

APPENDIX A – 18

SITE PLAN GUIDE AND CHECKLIST FOR UNIFIED RESIDENTIAL DEVELOPMENTS

FORM: URD 2000	REVIEW DATE:
REVIEWED BY:	REVIEW #:
PROJECT NAME:	DATE OF PREVIOUS REVIEW:

SITE PLAN GUIDE AND CHECKLIST FOR UNIFIED RESIDENTIAL DEVELOPMENTS (APARTMENTS, CONDOMINIUMS, SENIOR CITIZEN RESIDENTIAL COMPLEXES, ETC.)

**SUPPORTING/SUPPLEMENTAL INFORMATION
(SUBMIT/ADDRESS ALL ITEMS)**

- 1. HOLD A PRESUBMITTAL CONFERENCE WITH TOWN STAFF
 - a. Attend a meeting with Town Staff at Development Review.
 - b. Attend an independent meeting with the Town Engineer to discuss drainage design and other issues surrounding the drainage review process.

- 2. SUBMIT A NOTIFICATION MAP SHOWING ALL SURROUNDING PROPERTY OWNERS ENTITLED TO RECEIVE NOTICE OF THE PUBLIC HEARING. ADDITIONALLY, SUBMIT TWO (2) SETS OF STAMPED, ADDRESSED ENVELOPES FOR ALL SURROUNDING PROPERTY OWNERS ENTITLED TO RECEIVE NOTICE OF THE PUBLIC HEARING (Contact the Orange County GIS Department)
 - a. This is a requirement for all CUP and SUP projects and can be required, at the discretion of the Administrator, for certain ZP projects. Please consult Sections 15-101, 15-102 and 15-52(c) of the LUO for clarifying information.
 - b. The notification information requested above is not necessary for minor modifications to existing CUP or SUP projects.

- 3. COMPLETED LANDUSE PERMIT APPLICATION[Section 15-49]
- 4. APPROPRIATE LANDUSE PERMIT FEE BASED ON FEE SCHEDULE
- 5. RECORDED PLAT/BOUNDARY SURVEY OF PROP. [Appendix A-6(d)]
- 6. DOCUMENTS RELATED TO THE SUGGESTED NEIGHBORHOOD INFORMATION MEETING
(i.e., handouts, site drawings, notes about meeting, including attendees)
- 7. TOWN OF CARRBORO/NCDOT DRIVEWAY PERMIT
(issued by Carrboro Public Works Department or NCDOT, respectively)
- 8. TREE REMOVAL JUSTIFICATION INFORMATION [Section 15-316]
- 9. "TRUTH IN DRAINAGE STATEMENT" RELATING TO IMPACTS ON

UPSTREAM/DOWNSTREAM PROPERTIES AS A RESULT OF THE
PROJECT [see Section 15-263 for additional information]

- 10. COMPLETED TOWN OF CARRBORO ANNEXATION PETITION
(for projects outside of Carrboro Town Limits)
- 11. COMPLETED TRANSPORTATION IMPACT STATEMENT AND ANY
NECESSARY SATELLITE PARKING AGREEMENTS
[Appendix A, A-7 and Sections 15-298 and 15-299]
- 12. RECREATION CALCULATION SHEET (on 8.5" X 11" sheet of paper)
- 13. HOMEOWNERS ASSOCIATION DOCUMENTS REVIEWED BY TOWN
ATTORNEY [Sections 15-59, 15-67 and Appendix A, A-7(1) and (6)]
- 14. **NPDC** REVIEW REQUIRED WITHIN ALL **NPDC** ZONING DISTRICTS
- 15. INFORMATION REGARDING ADHERANCE TO THE RECOMMENDED
ARCHITECTURAL STANDARDS OF SECTION 15-177 OF THE LUO
- 16. COMPLETED "DEVELOPMENT FACT SHEET" FORM

