



HULL CONSERVATION COMMISSION

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September 11, 2007

Members Present: Sheila Connor, Chair, Sarah Das, Vice Chair, John Meschino, Judie Hass, Jim Reineck, Frank Parker, Paul Paquin

Members Not Present:

Staff Present: Anne Herbst, Conservation Administrator
Ellen Barone, Clerk

7:35pm Chair Connor called the meeting to order

Agenda Approved: Upon a **motion** by J. Hass and **2nd** by S. Das and a **vote** of 5/0/0;
It was **voted** to:

Approve the Agenda for September 11, 2007

F. Parker initiated a moment of silence in memory of the victims of September 11, 2001.

7:37pm James Avenue, Map 5 and 6 /Lot 96 (SE35-xxx) Opening of a Public Hearing on the Notice of Intent filed by the Town of Hull for work described as repair of storm drains and seawall.

Due to an incomplete filing, it is necessary to continue this hearing.

- Upon a **motion** by S. Das and **2nd** by J. Meschino and a **vote** of 5/0/0;
It was voted to:
Continue the Public Hearing to 9/25/07, at a time to be determined

7:45pm Nantasket Avenue, Map 27/Lot 34-36, Map 33/Lot 9, 10, 67 (NE35-998)
Continuation 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.

Applicant: Stuart Bornstein

Representatives: Chris Lucas, Don Rose, (Coler & Colantonio), David O'Connor (The Cecil Group) David Kellem, Paul Revere (Attorneys) Ed Mackay, (Holly Mgmt) Richard Pizzi (Geotechnical Consultants, Inc.)

John Roberge, P. E. - Consultant for the Commission

John Meschino presented a Certification Statement that he listened to the audiotape of the Public Hearing from August 14, 2007 that was added to the file.

Mr. Roberge presented his opinions of his review of the materials submitted relating to scour and transport of materials. He was satisfied with the computation methodologies. For the Commission's information, he developed some parallel computations based upon a more conservative depth of erosion as discussed. It is his opinion that although his calculations indicated a discrepancy with a higher result, the difference is not significant and he does not

feel any materials will leave the site. His general consensus is that the Applicant has responded to the key points that were left open.

The Commission asked Mr. Roberge how he calculated where the material would go to determine that it would remain on site. Mr. Roberge stated that he didn't use calculations; he has a sense of how beaches work and how waves would transport that mobilized material. The initial storm event, assuming that the sediment is mobilized around the piers, would tend to transport the materials landward, in this case in toward the parking area of Building #2 and upland of Building #1. As the flood recedes, some of that material would be transported back toward the beach. He does not have any fear that materials would be transported over land and into the bay.

The Commission asked if consideration was taken for a storm that starts in the southeast and goes through a full tide cycle and comes back in from the northeast, as is what happened in the storm of 1978. Mr. Roberge looked at the worse case scenario for one storm and one tide cycle for each specific pier. The Commission asked what wave height was used in his calculations. Mr. Roberge stated that the wave height was not so much quantified as the flood velocity. Using the FEMA methodology you employ the depth of flow. It is important to understand that the calculations were based on a v-zone.

The Commission asked where the cars would be and what would happen to them in a storm event. Mr. Roberge stated that in the building footprint, there would be little wave action shown. Cars were not modeled in this situation. Mr. Kellem added that he has submitted a proposal that would deal with the cars.

The Commission asked the Applicant if they felt comfortable that they or the trustees could police the site to the point that there would not be materials floating around the building that were being stored under the building. Mr. Bornstein stated that a development such as this would have maintenance personnel that would police the site on a daily basis. Mr. Kellem added that most condominium by laws prohibit any storage in common areas. This language could be added in the special conditions.

Mr. Bornstein stated that he had submitted a variety of information pertaining to pavers. Mr. Bornstein described the paver that they would like to use on this project as a 10 or 12 pound paver that sits on 4 different layers of stone that is rolled flat. Installation is the key to the success of a paver system that will not move.

