

3024/24

# RECEIVED APR **0.2** 2024 DNREC **Division of Water**

220013

### ARCHITECTS **ENGINEERS**

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> SALISBURY BALTIMORE SEAFORD

www.gmbnet.com

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# **TRANSMITTAL**

GMB NO:

March 27, 2024 DATE: Kingfisher Development **DNREC** RE: TO: Pump Station Division of Water TMP 533-18.00-5.00 Commercial & Government Services Section 89 Kings Highway Dover, DE 19901 **UPS** ATTN: Plan Reviewer Ground DESCRIPTION COPIES:

Kingfisher Pump Station Sewer Plans 1 Kingfisher Application for Construction of WW Collection and 1 Conveyance Systems 1 Narrative Summary Town of Selbyville Planning Commission Meeting Minutes, dated 1 10/12/2022, Approval of Preliminary Site Plan Plans, Application & Narrative (USB) 1 GMB Check #3963 - \$825.00 - Review Fee 1 GMB Check #3964 - \$300.00 - Advertisement Fee 1 Please find enclosed the Kingfisher Pump Station REMARKS: Sewer Plans, Application, Narrative Summary, Zoning Approval, and Review Fee for your review and approval.

Please contact our office with any questions or

COPIES TO:

West Selbyville Development, LLC Attn: Jon Hoffman (w/o encl.)

comments.

Sara E. McQuaid

Sara E. McQuaid **Project Engineer** 

## Kingfisher

### **Pump Station**

#### **Narrative Summary**

The Kingfisher development pump station consists of a new developer-built pump station that will be turned over to the Town of Selbyville after completion. The proposed pump station will serve 488 equivalent dwelling units (EDUs). Those EDUs are comprised of approximately 114 single family units, 109 single family units, 99 townhomes, and an allowance of 5 EDUs for the proposed clubhouse and pool within the Kingfisher development and approximately 149 single family units, 7 commercial EDUs, and an allowance of 5 EDUs for each of the proposed clubhouse and pool within the adjacent proposed Evans Bunting development.

The pump station will consist of an eight (8') foot diameter, round precast concrete wet well with two (2) 25HP submersible non-clog pumps with removable guiderail system and wet well ventilation supply fan. The station will also include an underground precast concrete valve vault to house check valves and isolation valves. An emergency bypass pumping connection, emergency generator and controls cabinet shall be constructed adjacent to the wet well. Alarms will be monitored through the Town's Mission Control SCADA system.

The pump station has an operating capacity of approximately 310 gallons per minute (GPM), which satisfies the design point of 254 GPM. The pumps have been designed to operate under flow conditions provided by the Town's Engineering Consultant (DBF) as the proposed six-inch (6") force main will manifold into an existing six-inch (6") force main from Lighthouse Lakes along Lighthouse Road (Route 54). The proposed Kingfisher Pump Station has been designed to communicate with the existing Lighthouse Lakes Pump Station through their provided Mission Control systems so that only one pump station will run at any given time due to the downstream pump station capacity constraints. Contingencies have been provided for possible pump shut off if the pump station on hold reaches a high level alarm during the other pump stations running time. This scenario shall only be in place until the future gravity discharge manhole has been constructed in the proposed Coastal Village development on Hudson Road.

The proposed Kingfisher force main design will be constructed in two phases. The first phase shall consist of the installation of approximately two thousand three hundred (2,300 LF) linear feet of six-inch (6") polyvinyl chloride (PVC C900 SDR 21) force main pressure pipe within the proposed development via the open cut pipe installation method. The proposed force main will

220013 1

then transition to approximately two thousand seven hundred linear feet (2,700 LF) of six-inch (6") high density polyethylene (HDPE SDR 11) pressure pipe for the perpendicular crossing under Lighthouse Road and the force main running parallel to Lighthouse Road to the proposed Lighthouse Lakes manifold connection point via directional drill. The flows will then be conveyed through the existing Light House Lakes six-inch HDPE SDR 11 force main to the existing discharge at Lighthouse Station Pump Station on Lighthouse Road.

