

HULL CONSERVATION COMMISSION

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February 27, 2007

Members Present: Sheila Connor, Chair, Sarah Das, Vice Chair, John Meschino, Judie Hass, Jim Reineck (arrived 7:45), Paul Paquin

Members Not Present: Frank Parker

- Staff Present: Anne Herbst, Conservation Administrator Ellen Barone, Clerk
- 7:40pm Chair Connor called the meeting to order

Agenda Approved: Upon a motion by J. Hass and 2nd by P. Paquin and a vote of 5/0/0; It was voted to: Approve the Agenda for 2/27/07.

- Minutes: Upon a motion by P. Paquin and 2nd by S. Das and a vote of 5/0/0; It was voted to: Approve the Minutes of 2/13/07 as amended.
- Bills: Approved and signed by All.
- 7:40pm 8 to 38 Summit Ave (Green Hill Seawall), Map 54/Lots 19-22, Map 55/Lots 1, 3-5 (SE35-xxx) Opening of a Public Hearing on the Notice of Intent filed by the Town of Hull for work described as replace concrete seawall with stone revetment and stabilize eroding coastal bank.

Applicant: Marc Fournier

Representative: Bryan Jones, Rebecca Roy

Abutters: C. Anne Murray, Elizabeth Bates, Margaret Mellon, John Cherry, Jill Beresford, Janet Gannon

Mr. Jones presented the project that will include four key elements:

- 1. Repair/maintain the existing 400 linear foot stone revetment,
- 2. Replace 500 linear feet of existing deteriorate concrete seawall with a stone revetment
- 3. Stabilize approximately 900 linear feet of eroding coastal bank above the existing revetment and seawall; and
- 4. Reconstruct five (5) existing timber access stairways on the coastal bank

Mr. Jones stated that repairs to the existing revetment will consist of re-setting armor stones and interior core stone where needed. The height of the top of the revetment will also be increased from elevation 20 to elevation 24 NGVD.

Mr. Jones explained that the vertical portion of the seawall would be demolished leaving only the footing in place; the footing will be incorporated into the new stone revetment. Materials

from the demolition of the wall will be removed and disposed of off site. The Commission requests that all materials are removed in a timely manner.

There are several areas where the existing erosion control mats have failed on the coastal bank above where the existing revetment is. A new system is being proposed to replace that system and the bank above the proposed revetment; a total of 900 linear feet will be stabilized.

The proposed erosion control system calls for utilizing a cellular polyethylene mat that forms a three-dimensional honeycomb patter to confine and reinforce the soil in fill matter. The mats extend from the crest of the slope to the top of the revetment at a depth of 4 inches. The cells are then backfilled with topsoil and planted. Vegetative bioswales will be installed along the top of the bank to capture and slow water flow over the slope during storm events.

Public access stairs will be removed and replaced and all other stairs must be removed to complete the bank stabilization portion of the project. Stairs on private property will be replaced by the Owners in kind, however are included within this project.

The Commission asked Mr. Jones how the contractors would access the work area. Mr. Jones stated that they would either enter through the Black Rock Beach or the public right of way off of Summit Avenue. It is expected that only materials that will be used on a given day will be brought in.

The Commission expressed concern that the bioswale might cause erosion rather than preventing it. Mr. Jones stated that the swales are only 6 inches deep. Mr. Fournier added that no core samples were taken so it is not known that these swales will work. It may be a good idea to do a test swale north end of the slope. The Commission asked if this type of erosion control system is in use in any other banks. Mr. Jones has not worked on any projects with this system.

The Commission asked if a vegetated buffer would provide the same effect as a swale without the build up at the head of the bank. Mr. Jones agreed.

The Commission asked for more details on the cellular mat system. Mr. Jones stated that the cells would be held in place and filled to allow for a 1.5 to 1 slope, then filled and sprayed with a mix of salt tolerant vegetation.

The Commission asked for the construction sequence. Mr. Jones explained that the money for this project came from the State and must be expended by the end of July. It is hoped that the construction would begin by the end of May and be completed by the end of July to the beginning of August. The first month would be all of the rockwork; the second month would be putting the retention system in place and seed.

The Commission asked if the bank as it exists now serves as any sort of sediment source for the beach, and how do you predict that the work you will be doing is going to impact the beach. Mr. Jones does not feel that there is a sediment source because there is a vertical wall structure as well as the rip rap. More importantly because the bank is destabilized, you lose a lot of the bank into the rock. As far as new impact, they are just replacing the structures that are already there; it may help that a rock revetment will be used versus a vertical wall. The only impact to the beach will be in one section that approximately 10 feet of the beach will be taken up to fit in the toe in front of the existing toe.

