

Transmittal Letter

3029/24

Solutions, IPEM
Jim Eriksen, PE
303 North Bedford Street
Georgetown, DE 19947
p: 302.297.9215
e: jeriksen@solutionsipem.com



April 24, 2024
To:
**DE DNREC Division of Water
SWDS**
89 Kings Highway
Dover, DE 19901
302-739-9946

Attention: Gregory Pope/Davison Mwale
Re: Turnberry
Job Number: G20076

We are sending you:

Attached Under Separate Cover

Delivery via:

UPS US Mail Fed Ex Hand Carried Picked up Other

Quantity	Description
1	Set of Autumndale Sewer Plans
1	Sewer Narrative
1	Completed Application
1	\$825 Review Fee (check #108170)
1	\$300 Advertisement Fee (check # 108171)
1	CD w/ digital files
1	Sussex County P&Z Approval Letter

These are transmitted as checked below

As requested For your use Resubmit copies for review Resubmit copies for approval

Comments:

Copy to:

	Signature
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Department of Natural Resources
and Environmental Control

89 Kings Hwy
Dover, DE 19901
dnrec.delaware.gov

Phone: (302) 739-9946
Fax: (302) 739-2296

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. 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.alpha.delaware.gov/water/surface-water/>

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

Date Application Submitted 4/24/2024

PROJECT INFORMATION			
Project Name and Location/ Address Turnberry 23000 Block Hollyville Road, Harbeson, DE 19951			
Tax Parcel Number(s) 234-16.00 Parcels 1.01, 1.02, 4.00, & 5.00			
County <input type="checkbox"/> Kent <input type="checkbox"/> New Castle <input checked="" type="checkbox"/> Sussex		Watershed (www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessment.aspx) <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 Artesian Wastewater Management Inc.		Wastewater Treatment/Disposal Facility Name Stonewater Creek Wastewater Treatment and Disposal Facility	
Anticipated Construction Start Date		Treatment/Disposal Facility Owner and Operating Permit Number Artesian Wastewater Management Inc. Operating Permit #202221-02	
Please note, construction permits expire three (3) years from the date of permit issuance.			
Are you requesting <u>plan review and comment</u> or WPC Construction Permit issuance? (circle one)			
Design Flow (gallons/day) Average 47,520		Peak 190,080	Peak Factor 4.0
Basis of Design 240 gal/EDU/Day			
Description 196 lot residential community, 1 on-site pool house. Gravity collection system to onsite pump station to discharge via forcemain to future Autumndale forcemain to existing forcemain in Independence Subdivision.			
OWNER/DEVELOPER			
Company Name Hollyville Buyer, LLC			
Mailing Address 20184 Phillips Street			
City Rehoboth Beach		State DE	Zip 19971
Contact Name Tim Green			
E-Mail Address tgreen@schellbrothers.com			
Telephone (302) 226-1994		Cell	Fax

ENGINEER

Company Name

Solutions IPEM

Mailing Address

303 North Bedford Street

City

Georgetown

State

DE

Zip

19947

Contact Name

Jim Eriksen

E-Mail Address

jeriksen@solutionsipem.com

Telephone

(302) 297-9215

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 26

Length (ft)

9283.10

Diameter (in)

8

Joint Specification

Wall Bell & Spigot

Min. Slope (ft/ft)

0.0030

Min. Velocity (ft/sec)

2.0

Ductile Iron Pipe

78.40

10

Wall Bell & Spigot

0.0040

2.0

Minimum Pipe Cover (ft)

4

Number of Manholes

46

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.)

