

## TASK ORDER

This Task Order pertains to an Agreement by and between Union County, North Carolina ("OWNER"), and HDR Engineering, Inc. of the Carolinas ("ENGINEER"), dated January 1, 2024 ("the Agreement"). ENGINEER shall perform services on the project described below as provided herein and in the Agreement. This Task Order shall not be binding until it has been properly signed by both parties. Upon execution, this Task Order shall supplement the Agreement as it pertains to the project described below.

**TASK ORDER NUMBER:** #8683-03

**RELATED RFQ NUMBER:** 2024-021

**PROJECT NAME:** 853 W Pressure Zone Tank Preliminary Engineering Report

### PART 1.0 PROJECT DESCRIPTION

ENGINEER to develop a Preliminary Engineering Report for the proposed Pressure Zone 853 W (853WPZ) Water Tank and recommendations for rehabilitation and upgrade of the existing Watkins Booster Pump Station for the OWNER.

### PART 2.0 SCOPE OF SERVICES TO BE PERFORMED BY ENGINEER ON THE PROJECT

The scope of services for this project will include the following tasks:

#### Task 1. Task Order Management

This task includes the management and coordination of the Task Order project with ENGINEER and OWNER staff. The project will be managed to provide support for the OWNER within the established budget and schedule. Task Order progress status reports and budget tracking will be provided on a monthly basis.

*Deliverables: Monthly task order summaries and project invoices.*

#### Task 2. Hydraulic Modeling Support and Analysis

ENGINEER will use the existing calibrated model of the OWNER's water system to conduct simulations of the proposed 853WPZ. The water demand projections provided by the OWNER will be input to the model and hydraulic model simulations performed to determine the following:

- Conduct a model review and cleanup that includes a validation of the model (up to 16 man-hours).
- Confirmation of the Elevated Storage Tank (EST) volume and the proposed location on the parcel acquired for the proposed 853WPZ tank is still suitable.
- Recommended tank overflow elevation.
- Extended Period Simulation under 2040 average day operation including
- Extended Period Simulation under 2040 maximum day operation including steady state

*Deliverables: Support and Analysis Documentation, including PowerPoint Summaries, Technical Memorandum, GIS-compatible (SHP, GDB) files or Email Findings Summaries; Meeting Notes.*

#### Task 3. 853 W Elevated Storage Tank Preliminary Engineering Report

This task includes preliminary engineering for the elevated storage tank that will be constructed on a OWNER owned parcel (PIN#07090020) near the intersection of Old Monroe Road and Brandon Oaks Parkway. The new tank will be sized to meet the 2040 projected water demands. Preliminary sizing by the OWNER indicates a 2.5 MG tank volume. The styles of tank to be evaluated based on the tank volume and overflow elevation (AMSL) established in Task 2 are as follows:

- Composite
- Fluted
- Spheroid
- Multi-Column

Conduct geotechnical investigations of up to five (5) soil borings. The geotechnical report will be provided to tank manufacturers to support preliminary foundation designs. ENGINEER'S geotechnical subconsultant (F&R) anticipates up to a total of 250 linear of drilling in soil, and up to 30 linear feet of rock coring with a budget of \$29,650.

ENGINEER will prepare a Preliminary Engineering Report which will include for each tank style:

- Preliminary site layout.
- Request estimated construction costs and schedule from up to four (4) tank manufactures. The OWNER recognizes that the tank foundation design may significantly change bid cost and is the responsibility of the tank manufacturer's Engineer-of-Record.
- Estimate lifecycle costs for re-coating tank exterior and interior metals (as required by each tank style).
- OWNER's design/equipment preferences for:
  - Control valves
  - Instrumentation
  - Mixing system
  - Overflow discharge
  - Site security requirements

The Preliminary Engineering Report will also include:

- Prepare a Class 5 Association for the Advancement of Cost Engineering (AACE) Opinion of Probable Construction Cost (OPCC). OPCC shall include site work, mechanical, electrical, and instrumentation components expected to be utilized for all tank styles.
- Identify budget level costs for demolition of the Indian Trail Tank to be removed from service.
- Outline permitting requirements. Identified permits are:
  - NCDEQ Public Water Supply Section – Authorization to Construct
  - NCDEQ Land Quality Section – Erosion & Sediment Control
  - NCDOT Encroachment
  - Federal Aviation Administration – Determination of Hazard
  - OWNER's – Building Code Permit requirements
  - Town of Indian Trail – Coordinate with Planning Department for Conditional Zoning Application requirements for an EST.
  - Town of Indian Trail – Coordinate with Planning Department what Site Plan requirements will be required.

