The applicant appealed the Department of Environmental Protection’s decision to deny it a wetlands permit to expand a parking area on a coastal dune that is part of a barrier beach. After a full hearing, the applicant failed to prove that the project would meet the performance standards for work on a coastal dune on a barrier beach. A final order of conditions denying the project therefore should be issued.

Introduction

The Atlantic Avenue Real Estate Trust (the “Trust”) wants to enlarge a parking area on land that it owns in Westport. The Department of Environmental Protection (the “DEP”) denied the Trust’s request for a permit under the Wetlands Protection Act, M.G.L. c. 131, § 40 (the “Act”), and the Wetlands Protection Act Regulations, 310 CMR 10.00. The DEP’s denial was based on its determination that the project is located on a coastal dune that is part of a barrier beach, and that the proposed work could not be conditioned to meet the applicable performance for such work. The Trust timely appealed the DEP’s decision and requested an adjudicatory hearing.

The parties identified two issues for appeal:

1. Will the proposed project be constructed on a coastal dune that is part of a barrier beach?

2. If the answer to Issue No. 1 is yes, can the proposed project be conditioned to meet the performance standards for a barrier beach, as set forth in 310 CMR 10.29?
See Conference Report and Order, dated November 9, 2006. On August 28, 2007, I granted the DEP’s motion for a directed decision on the first issue because the Trust conceded that the project would be built on a coastal dune on a barrier beach. See Ruling on Motion to Dismiss for Failure to Sustain a Direct Case, dated August 28, 2007, at p. 1.

I held a hearing on September 19, 2007 with respect to the second issue. The Trust called three witnesses: Anne Phelps, a former Conservation Commission Agent for the Town of Westport; Tanya Ryden, a member of the Westport Conservation Commission; and Mark Rits, a coastal geologist. Prior to the hearing, the Trust pre-filed Mr. Rits’s direct testimony; Mr. Rits therefore appeared at the hearing for cross-examination. The DEP called one witness: Daniel Gilmore, an Environmental Analyst at the DEP. Because the DEP submitted Mr. Gilmore’s pre-filed written direct testimony prior to the hearing, he appeared at the hearing for cross-examination. The Westport Conservation Commission presented no witnesses. The hearing was recorded stenographically; there is one transcript of the hearing.

After considering all of the evidence presented, I conclude that the Trust has not demonstrated that the project can be conditioned to meet the applicable performance standards for work on a coastal dune on a barrier beach. Accordingly, I recommend that the Commissioner issue a Final Order of Conditions denying the project.

**Statutory Framework**

The Trust’s proposed project involves two resource areas that are protected by the Wetlands Protection Act: a barrier beach and a coastal dune. The Wetlands Protection Act Regulations, 310 CMR 10.00 (the “Wetlands Regulations”), define a barrier beach as follows:

a narrow low-lying strip of land generally consisting of coastal beaches and coastal dunes extending roughly parallel to the trend of the coast. It is separated from the mainland by a narrow body of fresh, brackish or saline
water or a marsh system. A barrier beach may be joined to the mainland at one or both ends.

310 CMR 10.29(2). A coastal dune is defined as follows:

any natural hill, mound or ridge of sediment landward of a coastal beach deposited by wind action or storm overwash. Coastal dune also means sediment deposited by artificial means and serving the purpose of storm damage prevention or flood control.

310 CMR 10.28(2).

Any person who wants to “remove, fill, dredge or alter” a wetland resource area (such as a barrier beach) must request a wetlands permit from the local conservation commission. See M.G.L. c. 131, § 40; 310 CMR 10.05(4). The permit may be granted if (1) the resource area is not significant to the protection of any of the “interests” identified in the Wetlands Protection Act; or (2) the project can be conditioned to comply with performance standards established for that resource area. See 310 CMR 10.03(1)(a)1-2.1

If the local conservation commission denies an applicant’s request for a wetlands permit, the applicant may ask the DEP to issue the permit. 310 CMR 10.05(7)(b). An applicant who is unsuccessful before the DEP may appeal the DEP’s decision and request an adjudicatory hearing on the permit application. 310 CMR 10.05(7)(j).

