #13
- Wormhole at #13
- Trail Refurbishment and Relocations: general by staff and volunteers
- April-June 2019:
 - Road Maintenance: Municipal Drive, installed 150tons of ABC stone
 - Stream Crossing: Occoneechee, b/w 4 & 5
 - Turnpike at Farmhouse #4
 - Wormhole re-lo, between 9&10
 - Neverland alternate route, near #21
 - Correct trail braiding on Neverland Inner Loop, between 3&4
 - Invasive Plant Control: Removed Eleagnus sp. From Tripp Farm Rd. entrance, near Community Gardens

Memorial gardens: No activity to report for this period.

Kiosks and benches: No activity to report for this period.

Incidental parking areas: No activity to report for this period.

Site furnishings (recycle containers, fixtures, blue lights): No activity to report for this period.

Support facilities for special events (Tar Heel Town, concerts, etc.):

- July-September 2018:
 - XC Training, Hassan Agourram/Performance Track & Fitness
 - UNC XC Team Training, UNC Athletics
- October-December 2018:

- First Responder Training: Technical rescue Training by SORS
- XC Training, Hassan Agourram/Performance Track & Fitness
- UNC XC Team Training, UNC Athletics
- January-March 2019:
 - XC Training, Hassan Agourram/Performance Track & Fitness
 - UNC XC Team Training, UNC Athletics
- April-June 2019:
 - Search & Rescue Training: SORS
 - Santa Cruz Bike Demo, Clean Machine
 - Cross Country Camp, Bobby Lockhart
 - Tinkergarten, Amy McCarter
 - XC Training, Performance Track & Fitness
 - UNC XC Team Training, UNC Athletics

Demolitions: No activity to report for this period.

Landscaping activities:

- July-September 2018:
 - Tree Canopy: Develop GIS workflow to assess forest canopy at CN

Community gardens: No activity to report for this period.

Miscellaneous activities:

- July-September 2018:
 - The leased house located at 2311 Homestead Road damaged by fire in April 2017 was demolished August-September 2018.
- October-December 2018:
 - CritterCam: Wildlife camera trapping; co-op with NC Museum of L&S
- January-March 2019:
 - CritterCam: Wildlife camera trapping; co-op with NC Museum of L&S
- April-June 2019:
 - CritterCam: Wildlife camera trapping; co-op with NC Museum of L&S

D. Land Use and Activities in Development Area (5.5.3)

Chilled water, steam, electric ductbank, water and telecom lines: No activity for chilled water, steam, electric ductbank, water or telecom lines.

Reclaimed water line (with OWASA): No activity to report for this period.

Maintenance and improvements to existing utility lines: No activity to report for this period.

Stormwater lines and improvements: No activity to report for this period.

Stormwater structures: No activity to report for this period.

Public utility lines traversing site: No activity to report for this period.

Utility structures without a building (e.g., electrical substation): No activity to report for this period.

Alterations to utility equipment (generator, other mechanicals): No activity to report for this period.

Site storage and construction staging areas: Approximately 4.5 acres of the former Municipal Yard is being used by contractors working on large construction projects.

Stream restoration projects: No activity to report for this period.

Greenways and other paved trails: No activity to report for this period.

Public art: No activity to report for this period.

Site clearing for any other purpose: No activity to report for this period.

Miscellaneous: As identified in the November 2017 UNC Chapel Hill Board of Trustees' resolution, the Horace Williams Airport closed to the public May 15, 2018.

Subsequently, the runway was closed in accordance with Federal Aviation requirements on May 16, 2018. UNC Hospital Air Care will use the airport for occasional helicopter parking and refueling through February 2020 while the hospital continues to construct its additional helipad facilities outside of Chapel Hill.

E. Greenways

Report on examination and recommendations for a Greenways partnership model comparable to public transit partnership: No activity to report for this period.

Report on potential locations and funding alternatives for campus-to-campus greenway and bike connection: No activity to report for this period.

Current status and funding of greenway connections at Carolina North (after greenways plan submitted with initial individual site development permit): No activity to report for this period.

Greenway improvements and document compliance with 5.16.14: No activity to report during this period.

Report on consideration of pedestrian connections to adjacent neighborhoods: No activity to report during this period.

F. Waste Management

The University currently provides trash and recycling services for all University- owned buildings, including buildings at Carolina North, and several leased properties. The recycling program covers a variety of materials and is continually evaluated for improvement and expansion. A representative from the University Office of Waste Reduction and Recycling is involved in project reviews and helps identify waste reduction, reuse, and recycling opportunities. Specifications detailing University and regulatory requirements regarding construction waste management and reporting are to be included in each project manual. Project teams educate contractors about University, local, state and project-specific requirements; review and suggest changes to contractors' Solid Waste Management Plans; and collect waste reports from participating projects. Future construction projects and finished buildings will be managed and supported similarly. No fiscal impacts on the Town have been noted and waste management strategies have not been amended.

