



18072 Davidson Drive
Milton, DE 19968
(302) 684-8030
www.pennoni.com

3074/24

LETTER OF TRANSMITTAL

TO:
DNREC, DIVISION OF WATER, SWDS
89 KINGS HIGHWAY
DOVER, DE 19901

DATE:	September 04, 2024	JOB NO.	ENFCX21001
ATTENTION:	Mr. GORDON WOODROW		
RE:	EAGLES NEST SENIOR CARE FACILITY 235-8.00-35.06		

WE ARE SENDING YOU Attached Under separate cover via UPS the following items:

Shop Drawings Prints Plans Samples Specifications
 Copy of Letter Change Order _____

LIST OF ITEMS TRANSMITTED			
COPIES	DATE	NO:	DESCRIPTION
1		1	Eagles Nest Wastewater Narrative Final
1		2	Check #1020 \$825.00
1		3	Check #1021 \$300.00
1		4	WPCC -Application
1		5	PS Computations
1		6	Ability and Plan Approval Letter
1		7	Notice of Decision
1		8	PB427 PG84
1		9	Construction Set
1		10	Offsite Utility Set
1		11	CD – PDF'S



THESE ARE TRANSMITTED as checked below:

For approval Approved as submitted Resubmit _____ copies for approval
 For your use Approved as noted Submit _____ copies for distribution
 As requested Returned for corrections Return _____ corrected prints
 For review and comment _____
 FOR BIDS DUE _____ PRINTS RETURNED AFTER LOAN TO US

REMARKS: Any questions please contact this office, Mr. Alan Decktor, adecktor@pennoni.com
PENNONI Associates

COPY TO: _____

SIGNED: Katherine E Davidson/file

If enclosures are not as noted, kindly notify us at once.



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

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 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.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 Eagles Nest Senior Care Facility 26633 Zion Church Road Milton DE 19968			
Tax Parcel Number(s) 235-8.00-35.06			
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 checked="" type="checkbox"/> DE Bay/Estuary <input type="checkbox"/> Inland Bays/Atl Ocean <input type="checkbox"/> Piedmont	
Sewer District or Interceptor N/A		Wastewater Treatment/Disposal Facility Name Beaver Creek Regional WWTF	
Anticipated Construction Start Date OCTOBER 2024		Treatment/Disposal Facility Owner and Operating Permit Number Artesian Wastewater Management Inc. 359014-06	
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 89202 All Phases		Peak 334512	Peak Factor 3.75
Basis of Design accumulated EDUs			
Description Local Wastewater collection system initially for the senior care facility, church and school, wastewater pumping station and force main.			
OWNER/DEVELOPER			
Company Name Eagles Nest Fellowship Church Inc.			
Mailing Address 26633 Zion Church Road			
City Milton		State DE	Zip 19968
Contact Name Pastor John Hoenan			
E-Mail Address PastorJohn@eaglesnest.CH			
Telephone 302 684 3149		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 <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private		Type of Sewer System <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other?			If Other, list below Senior Care Facility	
Type of Pipe C900 PVC SDR 26		Length (ft) 2,420+/-	Diameter (in) 8-inch	Joint Specification Push-on	Min. Slope (ft/ft) 0.0028	Min. Velocity (ft/sec) 2
Minimum Pipe Cover (ft) 5.0+/-		Number of Manholes 13	Drop manholes provided? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Maximum Distance Between Manholes (ft) 400	
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 checked="" type="checkbox"/> Public <input type="checkbox"/> Private	Type of Wastewater <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other?		If Other, list below	
Pump Station Flows (gallons/day) Design 89202	Average 334512	Peak 334512	Peak Factor 3.75	
Basis of Design Accumulated EDUs		Pump Type Submersible		
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) 10 min	Wet Well Detention Time (minutes) 7.14	
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? Bypass connection				
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) 6.5
FORCE MAIN INFORMATION				
Type of Pipe C900 PVC SDR 18		Length (ft) 5642	Diameter (in) 6 inch	
Hazen-Williams "C" Design Factor 150	Type of Joints Push on	Velocity Under Design Conditions (ft/sec) 2.5	Minimum Pipe Cover (ft) 4 ft	
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				



