



July 5, 2022

Stephanie Brixey  
Deputy Director / POTW Director  
5926 Highway 55 East  
Durham, NC 27713

**Re: High Priority Line Visual Inspections  
Durham County, NC**

Dear Ms. Brixey,

### **Understanding**

Durham County monitors approximately 57 high priority lines as part of the County's NPDES permit with the North Carolina Division of Water Resources. As part of the permit the high priority lines must be inspected on a semi-annual basis. Duke's (formerly Hydrostructures) has performed yearly manhole inspections for the County and our staff is very familiar with the system. Since these manholes are currently visited once a year to evaluate the structural and maintenance conditions at each manhole, these inspections can be leveraged to meet the NPDES permit requirement. This proposal is for Duke's to provide the semi-annual inspection and reporting services for the County. Duke's will meet with Durham County staff to confirm the scope listed below.

### **Scope**

Durham County has a list of 57 high priority areas it must inspect semiannually to meet conditions of the NPDES permit WQCS00038. Duke's is currently under contract to perform manhole condition and maintenance assessments on the majority of the collection system manholes each year. Review of the high priority list shows that 623 manholes are inside the High Priority Inspection Areas. Each high priority section includes 2 pipes for visual inspection. This will allow the conditions entering and leaving the site to be documented along with any creek crossings or other areas of concern.

Duke's will build a location-enabled, cloud-based data collection form to capture all relevant data during the visual field inspection. The existing locations from the GIS will be used to ensure the correct area is inspected. During the field inspection the following services will be performed:

- All manholes in each priority area will be opened and visually inspected. The flow depth and an approximate velocity will be collected and documented at a point along the area.
- Photos of the manhole interiors will be collected.
- Photos documenting the ground conditions in the area will be collected.
- Stream crossings will be photographed, and the pipe will be visually inspected.
- The stream bank and any erosion will be photographed and documented.



Following the field inspections, Duke's GIS and Engineering staff will create a brief summary report for each area including all photos and field notes. Each site will be packaged as an individual pdf report.

As the high priority line inspections are semiannual, each area pdf report will be given a FY23-1 or FY23-2 suffix to allow the data to be organized for ease of reporting to Division of Water Resources.

**Project Fee**

Dukes proposes to perform all the tasks described above for the following unit prices:

First Inspection* (623 MH @ \$42/EA 114 pipes @ 42/ EA) .....	\$ 30,954.00
Second Inspection 623 MH @ \$42/EA 114 pipes @ 42/ EA) .....	\$ 30,954.00
Total .....	\$ 61,908.00

\* Note that the manholes were already included in the existing contract for one inspection per year. The additional cost of the high priority inspection cost is \$35,742.

**Project Schedule**

Dukes will coordinate with Durham County at a kick-off meeting following a Notice to Proceed. A formal schedule will be provided within 1 week of the kick-off meeting.

We very much appreciate the opportunity to assist you with this project. If you have any questions or need any additional information, please give me a call at (919) 542-5002.

Sincerely,  
**Duke's**

Jeffrey Koonce

SUBMITTED BY: Jeff Koonce DATE: 7/5/2022

APPROVAL BY: \_\_\_\_\_ DATE: \_\_\_\_\_ \*

\*Notice to Proceed Date