The second phase of the force main construction shall continue from the proposed force main manifold point, again running parallel to Lighthouse Road and Hudson Road within the State right-of-way, for and additional two thousand eight hundred and twenty five (2,825 LF) linear feet of six-inch (6") pressure pipe via directional drill and open cut methods until reaching the gravity discharge connection at the future Coastal Villages development. The Phase 2 force main design will be provided under separate cover.

All proposed directional drill entrance and exit pits have been shown on the plans provided. Additionally, the approximately seventy-five (75 LF) linear feet of six-inch (6") HDPE SDR 11 pressure pipe crossing Lighthouse Road via directional drill shall be installed with a twelve-inch (12") HDPE pipe casing per DelDOT standard specifications. The proposed Kingfisher force main will reside in the Town of Selbyville Sewer District and shall eventually discharge into the Town of Selbyville Wastewater Treatment Facility.

Limits of pavement restoration shall be as shown on the drawings. All pavement restoration shall be in accordance with the Town of Selbyville and DelDOT standard specifications. All force main installation via directional drill within the State right-of-way shall be in accordance with the DelDOT standard specifications. Legal holidays and/or Sunday work within the State right-of-way will not be permitted without prior written request and approval.

220013 2



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

Division of Water Commercial and Government Services Section

# 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, if applicable, signed and sealed by a Delaware-registered Professional Engineer, or a Delaware-registered Professional Land Surveyor for gravity systems only. One (1) electronic copy of final Plans.
- ☑ 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 eight hundred twenty-five dollars (\$825.00), 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 eight hundred twenty- five dollars (\$825.00) 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. A check made payable to the State of Delaware for three hundred dollars (\$300.00) for the reimbursement of legal notices (advertisement filing expense.)

☑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.

will be provided prior to 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.alpha.delaware.gov/water/surface-water/

Document last revised: December 1, 2022

Phone: (302) 739-9946

Fax: (302) 739-8369

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

03/21/2024 Date Application Submitted

Man film rea		PROJECT INI	FORMATION						
Project Name and Location/ Addre Kingfisher Pump Station Bear Hole & Lighthouse R		elbyville, DE 19975							
Tax Parcel Number(s) 533-18.00-5.00									
County		Watershed (www.dnrec.d	•	_	- ·				
☐ Kent ☐ New Castle 🕱 Su	ssex		☐ Chesapeake Bay ☐ DE Bay/Estuary 💆 Inland Bays/Atl Ocean ☐ Piedmont						
Sewer District or Interceptor	Sewer District or Interceptor Wastewater Treatment/Disposal Facility Name								
Selbyville Sanitary Sewer D	istrict	Town of Selbyville	•						
Anticipated Construction Start Date  April 2024  Treatment/Disposal Facility Owner and Operating Permit Number									
Please note, construction permi	its expire	e three (3) years from the	date of permit issu	ance.					
Are you requesting plan review	and con	nment or WPCC Constr	uction Permit issuar	nce? (circle o	ne)				
Design Flow (gallons/day) Average 122,000	Basis of Design 250 GPD/EDU								
Description The Kingfisher developm turned over to the Town of 488 equivalent dwelling	of Selb	yville after completion	on. The propose	d pump sta	ation will serve a total				
		OWNER/DI	EVELOPER						
Company Name West Selbyville Developm	nent l	I.C.							
Mailing Address 4750 Owings Mills Blvd.									
City Owings Mills			State MD Zip		21117				
Contact Name Jon Hoffman			**						
E-Mail Address									
jhoffman@chesapeakere	ealtypa								
Telephone Cell Fax 410-356-9900									