OVER 100 YEARS OF SUPERIOR SERVICE

Artesian Water Company



Artesian Wastewater Management



Artesian Utility Development



Artesian Water Pennsylvania



Artesian Water Maryland



Artesian Wastewater Maryland

August 26, 2024

Mr. Alan M. Decktor
Pennoni Associates, Inc.
18072 Davidson Drive
Milton, DE 19968

RE: Eagles Nest Senior Care Facility Ability to Serve and Plan Approval Letter, Tax Parcel 235-8.00-35.06

With reference to your request concerning Water and Wastewater Service (collectively, "Service") for the proposed Eagles Nest Senior Care Facility project consisting of a 3-story 54,228 s.f. Senior Care Building with service to the existing church and school on Zion Church Road in Broadkill Hundred, Sussex County, Delaware known as Tax Parcel Number 235-8.00-35.06 (the "Property"), please be advised as follows:

Subject to the following conditions, Artesian Water Company, Inc. and Artesian Wastewater Management, Inc. (collectively, "Artesian") is 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 existing 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 address the financial and other 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. The Agreements shall supersede this letter to the extent any terms of the Agreements conflict with any terms of this letter.

Furthermore, we have reviewed and approved Utility Construction Plans, Pump Station and Offsite Forcemain Plans dated July 18, 2023 last revised August 12, 2024.

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

Yours very truly,

Katherine E. Garrison

Katherine E. Garrison
Senior Planning Designer

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 OF PLANNING & ZONING

November 18, 2022

Alan M. Decktor, PE, ENV SP
Pennoni and Associates, Inc.
18072 Davidson Drive
Milton, DE 19968

By email to: ADecktor@Pennoni.com

RE: Notice of Decision Letter for the Preliminary Site Plan for Eagles Nest Senior Care Facility located on the west side of Coastal Highway (Route 1) and the east side of Shalom Trail approximately 0.5 miles north of the intersection Coastal Highway (Route 1) and Broadkill Road (Route 16).

Tax Parcels: 235-8.00-35.06

Dear Mr. Decktor,

At their meeting of **Thursday, November 17th, 2022** the Sussex County Planning & Zoning Commission granted **approval** of the **Revised Preliminary Site Plan** for **Eagles Nest Senior Care Facility** on the Lands of Eagles Nest Fellowship Church Inc. **with final approval to be granted by staff upon receipt of all agency approvals.** Additionally, final approval by staff is contingent upon the Applicant providing the Planning & Zoning Department with the following:

1. Clarification and specificity to be included on the Plan regarding the utility and access easement for the benefit of the adjacent campground on Parcel 35.03. Please indicate this access easement as well as notation of a shared maintenance agreement for the easement on the plan.
2. Documentation from DNREC confirming that any proposed sewer and water service improvements or septic relocations do not restrict or compromise the provision of current or future water or wastewater removal at the adjacent campground on Parcel 35.03 (Lands of Sammons Property Management LLC.)

The 9.50 acre +/- site currently hosts a campground, a recreational building, and a pool which are proposed to be removed. The plan proposes the construction of a 94,570 square foot assisted living facility, parking, a landscaped buffer, and associated improvements on approximately (4.9) acres of the (9.5) acre parcel.

Approval letters or letters of no objection from the following agencies shall be submitted to the Sussex County Planning and Zoning Office:

- a. Delaware Department of Transportation (DelDOT)
- b. Sussex Conservation District



COUNTY ADMINISTRATIVE OFFICES
2 THE CIRCLE | PO BOX 417
GEORGETOWN, DELAWARE 19947

- c. State Fire Marshal
- d. DNREC – Confirmation that utility service (water, wastewater) will not be compromised at the campground on adjacent Parcel 35.03.

The Revised Preliminary Site Plan has been reviewed by staff. Once all agency approvals have been submitted, please submit a minimum of **three (3) signed and sealed paper copies** of a Final Site Plan to the Planning and Zoning Office for review and approval by staff. Please note that the Owner's signatures are required on the Final Site Plan.

Once approved, the Planning Office will retain **two (2) copies** of the Final Site Plan and any remaining **copies will be returned to the applicant and shall be submitted as part of any Building Permit application process**. Additional copies of the plan may be submitted for endorsement by staff.

Please note that the Final Site Plan shall be valid for a period of five years from the date of approval (11/17/2022) by the County. Any such Final Site Plan shall be rendered null and void if substantial construction is not actively and continuously underway on the use within five years of the date of approval by the County.