When it denied the Trust’s permit application, the DEP determined that the project would be located on a coastal dune to a barrier beach and that the coastal dune is significant to two interests of the Act: flood control and storm damage prevention. See Superseding Order of Conditions, dated March 30, 2006, at p. 2. The Trust does not dispute these determinations. See.

---

1 The “interests” in the Wetlands Protection Act are as follows: protection of public and private water supply, protection of ground water supply, flood control, storm damage prevention, prevention of pollution, protection of land containing shellfish, protection of fisheries, and protection of wildlife habitat. M.G.L. c. 131, § 40.
This appeal therefore examines whether the proposed project can be conditioned to comply with the performance standards established for work on a coastal dune on a barrier beach.

**Findings of Fact**

Based on all of the evidence presented, reasonable inferences drawn from the evidence, and my assessment of the credibility of the witnesses, I make the following findings of fact. Additional findings of fact are included in the discussion section of this decision, as necessary.

1. The Trust owns a one-and-a-quarter acre lot located at 42 Atlantic Avenue in Westport, Massachusetts.
2. The property is relatively flat and low, with elevations ranging from five to seven feet above sea level.
3. Atlantic Avenue, a two-lane paved road, forms the southern property boundary.
4. The east and west sides of the property abut undeveloped and heavily-vegetated land.
5. The northern border of the property abuts Cockeast Pond, a one-hundred acre pond.
6. A bordering vegetated wetland (“BVW”) is located on the north and west sides of the lot; it covers the most of the northern portion of the property, all the way to Cockeast Pond.
7. The entire property is located on a large coastal dune that is part of a barrier beach on the Atlantic Ocean.
8. The Atlantic Ocean lies several hundred feet to the south of the property. Atlantic Avenue, homes on the other side of Atlantic Avenue, and a coastal beach separate the property from the ocean.

---

2 Testimony given during the hearing is cited as follows: Witness’s last name, followed by “Test.”, followed by the relevant pages in the transcript. “Rits PFT” and “Gilmore PFT” refer to the pre-filed written testimony of Mark Rits and Daniel Gilmore, respectively.
9. The shoreline of the coastal beach is roughly parallel to the southern border of the property.

10. The Trust previously built a single-family house, a garage and a parking area on the property.

11. The house is located on the east side of the property, and is set back thirty feet from Atlantic Avenue.\(^3\)

12. The garage is located twenty feet to the west of the house, and, like the house, is set back thirty feet from Atlantic Avenue.

13. The parking area is located in front of the garage. It is shaped roughly like a rectangle and measures eighty-five feet by thirty feet. It starts forty feet from the southwest corner of the property, and runs east eighty-five feet along the edge of Atlantic Avenue. It extends roughly thirty feet north into the property.

14. Currently, the property slopes gently from the west side of the garage and parking area down to the western border of the lot.

15. The Trust wants to grade roughly two thousand square feet of this gentle slope in order to expand the existing parking area. To accomplish this task, the Trust proposes to place fill on the slope and build a wooden retaining wall to hold the fill in place. See Gilmore PFT at ¶ 13.

16. The retaining wall would be three to four feet high and 110 feet long. See Rits Test. at pp. 30-31; Hearing Exh. 1.

17. The wall would begin fifteen feet from the southwest corner of the property. It initially would run north, perpendicular to Atlantic Avenue, for thirty feet. This first

\(^3\) Unless otherwise noted, the measurements in Findings of Fact Nos. 11-18 are taken from the final project plan, see Hearing Exh. 1, and are approximate distances.
thirty feet would be parallel to the existing parking area, and approximately twenty-five feet from it.

18. After the first thirty feet, the wall would bend to the northeast for roughly seventy feet and then turn to the east for roughly ten feet, where it would connect to the back left (or northwest) corner of the garage.

