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CAPE COD
COMMISSION

Date: August 4, 2011

To: Attorney Jonathon D. Idman
Law Office Of Singer & Singer, LLC
26 Upper County Road
Post Office Box 67
Dennisport, MA 02639

From: Cape Cod Commission

Re: Development of Regional Impact
Cape Cod Commission Act, Sections 12 and 13
Cape Cod Commission *Enabling Regulations,* Sections 3, 5, & 7

Applicant: Peter Copelas

Property Owner: Peter Copelas

Project: Windrift Acres Subdivision

Project Location: 55+ acres of land to be accessed off Slough Road, West Brewster

Project #: TR/LR 11002

Map and Parcel: Brewster Assessors Map 51 Parcels 3, 4, 5, 9(11), 47, 74

Barnstable Registry of Deeds: Book 2548 Page 345
Book 3605 Page 275

DECISION OF THE CAPE COD COMMISSION

SUMMARY

The Cape Cod Commission (Commission) hereby determines that the proposed residential subdivision in West Brewster qualifies as and was reviewed as a Development of Regional Impact (DRI) pursuant to Section 13(a) of the Cape Cod Commission Act (Act), c. 716 of the Acts of 1989, as amended, and Sections 3, 5, and 7 of the Commission's *Enabling Regulations* (revised March 2011) subject to a limited scope of DRI review. The scope of the DRI review was limited to the Regional Policy Plan (RPP) issue areas of Affordable Housing, Plant & Wildlife Habitat, Open Space, Solid Waste Management and Water Resources. This decision was

rendered pursuant to a vote of a duly authorized Subcommittee of the Commission on June 23, 2011.

The Cape Cod Commission hereby approves, with conditions, the application of Peter Copelas (Applicant) as represented by Attorney Jonathon D. Idman, as a Development of Regional Impact (DRI) pursuant to Sections 12 and 13 of the Commission Act (Act), Chapter 716 of the Acts of 1989, as amended subject to a Limited DRI scope as determined by an authorized Subcommittee in a vote rendered on June 23, 2011. The Limited scope of the DRI was granted pursuant to Sections 3, 5, and 7 of the Commission's *Enabling Regulations* (revised March 2011) and limited the scope of DRI review to the Regional Policy Plan issue areas of Affordable Housing, Plant & Wildlife Habitat, Open Space, Solid Waste Management and Water Resources of the 2009 RPP (as amended May 2011). This Limited DRI/DRI decision is rendered pursuant to a vote of the Commission on August 4, 2011.

PROJECT DESCRIPTION

According to the DRI Referral Form from the Town of Brewster, and accompanying information from the Town, as well as a May 20, 2011 project description from Attorney Jonathon Idman, the project is the subdivision of 55.20 acres of vacant, wooded, residentially zoned land into 20 single-family lots. The project site is comprised of several parcels owned by Peter Copelas. The proposed new subdivision will be accessed by a new road to be built off of Slough Road in West Brewster. The project will also include two (2) lots to be set aside as open space.

PROCEDURAL HISTORY

On February 2, 2011, Commission staff received a referral of the project as a DRI from Brewster's Planning Board. Also on February 2, 2011, Commission staff received an Email from the Applicant's Attorney, Jonathon Idman, in which he resubmitted the August 2010 Limited DRI application for consideration. The Applicant submitted additional application materials between August 2010 and May 24, 2011. A Hearing Officer procedurally opened the DRI hearing period on April 1, 2011. A duly noticed public hearing on the Limited DRI scoping hearing and DRI was held on June 15, 2011. At this hearing, the Subcommittee heard testimony and comments from Commission staff, the Applicant's representatives and Ms. Jillian Douglass representing the Brewster Housing Partnership. The Subcommittee voted unanimously to limit the Development of Regional Impact (DRI) scope to the Regional Policy Plan (RPP) issue and sub-issue areas of Affordable Housing, Wildlife and Plant Habitat, Open Space, Solid Waste Management and Water Resources. The Subcommittee voted to continue the hearing and the record to June 23, 2011 beginning at 4:30 PM at the Cape Cod Commission office in Barnstable, MA.

The Subcommittee held a continued public hearing on June 23, 2011 to discuss the project. At this hearing, the Subcommittee voted that based on the 6/1/11, 6/3/11 and 6/13/11 written testimony of Susan Leven, Brewster Town Planner, that the proposed Windrift Acres subdivision in Brewster is consistent with Brewster's Local Comprehensive Plan, is not subject to Brewster's Natural Resources Protection Design Bylaw, and is consistent with Brewster's local bylaws, and with Brewster's Water Protection DCPC. The Subcommittee also voted that the proposed project could be made consistent with the Regional Policy Plan Minimum Performance Standards related to Affordable Housing, Open Space, Wildlife and Plant Habitat, Solid Waste Management and Water Resources through conditions of a written decision. The Subcommittee discussed the Applicant's proposal to address the RPP Affordable Housing requirements, and considered the alternate written testimony from Ms. Douglass at the 6/15/11 hearing as a representative of the Brewster Housing Partnership that the Subcommittee and

Applicant should address the RPP Affordable Housing requirements through a cash donation. After consideration of this testimony, and information submitted for the record, the Subcommittee voted that the RPP Affordable Housing requirement should be met via donation of on-site lots. The Subcommittee voted that the probable benefit of the proposed development is greater than the probable detriment as the project will provide open space in excess of RPP requirements that will be permanently protected and will provide public access to it. The Subcommittee voted to direct Commission staff to draft a written decision with conditions for the project as a Limited DRI/DRI in the issue areas of issue areas of Affordable Housing, Wildlife and Plant Habitat, Open Space, Solid Waste Management and Water Resources. The Subcommittee also voted to recommend approval of the project to the full Commission as a Limited DRI/DRI with conditions. The Subcommittee voted to hold a Subcommittee meeting for the purpose of reviewing the draft decision on July 21, 2011 beginning at 1:00 PM at the Cape Cod Commission office in Barnstable. The Subcommittee voted to continue the DRI hearing and the record to June 29, 2011 at 10:00 AM at the Cape Cod Commission office in Barnstable where the DRI hearing and record would be procedurally closed by a Hearing Officer.

At the Subcommittee meeting on July 21, 2011 the Subcommittee discussed a draft Limited DRI decision for the Windrift Acres subdivision located in West Brewster. The subcommittee voted to approve the Limited DRI Draft Decision, as amended, and voted to recommend approval by the full Commission at the August 4, 2011 meeting at 3 PM at the Assembly of Delegates Chamber, 1st District Courthouse, Barnstable. The subcommittee also approved a set of 6/15/11 and 6/23/11 draft minutes.

MATERIALS SUBMITTED FOR THE RECORD

In addition to the list of materials submitted for the record (see Table 1 below), the application and notices of public hearings relative thereto, Commission staff's notes and correspondence, the minutes of public meetings and hearings, and all other written submissions received in the course of the proceedings are hereby incorporated into the record by reference.

TABLE 1: Materials Submitted for the Record

Materials from Cape Cod Commission	***Date Sent***
Email, Kristy Senatori (KS), Chief Regulatory Officer to Sue Leven (SL)	1/31/11
Email, Andrea Adams (AA), Senior Regulatory Planner, to SL	1/31/11
Letter, AA to Applicant and Attorney Idman (Idman): DRI referral	2/8/11
Email, AA to Dan Ojala (DO), DownCape Engineering	2/3/11
Email, AA to Idman: Water Resources and nitrogen loading	2/15/11
Email, AA to Idman: Water Resources issues	2/15/11
Letter, AA to Idman: Application incomplete	2/15/11
Letter, AA to Peter Copelas: Copy of 2/8/11 DRI referral letter	2/24/11
Letter, Returned to Commission: To Peter Copelas, Applicant	2/28/11
Letter, AA to Idman: Review timelines and incomplete application	3/10/11
Email, AA to DO: Copies of Applicant's information	4/1/11
Hearing Notice (Procedural)	4/1/11
Hearing Officer Minutes	4/1/11
Letter, AA to Idman: Application completeness	4/11/11
Email, AA to SL: Copy of letter from Water Commissioners	5/20/11
Email, AA to Idman, DO: Hearing dates and copies of materials	5/20/11

