

TAX MAP  
SCALE 1" = 1000' ±  
SOURCE: TOWNSHIP OF BARNEGAT  
TAXMAP SHEETS #4 AND #8

**PLAN REFERENCES**

1. PLAN ENTITLED "SITE MAP", CEDAR BRIDGE SAND & GRAVEL, BLOCK 46, LOT 14 & BLOCK 50, LOTS 2 AND 3, SITUATED IN TOWNSHIP OF BARNEGAT, OCEAN COUNTY, NEW JERSEY. PREPARED BY MATRIX NEW WORLD, SIGNED BY DAVID G. EARECKSON P.E. DATED 6/26/17, LAST REVISED 11/07/17.
2. PLANS ENTITLED "TOPOGRAPHY SURVEY OF CURRENT MINING AREA", BLOCK 46, LOT 14, BLOCK 50, LOTS 2 & 3, TOWNSHIP OF BARNEGAT, OCEAN COUNTY, NEW JERSEY. PREPARED BY VINCENT CREEVY, PLS. DATED MAR. 6, 2020.

**PLAN NOTES:**

1. EXISTING TOPOGRAPHY IS BASED ON PLAN REFERENCES 1 AND 2.
2. BOUNDARY AND MONUMENTATION IS BASED ON PLAN REFERENCE 1.
3. ANGLE OF REPOSE ASSUMED AS 2H TO 1V BELOW ELEVATION 109. ACTUAL MAY VARY.
4. MINING IN THE PERMITTED PERIOD TERM FROM JUNE 2020 TO JUNE 2023 WILL OCCUR IN MINING AREAS A, III, IV, & V.
5. AREAS A, III, IV AND V HAVE BEEN MINED AND WILL CONTINUE TO BE MINED IN THE PROPOSED PERMIT TERM FROM JUNE 2020 TO JUNE 2023.
6. PROCESSING PLANT IS TO REMAIN INSIDE THE MINING AREA.
7. FOR EXCAVATION BELOW WATER LEVEL, THE DEPTH OF WATER SHALL NOT BE LESS THAN 3' MEASURED FROM MEAN LOW-WATER MARK AND SHALL NOT BE LESS THAN 5' ACRES IN AREA AS STIPULATED IN SECTION 604-12.
8. MINING OPERATIONS ARE PERMITTED BETWEEN THE HOURS OF 7:00 AM AND 6:00 PM MONDAY THRU FRIDAY AND BETWEEN 8:00 AM AND 4:00 PM SATURDAY.
9. MINING OPERATIONS IN ALL PROPOSED AREAS I, II, A, III, IV, AND V WILL MOVE APPROXIMATELY 100,000 CY OF TOPSOIL AND 4,750,000 CY OF SAND AND GRAVEL. NO FURTHER MINING WILL OCCUR IN AREA I FOR AREA B.
10. ALTHOUGH THE ACCESS ROAD AROUND ON THE EAST, NORTH AND WEST SIDE OF AREAS III, IV, & V WILL REMAIN, THE APPLICANT RESERVES THE RIGHT TO REPLACE THE EXISTING "AREA A" ACCESS ROAD TO THE PROCESSING PLANT AND STOCKPILE AREA ONCE THE DREDGE MOVES INTO AREAS III & IV.

PHASE	ACRES	STATUS
I	27.08	Permitted
II	15.27	Permitted
A	22.81	Permitted
III	11.90	Permitted
IV	10.53	Permitted
V	13.78	Permitted
<b>Total Mining Area</b>	<b>101.35</b>	
Less Areas I and II Not To Be Mined	42.35	
<b>Net Mining Area</b>	<b>59.00</b>	