19. The Trust would then place approximately one hundred cubic yards of fill between the retaining wall and the garage/existing parking area. The fill would be leveled and graded, thus creating an even larger parking area.

20. The fill would be level with the top of the retaining wall.

21. The project plans state that the fill would consist of up to two feet of compacted gravel, covered by a two-inch layer of peastone.

22. The final grade of the project area would be approximately seven feet above sea level.

23. No fill would be added to the land behind the retaining wall. Thus, the final grade of the property on the front side of the retaining wall (where the fill is to be placed) would be three to four feet higher than the grade on the back side of the retaining wall (where no fill would be placed).

Storm and Wave Action

24. Storms primarily strike the barrier beach, including the property, from the south, southeast and southwest. Stated differently, storms generally originate off the coast of the barrier beach, *i.e.*, from the ocean.

25. Storms also may originate to the east of the barrier beach.
26. The Federal Emergency Management Agency (“FEMA”) has designated the property, including the area where the retaining wall and fill would be located (the “project area”), as a flood zone (Zone A13, elevation 14).

27. Waves from a ten-year storm could reach the property, including the project area.

28. Waves from a ten-year storm that reach the property could be three feet high.

29. Waves from storms larger than the ten-year storm also could reach the property, including the project area.

30. Waves that reach the property could come from the south, southwest or southeast.

31. Currently, waves that reach the project area can flow across the project area and into Cockeast Pond and/or the BVW surrounding the pond (hereafter, the pond and BVW are referred to as the “back barrier environment”).

32. Currently, flood waters from the back barrier environment can flow south/southwest out of the back barrier environment and travel over the property toward the ocean. This would occur when an ocean storm was large enough for ocean waves to reach the back barrier environment, and then the storm water recedes.

   Permitting History

33. On or about April 29, 2005, the Trust applied to the Westport Conservation Commission for a wetlands permit for the project.

34. On July 22, 2005, the Westport Conservation Commission issued an order of conditions denying the Trust’s request.

35. On August 2, 2005, the Trust asked the DEP to issue a superseding order of conditions granting the wetlands permit.

36. The DEP denied the Trust’s request on March 30, 2006.
37. The Trust timely appealed the DEP’s decision.

Discussion

I. Burden of Proof.

As the applicant, the Trust has the burden of proof in this case. See 310 CMR 10.03(1)(a). See also Matter of Karp, Docket No. 98-138, Remand Decision, 8 DEPR 47, 51 n.9 (Feb. 26, 2001). This means that the Trust must prove by a preponderance of the evidence that the project will comply with the Wetlands Protection Act and the Wetlands Regulations. Id. See also Matter of Jan Companies, Docket No. 97-069, Ruling on Petitioner’s Motion Regarding Burdens of Going Forward, 5 DEPR 54 (March 26, 1998).

II. Performance Standards for Work on a Barrier Beach.

There is one issue in dispute:

Can the proposed project be conditioned to meet the performance standards for work on a barrier beach, as set forth in 310 CMR 10.29?

See supra at p. 1. Under the Wetlands Regulations, a project located on a coastal dune that is part of a barrier beach must comply with three provisions governing work on coastal dunes: Sections 3, 4 and 5 of 310 CMR 10.28; the regulations add no additional requirements specific to barrier beaches. See 310 CMR 10.29(3). Section 3 of 310 CMR 10.28 sets out the performance standards for work on a coastal dune that has been found significant to at least one of the interests of the Act.\(^4\) Under Section 3, a project must not have an adverse effect on the coastal dune by:

(a) affecting the ability of waves to remove sand from the dune;
(b) disturbing the vegetative cover so as to destabilize the dune;
(c) causing any modification of the dune form that would increase the potential for storm or flood damage;

\(^4\)As previously discussed, the Trust does not dispute that the coastal dune is significant to storm damage prevention and flood control. See supra at p. 3.
(d) interfering with the landward or lateral movement of the dune;
(e) causing removal of sand from the dune artificially; or
(f) interfering with mapped or otherwise identified bird nesting habitat.