Letter, Gail Hanley (GH), Clerk, to Applicant – Noticing of Hearing	5/25/11
Email, PR to Idman: Affordable housing options per RPP standards	5/26/11
Email, AA to Town Hall Staff: Use of Brewster Town Hall for hearing	5/26/11
Email, AA to SL: Copy of letter from Water Commissioners	5/26/11
Email, AA to Commission Member Taylor: Water Commissioners letter	5/27/11
Email, AA to SL: Consistency with Town requirements	6/3/11
Email, AA to SL: Consistency with Town requirements	6/3/11
Staff Report	6/6/11
Email, AA to Idman, DO, SL, others: Copy of staff report	6/9/11
Memo, AA to Subcommittee: Materials for hearing, staff report and site visit	6/9/11
Colored map and aerial photo – Site visit directions for Subcommittee	6/9/11
Email, AA to Commission Staff: Copy of staff report	6/9/11
Email, AA to Idman, DO and staff: Clarification from SL on local bylaws	6/13/11
Email, AA to Idman, DO, JD, others: Copy of staff report	6/13/11
Email, AA to David Spitz: Response to his clarifications	6/14/11
Email, AA to Idman and Martha Hevenor, Commission Planner: Discussion of open space requirements	6/14/11
Letter, AA to Idman: Application substantially complete	6/15/11
Hearing Notice	6/15/11
Email, AA to Idman: Copy of letter received about project	6/15/11
Copy of Staff PowerPoint for Hearing	6/15/11
Copy of Hearing Outline	6/15/11
Copy of Timelines for Project – DRI and Limited Review	6/15/11
Hearing Minutes	6/15/11
Email, GH to Town Clerk: Posting of Continued Hearing on 6/23/11	6/16/11
Email, Paul Ruchinskas (PR), Affordable Housing Specialist, to Idman: Options to meet Regional Policy Plan requirements	6/16/11
Email, PR to Idman: Affordable Housing	6/16/11
Email, PR to JD: Affordable Housing	6/16/11
Email, PR to AA: Affordable Housing	6/16/11
Hearing Notice – Continued Hearing	6/23/11
Email, AA to JD: Subcommittee questions and Affordable Housing	6/23/11
Email, PR to JD: Subcommittee questions and Affordable Housing	6/23/11
Email, PR to Idman: Subcommittee questions and Affordable Housing	6/23/11
Copy of Hearing Outline	6/23/11
Sign In Sheet from Hearing	6/23/11
Sample Motions Sheet for Subcommittee	6/23/11
Copy of Staff PowerPoint for Hearing	6/23/11
Hearing Minutes	6/23/11
Email, AA to Idman, DO: Copy of Comment Email received	6/23/11
Email, GH to Town Clerk: Posting of Procedural Hearing	6/23/11
Email, AA to Commission Member Taylor: Receipt of her Email	6/24/11
Email, Tom Cambareri, Water Resources Program Manager: Discussion with Commission Member Taylor	6/24/11
Hearing Notice (Procedural)	6/29/11
Hearing Officer Minutes	6/29/11

Letter, GH, Clerk, to Applicant – Noticing of Hearing	7/12/11
Email, PR to Idman: Discussion of possible affordable lots	7/13/11
Email, Scott Michaud (SM), Hydrologist, to DO: Draft Water Resources findings and conditions	7/14/11
Email, SM to DO: Draft Water Resources findings and conditions	7/14/11
Email, AA to Subcommittee: Draft decision	7/18/11
Letter, GH to Applicant – Noticing of Hearing	7/18/11
Meeting Notice	7/21/11
Meeting Minutes	7/21/11
Copy of Draft Written Decision (Draft 7/18/11)	7/21/11
Copy of Revised Draft Written Decision (Draft 7/28/11)	7/28/11
Hearing Notice (Procedural)	7/29/11
Hearing Officer Minutes	7/29/11
Hearing Notice – Full Commission	8/4/11
Materials from Applicant	***Date Received***
Traffic Impact and Access Assessment (TIA), by Janson DeGray, Vanasse Hangen Brustlin, Inc (VHB), dated 4/12/10	8/31/10
Limited DRI/DRI Application, from Attorney Jonathon Idman (Idman); Also received on disk, with attachments (Two copies – Noon latest): Scoping Checklist for New Development, Reduced size set of site plans; Colored locus map; Nitrogen loading calculation sheet; Septic System Operations & Maintenance Plan; Natural Resources Inventory; Aerial photo of locus; Stormwater Operations & Maintenance Plan; Low Impact Landscape Maintenance Plan; and Transportation Assessment of Commission Requirements (8/26/11)	8/31/10 at Noon
DRI Application Cover Sheet and Project Description/Narrative Comparison to RPP Requirements, from Idman	8/31/10 at Noon
Revised Scoping Checklist, by fax, from Idman	8/31/10 at 1:44 PM
Revised Scoping Checklist, by Email, from Idman	8/31/10 at 1:59 PM
Fee Payment for DRI Review	8/31/10
Fee Payment for Limited DRI Review	10/7/10
Supplemental application information: Exterior Lighting, from Dan Ojala (DO)	12/16/10
Email, from Idman: Water District issues	2/2/11
Email, from DO: Clarification of information provided by CD	2/3/11
Email, from DO: Clarification of information provided by CD, Exterior lighting information, supplemental project narrative	2/3/11
Email, from Idman: Draft of letter to Water District	2/9/11
Letter, draft, from Idman: To Water District in Brewster	2/15/11
Letter, from Idman: Copy of formal letter to Brewster Water District	2/23/11
Email, with attachmts, from DO: Water Resources & stormwater	3/31/11
Letter, with attacht, from Idman: Filing w/Natural Heritage Program	3/17/11
Email, from Idman: Update on Water Resources issues	5/6/11
Copy of letter from Brewster Water Commissioners, from Idman	5/20/11
Email, with attachts, from Idman: Updated Abutters List	5/20/11
Email, with attachts, from Idman: Updated Abutters List	5/20/11
Email, from Idman: Comments on APCC letter	6/13/11

Email, from Idman: Access to proposed open space areas	6/14/11
Email, from Idman: Access to proposed open space areas	6/14/11
Email, from Idman: Donation of two lots for affordable housing	6/16/11
Email, from Idman: Affordable Housing issues	6/16/11
Email, from Idman: Affordable Housing issues	6/23/11
Email, from Idman: Current recording information	7/12/11
Email, from Idman: Donation of lots 7 and 17 as affordable lots	7/13/11
Email, from DO: Review of draft Water Resources findings/conditions	7/14/11
Letter, from Idman: Copies of Applicant's information for mailing	7/25/11
Materials from Public Agencies/Towns/State/Federal	***Date Received***
Letter, Massachusetts Historical Commission, to Attorney Idman	6/7/10
Letter, Susan Leven, AICP: DRI Referral Form	2/2/11
Brewster Planning Board, Form C-Definitive Plan Approval Application, with attachments	2/2/11
Letter, Massachusetts Division of Fisheries & Wildlife	4/11/11
Email, Susan Leven (SL) to AA: Water Commissioners letter	5/26/11
Email, SL to AA: Comments on consistency with local requirements	6/3/11
Email, SL to AA: More comments on consistency w/ local requirements	6/13/11
Email, SL to AA: More comments on consistency w/ local requirements	6/13/11
Email, Jillian Douglass (JD) to AA: Housing Partnership interest in project	6/13/11
Email, David Spitz, Harwich Town Planner to AA: No comments	6/14/11
Email, JD to AA: Affordable Housing comments on project	6/22/11
Email, JD to AA and others: Sales data for residential land	6/23/11
Email, from Commission Member Taylor, with 2 attachments	6/22/11
Email, from Commission Member Taylor	6/23/11
Materials from General Public or Organizations	***Date Received***
Letter, Maggie Geist, Executive Director, APCC	6/13/11
Email, Dutch Wegman	6/23/11

TESTIMONY

June 15, 2011 Public Hearing

Mr. McCormack introduced the Subcommittee members. He explained the purpose of the hearing, which was to consider the application for a Limited DRI Review/DRI review of Peter Copelas/Attorney Jon Idman for the subdivision of 55+ acres of vacant land in West Brewster into 20 house lots and 2 open space lots. He noted the hearing was being recorded, and that there was a sign in sheet for those who wanted to testify. He explained the order of the hearing. He administered an oath to those wishing to testify, thereby swearing in people in who wished to testify. He asked Ms. Adams to present the Commission staff report.

Ms. Adams, using a PowerPoint slide show, summarized the 6/6/11 staff report. Ms. Adams described how the project was subject to Commission review as a DRI according to Section 3(c) of the Commission's *Enabling Regulations* as *"[a]ny development that proposes to divide parcel(s) of land totaling 30 acres or more in common ownership or control on or after September 30, 1994, including the assembly and recombination of lots..."*

Ms. Adams described the standards of Commission review, and noted the Applicant had also applied for Limited DRI review according to Section 5.0 of the *Enabling Regulations*. She described this review process, noting the Subcommittee determines the scope of DRI review and uses in part a list of scoping questions for new development, as the project site is vacant. She said that if a RPP issue or sub-issue area from the checklist of scoping questions applies to the project, then it is an indication that the corresponding RPP issue area can be included in the DRI review. Ms. Adams said that in addition to these questions, the Subcommittee can consider the quantitative and qualitative impacts of the project on resource areas protected by the Commission Act and RPP. She said the Subcommittee can include issue areas in the review where the project substantially deviates from the RPP MPS or has significant impact upon the purposes and values identified in Section One of the Commission Act. Ms. Adams said the Subcommittee could also exclude from DRI review those areas where there is no substantial deviation from the MPS and no significant impact upon the purposes and values identified in Section One of the Commission Act.

Ms. Adams also discussed the standards for a DRI review and approval, as the project is a DRI. She noted the standards for review were in Section 7.0 of the Commission's Enabling Regulations. She said they included consistency with the Commission Act, the RPP, any applicable Districts of Critical Planning Concern (DCPC), with municipal bylaws, with the Town's Local Comprehensive Plan (LCP), and that the probable benefits of the project are greater than the probable detriments. Ms. Adams noted the RPP contains Best Development Practices (BDPs) that the Subcommittee can use to gauge the project's probable benefits.

Ms. Adams discussed the project's consistency with various RPP issue areas. In conclusion, Ms. Adams said Commission staff was seeking clarification from the Applicant with respect to whether or not a plan was in place to deal with solid wastes from land-clearing activities. She said the Applicant should also commit to using a fully shielded down-directed fixture at the intersection of Windrift Lane and Slough Road. Ms. Adams noted the project was a DRI and as such, should be subject to further Commission review. She said staff suggested the Limited DRI review scope should include the RPP issue areas of Affordable Housing, Wildlife and Plant Habitat, Open Space, Wetlands, and Water Resources.