Mr. Roberge responded that his experience has been very similar. The product that he used that was installed in a v-zone in Connecticut that was subject to the 1993 storm was a product called grasscrete. It is a precast porous block with 30 or 40% porosity. His experience has been that it is absolutely critical that the sub base is installed properly. The product that he used allowed for vegetation to grow up through it. When failure occurs it is due to uplift by waves. The proper weight and size must be used. He does recommend the use of pavers. The Commission asked if the pavers affected the sheeting of water in a v-zone. Mr. Roberge responded that that is why you use a system that is porous. They work as a free drain. He has never used them under a building. The key is size and proper installation. The pop up of pavers could occur with an undersized paver from the pressure after a wave has passed over. The Commission asked what size block Mr. Roberge would recommend. Mr. Roberge used an approximately 14- pound paver and that was successful. The applicant has not provided full information on their proposed paver plan. The Commission asked Mr. Roberge if he felt that using pavers would reduce the amount of scour that might occur at the site. Mr. Roberge stated that it would be beneficial to have the pavers. It adds a layer of armor to resist potential erosion; it stabilizes the soils further from deterioration from traffic. The Commission questioned how these systems are maintained or cleaned. Mr. Roberge recommends regular maintenance and encourages that organic material is planted within the system. As far as special clean up, such as motor oil, it would be the same whether it is gravel or pavers.

Ms. Herbst referenced a portion of text from the narrative submitted with the NOI. "Based on the removal of the impervious area in the parking areas, all subsurface infiltration structures that were infiltrating parking lot runoff have been removed for the site." She raised the question; the original filing with the Commission and the information that you provided to DEP, you were saying that impervious areas under the building were a big issue and asked if Mr. Lucas would comment. Mr. Lucas stated that it seemed that the DEP's concern was with the impervious pavement, the pavers were brought up to DEP however DEP seemed more focused on a gravel surface. Mr. Lucas stated that they did not have the depth of a scour analysis performed or Mr. Roberge's review of their analysis at the time of the DEP review. They have submitted most of this material and will forward the latest information to DEP.

There was some confusion over the type of paver that is being proposed. It was previously stated that an eco-stone paver would be used and that is the information that the Commission was focusing on. Mr. Bornstein is proposing to use a heavy-duty commercial stone 6 -inch thick, 15 ¾" x 15 ¾" octagon shaped paver that interlocks. The stones were not the same as what was viewed in Scituate by the Commission. The installer was the same. Mr. Bornstein suggested obtaining approval for a paver system and having the actual paver and installation process reviewed by the Commission's Consultant.

Mr. Lucas presented new plans designating resource areas.. The entire site is a Barrier Beach and areas have been delineated as Coastal Dune and Coastal Beach as defined. A discussion concerning the notes on the plans lead to an agreement that there would be text deleted that had indicated "individual coastal dunes cannot be delineate, etc." and an asterisk added that although the area is a dune "it is not a source of sediment." Again, Mr. Lucas made notations on the plans.

In response to a previous question of possible contamination on the site, Ms. Herbst reported that her research did not indicate that the site has had any reported problems. It has been stated that the area of a gas station and oil company would fall in the area of the proposed park. Mr. Connor indicated that there would be very little excavation done in the park area. The Applicant provided boring logs however no samples were taken in the area of the park. Mr. Revere submitted information regard M.G.L. ch 21E that covers policies and procedures for any hazardous material that may come to light during construction.

Regarding the issue of parking vehicles and evacuation in a storm event, Mr. Kellem had submitted language that was used in another condominium complex in town. The Commission discussed possible language that could be added as a special condition.

Mr. Connor presented revised landscape plans detailing the addition of a continuous double row of vegetation between the condominium building and Hull Shore Drive. The double row of vegetation should create a barrier and slow down any movement of materials or water. The Commission asked if accumulated sand in and on the vegetation would be removed. Mr. Connor indicated that the plants would continue to grow through the sand.

After discussion, the following Special Conditions would be recommended for the project.

- Prior to the start of any activity on site, the Responsible Parties (Property Owner and/or Applicant and Contractor) shall schedule an on site pre-construction meeting with the Conservation Administrator.
- A copy of this Order and the Approved Plans shall be on site at all times. In cases where the plan differs from the Order, the Order is the ruling document. No field changes shall be made without first consulting with the Conservation Administrator.

