

Civil Engineering Associates, LLC

55 West Main Street Middletown, DE 19709 302-376-8833 302-376-8834 fax

TRANSMITTAL SHEET

TO:	DE DNREC, Division of Commercial & Government Section	f Water ment Services	REF:	Dolby	/ North					
	89 Kings Highway			Sanita	ary Sewer Construction Plan	ns				
	Dover, DE 19901									
PHONE:	302-739-9946		☑ US M/	I US MAIL ☐ HAND CARRI						
ATTN:			□ UPS		☐ TO BE PICKED (UP				
DATE:	September 19, 2024		☐ FED-X	<u> </u>	□other					
FROM:	Ronald H. Sutton, Jr,									
IF THE EN	F THE ENCLOSED IS NOT AS NOTED, PLEASE CONTACT US AT ONCE.									
					For Your Review					
Copies	Description									
1	Sanitary Sewer Construction Plan Set									
1	Narrative Summary RECEIVED									
1	Check for \$1,150.00	Check for \$1,150.00 SEP 2 3 2024								
1	Application	Application Division of Water								
1	Pump Station Report									
1	CD of PDFs	CD of PDFs								
1	City of Seaford Approval/Acceptance Letter									
Copies To:	Copies To: Remarks:									
	If th	nere is anything e	else you ma	y requi	ire feel free to contact us.					
				F	Project Ref: 23022					

55 West Main Street Middletown, DE 19709 cea-de.com

Phone: 302-376-8833

Fax: 302-376-8834

September 11, 2024

State of Delaware
Department of Natural Resources
& Environmental Control
Division of Water
89 Kings Highway
Dover, Delaware 19901

RE: Narrative

Dolby North

Project No.: 21066

This project is the Major Subdivision of Dolby North (Tax Parcel No. 331-4.00-37.00). It is located approximately 2,630 feet south east of the intersection of Old Furnace Road and State Route 13 (a.k.a Sussex Highway). Dolby North consists of 157 residential lots (single family lots) served by a gravity sewer system and a pump station.

The proposed sewer system has a design flow rate of 39,250 GPD, a daily peak flow of 157,000 GPD, and a peak factor of 4. The wastewater flow from the subdivision is gravity fed to the pump station within Dolby North. The wastewater flow from the pump station will tie into a City of Seaford manhole next to the City of Seaford pump station along State Route 13 (a.k.a Sussex Highway).

The owner/operator is City of Seaford and will be part of the City of Seaford Sewer District. Enclosed are the sanitary sewer and pump station plan sheets from the Construction Improvement Plan Set, Pump Station Design Report, and an approval/acceptance letter from the City of Seaford.



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 (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/

Phone: (302) 739-9946

Fax: (302) 739-2296

APPLICATION FOR THE CONSTRUCTION OF WASTEWATER COLLECTION AND CONVEYANCE SYSTEMS

Application must be complete, typewritten or clearly printed

Date Application Submitted PROJECT INFORMATION Dolby Property (North)

~ 2,630 LF South East of the intersection of old Furnace

Road and Route 13

Tax Parcel Number(s) 331-4.00-37.00 Project Name and Location/ Address Watershed (www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessment.aspx) County Chesapeake Bay □ DE Bay/Estuary □ Inland Bays/Atl Ocean □ Piedmont ☐ Kent ☐ New Castle 🏿 Sussex Sewer District or Interceptor Wastewater Treatment/Disposal Facility Name City of Seaford City of Seaford Treatment/Disposal Facility Owner and Operating Permit Number Anticipated Construction Start Date City of Seaford Please note, construction permits expire three (3) years from the date of permit issuance. Are you requesting plan review and comment or WPCC Construction Permit issuance? (circle one) Peak Factor Basis of Design Design Flow (gallons/day) City of Seaford 39, 250 157,000 Description OWNER/DEVELOPER Company Name D.R. Horton, Inc. - New Jersey Mailing Address 671 South Carter Road, Suite 6 19977 Smyrna Contact Name CTHeilman @drhorton.com E-Mail Address Telephone 302-382-3694 Cell 484-643-3708

Owner: Jay A. Dolby Trustee (clo Jay Dolby)
22347 Sussex Highway email: jay@dolbyandassociates.
Seaford, DE 19973