G. Recreation Areas

Study of feasibility and cost-sharing options for future joint-use recreation areas at Carolina North: No activity to report for this period.

Description of improvements for recreation areas and document compliance with

5.15.5: No new recreational facilities or recreational areas were developed on the Carolina North property during the 2018-2019 fiscal year. The use of the Carolina North property for recreational purposes continues to thrive as residents of Chapel Hill, Carrboro and surrounding communities, make frequent and extensive use of the University's network of trails on the Carolina North property. Over 25 miles of trails are woven through the Carolina North Forest. The University, through its Forest Management Office Staff, facilitates cooperative use of the network of trails in the Carolina North Forest for the benefit of local schools, community organizations, and individual residents of Chapel Hill, Carrboro and the broader community.

H. Stream Buffers

No activity to report for this period.

I. Tree Canopy

The University is committed to proactive management of the Carolina North Forest and strives to maintain or increase the overall tree canopy of the tract. In the last year, canopy maintenance activities again focused on the removal of exotic, non-native, invasive or otherwise undesirable species to promote natural growth of the native canopy. As construction projects are planned, staff will assess the potential impacts on tree canopy with the objective of offsetting any loss in canopy.

II. 2018-2019 Development Schedule

A. Upcoming Projects

- a. The Field Operations Building and modular unit are expected to remain at Carolina North through calendar year 2020. The University continues to use the Field Operations Building and modular building to address campus space needs since UNC

Housekeeping moved to their permanent location in March 2018. The University will continue to reexamine the use of these facilities on an annual basis.

- b. Originally slated for a spring 2018 installation, the University anticipates installing the solar and energy storage demonstration project within the boundary of the Development Area in the Spring of 2020. This nominal 500 KW ground-mounted PV array and associated equipment and batteries will be positioned southwest of the existing Horace Williams Airport runway, inside the fenced area and adjacent to Estes Drive Extension. This utility project is intended to be movable to accommodate future University development as permitted by the Development Agreement. Currently, the University does not have immediate plans for additional development in this area that would disrupt the solar demonstration project.

B. Public Information Meetings held

- 9/10/2018 - UNC Semi-Annual Capital report to Town Council and Manager's compliance report to Town Council on Annual Report.
- 9/25/2018 - TOCH Annual Report Public Information Meeting.

III. 2018-2019 Reportable Items Checklist

DA Section	Topic	Subtopic	2018 AR Section (or reason for no report)
4.14	Report demonstrating good faith compliance with terms of DA	Report demonstrating good faith compliance with terms of DA	Cover Letter
4.14 (& 5.27.4.a.)	Construction Activity	List of individual site development permits issued	No activity to report.
4.14 (& 5.27.4.a.)	Construction Activity	Building floor area constructed	No activity to report.
4.14 (& 5.27.4.a.)	Construction Activity	Infrastructure installed	No activity to report.
4.14 (& 5.27.4.a.)	Construction Activity	Status of University participation in provision of or financing of public infrastructure	No activity to report.
4.14 (& 5.27.4.a.)	Construction Activity	Infrastructure dedicated/acquired	No activity to report.
4.14 (& 5.27.4.a.)	Construction Activity	Projected schedule for CN development for following year	No activity to report.
5.4.2 (& 5.27.4.b.)	Housing	Units constructed	None See page 1 of 18.
5.4.2 (& 5.27.4.b.)	Housing	Estimated number of residents living in CN housing	None See page 1 of 18.
5.4.2 (& 5.27.4.b.)	Housing	Estimated number of FTE employees working on site at CN	See page 1 of 18.
5.5.2.e.1 (& 5.27.4.f.)	Land Use-Limited Development Area	Chilled water, steam, electric duct bank, water and telecom lines	No activity to report. See page 2 of 18.
5.5.2.e.2 (& 5.27.4.f.)	Land Use-Limited Development Area	Reclaimed water line (with OWASA)	No activity to report. See page 2 of 18.
5.5.2.e.3 (& 5.27.4.f.)	Land Use-Limited Development Area	Maintenance and improvements to existing utility lines	No activity to report. See page 2 of 18.