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		Average 47,520	Peak 190,080	Peak Factor 4.0
Basis of Design 240 gal/EDU/Day			Pump Type non-clog	
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)
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) 6.0		Height of Effluent Above Pump (discharge head) (ft) 19.19		Friction Loss (ft) 77.03
Pump Design Point 132GPM @ 105.9ft	Pump Operating Point 133GPM @ 107ft	Static Head (ft) 28.91	Total Head (ft) 105.9	Required Motor Horsepower (hp) 12
FORCE MAIN INFORMATION				
Type of Pipe C900 PVC		Length (ft) 2,744		Diameter (in) 4
Hazen-Williams "C" Design Factor 150	Type of Joints ASTM D3139	Velocity Under Design Conditions (ft/sec) 3.36		Minimum Pipe Cover (ft) 4
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				

Turnberry Sanitary Sewer Narrative

Turnberry is a proposed residential subdivision in Sussex County located on the 23000 block of Hollyville Road. The subdivision will contain 196 single family lots and a pool/pool house. All the residential lots and pool house will be served by a gravity collection system which will discharge into a proposed Artesian Wastewater Management, Inc. pump station. The pump station will discharge via a 4" force main and tie into a future 4" forcemain from the nearby Autumndale subdivision, which will tie into an existing 6" forcemain in the nearby Independence Subdivision. Solutions IPEM has been provided with sewer tie-in locations and elevations along with existing and future pipe sizes, materials, and lengths for pump station design. The sewer system will be owned and maintained by Artesian Wastewater Management, Inc. The system has been designed per Artesian standards.

PLANNING & ZONING COMMISSION

ROBERT C. WHEATLEY, CHAIRMAN
KIM HOEY STEVENSON, VICE-CHAIRMAN
R. KELLER HOPKINS
J. BRUCE MEARS
HOLLY J. WINGATE



Sussex County

DELAWARE
sussexcountyde.gov
302-855-7878 T
302-854-5079 F
JAMIE WHITEHOUSE, AICP, MRTPI
DIRECTOR

January 28, 2022

Mr. Jason Palkewicz, P.E.
Solutions IPEM
303 North Bedford Street
Georgetown, DE 19947

By email to: jpalkewicz@solutionsipem.com

Re: Notice of Decision letter for the Preliminary Subdivision Plan for Turnberry (2021-05) (F.K.A. Unity Branch) for the subdivision of a 145.424 acre parcel of land for the creation of one-hundred and ninety-six (196) single-family lots as a cluster subdivision to be located on the southeast side of Hollyville Road (S.C.R. 48)

Tax Parcels: 234-10.00-199.00, 234-16.00-1.01, 1.02, 3.00, 4.00 & 5.00

Dear Mr. Palkewicz,

At their meeting of **Thursday, January 27, 2022**, the Planning & Zoning Commission **approved** the **Preliminary Subdivision Plan** for **Turnberry (2021-05) (F.K.A. Unity Branch)** for the subdivision of a 145.424 acre parcel of land for the creation of one-hundred and ninety-six (196) single-family lots as a cluster subdivision. The properties are lying on the southeast side of Hollyville Road (S.C.R. 48). The proposed subdivision is not located within the Henlopen Transportation Improvement District (TID). The properties are located in the Agricultural Residential (AR-1) Zoning District and also lie within the Low Density Area per Sussex County's 2019 Comprehensive Plan.

The Preliminary Subdivision Plan is valid for three (3) years from the date of Planning Commission decision. A Final Subdivision Plan shall be approved within three (3) years of the date of approval of the Preliminary Plan or the action of the Planning Commission shall be deemed canceled. Unless an extension is granted, approval shall be rendered null and void if substantial construction is not commenced within five (5) years of the date of recordation of the final plat.

As part of their motion, the Planning Commission acted to approve the development subject to the following conditions (which shall be clearly annotated on the Revised Preliminary and Final Subdivision Plans):

- A. There shall be no more than 196 lots within the subdivision.
- B. The Final Site Plan shall confirm that at least 65% of the site remains as open space.
- C. The developer shall establish a homeowner's association responsible for the maintenance of streets, roads, buffers, stormwater management facilities and other common areas.
- D. The stormwater management system shall meet or exceed the requirements of the State and County. The Final Site Plan shall contain the approval of the Sussex Conservation District for the design and location of all stormwater management areas and erosion and sedimentation control facilities.