ENGINEER										
Civil Engineering Associates, LLC										
Mailing Address 55 West Main Street										
Middle town State DE 19709										
Contact Name Ronald H. Sutton, Tr., P.E.										
E-Mail Address										
6-8833	Cell 302-	547-2	444	Fax						
GRAVITY SEWER INFORMATION										
Type of Sewer Sy		If Other, list below								
Residential [☐ Commercial	☐ Industrial	☐ Other?							
Length (ft)	Diameter (in)	Joint Spec	ification	Min. Slope (fl/ft)	Min. Velocity (ft/sec)					
4,941	8	Integr	al Gaske	8600.0	2					
		G-781	i con Ci							
			5.5							
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained?										
DYES INO Sewer provided where < 18" separation										
Explain any special challenges (for example, stream, highway and/or railroad crossings, directional drilling, elevated sewers, etc.)										
					I					
	West- Lown Cea 6-8833 Type of Sewer Sy Residential E Length (ft) Number of M 23 Orizontal & eightee eater lines maintained	West Main Fown ald H. Sutton Cea - de.ca GRAVITY Type of Sewer System Residential Commercial Length (ft) Diameter (in) U,941 8 Number of Manholes 23 orizontal & eighteen inch (18") ater lines maintained? Inges (for example, stream, highwa	West Main Streethown ald H. Sutton, Tr., Cea-de.com GRAVITY SEWER INI Type of Sewer System Residential Commercial Industrial Length (ft) Diameter (in) Joint Spector Manholes J 3 Drop manhole J 4 Number of Manholes Drop manhole J 5 M Number of Manholes Drop manhole J 6 M Number of Manholes Drop manhole J 7 Sewer M Number of Manholes Drop manhole J 8 Drop manhole J 9 M Number of Manholes Drop manholes Drop manholes J 9 M Number of Manholes Drop manh	il Engineering Associates, West Main Street Fown DE ald H. Sutton, Tr., P.E. Cea-de.com G-8833 Cell 302-547-24444 GRAVITY SEWER INFORMATION Type of Sewer System Residential Commercial Industrial Other? Length (ft) Diameter (in) Joint Specification 4,941 8 Integral Gaste Number of Manholes Drop manholes provided? 23 Yes No orizontal & eighteen inch (18") ater lines maintained? If not, explain provisions concrete essewer provide nges (for example, stream, highway and/or railroad crossings, di	West Main Street fown State DE 1970 ald H. Sutton, Tr., P.E. Cea-de.com GRAVITY SEWER INFORMATION Type of Sewer System Residential Commercial Industrial Other? Length (ft) Diameter (in) Joint Specification Min. Slope (ft/ft) 4,941 Number of Manholes Drop manholes provided? Number of Manholes 23 Yes No YOU F orizontal & eighteen inch (18") ater lines maintained? If not, explain provisions to prevent cross-contami Concrete excasement Sewer provided where 18 nges (for example, stream, highway and/or railroad crossings, directional drilling, elevated					

PUMP/LIFT STATION INFORMATION											
Ownership Type of Wastewater						If Other, list below			w		
■ Public □ Private											
Pump Station Flows (gallons/day) Design Average Peal						Peak Factor			actor		
Design Average 39, 250				157,000			4				
Basis of Design 109 GPM Pump Type Submersible Pump											
Will peak flows be accommo	odated if		np calc's a		np						
largest unit fails? Yes □ No	es allache Yes □ N			10	(minutes)						
Check valves provided on di	saharaa lis		CS 111			Gate valves pro	ovided on	dischare	re line?	1 1	
Yes \(\sigma\) No	scharge in	16:				Yes No		discharg	ge inie:		
If not, explain alternate proc	edure:					7 103 🗆 110					
ir not, explain atternate proc	cdurc.										
Ventilation provided in wet	well?	Dry `	Well?			Is an alarm system included?			Alternate source of power?		
Yes 🗆 No		□ Y	es No			¥ Yes □ No			Yes 🗆 No		
What other provisions for en	nergency o	peratio	ns?								
Backup G	enera	tor	p 5	CAE	PK	Controls	•				
Height of Influent Above Pu			Height	of Efflu	ent A	Above Pump		Frictio	n Loss (ft)		
(suction head) (ft) (discharge head)					1.63			47.03			
Pump Design Point Pump Operating Point Static H					Нег					Required Motor	
109 GPM/G1.00' - 1256PM -			72'	13.97			7 61.00			Horsepower (hp)	
	FORCE MAIN INFORMATION										
Type of Pipe Length (ft) Diameter (in)											
SDR-21 PVC						3,411 ft				4 in	
Hazen-Williams "C" Design Type of Joints						Velocity Under Design			Minimum Pipe Cover (ft)		
Factor Conditions (ft/sec)							44				
Air relief valves specified? Clean-outs provided?						Maximum distance between clean-outs (ft)					
Yes No Yes No											
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained?											
▼Yes □ No											
Comments	Comments										



414 High Street | PO BOX 1100 Seaford, DE 19973 302.629.9173 302.629.9307 fax www.seafordde.com

September 11, 2024

DE DNREC Division of Water, Commercial, and Government Services Section 89 Kings Highway Dover, DE 19901

RE: Dolby North Subdivision

Dear DNREC,

As per your request, this letter is to verify the property has the correct zoning and that the City has adequate water capacity to service the above referenced project.

This subdivision was approved by the City in August 2024 with the R-2 Medium Density Residential Zoning designation. Single Family dwellings are a use by right in this zone.

The City's waste water treatment facility's capacity is allocated at 2.0 MGD; the daily flows are currently 1.1 MGD. The project has been reviewed and the plans for water/sewer installation and connections have been approved.

Should you require additional information, please feel free to contact me at 302-629-9173.

Michael Bailey

Building Official

RECEIPT

	Septe	ember 24th, 2024	110							
RCVD FROM	DRH In	c Controlled Disb	\$1,125.00							
	One Thousand One Hundred Twenty Five Dollars and 00/100 DOLLARS									
FOR	WPCC 3080/24 Legal notice and permit application fee - Dolby Property North									
ACCT	\$	1,125.00	х	CHECK #	1890773					
PAYMENT	\$	1,125.00		CASH						
	\$	ne ne		OTHER	BY	Kevin Bronson				

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