Department of Natural Resources
and Environmental Control
89 Kings Hwy
Dover, DE 19901
dnrec.delaware.gov

Division of Water
Commercial and Government Services Section

Phone: (302) 739-9948

INSTRUCTIONS FOR COMPLETING THE PERMIT APPLICATION FOR THE CONSTRUCTION OF WASTEWATER COLLECTION AND CONVEYANCE SYSTEMS

The following items must accompany the application. **Please note that incomplete application packages will be returned in their entirety and not reviewed until such time as all required information is received.**

- ☑ 1. A narrative summary of the intended purpose and design of the proposed facilities.
- ☑ 2. One (1) set of final construction plans and specifications (paper copy), if applicable, signed and sealed by a Delaware-registered Professional Engineer, or a Delaware-registered Professional Land Surveyor for gravity systems only.
- ☑ 3. One (1) electronic copy of final Plans.
- ☑ 4. The final plans must be drawn to scale showing slopes, inverts, pipe types and sizes, existing and proposed ground surfaces, tops of manholes, water lines, stormwater and stream crossings, encasements shown in plan and profile, and other information if pertinent or requested.
- ☑ 5. For pump/lift stations and force mains, include all calculations and pump/performance curves.
- ☑ 6. A check made payable to the **State of Delaware** for two thousand and five hundred dollars ($2500.00), the non-refundable permit review fee. This fee covers the initial review and one follow-up review of any corrections or changes made to address the Division's comments. An additional two thousand and five hundred dollars ($2500.00) non-refundable review fee must be submitted for resubmission of the plans if changes are made to the project which trigger a complete review of the permit application.
- ☑ 7. Your permit will have a public notice requirement if your system includes force mains or pump/lift stations. Include a check made payable to the State of Delaware for three hundred dollars ($300.00) for the reimbursement of legal notices if the system has a force main connection or a pump/lift station.
- ☑ Please submit the completed application package, as outlined above, to DE DNREC, Division of Water, Commercial and Government Services Section, 89 Kings Highway, Dover, DE 19901. Please note, a new application, including the review fee, must be submitted if the Division's comments are not addressed or if requested supplemental information is not provided within one (1) year of the comment or request date.
- ☑ The following items must be submitted prior to permit issuance:
- ☑ 8. Verification from the appropriate county or municipal planning authority that the project has the proper zoning approval.
- ☑ 9. A letter from the owner/operator of the wastewater facilities to which the proposed collection and conveyance facilities connect. The letter must include confirmation that the owner/operator has approved the project, that the owner/operator will take responsibility for treating and disposing of the wastewater to be conveyed and that the downstream facilities have the capacity to manage the additional flows without causing or contributing to violations of Delaware's Environmental Protection Act (7 Del. C., Chapter 60) and the regulations promulgated thereafter. This includes, but is not limited to, unauthorized discharges such as overflows at manholes and violations of the treatment system's operating permit (for example, the National Pollutant Discharge Elimination System (NPDES) permit).

    - Visit us on the web at: https://dnrec.delaware.gov/water/commercial-government/

APPLICATION FOR THE CONSTRUCTION OF
WASTEWATER COLLECTION AND CONVEYANCE SYSTEMS
Application must be complete, typewritten or clearly printed

Date Application Submitted _____

PROJECT INFORMATION			
Project Name and Location/ Address Foley Cat/Bear 720 Pulaski Highway New Castle Hundred New Castle County DE			
Tax Parcel Number(s) 10-034.00-021			
County ☐ Kent ☑ New Castle ☐ Sussex	Watershed (www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessment.aspx) ☐ Chesapeake Bay ☑ DE Bay/Estuary ☐ Inland Bays/Atl Ocean ☐ Piedmont		
Sewer District or Interceptor Northern-ASTM	Wastewater Treatment/Disposal Facility Name Wilmington Wastewater Treatment Plant		
Anticipated Construction Start Date September 2026	Treatment/Disposal Facility Owner and Operating Permit Number Wilmington Water Utility		
Please note, construction permits expire three (3) years from the date of permit issuance.			
Are you requesting plan review and comment on WPCC Construction Permit issuance? (circle one)			
Design Flow (gallons/day) Average 19,454.4 gpd	Peak 9,000 gpd	Peak Factor 4.0	Basis of Design NCC Public Works & 10 States Standards
Description Proposed force main sewer system serving proposed 51,354 S.F. (G.F.A.) in Bear, New Castle County, DE. Includes duplex grinder pump and force main piping from site to Pulaski Highway (RT.40).			