- E. There shall be a vegetated or forested buffer that is at least 30 feet wide installed along the perimeter of this subdivision. This buffer shall utilize existing forest or similar vegetation if it exists in the buffer area. Where trees currently exist in the buffer area, stump removal or construction activities that disturb the existing grade of the area within the buffer shall be prohibited. All silt fencing shall be located along the interior limit of the buffer area (the edge of the buffer nearest the interior development) and the Final Site Plan shall identify the "Limit of Disturbance" to prevent disturbance of the buffer area. As stated by the Applicant, all lots shall also be at least 40 feet from the perimeter of the development.
- F. As stated by the Applicant, there shall be a buffer that is at least 50 feet wide from Unity Branch. There shall also be a buffer that is at least 50 feet wide from all non-tidal wetlands. There shall be minimum disturbance of trees and other vegetation within these buffer areas. Required silt fencing shall be installed upland of these buffer areas (using the edge of the buffer nearest the interior development) to avoid disturbance. Construction activities within the buffer area shall be minimum. Any disturbance in the buffer area shall be indicated on the Final Site Plan and the "Limits of Disturbance" shall be indicated on the Final Site Plan.
- G. The development shall comply with all DelDOT entrance and roadway improvement requirements.
- H. As proffered by the Applicant, sidewalks shall be installed on at least one side of all internal streets with a connection to the DelDOT multimodal path. A system of fully shielded and downward screened streetlighting shall also be provided.
- I. Amenities including a pool and poolhouse shall be constructed and open to use by residents of this development on or before the issuance of the 120th residential building permit. The Final Site Plan shall contain details as to the size and location of these amenities.
- J. The subdivision shall be served by a publicly regulated central water system providing drinking water and fire protection.
- K. Street design shall meet or exceed Sussex County standards.
- L. Road naming and addressing shall be subject to the review and approval of the Sussex County Mapping and Addressing Department.
- M. Construction, site work, and deliveries shall only occur on the site between the hours of 7:00AM through 5:00PM, Monday through Friday, and 7:00AM through 2:00PM on Saturdays. No Sunday hours are permitted. A 24-inch by 36-inch "NOTICE" sign confirming these hours in English and Spanish shall be prominently displayed at the site entrance during construction.
- N. The Applicant shall coordinate with the local school district regarding the location of a school bus stop within the subdivision. If required by the school district, the location of a bus stop area shall be shown on the Final Site Plan.
- O. The Final Site Plan and Recorded Restrictive Covenants shall state that agricultural activities exist nearby, and they shall include the Agricultural Use Protection Notice.
- P. The Final Site Plan shall include a Landscape Plan depicting all landscaping to be provided or preserved in all of the buffer areas. The Landscape Plan shall also clearly show all forested areas that will be preserved. The Landscape Plan shall also identify all "Limits of Disturbance" within the site.
- Q. The Final Site Plan shall include a Grading Plan for the site. No building permit shall be issued for individual lots until an individual lot grading plan has been supplied to and approved by Sussex County. No Certificate of Occupancy shall be issued until a

grading certificate is submitted to the Building Code Department demonstrating general conformity with the individual site grading plan.

- R. A Revised Preliminary Site Plan either depicting or noting these conditions must be submitted to the Office of Planning and Zoning.
- S. The Final Site Plan shall be subject to the review and approval of the Planning and Zoning Commission.

The Final Subdivision Plan must comply with the County's Zoning and Subdivision Codes, including submission of agency approval letters to the Planning and Zoning Office. The agency approvals required for Final Subdivision Plan approval include but are not limited to: the Sussex Conservation District, Office of the State Fire Marshal, Sussex County Engineering Department, Sussex County Mapping and Addressing Department, Office of Drinking Water (Public Health), the Delaware Department of Transportation (DelDOT) and the local school district with regard to any proposed bus stop provisions.