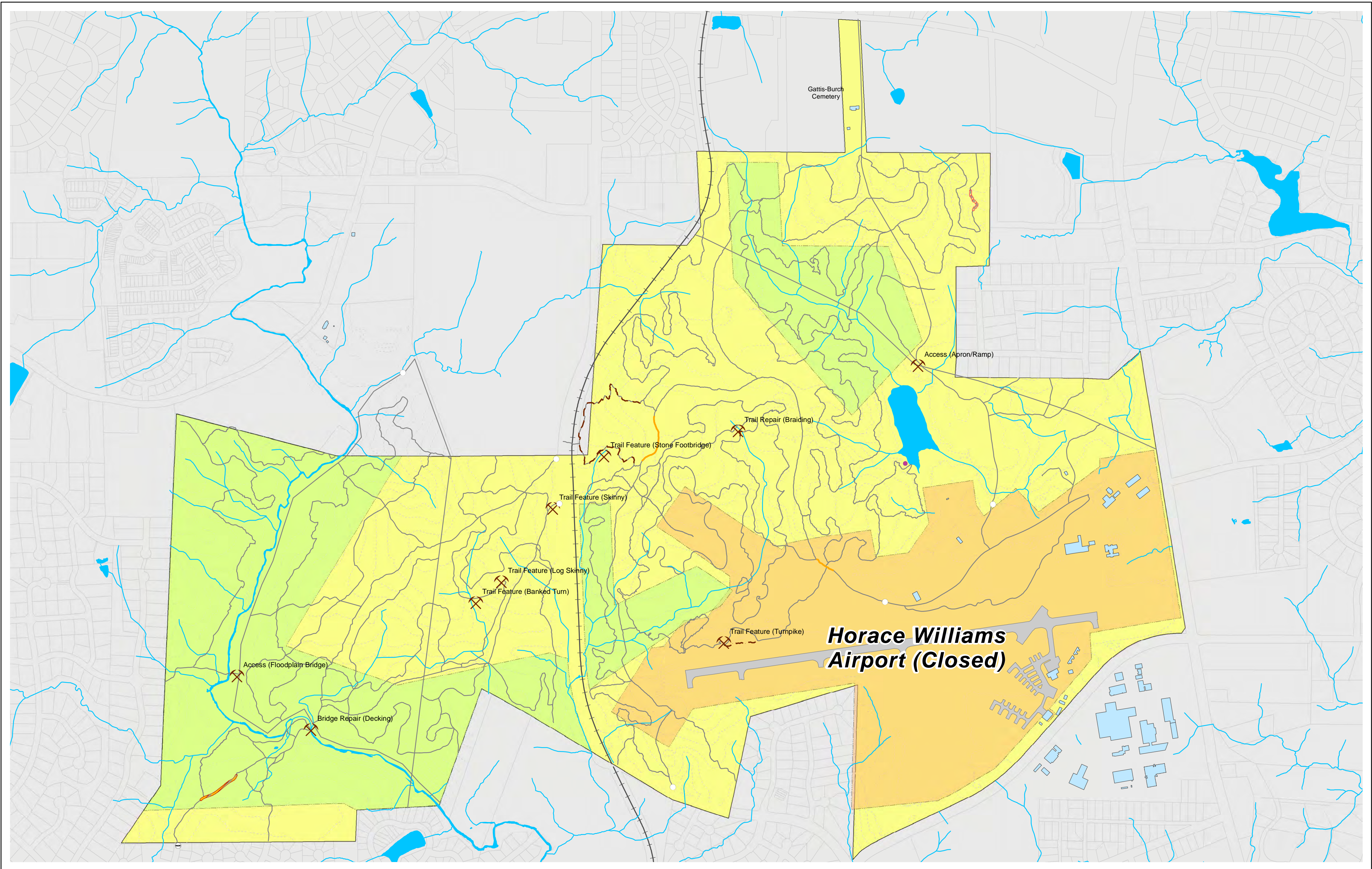
DA Section	Topic	Subtopic	2018 AR Section (or reason for no report)
5.5.2.e.4 (& 5.27.4.f.)	Land Use-Limited Development Area	Stormwater lines and improvements	No activity to report. See page 2 of 18.
5.5.2.e.5 (& 5.27.4.f.)	Land Use-Limited Development Area	Stormwater structures	No activity to report. See page 2 of 18.
5.5.2.e.6 (& 5.27.4.f.)	Land Use-Limited Development Area	Public utility lines traversing site	Routine maintenance See page 3 of 18.
5.5.2.e.7 (& 5.27.4.f.)	Land Use-Limited Development Area	Utility structures without a building (e.g., electrical substation)	No activity to report. See page 3 of 18.
5.5.2.e.8 (& 5.27.4.f.)	Land Use-Limited Development Area	Alterations to utility equipment (generator, or other mechanicals)	No activity to report. See page 3 of 18.
5.5.2.e.9 (& 5.27.4.f.)	Land Use-Limited Development Area	Site storage and construction staging areas	No activity to report. See page 3 of 18.
5.5.2.e.10 (& 5.27.4.f.)	Land Use-Limited Development Area	Stream restoration projects	No activity to report. See page 3 of 18.
5.5.2.3.11 (& 5.27.4.f.)	Land Use-Limited Development Area	Greenways and other paved trails	No activity to report. See page 3 of 18.
5.5.2.e.12 (& 5.27.4.f.)	Land Use-Limited Development Area	Public art	No activity to report. See page 3 of 18.
5.5.2.e.13 (& 5.27.4.f.)	Land Use-Limited Development Area	Site clearing for any other purpose	No activity to report. See page 3 of 18.
5.5.2.f.2 (& 5.27.4.f.)	Land Use-Limited Development Area	Alterations (but not expansion) in existing parking lots, including repaving, repaving, replanting for stormwater mitigation, or changing impervious to pervious pavement	No activity to report. See page 3 of 18.
5.5.2.f.3 (& 5.27.4.f.)	Land Use-Limited Development Area	Roads, internal service without exterior connections and not designed for vehicular circulation to serve buildings within CN developed area	No activity to report. See page 3 of 18.

