ORDINANCE NO. 407

THE DUNE ORDINANCE

OF THE

BOROUGH OF MANTOLOKING

REPEALING ORDINANCE No. 348,
PROVIDING FOR REGULATION AND PROTECTION OF DUNES
IN THE BOROUGH OF MANTOLOKING, OCEAN COUNTY,
NEW JERSEY AND PENALTIES FOR VIOLATIONS

. 18

ORDINANCE NO. 407 THE DUNE ORDINANCE OF THE BOROUGH OF MANTOLOKING	
TABLE OF CONTENTS	Page
ARTICLE I	
FINDINGS, DECLARATION AND PURPOSE	1
ARTICLE II	
→DEFINITIONS	
Section 2.1 Word Usage	
Section 2.2 Definitions	4
ARTICLE III	
REGULATION OF BEACH AND DUNE AREAS	
Section 3.1 Construction Prohibited	9
Section 3.2 Access to Dune Areas,,,	. 9
Section 3.3 Dune Walkways and Pathways	. 9
Section 3.4 Removal of Dune Protection Devices Prohibited	10
Section 3.5 Natural Deposits of Sand	. 10
Section 3.6 Maintenance of Dune Elevation	11
Section 3.7 Vegetation and Sand Fencing:	. 11
Section 3.8 Bulldozing and Mechanical Replenishment of Sand	
Section 3.9 Permits	
Section 3.10 Dune Inspection	15
ARTICLE IV	
ENFORCEMENT AND PENALTIES	
Section 4.1 Enforcement	
Section 4.2 Notice of this Ordinance	18

ARTICLE V EFFECT OF ORDINANCE	19
ection 5.1 Effect of Ordinance	19
Section 5.2 Repeal	19
Section 5.3 Effective Date	19
APPENDIX Appendix to Section 3.3, Dune Walkways and Pathways	20
A. Pathways	20
B. Foreslope Steps	20
C. Elevated Walkways	21
C. Elevated Walkways D. Dune Platforms	22
Appendix to Section 3.7, Vegetation and Sand Fencing	
A. Dune Planting	23
B. Sand Fencing	24
Appendix to Section 3.8, Bulldozing and Mechanical Replenishment of	
A. Dune Location and Other Parameters	25
Appendix to Section 3.9, Permits	. : 29

ORDINANCE NO. 407

AN ORDINANCE TO REGULATE, PRESERVE AND PROTECT THE BEACHES AND DUNES WITHIN THE BOROUGH OF MANTOLOKING, OCEAN COUNTY; NEW JERSEY; PROVIDING PENALTIES FOR THE VIOLATION THEREOF; AND REPEALING ORDINANCE 348.

BE IT ORDAINED BY THE MAYOR AND COUNCIL OF THE BOROUGH OF MANTOLOKING, IN THE COUNTY OF OCEAN AND STATE OF NEW JERSEY, AS FOLLOWS:

ARTICLE I: FINDINGS. DECLARATION AND PURPOSE:

Although there may be no long term defense for fixed oceanfront structures against a constantly rising ocean level, effective protection of the oceanfront and adjacent coastal areas in the intermediate term against high tides and flooding and against damage by the ocean under storm conditions requires sufficient elevation and breadth in the beach and dune areas, hereinafter defined, to dissipate the force of the waves. The dunes should provide an uninterrupted barrier and a source of sand to mitigate the effect of storm waves for the benefit of the entire Borough - interior lands as well as oceanfront premises -and a beach for the recreational purposes of all. Accordingly, the Borough has a vital interest in the continued maintenance and

protection of the ocean Beach and Dune Areas and in the right to cause their restoration in the event of damage or destruction.

une Areas are vulnerable to erosion by wind, water, the absence of good husbandry by those responsible for their maintenance and preservation, and by indiscriminate trespass, construction or other acts which might destroy or damage them. A proven and available means of protecting Dune Areas against erosion is by preventing indiscriminate trespassing, construction or other acts which might destroy or damage

them, and through the aggressive use of native plantings supplemented, when necessary, by sand fencing and other protective devices, or combinations thereof, designed to prevent the erosion of Dune Areas and to promote the root accumulations, normal contours and other features found in natural dune systems.

The Beach Area and Dune Area are dynamic and are not capable of rigid definition or delineation, or of completely firm stabilization. They can and do migrate, so that particular sites, at one time free of dunes may, as the result of natural forces, become a part of the Dune Area declared to be in the interest of the Borough to protect. Persons owning, using or purchasing such property do so subject to the public interest therein.