**RECLAMATION PLAN – Soil Erosion and Sediment Control notes.**

1. The Ocean County Soil Conservation District shall be notified forty-eight (48) hours in advance of any land disturbance.
2. All work is to be done in accordance with the State Standards for Soil Erosion and Sediment Control in New Jersey.
3. All Soil Erosion and Sediment Control practices are to be installed prior to any major soil disturbance, or in their proper sequence, maintained until permanent protection is established.
4. Any changes to the Certified Soil Erosion and Sediment Control Plans will require the submission of revised Soil Erosion and Sediment Control Plans to the District. The revised plans must meet all current State Soil Erosion and Sediment Control Standards.
5. N.J.A.C. 4:24-29 et seq. requires that no Certificate of Occupancy be issued before there has been compliance with provisions of a certified plan for permanent measures. All site work, and all work around individual lots in subdivisions, must be completed prior to the District issuing a Report of Compliance for the issuance of a Certificate of Occupancy by the Municipality.
6. Any disturbed area that will be left exposed more than thirty (30) days, and not subject to construction traffic, will immediately receive a temporary seeding. If the season prevents the establishment of temporary cover, the disturbed area will be mulched with straw, or equivalent material at a rate of 2 to 2-1/2 tons per acre, according to State Standard for Stabilization with Mulch Only.
7. Immediately following initial disturbance or rough grading, all critical areas subject to erosion (i.e. steep slopes and roadway embankments) will receive temporary seeding in combination with straw mulch or a suitable equivalent, at a rate of 1-1/2 to 2 tons per acre, according to State Standards.
8. A sub-base course will be applied immediately following rough grading and installation of improvements to stabilize streets, roads, driveways, and parking areas. In areas where no utilities are present, the sub-base will be installed within fifteen (15) days of the preliminary grading.
9. Any steep slopes (3:1 or greater) or any existing roadways receiving pipeline installation will be backfilled and stabilized daily, on the installation continues.
10. The Standard for Stabilized Construction Areas requires the installation of a stone and all construction highways where vehicles will access paved roadways from unpaved areas of the site.
11. All sediment washed, dropped, spilled or tracked onto roadways (public or private) or other impervious surfaces will be removed immediately.
12. Permanent vegetation is to be seeded or installed on all required areas within ten (10) days after final grading. At the time of the final inspection, you are required to provide confirmation that the proper type and amount of seed, lime and fertilizer have been used for permanent stabilization work. Straw mulch is required on all seeding.
13. At the time that site preparation for permanent stabilization is going to be completed, any soil that will not provide a suitable environment to support adequate vegetative ground cover shall be removed or treated in such a way that it will permanently adjust the soil conditions and render it suitable for vegetative ground cover. If the removal or treatment of the soil will not provide suitable conditions, non-vegetative means of permanent ground stabilization will have to be employed.
14. In accordance with the Standard for Management of High Acid Producing Soils, any soil having a pH of 4 or less or containing iron sulfides shall be covered with a minimum of twelve (12) inches of soil having pH of 5 or more prior to seeded preparation. Areas where trees or shrubs are to be planted shall be covered with a minimum of twenty-four (24) inches of soil having a pH of 5 or more.
15. Control Ditch Protection must be installed at all required outlets prior to the drainage system becoming operational.
16. Unfilled dewatering is not permitted. Necessary precautions must be taken during dewatering operations to minimize sediment transfer. Any dewatering methods used must be in accordance with the Standard for Dewatering.
17. Should the control of dust of the site be necessary, the site will be sprayed until the surface is wet, temporary vegetative cover shall be established or mulch shall be applied as required by the Standard for Dust Control.
18. Stockpile and staging locations established in the field shall be placed within the limit of disturbance according to the certified plan. Staging and stockpiles not located within the limit of disturbance will require certification of a revised Soil Erosion and Sediment Control Plan. The District reserves the right to determine when verification of a new and separate Soil Erosion and Sediment Control Plan will be required for these activities.
19. All stockpiles are to be temporarily stabilized in accordance with Soil Erosion and Sediment Control notes #6.
20. The property owner shall be responsible for any erosion or sedimentation that may occur below stormwater outfalls or offsite as a result of construction of the project.

**Method of Stockpiling Topsoil and Overburden** – Topsoil and subsoil is stored on-site in designated areas and protected from wind and water erosion.

**Proposed Grading and Final Elevation** – A lake is being created by the resource extraction operation. The slope of the shoreline three (3) feet above and three (3) feet below the projected average water table elevation, will be on the low side of the natural angle of repose. Slopes beyond the lake shoreline described above will be at the natural angle of repose to the bottom of the lake. It is assumed that the natural angle of repose is two feet horizontal to one foot vertical; however, the actual angle of repose may vary.

Areas surrounding the shoreline will be graded to conform to the natural contours of the property to the maximum extent possible. Grading will be minimal to reduce compaction and the creation of a pavement-like surface. Some irregular pockets will be left on the restoration slopes to trap leaf litter, seeds and water.

