FORMAL SITE PLAN REVIEW

MINIMUM SITE PLAN REQUIREMENTS

Site plan requirements are listed below. Some items may not be applicable to every application. Please contact *Plan Review* staff to confirm specific content requirements.

Site Plan Content

All Plan Sheets

- ☐ Vicinity/Location map
- ☐ True North (toward top of sheet)
- ☐ Scale (graphic and numeric)
- ☐ Date of preparation and all revisions
- ☐ Title block – Project name and address, ownership name and contact information, designer/engineer name and contact information
- ☐ Property boundaries and lot lines with bearings and distances (existing/proposed)
- ☐ Public rights-of-way and easements (existing and proposed)
- ☐ Limit of disturbance
- ☐ Utility connections (water, sewer, culverts, drains, etc.) showing size and direction flow
- ☐ Required and proposed sidewalks
- ☐ Delineate the normal pool elevation of impounded structures, the banks of streams and rivers, the MHW or NHW line of tidal waters, and any coastal wetlands landward of the MHW or NHW lines.
- ☐ Delineated vegetative buffer landward from all surface waters
- ☐ Conservation resources and setbacks
- ☐ Street and driveway locations and dimensions
- ☐ Location of Stormwater Control Measures & Appropriate outfall

Notes

- ☐ Contractor shall maintain an all-weather access for emergency vehicles at all times during construction
- ☐ Landscaping or parking cannot block or impede the FDC or fire hydrants. A 3-foot clear space shall be maintained around the circumference of the hydrant and FDC
- ☐ Additional fire protection and accessibility requirements may be required due to any special circumstances concerning the project.
- ☐ Contractor shall submit a Radio Signal Strength Study for all commercial buildings that demonstrates that existing emergency responder radio signal levels meet Section 510 requirements of the 2018 NC Fire Code.
- ☐ New hydrants must be brought into service prior to combustible materials delivered to the job site
- ☐ Prior to any clearing, grading, or construction activity, tree protection fencing will be installed around protected trees or groves of trees. No construction workers, tools, materials, or vehicles are permitted within the tree protection fencing.

Existing Conditions

- ☐ Adjacent property owner information (names, zoning, land use, deed book)
- ☐ Tree inventory (protected trees)
- ☐ Existing impervious areas (buildings, paved areas, sidewalks)
- ☐ Existing utilities (water, sewer, power, etc)
- ☐ Topography (1' contour intervals)
- ☐ Wetlands (delineated by qualified person)
- ☐ All flood plain areas with zone and elevation noted (if available)
- ☐ 100 year flood plain boundary
- ☐ All surface waters (ditches, creeks, and streams) and their classification

Existing Conditions (con't)

- ☐ Existing drainage easements and pipes
- ☐ Soil types
- ☐ CAMA Areas of Environmental Concerns
- ☐ CAMA land use classification boundaries
- ☐ Conservation resources
- ☐ Historic and archaeological sites

Site Layout Plan Data Table

- ☐ Tax Parcel Identification Number
- ☐ Total acreage within the project boundary
- ☐ Zoning
- ☐ Proposed use
- ☐ Setbacks of Building (required and proposed)
- ☐ Building size with square footage
- ☐ Calculations for building lot coverage
- ☐ Number of units
- ☐ Number of buildings
- ☐ Building height(s)
- ☐ Number of stories and square feet per floor
- ☐ Total amount and percent of impervious surface areas
- ☐ Off street parking calculations (required, proposed, and basis for determination)
- ☐ Bicycle parking spaces (required/proposed)
- ☐ CAMA land use classification
- ☐ Method of handling solid waste

Site Layout Plan

- ☐ Building footprints (riser rooms and ingress/egress identified)
- ☐ Tree removal plan, overlaid with proposed improvements
- ☐ Proposed impervious areas (buildings, paved areas, sidewalks)
- ☐ Location and dimensions of on-site pedestrian and vehicular access ways
- ☐ Parking areas
- ☐ Loading and unloading facilities
- ☐ Designs of ingress and egress of vehicles to and from the site
- ☐ Curb and sidewalk lines
- ☐ Internal curb radii
- ☐ Finished floor elevations
- ☐ Dimensions of all structures
- ☐ Building entrances
- ☐ Water/Sewer mains and connections
- ☐ Bicycle parking spaces and locations
- ☐ Dumpster location and screening
- ☐ Location and dimension of all fencing and screening.
- ☐ All offsite improvements (e.g. sidewalks)
- ☐ Site lighting (location, height, direction, fixtures) (as applicable)