It is a purpose of this Ordinance to define the areas so affected and to continue regulations to assure their effectiveness. This Ordinance does not attempt to define and regulate all parameters of dune delineation, function or management and the Borough Council declares its intent to review and update this Ordinance periodically to reflect appropriately new and beneficial knowledge. This Ordinance is declared to be an exercise of the police power in the interest of safety and welfare for the protection of persons and property. Further, this Ordinance is adopted in recognition of the knowledge and benefits realized by the implementation of prior enactments which have been operative since 1980 and which have been favorably endorsed by scientific and governmental authorities. By this enactment, it is the intention of the Borough to reflect and utilize the nowledge and experience gained in the administration of prior Beach and Dune Ordinances in the Borough of Mantoloking.

In view of the fact that the Bar-Beach-Dune System provides the only viable protection to property, public and private, and persons within the Borough, from the clearly present hazards of erosion and flooding caused by the Atlantic Ocean during periods of storm, and otherwise, all of the provisions of this Ordinance are deemed necessary, material, and substantial; therefore, they shall not be subject to waiver or variance.

ARTICLE II: DEFINITIONS

Section 2.1 Word Usage

For the purpose of this Ordinance, certain words or phrases shall be interpreted in the following manner:

- A. Words used in the present tense include the future tense.
- B. Words used in the singular include the plural, and conversely words in the plural include the singular.
- Words used in the masculine include the feminine.
- D. The word "shall" is mandatory and not discretionary.

Section 2.2 Definitions

All terms and language utilized in this Ordinance shall be accorded their common and

customary, meaning, except where specifically defined herein as follows:

Appendix is that portion of this Ordinance entitled "Appendix", and is incorporated herein.

Beach Area is that area between the Mean High Water line of the Atlantic Ocean, and the Seaward Edge of the Dune as hereinafter defined.

Borough is the Borough of Mantoloking, Ocean County, New Jersey.

Borough Clerk is the municipal clerk of the Borough of Mantoloking, Ocean County, New Jersey.

Borough Council is the municipal council of the Borough of Mantoloking, Ocean County, NJ.

<u>CAFRA</u> is the Coastal Area Facilities Review Act, <u>N.J.S.A.</u> 13:19-1 *et seq.*, and regulations issued thereunder at N.J.A.C. 7:7-1.1 *et seq.*, as may be amended from time to time.

<u>Crestline of the Dune</u> is a smoothly curbling line connecting the highest points of the dune system, generally within ten (10) feet on either side of the scarp line.

Dune Area is that area between the Seaward Edge of the Dune and the Landward Edge of the Dune.

<u>Dune Consultant</u> shall mean an expert on dunes and their care retained by the Borough. In any periods during which no such expert is regularly retained, it shall mean such other person designated by Borough Council.

<u>Dune Inspectors</u>) shall mean that person or those persons appointed by the Mayor with the consent of the orough Council.

<u>Dune Platform</u> is a wooden construction erected in the Dune Area, in accordance with specifications set forth herein.

<u>Dune Program Director</u> shall mean that person appointed by the Mayor with the consent of the Borough Council.

<u>Dune Vegetation</u> shall include all plant species found on beaches and dunes of northeastern U. S., either native or introduced, which can build and stabilize sand dunes. Specifically, it shall include, but not be limited to, such species as American beachgrass (<u>Ammophilia breviligulata</u> sea rocket (<u>Cakile edentula</u>), seaside spurge (<u>Euphorbia polvgonifolia</u>), dune cordgrass (<u>Spartina patens</u>), seaside goldenrod (<u>Solidago semipervirens</u>), dusty miller (<u>Artemisia stelleriana</u>), bayberry (<u>Mr ca Pennsylvaniea</u> beach pea (<u>Lathyrus japonicus</u>), salt spray rose (<u>Rosa rugosa</u>), beach <u>plum (Prunus maritima</u>), panicum grass, etc., which normally grow or may be planted on the. slopes of the dunes or behind them, with no distinction being made as to how such plants are introduced into their location.

Foreslope of the Dune is the intersection of the Crestline of the Dune and the Seaward Edge of the Dune.

<u>Landward Edge of the Dune</u> is the intersection line of the backslope of the dune and the grade of the land extending from the east boundary of New Jersey Route 35 or East Avenue, eastwardly, or the line joining the average Landward Edge of the Dune of the adjoining oceanfront properties, or a line parallel to and 60 feet west of the Seaward Edge of the Dune, whichever is the more westerly.

Mean High Water Line is the line found by the intersection of a plane at the elevation of Mean High Water with the existing slope of the beach.