The Commission asked for comment on the size and position of the stones. Mr. Jones stated that the new revetment will contain stones of similar size as the existing revetment about 2-5 ft in diameter, approximately three ton stone. For the modification of the existing revetment, it will be brought up to elevation 24, which is equal to approximately 1 to 2 stones above where it is

now. The new revetment will have an uneven surface (versus flat side up) so that the rocks will dissipate wave action more effectively. The new wall is designed for 100-year storm wave action.

The Commission expressed some concern with the number of landings on the new stairway design. Mr. Jones stated that the stairs were designed per the Mass State Building Code as that was the only reference that was available. Mr. Jones submitted plans for a new design of the stairways that will reduce the number of landings from 5 to 3. The new stairs have a landing at the top, one in the middle and one at the base above the revetment then another set of stairs that will be parallel to the revetment and down to where the bottom landing would be on the revetment. It is proposed to have a concrete landing on top of the revetment and then arrange stones in a step like fashion to access the beach.

The Commission asked what the plans were for the replacement of stairs that are on private property. Mr. Fournier stated that he was asked by the Town Manager to seek permits to replace the stairs, however it is now understood that this would not be possible as there are no design plans for those stairs. The stairs will be removed and then the owners will have to seek permits for replacement.

The Commission asked what is planned for the top of the bank; how far into the bank will work be necessary? Mr. Jones indicated that they were originally planning the bioswales but now will be removing them. They have shown that they need 2 feet from the top of the bank back to where they start the anchor fence that will be buried 2 feet under the ground which puts excavation at approximately 6 to 8 feet from the top of the bank to set in the anchors.

The public /private property line goes in between the houses # 18 and #20 and goes down to the beach. Fences that are on public property will be replaced as part of this project. The only fence that appears to be on public property is at the end of the dog run. The Commission requests that any fences that are replaced be moved 10 feet back from the top of the bank.

For work that will take place on private property, Mr. Lampke will be asking for easements from the owners as has been done in the past.

An abutter expressed concern about he safety of the stones as stairways. Mr. Fournier explained that they are trying to come up with a balance between access and protection. Also asked if there would be railings. Mr. Jones stated that there would be no railings. The Commission suggested abutters take a look at a similar revetment with stairs at the public accessway at 131 Edgewater Rd.

An abutter is concerned about the amount of truck traffic on the beach with high tide coming up to the wall.

Abutters were concerned with the timeline of the project. Mr. Fournier and Mr. Jones explained the funding/spending process. Mr. Jones added that most heavy equipment would be used at the beginning of the project in May. Work hours would be 5 days a week and not before 7:00 am.

The Commission asked if there were other access points other than the one public access. Mr. Fournier stated that Black Rock Beach would be the closest. It is understood that when Mr. Lampke asks for the easements he will also ask for public access so that people can walk the beach, which is part of the public access rights.

The Commission questioned the timing of planting. Mr. Fournier stated that there will be an initial seeding done upon completion of the stabilization and again in the fall.

The Commission asked what the construction sequence would be pertaining to the stairs. Mr. Jones stated that the stairs would probably be completed last. The bank must be stabilized first, but they will look further at that issue to see how the stairs will be brought in.

The Commission has requested that the Applicant provide the construction sequence and time line. They would like it spelled out which access would be used for construction and how access would be handled.

The Commission discussed the bioswale again. It appears that the bioswale will be at the top of the bank. The bioswale will stop water from flowing over the top of the bank and allow it to percolate through the bank. Some are concerned about a swale being in the buffer zone. However maybe requiring that all fencing be out of the 10 ft buffer zone it would be possible to have a vegetated buffer zone.

The project would utilize silt fence on the bank while vegetation is established.

Upon a **motion** by P. Paquin and **2nd** by J. Hass and a **vote** of 6/0/0;

It was **voted** to:

Continue the Public Hearing to 3/13/07, at a time to be determined

John Meschino Recused

8:45pm 48 George Washington Boulevard, Map 37/Lots 6, 6B-D, 7 (SE35-xxx) Opening of a Public Hearing on the Notice of Intent filed by the Steamboat Wharf Marina, Inc. for work described as installation of utilities and parking, construction of two buildings, anchoring and construction of new floats.

Representatives: John Cavanaro, Bruce Tobiasson Owners: Justin Gould, Andrew Spinale Abutters/Others: Kurt Bornheim, Jim O'Brien

Mr. Cavanaro presented information about the site, which is currently operating as Steamboat Wharf. It is about a 140,000 sq. ft. parcel. The Steamboat Wharf was awarded a 25-year lease from the Town of Hull. In their lease they are required to provide several things, i.e. improve public access, parking facilities, improve the wharf itself to bring it to a higher and better use of the parcel with the development of a new building, and to improve the water sheet facilities as well.