- Prior to the issuance of a Certificate of Compliance, the vegetation must have survived at least two winter seasons.
- Vegetation must be replaced when it does not survive. This condition is ongoing and will not expire at the end of three years.
- The applicant must have approval of the Conservation Commission to substitute any product for the proposed VortSentry units.
- The Conservation Commission must be provided copies of the applicant's Storm Water Pollution Prevention Plan and EPA Notice of Intent when they are filed with the EPA.
- Existing buildings and foundations must be completely removed from the site and not buried in place.
- The applicant will include the following requirements in the condominium Rules and Regulations. The Conservation Commission will be provided with a copy of the relevant documents. This condition is ongoing and will not expire at the end of three years.
 - A. The Trustees shall monitor weather forecasting services for coastal storms, which are predicted to cause ocean flooding at or near the condominium site. The Trustees shall consult with the Town of Hull Emergency Management to determine whether relocation of vehicles is necessary. In such event the Trustees shall instruct the residents to relocate their vehicles to areas protected from ocean flooding.
 - B. Each and every Owner shall provide the Trustees with duplicate keys of all automobiles that are registered to the Owners and are customarily parked and/or garaged on the common areas of the Condominium. In addition, those Owners who are leasing their units to other individuals shall similarly be responsible for providing duplicate keys of the automobiles parked on the common areas by the Lessees to the Trustees.

The Trustees, in their discretion, and as circumstances may warrant, shall have the authority to remove said automobiles from their parking spaces to other locations. The purpose of this authority is to accommodate local, state, and federal authorities in the event of an emergency, or other situation which may require the movement of said automobiles.
 - C. Every owner of a unit at the condominium, and every tenant, shall be advised at the time he or she takes title to a unit or begins renting, that vehicles are to be relocated in the case of a predicted significant ocean flooding event. Signed copies of acknowledgement of this information shall be kept on file by the Trustees.
 - D. The Trustees must provide their contact information to Hull Emergency Management on an annual basis. Nothing herein shall prevent the Trustees from making an independent decision to remove vehicles in an emergency weather event.
- The applicant will install Grasscrete pavers or an approved equal in the areas under the beachfront buildings. Installation and maintenance plans must be approved by the Commission after review by the Commission's consultant prior to commencement of construction. Pavers will replace the originally proposed concrete areas under the buildings, as long as they comply with ADA regulations.
- All construction material and debris must be secured daily to ensure no wind or water blown material will exit the site.

- Upon a **motion** by J. Meschino and **2nd** by J. Hass and a **vote** of 5/2/0; (P. Paquin, F. Parker opposed)

It was **voted** to:

Close the Public Hearing and **approve** the project with the standard conditions and ten special conditions as discussed. The Order of Conditions was **signed**.

F. Parker left

9:50pm 47 Beach Avenue Map 25/Lot 081 (SE35-1021) Continuation of a Public Hearing on the Notice of Intent filed by Mark Ostroff for work described as redo driveway.

Applicant: Mark Ostroff

Representative: Ken Hayes (Contractor)

Mr. Hayes presented information on the type and installation process for the paver system proposed. The sub base system includes a filter fabric, and crushed stone to allow for water storage and drainage. The actual paver is 3 inches thick and will retain heat that will help eliminate movement of the pavers with freeze and thaw events. There will be a minimum of six inches of crushed stone used in the base. This may change in the area of the existing dry well as the current depth is unknown

There will be curbing at grade of cobblestone at the edge of the neighbors property to prevent any movement of the pavers.

The existing surface is crushed seashells that will be removed and disposed of off site. A Special Condition will be added relating to removal off site. Mr. Hayes estimates that it may be necessary to excavate to a depth of 12 inches to remove the existing surface.

The Commission discussed maintenance of the paver systems as is required by the manufacturer. A Special Condition will be added.

- Upon a **motion** by P. Paquin and **2nd** by J. Meschino and a **vote** of 5/0/01; (S. Connor abstained)

It was **voted** to:

Close the Public Hearing and **approve** the project with the standard conditions and two special conditions as discussed. The Order of Conditions was **signed**.

