

# 3036/26



**RECEIVED**  
**06-29-2026**  
**Division of Water**

Division of Water  
Commercial and Government Services Section

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

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 6-11-26

PROJECT INFORMATION			
Project Name and Location/ Address <b>Keastone Bay - Section 2 Banks Road &amp; Green Road, Sussex County</b>			
Tax Parcel Number(s) <b>234-24.00-2.00</b>			
County <input type="checkbox"/> Kent <input type="checkbox"/> New Castle <input checked="" type="checkbox"/> Sussex		Watershed ( <a href="http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessment.aspx">www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessment.aspx</a> ) <input type="checkbox"/> Chesapeake Bay <input type="checkbox"/> DE Bay/Estuary <input checked="" type="checkbox"/> Inland Bays/Atl Ocean <input type="checkbox"/> Piedmont	
Sewer District or Interceptor <b>Tier 2 - Sussex County Planning Area</b>		Wastewater Treatment/Disposal Facility Name <b>Baywood Greens</b>	
Anticipated Construction Start Date <b>1-1-27</b>		Treatment/Disposal Facility Owner and Operating Permit Number <b>Inland Bays Preservation Co. (LTS-5001-05)</b>	
Please note, construction permits expire three (3) years from the date of permit issuance.			
Are you requesting plan review and comment or WPCCC Construction Permit issuance? (circle one)			
Design Flow (gallons/day) Average <b>54,750</b>	Peak <b>219,000</b>	Peak Factor <b>4.0</b>	Basis of Design <b>250 GPD/EDU</b>
Description <b>Residential subdivision with gravity collection system discharging to on-site pump station. Pump station discharges to existing wastewater treatment facility.</b>			
OWNER/DEVELOPER			
Company Name <b>Keastone Bay, LLC</b>			
Mailing Address <b>34026 Anna's Way, Suite 1</b>			
City <b>Millsboro</b>	State <b>DE</b>	Zip <b>19966</b>	
Contact Name <b>Robert Tunell</b>			
E-Mail Address <b>rtunell@potnets.com</b>			
Telephone <b>302-945-9300</b>	Cell	Fax	

<b>ENGINEER</b>					
Company Name Solutions IPEM					
Mailing Address 303 North Bedford Street					
City Georgetown			State DE		Zip 19947
Contact Name Jason Palkewicz, PE					
E-Mail Address jpalkewicz@solutionsipem.com					
Telephone 302-297-9215		Cell		Fax	
<b>GRAVITY SEWER INFORMATION</b>					
Ownership <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private	Type of Sewer System <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other?			If Other, list below	
Type of Pipe	Length (ft)	Diameter (in)	Joint Specification	Min. Slope (ft/ft)	Min. Velocity (ft/sec)
PVC	4575	8	Wall Bell & Spigot	0.0028	2.0
PVC	54	10	Wall Bell & Spigot	0.0022	2.0
Minimum Pipe Cover (ft) 5' from invert	Number of Manholes 25	Drop manholes provided? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Maximum Distance Between Manholes (ft) 450	
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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.)					
Comments					

PUMP/LIFT STATION INFORMATION				
Ownership <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private	Type of Wastewater <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other?		If Other, list below	
Pump Station Flows (gallons/day) Design 54,750	Average 54,750	Peak 219,000	Peak Factor 4.0	
Basis of Design 250 GPD/EDU		Pump Type		
Will peak flows be accommodated if largest unit fails? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Pump calc's and pump curves attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Cycle Time (minutes)	Wet Well Detention Time (minutes) 9.8	
Check valves provided on discharge line? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Gate valves provided on discharge line? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
If not, explain alternate procedure:				
Ventilation provided in wet well? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Dry Well? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Is an alarm system included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Alternate source of power? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
What other provisions for emergency operations?				
Height of Influent Above Pump (suction head) (ft) 5.56	Height of Effluent Above Pump (discharge head) (ft) 16.16	Friction Loss (ft) 10.73		
Pump Design Point 153@43.90 gpm	Pump Operating Point 190@44 gpm	Static Head (ft) 30.08	Total Head (ft) 43.90	Required Motor Horsepower (hp) 7.5
FORCE MAIN INFORMATION				
Type of Pipe PVC	Length (ft) 492	Diameter (in) 4		
Hazen-Williams "C" Design Factor 150	Type of Joints ASTM D3139	Velocity Under Design Conditions (ft/sec) 2.0	Minimum Pipe Cover (ft) 4.0	
Air relief valves specified? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Clean-outs provided? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Maximum distance between clean-outs (ft)		
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If not, explain provisions to prevent cross-contamination:			
Comments				

**RECEIPT**

	June 29, 2026			<b>93</b>
<i>RCVD FROM</i>	Inland Bays Preservation CO., LLC			\$2,500.00
	Two Thousand Five Hundred dollars and 00/100			<i>DOLLARS</i>
<i>FOR</i>	Plan review fee WPCC 3036/26 Keastone Bay Section 2			
<i>ACCT</i>	\$ 2,500.00	x	<i>CHECK #</i>	4337
<i>PAYMENT</i>	\$ 2,500.00		<i>CASH</i>	
	\$ -		<i>OTHER</i>	BY <i>Kevin Bronson</i>
DNREC, Commercial & Government Services Section, 89 Kings Hwy, Dover, DE 19901				

**RECEIPT**

	June 29, 2026			<b>94</b>
<i>RCVD FROM</i>	Inland Bays Preservation CO., LLC			\$300.00
	Three Hundred Dollars and 00/100			<i>DOLLARS</i>
<i>FOR</i>	WPCC Public Notice Reimbursement 3036/26			
<i>ACCT</i>	\$ 300.00	x	<i>CHECK #</i>	4351
<i>PAYMENT</i>	\$ 300.00		<i>CASH</i>	
	\$ -		<i>OTHER</i>	BY <i>Kevin Bronson</i>
DNREC, Commercial & Government Services Section, 89 Kings Hwy, Dover, DE 19901				