<u>Oceanfront</u> is abutting the Atlantic Ocean. In the case of the Borough of Mantoloking, oceanfront properties are those located east of Ocean Avenue and south of Lyman Street, and east of East Avenue and north of Lyman Street.

Pathway is an improved, protective access way, at grade across the dune.

<u>Sand Fence</u> shall include the term "snow fence" of a barricade type established in a line or a pattern to accumulate sand and aid in the formation of a dune, such as picket type consisting of light wooden fence held together by wire and affixed to wooden posts. Alternate types of "sand fence" may be utilized if approved by the Dune Consultant.

Scarp line is a parallel continuous line of cliffs cut in the dune system by a storm. The scarp line of the Borough of Mantoloking's dune system is measured with reference to the December 1992 storm ("Scarp '92") and is memorialized on a map of the Borough.

<u>Seaward Edge of the Dune</u> is the intersection line of the foreslope of the dune and the gradient of the Beach Area, or the contour line at an elevation of 9 feet above Mean High Water, or the Vegetation Line, or the Upper Driftline, whichever is the more easterly, except when the Borough Engineer may have caused stakes to be driven to mark the Seaward Edge of the Dune, in which case it is the line between such stakes.

<u>Setback Line</u> is that line determined by the setback distances as may, from time to time, be specified in the Land Use Ordinance of the Borough.

<u>Upper Driftline</u> is that line produced by the Winter Spring Tides (highest tides of the year) which contains oceanic debris (flotsam such as seaweed, etc.) and the seeds, rhizomes, or detached plants which can germinate and/or grow to produce a zone of new dune vegetation.

<u>Vegetation Line</u> is that line connecting the most seaward naturally occurring perennial plants with other such plants.

Walkway is a constructed means of crossing the Dune Area in accordance with specifications set forth herein.

ARTICLE III REGULATION OF BEACH AND DUNE AREAS

Section 3.1 Construction Prohibited

Construction east of the Landward Edge of the Dune and the placement there, except temporarily, of any object that would impede the flow of sand are prohibited, except as provided in this Ordinance and in accordance with any CAFRA regulations, the Land Use Ordinance of the Borough (setback), and subject to Permits as may be issued pursuant to said enactments.

Section 3.2 Access to Dune Areas

No person shall be in the Dune Area unless:

- (a) upon an improved Pathway, Walkway or Dune Platform; or
- in the performance of such activities as may be reasonable and necessarily required to construct or maintain the dune or allowed structures with the permission of the owner; or
- (c) for the purposes of inspection, topographical survey, or enforcement of this Ordinance; entry for these purposes shall not be deemed an actionable trespass.

Section 3.3 Dune Walkways and Pathways

Only one Pathway or Walkway across the Dune Area is permitted for each residence. It shall run, generally, the shortest practical course between the residence and the Seaward Edge of the Dune, and shall not exceed four feet in width (see Appendix for specifications). At street ends, wider Pathways may be delineated by the Borough Engineer. In the event that any Pathway or Walkway shall be or become, in the opinion of the Dune Consultant, a substantial detriment to the development and maintenance of the continuous protective dune sought to be achieved by this Ordinance, the owner of the premises shall be subject to the provisions of Article IV of this Ordinance.

In addition to the pathway or Walkway, each oceanfront lot shall be allowed a "Dune Platform" not to exceed 200 square feet, situated within the Dune Area. Dune Platforms, Walkways and Pathways shall comply with the specifications as to construction details and location within the Dune Area as are set forth in the Appendix.

Section 3.4 Removal of Dune Protection Devices Prohibited

he removal, cutting, burning or destruction of Dune Vegetation, Sand Fence or such other types of approved dune protection devices by the Borough Council in the Dune Area is prohibited, except as necessary for construction or maintenance and authorized pursuant to this Ordinance.

Section 3.5 Natural Deposits of Sand

Sand which is transported upon lands by action of wind, tides, storms or any combination thereof shall not be removed from the lot upon which it is deposited by such action. To the extent practicable, considering the utilization of the premises, such sand as may be affirmatively relocated by the owner upon the lot shall be moved eastwardly. Surplus sand deposited upon any improved street ends shall be restored into the Beach and Dune Area.

Section 3.6 Maintenance of Dune Elevation

One of the purposes of this Ordinance is to achieve the maintenance of sand dunes at the highest practical height. To this end, no dune shall be directly or indirectly lowered or reduced in height by the action or inaction of any owner or his agent. However,, if any dune shall be or become lower than the elevation deemed materially significant by the Dune Consultant, applying recognized criteria, with due regard to the intent of this Ordinance and reasonable use of the premises, the owner thereof shall be obliged to install such Sand Fence and plantings as are prescribed by this Ordinance. See Appendix. The owner shall have an obligation to maintain and replace, if necessary, such fences and plantings. If the dune is lowered or caused to be lowered by the direct or indirect action of any owner, then the dune shall, upon due notice to the owner, be restored to its prescribed elevation by the owner or at his expense. The restored dune shall be planted and sand fenced in accordance with the especifications set forth in the Appendix.