ENGINEER										
Company Name										
George, Miles & Buhr, LLC										
Mailing Address										
206 W. Main Stree	t									
City State Zip Salisburg 21801										
Salisbury MD 21801										
Contact Name Sara McQuaid										
E-Mail Address	at oom									
smcquaid@gmbne	EL.COITI	Cell			Fax					
Telephone 410-742-3115		Cen			rax					
						-				
			SEWE	ER INFORMATIO						
Ownership	Type of Sewer Sy		. = .		If Oth	er, list below				
☐ Public ☐ Private				lustrial  Other?	N.C.	01 (0/0)	Min. Velocity (ft/sec)			
Type of Pipe	Length (ft)	Diameter (in)	Jon	Joint Specification		Slope (ft/ft)	With. Velocity (fl/sec)			
							4 Name of			
Minimum Pipe Cover (ft)	Minimum Pipe Cover (ft) Number of Manholes Drop manholes provided? Maximum Distance Between Manholes (ft)									
				: □ No						
Minimum ten foot (10°) horizontal & eighteen inch (18") If not, explain provisions to prevent cross-contamination: vertical separation from water lines maintained?										
☐ Yes ☐ No										
Explain any special challe	nges (for example,	stream, highwa	ay and/or	railroad crossings, d	irection	al drilling, elevated	sewers, etc.)			
-										
Comments										
Submitted under separate application.										

PUMP/LIFT STATION INFORMATION										
Ownership	rship Type of Wastewater							If Other, list below		
☑ Public ☐ Private	□ Resid	Residential $\square$ Commercial $\square$ Industrial $\square$ Other?					Other?			
Pump Station Flows (gallons/day)								Peak Factor		
Design Average Peak										
366,000 GPD 122,000 GPD 36						5,000 GPD 3.00				
Basis of Design Submersible Wet V	t	Pump Type Submersible, No				og				
Will peak flows be accommodated if largest unit fails? Pump calc's curves attact				ed?			inutes)	Wet Well Detention Time (minutes) 18.3 (Phase 1		
Ma Yes □ No Ma Yes □ No			es □ No			Tmin = 9		3.74 (build-out)		
Check valves provided on d	lischarge lin	ie?			1	Gate valves pro	vided or	discharg	e line?	
X Yes □ No					1	🛚 Yes 🗆 No				
If not, explain alternate pro-	cedure:									
Ventilation provided in wet	well?	Dry '	Well?			Is an alarm syst	em inclu	ided?	Alternat	e source of power?
X Yes □ No		'	es 🛛 No			XIYes □ No			Yes □ No	
What other provisions for e	mergency o									
Bypass pumping of		-								
Height of Influent Above Pump  (suction head) (ft)  Height of Eff (discharge he					Effluent Above Pump c head) (ft)			Friction Loss (ft)		
N/A (flooded suction) 14.39'					1			51.97'		
									Required Motor	
254 GPM 310 GPM			32.16 (discha			84.6	3'		Horsepower (hp)	
20 / 0/				20.00	<u>(n</u>	nanifold)				25
			FOR	CE MA	IN	INFORMAT	TION			
Type of Pipe PVC C900 SDR 21						Length (ft) 2,300'		Diameter (in)		
HDPE SDR 11					2,700'			6"		
Hazen-Williams "C" Desig	n Type o	f Joint	s		T	Velocity Under	Minimum Pipe Cover (ft)		m Pipe Cover (ft)	
Factor			Bell &	Spigot Conditions (ft/sec) 3.02 (PVC)			4'		• , ,	
140	Gasi	eleu	Delia	Spigo		3.02 (FVC 3.34 (HDP			7	
Air relief valves specified?	Clean-	outs pr	ovided?			Maximum dist		ween clea	n-outs (ft)	
X Yes □ No □ Yes X No					N/A					
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained?							on:			
ĭ Yes □ No	X Yes □ No									
Comments										

# The Town of Selbyville Planning and Zoning Commission Minutes of Meeting October 12, 2022

The meeting was called to order by Chairman Jay Murray at 4 o'clock p.m. Also in attendance were Councilman Richard Duncan, Mike Doyle, Ken Madara and Town Manager Stacey Long. Mike West was absent.

The meeting was properly posted.

