



M • V • ENGINEERING, LLC

102 N. MAIN STREET • P.O. BOX 484 • CAPE MAY COURT HOUSE, NJ 08210
TEL: (609) 465-7080 • FAX: (609) 465-3973 • E-MAIL: mveng@comcast.net • WEBSITE: mvengllc.com
Certificate of Authorization #24GA28195100

LETTER OF TRANSMITTAL

To: Ms. Eileen McFillin, Board Administrator
Dennis Township Consolidated Land Use Board
PO Box 204, 571 Petersburg Road
Dennisville, NJ 08214

Date: February 11, 2022
RE: Block 224 Lots 68.01, 73, 74.02,
75.03, & 78.04
Township of Dennis
Pierson-Pleasantville, LLC

Project No.: 118-14

ENCLOSED PLEASE FIND THE FOLLOWING –

<u>QUANTITY:</u>	<u>DESCRIPTION:</u>
<u>17</u>	<u>Sealed copies of "Site Plan for Proposed Concrete Plan" at the above referenced</u> <u>property, rev. 1-31-22 by M V Engineering, LLC.</u>
<u>17</u>	<u>Sound Level Evaluation for the above referenced property, prepared by</u> <u>prepared by Shropshire Associates, LLC and dated 2-11-22.</u>

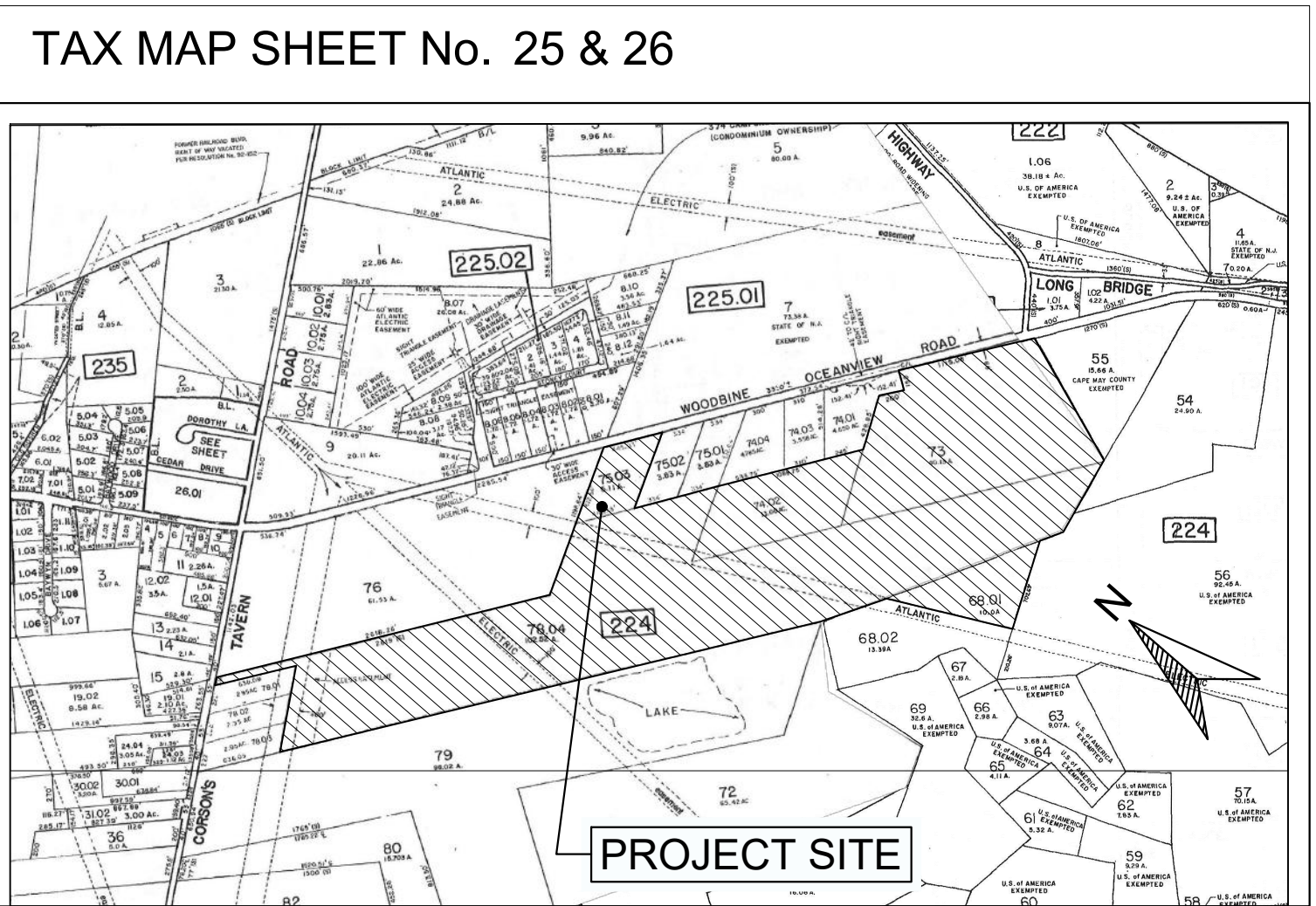
These are transmitted as checked below:

☒ Planning Board ☐ Preliminary Approval
☐ Zoning Board ☐ Final Approval
☐ Per Your Request ☐ For Your Files
☐ Other: _____

REMARKS: This supplements the submittal of November 2, 2021.

C: Pierson-Pleasantville, LLC, w/ encl's
Paul Baldini, Esq, w/ encl's
File 118-14

Signed: Kathy Starr
Kathy Starr
Administrative Assistant



EFFECTIVE: 10/5/17

APPLICANT	APPLICANT #1 (print name)	DATE
APPLICANT	APPLICANT #2 (print name)	DATE

PROJECT SITE: PIERSON PLEASANTVILLE, LLC
471 (ET.AL) CORSONS TAVERN RD.
OCEANVIEW, NJ 08230

PAGE(5)	BLOCK	LOT	QUAL	PROPERTY OWNER & MAILING ADDRESS PROPERTY LOCATION
	223.01	7.01		TURNER-D'ABUNDO/MCCREESH ASSOC PO BOX 607 OCEAN VIEW, NJ 08230 475 WOODBINE OCEANVIEW RD
	225.01	7.02		TURNER-D'ABUNDO/MCCREESH ASSOC PO BOX 607 OCEAN VIEW, NJ 08230 425 WOODBINE OCEANVIEW RD
	225.01	7.03		TURNER-D'ABUNDO/MCCREESH ASSOC PO BOX 607 OCEAN VIEW, NJ 08230 WOODBINE-OCEANVIEW RD
	225.01	8.01		PLATTNICK, MICHAEL R 22 BROOKSIDE RD CAPE MAY COURT HOUSE, NJ 08210 375 WOODBINE-OCEANVIEW RD
	225.01	8.02	C-1	HERMAN FERRLE & SONS, INC PO BOX 507 SEA ISLE CITY, NJ 08243 369 WOODBINE-OV RD,UNIT 1
	225.01	8.02	C-2	HERMAN FERRLE & SONS, INC PO BOX 507 SEA ISLE CITY, NJ 08243 369 WOODBINE-OV RD,UNIT 2
	225.01	9.02	C-3	MCC RENTALS, LLC 4 CROWDING LN CAPE MAY COURT HOUSE, NJ 08210 349 WOODBINE-OV RD,UNIT 3
	225.01	9.02	C-4	JPF INVESTMENTS LLC 369 WOODBINE OCEANVIEW RD WOODBINE, NJ 08270 369 WOODBINE-OV RD,UNIT 4
	225.01	8.02	C-5	HERMAN FERRLE & SONS, INC PO BOX 507 SEA ISLE CITY, NJ 08243 369 WOODBINE-OV RD,UNIT 5
	225.01	8.02	C-6	HERMAN FERRLE & SONS, INC PO BOX 507 SEA ISLE CITY, NJ 08243 369 WOODBINE-OV RD,UNIT 6
	225.01	8.02	C-7	JPF INVESTMENT LLC 223 507H ST SEA ISLE CITY, NJ 08243 369 WOODBINE-OV RD,UNIT 7
	225.01	8.02	C-8	JPF INVESTMENTS LLC 223 507H ST SEA ISLE CITY, NJ 08243 369 WOODBINE-OV RD,UNIT 8
	225.01	8.03		SWANSON, ANDREW & COMOVER, FRANK 47 SUNSET BLVD LONGPORT, NJ 08038 383 WOODBINE-OCEANVIEW RD
	225.01	8.04		RHEINHEITZ, DONALD BRUCE 7 HERIZIAM DR CAPE MAY COURT HOUSE, NJ 08210 357 WOODBINE-OCEANVIEW RD
	226	1.02		BUMONT, CHRISTOPHER J & DONNA 8 BAYVIEW DR OCEAN VIEW, NJ 08230 5 BAYVIEW DR