Section 3.7 Vegetation and Sand Fencing

In order to provide for effective protection and/or restoration of the Dune Area, each owner shall plant or cause to be planted in the Dune Area suitable vegetation and erect, or cause to be erected, suitable sand fencing all in accordance with such standards as are provided in the Appendix.

Section 3.8 Bulldozing and Mechanical Replenishment of Sand

- (A) No person or entity shall engage in the mechanical replenishment of the ocean beach dunes within the Borough without first obtaining a Permit for such activity and proceeding in strict adherence with the terms and conditions of the Permit. Mechanical replenishment shall be broadly defined to include the transport of sand from the berm by any mechanical means (bulldozing or like activity) to or into the dune area as well as the placement of sand obtained from off-site locations.
- (B) No permits shall be issued at such times as, in the opinion of the Dune Consultant, the Beach Area is not suitable for bulldozing.
- (C) The dune replenishment Permit shall be issued by the Borough Clerk and shall be conditioned in accordance with CAFRA regulations and as follows:
- (i)No mechanical dune replenishment activity shall be allowed from

April 1 to September 1, inclusive, or as may be prescribed by CAFRA regulations, except in case of emergency ircumstances which constitute an immediate threat to the public health, safety and welfare as declared by the Mayor or Borough Council;

(ii)No scraping or bulldozing of sand from the berm at a depth greater

than one foot from the grade existing prior to activity under the

permit shall be allowed;

- (iii)Transport of sand from below the low water line shall not be allowed;
- (iv) No person shall operate any motorized vehicle across or upon any Dune Area except as may be necessitated for permitted construction or for dune maintenance in compliance with this Ordinance.
- (v) No person shall operate mechanical sand transfer equipment on the beach unless in possession of a valid permit, and in compliance with the terms and conditions of said permit.
- (vi) Permits shall be effective for six months;
- (vii) All replenished dunes shall be immediately protected by the erection of sand fence in accordance with specifications set forth in the Appendix to this Ordinance;

- (viii) All replenished dunes shall be graded to the required slope and shall be protected by planting of appropriate vegetative cover all in accordance with specifications set forth in the Appendix to this Ordinance.
- Any permit issued hereunder may, in the event of violation of the terms of the permit, or in the event of conditions of the beach and dune systems and weather, which are not, at that time, consistent with the attainment and maintenance of a proper protective dune system, be suspended by the Dune Inspector after consultation with a Dune Consultant. The action of the Dune Inspector shall be subject to review by the Borough Council upon written application of an aggrieved property owner. In the event of such application for review, the Borough Council shall promptly, after public hearing, affirm, reverse, or modify the determination of the Dune Inspector;
- (x) The failure of any owner or contractor, or any agent of an owner or

contractor, to obtain a permit for dune replenishment activities or to abide by the terms and conditions of the permit shall be deemed a violation of this Ordinance.

(xi) In the event that a dune maintenance or replenishment project involves the placement of sand upon the dune under circumstances where the additional sand or a portion thereof is obtained from any off-site location, the added sand shall be of such grain size, shape, color and other characteristics as will in the judgment of the Dune Consultant or Dune Inspector be compatible with the existing on-site sand. The placement of sand from off-site locations shall be by such methods as will avoid damage to existing dunes and shall, whenever reasonably practicable, as determined by the Dune

I Inspector, be placed upon the dune from the landward side of the dune.

(xii) The removal, off site, of sand from the Beach or Dune Area is prohibited. The movement of sand from the Dune Area to the 14 Beach Area is prohibited. The Dune Inspector may, in the public interest, revoke any permit. Appeal from any revocation may be taken to the Borough Council by written petition within fourteen (14) days of revocation.

Section 3.9 Permits

A permit shall not be required for the planting of dune grass or other appropriate vegetation, or for the erection of sand fencing or the placement of temporary walkway protection in the Dune Area in. compliance with approved standards set forth in the Appendix to this Ordinance. All other construction, modification, alterations or like activity in the Dune Area, unless specifically exempted in this Ordinance, shall require that the owner or his agent obtain a Dune Area Permit. Activities requiring a Permit include but are not limited to elevated walkways, dune platforms, bulldozing, sand replenishment from off-site sources, and the placement of sand fencing more than 3 feet seaward of the Seaward Edge of the dune. All permits are subject to revocation, suspension or modification in the event of changed site conditions, as determined by the Dune Inspector with the advice of the Dune Consultant. The Dune Area permit shall be issued at no charge. The permittee or any agent shall promptly, upon request, allow any Borough official to examine the permit or a certified true copy thereof at any time.