Ms. Adams noted the hearing was for consideration of the Limited DRI review scoping and DRI standards for review and approval. Ms. Adams said one of the criterion for DRI approval in Section 7(viii) of *Enabling Regulations* and the June 6, 2011 staff report is that the Subcommittee must find that the *"probable benefit from the proposed development is greater than the probable detriment."* She noted the RPP states in part that *"the [Subcommittee] may, in its discretion, consider Best Development Practices that exceed the Minimum Performance Standards in its analysis of benefits and detriments."* Ms. Adams said the project provides high quality naturally vegetated open space within SNRA contiguous to existing protected open space, consistent with Best Development Practice (BDP) OS1.9(1). Ms. Adams noted that to be eligible for this BDP, the project's open space would also need to be made permanently accessible for use by the public. She noted the application materials provided to date do not address the whether the open space will be permanently protected and publicly accessible. At the same time, Ms. Adams said Commission staff suggests the proposed project could meet Open Space BDP OS1.9(1) if the open space was permanently protected and made accessible to the public.

Expanding on the criterion of probable benefits relative to probable detriments, Ms. Adams said as outlined in the 6/6/11 staff report, the Subcommittee may also consider other factors that it

determines constitute probable benefits from the proposed development. She noted the Applicant is proposing to permanently protect 40 acres, located on west/southwest portion of the site, which exceeds the RPP requirements. Because of this, Ms. Adams said suggests the Subcommittee could consider the permanent protection of open space in excess of RPP requirements as another probable benefit.

Expanding on the criteria of consistency with Brewster's LCP, bylaws and applicable DCPCs, Ms. Adams said the Subcommittee had received copies of 6/1/11, 6/3/11 and 6/13/11 Emails from Brewster Town Planner. She said that Brewster has a 1997 draft LCP that encourages open space protection in Brewster. Ms. Adams said that with respect to consistency with Brewster's local bylaws, based on the 6/13/11 Email from Ms. Leven, Brewster's Natural Resources Protection Design (NRPD) bylaw does not apply to Windrift Acres as the project filed at local level before the effective date of this bylaw. She noted this clarification was received after the 6/6/11 staff report had been finalized and mailed to the Subcommittee. Lastly, with respect to the criterion of consistency with Brewster's Water Protection DCPC, Ms. Adams noted Ms. Leven's Emails indicate that household uses and subdivisions are exempt from the DCPC, although they must still undergo standard Town permitting. Based on this, Ms. Adams said testimony provided to the Commission for the project record indicates proposed project is likely consistent with Brewster's LCP and the Water Protection DCPC, and that the NRPD bylaw does not apply.

Ms. Adams said staff suggests the proposed Windrift Acres subdivision in Brewster should be scoped for the Regional Policy Plan issue areas of Affordable Housing, Plant & Wildlife Habitat, Open Space, and Water Resources. She said her earlier presentation that the Limited Review scope should include the RPP Wetlands issue area was in error, as there were no wetlands or vernal pools on the site. She noted this was clearly stated in the 6/6/11 staff report. Ms. Adams said the Subcommittee should also continue the hearing to a date, time and place certain, noting that the hearing and the record on the project for the Limited DRI and DRI review must close by 6/29/11.

Mr. McCormack asked the Applicant to present the project.

Attorney Idman used a large size site plan mounted on an easel to discuss his presentation. He said that Ms. Adams had described the project in detail and the standards of review. He noted the Applicant would use a fully shielded down-directed fixture to illuminate the intersection of Slough Road and Windrift Lane. He said the Applicant did not have a solid waste management plan for land-clearing wastes, and as such, would agree to a condition of approval to address these issues. Attorney Idman said the Scoping Checklist questions are relatively straightforward.

Attorney Idman said a small part of the project site is mapped for a rare damsel fly habitat, which is due to the pond across from the proposed intersection with Slough Road. He noted the Subcommittee had seen Elbow Pond when traveling to the site visit on 6/14/11. He said the NHESP noted the project would not result in a "take" of this species. Attorney Idman noted the assessment done by Mr. Madden of LEC did not note any wetlands, invasive species or specimen trees on the site. Attorney Idman said Mr. Madden's assessment did note that what is being proposed is a large open space parcel that will be contiguous with open space in Brewster, Dennis and Harwich. Mr. Idman noted this had been pointed out during the site visit. Attorney Idman said this open space area could provide a wildlife corridor.

In terms of Water Resources issues, Attorney Idman said the nitrogen-loading standard that applies is 5 parts per million (PPM). He said the calculations for the project indicate a loading of 1.6 PPM. Attorney Idman said a Stormwater Management Plan, a Septic Operations Plan and a turf management plan consistent with RPP requirements. He said a community denitrifying septic system was being proposed. He said the Applicant acknowledges the monetary contribution required by the Regional Policy Plan, because of the marine embayment to Herring River, but is seeking some flexibility on the mitigation amount discussed in the staff report of $132,000 as the applicable standard state that the mitigation may be up to $20.00 of system flow. He said a condition in the decision was amenable to the Applicant but wanted to work with the Commission and/or staff on the mitigation amount. He noted the Total Maximum Daily Load (TMDL) has not yet been set for the Herring River embayment.

In terms of Open Space, Attorney Idman said approximately 40 acres or 75% of the cluster subdivision was being proposed as open space. He said a condition of the decision requiring the set aside was acceptable to the Applicant. Attorney Idman asked for flexibility, in that perhaps the fee interest in the land to be set aside for open space could be transferred to directly to the Town or a conservation trust, or a conservation restriction could be placed on the land.

In terms of Affordable Housing, Attorney Idman said the Applicant acknowledged the 10% RPP requirement, and would meet it via two lots on site through donation to a qualified entity. He said the Applicant was amenable to the conditions as suggested in the staff report, in that the restrictions would run with the land, and bind any grantee or recipient to implement the RPP requirements. Attorney Idman said the conditions suggested in the staff report are completely acceptable to the Applicant.

Attorney Idman addressed the standards of review for DRIs. He said one was related to benefits and detriments. He noted Ms. Adams had raised a few issues for the Subcommittee's consideration as probable benefits, including the provision of open space in excess of the RPP requirement. Attorney Idman suggested other potential project benefits, including the community septic system with denitrification, the contribution to the Town's affordable housing stock. He also said the Applicant was amenable to allowing public access over the proposed open space area, as a condition of a decision of approval. Mr. Idman noted some bio-retention areas were proposed in certain parts of the proposed open space area, and as such, he suggested that any public access avoid these locations. Attorney Idman suggested instead that the public access be through the Old Brewster/Harwich Road as shown on the large size site plan, over Parcel A. He suggested another potential benefit was the elimination of potential uses via local Special Permit in favor of the proposed and less intense residential use.

Mr. Dan Ojala, the Applicant's engineer, commented on the proposed project using the large size site plan. He noted the location of the James Burr Road, which he noted was the gathering place for the Subcommittee 6/14/11 site visit. He said the project would be accessed via Slough Road, and suggested there was no other publicly accessible way to the proposed site. He noted the Town of Brewster could supply the proposed subdivision with public water.

Mr. Ojala said the shared wastewater system would be a gravity-flow system to a tank. He said the location of the shared wastewater system was chosen to provide a greater distance from Elbow Pond, and indicated it would achieve approximately 1.6 PPM.

Mr. Ojala said stormwater would be handled by bio-retention swales, including road runoff. He said the existing topography could be used to achieve the intended bio-retention drainage, particularly in large storm events.

Using the large site plan, he pointed out the proposed open space parcels and their proximity to existing Town-owned conservation land. Mr. Ojala said Dennis Water District land abutted the site to the West, and conservation land in Harwich was located to the bottom of the site as shown on the plan. He noted the subdivision lots were also arranged to provide a buffer to existing houses, such as those on James Burr Road. Mr. Ojala said the zoning required lots of over 100,000 square feet in size.

Mr. Ojala said land-clearing wastes from lot preparation (brush and stumps) would be transferred to a wood waste facility in Dennis or another Town on Cape. He said the Applicant could work with staff on development of a waste management plan for land clearing wastes.

Mr. McCormack asked for questions from the Subcommittee.

Mr. Olsen asked if the Applicant or others would ultimately build out the subdivision?

Attorney Idman said the Applicant would develop the road, to perfect the subdivision. He said Mr. Copelas had no expertise or interest in developing the site beyond the road, and as such, suggested the subdivision as a whole or lots would be sold off to others for development.

Ms. Brookshire asked how the community wastewater treatment system would be handled? Would the Applicant install the system? She asked who would maintain the system and what would happen if the area were sewered after the community system had been built?

Mr. Ojala said the community wastewater system would be subject to approval by the Massachusetts Department of Environmental Protection (DEP). He suggested that the homeowners would be obligated through a deed rider to help maintain the system. He said an escrow is typically established to maintain the system once it is built. Mr. Ojala said that Mr. Copelas, as the person constructing the road, would probably set up the initial financing mechanism to provide for system operation and maintenance (O&M). He said that if the area were sewered, the homes would be obligated to connect to sewer. He said the benefit to the community system is that all of the wastewater would have been already collected in one spot, which could then be connected to the municipal sewer system. Mr. Ojala said the Town would typically charge residents a betterment for the sewer connection. He suggested the added incremental cost to residents in the subdivision of the community wastewater system was relatively small, perhaps $200.00 per year, and suggested the sewer betterment could be slightly higher.

Ms. Brookshire asked about the proposed open space, and if the Applicant had considered providing public access to it? She noted two lots abut James Burr Road and asked if residents of those lots would be able to access the open space areas? She also asked about the residents in the proposed subdivision, and how they would get access to the open space areas.

Attorney Idman said the Applicant had considered providing a public access to the open space via Old Harwich/Brewster Road, which he pointed out on the large size site plan. He said the Applicant could discuss accommodation for the residents of James Burr Road.