REVISIONS

M · V · ENGINEERING, LLC

*Consulting, Municipal, Environmental
Engineers & Planners*

Certificate of Authorization #24GA28195100

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www.mvengllc.com

BRIAN J. MURPHY

CYNTHIA S. CHEMERYS

Professional Engineer, NJ License No. 32063
Professional Planner, NJ License No. 3615
Professional Engineer, CT License No. 32235

Professional Engineer, NJ License No. 33816
Professional Planner, NJ License No. 4179

SCALE: **AS NOTED**


DATE: **9/17/2021**

DWG BY: **CHILDS**

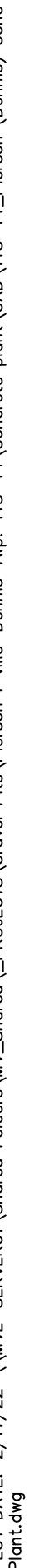
PROJECT #: **118-14**

CKD BY: **BTM**

SHEET: **C-0**

1/31/22  T.O.C.

REVISIONS



Pierson Pleasantville, LLC
C/O Richard E. Pierson, President
426 Swedesboro Road
Pilesgrove, NJ 08098

The purpose of this application is to obtain site plan approval to add ready mix concrete as an additional use associated with an existing gravel pit. The site is presently being actively utilized as a mining and mineral extraction site performing wet and dry mining as well as general contracting, receiving, shipping and wholesale and retail sales of soils, sand, gravel, earth, stone, mineral products, recycled concrete, mulch, landscaping materials, block, manufactured concrete products, brick cement and cement products, supplies and related items.

	Req'd	Provided	Variance
Lot area	60,000 SF	+ 165 Ac	NO
Lot width	150 FT	445.38 FT	NO
Lot depth	200 FT	+ 1,211 FT	NO
Building setbacks			
Side	25 FT	63.5 FT	NO
Front	75 FT	100 FT	NO
Rear	50 FT	+ 650 FT	NO
Building coverage	35 %	< 35 %	NO
Impervious coverage	50 %	< 50 %	NO
Building height	30 FT	52.85 FT	YES

Survey was prepared by Gibson Associates, PA dated 10-26-17 and revised through 9-14-20

All stormwater will be directed to the wet areas existing on this site.

6. This map is for the purpose of site plan only and is not intended to represent a land survey as defined by N.J.S.A. 45:8-28(e). This map is based on deeds of record, tax map, survey, field measurements and other information.

7. All wetland areas have been delineated and certified by the N.J.D.E.P. All required buffers are shown on this plan.

8. Office is located on Lot 75.03 and is provided with site lighting.

9. "DO NOT ENTER – UNSAFE CONDITIONS" signs shall be maintained at all access locations to the site.