COVER SHEET

SHOW THE FOLLOWING FEATURES/INFORMATION ON THE COVER SHEET

- 1. NAME OF DEVELOPMENT AND/OR PHASE
- 2. TYPE OF PERMIT/APPROVAL REQUESTED (**ZP/SUP/CUP/CONST. PLAN**)
- 3. LEGAL OWNER'S NAME, ADDRESS, PHONE AND FAX NUMBER, ETC.
- 4. CONSULTING FIRM NAME, ADDRESS, PHONE AND FAX NUMBER, ETC.
- 5. PLANS DESIGNED BY:
- 6. PLANS DRAWN BY:
- 7. DATE OF PLANS:
Include all revision dates.
- 8. SHEET INDEX (Please note that each sheet must be included in 'Sheet Index')

Sample	SHEET #
Cover Sheet	Cover
Approved Conceptual Project Design	CP1
Site Plan	SP 2
Open Space and Recreation Plan	OR3
Utility Plan	UP 4
Landscape Plan	LP 5
Grading & Storm Drainage Plan	GP 6
Details	DP 7

- 9. LOCATION MAP: [Appendix A, A-4(a)]
Small scale (i.e., 1:1200)
Property located with shading
Surrounding streets within ½ mile shown
- 10. INCLUDE A SECTION ENTITLED "SUMMARY INFORMATION" LISTING THE FOLLOWING INFORMATION:
 - a. Tract size (acreage and square feet).
 - b. Show density calculation by zone [15-182].
 - 1. Use adjusted tract acreage for R-10 through RR [15-182.3].
 - 2. Include density bonuses for providing affordable units [15-182.4].
 - c. Total number of proposed units.
 - d. Number and size of each phase (acreage, square feet and # of units):
 - 1. List units by phase
 - 2. Include a detailed phasing schedule
 - e. Existing use category (use and # from 'Permissible Use Table') [15-146]
 - f. Proposed use category (use and # from 'Permissible Use Table') [15-146]
 - g. Detailed parking information, to include: [15-291]
 - 1. Number of spaces required
 - 2. Number of existing spaces

3. Number of proposed spaces (std., compact, HC, bike racks, etc.)
- h. Recreational amenities [15-196]:
 1. Amount of points required (# of units x multiplier)
 2. Amount of points provided (show # of points per item and total)
- i. Open space [15-198]:
 1. Amount of open space required (acreage and square footage)
 2. Amount of open space provided (acreage and square footage)
 - Amount of 'primary' by category (include %)
 - Amount of 'secondary' by category (include %)
- j. Maximum building height for the zoning district [15-185]
- k. Total impervious surface area (square feet and acreage)
- l. Tax map reference number
- m. Address of property
- n. Zoning district (see 'Official Zoning Map')

SITE PLAN

SHOW THE FOLLOWING FEATURES ON SITE PLAN

PLEASE INCLUDE ITEMS 1 THRU 8A AND 9 THRU 17 ON ALL PLAN SHEETS (AKA 'BASE INFORMATION')

