Introduction

Chapel Hill Gateways
BRT Map

Proposed North-South Connection
BRT Map
Proposed North-South Connection

UNC HEALTH CARE SYSTEM

EUBANKS
WEAVER DAIRY ROAD
NEW STATESIDE
NORTHFIELD
ESTES
HILLSBOROUGH
FRANKLIN
CAMERON
PITTSBORO / CREDIT UNION
CARRINGTON HALL
MANNING / EAST
NC 54
SOUTHERN VILLAGE
CULBRETH
HOMESTEAD
FINLEY MOUNTAIN

UNC HEALTH CARE SYSTEM

Proposed North-South Connection Map

0 3 61.5 mi
0 5 102.5 km
1:159,834

Web AppBuilder for ArcGIS
BRT Map
Potential East-West Connection
Existing Bus Routes
5 Minute Walk

Existing Conditions

DENSITY REQUIRED TO SUPPORT TRANSIT

Station Area = 1/4 mile radius (125 acres)

A range of 3,750 to 6,250 people (jobs and residents) within 1/4 mile of transit station is needed for a cost effective system.
Network Grid

Phase 1

EXISTING DENSITY WITHIN 5-MINUTE WALK OF TRANSIT HUB

1/4 mile (125 acres) = 5 minute walk

Residents: 280
Jobs: 1,050
Total: 1,330 people
Urban Form - Roads

Franklin Street, Chapel Hill

Meadowmont, Chapel Hill

Southern Villiage, Chapel Hill

Eastowne, Chapel Hill
Urban Form - Buildings

Franklin Street, Chapel Hill

Meadowmont, Chapel Hill

Southern Villiage, Chapel Hill

Eastowne, Chapel Hill
Network Grid

Phase 2
Network Grid
Phase 3
Long Range Road Improvements
Potential Interchange and I-40 Crossing
Network Grid

Phase 4
Formal Grid

Road Network
Formal Grid
Land Parcels
Alternative Formal Grid

Road Network
Alternative Formal Grid

Land Parcels

Note: Blocks shown may represent buildings, parking decks, or public spaces.
Radial Scheme
Road Network
Radial Scheme
Land Parcels

Note: Blocks shown may represent buildings, parking decks, or public spaces.
Potential Stream

Existing Conditions

OLD STERLING DR.
PINEGATE APARTMENTS
DURHAM-CHAPEL HILL BLVD.
Potential Stream

Phase 1

OLD STERLING DR.
PINEGATE APARTMENTS
EASTERN DR.
DURHAM-CHAPEL HILL BLVD.

15-501
Potential Stream

Phase 2
Stream Enhancement

Examples

Fawn Ridge, Knightdale, North Carolina

Before

Constructed

Bethpage, Durham, North Carolina

Before

After

Before

After

Before

After

would also require a General Water Quality Certification from DWR. Stream/buffer restoration projects that also require DWR approval for the use of a 401 Water Quality Certification are classified as exempt from the Town's LUMO Section 5.18 - Jordan WS riparian buffer protection requirements.

Discussions about the trade-off for preserving a portion of the upland basic forest and lower alluvial forest have included impacting 300–400 feet (my guesstimate) of the stream running from US 15-501 and adjacent to Eastowne Drive. There are some permitting challenges associated with constructing parking, or buildings, on a stream with a Jordan Buffer. Fortunately, the CWA delineation by the USACE would not be impacted. This section was not found to be subject to CWA jurisdiction. Impacting the stream would require a variance from Jordan Buffer Rule. The appeal did not change the stream determination of this portion of the channel. A variance request would need to demonstrate practical difficulties or hardships requiring the stream to be impacted. Presumably we would need the Town's support to demonstrate importance of preserving this basic upland forest and that be excepted as a hardship.
Proposed Site

Land Use

- MAIN CIVIC SPACE
- SECONDARY CIVIC SPACE OPPORTUNITY
- COMMERCIAL FOCUS
- COMMERCIAL / RESIDENTIAL

NC HEALTH CARE SYSTEM

Proposed Site

Land Use

- MAIN CIVIC SPACE
- SECONDARY CIVIC SPACE OPPORTUNITY
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NC HEALTH CARE SYSTEM

Proposed Site

Land Use

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NC HEALTH CARE SYSTEM

Proposed Site

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NC HEALTH CARE SYSTEM
Proposed Site
Building Heights

- Old Sterling Dr.
- Pinegate Apartments
- Eastowne Dr.
- Durham-Chapel Hill Blvd.
- New Hope Commons
Eastowne Northern Tract

• Approximately 20 acres in size
• Part of Dry Creek/Mt. Moriah Bottomland
  • Statewide Overall Rating Scale: Exceptional
    Very High
    High
    Dry Creek/Mt. Moriah: Moderate
    General
    Unranked
• Aerial photographs show forest is greater than 80 years old
• Mature forest with canopy trees 12 to 16 inches in size with some as large as 28 inches
Eastowne Northern Tract

Contains Dry-mesic Basic Oak-Hickory Forest on upland areas (from M. Schafele, NC NHP)

Canopy – White oak, red oak, white ash, Biltmore ash, shagbark hickory & mockernut hickory

Understory – So. sugar maple, chalk maple, flowering dogwood, black cherry, redbud & Ironwood

Shrub Layer – downy arrowwood, blackhaw, maple-leaf arrowwood

Herb Layer – Bosc’s panicgrass, Virginia wildrye, American lopseed, sanicle
Dry-mesic Basic Oak-Hickory Forest

- NHP Natural Areas with Dry-mesic Basic Oak-Hickory Forest within 15-mile radius Chapel Hill
- 7 sites totaling 149 acres
  - All sites are mature forests over 80 years old.
  - Eastowne Tract is not included.
- Occurs less frequently than commonly occurring Dry-mesic Oak-Hickory Forest
Dry-mesic Oak-Hickory Forest

- NHP Natural Areas with Dry-mesic Oak-Hickory Forest within 15-mile radius of Chapel Hill
- 26 sites totaling 5,673 acres
- According to the NHP Guide to the Natural Communities of NC, perhaps most common association in the Piedmont
Eastowne Northern Tract

- Eastowne Tract basic forest is not mapped. But, may be added based on recent NHP assessment
- 24% of the undeveloped lands in the Chapel Hill’s ETJ (4,296 acres) contains basic soils that support Dry-mesic Basic Dry-Oak Hickory Forest
- Dry Creek/Mt. Moriah Bottomland Overall Rating
  - Overall based on Highest value of Representational and Collective Rating
  - Representational rating – General
    - Natural areas contains 13th to 30th best examples in the state based on global rarity elements present
  - Collective rating – Moderate
    - Natural areas has a minimum of 2 elements documented
    - Elements = plants, animals, exemplary or unique natural communities, and animal assemblages important to conservation of state’s biodiversity