310 CMR 10.28(3). The regulations define “adverse effect” to mean:

a greater than negligible change in the resource area or one of its characteristics or factors that diminishes the value of the resource area to one or more of the specific interests of M.G.L. c. 131, § 40, as determined by the issuing authority. “Negligible” means small enough to be disregarded.

310 CMR 10.23.

Furthermore, under Section 4 of 310 CMR 10.28, a project that does not meet the performance standards in Section 3 nevertheless may be permitted if it qualifies as an “accessory use.” 310 CMR 10.28(4). Finally, Section 5 provides for certain limited projects, such as pedestrian walkways.

I first examine the performance standards in Section 3 and then the accessory use provision in Section 4. The parties agree that Section 5 is not applicable to this project and therefore I do not address it here.

A. Performance standard (a): affecting the ability of waves to remove sand from the dune. 310 CMR 10.28(3)(a).

The Trust does not dispute that the property can be inundated by waves from the Atlantic Ocean, but argues that the project meets the performance standard in 310 CMR 10.28(3)(a) because (1) waves cannot remove sand from the coastal dune; and (2) even if they could, the project would not interfere with any such removal. For the reasons explained below, I conclude that the project would affect the ability of waves to remove sand from the dune.

---

1. Is the coastal dune a source of sediment transport?

The Trust asserts that the barrier beach, including the coastal dune at issue, is so developed that waves cannot remove sand from it. Thus, according to the Trust, there is no sand removal with which the project could interfere. In support of this argument, the Trust proffered photographs of the barrier beach and testimony from its expert coastal geologist, Mark Rits.

Photographs. The Trust produced several photographs of the barrier beach. See Rits PFT at Exhs. 8, 10, 11, 12. The photographs show that the barrier beach to the east, west and north of the Trust’s property is undeveloped and heavily-vegetated. The photographs show that the barrier beach to the south (i.e., seaward) of the property has three or four homes that are spaced widely apart and that have large landscaped lawns extending to the coastal beach. Id. The photographs also depict rip rap revetments and seawalls in some areas along the coastal beach. Turning to the project site itself, the photographs show that it is an open, exposed area comprised primarily of sand; it has no structures on it and little vegetation. Id. at Exhs. 8, 10, 11. Thus, the photographs do not support the Trust’s claim that the coastal dune is heavily developed (and thus immune to sand removal).

Rits Testimony. Mr. Rits testified that the barrier beach has been so heavily developed and stabilized that waves cannot remove sand from it. See, e.g., Rits Test. at p. 74. Mr. Rits did not provide any evidence to support his testimony. He did not, for example, proffer any data demonstrating that the barrier beach is fixed and unmoving. He produced no studies, reports or analyses showing that waves cannot remove sand from the barrier beach. Further, as previously discussed, the Trust’s photographs do not back Mr. Rits’s testimony. Absent any supporting evidence, Mr. Rits’s opinion lacks foundation and is conclusory. I therefore give it no weight.

See Matter of the Litchfield Company, No. 2000-146, Recommended Final Decision, 9 DEPR
95, 98 (March 25, 2002) (expert opinion that lacks sufficient foundational evidence is entitled to no weight); Van Brode Group, Inc. v. Bowditch & Dewey, 36 Mass. App. Ct. 509, 520, 633 N.E.2d 424, 430 (1994) (“[a]n expert should not be permitted to give an opinion that is based on conjecture or speculation from an insufficient evidentiary foundation”).

I also note that Mr. Rits contradicted his own testimony, thus further discrediting it. Most significantly, he testified that waves flowing across the property would contain sand and other sediment. Rits PFT at ¶ 13. He also stated that the entire barrier beach is a source of sediment transport. Rits Test. at pp. 78-79.