The first item on the Agenda was consideration of Preliminary Site Plan approval for Kingfisher Development consisting of 326 units (90 townhomes and 236 single family homes) located on Lighthouse Road, directly across from Lighthouse Lakes, District 5-33 Map 18.00 Parcels 5.00 and 5.01 and District 5-33 Map 11.00 Parcel 35.00, owned by West Selbyville Development, LLC. Daniel Bunting of West Selbyville Development, LLC presented a rendering of the plan. He stated that the project consists of three different parcels that were recently annexed into town. Conceptual plans for the project were discussed during the annexation process. Mr. Bunting stated that the third, and final, parcel was acquired at the request of DelDOT. For safety reasons, DelDOT is requesting that the Kingfisher entrance align with the current entrance into Lighthouse Lakes. Mr. Bunting stated that the proposed development will be a mixed used development, with both town homes and single family homes, on 60 foot and 75 foot lots. Their intention is to appeal to buyers at all price points. The project consists of 168 acres. Mr. Bunting stated that the proposed 326 units is well below the allowable density of 2.2 to the acre required by the R-4 Residential with an RPC overlay. He added that there is an abundance of open space in the proposed design, leaving 55% of the land open space. Of the 86 acres of woods, only 22 acres are being removed. Mr. Bunting stated that the remaining wooded area will be perfect for walking paths, ponds and wildlife. Amenities will include a Club House, tot lot, pickleball courts and large ponds for kayaking and fishing.

Mr. Bunting stated that the Preliminary Site Plan for Kingfisher Development has been reviewed by the town's engineer and has received a favorable recommendation. He added that this project will require that the Coastal Villages pump station be built and operational as well as the town's current water tower project. Mr. Bunting stated that he anticipates a 2025 start date for the proposed project. He anticipates a 7-year build out with approximately 40 homes being completed during each of those years. At that point, near 2032, Mr. Bunting believes that current construction projects, to include Saltwater Landing and Creekhaven, should be complete with Atlantic Lakes and Schooner Landing nearing completion. Coastal Villages should be an actively selling development at that time. He stated that they are in the negotiation process with the Department of Transportation working toward a Letter of Agreement and that they will be required to do whatever on-site and off-site improvements DelDOT may require.

Mr. Bunting presented a list of RPC Variance Requests for the proposed Kingfisher Development. (That list is included with these Minutes.) The first request was for 60 feet by 120 feet lot widths which, Mr. Bunting stated, will accommodate a more affordable 40 foot product. Mr. Bunting added that this would also decrease side yard homeowner maintenance and irrigation costs. He stated that the reduced lot size will be mixed in with standard 70 feet x 120

feet lots. Mr. Bunting also requested 20 feet rear setbacks, a decrease of 10 feet from the standard 30 feet rear setback. He stated that this is to allow for screened porches, fire pits and paver patios in the back. Mr. Bunting also asked for a reduction in the Boat / RV storage area and space size. He requested 10% rather than the required 20% of the total number of units and also that space size be reduced to 12 feet by 30 feet. He noted that current Boat / RV storage lots are rarely full. Mr. Bunting added that these variances have been approved for several subdivisions recently. Continuing, Mr. Bunting requested 25 feet separation between townhomes, a reduction of 15 feet from the current 40 feet requirement. He believes that 25 feet is an adequate distance and added that 25 feet is also the county code. Mr. Bunting's final variance request concerned dead-end streets, which was addressed later in the meeting.

Lawton Myrick, Mr. Bunting's engineer on the project, addressed the Committee. He reviewed the preliminary site plan and focused on the proposed variances. Mr. Bunting specifically requested clarification on separation from adjacent developments. The current RPC code states that the townhomes be separated from the adjacent development with single family lots or a landscaped open area buffer that is at least 100 feet in width. Chairman Murray clarified that the intent was separation for adjoining properties and not internal distances between different unit types inside the same development. Mr. Myrick stated that the first five RPC Variance Requests were included in their preliminary submittal packet. The sixth request, however, was added after review by the town's engineer. The current RPC standard states that dead-end streets of a permanent nature shall be a minimum of 400 feet and shall provide a turnaround at the end with a radius of 40 feet. Mr. Myrick stated that the plan currently reflects a 300 foot length from the middle of the cul-de-sac to the middle of the closest "T" intersection but that the entire street is actually 1,000 feet in length. He feels confident that the plan meets the intent of the code and that they have adequate room for emergency equipment to turn around in the cul-de-sac. Chairman Murray stated that he did not see it as a problem.