Mr. Ojala said a proposed walkway easement was shown on the large size site plan, to address the concerns raised by Ms. Brookshire. He said there was also a walkway easement between Lots #3 and #4.

Attorney Idman noted the Old Harwich/Brewster Road eventually ends up out onto Slough Road, and suggested the open space could also be accessed from there.

Mr. Ojala pointed this area out on the large size site plan, noting how it connected to the other Town open space areas.

Mr. Knight noted that at the site visit, some of the houses on James Burr Road were visible. He asked if the development plans included a visual buffer to abutting properties?

Mr. Ojala, using the large size site plans, noted the subdivision had been configured in a manner to provide at least a 150-foot buffer between the subdivisions, and around its perimeter.

Mr. Knight asked what steps the Applicant would take to ensure that the 2 affordable units would be in keeping with the rest of the overall subdivision? He asked if this could be a requirement on the deeds?

Attorney Idman said this could be addressed via a condition of the DRI approval, and via a deed restriction. He noted the DRI decision would run with the land. He suggested it would be in the Applicant's interest to not have the affordable units readily apparent.

Mr. Ojala suggested the two affordable units would have the same general appearance as the market rate units, and the same number of bedrooms (3).

Ms. Brookshire expressed concern that the cost of the community wastewater system could pose a financial burden to the affordable units. She asked how this could be addressed?

Attorney Idman said this could be worked out with Commission staff.

Mr. Ojala said it would probably be addressed on a pro-rata basis on the value of the affordable unit. He suggested the cost of O&M for the system would be approximately $4,000.00 per year divided over 20 houses.

Mr. Short asked if the community wastewater system as proposed was a denitrifying system? He asked what the backup power would be?

Mr. Ojala said yes, it was a FAST system. He described the mechanisms of the proposed system with a gravity feed to a settling tank. Mr. Ojala said treatment is achieved via a bubbler system that reduces the dissolved solids. He said the system re-circulates semi-treated wastewater back into the system, thereby achieving advanced nitrogen removal. Mr. Ojala said the effluent would be sent to a leaching field under pressure dosing. He said the system needs some electricity for the pumps and blowers, but suggested it would not be a significant expense. Mr. Ojala said the backup would be provided through reserve capacity in the pump chamber. He suggested the system would be set up to allow for connection to a portable generator during a prolonged outage. Mr. Ojala suggested the storage capacity would be adequate.

Mr. Knight questioned how many bedrooms total were proposed and whether the system needed back up power to accommodate the flows in an emergency? He expressed concern that the system would not be operational in an extended power outage.

Mr. Ojala said the system had been designed based on three (3) bedrooms per house on 20 lots or 60 total bedrooms.

Mr. Ojala suggested based on this the Applicant could consider an onsite generator. At the same time, he suggested the system could be redesigned to work solely on gravity.

Ms. Brookshire agreed with Mr. Knight, given her experience on the Board of the Tri-Town Septage Treatment Plant in Orleans. She said a contingency plan needs to be worked out, such as an automatic alarm system to the maintenance company. She noted it was an environmentally sensitive area, and suggested the project needed to be conditioned to deal with emergencies.

Mr. McCormack acknowledged Mr. Cambareri to make a comment.

Mr. Cambareri noted that RPP MPS also require a wastewater system of 2,000 gallons per day or more would be subject to three-way Operations, Maintenance and Compliance agreement between the Applicant, Commission and Town Board of Health to ensure the system O&M plan was implemented.

Mr. Knight said the issue of system O&M needed to be addressed to ensure the development's ultimate success.

Mr. McCormack asked for comments from Federal, state or local officials.

Ms. Jillian Douglass, as Chair of 7the Brewster Housing Partnership, said the project is a DRI. She said it is very close to the Dennis and Harwich, and is a Resource Protection Area. Ms. Douglass said the property is located in Brewster's DCPC area. She said it was of concern that the designation of the site as a Potential Public Water Supply Area (PPWSA) had been lifted. She suggested the Commission should seek input from the water supplier.

Mr. McCormack asked Commission staff to address this issue.

Mr. Cambareri noted that MPS in question deals with PPWSA, which are recognized as areas suitable for public water supply development. He said the nitrogen-loading standard for PPWSA is 1.0 PPM. He said the MPS allows input from the water provider in the Town in which the site is located to provide input as to whether the provider is interested in development on the site for public water supply. He noted the Commission had received a letter from the Brewster Water Commissioners stating they were not interested in the Windrift site for development of a public water supply. Mr. Cambareri said therefore, the PPWSA nitrogen-loading standard of 1.0 PPM does not apply, but rather the 5.0-PPM standard for Wellhead Protection Areas.

Ms. Douglass asked if the Town of Dennis had commented on this?

Mr. Cambareri said the jurisdiction for the site in terms of the PPWSA designation was with the Town of Brewster.

Ms. Adams said the standard as applied to this and past DRIs is to request a determination on the PPWSA designation from the controlling Town, which in this case is Brewster. She also noted that a copy of the staff report had been Emailed to the Town Planners in the Towns of Dennis and Harwich. She noted that the only response received to date had been from David Spitz, Harwich's Town Planner, stating he understood the project was located on the Town line, but he had no comments. She noted that the project site is so close to the Town line that some of the noticed abutters live in either Dennis or Harwich.

Ms. Douglass said that with respect to the proposed donation of two lots, the Town of Brewster does not have a system or developer in place to develop the units. She said this had been done via a Request for Proposals (RFP) in the past. Ms. Douglass suggested there might be a timing issue in terms of being able to include the two affordable lots from this project in the next scheduled RFP for services. She also said the Town did not have the expertise to manage such a donation, and would therefore likely seek the assistance of a third party to do so. She also expressed concern about the ongoing O&M of the wastewater system and its potential impact on the affordable units.

Ms. Douglass noted the RPP also allows for offsite units or lots or a cash donation. She suggested a cash donation might be of potentially greater environmental benefit to the Town, from the elimination of 2 units = 6 bedrooms worth of flow. She suggested an alternate location might also be preferable because it could be closer to transportation networks and amenities. She said the Brewster Housing Partnership would welcome continued dialogue.

Mr. McCormack questioned whether the Commission could require a particular method of addressing the affordable housing. He noted, however, that Commission review did not supercede zoning, so that the project would still need to comply with that, and perhaps the Town could discuss these issues with the Applicant at that time.

Mr. Short noted there were Habitat homes on James Burr Road, and as such, questioned some of Ms. Douglass's points about distance to services. He also questioned whether the possible elimination of 6 bedrooms would significantly better the project's environmental impacts.

Ms. Douglass said the land of the James Burr Road subdivision was land given to the Town specifically for development of affordable housing. She said there might be better locations for further development of affordable housing.

Mr. McCormack asked for any further comments from public officials. Hearing none, he asked for comments from any other members of the audience. Hearing none, he asked for final comments from the Applicant and Commission staff.

Attorney Idman said the Applicant did not have any final comments.

Ms. Adams noted there was a letter in the Subcommittee's packets for the hearing tonight that deemed the DRI/Limited DRI application substantively complete to proceed to a public hearing.

Mr. Knight asked if the Applicant had considered a cash contribution or an off-site contribution of affordable units?

Ms. Adams said the RPP allows three options to an Applicant to address the Affordable Housing requirement: onsite, offsite or cash contribution. She also said that it was within the Subcommittee's purview to require the Applicant to use one or the other of the three options. She said that the Subcommittee would have to describe why the cash mitigation, for example, was preferred in this case. Ms. Adams said the Applicant would then have to make a decision as to how to proceed.

Mr. Knight asked if the Applicant had considered the cash mitigation option? He also acknowledged that he was not certain how much the cash mitigation option would be. He noted that testimony from Ms. Douglass indicates the Town may not be prepared to accept the proposed 2 lots.

Ms. Adams also noted that the project is a DRI, and should be subject to review under the RPP issue areas of Affordable Housing, Plant & Wildlife Habitat, Open Space, Solid Waste and Water Resources. She said the scope should include solid waste to address the proper management of land-clearing wastes. Ms. Adams noted her PowerPoint presentation and suggestion that Wetlands should be included in the DRI scope was an error; there are no wetlands on the site.

Mr. McCormack suggested the Subcommittee should discuss possible motions on the project. He noted the public hearing should probably be continued, to allow for more testimony on the issues, particularly the affordable housing issue.

Ms. Adams also noted that because the site is located in a Wellhead Protection Area, any emergency generator for the community wastewater system would have to be limited to not more than 275 gallons of liquid petroleum fuels to be consistent with the Regional Policy Plan limit on Hazardous Materials. Ms. Adams suggested use of a compressed gas fueled generator instead, if one is determined to be necessary.

Ms. Brookshire said the Subcommittee should vote on the scope of the review at this hearing. She said she wanted her questions answered.

Mr. Knight said he would like to get some answers to his questions.

Ms. Adams distributed a sheet to the Subcommittee showing the proposed schedule for the DRI and Limited DRI review timeframes. Based on this, she said the hearing and the record on the project had to close by June 29, 2011. Based on this, Ms. Adams suggested the Subcommittee could consider the scope of review at tonight's hearing, and further discuss the standards for DRI approval at a subsequent hearing or meeting. She said the Subcommittee could also continue to discuss the project at tonight's hearing.

Mr. Knight moved that the project be reviewed as a DRI subject to the RPP issue areas of Affordable Housing, Plant & Wildlife Habitat, Open Space, Solid Waste and Water Resources. Ms. Brookshire seconded the motion.

Mr. Putnam noted that the Subcommittee was considering limiting the scope of the review to these RPP issue areas.