The site currently does not have any stormwater management facilities, no traffic circulation; and there is a mix of materials on the site. The pier now is a mix of pavement and hard packed gravel surface.

The pier itself is broken into 3 areas, there is Jake's which occupies about 15,000 sq. ft., another 5,000 sq. ft. parcel between Jakes and the remainder of the pier which is another 115,000 sq. ft. Thus the primary area of the pier itself where Steamboat Wharf will function is approximately 115,000 sq. ft. plus all of the water sheet facilities.

There are three resource areas that are considered in this project. The Pier itself is Land Subject to Coastal Storm Water Flowage; the flood elevation is elevation 11. The area where the water sheet facilities will be improved is Land Under the Ocean. There is also a Coastal Bank that surrounds the entire site. The ACEC is located 150 feet off the edge of the pier around the perimeter.

The proposal is to do three principal things. One is to improve the site with the construction of a 5,000 sq. ft. building that will serve as a marina facility; it will have a commercial component to it and a facility for the Harbormaster's office. The goal is to take part of the operation of the

marina that happens outside today to put it inside a state of the art facility and also to improve the site in terms of their lease to bring the site to a higher and better use in terms of a commercial facility, generate tax revenue, and make it more suitable for public amenities. The second building is 650 square foot bathroom facility open to the public and also the marina customers.

The pier itself will be improved with a pedestrian sidewalk that will run around the perimeter and with pedestrian walkways across the parking and travel lanes. The entrance will be reconfigured with a landscape island. The lights will be relocated. The parking will be improved and expanded throughout the entire facility. The applicants are required to provide additional public parking spaces as well as dedicated spaces for the commercial area itself.

The applicants have tried to balance out the type of materials to be used on the site. It is proposed that some of the pavement will be replaced to have pervious surfaces. Permanent pavement will be around the facility itself, adjacent to the proposed straddle hoist for the activity that will be in and around the marina building itself. Paved areas will go out to the head of the pier and at the head of the pier itself. There will be gravel areas intermittent and in between both sides of the pier. There will be a paved sidewalk around the perimeter of the site with handicap facilities at the head of the pier and in front of the marina building.

The water sheet improvements include, an extension of the dock facility at the head of the pier and improvements to the transient docks at the head of the pier and then construction of a straddle hoist next to the building to lift boats in and out of the water. Currently all floats are bottom anchored. The plan is to make them permanently anchored with driven piles throughout the entire marina facility itself. The applicant will be following up with DEP regarding a Chapter 91 license when the hearings with the Commission are complete.

The biggest improvement of the site will be the reconstruction of the stormwater management facilities. Currently the site is serviced with two dysfunctional catch basins, they are shallow and daylight through a 6-inch pipe out to the side of the pier itself with very little treatment. The invert is located at about high tide level. There is also a 48-inch outlet pipe that collects runoff from off site and is transmitted through that pipe that runs south west of the public ramp. The plan is to reconstruct this facility with six new deep sump catch basins and create low points at three different locations to capture the runoff, pre-treat it with the deep sump catch basins and oil and water separators at each of the locations, then transmit that through a collection system that is a 2,000 gallon water quality tank, that will further treat the water and that will discharge through the 48 inch pipe that serves the off site drainage. Because they are discharging to a tidal facility they are not obligated to control the post development rate. The existing 6-inch pipe will be kept in place to discharge the roof runoff. Because of the soil types on this pier there is no opportunity to recharge. It is class D soils.

There will be some relocating of fire hydrants on and off the pier. All electrical service will be upgraded.

The Commission asked how the boat pressure washer would be handled. Mr. Cavanaro explained that it is planned to happen right behind the marina building itself. The Applicants have been talking to manufacturers about re-circulation systems to capture the wash runoff. They have proposed an "L shaped" trench drain that capture all of the runoff that will then be pumped into a re-circulation facility that has yet to be designed. It is planned to capture all of the runoff from the pressure washing area, treat it and re-use it again through the washing system.

The Commission asked what materials would be used for the parking lots closest to the Boulevard. Mr. Cavanaro stated that gravel would be to the right and a bituminous surface would be in front of the end of the pier.

The Commission asked if soil borings were completed. Mr. Cavanaro will provide them.

The Commission noted that stormwater at the end of the pier will not be treated. Mr. Cavanaro stated that some will be graded to the collection system and some will not.

The Commission asked where would the runoff from the top of the pier go and if it would be treated. Mr. Cavanaro said that some would go into the gravel and some will go straight off the pier. They are limited by existing elevations of the pier. They cannot grade the head of the pier higher than what the existing structure is. The edges of the pier itself will be raised to direct water to the catch basin.

The Commission asked how much parking would be in the area that would not be treated. Mr. Cavanaro indicated that there would be some handicap spaces and six spaces for the commercial fleet.