- 1. SHOW ALL TRACT BOUNDARIES
Include property corners, label the control corner, include metes and bounds, etc.
- 2. SHOW ADJACENT PROPERTY BOUNDARIES
Include the following for each property:
 - a. Name of owner
 - b. Tax map number
 - c. Zoning district
 - d. Use classification (use and use number from 'Permissible Use Table')
- 3. SHOW LOCATION OF ALL EXISTING BUILDINGS, PARKING, SIGNS
 - a. Show all existing buildings within 50' of the subject property.
 - b. Include the square footage and use category in the footprint of the existing building(s).
 - c. If the project is an extensive redevelopment, you may need an 'Existing Conditions' plan sheet.
- 4. SHOW LOCATION OF ALL PROPOSED BUILDINGS, SIGNS AND OTHER PROMINENT SITE FEATURES
 - a. Include the square footage, use category and finished floor elevation (FFE) in the footprint of the proposed building(s).
 - b. Label the number of units by building within building footprint(s).
- 5. SHOW AND LABEL SETBACK FOR THE ZONING DISTRICT
Include a note if there is no setback for the district.
- 6. SHOW AND LABEL EXISTING PARKING AREAS ON THE SITE
[Section 15-290]
 - a. Show all existing parking within 50' of the subject property.
 - b. This information can be included on an 'Existing Conditions' sheet, if applicable.
- 7. SHOW AND LABEL PROPOSED PHASING [Section 15-61]
 - a. Include phase lines, phase schedule, etc.
 - b. Ensure that each phase meets the requirements of the LUO (i.e., screening, parking, shading, etc.).
- 8. PARKING – Show, label and/or include the following on the plans:
 - a. Parking layout and dimensions (for standard, compact and handicapped)
 - b. Parking stop location (include a detail – concrete, 3.5' from edge of walk/curb, needed adjacent to vegetation and sidewalks)
 - c. Parking aisle widths
 - d. Crosswalks at driveway/street/sidewalk intersections
 - e. Compact and handicapped space markings and signs (include a detail)
 - f. Driveway width, radius, etc.
 - g. Loading space (include dimensions and a detail, if applicable)

- h. Details for paving, curb and gutter, concrete, parking stops, etc.
 - i. Include a note concerning fire lane striping. The note should read “Fire lane striping will be coordinated with the Carrboro Fire Marshall prior to the issuance of a CO per Chapter 12 of the Carrboro Town Code.”
 - j. Include a note specifying that a ‘hard surface’ is required prior to building construction (contact Fire Department for further information)

- 9. WRITTEN AND GRAPHIC SCALE (Include on all plan sheets)
The plans must be drawn so that all features are discernible (1” = 50’ preferred).

- 10. NORTH ARROW (Include on all plan sheets)

- 11. MARGIN INFORMATION (Include on all plan sheets)
Please include the following information on the right-hand margin of each sheet:
 - a. Name of development and phase number
 - b. Type of permit/plan submittal
 - c. Sheet title and sheet number
 - d. Owner’s name, address, phone and fax number
 - e. Applicant’s name, address, phone and fax number
 - f. Consulting firm(s) name, address, phone and fax number
 - g. Name of designer/drawer
 - h. Plan date (include all revision dates)

- 12. SHOW AND LABEL ALL STREAMS, FLOODWAYS, AND FLOODPLAIN BOUNDARIES
 - a. Development activity adjacent to and within streams and floodways/floodplains is extremely restricted. Please review the LUO for additional information [Section 15-254 through 15-257].
 - b. Show all stream crossings and/or intrusions (i.e., parking, trails, sewer lines, etc.) and ensure that they are permitted by the LUO.

- 13. SHOW AND LABEL ALL STREAM BUFFERS [Section 15-268 AND 15-269]
No disturbance is permitted within the stream buffer(s) except in conjunction with 15-268(f) and 15-269(e) of the LUO.

- 14. SHOW THE FOLLOWING TREE INFORMATION: [Appendix A, A-5]
 - a. Existing and proposed tree line on the site and within 50’ of the site.
 - b. Show the location of the tree protection fencing on all plan sheets
 - c. Show the location and extent of the canopy for all trees 18” or greater in diameter & all rare trees on the site and within 50’ of the site.
Additionally, include the following information:
 - 1. Identify the trees to be removed on the plans
 - 2. Provide the following information in a table for all specimen trees
 - Tree number
 - Type of tree
 - Size (diameter) of tree
 - Whether the tree will be removed or retained

- 15. SHOW AND LABEL ALL EXISTING UTILITIES AND DRAINAGE SYSTEMS ON OR ADJACENT TO THE SITE

- 16. SHOW ALL EXISTING AND PROPOSED EASEMENTS

Include the following information on the plans:

- a. Easement type (water/sewer, drainage, access, etc.)
- b. Label as public or private
- c. Include the easement width

