
Group II Draft Issue Comments (Issues 7-9, 12-17)

Topic: Stormwater management on site (#7)

Description:

Carolina North will employ a variety of best management practices for stormwater management control in order to achieve appropriate reduction and quality goals.

Key University Considerations:

1. Stormwater management should be integrated into the site, building and landscape design
2. Stormwater management strategies should be broadly coordinated and applied across Carolina North

Key Town Considerations:

1. Application of integrated stormwater strategies across Carolina North

Technical information to support policy decisions:

- Performance criteria in Development Agreement start with OI-4 requirements
- Compliance with town and UNC NPDES permits
- University will comply with Jordan Lake Rules
- Proposed Jordan Lake rules will set specific pollutant load targets
 - Jordan Lake guidelines push the limits of technology for pollutant removal
 - Design criteria in the development agreement
 - Submittal procedures outside development agreement and can be revised at staff level
 - Town and UNC staff will agree on required submittals for stormwater
 - Peak discharge and rate controls for specific design storms based on per-v.s post- development runoff
- Town would prefer stormwater quality facilities not located in street right-of-way maintained by the town (stormwater should be coordinated with street ownership)

Note: staff assistance identifying potential standards, requirements, mitigation measures, triggers for action, etc. will be offered for discussion to the Council-Trustees. More than one approach may be identified for consideration. These suggestions will inform the policy decisions to be made by the Council-Trustees; conflicting information does not need to be negotiated or resolved by staff working groups.

Topic: Water use and reclamation (#8)**Description:**

Carolina North development will include water conservation and reclamation measures

Key University Considerations:

1. Buildings at Carolina North will meet state-required water conservation standards
2. A whole-water approach at Carolina North will include water reclamation strategies
3. Buildings will include water-reclamation and water-reuse designs

Key Town Considerations:

- 1.
-

Technical information to support policy decisions:

- UNC could benchmark peers and establish overall % reduction goals
- UNC will work with OWASA and comply with appropriate OWASA policies and standards for water and sewer service
- Rainwater harvesting will be a significant method used by UNC to meet proposed Jordan Lake Rules
- If buildings are more efficient, less water is used for chilled water
- Use campus-wide metrics to preclude unattainable building-level goals

Possible metrics:

- Focus on overall goals for campus
- Total potable water use should be at least ____% less than what the demand would be under “conventional” guidelines
- State Construction Office reports (“668” and NC G.C. 143) could be submitted to TOCH for information
- Meet NC Plumbing code
- Meet SCO Manual requirements for reducing potable consumption per “NCGS 143 Article 86” a.k.a. Senate Bill 668

Note: staff assistance identifying potential standards, requirements, mitigation measures, triggers for action, etc. will be offered for discussion to the Council-Trustees. More than one approach may be identified for consideration. These suggestions will inform the policy decisions to be made by the Council-Trustees; conflicting information does not need to be negotiated or resolved by staff working groups.

Topic: Energy conservation, carbon credits (#9)
Description:

Buildings at Carolina North will include overall energy conservation or carbon reduction goals

Key University Considerations:

1. Buildings at Carolina North will be built according to state-required energy efficiency standards
2. The energy efficiency and carbon reduction strategies at Carolina North will be implemented across the campus as a whole.
3. The University is committed to meeting the standards in the American College and University Presidents Climate Commitment (ACUPCC) **(these standards supersede the earlier CRED goals)**
4. The University has prepared a carbon inventory (<http://acupcc.aashe.org/ghg-report.php?id=372>)
5. The University will strive to develop Carolina North in a manner that supports the ACUPCC goals.