Section 3.10 Dune Inspection

The Dune Program Director shall make periodic dune inspections and shall provide written advice to owners. These writings shall not be deemed as notice of

violations of this Ordinance, but shall be maintained as part of the record for the subject property and may be considered by the Court in the imposition of penalties, upon conviction under any subsequent complaint for violation of this Ordinance. Further, the Dune Program Director shall coordinate his efforts with those of the Dune Inspector(s) to the end that the purposes of this ordinance may be achieved.

ARTICLE IV: ENFORCEMENT AND PENALTIES

Section 4.1 Enforcement

The Borough Dune Inspector or, in his absence, the Chief of Police, and in all events the Borough Council, shall enforce the affirmative duty of each oceanfront owner, as set forth in this Ordinance. The initial enforcement effort shall be by service of a written notice, certified mail return receipt requested, upon the record owner at his last known address as set forth in the Borough tax rolls, requesting specific compliance with these obligations concerning dune protection and/or restoration, at the expense of the owner. The notice shall also advise that unless the owner shall take appropriate corrective action and complete the same within 30 days from the day of mailing of said notice, the Borough may perform such acts of protection and/or restoration. Such expenditures by the Borough, if any, shall be due and payable by the owner upon demand. In the event that any such owner hall fail to pay, then the sum, together with interest at the highest legal rate thereon, shall become alien upon the property and be collected in the same manner as delinquent real property taxes. The Borough may, in any event, seek injunctive relief from any violation of this Ordinance.

In addition to the action described above, or alternatively, the owner may, at the election of any enforcement official or the Borough Council be prosecuted in the Municipal Court for violation of this Ordinance.

Section 4.2 Notice of This Ordinance

A copy of this Ordinance shall be furnished to all oceanfront property owners and to each applicant for a building permit for any construction east of Ocean Avenue south of Lyman Street and east of East Avenue, north of Lyman Street. Compliance with this sub-article shall not be a jurisdictional prerequisite in any enforcement

Section 4.3 Penalties

For each and every violation of this Ordinance, or violation of the regulations or standards set forth in the Appendix to this Ordinance, or the terms and conditions of any permit issued hereunder, the owner of lands abutting the beach or Dune Area where such violation has been committed, and any contractor or agent of the owner, or the trespasser (if the violation is of section 3.2), shall for each and every violation be subject to a fine f not more than five hundred dollars or ninety days. in detention or both at the discretion of the Court. Each

and every day that such violation continues shall be considered a separate violation of this Ordinance, unless waived by action of the Borough Council.

ARTICLE V: EFFECT OF ORDINANCE

Section 5.1

Effect of Ordinance

If any part or parts of this Ordinance are for any reason held to be invalid, such adjudication shall not affect the validity of the remaining portions of this Ordinance.

Section 5.2

Repeal

All Ordinances or parts of Ordinances in conflict with or inconsistent with the provisions of this Ordinance are hereby repealed except that this repeal shall not affect or prevent the prosecution or punishment of any person for any act done or committed in violation of any Ordinance hereby repealed prior to the effective date of this Ordinance. Further, Ordinance 348 and any amendments thereto are hereby specifically repealed.

Section 5.3

Effective Date

This Ordinance shall take effect upon its final adoption.

APPENDIX TO BEACH AND DUNE ORDINANCE

BOROUGH OF MANTOLOKING, OCEAN COUNTY, NEW JERSEY APPENDIX TO SECTION 3.3, DUNE WALKWAYS AND PATHWAYS

A. Pathways

(i)If an elevated walkway is not used to access the ocean or any dune

platform, the pathway shall be protected, by placing suitable material on the

sand surface, to be removed when the premises are not occupied.

(ii)A crestline gap is a first point of entry for the ocean in a storm. The depth of a crestline gap is the vertical distance between the bottom of the pathway through the crest of the dune and a line connecting the highest points of the dune with 20 feet on either side of the pathway. If the crestline gap depth is two feet or more at any time, the pathway shall be replaced by an elevated walkway.