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

Sincerely,



Michael Lowrey
Planner III

CC: Andy Wright, Chief Code Official – Building Code
Jordan Dickerson, Planning Technician IV – Engineering
John Ashman, Director of Utility Planning - Engineering
Jennifer Norwood, Manager - Planning & Zoning

Eagles Nest Senior Care Facility, Milton, DE

Introduction

Eagles Nest Senior Care Facility is a 110 unit located on Zion Church Road, Milton Delaware. The property is identified by Tax parcel 235-8.00-35.06 totaling 9.50 acres. The site is adjacent to the Eagles Nest Fellowship Church and School.

The Church and School are currently serviced by onsite septic system. The pumping station capacity has been designed to include the Senior Care Facility, the School and Church as well as an allowance for additional vacant property owned by the church totaling some 58.4 acres, being developed in the future.

Sewer Collection System

The sewer collection system and disposal system will be public and will be managed, operated and maintained by Artesian Wastewater Management Inc. Sewer pipe will be PVC SDR 26. Manholes will be precast concrete.

Sewer Conveyance and Disposal System

Average daily flow for the 110-bed facility is computed at 22,84 gallons per day using an equivalent EDU of 240 gpd plus collection system infiltration of 250 gallons per mile per inch. Allowing for future flow the average daily flow is estimated at 89,000 gpd. Using the Artesian 1-hour peak factor of 3.75, the pump station design flow is computed at 232 gallons per minute. The pumps are designed to meet the design flow with the largest pump out of service. The collection system is capable of storing approximately 16 hours of sewage computed using the average daily flow rate without any sewer overflows.

The force main will be installed using C900 PVC SDR 18 -Green pipe. High points will include air release valves. The force main will generally follow Zion Church Road public right of way running south easterly then turning east along Route 16 crossing Route 1 then turning south in an easement and terminating as a manhole in Sweet Gum Lane in the Woodfield Preserve Community. Wastewater is treated at the Beaver Creek Wastewater Treatment Facility.

The wastewater pumping station will include a 8-foot diameter wet well with dual Flygt 6.5 HP motors submersible pumps with N series non clog impellers, above ground valve enclosure housing check valves, gate valves, flow meter, air release valve and bypass connection to the force main. Electrical cabinet houses VFDs, pump controller, and panel boards for lights, heaters and ancillary items requiring power, ventilation blowers and back-up generator panels and disconnects.

Pumps will operate in the traditional method of alternating pump starts to lead and lag motors with each cycle. Controls will include variable frequency drives (VFD) and will include redundant flow monitoring systems consisting of a primary pressure transducer and back up float switch. Wet well ventilation will utilize continuous operation forced air with a minimum of 12 wet well volume air changes per hour. Remote station monitoring will employ SCADA for monitoring power, motors, flow, and pump operation including high and low wetwell level alarms.

Back up electrical power will be provided by 25 KW diesel generator with automatic transfer switch (ATS), capable of operating the entire pumping station in the event of the loss of primary power.

The station will include an 8-foot diamond mesh security fence with vinyl plastic insert privacy strips with sliding gate and selected screening landscaping.

RECEIPT

	September 5th, 2024				101
RCVD FROM	The Pointe at Prime Hook LLC				\$825.00
	Eight Hundred twenty-five dollars and 00/100				DOLLARS
FOR	Plan review fee WPCC 3074/24 Eagles Nest Senior Care Facility				
ACCT	\$	825.00		x	CHECK # 1020
PAYMENT	\$	825.00			CASH
	\$	-			OTHER BY <i>Kevin Bronson</i>

DNREC, Commercial & Government Services Section, 89 Kings Hwy, Dover, DE 19901

RECEIPT

	September 5th, 2024				102
RCVD FROM	The Pointe at Prime Hook LLC				\$300.00
	Three Hundred Dollars and 00/100				DOLLARS
FOR	WPCC Legal Notice Reimbursement 3074/24				
ACCT	\$	300.00		x	CHECK # 1021
PAYMENT	\$	300.00			CASH
	\$	-			OTHER BY <i>Kevin Bronson</i>

DNREC, Commercial & Government Services Section, 89 Kings Hwy, Dover, DE 19901