The DEP’s evidence. The DEP’s Environmental Analyst, Daniel Gilmore, testified that waves do remove sand and sediment from the barrier beach. Gilmore PFT at ¶ 14. Mr. Gilmore introduced documentary evidence that supports his testimony. For example, Mr. Gilmore produced evidence that the barrier beach, including the project site, is in a FEMA-designated flood zone and that it can be inundated by waves during storms. See, e.g., Gilmore PFT at ¶¶ 18, 20 and Exhs. C, D. Mr. Gilmore also proffered data from the Massachusetts Office of Coastal Zone Management (“CZM”) showing that the barrier beach is eroding at an average rate of two feet a year. See Gilmore PFT at ¶ 16 and Exh. B.

Mr. Gilmore further testified that the barrier beach is not fixed in place, but instead is migrating landward and laterally. See, e.g., Gilmore PFT at ¶¶ 14, 16. The data from CZM, which found that the beach is eroding, is direct empirical evidence that the beach is not fixed and stable. Id. at Exh. B.

Conclusion. The Trust failed to produce competent, reliable evidence that the barrier beach is so immovable that waves cannot remove sand from it. The DEP, on the other hand, produced evidence that the barrier beach is vulnerable to wave action. Photographs of the barrier
beach, as well as testimony from Mr. Rits that the barrier beach is a source of sediment transport, corroborate the DEP’s evidence. The preponderance of the evidence therefore demonstrates that, under the present site conditions, waves can remove sand and other sediment from the barrier beach, including the project area.

2. Would the proposed project affect the ability of waves to remove sand from the coastal dune?

The Trust contends that even if waves could remove sand from the coastal dune (which they could), the proposed project would not interfere with that removal. In particular, the Trust claims that because the retaining wall would be perpendicular to the coastline, waves coming from the ocean would flow unimpeded over the wall. According to the Trust, this means that post-construction sand removal would mirror pre-construction removal. The DEP disagrees and also argues that at least three aspects of the project would interfere with the ability of waves to remove sand from the dune. The DEP is correct.

Only the first thirty feet of the wall would be perpendicular to the coastline. Approximately seventy feet of the wall would be built at a sharp angle to the coast, while the last ten feet would be parallel to the shoreline. See, e.g., Hearing Exh. 1; Gilmore PFT at ¶ 25; Rits Test. at pp. 50-51.

Even if the entire wall were “shore perpendicular,” however, water would not flow across it, unimpeded and unchanged, as the Trust contends. The Trust’s claim rests on the notion that ocean waves would always flow across the property in a uniform direction: that is, they would always originate from the due south and travel across land due north, parallel to the coastline. Waves reaching the property would not be so uniform, however. Both expert witnesses, Mark Rits and Daniel Gilmore, testified that storms hit the region from many directions, including the
south, southwest, southeast and east. Thus, waves would reach the property from various
directions, including the south, southwest and southeast.

3. Impacts to sand removal.

The DEP presented evidence that the project would interfere with sand removal in at least
three ways. First, the wall would physically prevent waves from carrying sediment into the back
barrier environment. As Mr. Gilmore explained:

[T]he layout of the wall is such that the winds and the waves, depending
on which direction the storm was going to come from, will cross the wall
or run into the wall…. Mr. Rits was saying that the storms may come out
of the southwest, the south or the southeast. Depending on … the
predominant [direction] … for the particular storm, it’s going to run into a
section of the wall that’s not shore perpendicular. It will be more shore
parallel. So it will be run into that wall and potentially scour or scarp at
that wall.

Gilmore Test. at pp. 100-01.

