City of Graham
Stormwater Permit Application

FOR OFFICE USE ONLY	
Review Fee:	
Permit No.:	
Date Issued:	
Date Paid:	
Check No.:	
Rec'd By:	

City of Graham Planning Department
Telephone: (336) 570-6705
Fax: (336) 570-6703

201 South Main St
Graham, NC 27253

City web site:
www.cityofgraham.com

Section A. SUMMARY INFORMATION

DEVELOPMENT NAME: _____

LOCATION: _____

PARCEL ID NO.: _____

TOTAL ACRES: _____ TOTAL DWELLING UNITS (if applicable) : _____

TOTAL DU/Acre: _____ % Built Upon Area: _____ TOTAL Built Upon Area: _____

☐ LOW DENSITY (no more than two dwelling units per acre or twenty-four percent built-upon area):

☐ HIGH DENSITY (exceeds the low density thresholds for dwelling units per acre or built-upon area)

Section B. APPLICANT INFORMATION

Owner (Owner or Developer)

Owner: _____ Phone No.: _____

Company: _____ Fax No: _____

Address: _____

_____ Zip: _____

Fax No: _____ Email Address: _____

Consultant (Person to contact regarding questions or revisions to the plan)

Contact Name: _____ Phone No.: _____

Company: _____ Fax No.: _____

Address: _____

_____ Zip: _____

Fax No: _____ Email Address: _____

ALL ITEMS ON THIS APPLICATION MUST BE ADDRESSED PRIOR TO SUBMITTAL.

ALL INCOMPLETE SUBMITTALS WILL BE RETURNED.

Section C. REQUIRED ITEMS CHECKLIST

The following checklists outline submittal requirements. Initial in the space provided to indicate the following submittal requirements have been met and supporting documentation is attached.

General Requirements:

Applicant's initials

_____1. Sheets shall be no larger than 36" x 24" plan and profile paper.

_____2. Minimum text size shall be 1/8".

_____3. Scale on plan view shall be no smaller than 1" = 50'; scale on profile view shall be no smaller than 1" = 50' horizontally and 1" = 5' vertically using a grid showing 1' intervals.

_____4. All drawings to be in North Carolina State Plane coordinate system.

_____5. Cover sheet shall have a vicinity map at a scale no smaller than 1" = 200'.

_____6. Provide a legend indicating existing and proposed lines, features and symbols.

_____7. Cover sheet shall include all general notes, owner's name, telephone number, and mailing address.

_____8. All elevations shall be given in relation to mean sea level; elevations in profile view shall be labeled in 10' intervals on the heavy lines (Ex. 350, 360).

_____9. Benchmark elevations and locations shall be shown on plan view.

_____10. Plan views shall have a north arrow on each drawing.

_____11. Each drawing shall have the following information in the title block: Street or project title, limits, horizontal and vertical scales, original date, revisions date, drawing number, checked by and drawn by. Recommended placement is lower right-hand corner.

_____12. All drawings sealed, signed and dated by a NC Professional Engineer or Landscape Architect.

_____13. A signed and sealed statement on the plans (if a high density project) certifying that the design of all stormwater management facilities and practices will control and treat the runoff from the from the first one inch of rain over the total drainage area, that the designs and plans are sufficient to comply with applicable standards and policies found in the *Stormwater BMP Design Manual*, and that the designs and plans ensure compliance with the City's Phase II Stormwater Ordinance.

_____14. Plan view shall show all actual street names. State road numbers shall be shown if applicable. Plan view should also indicate whether street is asphalt, concrete, gravel or dirt. Proposed street & Right-of-way widths will be dimensioned back-to-back and labeled in plan view.

_____15. Plan view shall show proposed and existing curb and gutter, pavement, storm sewers, drainage structures, driveway pipes, water mains, sanitary sewer mains, etc. All available elevations shall be shown on the profile view. Direction of flow shall be shown on plan view for all sanitary sewers and storm drains. Materials and pipe sizes shall be labeled.

_____16. Existing utility lines shall be shown and labeled on plan view and indicated in the legend.

_____17. Plans shall show final proposed locations and dimensions of all water, storm drain, and sanitary sewer lines, devices to be installed on the system, catch basins, culverts, ditches, including grades, pipes sizes, elevations, assumptions, calculations, invert elevations for all inlets and manholes and profiles of sanitary sewer lines.