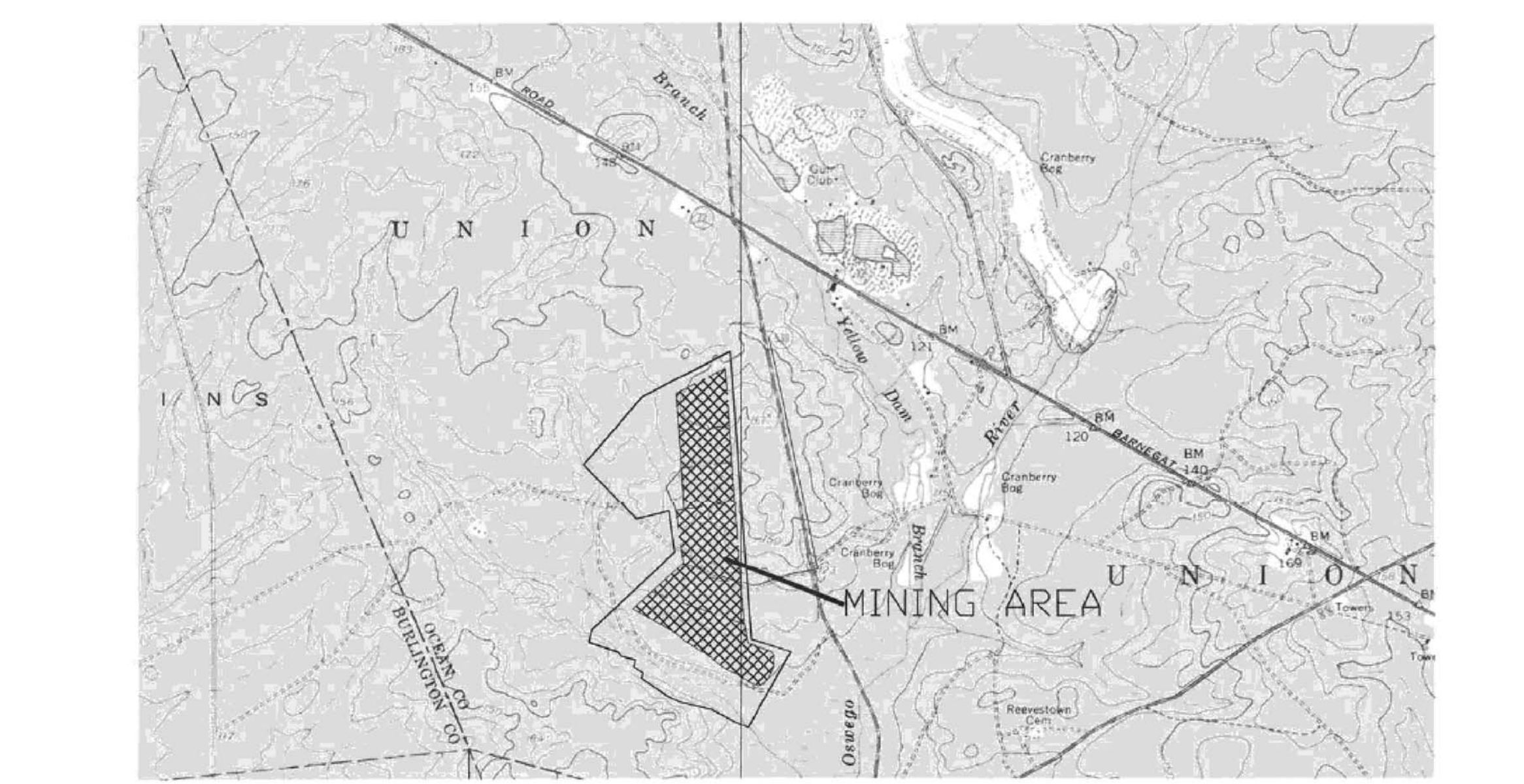
**Topsoil Material Application and Preservation** – "Trucking" in with a dozer or a loader will be used to prepare the seedbed in accordance with NRCS recommendations. "Truck bldg" will be used for seeded preparations because the trucks will provide depressions that collect water and/or seed germination.

Soil will be restored in approximately the same quality and quantity that existed at the time the resource extraction operation was initiated. The site contains very little natural topsoil. Consequently, seed and/or mine soils (copy overburden and setting basin fines) may also be used for soil replacement if warranted. A scarification device (ripper teeth, chisel plow, disc harrow, etc.) will be used if it is needed to promote the natural reclamation of the site.