B.Foreslope Steps

(i)An unprotected dune foreslope is particularly vulnerable to damage by foot traffic. Accordingly, where foot traffic is very light, owners shall use protective means such as a cleated ramp, or similar devices which may be removed when the premises are not occupied, or during seasonal storms. (ii)When, in the judgment of the Dune Consultant, foot traffic is causing more

than minimal damage to the foreslope and, in all circumstances, whenever not traffic has caused the pathway over the foreslope to be at least one foot lower than the adjacent sand surface in any location, the owner shall cause to be erected a set of steps in accordance with those used with an Elevated Walkway and having. planking no wider than 4 inches to accommodate the requirement that there be at least 16% of the .surface as gap area between the planks so as to facilitate growth of vegetation under the structure (5/8 inch gap with 4" planking). The steps should be constructed in a manner which will facilitate optional removal during seasonal storms or when the premises are not occupied; upon temporary removal, the pathway should be protected by sand fence.

C.Elevated Walkways

(i) Walkways shall be constructed with supporting posts, 44, the use of

beams of no greater than 6 inches vertical section, the use of handrails no more than 2 inches, vertical section, all to limit eroding wind turbulence. Planking shall be no greater than 4 inches in width, installed with at least a 16 % gap area (5/8 inch for 4 inch width).

(ii)Whenever the dune builds to the point that any part of the surface of an existing walkway is at or below the sand surface elevation within five feet to either side, that walkway shall be raised, to meet the criteria referenced this Appendix, or rebuilt. Raising an elevated walkway shall not require a permit. Reconstruction of a walkway shall be subject to issuance of a permit.

D.Dune Platforms

(i)Dune Platforms shall be constructed with neither length nor width greater

than 18 feet, an elevation of at least 18 inches above any point of the sand surface, supporting posts 4x4, beams no greater than 6 inches in vertical section, handrails no more than 2 inches in vertical section, planking shall be no more than 4" in width installed with at least a 16% gap area (5/8 inch for 4 inch width) in order to permit dune grass to grow underneath

(ii)The permit application for a Dune Platform is to be accompanied by a sketch, to scale, showing that it is at least 10 feet from either property sideline and that the seaward edge of the platform is at least 10 feet to landward of the Dune Crestline. The sketch may be prepared by the owner with reference to a pre-existing survey in form satisfactory to the Dune Inspector.

(iii)Whenever the dune builds to the point that any part of the dune platform surface is less than 6 inches above the sand surface within 5 feet, that platform shall be raised or rebuilt. Raising an existing dune platform does not require a permit. Reconstruction of a dune platform shall be subject to issuance of a permit.

APPENDIX TO SECTION 3.7, VEGETATION AND SAND FENCING:

A.Dune Planting

- (i)For initial planting, or replanting sparse areas, "Cape" American beachgrass (Ammophilia breviligulata) should be used. The entire Dune Area (including the crest and the upper third of the Foreslope of the Dune) shall be planted; (the vegetation will voluntarily grow down the foreslope). In addition, some (up to 50%) Panicum Grass (panic grass) should be mixed in the planted area.
 - (ii)Planting may take place any time between October 15th and April 1st, if the ground is not frozen. Spring planting should be accompanied by frequent watering. Initial and subsequent fertilization is recommended at the rate of about 2 pounds of slow-release 10-10-10 per 1000 square feet. If the ph is lower than 7, then a treatment to raise ph should be applied (ph+ or limestone).
 - (iii)Only fresh planting stock cut back to 16-18 inches long shall be utilized. Spacing shall be no greater than 18 inches, two stems to a hole, at least 7 inches deep. If not planted with a water flooding method, the sand shall be compacted to eliminate air pockets.
 - (iv)Sand placed by earth moving equipment shall be allowed to become compacted by rains before planting is commenced.
 - (V)After beachgrass has been established, other appropriate vegetation may be added.
- B.Sand Fencing
 - (i), Fencing shall be standard -4-foot wood sand (snow) fence, or cut in half for half fence, in good condition, secured to wooden posts of a minimum cross-section of 4 square inches and a minimum length of 2 1/2 feet more than the height of the fence, with maximum span between posts of 12 feet.

