



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. **REFER TO INCLUDED CD**
- ☒ 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. **PROVIDED EMAIL OF PRELIM APPROVAL FROM COUNTY.**
- ☒ 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 DOVE KNOLL SUBDIVISION - PHASE 2 (18 LOTS) DOVE KNOLL DRIVE REHOBOTH BEACH DE 19971			
Tax Parcel Number(s) 334-6.00 PARCELS 1015-1024, 1052-1056, 1096-1098			
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 SUSSEX COUNTY TIER 1 UNIFIED SEWER DISTRICT		Wastewater Treatment/Disposal Facility Name WOLFE NECK REGIONAL WWTF	
Anticipated Construction Start Date OCTOBER, 2026		Treatment/Disposal Facility Owner and Operating Permit Number SUSSEX COUNTY OPERATING PERMIT #WPCC 30426-90	
Please note, construction permits expire three (3) years from the date of permit issuance.			
Are you requesting plan review and comment or <u>WPCC Construction Permit Issuance?</u> (circle one)			
Design Flow (gallons/day) Average 350 GPD X 18 = 6,300		Peak 22,050	Peak Factor 3.50
Basis of Design ACCUMULATED EDUs			
Description Residential Subdivision (18 Lots) Wastewater collection, conveyance System to tie into adjacent Existing MH in Dove Knoll Drive, 6 Lots via Gravity and 12 with E-ONE Grinder Pumps			
OWNER/DEVELOPER			
Company Name KEY PROPERTIES GROUP, LLC			
Mailing Address 701 McCOLLEY STREET			
City MILFORD		State DE	Zip 19963
Contact Name MIKE FANNIN			
E-Mail Address mikefannin@countrylifelhomes.com			
Telephone 302-218-2141		Cell	Fax

ENGINEER					
Company Name PENNONI ASSOCIATES INC					
Mailing Address 18072 DAVIDSON DRIVE					
City MILTON			State DE		Zip 19968
Contact Name ALAN DECKTOR					
E-Mail Address ADECKTOR@PENNONI.COM					
Telephone 302 684 8030		Cell		Fax	
GRAVITY SEWER INFORMATION					
Ownership ☒ Public ☐ Private		Type of Sewer System ☒ Residential ☐ Commercial ☐ Industrial ☐ Other?		If Other, list below	
Type of Pipe PVC SDR 35	Length (ft) 361.40+/-	Diameter (in) 8 INCH	Joint Specification PUSH ON	Min. Slope (ft/ft) 0.0028	Min. Velocity (ft/sec) 2
Minimum Pipe Cover (ft) 4.0	Number of Manholes 4	Drop manholes provided? ☐ Yes ☒ No		Maximum Distance Between Manholes (ft) 400	
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained? ☒ Yes ☐ No			If not, explain provisions to prevent cross-contamination:		
Explain any special challenges (for example, stream, highway and/or railroad crossings, directional drilling, elevated sewers, etc.) STEEP TOPOGRAPHY LIMITING INSTALLATION OF GRAVITY COLLECTION SYSTEM, 6 LOTS BY GRAVITY AND 12 LOTS TO BE SERVICED BY E-ONE GRINDER PUMPS					
Comments					

THE PROPOSED EONE GRINDER PUMPS WIL SERVE EACH LOT INDIVIDUALLY, EACH LOT WILL HAVE THEIR OWN INDIVIDUAL PRIVATE PUMP.

PUMP/LIFT STATION INFORMATION				
Ownership ☐ Public ☐ Private		Type of Wastewater ☐ Residential ☐ Commercial ☐ Industrial ☐ Other?		If Other, list below
Pump Station Flows (gallons/day) Design	Average	Peak	Peak Factor	
Basis of Design		Pump Type		
Will peak flows be accommodated if largest unit fails? ☐ Yes ☐ No	Pump calc's and pump curves attached? ☐ Yes ☐ No	Cycle Time (minutes)	Wet Well Detention Time (minutes)	
Check valves provided on discharge line? ☐ Yes ☐ No		Gate valves provided on discharge line? ☐ Yes ☐ No		
If not, explain alternate procedure:				
Ventilation provided in wet well? ☐ Yes ☐ No	Dry Well? ☐ Yes ☐ No	Is an alarm system included? ☐ Yes ☐ No	Alternate source of power? ☐ Yes ☐ No	
What other provisions for emergency operations?				
Height of Influent Above Pump (suction head) (ft)		Height of Effluent Above Pump (discharge head) (ft)		Friction Loss (ft)
Pump Design Point	Pump Operating Point	Static Head (ft)	Total Head (ft)	Required Motor Horsepower (hp)
FORCE MAIN INFORMATION				
Type of Pipe HDPE SDR 11		Length (ft) 462'+/- of 2" 495'+/- of 1.5"	Diameter (in) 1-1/2 TO 2	
Hazen-Williams "C" Design Factor 150	Type of Joints FUSED JOINTS	Velocity Under Design Conditions (ft/sec) VARIES	Minimum Pipe Cover (ft) 4 FEET	
Air relief valves specified? ☐ Yes ☒ No	Clean-outs provided? ☐ Yes ☒ No FLUSHING VALVES	Maximum distance between clean-outs (ft) FLUSHING VALVE AT TERMINAL POINTS IN FM		
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained? ☒ Yes ☐ No		If not, explain provisions to prevent cross-contamination:		
Comments E-ONE GRINDER PUMPS TO BE INSTALLED BY THE BUILDER AS EACH UNIT IS CONSTRUCTED. MAINTENANCE BY INDIVIDUAL HOME OWNERS.				