The Commission asked if there was an existing Chapter 91 License. Mr. Cavanaro stated that there is an existing Chapter 91 License for the marina however not for the building. Because the site is filled tidelands, it does require a Chapter 91 License.

The Commission asked how the water quality tank will work. Mr. Cavanaro stated that in a normal flow condition, the water will go into a manhole with a baffle then into a three chamber tank and the sediment gets trapped in one, the oil and grease in another, then fills up to a certain level then discharges into the outlet. There is a maintenance plan that must be followed.

The Commission asked where the water leaving the 2,000 gallon tank goes and if it exits through the existing outfall will there be rip rap? Mr. Cavanaro stated that they are connecting to an existing drain. The Commission asked if the applicant has verified that there is enough capacity to utilize the existing drain. It was suggested that Mr. Cavanaro verify with the DPW.

The Commission asked if the system that is utilized for washing the bottom of the boats go into that drain also. Mr. Cavanaro stated that after treatment it would eventually enter the outflow pipe. The Commission asked if this design complies with the Clean Marina Guidelines. He stated that all of the water from the pressure washing would be treated and re-circulated. There is a valve system that will be used during pressure washing to capture all runoff.

The Commission stated that the plans show that the flood elevation level is 11.0 and would like it to be known that the actual elevation is 11.6. They also asked what type of foundation would be used for the building. Mr. Cavanaro stated that the plans call for the first floor of the building to be at or above the flood elevation that would be on a pile supported foundation with concrete pile caps with nothing below the first floor. The Commission asked if there will be stairs going up to the building. Mr. Cavanaro stated that they would be bringing the grade up to 11.0 around the building. The Commission requested that the area of the building on the plans show more detail. The Commission would like the applicant to consider going higher up with the foundation.

The Commission asked what material would be used for the piles. Mr. Tobiasson stated that there are differences to be considered when selecting the materials such as cost versus workability and the sensitivity now with the use of greenheart with the deforestation of the rainforest. The applicants have been investigating and have indicated that the cost differential may come into agreement with continuity and pricing. The proposal calls for Southern Yellow Pine, CCA treated but the back up would be to go to the greenheart if the Commission so requires.

The Commission asked the Harbormaster about the piles that were permitted around the pier. It was requested that greenheart be used. He stated that the price of greenheart is nearly double other materials.

The Commission asked if the installation of the piles would interfere with dredging. Mr. Tobiasson stated that they are using a minimal amount of piles and that there should be no interference. He stated that the Army Corps of Engineers may have comments about this as well.

The Commission asked how many slips would be added. The Applicant stated that they currently have 91 and would increase to 104 so there would be 13 new slips.

The Commission questioned if a peer review of the pilings proposal as well as a land review would be needed. It was decided that due to the nature of the project that a peer review only for the land based work is necessary.

The Commission would like the staff to investigate if there were any outstanding Orders of Conditions at this location.

Judeth VanHamm stated that the Citizens Advisory Committee is working on the idea of restoring ferry access to this pier and asked if where the transient docking is where a ferry could dock and would it been in the way of the slip expansion. The Applicant responded that the transient dock could accommodate ferries as well as commuter boats.

Mr. Kellem asked what the width of the sidewalk around the perimeter is and could the general public access that. Mr. Cavanaro stated that the public could access that from George Washington Blvd. connection and folks will be brought around the front of the building away from the commercial activities taking place. The sidewalk will be four feet wide.

A resident asked why there would be two separate buildings. Mr. Cavanaro stated the thought was to have restroom facilities that were completely independent that were available to the marina folks, separate from any commercial activities and also be accessible to pedestrians as they walk around the pier.

The Commission stated that they would like this project to go out to peer review.

 Upon a motion by P. Paquin and 2nd by S. Das and a vote of 5/0/0; It was voted to:

Continue the Public Hearing to 3/27/07, at a time to be determined

John Meschino Returned

9:45pm Nantasket Avenue, Map 27/Lot 34-36, Map 33/Lot 9, 10, 67 (NE35-xxx) Opening of a Public Hearing on the Notice of Intent filed by Nantasket Beachfront Condominiums LLC for work described as four condominium buildings with associated parking stormwater management and open space parkland.

Owner/Applicant: Stuart Bornstein

Representatives: Chris Lucas, (Coler and Colantonio Engineering), Don Rose, (Coler and Colantonio Engineering), Peter Rosen, (Coastal Geologist) Richard Pizzi, (GeoTechnical Consultants) Attorney David Kellem, Attorney Paul Revere

Abutters/Others: Phyliss Aucoin, Jan Scullane, Robert Olick, Marie Pizziferi, Vernon Wood, Jacquelin Chase, Caryn Mastrangelo, Mary Carpenter, Walter Introne, Jr. After the opening of the hearing, Paul Paquin read the following statement that is to be entered into the record for this project.