- Documentation of findings and recommendations via discussions with OWNER.

*Deliverables: Preliminary Engineering Report (draft), Preliminary Engineering Report (final)*

#### **Task 4. Watkins Booster Pump Station Upgrade Preliminary Engineering Report**

This task includes requested evaluation and condition assessment of the existing booster pump station for needed capacity expansion to meet the 2040 projected water demands. The condition assessment will identify other components of the booster station in need of rehabilitation and replacement. The Preliminary Engineering Report shall be based on the following:

- Perform a visual inspection of the existing booster pump station to include civil, structural, mechanical, and instrumentation components which include:
  - Condition of the building.
  - Existing security of the facility and site.
  - Electrical supply to the building.
  - Confirm adequate laydown space for pump station upgrade.
- Identify needed capacity improvements including pumps, piping, and instrumentation which include:
  - Size the pumps for upgraded pressure zone and operations with the new 853 W tank online.
  - Prepare a schematic layout of new pumps and equipment.
  - Evaluate the benefits of adding VFD controls on pumps.
  - Replacing the existing control valve to improve maintenance.
- Using existing drawings, provided by the OWNER, as a background image, markup the existing drawings to identify proposed improvements.
- Prepare Class 5 AACE OPCC based on the recommended improvements.
- Document findings and recommendations in the Preliminary Engineering Report.

*Deliverables: Preliminary Engineering Report (draft), Preliminary Engineering Report (final)*

#### **Task 5. Town Of Indian Trail Conditional Zoning Application Submittals**

The Town of Indian Trail has indicated the proposed Elevated Storage Tank (EST) is subject to approval of their Conditional Zoning Process described in 330.020 Application Procedures, the current version of which is attached and incorporated herein as Appendix B. ENGINEER'S review of this application process requires additional information and project details beyond what is included in the final Preliminary Engineering Report. Below is a summary of the requirements of 330.020 and manhour budget for each task listed:

- Topographic Survey and Site Plan (A.1 through 7, 9,11 and 12) included in this effort is an updated survey of the parcel by our sub-consultant to reflect current parcel lines, ROW and utilities.
  - A.1 through A.7, A.11 and A.12
    - ENGINEER MAN-HOUR ESTIMATE – 96 hours
    - SURVEY SUB-CONSULTANT (\$5,280 includes 10% markup)
  - A.16 Wetlands Field Investigation/Delineation/FEMA Flood Plain
    - ENGINEER MAN-HOUR ESTIMATE – 16 hours
- A Pre-application with Town and a one follow up meeting addressing initial comments. Includes attendance with OWNER and preparation of information for both meetings

including up to two figures depicting the water tank location, access roads, and required setbacks and vegetated buffers.