Before excavating in project area, the contractor is to verify the location of any underground utility facilities (gas, mains, electric lines, telephone lines, water or sewer mains, etc.). Should underground structures or facilities interfere with project construction, the engineer shall be notified before proceeding with work.

A variance is required from 185-64 D (1) (a) for machinery closer than two hundred feet to a property line. This is an existing condition that will also apply to the redi-mix concrete equipment.

① "D" VARIANCES are required for:

- 1) Use - Concrete Plant
- 2) Multiple uses on one site
- 3) Height in excess of 10%

SITE PLAN
FOR
PROPOSED CONCRETE PLANT
AT
PIERSON PLEASANTVILLE, LLC
TAX BLOCK 224
LOT(S) 68.01, 73, 74.02, 75.03 & 78.04
DENNIS TOWNSHIP
CAPE MAY COUNTY, NEW JERSEY

PROJECT SITE: PIERSON PLEASANTVILLE, LLC
471 (ET.AL) CORSONS TAVERN RD.
OCEANVIEW, NJ 08230

**OUTBOUND INFORMATION FROM SURVEY PREPARED BY MARK J. GIBSON,
P.L.S. NJ LICENSE #32115. SURVEY DATED 10/26/17. REVISED 9/14/2020.**

PROPOSED CONCRETE PLANT LOCATION

PIERSON PLEASANTVILLE, LLC (SHEET SP-1)

SITE PLAN

Shropshire Associates LLC

Traffic Engineering, Transportation Planning & Design

277 White Horse Pike, Suite 203, Atco, NJ 08004

P: 609-714-0400 F: 609-714-9944 www.sallc.org

SBE Certified

David R. Shropshire, PE, PP
A. Andrew Feranda, PE, PTOE, CME
Randal C. Barranger, PE
Nathan B. Mosley, PE, CME



February 11, 2022

Pierson Pleasantville, LLC
c/o Mr. Brian J. Murphy, P.E., P.P., C.M.E.
MV Engineering, LLC
P.O. Box 484
Cape May Court House, NJ 08210

(via email: b.murphy@mvengllc.com)

Re: **Sound Level Evaluation**
Proposed R.E. Pierson Concrete Plant
Dennis Township, Cape May County, NJ
SA Project No. 22016

Dear Brian:

At your request, Shropshire Associates, LLC has prepared a sound level evaluation to support the Dennis Township Zoning Board application and evaluate the impact of the sound pressure levels to be generated by the proposed R.E. Pierson Materials concrete plant facility located along westbound Woodbine Ocean View Road (CR 550) in Dennis Township, Cape May County, NJ. The property contains several material storage buildings. The property is located just west of the Woodbine Ocean View Road & Corsons Tavern Road intersection. The proposal is for the construction of a new concrete mixing facility.

The purpose of this evaluation is to provide sound pressure level (SPL) data to be representative of ambient conditions (area/neighborhood residual noise), source-on conditions (total noise in the environment including the source of interest), and project SPLs based on recorded SPL measurements at a comparable site. The scope of this evaluation is as follows:

- Review the layout of the existing site.
- Identify target areas to conduct ambient sound pressure level (SPL) measurements as per information provided by the project team and via a field investigation of existing site characteristics.
- Identify all sources contributing sound to the point of measurement.
- Survey the area on foot to identify any other sound sources which may affect measurements.
- Conduct daytime and nighttime ambient sound pressure level measurements at the proposed site, in accordance with the procedures outlined in the New Jersey State Noise Control Act (N.J.A.C. 7:29), to determine the existing sound pressure levels.
- Conduct ambient and source-on sound pressure level measurements at a comparable site for comparison to the proposed site.