_____18. All existing and proposed water, storm drainage and sanitary sewer easements shall be shown on all applicable sheets.

_____19. Number of dwelling units

_____20. Existing and proposed topographic lines (minimum 2-foot intervals).

_____21. City limits, county lines, and other jurisdiction lines, if any.

_____22. Streams, ponds, wetlands, etc. on the project site and within 50 feet of the property lines.

_____23. Location of floodplain and floodway (if applicable).

_____24. Location of drainage ways and easements.

Site Drainage Features:

_____25. Existing and planned drainage patterns (include off-site areas that drain through project) .

_____26. Any existing stormwater control systems.

_____27. Sub-watershed delineation showing drainage areas.

_____28. Show extent and number of disturbed acres.

_____29. Proposed impervious areas.

_____30. Soil information: type, special characteristics.

_____31. Name and classification of receiving water course.

Permanent Stormwater Control Measures (High Density only):

_____32. Type of BMP (wet pond, rain-garden, etc.).

_____33. Designer's certification.

_____34. Narrative description of proposed stormwater system (where runoff originates (e.g. roofs, roads, parking lots etc.), its conveyance within the project, its treatment, and its conveyance from the project to the receiving water body).

_____35. Profile along the centerline of the principal spillway/outfall pipe extending below the protected outfall or to the downstream structure.

_____36. Elevations of the "water quality" surface, temporary storage water surface, and the 10 and 100 year storms.

_____37. Stage-storage table for each BMP.

_____38. If BMP is to be used to treat construction site runoff, provide steps necessary to restore BMP to original design condition.

_____39. All necessary construction specifications.

_____40. Sequence of construction.

_____41. Individual drainage areas for each stormwater BMP.

_____42. Construction drawings and details for permanent measures.

_____43. Size and location of culverts.

_____44. Size and location of subsurface drainage conveyances.

_____45. Disclosure of party ultimately responsible for operation and maintenance of the stormwater system.

Stormwater Calculations:

_____46. Narrative description of calculations (methods, variables, assumptions, etc.) and results.

_____47. Stormwater BMPs designed in accordance with North Carolina Department of the Environment and Natural Resources-Division of Water Quality's *Manual of Stormwater Best Management Practices.*

_____48. Time of concentration for pre/post development conditions.

_____49. Pre-construction and post-construction runoff calculations for each outlet from the site (at peak discharge points).

_____50. Pre-construction and post-construction design calculations and hydrographs.

_____51. Design calculations of culverts and storm sewers.

_____52. Discharge and velocity calculations for open channel and ditch flows (easement & right-of-ways).

_____53. Design calcs of cross sections and method of stabilization of existing and planned channels (include temporary linings).

_____54. Design calcs and construction details of energy dissipators below culvert and storm sewer outlets (diameters & apron dimensions).

_____55. Amount and type of existing and proposed land use.

Operation and Maintenance Manual (for each BMP, High Density only):

_____56. Narrative description of the purpose and operation of the BMP.

_____57. Detailed list, description, and procedure of routine maintenance items.

_____58. Detailed list, description, and procedure of non-routine maintenance items.

_____59. Maintenance schedule.

_____60. Steps needed to restore BMP in the event of a failure.

_____61. Maintenance checklist and inspection form.

_____62. BMP construction drawings. Replace with record drawings when BMP is complete.

_____63. Latitude and longitude of each stormwater BMP.

Section D. ATTACHMENTS

- ☐ 3 sets of plans
- ☐ 1 set of calculations
- ☐ Operation and Maintenance Manual
- ☐ Application Fee

Section E. APPLICANT'S CERTIFICATION

Designer Certification:

I hereby certify that the design-related information submitted with this application for permit coverage was prepared under my direction or supervision and that the information is, in the exercise of my reasonable professional judgment, true, accurate and complete. I also hereby certify that the stormwater collection, treatment and control system design submitted with this application complies with all requirements of the City's Phase II Stormwater Ordinance.

Original Signature of Stormwater Designer	Title
Type or Print Name	

Owner Certification:

I hereby certify that I have read this application and agree to abide by the terms of any Stormwater Permit issued by the City of Graham.

Original Signature of Owner or Authorized Agent	Title
Type or Print Name	