- ENGINEER MAN-HOUR ESTIMATE – 40 hours
- A.8 - Traffic Impact Analysis – Preparation of a one-page memo describing daily traffic of EST operations
  - ENGINEER MAN-HOUR ESTIMATE – 8 hours
- A.10, A.14 – Landscape Plan, screening, buffers and setbacks. Assume a depiction of buffer planting area and lawn area, with a potential plant list. Signage and planting plan, identifying quantity and location of individual plants are not included. Includes one round of revisions
  - ENGINEER MAN-HOUR ESTIMATE – 50 hours
- A.15 – Renderings 7 & A.18 Existing & Proposed Cross Sections. Renderings will consist of one section, 250-lf or less, demonstrating the relationship of the water tower to the landscape. Architectural renderings are not included, as it is assumed ancillary buildings are not required for this project. Assumed one basic elevation drawing of example tank bowl logo.
  - ENGINEER MAN-HOUR ESTIMATE – 36 hours
- Storm Water Plan Application – A.16,17, and 20 includes compliance with Town Post Construction Ordinance (copy of the current version of such ordinance is included herein as Appendix C, which is attached and incorporated herein by reference.)
  - ENGINEER MAN-HOUR ESTIMATE – 90 hours
- A. 19 – Letter of Waiver from Union County Water - Preparation of a one-page memo describing water and sewer needs for the EST
  - ENGINEER MAN-HOUR ESTIMATE – 2 hours
- A.21 – School Impact Study – Preparation of a half page memo describing there will not be any new school students created by the EST.
  - ENGINEER MAN-HOUR ESTIMATE – 2 hours
- Community Meetings based on Paragraph E
  - ENGINEER MAN-HOUR ESTIMATE – 50 hours
- Submissions and Revisions based on Technical Review Committee, Town Council requests, and Planning Director. Assumed to provide limited miscellaneous support to OWNER Staff.
  - ENGINEER MAN-HOUR ESTIMATE – 40 hours
- Miscellaneous Expenses
  - Application Fee - \$1,600
  - Expenses by the Town for the Community Meeting – NTE \$1,000

### **Scope of Services Assumptions and Exclusions**

- The 853 W tank site is set. No additional site evaluations are included.
- Supplemental GIS and field testing may be requested as needed.
- The models are assumed to be acceptable for analysis as-is.
- Additional geotechnical investigations during final design may be required.

- Additional testing, assessments or services requiring subcontractors or subconsultants are not included in the scope. If needed, these may be negotiated and added by the OWNER by amendment.
- Conditional Zoning refers to the proposed land use that the Town of Indian Trail may or may not approve. These uses are subject to approval by the Town of Indian Trail and the services provided by HDR to support the Conditional Zoning Process do not guarantee approval.
- The Conditional Zoning Process will be initiated during the PER development at the time both OWNER and ENGINEER believe there is sufficient information to make the application.

### **PART 3.0      ADDITIONAL SERVICES, NOT PART OF BASIC SERVICES**

Not used.

### **PART 4.0      PERIODS OF SERVICE**

The term of service for this contract shall be 6 months from notice to proceed for completion of the Preliminary Engineering Report. Support services for the Conditional Zoning Process will be completed within 9 months from notice to proceed.

### **PART 5.0      PAYMENTS TO ENGINEER**

The total Not-to-Exceed Fee for this Task Order shall be \$275,650. Payments to HDR shall be based on a Per Diem basis, as defined in Section 6.1.3 of the Agreement.

| <b>Task</b>  | <b>Project Costs</b> |
|--|----------------------|
| Task 1 Task Order Management                             | \$ 16,221            |
| Task 2 Hydraulic Modeling Support and Analysis           | \$ 34,923            |
| Task 3 853 W Elevated Storage PER                        | \$ 80,740            |
| Task 4 Watkins Booster Pump Station Upgrade PER          | \$ 45,994            |
| Task 5 Town of Indian Trail – Conditional Zoning Process | \$97,772             |
| <b>Total</b>   | <b>\$275,650</b>     |

Appendix A, located at the end of this Task Order contains an estimated breakdown of the staff mix and hours for each task to be performed, which is attached and incorporated herein by reference.

Hourly rates for ENGINEER'S employee job classifications are listed below.

| <b>Contract Title (Billing)</b> | <b>2025</b> |
|---------------------------------|-------------|
| Project Principal               | \$336       |
| Senior Engineer II              | \$320       |
| Project Manager                 | \$280       |
| Senior Engineer                 | \$280       |
| Engineer II                     | \$210       |
| Engineer I                      | \$170       |
| Senior CADD                     | \$203       |
| CADD                            | \$178       |
| EIT/Designer II                 | \$155       |

|                       |       |
|-----------------------|-------|
| Designer I            | \$130 |
| GIS Developer         | \$169 |
| GIS Analyst           | \$135 |
| Senior Cost Estimator | \$267 |
| Cost Estimator        | \$201 |
| Senior Env. Scientist | \$186 |
| Project Coordinator   | \$185 |
| Accountant            | \$140 |
| Administrative        | \$120 |

† ENGINEER will review billing rates annually. Updates to billing rates 2026 will be reviewed with OWNER and approved by all parties prior to first invoice in the respective calendar year.