Once all agency approvals have been obtained, please submit a minimum of **one (1) full-size (24 " x 36")** and **one (1) electronic PDF copy** of a Final Subdivision Plan to the Planning and Zoning Office for consideration on the next available agenda for Planning Commission. It is recommended that **two (2) copies** of a check print are first submitted to staff for review.

Please note that a \$10.00 per lot fee will be required to be paid prior to the approval of any Final Subdivision Plan. For 196 lots, the fee is \$1,960.00.

Please feel free to contact me during business hours with any question from 8:30 AM – 4:30 PM, Monday through Friday, at 302-855-7878.

Sincerely,



Ms. Lauren DeVore
Planner III

CC: Mr. Andy Wright, Chief Code Official – Building Code
Mr. John Ashman, Director of Utility Planning & Design – Engineering – Utility Planning
Ms. Susan Isaacs, Engineering Project Coordinator – Engineering – Public Works
Mr. Timothy Green, Director of Land Development – Schell Brothers, LLC
Ms. Mackenzie Peet, Esquire - Baird Mandalas Brockstedt, P.A.
Turnberry (2021-05) (F.K.A. Unity Branch) file



OVER 100 YEARS OF SUPERIOR SERVICE

Artesian Water Company



Artesian Wastewater Management



Artesian Utility Development



Artesian Water Pennsylvania



Artesian Water Maryland



Artesian Wastewater Maryland

July 26, 2021

Mr. Chris Schell
Schell Brothers, LLC
20184 Phillips Street
Rehoboth Beach, Delaware 19971

RE: Unity Branch Subdivision Ability to Serve Letter

With reference to your request concerning Water and Wastewater Service (collectively, "Service") for Unity Branch Subdivision Project on Hollyville Road in Indian River Hundred, Sussex County, Delaware, with tax parcel numbers 234-10.00-199.00, 234-16.00-1.01, 234-16.00-1.02, 234-16.00-3.00, 234-16.00-4.00 and 234-16.00-5.00 (the "Property"), please be advised as follows:

Subject to the following conditions, Artesian Water Company, Inc. and Artesian Wastewater Management, Inc. (collectively, "Artesian") are willing and able to provide Service to the Property that meets all applicable State of Delaware, Delaware Department of Natural Resources and Environmental Control, and Sussex County standards. Artesian has the water and wastewater Certificates of Public Convenience and Necessity ("CPCNs") from the Delaware Public Service Commission.

Based on current conditions and subject to the development entity and Artesian entering Water and Wastewater Service Agreements (collectively, "Agreements") that addresses the financial terms of the provision of Service for the Property, in accordance with Artesian's tariff as approved by the Delaware Public Service Commission, Artesian is willing and able to provide the required Service for this Property.

This letter shall expire if Agreements are not executed within one year of the date of this letter.

If you have any questions, please do not hesitate to contact us.

Yours very truly,

Katherine E. Garrison

Katherine E. Garrison
Senior Planning Designer

RECEIPT

April 30, 2024

42

RCVD FROM

Schell Brothers LLC

\$825.00

Eight Hundred twenty-five dollars and 00/100

DOLLARS

FOR

Plan review fee WPCC 3029/24 Turnberry

ACCT	\$	825.00
PAYMENT	\$	825.00
	\$	-

<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

CHECK # 108170

CASH

OTHER BY

Kevin Bronson

DNREC, Surface Water Discharges Section, 89 Kings Hwy, Dover, DE 19901

RECEIPT

April 30, 2024

43

RCVD FROM

Schell Brothers LLC

\$300.00

Three Hundred Dollars and 00/100

DOLLARS

FOR

WPCC Legal Notice Reimbursement 3029/24

ACCT	\$	300.00
PAYMENT	\$	300.00
	\$	-

<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

CHECK # 108171

CASH

OTHER BY

Kevin Bronson

DNREC, Surface Water Discharges Section, 89 Kings Hwy, Dover, DE 19901