**Seed Rate and Age of Vegetation to be Used** – The herbaceous seed programs for the fall and spring seasons are as follows:

TABLE 1 – SPRING SEEDING PROGRAM			TABLE 2 – FALL SEEDING PROGRAM		
Seeding Date	Species	Seed Rate (Lbs./acre)	Seeding Date	Species	Seed Rate (Lbs./acre)
March 1 to April 30	Blackwell Saltgrass	10	August 15 to October 1	Blackwell Saltgrass	10
	Harding Lyellgrass	2		Crain Syc	30
	Crain Syc	10		Red Canary grass (wet sites)	10 (in mix)
	Red Canary grass (wet sites)	10 (in mix)			

- Native tree seedlings and/or shrubs will be purchased for spring plantings. One, or both, of the following techniques will be used in spring planting of the trees:
- The planting of a minimum of 1,000 one-year-old plus pine seedlings, or other native Pinelands tree species, per acre in a random pattern.
  - Cluster plantings of characteristic Pinelands oak species and shrubs at a sufficient spacing to ensure establishment of these species
- One or more of the following species will be used in the spring plantings:
- Conifers** – Pitch Pine, Shortleaf Pine, Atlantic White Cedar
- Hardwoods** – Chestnut Oak, Pin Oak, White Oak, Bayberry
- Shrubs and/or small trees will be transplanted from the future mining areas to the restoration areas in the fall plantings, if warranted.
- Planting Method and Schedule** – Seed will be applied by hand, broadcast seeder, cyclone seeder, drill, cultipacker seeder or hydrosower.
- Small blocks or groups of single woody species will be randomly spaced to simulate the pattern of regeneration in the natural forest, to provide a diverse habitat for wildlife, and to hasten the development or succession of the original forest species. Single species of native conifers, hardwoods, and shrubs will be used in block plantings. Block plantings will be placed around these planting blocks to provide wildlife cover, bird perches (to introduce more seeds), a trap for leaf litter and organic material, and a source of organic material. Shrub will be used to modify the sharp unrounded edge between the natural forest and the reclaimed area.
- The soil storage area, the crushed stone stockpile area, the concrete plant area and the processing plant area will be restored after the cessation of operations.
- Fertilizer Application Including Method and Rates** – Soil amendments will be applied, if needed, to re-establish the natural vegetation on the site. Fertilizer rates will depend upon revegetation outcomes and/or lab test requirements. Straw or hay mulch will be applied at the approximate rate of 1.0 to 1.5 tons per acre, if needed.
- Maintenance Requirement Schedule** – "Spot" seeding and planting will be conducted in restoration areas, if needed.