## PART 6.0 OTHER

### 6.1 General Assumptions, Exclusions and Clarifications

- Work under this On-Call Contract will be under the direction of the OWNER. Scope and budget are estimated based on our current understanding of the OWNER's requirements.
- All deliverables will be electronic (PDF or GIS-compatible files).
- All travel will be scheduled with a minimum of two (2) weeks' notice unless an emergency that requires in-person facilitation and analysis.

This Task Order is executed this \_\_\_\_\_.

Union County, NC  
"OWNER"

HDR Engineering, Inc. of the Carolinas  
"ENGINEER"

BY: \_\_\_\_\_

BY: \_\_\_\_\_

NAME: Brian Matthews

NAME: Jonathan Henderson

TITLE: County Manager

TITLE: Senior Vice President

ADDRESS: 500 N. Main Street  
Monroe, NC 28112

ADDRESS: 440 South Church Street  
Charlotte, NC 28202

Approved as to Legal Form:

\_\_\_\_\_  
Deputy Finance Officer

This instrumentation has been preaudited in the manner required by the Local Government Budget and Fiscal Control Act

# APPENDIX A – Task Order #8683-03-853 W Tank PER

| Contract Title        | 2025  | Project Management | Initial Hydraulic Modeling | 853W EST P.E.R         | Watkins BPS P.E.R. | Conditional Zoning Support | Totals            |
|-----------------------|-------|--------------------|----------------------------|------------------------|--------------------|----------------------------|-------------------|
| Project Principal     | \$336 | 4                  |                            | 1                      | 1                  | 36                         | 42                |
| Senior Engineer II    | \$320 |                    |                            | 4                      | 24                 | 26                         | 54                |
| Project Manager       | \$280 | 24                 | 2                          | 8                      | 8                  | 44                         | 86                |
| Senior Engineer       | \$280 | 12                 | 8                          | 101                    | 72                 | 58                         | 251               |
| Engineer II           | \$210 | 4                  | 54                         |                        |                    | 70                         | 128               |
| Engineer I            | \$170 |                    | 107                        |                        |                    | 48                         | 155               |
| Senior CADD           | \$203 |                    |                            |                        |                    |                            |                   |
| CADD                  | \$178 |                    |                            |                        |                    |                            |                   |
| EIT/Designer II       | \$155 |                    |                            |                        |                    |                            |                   |
| Designer I            | \$130 |                    |                            | 90                     | 84                 | 88                         | 262               |
| GIS Developer         | \$169 |                    |                            |                        |                    |                            |                   |
| GIS Analyst           | \$135 |                    | 20                         | 8                      |                    | 60                         | 88                |
| Senior Cost Estimator | \$267 |                    |                            |                        |                    |                            |                   |
| Cost Estimator        | \$201 |                    |                            | 16                     | 16                 |                            | 32                |
| Senior Env. Scientist | \$186 |                    |                            |                        |                    |                            |                   |
| Project Coordinator   | \$185 | 6                  |                            |                        |                    |                            | 6                 |
| Accountant            | \$140 | 12                 |                            |                        |                    |                            | 12                |
| Administrative        | \$120 |                    |                            |                        |                    |                            |                   |
| <b>Totals</b>         |       | <b>62</b>          | <b>191</b>                 | <b>228</b>             | <b>205</b>         | <b>430</b>                 | <b>1,116</b>      |
| <b>Total Labor</b>    |       | <b>\$ 15,054</b>   | <b>\$ 34,923</b>           | <b>\$ 47,796</b>       | <b>\$ 44,216</b>   | <b>\$91,328</b>            |                   |
| <b>Expenses</b>       |       | <b>\$ 1,167</b>    | <b>\$ 0</b>                | <b>\$ 32,944 (Sub)</b> | <b>\$ 1,778</b>    | <b>\$6,444</b>             |                   |
| <b>Task Budget</b>    |       | <b>\$ 16,221</b>   | <b>\$ 34,923</b>           | <b>\$ 80,740</b>       | <b>\$ 45,994</b>   | <b>\$97,772</b>            | <b>\$ 275,650</b> |

**330.020 Application Procedures**

All applications must include a conceptual plan, drawn to scale, and supporting text that, if approved, will become a part of the Ordinance amendment. The conceptual plan, drawn by an architect, landscape architect, professional surveyor, or engineer licensed to practice in North Carolina, shall include any supporting information and text that specifies the actual use or uses intended for the property and any rules, regulations, and conditions that are in addition to all Ordinance requirements, will govern the development and use of the property.