Ms. Adams said that this would mean that the Subcommittee could only consider conditions on these RPP issue areas.

Mr. McCormack asked for a vote on Mr. Knight's motion, and it passed unanimously.

The Subcommittee discussed potential dates, times and locations for a continued hearing on the project.

Mr. Knight moved to continue the hearing and the record to June 23, 2011 beginning at 4:30 PM at the Cape Cod Commission office in Barnstable. Ms. Brookshire seconded the motion, and it passed unanimously.

Mr. Olsen moved to adjourn. Mr. Putnam seconded the motion, and it passed unanimously.

June 23, 2011 Continued Public Hearing

Mr. McCormack opened the continued hearing at 4:30 PM. Mr. McCormack and the Subcommittee members introduced themselves. He explained the purpose of the hearing, which was to consider the application for a Limited DRI Review/DRI review of Peter Copelas/Attorney Jon Idman for the subdivision of 55+ acres of vacant land in West Brewster into 20 house lots and 2 open space lots. He noted the hearing was being recorded, and that there was a sign in sheet for those who wanted to testify. He explained the order of the hearing. He administered an oath to those wishing to testify, thereby swearing in people in who wished to testify. He asked Ms. Adams to present the Commission staff's update.

Ms. Adams, using a PowerPoint presentation, reiterated the standards of review and approval for the project. She noted the draft Minutes from the 6/15/11 hearing had been distributed to the Subcommittee members. She noted the Applicant had also applied for a Limited Development of Regional Impact (DRI) under Section 5.0 of the *Enabling Regulations,* and covered the standards for including or excluding Regional Policy Plan (RPP) issue areas in the DRI scope. She noted that the Subcommittee had voted at the 6/15/11 hearing to limit the scope of DRI review to the RPP issue areas of Affordable Housing, Wildlife & Plant Habitat, Open Space, Solid Waste Management, and Water Resources. Ms. Adams noted the standards for review and approval of DRIs in Section 7.0 of the *Enabling Regulations*. She went over the Commission staff's analysis of each RPP issue area included in the DRI scope.

Ms. Adams said the first issue for the Subcommittee to determine is what would be the appropriate mitigation under Minimum Performance Standard (MPS) WR3.5, which allows a monetary contribution of up to $20.00 of wastewater flow to address nitrogen loading in the project's marine embayment, which is the Herring River. Ms. Adams asked Mr. Michaud to address conformance with this standard, and with an Email received by Commission staff from Commission Member Taylor concerning the project's nitrogen loading and the marine embayment in which the project was located.

Mr. Michaud said he had taken over the project from Ms. Belfit, who no longer worked for the Commission. He referenced Ms. Taylor's Email. He noted Ms. Taylor's map indicated the Windrift Acres site was located in the Bass River Watershed. Mr. Michaud said the map sent to Commission staff by Ms. Taylor shows RPP watershed delineations, and does show the project site is located in the Bass River watershed. He said this was a nitrogen-overloaded system, and if it were located in the Bass River, it would be subject to a no-net nitrogen-loading limit. Mr. Michaud said more recent information has been developed since the RPP delineation was made. He said the Brewster Needs Assessment reflects a delineation that reflects the Massachusetts Estuaries Program (MEP) watersheds. He said the MEP watersheds are in draft form, but these draft delineations do show that the site is in the Herring River watershed. He said this is

consistent with the presentation made in the staff report. He said that it is uncertain what the load is for the Herring River, and in such cases, the RPP provides for the proposed monetary contribution as outlined in MPS WR3.5. He said the maximum contribution would be $132,000 ($20 x 6,600 gallons per day) which could be used by the Town of Brewster as it developed its Comprehensive Wastewater Management Plan. Mr. Michaud said Commission staff was comfortable with the recommendation that the site was in the Herring River watershed. He said the underlying work had been done by the US Geological Survey working with the MEP program.

Mr. Michaud addressed the formula to determine the monetary contribution. He noted the $132,000 was based on the maximum design flow. Mr. Michaud said that if one used an average flow, the resulting contribution amount would be $88,000. He said also that if estimated actual average flow data was used, the resulting dollar figure would be $43,800. He said this was to provide the Subcommittee with a range of possible contributions. He said the monies would go to the Town for its wastewater planning.

Ms. Adams noted that MPS WR3.5 allowed the Commission to adjust the contribution amount.

Ms. Brookshire said the site was in the Herring River watershed, which was in both Brewster and Harwich. She said the monies go to the Town of Brewster, although the condition of the Watershed/Herring River was unknown.

Mr. Michaud said the Subcommittee could direct staff to address nitrogen loading in the Herring River watershed.

Ms. Brookshire said what if the Subcommittee chooses a mitigation contribution amount that does not sufficiently address the project's impacts to the watershed?

Mr. Michaud noted the MEP Technical Report had not been produced yet, so it was not certain what the Total Maximum Daily Load (TMDL) would be for the embayment. He noted the $20 figure resulting in a projected contribution of $132,000 would not necessarily be enough to address the problem either.

Ms. Brookshire said the nitrogen loading and affordable housing were her two largest concerns with this project. She said she was struggling with whether or not the contribution would be sufficient.

Ms. Adams said MPS WR3.5 was designed to address a contribution to nitrogen loading in cases where there was uncertainly. She said the MPS seeks to have all projects make some contribution to address the problem. She said it does not ignore the uncertainty.

Ms. Brookshire noted the watershed is in two Towns, yet the mitigation monies would go to Brewster.
Ms. Adams acknowledged this, but noted that water resources were a regional resource, and does not respect political boundaries. Based on this, she suggested the overall embayment would be benefited even if the monetary contribution were directed solely to Brewster. At the same time, she noted that in past cases, the Commission has sometimes directed staff to apportion the monetary contribution to several affected Towns.

Mr. McCormack asked for further questions from Subcommittee members? Hearing none, he asked what kind of wastewater system the project would use.

Mr. Michaud said the system the project would use, a FAST system, would not remove all of the nitrogen. He noted it was provisionally permitted by the Massachusetts Department of Environmental Protection (DEP) at a 25 parts per million (PPM) treatment level. He noted it would remove approximately 1/3 of the nitrogen going to groundwater. He said the Commission relies on the DEP to enforce the requirements of the treatment level via a Groundwater Discharge Permit.

Mr. Ojala said he agreed with Mr. Michaud's analysis. He suggested it was a good technology. He asked Mr. Michaud if he had any information on the loading of the Herring River. He suggested the Herring River was less nitrogen sensitive than first anticipated.

Mr. Michaud said the Herring River is a marsh-dominated system which complicates the analysis of the system's nitrogen sensitivity.

Attorney Idman suggested that the full amount could be placed in escrow, and that if the TMDLs indicate that the full amount is not needed, it could be refunded to the Applicant.

Ms. Adams suggested the method suggested by Attorney Idman is relatively uncommon in the Commission's history. She said that it might be warranted, given the uncertainty about when the Herring River Technical Report and TMDL would be published by the MEP. However, Ms. Adams suggested there might have to be a date/time at which the Cape Cod Commission would permanently retain part or all of the funds placed in escrow. She noted this would be to attempt to address the nitrogen loading issue before the proposed homes are constructed, and preserve the money's ability to make a meaningful contribution to the problem, as the longer the money stays in escrow, typically the lower its purchasing power when finally used.

Ms. Adams noted the issue of stormwater was relatively easy to address, and noted that in total, Commission staff believes the project could be conditioned to address the Water Resources MPS.

Ms. Brookshire noted her experience on the Tri-Town Treatment Plant board. She said the Plant is located near Namskaket Marsh, which is a similar situation to the Windrift project affecting marshes in the Herring River watershed. Ms. Brookshire asked where is the flow direction for this project.

Mr. Ojala, using a USGS water table contour map, said the project's wastewater flow direction was towards the Herring River, but it would be approximately 6,000 feet before this would reach the first instance of Herring River system, which he noted was tidal.

Mr. Short asked Mr. Ojala to clarify the groundwater flow direction and the project site on the map he was using.

Ms. Adams continued with her PowerPoint presentation, covering the Wildlife and Plant Habitat issue area. She noted that the project site was mapped as a Significant Natural Resources Area (SNRA) because of rare species. She noted the project had addressed MPS WPH1.1, MPS WPH1.2 and MPS WPH1.13. She noted the Applicant had consulted with the Natural Heritage and Endangered Species Program (NHESP) as required by MPS WPH1.4 and

that the NHESP had issued a "no take" letter on 4/11/11. She noted there were no vernal pools on the site and as such, MPS WPH1.5 and the RPP Wetlands section would not apply to the project. She said Commission staff suggested that the project could be conditioned to comply with the RPP Wildlife and Plant Habitat MPS.

Attorney Idman noted the Natural Resource Inventory done of the site had also determined there were no invasive species on the property.

Ms. Adams addressed the RPP Open Space issue. She noted it was mapped as SNRA. She noted that per MPS OS1.1, the project was a residential cluster subdivision, proposing 40 acres of open space to 15 acres of development. She said the RPP provides a mechanism for permanent protection of open space either through donation to the Town or a land trust, or by placing a conservation restriction on the open space areas. She said the Subcommittee had discussed these two mechanisms at the 6/15/11 hearing, and that either mechanism would be sufficient to address the RPP. She said that donation in fee of the land is generally a simpler and faster process. She noted this was described in more detail in the Commission's Technical Bulletin 94-001, as amended. Ms. Adams noted that Attorney Idman had said at the 6/15/1 hearing that the Applicant intended to allow public access along Old Brewster/Harwich Road, as shown on the large sized site plans. She said providing public access to the open space could be seen as a potential project benefit. She said Commission staff suggested that the project could be conditioned to comply with the RPP Open Space MPS.