 Alternate fencing, as approved by the Dune Inspector with advice of the Dune Consultant, prior to installation, may be utilized.
 - (ii) There shall be at least two lines of fencing in the top half of the Foreslope of the Dune, for the length of the Dune Area of each property. Both lines of the fencing should be in a zig-zag pattern with alternate posts offset by at least 5 feet. Half-height fencing is recommended. When sand accumulates at the fence at a height of twelve inches (12") or higher, the fence should be raised, so that it will continue to be effective.
 - (iii)A straight (or zig-zag) line of fencing may be erected adjacent to the seaward toe of the dune to prevent incursion into the dune area, but if it is more than 3 feet to seaward, a permit is required and such fencing must be removed during the winter months.
 - 6.7 DUNE LOCATION AND OTHER DUNE PARAMETERS:

APPENDIX TO SECTION 3.8, BULLDOZING AND MECHANICAL REPLENISHMENT OF SAND:

- A.Dune Location and Other Dune Parameters

- (i)A severe storm generally cuts a sharp cliff or scarp in the dune system, as a-straight or slightly curving continuous line the length of the beach, though there maybe gaps in the line where the ocean has broken through. Successive storms cut scarp lines that are essentially parallel, the more severe the storm the more westerly the scarp line. Remedial action after a severe storm consists of bulldozing about the same amount, depending upon the amount of sand available in the post-storm berm, up against the scarp line, leaving the Seaward Edge of the Dune in about a parallel continuous line. This was the case with the most recent severe storm, that of December 11 and 12 of 1992. Its scarp line ("Scarp 92") has been memorialized on a map of the Borough and thus provides an appropriate reference line for the dune system. After the '92 storm, in which the dune line was eroded some 60 feet, bulldozing of some 30 feet took place, leaving the dune by natural forces, aided by beachgrass planting and fencing, to build higher and to seaward. Therefore:
- (ii)It is desirable to have a continuous dune system with reference to Scarp
- '92. No bulldozing permit will be granted if to do so would result in displacement of the Seaward Edge of the Dune of that property more than 5 feet to seaward of the prevailing Edge of the dune of the dune system.
- (iii) When a severe storm erodes past the prevailing Dune Crestline (defined, for the purposes of this Appendix, to be a smoothly curbing line connecting the highest points of the dune system, generally with 10 et either side of Scarp '92), it can easily break through the dune system to flood the town and/or wash away neighboring houses, it is important to define a minimum Dune Height and other parameters of dune dimension.
- (iv) Therefore, the Dune Inspector, in consultation with the Dune Consultant shall require an owner to achieve certain standards of minimum dune height and dimensions, by affirmative action, including the transport to the Dune Area of suitable off-site sand, if, in the opinion of the Dune Consultant, achieving those criteria by natural processes would be protracted or would present unacceptable risk to the public interest. The standards are hereby established as: (a) a Seaward Edge of the Dune of between 25 and 35 feet to seaward of Scarp '92; (b) a dune foreslope or face with a slope (vertical horizontal) of 5.1 or less; (c) a minimum Dune Height, at the prevailing Dune Crestline of 18 feet; and (d) a minimum elevation of 16 feet between Crestline and (e) a distance westerly of Scarp '92 of 25 feet. In the event that the Mayor and Council shall, in the future, declare a beach emergency as the result of a storm event "Scarp 92" may, by resolution, be replaced by such other scarp line as may be established.

APPENDIX TO SECTION 3.9, PERMITS

A.Permits

(i)Permits required under this Ordinance shall be issued at no charge by the

Borough Clerk in a form and requiring such application data as shall be prescribed by the Dune Program Director after consultation with the Dune Consultant. No permit shall be issued unless, approved by the Dune aspector.

- (ii) Any permit may, in the discretion of the Dune Inspector, with due regard to the then existing conditions of beach and dune, be more restrictive than the criteria set forth herein if, in the judgment of the Dune Inspector, upon consultation with the Dune Program Director and Dune Consultant, to do so would more appropriately enhance attainment of the goals to be achieved by this Ordinance.
- (iii)Any owner aggrieved by the terms, conditions, denial or revocation of a permit issued or applied for under this Ordinance may appeal said action by written petition to the Borough Council within 14 days of the issuance or denial of any permit. Council may, upon hearing, and in summary fashion, modify, affirm or rescind the permit or the decision of the Administrative Officials.
- (iv) All permits issued must be maintained on site and shall be shown to any Borough official upon demand.
- (v) It is recognized that CAFRA regulations may provide for certain activity, by permit, within the beach and dune area. Therefore, the provisions of this Ordinance shall be strictly enforced and any activity not permitted herein is prohibited in the beach and dune area, except as shall be specifically permitted by the N.J.D.E.P. on a site-specific basis. In such event, all provisions of this Ordinance which are not inconsistent with the terms and conditions of any site-specific CAFRA Permit shall be strictly observed.
- (vi) Owners are hereby admonished to be aware that any activity upon the dune or beach which fails to honor the principles embraced by this Ordinance may subject the owner to liability for damage to the property of others.