17. **SHOW & LABEL THE ADJACENT STREET & STREET RIGHT-OF-WAY**
Include the following information on the plans:
- a. Street name(s)
 - b. Street width
 - c. Right-of-way width
 - d. Show sidewalk and sidewalk width (you must provide a sidewalk within right-of-way if shown on the Town's Master Sidewalk Plan)
 - e. Show on-site linkages to the public sidewalk
 - f. Note 'private' roads, if any
 - g. For all private roads and access ways, review the requirements in Section 15-221
18. **SHOW THE LOCATION OF THE REFUSE AND RECYCLING CONTAINERS ON THE SITE (and within 50' of the site) [Section 15-250]**
- a. All refuse/recycling containers must be screened from adjacent properties and the street right-of-way (provide screening and a detail on the plans).
 - b. If a dumpster is used, a dumpster pad constructed to the specifications of the Public Works Director must be used (show location of pad on the plans and provide a detail).
19. **SHOW THE LOCATION OF ANY EXISTING OR PROPOSED BUS SHELTER(S)**
- a. Include a letter from Chapel Hill Transit indicating that they have been contacted concerning desired or anticipated system upgrades that are needed as a result of your proposed project.
 - b. Show the location of any existing or proposed bus shelter along with a sidewalk connecting the shelter to the site.
 - c. Show any associated road widening, bus pull-off area, etc. required as a result of the site upgrade (for existing bus-stops) or the installation of the bus shelter (for proposed bus stops).
 - d. Include a detail of the bus shelter with the plans. The shelter approved by the Board of Aldermen is a "Design Works" shelter that must be constructed on-site.
20. **SHOW ALL RECREATION AREAS (including support facilities)**
21. **SHOW ALL OPEN SPACE AREAS**

OPEN SPACE AND RECREATION PLAN

INCLUDE THE FOLLOWING INFORMATION, IN ADDITION TO THE 'BASE INFORMATION' FROM THE 'SITE PLAN' SHEET (ITEMS 1 THRU 8A AND 9 THRU 17 ON 'SITE PLAN')

- 1. COMPUTATION SHOWING REQUIRED RECREATION POINTS AND POINTS CLAIMED FOR FACILITIES PROVIDED [Section 15-196]
 - a. Show amount of recreation points required. The # of units x multiplier = the amount of recreation points required [Section 15-196(c)].
 - b. Show amount of recreation points provided (show calculations for each piece of equipment/amenity), including: [Section 15-196 and Appendix G]
 - 1. List of equipment and cost
 - 2. Conceptual design
 - c. Show calculation demonstrating compliance with children's amenities:
 - 1. Single-family units must have 10% of required recreation points in amenities designed for children 12 or under
 - 2. Multi-family units must provide 5% of required recreation points in amenities designed for children 12 or under
 - d. Include descriptions, elevations and details of equipment to be used in mini-parks and/or facilities to be constructed on the property.
 - e. Any 'payments-in-lieu' for required recreational amenities must be approved by the Recreation and Parks Director. Please submit a letter of approval from the Recreation and Parks Director that specifies the number of recreational points that can be satisfied by a payment-in-lieu. [Section 15-203]

- 2. REQUIREMENTS FOR RECREATION FACILITIES
 - a. Bike and pedestrian easements are generally required in primary conservation areas for the purpose of connecting to adjacent bikeway and pedestrian systems. [Section 15-196(e)]
 - b. Recreation facilities/amenities should be located throughout the development. [Section 15-196(g)]
 - c. Each recreation area must be a minimum of 1,200 square feet and screened.
 - d. Only play fields and bike/pedestrian paths may be 'double counted' (including land costs) as open space and recreation (note that an easement dedication does not equal recreation points – only trail construction does). [Section 15-196(h)]
 - e. Homeowner's Association maintenance is required for all facilities/amenities not dedicated to the Town. Please note that the Town is not required to accept offers of dedication. [Section 15-67, 15-199 and 15-201]
 - f. Show the location of any planned support facilities, including:
 - 1. Parking
 - 2. Bike racks
 - 3. Screening
 - g. Label all recreational amenities as public or private.