A. The applicant shall, at a minimum, include as part of the application, each of the items listed below

1. A boundary survey showing the total acreage, present zoning classifications, date, and north arrow.
2. Legal description of the property(ies).
3. The owners' names, addresses, and the tax parcel numbers of all adjoining properties within five hundred (500) feet of the subject parcel. The information shall be provided in a digital format and typed on address labels.
4. All existing or proposed easements, reservations, and rights-of-way on the property(ies) to be rezoned.
5. Existing location of buildings on the parcel.
6. Lot sizes for residential uses and proposed out parcels if applicable.
7. Proposed principal uses: For residential uses this shall include the number of units and an outline of the area(s) where the structures will be located. For non-residential uses, designate the area(s) within the development where particular types of uses that will occur with reference made to the list of uses found in the applicable zoning district.
8. Traffic impact analysis/study for the proposed service area as required by the Town's Guide for the Preparation of Traffic Impact Studies document. In addition, traffic, parking, and circulation plans, showing the proposed locations and arrangement of parking spaces and access points to adjacent streets including typical parking space dimensions and locations (for all shared parking facilities) along with typical street cross-sections. The traffic impact analysis/study shall receive a preliminary approval by the Town prior to the community meeting being scheduled. The Engineering Director shall be authorized to require revisions to the preliminary approved TIA if it is determined that modifications to the proposed project (between the community meeting and public hearing) may result in other significant impacts.
9. Detailed information on the number, height, size and location of structures.
10. All proposed setbacks, buffers, screening and landscaping required by these regulations or otherwise proposed by the applicant shall be delineated on a conceptual plan. Actual approval of landscaping plans shall be part of the site plan review process.
11. Generalized traffic, parking, and circulation plans.
12. All existing and proposed points of access to public streets.
13. A detailed description of all proposed phasing of development for the project.
14. Number, location, type, and size of all signs proposed to be erected by the developer at entrances to the site. Additionally, a general description of other proposed signs



including number, location, type and size of all commercial signs. Actual approval of signs shall be part of the site plan review process.

15. Conceptual renderings of the proposed development delineating the exterior treatments of the principal structures including proposed materials and general architectural design shall be in compliance with the Statement of Integrity and Design. Actual approval of all proposed buildings shall be part of the site plan review process.
16. Approximately identify all environment constraints on the subject property including but not limited to the following: flood plain, ponds, streams, and wetlands. Approximately delineate areas within the regulatory floodplain as shown on the official Flood Insurance Rate Maps (F.I.R.M.) published by the Federal Emergency Management Agency (F.E.M.A.).
17. Existing and proposed topography at two-foot contour intervals or less.
18. Scale and physical relationship of buildings relative to abutting properties. This may be accomplished by providing existing and proposed topographic elevation cross-sections of the site showing proposed structures relative to existing adjacent properties.
19. Letter of water and sewer availability from Union County Public Works.
20. Detailed information of measures that will be taken in order to comply with the Post Construction Ordinance. Prior to submitting an application for a conditional zoning district the applicant/property owner will need to have a consultation meeting with the Storm Water Administrator.
21. School impact study for residential developments of fifty (50) lots/units or greater as required in UDO Chapter 13140.

#### **B. Conceptual Plans**

Conceptual plans, including all additional information shown on it, shall constitute part of the petition for rezoning to a conditional zoning district. The Planning Director may, on a case by case basis and within his/her sole discretion, specify if and how many paper copies of the application the applicant must submit in order to initiate the review. No application shall be deemed complete unless accompanied by a digital PDF file copy of the application and fee in accordance with the fee schedule most recently adopted by the Town Council.

#### **C. Additional requirements**

When reviewing an application to rezone property to a conditional zoning district, the Planning and Zoning Board and/or Town Council may request additional information (in addition to that required in Section 330.020, as they deem necessary).