Addressing the issue of Solid Waste Management, Ms. Adams said the project was a residential subdivision, and likely to generate a significant amount of land-clearing wastes. She noted the Applicant's representatives stated at the 6/15/11 hearing that there was no plan in place to deal with these wastes. She noted the Subcommittee had voted on 6/15/11 to include the RPP Solid Waste Management issue area in the project review scope. Ms. Adams said Commission staff suggested that the project could be conditioned to comply with the RPP Solid Waste MPS WM2.1 and MPS WM2.2, but that MPS WM2.3 and MPS WM2.4 did not apply.

Ms. Adams addressed the RPP issue area of Affordable Housing. She noted that MPS AH3 was not applicable as it dealt with commercial projects. She said the Applicant's proposal was to meet the requirements of MPS AH1.2 and MPS AH1.4 by two onsite lots. She said if this method was used, the entity to receive the lots would need to be identified, and compliance with Section AH1 and AH2.2 would be required by the entity receiving the lots, including the size of the units, that they would be visit-able, the pricing of them, the manner in which permanent affordability would be monitored, how buyers would be selected. She said that Mr. Ruchinskas, the Commission's Affordable Housing Specialist, could not attend the hearing, but also suggested that if onsite lots were provided to satisfy the RPP, the two lots should be spread throughout the subdivision. Ms. Adams said this was dealt with in the Email messages that she had distributed to the Subcommittee. Ms. Adams said Commission staff suggested that the project could be conditioned to comply with the RPP Affordable Housing requirements.

Ms. Adams addressed the question raised at the 6/15/11 hearing regarding the operations/maintenance costs of the onsite wastewater system. She suggested they could be dealt with if two onsite lots were provided to meet the RPP affordable housing requirements. Ms. Adams noted this was covered in the Emails she had distributed to the Subcommittee. She suggested these costs could be factored into the houses' sales price. She said Mr. Ruchinskas suggested that they could be dealt with if all the homeowners would pay the same amount, or if the amount was reduced for the affordable units.

Ms. Brookshire noted a homeowners association could be established, and could set up a fund for the maintenance of the onsite wastewater treatment system. She noted that if there weren't enough money in the fund, the homeowners would be assessed to make up the shortfall.

Attorney Idman suggested there might be a way to take out an insurance policy on the system to help make up any fund shortfalls.

Ms. Brookshire said she also had a question about the type of affordable housing and integration. Based on this, she questioned whether it would be possible to donate the lots to Habitat for Humanity or the Housing Assistance Corporation, as the houses might not be the same size as the market rate units, thereby violating the integration/similar size criterion.

Mr. Ojala suggested the houses could be made to look similar to the market rate units. He suggested the exterior could be made to appear the same as the others, perhaps minus a garage.

Ms. Brookshire said she was drawing on her experience with Habitat, in that these houses are relatively basic in design.

Attorney Idman suggested lots in the subdivision would be relatively similar in size. He noted homes in nearby subdivisions were selling in the $120,000 - $140,000 range. Attorney Idman said there was less of a chance of a disparity in the home in a subdivision like this.

Mr. McCormack said that this issue might be moot, as Brewster does not seem to be very interested in acquisition of the two onsite lots.

Ms. Adams noted that the RPP and Mr. Ruchinskas see the onsite lots and cash contribution as both acceptable ways to address the affordable housing requirement. He suggested onsite donation could be done through conditions.

Regarding the cash mitigation option raised by Ms. Douglass, Brewster Housing Partnership at the 6/15/11 hearing, Ms. Adams also noted the Emails she had distributed to the Subcommittee. Ms. Adams noted Ms. Douglass had suggested the Subcommittee consider a cash contribution in lieu of two onsite lots. Ms. Adams noted that MPS AH1.2 allows onsite lots, offsite lots or units or cash. Ms. Adams said that MPS AH1.3 stipulates that for subdivisions, the cash contribution is based on the current appraised value of the two lots. Ms. Adams noted the Email from Mr. Ruchinskas to Attorney Idman of how to value the two lots for the purposes of AH1.3, including the infrastructure costs. She noted this MPS also requires that the cash be linked to a credible plan to create more than two units which have to be ready at the same time as the units in the Applicant's overall development are ready for sale. She said these requirements apply to the entity receiving the cash contribution. Ms. Adams said this plan realistically needed to be in place before the Commission renders a decision on this project. In this case, she noted it was not just a matter of a cash contribution. She said the Commission staff needs the Subcommittee's guidance on this issue and which testimony in the record is more persuasive.

Mr. Knight said his question on the issue goes back to the 6/15/11 hearing: This is a subdivision, with no construction at all. He said it seems counterintuitive that the Commission would require the entity receiving the cash contribution to create units when the project before the Commission for review is just a subdivision, where Applicant will not create housing units.

Ms. Adams said this is what is required in MPS AH1.3.

Mr. Knight said that there is no development in this case. He said the escrow monies are deposited with the Town and must have a project ready, but the DRI development is not ready to be built. He said the development might occur in the future.

Ms. Adams noted that this MPS deals with subdivisions, whether the development of the lots are by the DRI Applicant or by someone else, should the Applicant sell the subdivision. She said this MPS deals with the cash option. Ms. Adams said the Commission's mitigation is typically tied to the first Building Permit, or prior to the first lot release from covenant, so that the Applicant provides the mitigation expeditiously. Ms. Adams said that in the case of Affordable Housing mitigation, it is very important that mitigation monies be spent as efficiently and as expeditiously as possible, as the Commission staff's and Commission members' experience is that the dollar value of money in escrow erodes over time.

Ms. Adams said the requirements of MPS AH1.3 relate to the entity creating the affordable units, whether it is Town, Habitat, or the Housing Assistance Corporation. She said the requirements are in place to reduce the possibility that the buying power of money in escrow will erode. Ms. Adams noted that in prior cases, such as Norse Pines subdivision DRI in Sandwich, the affordable units were provided off site, but were also ready at the same time as the market rate units in the Norse Pines subdivision. She said in the Norse Pines case, the entity creating the offsite affordable units developed a detailed plan to bring them on line at the same time as the market rate units. She said because there was a detailed plan in place, more than the required number of affordable lots was created. Ms. Adams noted both the cash contribution and onsite donation method were equivalent.

Mr. McCormack asked if Brewster would be equipped to deal with creation of affordable units from a cash contribution as mitigation?

Ms. Adams said that from what she understood of the Emails between Mr. Ruchinskas, Attorney Idman, and Ms. Douglass, it's not just a pot of money that is drawn down on.

Mr. Knight said the Subcommittee had heard some concerns from Ms. Douglass at the 6/15/11 hearing about the Town's ability to implement a cash contribution.

Ms. Brookshire suggested it would be easier that Mr. Copelas donate the two lots on site and the Subcommittee condition the project to require that the affordable housing be started at the same time as the market rate units. Ms. Brookshire said this was what was required on a prior project.

Ms. Adams said this would be part of the requirements.

Attorney Idman said it was acceptable to the owner that the two lots be donated at the same time as the first Building Permit.

Mr. McCormack asked Ms. Adams to continue with her PowerPoint presentation.

Ms. Said the next issue was that the Applicant's representatives clarified at the 6/15/11 hearing that the one pole mounted light to be used at the intersection of Slough Road and the new

Windrift Lane subdivision road would be fully shielded. Based on this, Ms. Adams suggested that the project could be conditioned to conform to RPP requirements.

Ms. Adams concluded noting the project was a DRI and subject to the criteria for DRI approval as described in section 7(viii) of the *Enabling Regulations*. She noted that the Subcommittee must find that the *"probable benefit from the proposed development is greater than the probable determent."* Ms. Adams noted the project would provide high quality naturally vegetated open space contiguous to existing open space. She said it would also provide open space in excess of that required by the RPP. Ms. Adams also noted Attorney Idman's 6/15/11 testimony that the open space would be permanently protected and accessible to the public. She suggested the Subcommittee could consider the permanent protection of open space in excess of RPP requirements with public access as a probable project benefit.

Ms. Adams covered the other findings necessary for a DRI approval relating to local requirements, Brewster's Local Comprehensive Plan, local bylaws, and with Brewster's District of Critical Planning Concern, all of which were covered in detail in the staff report and at the 6/15/11 hearing. Ms. Adams noted testimony in the record also clarifies that Brewster's Natural Resources Protection Design Bylaw does not apply to this project.

Ms. Adams said the next steps could include the Subcommittee continuing the hearing to 6/28/11 or 6/29/11 unless the Subcommittee believes it has heard enough testimony and seen enough information on the record to move to close the hearing and the record on the DRI on 6/29/11. She said staff suggests the Subcommittee could recommend approval of the project, with conditions, to the full Commission, and could also direct staff to draft a written decision. She said the Subcommittee should also select a date, time and place for a Subcommittee meeting to review the draft decision, and noted that based on the DRI and Limited DRI timeframes, the full Commission must take action on the proposed project no later than at the August 4, 2011 full Commission meeting.

Mr. McCormack asked for further question of Commission staff?

Ms. Brookshire asked about the FAST system? She asked about future nitrate removal?

Mr. Michaud said a FAST system removes about 1/3 of the nitrogen and meets the 5-PPM RPP requirements. He said it could not meet 1 PPM if the Potential Public Water Supply Area designation was still in place. He said it was not certain which way Herring River would go, but the Subcommittee is working within the framework as set out by the RPP based on a cash contribution per MPS WR3.5. He said the contribution would assist the Town in dealing with this issue.

Mr. McCormack asked the Applicant to make a presentation.