"February 27, 2007 To the Town of Hull Board of Selectmen,

To the extent that it may be required, and in an abundance of caution, I wish to make a disclosure pursuant to Chapter 268A, Section 23 of the Massachusetts General Laws. My wife was formerly a member of the "No Way HRA" organization. However, that will in no way influence me in my actions regarding the project filed by Nantasket Beachfront Condominiums, LLC.

Sincerely, Paul Paquin"

David Kellem provided an introduction to the project. The original Notice of Intent for this project was filed in August of 2004. Following the denial of the Order of Conditions on June 13 2005 the project was appealed to the DEP where the Commission's decision was supported. During that time, the project also went through the MEPA review process. The MEPA comments focused on three elements; that the Applicant will address tonight:

- 1. Foundation designs on the beachfront buildings originally proposed a foundation that had beams below grade that supported piles that supported the building. The plans to be presented tonight will show the preferred alternative is a pile driven system that does not rely on the grade beams that the Commission was concerned with.
- 2. On the Bayside buildings, which are located in an AO zone, there was some controversy that the FEMA Maps showed that the first floor would have to be built 1 foot above grade. The new plans show a new foundation system with the first floor elevated 2 feet above grade and these foundations provide for water to flow through and under the building.
- 3. There was concern about the amount of fill being brought in to sculpt the berms in the park area and also the species of some of the plantings. The result of those comments is that the amount of fill to be brought in to the park has been reduced. Essentially in some areas of the park, the grade will be cut and that material will be used to fill up areas so that there is still a contoured park however will not have as much new fill. The plans will now call for plantings that are native indigenous species typical of the marine coastal environment.

Mr. Lucas reviewed the development plans for the 6 parcels involved in the project. Lot 1 is the beachfront parcel with development of 2 buildings that will total 54 units. Lot 2 is the proposed beachfront park that is designed by the Cecil Group. Lot 4 is undeveloped parkland located on the bayside portion. Lot 5 will be the bayside development that will consist of 2 townhouse condominiums which will be 12 units. Lots 3 and 6 will be retained by the HRA and used for further purposes at a later date that is not associated with this project. The 6 lots compose 12.18 acres and the applicant is looking to develop 3.15 acres that includes lots 1 and lot 5. Following completion of the project, lots 2 and 4 will consist of 9.03 acres of developed and undeveloped parkland, some of which will go back to the land trust for the Town's use through the HRA. The existing school building on the property will be razed.

The Commission questioned land between lot 1 and 2 as lot 37 that is called out as one of the pieces that belongs to the HRA but nothing is being done with at this time. Mr. Lucas indicated that that land is part of the deal with the land swaps. This land will go to the DCR and will become the DCR parking lot.

Mr. Lucas reviewed the resource areas. The beachfront property (lots 1 and 2) is classified as Land Subject to Coastal Storm Flowage. The buildings will be in the AO Zone and have been

designed outside of the velocity zone but designed to withstand storm surges. The entire property is classified as a barrier beach, parts of the property along the seawall and outer edge of the park are a coastal bank. There is also a historical coastal dune that there has been some debate about. Mr. Lucas further stated that on December 29, 2004 an agreement was reached with the DEP and ENSR agreed, because there was no sediment transported onto this property, and the property is not acting as a sediment source to the beach, they may work with the barrier beach standards regarding storm damage protection and flood control only.

The bayside (lot 4) and the park area (lot 2) plans indicate the limits of the velocity zone and the AO zone. They have met the zoning bylaws and have kept all the buildings out of the V-Zone.

Changes to the present plans include a reduction of units, changed configuration of units, reduction of impervious surfaces which was all documented in the FEIR and presented in the Notice of Intent. Dick Pizzi of GeoTechnical Consultants also presented various types of building foundations to Coler and Colantonio for alternative analysis, the one that was selected will be discussed. The park design has a balance of cut and fill. DEP requested that the balance should be met. They did not want changes in topography. The elevations in the park will remain lower than the existing grade of the roadway so that the water can continue to flow across Nantasket Avenue as it does today. Approximately 81 cubic yards of material will be cut and with the cut and fill design, they will actually be adding 255 cubic yards of flood storage with the park and only native sand and salt tolerant plants will be used.

The beachfront design contains the 2 buildings. Almost all of the impervious exterior parking has been changed to pervious surface by using 3 inches of crushed stone of 3/8 inches to ³/₄ inch stone laid over 12 inches of ³/₄ inch to 1¹/₂ inch diameter gravel. The DEP has requested that some type of crushed stone be used. They believe that is the best option, it is pervious and will allow stormwater to flow through freely. The only places that pavement will be used for parking is for handicap parking. Underneath the buildings, the crushed stone will be used except for the access drive that runs through the center of the building and the 2 handicap parking spaces under each building. The original proposal called for 55,068 square feet of impervious surface.