Key Town Considerations:

1. Carolina North should use energy efficiently and support town sustainability goals
-

Technical information to support policy decisions:

- Show how each building addresses issues of energy/climate/stormwater etc. in the individual design, and demonstrate how it relates to the ACUPCC goal of “climate neutrality”
- Consider that energy efficiency goals may not be best measured by comparison to ASHRAE 90.1 for all facility types (e.g., chiller plant); identify appropriate metrics for these facilities
- Consider energy efficiency goals within the sliding metrics of current standards of ASHRAE 90.1
- Define the role of hospital and private developers relative to these standards (cost/profit/jurisdiction)
 - Identify council standard as a minimum for buildings outside of university control

Possible metrics and reporting:

- State Construction Office reports (“668” and NC G.C. 143) could be submitted to TOCH for information
- ASHRAE 90.1-2004 (30% below), 2007 (25% below), ASHRAE 189 (0% below) – in concert with code equivalents and reduction measures associated with the AIA 2030 Challenge
- State code
- Greenhouse gas (GHG) report is required on a regular basis to ACUPCC – could be provided to Council.
- Reduction strategies and progress will be published – could be provided to Council.

Note: staff assistance identifying potential standards, requirements, mitigation measures, triggers for action, etc. will be offered for discussion to the Council-Trustees. More than one approach may be identified for consideration. These suggestions will inform the policy decisions to be made by the Council-Trustees; conflicting information does not need to be negotiated or resolved by staff working groups.

Topic: Stream Buffers (#12)**Description:**

Streams will be appropriately buffered at Carolina North

Key University Considerations:

1. The Ecological Assessment identified streams and regulatory buffers at Carolina North
2. Resource Conservation District regulations will apply to Carolina North
3. Other agencies (such as the Army Corps) will have additional regulatory requirements

Key Town Considerations:

1. Resource Conservation District regulations will apply to Carolina North
-

Technical information to support policy decisions:

- Town RCD requirements will apply; identify any activities currently in place that should be 'grandfathered' in.
- Stream buffer impacts: avoid, minimize, mitigate
- Jordan Lake TMDL regulations will increase buffer regulations over RCD
- State has jurisdiction of isolated upland wetlands (outside 404/401)
- Consider restoration/enhancement of riparian buffers
- Permanently protect significant wildlife corridors (~300' wide) along streams (while allowing essential utility lines, trails, etc.)
- Stream access should be available for educational purposes (i.e. water quality testing)
- Coordinate with forest management for plans, notice, and activities with potential impacts
- Could have greenway trail in the RCD buffer but Jordan Lake rules apply to area closest to streams (~30 feet)

Note: staff assistance identifying potential standards, requirements, mitigation measures, triggers for action, etc. will be offered for discussion to the Council-Trustees. More than one approach may be identified for consideration. These suggestions will inform the policy decisions to be made by the Council-Trustees; conflicting information does not need to be negotiated or resolved by staff working groups.

Topic: Trees, landscaping (#13)

Description:

Carolina North will include significant street, landscape and natural plantings and landscaped areas and tree protection measures.

Key University Considerations:

1. Tree and landscape areas may also have a stormwater management function at Carolina North, including in roadways
2. Appropriate native and non-invasive species will be used at Carolina North
3. Landscape areas will be designed to support the Carolina North design guidelines

Key Town Considerations:

- 1.
-

Technical information to support policy decisions:

- Will potable water be used for recreation fields (as back-up)?
- Goals: Low maintenance, low fertilizer use
- Use the list of 'best suited' plant materials for Carolina North campus (already in use for main campus)
- Establish existing and proposed tree canopy mix
- Establish hierarchy of tree planting goals (working landscapes: young age, street trees: mid-age, permanent landscapes: mature age)
- Establish landscape irrigation hierarchies
 - Plant establishment requires irrigation
 - Critical landscapes require irrigation (define critical)
 - Priorities for irrigation are: rainwater, reclaimed water and potable water (as last resort)

Note: staff assistance identifying potential standards, requirements, mitigation measures, triggers for action, etc. will be offered for discussion to the Council-Trustees. More than one approach may be identified for consideration. These suggestions will inform the policy decisions to be made by the Council-Trustees; conflicting information does not need to be negotiated or resolved by staff working groups.

Topic: Sedimentation (#14)

Description: Construction at Carolina North will be subject to appropriate soil and erosion control measures and State oversight.