DA Section	Topic	Subtopic	2018 AR Section (or reason for no report)
5.5.2.f.4 (& 5.27.4.f.)	Land Use-Limited Development Area	Exterior tennis and basketball courts	No activity to report. See page 3 of 18.
5.5.2.f.5 (& 5.27.4.f.)	Land Use-Limited Development Area	Athletic facilities and events that are not buildings and that do not involve land clearing or grading of more than 20,000 square feet.	See page 3 of 18.
5.5.2.f.6 (& 5.27.4.f.)	Land Use-Limited Development Area	Gazebos and other open-air shelters, parks, children's play areas, passive recreation features, and park site furnishings	No activity to report. See page 5 of 18.
5.5.2.f.7 (& 5.27.4.f.)	Land Use-Limited Development Area	Unpaved trail construction/maintenance (including volunteer work on paths, harvesting	See page 5 of 18.
5.5.2.f.8 (& 5.27.4.f.)	Land Use-Limited Development Area	Memorial gardens	No activity to report. See page 7 of 18.
5.5.2.f.9 (& 5.27.4.f.)	Land Use-Limited Development Area	Kiosks and benches	See page 7 of 18.
5.5.2.f.10 (& 5.27.4.f.)	Land Use-Limited Development Area	Incidental parking areas	No activity to report. See page 7 of 18.
5.5.2.f.11 (& 5.27.4.f.)	Land Use-Limited Development Area	Site furnishings (recycle containers, fixtures, blue lights)	No activity to report. See page 7 of 18.
5.5.2.f.12 (& 5.27.4.f.)	Land Use-Limited Development Area	Support facilities for special events (Tar Heel Town, concerts, etc.)	No activity to report. See page 7 of 18.
5.5.2.f.13 (& 5.27.4.f.)	Land Use-Limited Development Area	Demolitions	No activity to report. See page 7 of 18.
5.5.2.f.14 (& 5.27.4.f.)	Land Use-Limited Development Area	Landscaping activities	See page 7 of 18.
5.5.2.f.15 (& 5.27.4.f.)	Land Use-Limited Development Area	Community gardens	No activity to report. See page 7 of 18.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.1)	Land Use-Development Area	Chilled water, steam, electric duct bank, water and telecom lines	No activity to report. See page 7 of 18.








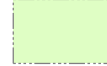
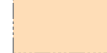
DA Section	Topic	Subtopic	2018 AR Section (or reason for no report)
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.2)	Land Use- Development Area	Reclaimed water line (with OWASA)	No activity to report. See page 7 of 18.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.3)	Land Use- Development Area	Maintenance and improvements to existing utility lines	No activity to report. See page 7 of 18.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.4)	Land Use- Development Area	Stormwater lines and improvements	No activity to report. See page 7 of 18.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.5)	Land Use- Development Area	Stormwater structures	No activity to report. See page 8 of 18.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.6)	Land Use- Development Area	Public utility lines traversing site (Duke Energy, PSNC, etc.)	No activity to report. See page 8 of 18.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.7)	Land Use- Development Area	Utility structures without a building (e.g., electrical substation)	No activity to report. See page 8 of 18.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.8)	Land Use- Development Area	Alterations to utility equipment (generator, other mechanicals)	No activity to report. See page 8 of 18.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.9)	Land Use- Development Area	Site storage and construction staging areas	See page 8 of 18.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.10)	Land Use- Development Area	Stream restoration projections	No activity to report. See page 8 of 18.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.11)	Land Use- Development Area	Greenways and other paved trails	No activity to report. See page 8 of 18.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.12)	Land Use- Development Area	Public art	No activity to report. See page 8 of 18.
5.5.3.d. (& 5.27.4.g.) (tracking 5.5.2.e.13)	Land Use- Development Area	Site clearing for any other purpose	No activity to report. See page 8 of 18.
5.7.2 (& 5.27.4.c.)	Stormwater Cost- Sharing	Cost-sharing agreements (to be updated every three years)	The existing agreement has been updated to cover the 2018-2021 time frame.