The building's ground floor structure that would contain the elevator machine room, sprinkler room, and the electrical room will now be located on the first floor to allow flood water and storm surge to flow freely. The staircases have been designed to be open to prevent obstructions.

The beachfront building foundation has been designed to be on top of the dense sand layer above the ground water table and 2 feet below the minimum depth required by the Mass State Building Code. Smaller footings will be used which will reduce the amount of concrete by 60% less than the original design. This will also result in less excavation and reduce surplus soil that may have been removed from the site.

The bayside building design will be constructed so that all living space will be at least 2 feet off the ground level. The average flood zone depth is 1 foot. There will be a crawl space below the buildings to allow water to flow through. The garages will have break away panels so that water will flow through. They are using stainless steel grates to allow the water to flow through freely under the buildings.

The total parking spaces on both sites have been reduced by 54 spaces. There are now a total of 150 parking spaces, 124 at beachfront and 26 on the bayside.

Mr. Rose briefly presented the changes or modifications in the storm water and drainage systems. He indicated that on the bayside there were very few modifications based on ENSR's comments. Mr. Rose indicated where the gravel surfaces were and the gravel trench that water

will infiltrate and there is a closed roof infiltration system that the roofs from both buildings will connect to. There is an open infiltration that will be landscaped, and there are a few underground infiltration systems for the proposed driveways. Water will be caught in catch basins then flow through stormwater treatment units. There are 4 proposed units that then pass into the infiltration system for the 80% TSS removal.

There were no changes to the beachfront drainage system since the last plans reviewed by ENSR. There will be a closed infiltration system that serves the rooftops only. There will be open infiltration systems that are just little depressions that less than 24 inches deep. Mr. Kellem explained that there was some confusion through the MEPA review. The depressions were previously called rain gardens, it has not been designed as a rain garden, it is an infiltration area that will be landscaped for aesthetic purposes.

The Commission asked what had happened to the pervious pavers that were discussed at the DEP site visit. Will they be used? The answer was that they were planned for use in the parking areas underneath the buildings, however stated that DEP was not going to approve them.

The Commission questioned the layers of gravel and crushed stone in the parking areas. It is felt that any movement from a car breaking would move the 3 inches of crushed stone. Mr. Rose indicated that it would be pretty well compacted and that this was what the DEP suggested. The Commission does not feel that this would be a pervious surface. The site now is packed down gravel and there is flooding. Mr. Bornstein stated that what the Commission said has some merit. The existing condition has 10 or 15 years of dirt that has been packed down pretty tight and they layer it up with all kinds of hardening oil from cars so you have a real hard surface. It is not rock it is dirt and there is some gravel. What is being proposed is a pure gravel base and is not a pea stone. There will probably be 3 or 4 different types of stone layered in that will really get compacted down. This system will need to be maintained by the condo owners. They had wanted to use the pavers, however the DEP would not approve.

The Commission referred to the many comments that have been received through the process from the different agencies. A statement was made that the comments have been addressed. However, the Commission does not feel that all of the comments have been addressed. Correspondences from the following agencies were pointed out: Executive Office of Environmental Affairs (DEP), May 26, 2006; Office of Coastal Zone Management, May 24, 2006 and the Final Environmental Impact Report, June 2, 2006.

Mr. Lucas did not have the correspondence in front of him but believes that they have addressed most of the comments that came through with the FEIR. Mr. Lucas stated that they believe most of the comments came down to the impervious features underneath the buildings dealing with storm damage and flood control which they believe they have reduced impacts by moving the structures to the first floor to continue flow through and have maintained a balance of cut and fill on the park design to prevent any further storm damage. The stormwater system is completely contained on site with the infiltration systems and the infiltration basins.

The Commission referred to the correspondence from the Office of Coastal Zone Management and read the comments requesting an answer to each comment.

1. CZM recommended exchanging the locations of beachfront building #2 and the gravel parking area adjacent to Samoset Avenue. Mr. Kellem stated they did consider other configurations but did not specifically address that particular alternative; it was not a preferred alternative from the standpoint of the design of the structure and the aesthetics of the property. The reason the buildings were off set was so that there would not be one continuous building along Nantasket Avenue and to give the site more light, more air, and

more aesthetic appeal. If the concern was storm flow, the buildings are now designed as velocity zone buildings in terms of the foundation design.