- 3. COMPUTATION SHOWING REQUIRED OPEN SPACE AND OPEN SPACE

PROVIDED [Section 15-198]

- a. Show amount of open space required (both acreage and square feet).
- b. Show amount of open space provided (both acreage and square feet).
 - 1. Include amount of primary constraint (square feet, acreage and %) [15-198(b)(4)]
 - 2. Include amount of secondary constraint (square feet, acreage and %) [15-198(b)(5)]
- c. Any 'payments-in-lieu' for open space must be approved by the permit issuing authority during the permit approval process. Please submit a letter justifying the request so that it may be included with the staff report.

4. REQUIREMENTS FOR OPEN SPACE

- a. All 'primary conservation areas' must be set aside as open space, even in excess of 40% (except hardwoods, which must be preserved to the extent practicable). Areas in excess of the 40% requirement can be on private lots by specifying buildable areas and creating overlay easements on the property. [Section 15-198(g)]
- b. 'Open Space' refers to areas that are not: [Section 15-198(b)(1)]
 - 1. Encumbered by substantial structures
 - 2. Devoted to street, parking, sidewalks, etc.
 - 3. Part of a privately owned lot [see exception in Section 15-198 (g)]
- c. All areas intended for open space should be a minimum of 50' in width. The exception to this requirement deals with trail connections linking larger open space areas. [Section 15-198(b)(2)]
- d. All open space must be accessible to the residents of the project or the general public. [Section 15-198(b)(1)(d)]
- e. If the project has 25 units or more, you must provide: [Section 15-198(d)]
 - 1. A flat, well-drained, grassed play field of at least 20,000 square feet (400 square feet per dwelling unit is required, with the minimum size being 20,000 square feet)
 - 2. Play field(s) must be located so that 90% of all units in the project are within 1,500 feet of the play field
 - 3. Play field(s) may be counted for recreation points and open space (land costs can not be used for the recreational component, however)
- f. Homeowner's Association (HOA) maintenance is required for all open space not dedicated to the Town. Please note that the Town is not required to accept offers of dedication. [Section 15-199]
- g. Label all open space as public or private. [Appendix A, A-6(b)(9)]

UTILITY PLAN

INCLUDE THE FOLLOWING INFORMATION, IN ADDITION TO THE 'BASE INFORMATION' FROM THE 'SITE PLAN' SHEET (ITEMS 1 THRU 8A AND 9 THRU 17 ON 'SITE PLAN')

- 1. SHOW PROPOSED WATER SYSTEM [Sections 15-237, 15-240, 15-241, 15-249 and 15-256]
 - a. Show the proposed water system (including the connection to existing water system) with size of pipe and type of material noted.
 - b. Show location of water services (one per lot).
 - c. Show the location of existing and proposed fire hydrants adhering to the following requirements:
 - 1. Fire Chief shall determine the location of hydrants if there is a dispute/problem
 - 2. Hydrants must be within 500' of all buildings
 - 3. Hydrants must be served by at least a 6" line and must have two (2) 2.5" connections and one (1) 4.5" connection
 - 4. Hydrant connections must be located at least 21.5" from ground level
 - 5. Add a note specifying that "No framing may begin until hydrants are operational"
 - 6. Add a note specifying that "An all-weather travel surface must be in place on the roadway prior to receiving final plat approval and/or building permits
 - d. Water lines should be looped, when possible, to provide adequate fire flow and to avoid 'dead-end' lines. Please submit fire-flow calculations for review by the Fire Chief and Town Engineer.
 - e. If a public water system is not used, show the private water system and/or the proposed location of water wells. If a well is needed/used, please show on the plans and submit a copy of the approved permit (Orange County Health Department or State of North Carolina).