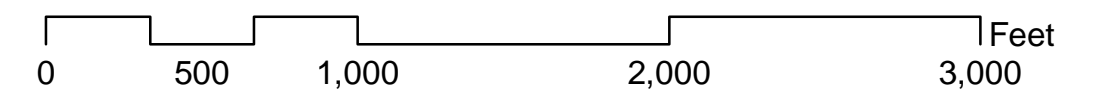
DA Section	Topic	Subtopic	2018 AR Section (or reason for no report)
5.8.7.a (& 5.27.4.d.)	Parking, Traffic and Transit	Current status of transit planning for CN Project and coordination within SRTP process	See page 1 of 18.
5.8.11.b (& 5.27.4.d.)	Parking, Traffic and Transit	Coordination with Transportation Management Plan	See page 2 of 18.
5.9.3 (& 5.27.4.e.)	Short Range Fiscal Plan	Actions taken to address recommendations in most recent SRFP	No activity to report. See page 2 of 18.
5.10 (& 5.27.4.h.)	Carbon and Other Greenhouse Emissions	Greenhouse gas emissions and offsets updated biennially	No report required until two years after initial site development permit.
5.11.3 (& 5.27.4.i.)	Water Use/Water Reclamation	Progress toward reductions of 20 percent indoor and 50 percent outdoor	No report is required, since no site development permit applications have been submitted.
5.12 (& 5.27.4.j.)	Design Guidelines	Informational copy of any updates to Design Guidelines	No updates have been made to Design Guidelines.
5.12.11 (& 5.27.4.k.)	Public Art	Update on plans, activities, implementation	There are no activities to report.
5.15.4 (& 5.27.4.o.)	Recreation Areas	Study of feasibility and cost-sharing options for future joint-use recreation areas at CN	No report required.
5.15.5 (& 5.27.4.o.)	Recreation Areas	Description of improvements for recreation areas and document compliance with 5.15.5	No new recreational facilities or recreational areas were developed on the CN property.
5.16.1.b (& 5.27.4.l.)	Greenways	Report on examination and recommendations for a greenways partnership model comparable to public transit partnership	No activity.

DA Section	Topic	Subtopic	2018 AR Section (or reason for no report)
5.16.2 (& 5.27.4.l.)	Greenways	Report on potential locations and funding alternatives for campus-to-campus greenway and bike connection	No activity.
5.16.4 (& 5.27.4.l.)	Greenways	Current status and funding of greenway connections at CN (after greenways plan submitted with initial individual site development permit)	UNC has not submitted a site development permit.
5.16.14 (& 5.27.4.l.)	Greenways	Greenway improvements and document compliance with 5.16.14	No activity.
5.16.15 (& 5.27.4.l.)	Greenways	Report on consideration of pedestrian connections to adjacent neighborhoods	No activity.
5.18 (& 5.27.4.m.)	Waste Management	Description of strategies/impacts	See page 9 of 18.
5.19.5 (& 5.27.4.p.)	Airport Closing Assessment	Environmental impacts (after cessation of airport activities)	The Airport continues to operate with limited UNC Hospitals use through May 2019. See page 8 of 18.
5.20.1 (& 5.27.4.n.)	Stream Buffers	Description of improvements and document compliance with 5.20	No activity.
5.21.1	Tree Canopy	Demonstration of best efforts to maintain or increase tree canopy	See page 11 of 18.



Carolina North Forest Activities, 2018 - 2019

-  Trail Feature Improvement
-  Trail Surface Improvement
-  Road Resurfacing and Grading
-  Invasive Plant Suppression: Chemical
-  Invasive Plant Suppression: Physical
-  Invasive Plant Suppression: Mechanical
-  Existing Roads and Trails, 2018
-  Conservation Area
-  Campus Development Area



Date: 8/15/2019