2. It was recommended that effects related to storm damage and flood control function be considered and addressed accordingly for the foundation design. The Commission feels that foundation types were compared however does not feel that the storm damage and flood control effects were addressed. Mr. Lucas stated that he doesn't believe they went that far into it. For each of the options they specially addressed the conditions of construction, installation, operations of the storm and those items that were listed. Mr. Lucas felt that some of the options such as driven piles were completely not viable.

The Commission doesn't believe that they have seen anything different for the first two comments since they were written; it was specifically requested to show how the foundation is related to storm damage and flood control function. Mr. Lucas believes that there is a memo that addresses this comment. Mr. Lucas does not believe they went into detail about storm damage. Mr. Pizzi explained that since the entire foundation is below 8 feet or would be 7 or 8 feet below grade, the only thing that would be stand above grade which is the velocity zone is the columns that carry the load from the first floor level 20 some odd feet to the foundation below. The footprint of the support structure that is exposed or could be potentially exposed to storm damage is a very small footprint. The DEP also made comments that asked for more specific information as to how these foundations varied in terms as scour, etc. There could be water and flood energy below grade to be considered. The Commission is requesting a response to this issue.

- 3. Due to the amount of gravel now being used on the project, CZM believes that the hydraulic calculation may have resulted in excess stormwater storage volume. It is recommended that rooftop runoff be directed to the pond/rain garden features and that the sub-surface rooftop infiltration structures be eliminated. Mr. Rose feels that they have not double counted in their calculations. The Commission asked if they were saying that their gravel parking areas are not pervious. Mr. Rose stated that they are pervious but are not including infiltration into that area. They are using infiltration into the gravel trench only and then going across the infiltration basin itself. Mr. Rose stated that this design has been discussed with DEP and agreed that this is the preferred design. The Commission would like documentation indicating this finding. Mr. Rose stated that most of the discussion was verbal however would document it.
- 4. Regarding Parking/Garages/Access Paths; it appears that the design currently includes substantially more parking that is required. Mr. Lucas stated that they have addressed the parking and have reduced it to the extent possible. The Flexible Plan Development Bylaw allows for 1.5 parking spaces per unit. On the beachfront parcel they need a minimum of 81 parking spaces and they have a total of 124 which includes 117 that are crushed stone and 7 that are paved for handicap accessibility. Some spaces are allowed for guests and workers. Mr. Kellem stated that the Board of Appeals issued a special permit to allow for this number of spaces. The Commission asked about the response to the DEP comment that the size of the parking spaces be reduced. Mr. Kellem explained that zoning bylaw requires that all parking spaces be 9 feet wide by 20 feet long. That is what is provided in this plan. The Commission asked for a response to DEP's comment to narrowing and/or combining driveways at the bayside parcel. Mr. Kellem did not feel that there was anyway practical to do this. The parking at that parcel is very limited and the driveways would also serve as parking spaces. The Commission then asked if they were able to ask for additional spaces and were granted the permit, could they not go back and ask for smaller spaces. Mr. Kellem stated that this would be a variance. The bylaw for the Town requires for 2 parking spaces for every unit. In this case they can go to 1.5 in this application. The

Commission asked if they have gone to the 2 spaces per unit. Mr. Kellem explained that they were using 1.5 for the bayside and 2.2 spaces per unit on the beachfront property.

- 5. CZM recommends that solid walls and other obstruction be limited as much as possible on the enclosed ground floor space. Moving everything originally planned on the ground level to the first floor satisfied this.
- 6. CZM recommends that during demolition, all foundations, footing, utilities, etc, be removed from the site in order to minimize the impacts to resource area functions. Mr. Lucas indicated that this will be done. The Commission indicated that the current narrative also indicate that they will only be demolishing to a depth of not less than one foot. Mr. Lucas will change that.
- 7. CZM recommends that all vegetation used for landscaping in the project be native (noninvasive), salt tolerant plants. The applicant has indicated that this will be done.
- 8. CZM recommends that all parkland, open space, and undeveloped land be protected in perpetuity as recommended n the Secretary's Certificate for the DEIR. Mr. Kellem stated that all of the parkland on both sides of the project would be conveyed to the open space trust, with none retained by the developer. Mr. Kellem will have that item corrected or clarified.

The Commission asked for clarification as to whether the stairway risers were being removed on all buildings. It was stated that this was done.

The Commission questioned the garages on the bayside building. Mr. Lucas stated that the garages would have grates and break away panels. Mr. Lucas showed the specifications for the bayside grates and break away panels. There is also a crawl space to allow for water to flow through.

The Commission asked if the impervious surfaces throughout the park would be removed. The Landscape Architect stated that the walkways would be pervious pavement, possibly stone dust or crushed stone. The Commission indicated that they do not believe that stone dust is pervious.