Second, the final grade of the project area would be higher than the land seaward of it and
therefore would prevent smaller waves from flowing into the back barrier environment. See,
e.g., Gilmore PFT at ¶¶ 25, 27; Gilmore Test. at pp. 101-02; Hearing Exh. 1. In particular, the
west side of the project area currently is at elevations 5 and 6, with elevation 6 extending along
Atlantic Avenue for approximately fifty feet in front of and to the west of the project area.
Gilmore PFT at ¶ 25; Hearing Exh. 1. Once built, the retaining wall would be at elevation 7.3,
meaning that the top of the wall would be one foot higher than the existing elevations along
Atlantic Avenue. Id. The project therefore would prevent some waves from flowing into the
back barrier environment. Gilmore PFT at ¶¶ 25, 27; Gilmore Test. at pp. 101-02. This would
interfere with the ability of waves to transport sand and sediment into the back barrier
environment. See, e.g., Gilmore PFT at ¶ 27 (“Based on the change in elevation, some of the

---

6 “Back barrier environment” refers to Cockeast Pond and the BVW surrounding the pond. See Finding of Fact No. 30.
sediment presently transported into the marsh system by the more frequent, less intense storms will be cut off by the wall”).

I reject the Trust’s contention that the real barrier on the coastal dune is Atlantic Avenue because it is both the highest point on the coastal dune and higher than the proposed retaining wall. See, e.g., Rits PFT at ¶ 13. The Trust’s expert, Mark Rits, was the only witness to testify on this point and he did not have personal knowledge of the road’s elevation. He based his testimony on the project plan, which includes the elevation of a benchmark on a utility pole next to Atlantic Avenue. See Rits Test. at pp. 81, 83-84; Hearing Exh. 1. He did not prepare the project plan, however, and he did not know where the benchmark was located on the utility pole. He merely assumed that it was at ground level. Id.

Third, the Trust would place approximately one hundred cubic yards of fill on top of the coastal dune, covering the existing sediment. See Hearing Exh. 1; Rits PFT at ¶ 5. Waves flowing across the project area would not be able to remove sand and sediment that is buried under two feet of fill. This is true regardless of the orientation or height of the retaining wall with respect to incoming waves. Thus, I conclude that the fill would adversely affect the ability of waves to remove sand from the coastal dune.

In reaching this conclusion, I considered testimony from Mr. Rits that the Trust would use “compatible fill” and therefore waves could remove the fill, instead of the sediment, from the dune. However, the Trust did not present any information about the specific type of fill it would use, or any other evidence that “compatible fill” is comparable to the existing sediment in the project area. Because there is no evidence that the proposed fill is comparable to the existing sediment, the Trust’s alleged use of “compatible fill” does not satisfy this performance standard. I also note that Mr. Rits’s testimony about using “compatible fill” contradicts the final project
plan that he submitted with his testimony. That plan calls for using two feet of gravel followed by a two inch layer of peastone. Hearing Exh. 1.

4. Conclusion.

The Trust had the burden of proving, by a preponderance of the evidence, that the project would not adversely affect the ability of waves to remove sand from the dune. 310 CMR 10.28(3)(a). It tried to meet this burden by showing that (1) waves cannot remove sand from the dune; and (2) even if they could, the project would not interfere with any such removal because the project would not change the way water flows across the property. The evidence is to the contrary: (1) waves can remove sand from the coastal dune; and (2) the project would affect the flow of water over the property. Thus, the Trust failed to meet its burden of proof.

Finally, while not necessary to do so, the DEP has demonstrated that the project would adversely affect the ability of waves to remove sand from the dune in three ways: (1) the wall would act as a physical barrier to waves carrying sediment into the back barrier environment; (2) the final grade of the project area would cut off the flow of other waves into the back barrier environment; and (3) the existing sand and sediment would be buried under one hundred cubic yards of fill. Thus, the DEP has shown that the project would not satisfy 310 CMR 10.28(3)(a).

B. Performance Standard (b): disturbing the vegetative cover so as to destabilize the dune. 310 CMR 10.28(3)(b).

The Trust states that the project would not destabilize the dune because any vegetation that is disturbed during construction would be replanted. Rits PFT at ¶ 14. The Trust plans to use the project site for parking, however, and it has not presented any evidence that plants could survive in an area used to park cars. The Trust therefore has not met its burden of proving by a preponderance of the evidence that the project would not disturb “the vegetative cover so as to destabilize the dune.” 310 CMR 10.28(3)(b).
In reaching this conclusion, I considered the Trust’s assertion that it is installing the
retaining wall and fill to prevent the spread of phragmites, an invasive plant on the Trust’s
property. I do not find the assertion to be credible or supported by the evidence. Daniel
Gilmore, the DEP Environmental Analyst responsible for reviewing the project, testified that the
Trust originally proposed the project as a parking lot expansion. See Gilmore Test. at pp. 102-
04. This is consistent with the documents in evidence. For instance, the Trust’s permit
application to the Westport Conservation Commission portrayed the project as follows:

The Trust proposes to construct a short retaining wall for the purpose of
creating a level, stable area adjacent to the existing garage on the subject
property.

Notice of Intent, dated April 25, 2005, at p. 1 of 7. Similarly, the project plan filed with the
permit application describes the project as a “Proposed Parking Area.” Id. The final project plan
that was submitted shortly before the hearing refers to the project in the same way. See Hearing
Exh. 1. Moreover, none of these documents mentions any intention to curb the spread of
phragmites.

The Trust’s only witness on the topic was Mr. Rits, and I give his testimony no weight.
Mr. Rits did not have personal knowledge of the project’s purpose; he was retained after the
project had been designed and could testify only to what he had been told about the project. His
testimony reflected his lack of personal knowledge: he variously referred to the project as a
parking lot, a landscaping feature, a grading project and a method of controlling phragmites.
See, e.g., Rits Test. at pp. 53, 58, 84-85.
C. Performance Standard (c): causing any modification of the dune form that would increase the potential for storm or flood damage. 310 CMR 10.28(3)(c).

The Trust does not dispute that the proposed project would modify the dune. See 310 CMR 10.28(3)(c). The Trust instead argues that the modifications would not increase the potential for storm or flood damage because (1) the dune has been so “stabilized and armored by previous development,” that it cannot be affected by waves and flood waters; and (2) in any event, the proposed changes would not alter the current flow of water and sediment across the property. Trust’s Post-Hearing Br. at p. 9.

As previously discussed, the evidence does not support either of the Trust’s positions. First, the coastal dune is not “fixed and stable.” See supra at Section A.1. Second, the DEP has shown that the project would change the way that ocean waves flow across the property into the back barrier environment. See supra at Section A.3. The Trust therefore failed to meet its burden of proof with respect to this performance standard.

D. Performance Standard (d): interfering with the landward or lateral movement of the dune. 310 CMR 10.28(3)(d).

The preponderance of the evidence demonstrates that the project would interfere with the landward and lateral movement of the dune. The retaining wall is designed to “hold the material that is backfilled behind it.” Rits Test. at p. 53. Once built, the wall would prevent the seaward portion of the coastal dune from migrating either landward or laterally. See, e.g., Rits Test. at pp. 53-54 (the wall would “prevent[] a portion of the dune from migrating”). See also Gilmore PFT at ¶¶ 14-15, 17; Gilmore Test. at p. 97.

---

7 For instance, the Trust would modify the dune by grading and filling the project area.
8 The DEP also presented credible evidence that the project would alter the course of receding flood waters flowing out of the back barrier environment and onto the property. See, e.g., Gilmore PFT at ¶ 19; Gilmore Test. at pp. 97-98. Because I find that the Trust has not met its burden of proof, however, it is not necessary to address the DEP’s evidence here.
I already have addressed the Trust’s arguments to the contrary – the dune is not migrating, the wall is shore perpendicular, and water would continue to flow over the wall. I therefore do not re-visit those arguments here.

E. Performance Standard (e): causing removal of sand from the dune artificially. 310 CMR 10.28(3)(e).

The Trust’s coastal geologist, Mark Rits, testified that no sand or sediment would be removed from the coastal dune as part of this project. Rits PFT at ¶ 22. The DEP did not dispute this testimony. I conclude that the Trust has met its burden of proof with respect to this performance standard.