USGS TOPO MAP  
SCALE 1" = 2000' +/-  
SOURCE: USGS WOODMANSIE & BROOKVILLE NJ QUADRANGLES

APPROVAL FOR SOIL REMOVAL PERMIT FOR A PERIOD OF THREE (3) YEARS WHICH SHALL EXPIRE ON \_\_\_\_\_

CHAIRMAN DATE \_\_\_\_\_

SECRETARY DATE \_\_\_\_\_

TOWNSHIP ENGINEER DATE \_\_\_\_\_

DATE OF RESOLUTION FOR APPROVAL \_\_\_\_\_

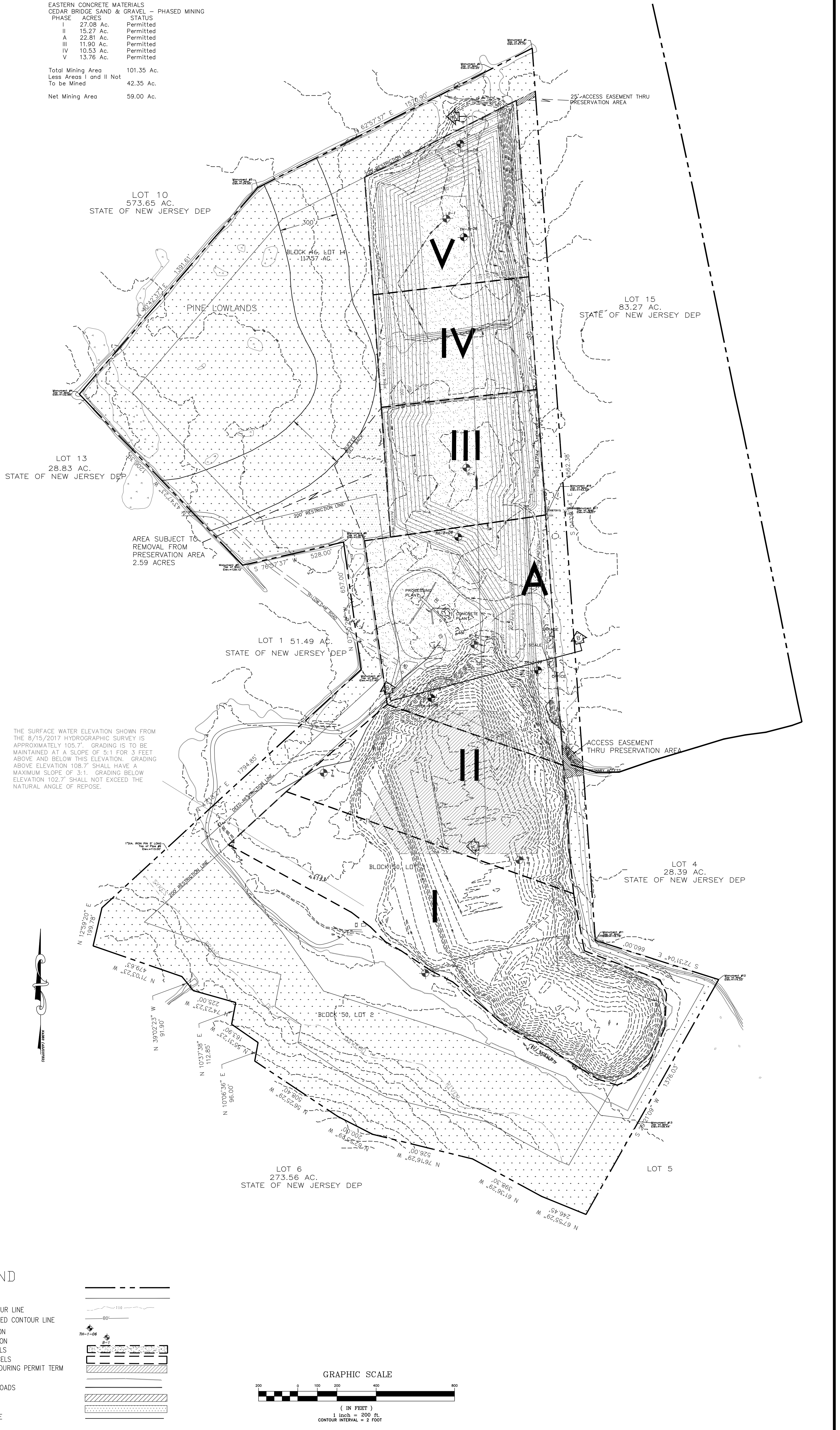
**SITE DATA**  
TOTAL TRACT AREA: 227.873 ACRES  
ZONING DISTRICT: PRESERVATION AREA – (PA)

**APPLICANT & OWNER**  
PHOENIX PINELANDS CORP.  
2114 ROUTE 23  
SUITE 202  
MANASQUAN, NJ 08736

**LEGEND**

- PROPERTY LINE
- WATER
- EXISTING SURFACE CONTOUR LINE
- PROPOSED DREDGE FINISHED CONTOUR LINE
- CPI TEST BORING LOCATION
- FPA TEST BORING LOCATION
- PERMITTED MINING PARCELS
- UNPERMITTED MINING PARCELS
- AREA NOT TO BE MINED DURING PERMIT TERM
- TREE LINE
- ACCESS ROADS – HAULROADS
- BUILDING/STRUCTURE
- DEED RESTRICTED AREA
- BUFFER / SET-BACK LINE

PROJECT NUMBER: C-202001	<b>SITE MAP</b> <b>PHOENIX PINELANDS CORP.</b>	<b>BRYAN E. LUOMA, P.E.</b> PO BOX 791 RAHWAY, NJ 07065 732-888-8917	DESIGNED BY: BEL	REVIEWED BY: BEL	RELEASED BY: BEL	NO.	DESCRIPTION	DATE	BY	APR.
DATE: 4/4/20										
SCALE: 1"=200'	<b>BLOCK 46, LOT 14 &amp; BLOCK 50, LOTS 2 AND 3</b>	SITUATED IN TOWNSHIP OF BARNEGAT OCEAN COUNTY, NEW JERSEY								
SHEET 1 OF 2										



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