#### **D. Technical Review Committee**

The TRC shall review and comment on the proposed project to ensure all of the Town ordinances are being complied with. Once the TRC comments are addressed and the project is resubmitted the community meeting may be scheduled.

#### **E. Community Meeting**

Once the conceptual plan and the required number of associated documents have been submitted to the Town and the required fees have been paid, the applicant shall schedule and hold a community meeting in coordination with the Town planning staff. Such meetings shall occur prior to the petition being scheduled on the Planning and Zoning Board agenda. The community meeting is designed to provide a framework for creating a shared vision with community involvement directed by the applicant in accordance with the following requirements:

1. The applicant shall provide an agenda, schedule, location, and list of participants such as landscape architects, engineers, etc. to answer questions from citizens and service

providers for the project in cooperation with the planning staff. This information shall be provided to the Town prior to the community meeting notification being mailed.

2. The community meeting shall be a minimum of 4 hours. Two hours shall be scheduled during normal business hours to allow service providers (such as NCDOT, utilities, NCDENR) to participate as needed and to allow for citizens to drop in at a convenient time throughout the period. It is strongly recommended that this portion of the community meeting take place at the proposed development site. In addition, a 2 hour evening period shall be scheduled at the Indian Trail Town Hall or other nearby location agreed upon by the applicant and planning staff. This meeting shall also be conducted in a drop in format.
3. Notice of community meetings shall at a minimum, be given as follows:
  - a. A public notice shall be sent by the Town of Indian Trail to a newspaper having general circulation in the town not less than 10 days or more than 25 days prior to the date of the community meeting.
  - b. A notice shall be sent by first class mail by the Town of Indian Trail to the property owner(s) affected by the proposed zoning change and to the owners of all properties that lie within 500 feet as measured from the exterior boundaries of the proposed development. The applicant shall furnish the Town with mailing labels that depict the names and addresses of the owners (or "Current Resident") of all properties within said 500 foot area. Such notice shall be sent not less than 10 days prior to the date of the community meeting. The notification shall contain information regarding the community meeting time and location(s) as well as a general description of the proposal. The community meeting notice shall contain an information sheet with a general description of the conditional zoning process and timeline.
  - c. A community meeting notification sign shall be posted by the Town in a conspicuous place at the property not less than 10 days prior to the community meeting.
  - d. All conceptual plans submitted and reviewed during the community meeting process shall conform to all current Town Ordinances. In addition, a disclaimer statement shall be added to all community meeting notifications indicating that the proposed application and conceptual plan in no way has been endorsed or approved by the Town of Indian Trail.
  - e. The applicant shall reimburse the Town for all expenses incurred to provide the notifications required by this Section.
4. Town staff shall keep notes of citizen comments received during the community meeting. In addition, all service provider comments shall be recorded by the Town, including but not limited to, all correspondence, reports, and oral comments by service providers. After Town review, the information will be available at Town Hall and at subsequent meetings concerning the project. When practical, comments, ideas, and suggestions should be incorporated by the developer into the proposed development.
5. Following the community meeting, the applicant shall have the opportunity to make changes to the application to take into account information and comments received. Revised copies of the conceptual plan in PDF file format shall be submitted to the Planning Director for review. No additional fee shall be required for making such changes provided the Planning Director receives the revised conceptual plan within 30 days following the community meeting. If a revised conceptual plan is not received within the 30 day period, or if the applicant otherwise notifies the Planning Director in writing

that no revised conceptual plan will be submitted, the Planning Director shall review the original application submitted.

#### **F. Planning Director Review**

Within 30 days of the submission of a revised application or revised conceptual plan or within 60 days following the community meeting where no revised application is submitted, the Planning Director will make comments and suggestions for revisions. If the planning director does not forward comments to the applicant by the end of these time periods, the application shall be scheduled on the Planning and Zoning Board agenda. If the Planning Director provides the applicant with comments on the application, the applicant shall have 10 days after receiving those comments to inform the director whether the application will be further revised. If the applicant informs the Planning Director that the application will not be further revised, the director shall schedule the application on the Planning and Zoning Board agenda. If the applicant informs the director the application will be further revised, the director shall not submit the current application to the Planning and Zoning Board. Once the applicant submits a revised application, it shall be subject to review in accordance with this section.