- 2. SHOW PROPOSED SEWER SYSTEM [Sections 15-237 - 15-239 and 15-256]
 - a. Show connection to the existing sewer system with size of pipe and type of material noted.
 - b. Show proposed sewer system (outfalls, interceptors, collectors, manholes, pump station, etc.).
 - c. Show location of sewer services (one per unit).
 - d. Include the size and type of pipe/material used, inverts in and out, rim elevations, slope percentages of pipe segments, etc.
 - e. If a private system is used, show the private sewer system along with the wastewater treatment system. If a septic system/absorption field is required, please show on the plans and submit a copy of the approved permit (Orange County Health Department or State of North Carolina).
 - f. See Section 15-237 for OWASA connection requirement – 200' + 10'/unit for each unit over four (4).

- 3. SHOW LIGHTING [Section 15-242 thru 15-243]
 - a. Show the location of the proposed site lighting. Include the following:
 - 1. Location of proposed lighting in the parking area
 - 2. Light detail with height to top of light (15' maximum), type of light (shoebox style or low-level decorative lights recommended) and wattage of light indicated

3. Show the iso-candle footprint of the lights on the plan (maximum illumination at the property line is 0.2 footcandles measured at grade)
 - b. Show the location of any necessary street lights. [Section 15-242]
4. SHOW/PROVIDE ELECTRIC, TELEPHONE, CABLE, GAS INFORMATION [Section 15-244 thru 15-248]
 - a. Submit letters from all applicable utility companies certifying that the utility company can serve all lots within the subdivision via the existing infrastructure.
 - b. Include a note stating that all new utilities must be located underground.
 - c. As-built drawings must be submitted to the Town for any utilities installed by the developer within the public right-of-way (water/sewer). All utilities installed by a utility company (electric, cable, gas, telephone) should be shown on as-built drawings maintained by the utility company.
 - d. Include a typical drawing/detail for the location of all utilities within the right-of-way. Use standard drawing #6 or #7 in Appendix C.
5. SHOW ALL EXISTING UTILITIES [Appendix A]
 - a. Show the location of all existing utilities on the site (both above and below ground).
 - b. Indicate whether the existing utilities will 'remain' or be 'removed'.
 - c. If the utilities are to be relocated on the site, they must be placed underground.
6. SHOW ALL EASEMENTS [Appendix A]
 - a. Show all existing or proposed drainage easements. Include the following:
 1. Label either public or private.
 2. Label width.
 - b. Show all existing or proposed water and sewer easements. Include the following:
 1. Label either public or private.
 2. Label the width.
 - c. Show all existing utility easements (electric, gas, etc.).

LANDSCAPE PLAN

INCLUDE THE FOLLOWING INFORMATION, IN ADDITION TO THE 'BASE INFORMATION' FROM THE 'SITE PLAN' SHEET (ITEMS 1 THRU 8A AND 9 THRU 17 ON 'SITE PLAN')

- 1. SHOW THE FOLLOWING TREE INFORMATION: [Appendix A, A-5]
 - a. Existing tree line on the site and within 50' of the site (Although not specified in the LUO, the Administrator can require it- [Section 15-49(d)])
 - b. Show the location and extent of the canopy for all trees 18" or greater in diameter & all rare trees on the site and within 50' of the site. Additionally, include the following information:
 - 1. Identify the trees to be removed on the plans
 - 2. Provide the following information in a table for all specimen trees
 - Type of tree and tree number
 - Size (diameter) of tree
 - Whether the tree will be removed or retained