- Estimate projected sound pressure levels to the residential areas in the vicinity of the site and determine the impact on the environmental character of the surrounding area with respect to noise.
- Evaluate the current and projected sound pressure levels in relation to State standards. The New Jersey State daytime and nighttime noise thresholds for continuous airborne sound at a residential property line for noise generated by the site is 65 A-weighted decibels (dBA) between 7:00 AM to 10:00 PM and 50 dBA between 10:00 PM to 7:00 AM, respectively. The threshold to non-residential property lines is 65 dBA without time stipulations.
- Prepare sketches identifying location of measurements.

Site Characteristics

The proposed site (Figure 1) is located along westbound Woodbine Ocean View Road, just west of its intersection with Corsons Tavern Road in Dennis Township, Cape May County, New Jersey. The proposed site currently contains an existing sand mining plant with several material storage buildings. The proposal is for the addition of a concrete mixing facility within the existing property. Access to the proposed site will continue to be utilized via the two (2) existing full-movements driveways along westbound Woodbine Ocean View Road. To the west is a truck repair shop. Opposite Woodbine Ocean View Road to the south are several individual developments such as a plumbing facility, brewery, and storage facilities. To the east is a transformer station. Adjoining the proposed site to the northeast is an existing campground residential community.

The comparable (existing) site (Figure 2) is located along westbound Sherman Avenue (CR 552) between Wilson Avenue and West Boulevard in the City of Vineland, Cumberland County, New Jersey. The site contains an R.E. Pierson Materials concrete mixing facility.

Sound Level Measurement Equipment

All sound pressure level (SPL) data was collected using a Quest Model 2900, Type 2, Sound Level Meter. The unit was calibrated using a Quest QC-10 Calibrator (114dB – 1000Hz), at the start and end of each study and at one-hour intervals. A windscreen was used to minimize the effect of wind gusts. A Kestrel 2000 Thermo Wind Meter was used for temperature and wind speed measurements. The sound level meter and calibrator were factory-calibrated and certified on October 25, 2021. All SPL tests were conducted using the A-weighting network in the slow meter response mode. The tests were conducted utilizing the SPL function setting on the noise meter.

SPL Data Collection Conditions

In conjunction with calibrating the sound level meter, temperature and wind measurements were recorded. Both the temperature and wind readings were within the ranges specified in the New Jersey State Noise Control Act. The recorded temperatures during the SPL measurements at both the proposed and existing sites ranged between 33° during the AM to 53° during the PM, and wind gusts did not exceed 3 MPH (see attached Table 1).



Proposed Site SPL Data Collection

Ambient (neighborhood residual) sound represents all sounds in the environment, other than noise from the source of interest. Ambient SPL measurements were conducted at the proposed site between 6:00 AM to 8:00 AM to capture the daytime and nighttime periods on Thursday, February 10, 2022 (see attached Tables 2 and 3). The ambient measurement location was approximately 1,450-feet from the proposed concrete facility location (Location A; Figure 1).

The daytime ambient recorded SPLs ranged between 45 dBA – 53 dBA, and the nighttime ambient recorded SPLs ranged between 44 dBA – 50 dBA. The primary sources of ambient noise were typical operations on-site, backup beacons for trucks on-site, birds, area traffic, and wind. Extraneous sources of noise during the measurements were overhead planes. Overhead planes were recorded at 52 dBA.

Comparable Site SPL Data Collection

Source-on (total) sound represents all sounds in the environment, including sound from the source of interest. Source-on SPL measurements were taken at the existing R.E. Pierson Materials concrete mixing facility located along westbound Sherman Avenue in the City of Vineland, Cumberland County between 9:20 AM to 10:20 AM on Thursday, February 10, 2022 (see attached Table 4). Measurements were recorded approximately 170-feet from the concrete mix loading area for trucks (Location B). The measurement location and measurements were recorded such that the SPLs are assumed to be solely from typical operations of the concrete mixing facility, including trucks queuing, loading the trucks, as well as the concrete mixing operation.