Key University Considerations:

1. Projects will be subject to standard oversight measures
2. The University will develop additional construction-related soil erosion control measures for building projects at Carolina North

Key Town Considerations:

1. Regular distribution and review of Erosion and Sedimentation plans
-

Technical information to support policy decisions:

- E&S measures should be applied for all land disturbance projects
- Orange County could receive courtesy review of E&S plans at individual project review
- E&S plan (not permit) should be provided for projects between 20,000 SF and 1 acre of disturbance
- Follow up inspections and checklist following NPDES construction permit requirements could be requested for projects under 1 acre of disturbance

Note: staff assistance identifying potential standards, requirements, mitigation measures, triggers for action, etc. will be offered for discussion to the Council-Trustees. More than one approach may be identified for consideration. These suggestions will inform the policy decisions to be made by the Council-Trustees; conflicting information does not need to be negotiated or resolved by staff working groups.

Topic: Neighboring lands, compatibility, buffers (#15)

Description:

Development at Carolina North will be compatible with existing adjacent development and appropriately buffered.

Key University Considerations:

1. Development near existing neighborhoods should respect buffers, height limits, lighting and noise impacts

Key Town Considerations:

1. New uses should protect or enhance existing uses
-

Technical information to support policy decisions:

- Identify Perimeter Transition Area (PTA) projects in phase plan
 - Use PTA process from OI-4 to meet with neighbors in advance of individual project review
 - Add drainage to PTA topics (already includes specific noise, lighting, visual impacts)
- Town should identify neighborhood protection districts around/beyond Carolina North for the comprehensive plan

Note: staff assistance identifying potential standards, requirements, mitigation measures, triggers for action, etc. will be offered for discussion to the Council-Trustees. More than one approach may be identified for consideration. These suggestions will inform the policy decisions to be made by the Council-Trustees; conflicting information does not need to be negotiated or resolved by staff working groups.

Topic: Noise (#16)**Description:**

The Chapel Hill noise ordinance will be in effect at Carolina North

Key University Considerations:

1. Noise from construction will be subject to the applicable noise ordinance
2. Applications for new construction will demonstrate compliance with the ordinance

Key Town Considerations:

1. Town noise ordinance applies during construction and occupancy
-

Technical information to support policy decisions:

- Refer to town noise ordinance for
 - Construction
 - Occupancy
- Complaints should be handled by Chapel Hill Police/Chapel Hill Engineering through UNC construction management to insure procedures are in place to remediate or address legitimate complaints

Note: staff assistance identifying potential standards, requirements, mitigation measures, triggers for action, etc. will be offered for discussion to the Council-Trustees. More than one approach may be identified for consideration. These suggestions will inform the policy decisions to be made by the Council-Trustees; conflicting information does not need to be negotiated or resolved by staff working groups.

Topic: Lighting (#17)

Description:

Lighting should not have a negative effect on adjacent users, neighborhoods or other uses at Carolina North

Key University Considerations:

1. Lighting should be energy efficient
2. Lighting should be appropriate for the program requirements and times of use

Key Town Considerations:

1. Lighting should not negatively affect surrounding neighborhoods or the community
-

Technical information to support policy decisions:

The Chapel Hill lighting standards will be in effect at Carolina North
(e.g. no increase in lighting foot-candle levels at the adjacent property line)

Lighting for Carolina North should be designed with a three-point basic strategy:

- A 'dark skies' approach should be applied to the campus as a whole
- Streets should be lit to Town or DOT standards
- Building code requirements should be met for new buildings
 - Recommendations for lighting levels for certain activities are covered in building code e.g. exiting and safety

Note: staff assistance identifying potential standards, requirements, mitigation measures, triggers for action, etc. will be offered for discussion to the Council-Trustees. More than one approach may be identified for consideration. These suggestions will inform the policy decisions to be made by the Council-Trustees; conflicting information does not need to be negotiated or resolved by staff working groups.