- 2. SHOW THE LOCATION OF THE TREE PROTECTION FENCE ON THE PLANS [Sections 15-316(b) & (c) and Section 15-318)]
 - a. Tree protection fencing must be placed around all trees and all forested areas that are to be retained on the site. The tree protection fencing must be placed at the edge of the canopy for all trees that are to be preserved/saved. No clearing, grading or other disturbance is permitted within the tree protection area.
 - b. Provide a detail showing the type of tree protection device to be used. The detail should include the following:
 - 1. Type of fence material (orange tensor ski fence is preferred)
 - 2. Spacing and type of stakes (10' max. spacing and metal preferred)
 - 3. Sign reading "TREE PROTECTION AREA – DO NOT ENTER" spaced every 50' along the fence

- 3. SHOW REQUIRED SHADE TREES FOR PAVED PARKING [Section 15-317]
 - a. Select trees from Appendix E and use formula E-3 in Appendix E for calculating 20% shading of vehicle accommodation area (parking and sidewalks). Include the following on the plans:
 - 1. Detailed calculation of the 20% shade tree requirement
 - 2. Provide a note or calculation demonstrating how the trees retained and/or planted meet the 20% requirement
 - b. Show and label the types of trees on the plans (name/abbreviation).
 - c. No pavement may be placed within 15' of trees retained for shading. If the retained tree is a specimen/rare tree, no pavement may be placed within the dripline/tree protection perimeter of the tree.
 - d. New trees must be surrounded by at least 200 sq. ft. of unpaved area (i.e. a planting island or strip).
 - e. Show concrete parking stops 3.5' from edge of curb/walk to prevent car overhangs from striking vegetation or blocking sidewalks.
 - f. 1/3 of trees should be evergreen for winter shading and color.

- 4. INCLUDE A PLANTING TABLE ON THE PLANS [Appendix A, A-6(23)]
 - a. The planting table should include the following:
 - 1. The name and quantity of the plant species used on the site

2. The size of the plant at planting (height or container size)
 3. Typical on-center spacing of the plant material
 4. Whether the plant is in a 'container' or 'balled and burlapped'
5. SHOW AND LABEL TYPE OF REQUIRED SCREEN [Section 15-304]
- a. The type of screen required depends on the proposed use and the existing surrounding uses. Using the chart found in Section 15-308, label the type of screen required along each property line. If no screen is required, leave the area blank.
 - b. Show and label the location of the screen material (plant, fence, wall, etc.).
 - c. If plants are used, include all plant information in the 'Planting Table'.
 - d. If a fence or wall is used, please provide a detail on the plans.
6. SHOW SCREENING OF REFUSE AND RECYCLING BINS [Section 15-250]
- a. All refuse/recycling containers must be screened from adjacent properties and the street right-of-way (provide screening and a detail on the plans).
 - b. If a fence is used, please provide a detail on the plans.
 - c. Include a detail of the gate/enclosure that will be used.
 - d. Location of the refuse/recycling container must be easily served by trucks.
7. INCLUDE ELEVATIONS – (all views) [Appendix A, A-6(b)(4)]
- a. The elevations should specify the types of materials to be used on the building. Include elevations of other prominent site features.
8. INCLUDE PROJECT ENTRANCE SIGN INFORMATION [Section 15-279]
- a. No more than 2 signs limited to 16 square feet (not to exceed 32 square feet for 2 sides).
9. SIGN PERMIT APPLICATION PROCESS
- a. The sign permit can be approved at the same time or as a separate process following project permit approval. Please consult the 'Sign Permit Procedure' pamphlet available in the Zoning Division for additional sign permit information.

GRADING AND DRAINAGE PLAN

INCLUDE THE FOLLOWING INFORMATION, IN ADDITION TO THE 'BASE INFORMATION' FROM THE 'SITE PLAN' SHEET (ITEMS 1 THRU 8A AND 9 THRU 17 ON 'SITE PLAN')