SITE PLAN REQUIREMENTS

Grading Plan

- ☐ Existing topography (1’ contour intervals)
- ☐ Proposed topography (1’ intervals) resolved with existing grades
- ☐ Soil erosion and sedimentation control measures (e.g. fencing)
- ☐ For parking areas, spot elevations provided at top of curb and edge of pavement every 200 ft and at all grade breaks
- ☐ For roadways, spot elevations are provided at the top of curb, edge of pavement and at the centerline every 200 ft and at all grade breaks (profiles w/ typical road section acceptable)
- ☐ For driveways, spot elevations provided along the edge of pavement, along both sides of the sidewalk and 5-10’ inside the sidewalk to show grade transitions.
- ☐ Proposed roadways with a longitudinal slope between 0.3 – 7.0%
- ☐ Proposed driveway slopes: 15% max (residential) 8% max (commercial)
- ☐ ADA compliant sidewalk and ramps shown with spot elevations to demonstrate constructability.
- ☐ All proposed stormwater management structures shown (pipes, culverts, swales, ditches, SCMs etc.)
- ☐ Size, slope and cross section provided for all proposed swales
- ☐ 10’ (min) maintenance and access shoulder and 5’ (min) landscape buffer provided around the perimeter of open basin type stormwater SCMs (wet ponds, infiltration basins, stormwater wetlands etc.) Limits of Disturbance delineated
- ☐ All vegetated side slopes are 3 to 1 or flatter or stabilization method provided
- ☐ Show trees to be removed and preserved. Show grading does not conflict with tree preservation
- ☐ Tree protection fencing

Storm Pipes and Catch Basins

- ☐ Sizes, lengths, inverts and slopes shown for all proposed pipes (provide chart if necessary)
- ☐ Stormwater collected minimum of 10 ft behind the property line. Runoff may not sheet flow over a sidewalk
- ☐ Roof drains are directed to stormwater system
- ☐ All storm pipes greater than 12” in diameter
- ☐ Storm pipes greater than 10 ft from buildings
- ☐ Storm pipes greater than 5 ft from utilities
- ☐ Manhole and inlet spacing < 400 ft (< 60” pipes)
- ☐ Cover meets DOT minimum for class III RCP (or others per manufacturer specifications)
- ☐ Curb Inlets located at upstream sides of intersecting streets (no flow across intersecting street or around corners)
- ☐ Center of inlets min 5 ft from point of tangent on public streets
- ☐ If using 24” curb, a 24” grate must be used. Grate may not protrude beyond edge of pavement.
- ☐ Headwalls or flared end sections are provided at all pipe inlets and outlets
- ☐ Easements shown for public drainage across private property and meet the width requirements specified on page 5-3 of the technical standards
- ☐ Energy Dissipaters designed for the 10-yr flow provided at each outlet
- ☐ Appropriate outfall provided for each system (r/w, drainage easement or naturalized channel)

Utility Plan

- ☐ Meters, valves, cleanouts etc. in public right of way shall not be located in sidewalk or driveway
- ☐ 18” setback required for above ground facilities from back of curb or driveway
- ☐ 24” Vertical separation of Sanitary Sewer from storm drains otherwise DIP or structural bridging required.
- ☐ Fire hydrants (w/i 500’ of building for residential, w/i 300’ of building for commercial, w/i 150' of the FDC)
- ☐ Building construction type based on International Building Code (IBC).
- ☐ Fire Department Connection (FDC) location (if building sprinkler system employed). FDC must be within 40' of fire apparatus placement.

SITE PLAN REQUIREMENTS

Standard Details

- ☐ Driveways (appropriate to development type)Road cross-sections
- ☐ City standard driveway detail (appropriate for type of development)
- ☐ Appropriate details (NCDOT or City Standard) for all drainage structures proposed
- ☐ Typical road section (if applicable)
- ☐ Pavement section(s)
- ☐ Typical sidewalk and curb ramp details
- ☐ Edge treatment details (curbing, wheel stops, turn-down sidewalk)
- ☐ Energy dissipater detail
- ☐ Stormwater SCM details
- ☐ Tree protection
- ☐ Dumpster screening

Landscape Plan

- ☐ Locations, dimensions, and square footages of required buffer yards, parking lot landscaping, streetyards, perimeter landscaping, and foundation plantings.
- ☐ Details of required landscaping showing species, dimensions, and spacing of planted materials and the use and protection of existing vegetation.
- ☐ All existing and proposed utilities and if applicable, their associated easements.
- ☐ Location and square footage of structures and parking lots.
- ☐ Adjacent zoning districts.
- ☐ Approximate locations of all trees greater than eight (8) inches DBH within required buffers and of all areas of natural vegetation to be used as part of the buffer.
- ☐ Setbacks of all structures and specifications and shielding of certain uses, as required.
- ☐ Locations of any conservation resources associated with the parcel including any rare and endangered species in accordance with the North Carolina Wildlife Resources Commission.
- ☐ Proposed schedule for landscaping.
- ☐ Approximate location of all existing protected trees clearly indicating those to be retained and those proposed for removal and all trees to be planted on site to meet any mitigation requirements.
- ☐ Triangular sight distance.
- ☐ Landscape plan shows how BMP landscaping conforms to SD 15-16 (for all infiltration basins and wet ponds)
- ☐ SCM landscaping meets requirements of NCDEQ Stormwater SCM manual
- ☐ 5-10’ landscape zone as required by Sec. V-4(g) of the technical standards
- ☐ Temporary and permanent vegetative stabilization methods and including seedbed preparation. Must be appropriate for this area

Note: All federal, state and local permits are required prior to full construction release. This includes, but is not limited to: tree protection, erosion control, wetland impacts, city storm water, CAMA, etc.