The source-on recorded SPLs ranged between 59 dBA – 65 dBA during the period when trucks were queuing and loading on-site, and between 64 dBA – 73 dBA during the period when the conveyor was running for concrete mix preparation and trucks were loading on-site. The primary sources of source-on noise were operations of the facility, traffic on the adjacent roadway, birds, and wind. Extraneous sources of noise were motorcycles and loud vehicles/trucks on the adjacent roadway.

Corrected (Source) Sound Pressure Levels

Corrected (source) levels can best be described as the level of noise being emitted solely from the source of interest; however, the noise level emitted solely from the source cannot be measured directly from a specific activity. The noise level emitted solely from the source is calculated from arithmetic difference between the source-on (total) level and the ambient (background) level. It is important to note that per the procedure outlined in N.J.A.C. 7:29, the *highest* overall recorded ambient measurement is subtracted from the *lower* range of the source-on readings. This difference, if less than 10.0-dBA and greater than 3.0-dBA, is then correlated with the corresponding correction factor as outlined in N.J.A.C. 7:29-2.10, Table 1. The correction factor is then deducted from the *lower* source-on or total measurement yielding the corrected (source) sound level. Measurements that result in a difference of less than 3.0-dBA are generally regarded as unenforceable, meaning that the noise emitted from the source has a negligible impact on the ambient level. If the difference between the source-on and ambient levels is greater than 10.0 dBA, then no correction is necessary, and the recorded source-on measurement is considered solely a result of the noise generated by the source. The



correction factors as outlined in N.J.A.C. 7:29-2.10, Table 1 are determined by decibel subtraction (decibels are a logarithmic scale) using the following formula:

$$\text{Corrected (Source) Level} = 10 \log (10^{(\text{total sound level} / 10)} - 10^{(\text{background level} / 10)})$$

However, in this case the source-on measurements are assumed to be solely from typical operations of the concrete mixing facility, and no corrections were made to provide for conservation analyses.

SPL Projection

The source SPLs at the comparable site was recorded approximately 170-feet from the concrete mix loading area for trucks (Figure 2; Location B). Due to site geometrics as well as operations on-site, it was not feasible to record measurements at a greater distance that would match the 1450-feet distance from the proposed concrete mixing facility at the Ocean View facility to the nearest residential area (adjacent campground).

The dissipation of sound pressure levels follows a modified inverse square law, whereby SPLs are reduced by half with a doubling of distance. Please note that decibels are a logarithmic scale. The inverse square law can be expressed using the formula (wherein "d" is distance):

$$\text{SPL}_2 = \text{SPL}_1 + 10 \log (d_2 / d_1)^2 = \text{SPL}_1 + 20 \log (d_2 / d_1)$$

Using the above formula, the lower range of source SPLs, as specified in N.J.A.C. 7:29, of 59 dBA (representing the loading of concrete trucks) and 64 dBA (representing the conveyor/concrete mix preparation and truck loading) recorded at 170-feet are anticipated to dissipate to 40 dBA and 45 dBA, respectively, at a distance of 1,450-feet. The source SPLs projected to the nearest residential area at the proposed site is anticipated to conform to the State Noise Control Act requirements for daytime and nighttime noise levels. Using logarithmic addition, the combined existing SPLs and proposed source SPLs results in minimal changes to the existing SPLs.

Conservatively projecting the higher range, contrary to the procedures outlined in N.J.A.C. 7:29, of source SPLs of 65 dBA (loading of trucks) and 73 dBA (conveyor/concrete mix preparation and truck loading) recorded at 170-feet are anticipated to dissipate to 46 dBA and 54 dBA at a distance of 1,450-feet, which is comparable to existing recorded sound pressure levels.