Mr. Knight asked about the Applicant's emergency response plan, which had been discussed at the 6/15/11 hearing.

Attorney Idman said that the Applicant is willing to develop a plan to manage solid/land-clearing wastes to address the MPS in that section of the RPP. He said the Applicant does not as yet have an estimate of the total volume of those wastes, and to describe a process to recycle them.

Attorney Idman said Mr. Ojala would discuss methods to provide emergency backup to the onsite wastewater treatment system in a power failure. He said it is a gravity system, and there would be no release in a power failure. Attorney Idman said that in the event that the system was without power, the advanced denitrification technology would stop functioning, but suggested that even in this case, if there was no power to the system for two months, the resultant parts per million nitrogen level would increase from 1.6 PPM to 1.7 PPM. He said the Applicant also preferred to address the RPP affordable housing requirements via provision of onsite lots. Attorney Idman said this was appropriate, given the adjacent James Burr subdivision.

Mr. Ojala said the FAST system was a gravity flow system to a pump chamber. He said that in the event of a power failure, there would be no "breakout," as the site grade allows the system flow to continue to the pump chamber. He said a portable generator could provide backup power. He said the system would also have an Operations and Maintenance contract with quarterly test results submitted to the DEP and local Board of Health. He suggested $20.00 per gallon of design flow was the maximum possible rate per MPS WR3.5. He suggested the Applicant be given "credit" for the 1/3 nitrogen reduction that the FAST system achieves, thereby suggesting the contribution under MPS WR3.5 be $88,000. He also noted the resultant nitrogen loading level would remain low even if there was a power failure to the system. Mr. Ojala said the site was relatively distant from the beginning of the Herring River system.

Addressing the issue access to the land from an Email from a Mr. Ellis, He said Mr. Ellis could not get access to the land because Mr. Copelas owned the land between Slough Road and his property. Mr. Copelas had purchased the fee in his land, and laid out a subdivision road to provide access for the proposed project, which Mr. Ellis was not able to do.

Attorney Idman addressed the concerns raised by Ms. Douglass in an Email to him and to Mr. Ruchinskas concerning the Town's interest in purchase of the project site. He said the option for the Town to purchase the land was still on the table. He said Mr. Copelas has sent letters to the Towns of Dennis and Brewster with respect to purchase of the property. He suggested going through the Commission's process would support an appraisal price. He said he and the Applicant did not know why this process with the Towns had stalled.

Mr. McCormack asked for public comments. He asked for comments from federal, state, regional, local officials to comment.

Ms. Taylor asked Mr. Michaud about the marine embayment in which the project was located. She said relative to Brewster's Local Comprehensive Plan mapping process, the site was located in Bass River embayment.

Mr. Michaud said he acknowledged the map referenced by Ms. Taylor but suggested he could also provide her with the draft MEP maps.

Ms. Taylor also said the Town of Brewster had maps that showed that the northern corner the site, near to Elbow Pond, was potentially archeologically sensitive. She said any area around water, salt or fresh, has the potential to be archeologically sensitive. She said that based on this, this issue area should be included in the DRI review scope.

Mr. McCormack asked Commission staff to address this issue.

Ms. Adams said that with respect to the archeological issues, she noted the letter in the record from the Massachusetts Historical Commission (MHC) stating that the site was not on their inventory. She said this response from MHC formed the basis of the staff's suggestion that that this issue area did not need to be included in the DRI review scope.

Ms. Taylor said the map of potential archeological resources was a Town map. She said this issue should be included in the DRI review scope.

Ms. Adams said the relevant MPS in the RPP states that when development is proposed on or adjacent to known archeological sites, as identified by MHC or the local board, it shall be configured to maintain or enhance the resources, and requires a predevelopment survey.

Attorney Idman said that Slough Road had been constructed in the same general area, adjacent to the shore of Elbow Pond and the Windrift Acres site. He suggested that based on this, that if there had been any archeological resources in that area, they could have been disturbed when the road was constructed.

Ms. Brookshire asked if the project begins, and there was a finding, would development have to stop?

Ms. Adams said she did not know.

Ms. Brookshire asked if the Commission staff could take this matter up and report back?

Ms. Adams said that Ms. Korjeff, the Commission's Historic Preservation Specialist, was not back from vacation until July 5, 2011, and the record hearing for the DRI would have to close on June 29, 2011. She said it would be opened again when draft decision was up for consideration by the full Commission.

Ms. Rooney asked to speak.

Mr. McCormack administered an oath to Ms. Rooney, thereby swearing her in so she could testify.

Ms. Rooney asked if the archeological issues could be handled at the local level?

Ms. Taylor said this would be addressed under the Conservation Commission. She said the subdivision is within the area of archeological sensitivity on Brewster's local map. She said she was not certain how this would be reviewed.

Ms. Rooney suggested this would trigger local review.

Ms. Taylor said this should be part of the DRI scope.

Mr. McCormack suggested that it appears that the RPP archeological resources standards do not apply. He said that it also appears that the Town of Brewster has concerns, but that these could be addressed at the local level.

Ms. Adams noted the MHC response noted that the site was not on their inventory.

Mr. Ojala said the general concern is for sites near the ocean, which is not the case for this project, or the shoreline of any great fresh water ponds and lakes. He said he had dug a large drainage test hole near this area, and had not seen anything unusual. Mr. Ojala said the northern portion of the project site might be seen as potentially archeologically sensitive. Mr. Ojala used a large size site plan to illustrate his points. He said the area in question has already been disturbed by construction of Slough Road, the manmade slope to the guardrail, and the guardrail between Slough Road and the pond edge.

Attorney Idman James Burr Road was a recent subdivision road, and the Applicant could see how this issue had been handled at the local level when that road had been built. He said the MHC letter dated 6/4/10 had been included in the packets prepared for the Subcommittee for the 6/15/11 hearing.

Ms. Adams said regardless, she had forwarded the Email from Commission Member Taylor on this issue to Ms. Korjeff, but as she had not been in yesterday or today, she had not seen it. Based on this, Ms. Adams said she had not been able to get a response from Ms. Korjeff to provide to the Subcommittee for today's continued hearing.

Mr. McCormack asked if there were any other comments or testimony from those in the audience? Hearing none, he asked for final comments from the Applicant and Commission staff.

Attorney Idman said he had no comments.

Ms. Adams said the Subcommittee needed to make some decisions on a few outstanding issues. She said one was the proposed monetary contribution under MPS WR3.5. She noted the testimony on the record. She noted the maximum possible dollar figure for the nitrogen loading contribution was $20.00 per design flow resulting in $132,000 contribution. She noted the alternate testimony from Mr. Ojala suggesting the Applicant be allowed to credit the 1/3 nitrogen removal of the proposed system, which results in a $13.33 per 6,600 gallons of average flow, or an $88,000 contribution. Ms. Adams said the third potential dollar figure for the nitrogen loading contribution used estimated average water use data, and would result in $43,000. She said the staff was seeking guidance from the Subcommittee on this issue.

Mr. Short said he was reluctant to make such a decision now.

Ms. Adams said the Subcommittee needed to make a decision on this matter. She also noted that with respect to the portable generator proposed by Mr. Ojala that because the site was located in a Wellhead Protection District, any portable generator used would have to be limited to either compressed gas fuels or no more than 275 gallons of diesel fuel. She noted that compressed gas fueled generators are generally more expensive than diesel.

Mr. Putnam suggested the power needs of the system would dictate the size of the generator.

Mr. Ojala said the generator would probably be mounted on a trailer.

Ms. Adams concurred, but emphasized again that to even be brought to the site, the generator would have to have a fuel tank no greater than 275 gallons of petroleum based liquid fuel to meet RPP requirements.

Mr. Ojala said the pump for the emergency generator was only about three horsepower. Based on this, he suggested the emergency generator could be fueled in a manner consistent with the RPP.

Ms. Adams said the Subcommittee needed to decide on the testimony with respect to the northern part of the site may be potentially archeological sensitivity. She noted the alternate testimony on the record that this would be handled at the local level. Ms. Adams noted that the Applicant had however taken the steps with respect to this issue that the RPP requires.

Ms. Adams noted the Subcommittee had also received testimony that the monetary contribution for nitrogen loading per MPS WR3.5 could range from $132,000 to $43,000 and that the Applicant had indicated a willingness to provide a contribution of $88,000. She said the Subcommittee needed to decide on this issue.

Ms. Adams said the Subcommittee had also heard testimony from Mr. Ojala about the access issue brought up in an Email from Mr. Ellis. She suggested Mr. Ojala's comments had resolved the issue.

Ms. Adams directed the Subcommittee to the draft motions she had prepared, or suggested that the Subcommittee could continue the hearing and the record to the last week of June for further discussion testimony.

Ms. Brookshire said Attorney Idman had suggested a fourth possibility with respect to the nitrogen loading mitigation, which was that the Applicant pay the full amount ($132,000) into an escrow, and that it ultimately be refunded in part or kept.

Attorney Idman acknowledged he had suggested this option. He said however, the Applicant was not keen on the possibility of the entire mitigation amount perhaps being kept at a date certain in the future.

Ms. Adams said such a scenario had been contemplated perhaps two or three times in the Commission's history, because of the complexity in setting up the escrow, including adjusting the amount in escrow to reduce the erosive power of inflation and the time the monies sat in the escrow account.

Ms. Brookshire asked if a minimum escrow amount could be agreed on, such as putting $132,000 in escrow, with $88,000 being the minimum amount, with the potential of returning $43,000 to the Applicant?

Ms. Adams suggested this would be a relatively complex arrangement. And, in effect, the Commission is signaling that a minimum of $88,000 would be kept. She noted the Commission staff could potentially craft something.