Responding to questions by the committee, Mr. Bunting stated that the plan calls for 120 sixty (60) foot lots and 114 seventy-five (75) foot lots. He also stated that there will strict architectural guidelines for the units whose backs face roadways. Mr. Bunting stated that there will be no more than five units in a multi-family building, often less, but no duplexes. He added that there is a tax ditch that runs through the property that will be cleaned, landscaped and maintained by the HOA. Mr. Bunting confirmed that the only access to the development will be from Lighthouse Road. He stated that the proposed project is very similar in size to Lighthouse Lakes, although laid out very differently. He anticipates a similar price point.

After a lengthy review by the committee, Councilman Duncan made a motion to approve the Preliminary Site Plan with all requested waivers for Kingfisher Development, as presented, on Lighthouse Road, District 5-33 Map 18.00 Parcels 5.00 and 5.01 and District 5-33 Map 11.00 Parcel 35.00 by West Selbyville Development, LLC. Motion seconded by Ken Madara and carried by all. It is the recommendation of the Planning and Zoning Committee that the Mayor and Council approve this request.

There being no further business to discuss, Mike Doyle made a motion to adjourn the meeting. Motion seconded by Ken Madara and carried by all.

# Kingfisher - RPC Variance Requests:

The proposed Kingfisher development as detailed in the Preliminary Site Plan, is generally consistent with the Concept Plan that was presented at the annexation public hearings. Regarding the proposed layout, there are several exceptions to the current RPC Code that are being requested as follows:

#### 1. Section 200-36 Residential Planned Community (RPC) District

D. (2) - Permitted Uses (b) [5] Townhouses and two family dwelling lots shall be separated from the adjacent development with single family lots or a landscaped open area buffer that is at least 100 feet in width.

We interpret this as distances between units on adjacent, separate developments, not internal distances between different unit types inside the same development. However, we would appreciate clarification. There is no problem with impact to adjacent developments. Internally, we meet a 100' separation between units (measured to building restriction lines) but not between lot lines. We do not believe a variance is required, but again, would appreciate further discussion on this item. If a variance is required, we propose a minimum separation of 80' at the BRL

### 2. Section 200-36 Residential Planned Community (RPC) District

D. (5) - Minimum lot dimensions (a) All lots shall contain a lot area of at least 9,000 square feet and shall have a lot width of at least 75 feet (75 feet by 120 feet)

We propose a portion of lots to be 7,200 square feet (60 feet wide by 120 feet). Variance requested for minimum lot area and minimum lot width

# 3. Section 200-36 Residential Planned Community (RPC) District

D. (5) - Minimum lot dimensions (c) Setbacks [3] Rear. 30 feet

We propose a 20' rear yard setback. Variance needed for reduced setback.

#### 4. Section 200-36 Residential Planned Community (RPC) District

D. (6) - Community Features (d) Boat and/or RV storage area(s) that can accommodate a minimum number of paved spaces equal to 20% of the total number of units in the RPC shall be provided. Each space shall have a minimum size of 12 feet by 40 feet. All boat and RV storage areas shall be adequately screened.

The current plan reflects spaces equal to 10% of the total number of units and the spaces shown are 12 feet by 30 feet. Variance requested.

5. Section 200-49 Townhouses, duplexes and multifamily dwellings planning requirements H. For the purpose of maintaining setback between buildings on the same site, the distance between townhouse, duplex or multifamily buildings shall be 40 feet.

We proposed 25' separation between adjacent "sticks" of townhomes, measured from the BRL. Variance requested to reduce required separation

6. Section 160-10 Design Standards, B (13) Dead-end streets (cul-de-sac) of a permanent nature shall be a minimum of 400 feet and shall provide a turnaround at the end with a radius of 40 feet. [Amended 12-3-2018]

We are seeking a Variance from the 400' minimum length. The plan currently reflects a 300' length from the middle of the Cul-de-sac to the middle of the closest 'T' intersection.

		April 2,	2024				33
	RCVD FROM	George,	Miles & Buhr, LLC				\$825.00
		Eight H	undred twenty-fiv	e dollars	and 00/100		DOLLARS
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RECEIP		\$			OTHER	BY	Kevin Bronson

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RECEIP		\$	(4)		OTHER	BY	Kevin Bronson
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