#### **HISTORY**

*Amended by Ord. 0210209-347 on 2/8/2021*

*Amended by Ord. 397 on 3/26/2024*

*Amended by Ord. 410 on 12/10/2024*

## **Storm Water Management Permit Application & Checklist**



**Town of Indian Trail  
Stormwater Services**  
315 Matthews-Indian Trail Rd.  
PO Box 2430  
Indian Trail, NC 28079  
Phone: (704)-821-5401

**APPENDIX 5-1: STORM WATER MANAGEMENT PERMIT APPLICATION**

Name of Development: \_\_\_\_\_

Project Address: \_\_\_\_\_ Tax Parcel: \_\_\_\_\_

Total Area of Project: \_\_\_\_\_ Total Disturbed Area: \_\_\_\_\_ Type of

Development: ☐ Commercial ☐ Residential ☐ Mixed Use

Resubmittal: ☐ Yes ☐ No

Owner's Name: \_\_\_\_\_ Contact Person: \_\_\_\_\_

Owner's Address: \_\_\_\_\_

Owner's Phone Number: \_\_\_\_\_ Fax: \_\_\_\_\_

Owner's Email: \_\_\_\_\_

Designer: \_\_\_\_\_ Contact Person: \_\_\_\_\_

Designer's Address: \_\_\_\_\_

Designer's Phone Number: \_\_\_\_\_ Fax: \_\_\_\_\_

Designer's Email: \_\_\_\_\_

*This application conveys the information necessary for review of the Concept Plan for compliance with the applicable Post-Construction Storm Water Ordinance. Concept Plan approval is required prior to approval of the preliminary plan for the project.*

For Office Use Only:

Date Received: \_\_\_\_\_

Project Number: \_\_\_\_\_

## **APPENDIX 5-2: STORM WATER MANAGEMENT PERMIT CHECKLIST**

Please check off the items below that are enclosed with the Storm Water Management Permit Application. All items must be checked in order for an application to be considered complete.

### **Required With Submittal of Storm Water Management Plan Application:**

Two (2) sets of plans and calculations for all BMPs, including the storm sewer system, to be installed for compliance with the water quality, volume and peak control requirements of the Post-Construction Storm Water Ordinance. All designs must be in accordance with the NCDENR Storm Water BMP Manual adopted by Indian Trail. All plans and calculations must be sealed by a professional engineer. All plans must contain the following:

- ☐ BMP Insert Table with specifics on each BMP, including: BMP Type (wet pond, wetland, bioretention, etc.); BMP location, size and elevation; location and elevation of BMP inlets and outlets; latitude/longitude coordinates of BMP; fee credit; BMP name (project or subdivision name- BMP type- number); length of swale (in flow direction (ft)-Grass Swale); maximum pool depth in feet (for wet ponds and bioretention systems); owner name; owner address; owner phone number; and owner email.
- ☐ Details showing BMP dimensions, including top and bottom of storage areas as well as depth and storage volume.
- ☐ Easements for all BMPs and drainageways.
- ☐ Existing and proposed paved roads, buildings, structures and utilities.
- ☐ Basin contours labeled and tied into existing contours.
- ☐ Construction sequence.
- ☐ North arrow.
- ☐ Vicinity map.
- ☐ Parcel Tax Number.
- ☐ Jurisdiction.
- ☐ Legible scale.
- ☐ Property boundary and adjoining property boundaries and owners.
- ☐ Watershed District.
- ☐ Delineation of on-site drainage areas including numbers of acres.
- ☐ Latitude/longitude coordinates of storm sewer system inlets and outlets.
- ☐ BMP calculations illustrating compliance.
- ☐ Stream buffers for compliance with the Post-Construction Storm Water Ordinance.
- ☐ Delineate undisturbed open space area for compliance with Post-Construction Storm Water Ordinance requirements.
- ☐ An Operation and Maintenance Agreement and Maintenance Plan must be attached to the Storm Water Management Permit Application for each BMP included in the project.