10:14pm 79 Atlantic Avenue Map 54/Lot 037 (SE35-xxx) Opening of a Public Hearing on the Notice of Intent filed by Jacob Brown for work described as repair footings and convert to garage.

Representative: David Kellem

Abutter/Other: Robert Brown

Mr. Kellem presented the project. The existing property is an old cottage that will be renovated to become a garage. The project includes elevating the cottage and the installation of footings with a flow through foundation.

- Upon a **motion** by J. Hass 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**.

10:20pm 36 Packard Avenue Map 24/Lot 165 (SE35-xxx) Opening of a Public Hearing on the Notice of Intent filed by Donald Kupperstein for work described as addition to a single family house.

Applicant: Donald Kupperstein

At the site visit the Commission felt that the plans presented did not properly represent the property as the conditions currently existing. Mr. Kupperstein presented the drawing from the assessor's office and offered an explanation. An existing enclosed porch and shed are being removed. The submitted plans showed the proposed plans and it was determined to indicate the assessor's drawing as the existing conditions and was noted as such.

Due to the fact that the improvements represent a 50% increase in construction, the project will include the required FEMA foundation systems with flow through vents.

- Upon a **motion** by P. Paquin and **2nd** by J. Meschino 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**.

Discussion of potential violation:

4 Gun Rock Avenue – An Enforcement Order has been issued for fill being added to the property. The Order called for restoration and/or appearance before the Commission to discuss. Bill Germaine stated that he brought fill in to replace materials that had been lost to due to storms primarily at the sea wall which has deteriorated behind the home. Mr. Germaine had spread some of the fill brought in prior to the stop order. Materials that had not been spread were removed from the site. Mr. Germaine was under the impression that it was the Town's responsibility to maintain a four foot level of material against the seawall and that the Town was receiving funds from the State to do this. He does not feel that the Town is doing its job so he has taken it upon himself to purchase material. He stated that he has several times replaced materials that have been washed away, ultimately into Straits Pond. Mr. Germaine was informed that the small size materials that he was using will again wash away. It was suggested that Mr. Germaine contact the Town perhaps along with neighbors to seek help with repair of the seawall. He also can come before the Commission with a proposal to bring in larger stones that would not wash away during a storm event. It is unclear if the grade has been changed as a result of the fill. Ms. Herbst will re-visit the site and report back to the Commission. If the grades have changed and neighboring properties are affected, the fill will have to be removed. Mr. Germaine was informed that in the future, no further fill can be brought on the property without permitting the working advance.

Requests for Certificate of Compliance:

927 Nantasket Avenue – Mike Barrett & Mike Parks - The discussion centered around the discrepancies in the elevations indicated in the as-built, whether fill was used on the rear of the site and if the coastal bank has been stabilized with vegetation. The Commission requested that a new as-built be submitted with proper elevations indicated and they will again visit the site.

Hull Gut (conduits to Peddocks) –Motion S. Das, **2nd** J. Meschino, Vote 6/0/0 **signed**
Cadish Avenue seawall - Motion S. Das, **2nd** J. Meschino, Vote 6/0/0 **signed**

11:05pm Brockton Circle, Map 24/Lot 106 (SE35-1022) Continuation of a Public Hearing on the Notice of Intent filed by the Town of Hull for work described as remove debris and vegetation from manmade drainage swale.

This project was presented at a previous hearing and was awaiting issuance of a DEP number.

- Upon a **motion** by J. Hass 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**.

11:10pm 35 Manomet Ave, Map 25/Lot 104, (SE35-xxx) Continuation of a Public Hearing on the Notice of Intent filed by Carson Lu-Marques for work described as repair and restore existing mason garage and expand by 5 ft, 3 in.

The Applicant has requested a continuance.

- Upon a **motion** by S. Das and **2nd** by J. Hass and a **vote** of 6/0/0;
It was **voted** to:
Continue the Public Hearing to 10/23/07, at a time to be determined

11:20pm P. Paquin **motion, 2nd** by J. Hass and a **vote** of 6/0/0; **voted** to Adjourn