OWNER/DEVELOPER		
Company Name Foley Cat/Bear		
Mailing Address 720 Pulaski Highway New Castle Hundred		
City Bear	State Delaware	Zip 19701
Contact Name Kenneth Fleck		
E-Mail Address		
Telephone	Cell	Fax

ENGINEER					
Company Name: Becker Morgan Group, Inc.					
Mailing Address: 100 Discovery Boulevard, Suite 102					
City: Newark		State: Delaware		Zip: 19713	
Contact Name: Christopher D. Duke					
E-Mail Address:					
Telephone:		Cell:		Fax:	

GRAVITY SEWER INFORMATION					
Ownership: ☐ Public ☑ Private	Type of Sewer System: ☐ Residential ☑ Commercial ☐ Industrial ☐ Other?			If Other, list below	
Type of Pipe	Length (ft)	Diameter (in)	Joint Specification	Min. Slope (ft/ft)	Min. Velocity (ft/sec)
SDR 26 PVC	10'	8"	MJ	0.02 ft/ft	2 ft/sec
SDR 26 PVC	126'	6"	MJ	0.02 ft/ft	2 ft/sec

Minimum Pipe Cover (ft)	Number of Manholes	Drop manholes provided?	Maximum Distance Between Manholes (ft)
3'	N/A	☑ Yes ☐ No	10'

Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained?	If not, explain provisions to prevent cross-contamination:
☑ Yes ☐ No	

Explain any special challenges (for example, stream, highway and/or railroad crossings, directional drilling, elevated sewers, etc.)

Comments

PUMP/LIFT STATION INFORMATION

Ownership	Type of Wastewater	If Other, list below
☐ Public ☑ Private	☐ Residential ☑ Commercial ☐ Industrial ☐ Other?	

Pump Station Flows (gallons/day) Design	Average	Peak	Peak Factor
19,454.4 gpd	2,250 gpd	9,000 gpd	4.0

Basis of Design	Pump Type
NCC Public Works & 10 States Standards	DH152 -160 (Eone Duplex Grinder Pump System)

Will peak flows be accommodated if largest unit fails?	Pump calc's and pump curves attached?	Cycle Time (minutes)	Wet Well Detention Time (minutes)
☑ Yes ☐ No	☑ Yes ☐ No	6.1 minutes	3.3 minutes

Check valves provided on discharge line?	Gate valves provided on discharge line?
☑ Yes ☐ No	☑ Yes ☐ No

If not, explain alternate procedure:

Ventilation provided in wet well?	Dry Well?	Is an alarm system included?	Alternate source of power?
☑ Yes ☐ No	☐ Yes ☑ No	☑ Yes ☐ No	☑ Yes ☐ No

What other provisions for emergency operations?

System can be powered by a portable generator during power outage events

Height of Influent Above Pump (suction head) (ft)	Height of Effluent Above Pump (discharge head) (ft)	Friction Loss (ft)
1.02'	2.26'	19.02'

Pump Design Point	Pump Operating Point	Static Head (ft)	Total Head (ft)	Required Motor Horsepower (hp)
13.51 gpm	34.02'	15 ft.	34.02'	1 hp

FORCE MAIN INFORMATION

Type of Pipe	Length (ft)	Diameter (in)
SDR 11 HDPE	650"	1.25"

Hazen-Williams "C" Design Factor	Type of Joints	Velocity Under Design Conditions (ft/sec)	Minimum Pipe Cover (ft)
150	MJ	3.07 ft/sec	3'

Air relief valves specified?	Clean-outs provided?	Maximum distance between clean-outs (ft)
☐ Yes ☑ No	☑ Yes ☐ No	227'

Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained?	If not, explain provisions to prevent cross-contamination:
☑ Yes ☐ No	

Comments