- 1. SHOW EXISTING UTILITY, STREET, AND/OR DRAINAGE SYSTEMS ON OR ADJACENT TO THE SUBJECT PROPERTY [Appendix A, A-5]
- 2. SHOW EXISTING CONTOURS ON THE SITE & WITHIN 50' OF THE SITE
 - a. The existing contours should be shown at 2' intervals (minimum) and should be shown using a dashed (- - -) line. [Appendix A, A-5]
- 3. SHOW PROPOSED CONTOURS ON THE SITE
 - a. The proposed contours should be shown at 2' intervals (minimum) and should be shown using a solid (___) line. [Appendix A, A-6]
 - b. No grading or disturbance may take place within any tree protection area or within any stream buffer, unless specifically permitted in the ordinance and/or approved by the permit issuing authority. [see Section 15-316(b) & 15-268(e)]
 - c. No grading may take place on another property unless all necessary construction easements are secured and there is no disturbance to specimen trees, stream buffers, etc. on the adjacent property.
- 4. SHOW ALL COMPONENTS OF THE PROPOSED DRAINAGE SYSTEM [Sections 15-261 thru 15-263, Appendix C and Appendix I]
 - a. Show all of the following features on the plans:
 - 1. New channels, swales, etc.
 - 2. Pipes (sizes and types) [minimum 15" rcp unless alternative approved]
 - 3. Catch basins
 - 4. Junction boxes
 - 5. Yard inlets
 - 6. Energy dissipaters
 - 7. Stormwater retention/detention facilities
 - 8. Stormwater quality devices
 - 9. Easements
 - b. Include all details necessary to ensure compliance with Appendix C and Appendix I of the LUO.
- 5. SUBMIT DETAILED DRAINAGE CALCULATIONS AND A WATER QUALITY ANALYSIS FROM A REGISTERED ENGINEER
 - a. Please consult Sections 15-262, 15-263 and Appendix I of the LUO for specific requirements. Additionally, please contact the Town Engineer to discuss all drainage requirements. Further, you are encouraged to set up a pre-submittal conference with the Town Engineer to discuss the drainage review process.
 - b. Submit a 'Truth in Drainage' statement disclosing the impacts the proposed project may have on upstream and downstream properties in relation to water quantity and water quality. [Section 15-263(a)(2)]
 - c. Please note that prior to the issuance of a CO or final plat, the Town may require that a 'drainage performance bond' be posted for a period of two (2) years. [Section 15-263(a)(3)]

- 6. PROVIDE ADEQUATE INFORMATION TO ALLOW ORANGE COUNTY EROSION CONTROL TO ISSUE PRELIMINARY EROSION CONTROL APPROVAL
 - a. Enough information must be provided to Orange County Erosion Control so they can determine that an Erosion Control Permit can be issued without significant modification to the plan. Significant modifications may require further review per Section 15-64 of the LUO, thus creating substantial project delays.

- 7. SHOW ALL STREAMS, STREAM BUFFERS, PONDS, DRAINAGE SWALES, WETLANDS, SWAMPS AND/OR FLOODPLAINS/FLOODWAYS ON THE PROPERTY AND WITHIN 50' OF THE PROPERTY [Sections 15-268, 15-269 and Appendix A, A-5]

- 8. SUBMIT COPIES OF ALL NECESSARY STATE AND/OR FEDERAL PERMITS FOR ALTERATIONS OR DISTURBANCE TO WETLANDS, STREAMS, FLOODWAYS/FLOODPLAINS
 - a. Such permits may include, but are not limited to, CLOMR's and LOMR's from FEMA, wetland permits from the Army Corp of Engineers and/or NCDEHNR, etc.
 - b. Please consult the Town Engineer for additional information or to determine the type of permits that may be necessary.

NOTE: THIS CHECKLIST IS INTENDED TO SERVE AS A GUIDE FOR PREPARING SITE PLANS FOR REVIEW BY THE TOWN OF CARRBORO AND IT SUPPLEMENTS THE TOWN'S LAND USE ORDINANCE. EACH APPLICATION MUST COMPLY WITH ALL LAND USE ORDINANCE REQUIREMENTS, NOT JUST THE CHECKLIST