ORDINANCE NO. 407 THE DUNE ORDINANCE OF THE BOROUGH OF MANTOLOKING

INDEX

	<u>Page</u>
A access to dune areas	20
В	
beach area	4

	12,25
С	
CAFRA -defined	5
regulations and permits	
D	
dune area	5
dune consultant	5, 11
dune inspector	
dune platform	
dune program director	
dune vegetation	5, 10-11, 23
E	
effective date of ordinance	
elevated walkwayselevation of dunes	
elevation of walkway	
VICTURED OF WARKING TO THE TOTAL OF THE TOTA	
F	
fence, see sand fence	
-	
findings, declaration and purpose	
fines	18
fines	
fines	
fines	
fines	
fines foot traffic foreslope steps	
fines foot traffic foreslope steps G	
fines foot traffic foreslope steps G H handrails on dune platforms	
fines foot traffic foreslope steps G	
fines foot traffic foreslope steps G H handrails on dune platforms	
fines foot traffic foreslope steps G H handrails on dune platforms height of dune	
fines foot traffic foreslope steps G H handrails on dune platforms height of dune	
fines foot traffic foreslope steps G H handrails on dune platforms height of dune I.	
fines foot traffic foreslope steps G H handrails on dune platforms height of dune	
fines foot traffic foreslope steps G H handrails on dune platforms height of dune I. J jail sentence	
fines foot traffic foreslope steps G H handrails on dune platforms height of dune I.	
fines foot traffic foreslope steps G H handrails on dune platforms height of dune I. J jail sentence	
fines foot traffic foreslope steps G H handrails on dune platforms height of dune I. J jail sentence K	

•

-	_mean high water line
	equipment
	motorized vehicles prohibited
	municipal court
	N
	natural deposits of sand
	notice of ordinance 18
	O
	oceanfront - definition
	Volument - desimilari
	P · ·
	panicum grass
	pathway
	penalties
	permits: bulldozing and mechanical replemshment
	planking
	plants, planting vegetation and sand fencing, see dune vegetation . 5, 10-11, 23
	platforms
	police, enforcement
	3
`	Page
	
	R
	relocation of sand, see natural deposits of sand, bulldozing and
	relocation of sand, see natural deposits of sand, bulldozing and mechanical replenishment
	relocation of sand, see natural deposits of sand, bulldozing and mechanical replenishment
	relocation of sand, see natural deposits of sand, bulldozing and mechanical replenishment
	relocation of sand, see natural deposits of sand, bulldozing and mechanical replenishment
	relocation of sand, see natural deposits of sand, bulldozing and mechanical replenishment
	relocation of sand, see natural deposits of sand, bulldozing and mechanical replenishment
	relocation of sand, see natural deposits of sand, buildozing and mechanical replenishment
	relocation of sand, see natural deposits of sand, buildozing and mechanical replenishment
	relocation of sand, see natural deposits of sand, bulldozing and mechanical replenishment
	relocation of sand, see natural deposits of sand, buildozing and mechanical replenishment
	relocation of sand, see natural deposits of sand, buildozing and mechanical replenishment
	relocation of sand, see natural deposits of sand, buildozing and mechanical replenishment 10, 12 removal of fencing or vegetation 10 repeal 10 replenishment of dunes 11-12, 25 S sand, naturally deposited 10 sand fence 7, 11, 24 scarp line - definition 7 seaweed edge of the dune 7 setback line 7 snow fence, see sand fence 7
	relocation of sand, see natural deposits of sand, buildozing and mechanical replenishment 10, 12 removal of fencing or vegetation 10 repeal 19 replenishment of dunes 11-12, 25 S sand, naturally deposited 10 sand fence 7, 11, 24 scarp line - definition 7 scaweed edge of the dune 7 setback line 7 snow fence, see sand fence 7 storms, effect 12, 25
	relocation of sand, see natural deposits of sand, buildozing and mechanical replenishment 10, 12 removal of fencing or vegetation 10 repeal 10 replenishment of dunes 11-12, 25 S sand, naturally deposited 10 sand fence 7, 11, 24 scarp line - definition 7 seaweed edge of the dune 7 setback line 7 snow fence, see sand fence 7
	relocation of sand, see natural deposits of sand, buildozing and mechanical replenishment 10, 12 removal of fencing or vegetation 10 repeal 19 replenishment of dunes 11-12, 25 S sand, naturally deposited 10 sand fence 7, 11, 24 scarp line - definition 7 scaweed edge of the dune 7 setback line 7 snow fence, see sand fence 7 storms, effect 12, 25

upper driffline	
V	
vegetation - definition	11,23
vegetation line vehicles prehibited	13
violation of ordinance violation of permit	18 ⁻
W	
walkway definition: walkway, regulations	
\boldsymbol{X}	
Y	
Z	