The Commission asked for more comment on the cut and fill operation in the park. Is it purely aesthetic or would there be low lying spots. The Architect stated that there would be low lying spots however none would be lower than the existing grade. There would be no fill above the elevation of the Nantasket Ave. curb to allow the flow through pattern in an extreme storm is maintained. There will always be a "bowl" on the site. There are contours around the parkland that will rise up and then slope down therefore there will always be that low point. The Commission asked if the materials would be from the site or bringing in materials. The Architect indicated that the material on site would have to be tested. It is a pretty poor mix to support plant material. It should be tested for texture, organic content and even chunks of foundation. There ultimately will be no more fill added but may be some different material. The Commission requested calculations for perc rates for the bowl area.

Abutters/Others:

A letter dated February 26, 2007 from several concerned citizens was read and entered into the file by Robert Olick.

An abutter questioned the foundation that was being proposed on the beachfront property. Had the applicant considered 3 to 4 alternatives as requested by DEP? Mr. Lucas stated that they have looked at 6 or 7 design alternatives and feels that the foundation shown is the least

intrusive, has the best chance of being constructed with the least amount of construction needed based on the geology at this time. It was added that the engineers have been in contact with DEP and they have seen most of this information and did not have many comments regarding this design. Not additional comments have been received. Mr. Lucas indicated that it is appropriate that they make sure that the Commission has sufficient information to understand why they think the preferred alternative meets the applicable and appropriate standards for the area. Mr. Lucas will provide this and verify that the current submittal does this and if it doesn't they will provide more information. Again the Commission requested documentation about comments made by DEP.

An abutter asked for explanation of comments regarding the beachfront property not being a source of sediment to the beach. Mr. Lucas explained that the DEP and ENSR agreed that the area of the beachfront park is not a sediment source and sediment is not being transported onto the site. Therefore they have been held to the performance standards for storm damage prevention and flood control.

An abutter questioned if during the process of development the elevation of the existing curb openings on Water St. or the sidewalk were changed, wouldn't that effect the way flooding happens. Mr. Lucas indicated that the grading in that area with the curb cuts, they have added a bump up (2 to 3 inches) so that water will act the way it does now.

Abutters stated concerns over what would happen with the cars during a storm and what will happen with the oil and grease that is in the garages. Will it flow out the break away panel and into the bay?

The Commission wanted to add that the statement made regarding "no shell fish in this area" was not accurate. There is an active clam bed on the bayside. The Commission also wanted to note that the area is very active with lobster and clamming activities.

The Commission requested the size of the park. Mr. Lucas replied 4.45 acres. The undeveloped park on the bayside is 3.78 acres.

- Upon a motion by J. Hass and 2nd by S. Connor and a vote of 6/0/0; It was voted to: Send this project out for peer review.
- Upon a motion by J. Hass and 2nd by S. Das and a vote of 6/0/0; It was voted to:

Continue the Public Hearing to 3/27/07, at a time to be determined

11:20pm 113 Edgewater Rd, Map 30/Lot 013 (SE35-989) Continuation of a Public Hearing on the Notice of Intent filed by John Patterson for work described as addition to a single-family home.

This project was awaiting a DEP # and was presented at previous hearings.

 Upon a motion by P. Paquin and 2nd by S. Das and a vote of 6/0/0; It was voted to: Close the Public Hearing, approve the project and to discuss the Draft

Order of Conditions. The Order of Conditions was signed.

11:21pm 42A State Park Road, Map 12/Lot 092 (SE35-990), Continuation of a Public Hearing on the Notice of Intent filed by F.E.S. Realty, LLC for work described as

construction of a grease trap, removal and construction of stairs, installation of concrete pads.

This project was awaiting a DEP #.

- Upon a motion by P. Paquin and 2nd by S. Connor and a vote of 6/0/0;
 - It was voted to:

Close the Public Hearing, **approve** the project and to **discuss** the Draft Order of Conditions. The Order of Conditions was **signed**.

11:25pm Judeth Van Hamm requesting support for establishing the Hull Land Trust

Ms. Van Hamm attended the meeting to explain that they were in the process of setting up the Hull Land Conservation Trust that will be set up as a supporting charity that is a little different than a public charity. She is asking the Commission to support this idea. She is also requesting support as to how this Trust will be set up and requesting a member of the Commission be appointed to this charity. A document dated February 22, 2007 with the details was sent to the Commission for review.

Upon a motion by J. Hass and 2nd by P. Paquin and a vote of 6/0/0;

It was voted to:

Support the concept behind the Land Conservation Trust pending review by Town Counsel.

Ms. Van Hamm also referred to an email that was sent to the Commission regarding items that will be added to warrants for the Town Meeting.

11:50pm P. Paquin motion, 2nd by J. Hass and a vote of 6/0/0; voted to Adjourn