F. Performance Standard (f): interfering with mapped or otherwise identified bird nesting habitat. 310 CMR 10.28(3)(e).

Mr. Rits testified that the property is not located in any mapped or identified bird nesting habitat. Rits PFT at ¶ 23 and Exh. 5. The DEP did not dispute this testimony. I conclude that the Trust has met its burden of proof with respect to this performance standard.

G. Accessory Use. 310 CMR 10.28(4).

Under the Wetlands Regulations, a project that does not meet the performance standards for work on a coastal dune nevertheless may be permitted if it qualifies as an “accessory use.” 310 CMR 10.28(4). In particular, the Wetlands Regulations provide as follows:

when a building already exists upon a coastal dune, a project accessory to the existing building may be permitted, provided that such work, using the best commercially available measures, minimizes the adverse effect on the coastal dune caused by the impacts listed in 310 CMR 10.28(3)(b) through 10.28(3)(e). Such accessory use may include, but is not limited to, a small shed or a small parking area for residences. It shall not include a coastal engineering structure.

Id.

The Trust argues that it falls under the accessory use provision because the project is designed to curb the spread of phragmites. I previously found, however, that the purpose of the
project is to expand the existing parking area, not to control phragmites. See Finding of Fact No. 15 and Section B, supra. Nor can the project be approved as a “small parking area for residences.” 310 CMR 10.28(4). The Trust already has a 2,500 square-foot parking area that can accommodate at least fifteen cars. Since the property currently has ample parking for a single-family home, I cannot conclude that the project, which would create between ten and twelve additional parking spaces, is a “small parking area for residences.” Id.

Finally, even if the project might be considered an accessory use, the Trust has not presented any evidence that the project would use “the best commercially available measures [to] minimiz[e] the adverse effect on the coastal dune caused by the impacts listed in 310 CMR 10.28(3)(b) through 10.28(3)(e).” 310 CMR 10.28(4).

**Conclusion and Disposition**

For the reasons set forth above, I find that the project would adversely affect the ability of waves to remove sand from the dune, and that it would interfere with the landward and lateral movement of the dune. See 310 CMR 10.28(3)(a) and 310 CMR 10.28(3)(d). The Trust failed to meet its burden of proving that the project would not disturb the vegetative cover so as to destabilize the dune, 310 CMR 10.28(3)(b), and that it would not modify the dune form in such a way as to increase the potential for storm or flood damage. 310 CMR 10.28(3)(c). The Trust has demonstrated that the project would not remove sand from the dune artificially and that it would not interfere with mapped or otherwise identified bird nesting habitat. 310 CMR 10.28(3)(e)-(f). Finally, the project cannot be approved as an “accessory use” under 310 CMR 10.28(4). Consequently, the Trust has not proven by a preponderance of the evidence that the

---

9 Mr. Gilmore testified that the existing parking area is roughly 3,000 square feet. See Gilmore PFT at ¶ 13. This figure appears to include a strip of land along the shoulder of Atlantic Avenue that is not part of the Trust’s property. See Hearing Exh. 1. I did not include this strip of land in my calculations because there was insufficient evidence that the Trust uses it for parking.
The proposed project can be conditioned to meet the performance standards for work on a coastal dune located on a barrier beach. See 310 CMR 10.29(3). I therefore recommend that the Commissioner issue a Final Order of Conditions denying the project.

DIVISION OF ADMINISTRATIVE LAW APPEALS

____________________________________________
Natalie S. Monroe
Date: May 19, 2008 Administrative Magistrate

Notice

This is a recommended final decision of the Administrative Magistrate. It has been transmitted to the Commissioner for her final decision in this matter. This decision therefore is not a final decision subject to reconsideration, and may not be appealed to Superior Court pursuant to G.L. c. 30A. The Commissioner’s final decision is subject to rights of reconsideration and court appeal and will contain a notice to that effect. Because this matter has now been transmitted to the Commissioner, no party may file a motion to renew or reargue this recommended final decision or any portion of it, and no party shall communicate with the Commissioner’s office regarding the decision unless the Commissioner, in her sole discretion, directs otherwise.