Conclusions

Based on the analyses presented in this evaluation, the following conclusions are provided:

1. The primary source of ambient sound pressure levels at the proposed site were on-site operations, traffic on the adjacent roadways, birds, and wind. The ambient measurements currently conform to the State Noise Control Act (N.J.A.C. 7:29) requirements for daytime and nighttime noise levels along the northern property line, which represents the nearest residential area.
2. The source sound pressure levels at the comparable site were conservatively assumed to be solely a result of operations on-site, and no correction was made. The source SPLs projected to the nearest residential area at the proposed site is anticipated to conform to the State Noise Control Act requirements for daytime and nighttime noise levels.

Should you have any questions or require additional information, please feel free to contact us.

Sincerely,
Shropshire Associates LLC

A handwritten signature in black ink, appearing to read 'Randal C. Barranger'.

Randal C. Barranger, P.E.
Project Manager / Partner
RCB/jab
Attachments

Table 1 R.E. Pierson Materials Dennis Township, Cape May County, NJ Weather Conditions					
Date	Location	Time	Conditions	Temp.	Wind
Thursday Feb 10, 2022	Proposed Site Dennis Township	6:08 AM	Clear	33°F	< 2 MPH
		7:02 AM	Clear	35°F	< 2 MPH
		8:01 AM	Clear	37°F	< 2 MPH
Thursday Feb 10, 2022	Comparable Site City of Vineland	9:20 AM	Clear	45°F	< 2 MPH
		10:20 AM	Clear	53°F	< 3 MPH

Table 2 R.E. Pierson Materials Dennis Township, Cape May County, NJ Nighttime Ambient Measurements at Proposed Site - 10 February 2022			
Location	Time	Reading Range (dBA)	Comments
A	6:11 - 6:18 AM	43 - 51	Primary sources of noise: traffic; on-site operations.;
	6:18 - 6:24 AM	43 - 51	birds; wind
	6:24 - 6:28 AM	45 - 51	Extraneous sources of noise: overhead planes (52 dBA)
	6:28 - 6:35 AM	44 - 53	
	6:35 - 6:54 AM	44 - 51	
	6:54 - 7:00 AM	46 - 51	

Table 3 R.E. Pierson Materials Dennis Township, Cape May County, NJ Daytime Ambient Measurements at Proposed Site - 10 February 2022			
Location	Time	Reading Range (dBA)	Comments
A	7:04 - 7:10 AM	47 - 52	Primary sources of noise: traffic; on-site operations.;
	7:10 - 7:16 AM	46 - 53	birds; wind
	7:16 - 7:24 AM	46 - 53	Extraneous sources of noise: overhead planes
	7:24 - 7:43 AM	44 - 51	
	7:43 - 8:00 AM	47 - 51	

Table 4 R.E. Pierson Materials Dennis Township, Cape May County, NJ Source-On Measurements at Comparable Site - 10 February 2022			
Location	Time	Reading Range (dBA)	Comments
B (Trucks on Site)	9:21 - 9:31 AM	59 - 65	Primary sources of noise: operations on-site, truck loading, area traffic, wind
	9:31 - 9:41 AM	68 - 71	
	9:41 - 9:46 AM	51 - 62	
	9:46 - 9:48 AM	61 - 65	
B (Conveyor)	9:48 - 9:50 AM	70 - 71	Primary sources of noise: operations on-site, truck loading, area traffic, wind
	9:50 - 9:52 AM	66 - 71	
	9:52 - 10:00 AM	71 - 73	
	10:00 - 10:04 AM	64 - 66	



R.E. PIERSON MATERIALS
384 WOODBINE OCEAN VIEW ROAD
OCEAN VIEW, NJ
10 FEBRUARY 2022

Shropshire Associates LLC

277 White Horse Pike - Suite 203, Atco, NJ 08004
P: 609.714.0400 F: 609.714.9944 www.salic.org

FIGURE 2 - EXISTING SITE
SITE LOCATION MAP



R.E. PIERSON MATERIALS
184 W. SHERMAN AVENUE
VINELAND, NJ
10 FEBRUARY 2022