Mr. Olsen suggested he was persuaded by the Applicant's figures and testimony, and moved that the Subcommittee find that a monetary contribution of $13.33 per 6,600 gallons of design flow resulting in a contribution of $88,000 was appropriate. Mr. Putnam seconded the motion, and it passed unanimously.

Ms. Adams directed the Subcommittee members to the list of sample motions she had prepared. She said that if the Subcommittee believed it had heard sufficient testimony, it could begin to make motions on the project.

Mr. Putnam said he believed that if there was an archeological issue, it could be addressed at the local level.

Ms. Adams said that local boards can impose more restrictive conditions than the Commission may impose on a project. She said that if requirements related to archeological resources are placed on this project by the Town of Brewster, the Commission would expect the Applicant to possibly seek a modification of the decision to address any overlapping issues.

Mr. Putnam moved that the Regional Policy Plan issue areas of Affordable Housing, Wildlife and Plant Habitat, Open Space, Solid Waste Management and Water Resources be included in the DRI review scope because the proposed project does involve a substantial deviation from the MPS of the RPP or does have significant impacts on the purposes and values identified in Section One of the Act. Ms. Brookshire seconded the motion, and it was unanimously approved.

Mr. Putnam moved that the Windrift Acres subdivision project to be located off Slough Road, Brewster, shall be scoped for Limited DRI review in the Regional Policy Plan issue areas of Affordable Housing, Wildlife and Plant Habitat, Open Space, Solid Waste Management and Water Resources. Ms. Brookshire seconded the motion.

Mr. Short said he had concerns about the onsite backup generator for the community wastewater system. He said there was no way to block the movement on nitrogen in the groundwater. Mr. Short said it was important that the onsite system not fail, particularly in the event of a power failure.

Mr. Ojala suggested this is why the community system was being used.

Mr. Short acknowledged this, but suggested the treatment efficiency of 25 PPM was not very good.

Mr. Ojala suggested the system would achieve 19 PPM, in part because of a recirculation pump. He noted he would check the DEPs General Permit for the system. He suggested the distance to the Herring River would help address attenuation.

Mr. Short said he understood the issues Mr. Ojala was discussing. He expressed concern, given that there was debate in general about how much nitrogen a marsh dominated embayment system could absorb.

Mr. McCormack noted there was a motion on the floor from Mr. Putnam. He asked for more discussion. Hearing none, he called for a vote, and it was unanimously approved.

Ms. Brookshire moved that based on the 6/1/11, 6/3/11, and 6/13/11 written testimony of Susan Leven, Brewster Town Planner, that the proposed Windrift Acres subdivision in Brewster is consistent with Brewster's Local Comprehensive Plan. Ms. Brookshire seconded the motion, and it was unanimously approved.

Mr. Putnam moved that based on the 6/1/11, 6/3/11, and 6/13/11 written testimony of Susan Leven, Brewster Town Planner that the proposed Windrift Acres subdivision in Brewster is not subject to Brewster's Natural Resources Protection Design Bylaw. Ms. Brookshire seconded the motion, and it was unanimously approved.

Mr. Short moved that based on the 6/1/11, 6/3/11, and 6/13/11 written testimony of Susan Leven, Brewster Town Planner, that the proposed Windrift Acres subdivision in Brewster is consistent with Brewster's local bylaws. Mr. Olsen seconded the motion.

Mr. Putnam asked if this proposed motion was inconsistent with the potential additional local review for archeological resources?

Ms. Adams suggested it was not, noting a similar case in Yarmouth where the project was a DRI but also needed a use variance that the Town at the time could not grant. She said in that case, staff advised the Applicants not to go forward with DRI review, because the Commission review does not supercede local requirements. In this case, Ms. Adams suggested the Town of Brewster could be as or more restrictive than the RPP would require with respect to archeological resources, so there is no conflict with the proposed motion. She said the proposed motion does not obligate the Town to approve the project.

Ms. Rooney noted the Applicant had proposed to set aside open space along the border with the Old Kings Highway Historic District. She noted this was discussed in the staff report, and suggested perhaps this would address the concerns over the potential for archeological resources.

Attorney Idman said the open space lot abuts Dennis Water District land, not Elbow Pond or the area near Slough Road. He said the area of the potential archeological sensitivity was not in the same location as referenced by Ms. Rooney or the staff report comments.

Mr. McCormack noted there was a motion on the floor from Mr. Short. He asked for more discussion. Hearing none, he called for a vote, and it was unanimously approved.

Mr. Putnam moved that based on the 6/1/11, 6/3/11, and 6/13/11 written testimony of Susan Leven, Brewster Town Planner, that the proposed Windrift Acres subdivision in Brewster is consistent with Brewster's Water Protection DCPC. Mr. Olsen seconded the motion, and it was approved unanimously.

Mr. Putnam moved that based on the materials submitted to date, that the proposed Windrift Acres subdivision in Brewster can be made consistent with RPP MPS WPH1.1, MPS WPH1.2, MPS WPH1.3 and WPH1.4 related to Wildlife and Plant Habitat through conditions. Mr. Olsen seconded the motion, and it was approved unanimously.

Mr. Olsen moved that based on the materials submitted to date, the proposed project can be made consistent with the Regional Policy Plan Minimum Performance Standards MPS OS1.1, MPS OS1.2, MPS OS1.3, MPS OS1.4, MPS OS1.5 and MPS OS1.6 related to Open Space through conditions. Mr. Short seconded the motion, and it was approved unanimously.

Mr. Putnam moved that based on the materials submitted to date, that Minimum Performance Standards MPS OS1.7 and MPS OS 1.8 are not applicable to the project as the site is not in a

Growth Incentive Zone and it is a residential subdivision without a parking structure. Mr. Olsen seconded the motion, and it was approved unanimously.

Mr. Olsen moved that based on the materials submitted to date, the proposed project can be made consistent with the Regional Policy Plan Minimum Performance Standards MPS WM2.1 and MPS WM2.2. Mr. Short seconded the motion, and it was approved unanimously.

Mr. Olsen moved that based on the materials submitted to date, Regional Policy Plan Minimum Performance Standards MPS WM2.3 and MPS WM2.4 do not apply to this project. Mr. Short seconded the motion, and it was approved unanimously.

Mr. Olsen moved that based on the materials submitted to date, the proposed project can be made consistent with the applicable Regional Policy Plan Minimum Performance Standards in the RPP Water Resources section. Mr. Short seconded the motion, and it was approved unanimously.

Mr. Putnam moved that based on the materials submitted to date, the probable benefit of the proposed development greater than the probable detriment as the project will provide additional land in excess of RPP requirements that will be permanently protected and will provide public access to the protected open space. Mr. Olsen seconded the motion, and it was approved unanimously.

Ms. Adams noted the Subcommittee could articulate other probable benefits as well. She noted that Attorney Idman had proposed other probable project benefits at the 6/15/11 hearing: the community septic system with denitrification, and the elimination of potential uses allowed by local Special Permit in favor of the proposed and less intense residential use. She also noted that Attorney Idman had suggested that provision of affordable housing was a probable project benefit. Ms. Adams said Commission staff suggests that a contribution to Brewster's Affordable Housing stock as suggested by Attorney Idman is not a probable benefit as the project is providing the required amount of affordable housing. The Subcommittee did not find that these factors as suggested by Attorney Idman were probable project benefits.

Ms. Adams said that the Subcommittee should also direct Commission staff with respect to the method of achieving compliance with the RPP affordable housing requirements. She said the two possible options were donation of two lots or a cash contribution, as suggested by testimony heard at the 6/15/11 hearing and in Emails from Ms. Douglass.

Mr. Putnam moved that the Commission find that the project shall satisfy the RPP affordable housing requirements via two onsite lots. Mr. Olsen seconded the motion, and it was approved unanimously.

Ms. Brookshire moved to direct Commission staff to draft a written decision with conditions for the Windrift Acres subdivision project as a Limited DRI/DRI in the issue areas of issue area of Affordable Housing, Plant & Wildlife Habitat, Open Space, Solid Waste Management and Water Resources. Mr. Putnam seconded the motion, and it was approved unanimously.

Mr. Putnam moved to recommend to the full Commission approval of the Windrift Acres subdivision project as a Limited DRI/DRI with conditions. Mr. Olsen seconded the motion, and it was approved unanimously.

Ms. Adams suggested the Subcommittee should discuss a date, time and place for a Subcommittee meeting to review the draft decision. Ms. Adams noted her upcoming vacation.

Based on this, and the Subcommittee members' schedules, Ms. Brookshire moved to hold a Subcommittee meeting for the purpose of reviewing the draft decision on July 21, 2011 at 1:00 PM at the Cape Cod Commission's office. Mr. Short seconded the motion, and it was approved by a majority with Mr. Putnam abstaining.

Ms. Adams said the Subcommittee also needed to continue the hearing and the record on the DRI.

Ms. Brookshire moved to continue the hearing and the record on the DRI to June 29, 2011 at 10:00 AM at the Cape Cod Commission office in Barnstable where the hearing and record will be procedurally closed by a Hearing Officer. Mr. Olsen seconded the motion, and it was approved with unanimously.

Mr. Short moved to adjourn the hearing. Ms. Brookshire seconded the motion, and it was approved unanimously.

July 21, 2011 Subcommittee Meeting
Mr. McCormack opened the meeting at 1:06 PM.

Mr. Short moved to approve the draft set of minutes from June 15, 2011. Mr. Putnam seconded the motion and it came to a unanimous vote.

Mr. Putnam moved to approve the draft set of minutes from June 23, 2011. Mr. Short seconded the motion and it came to a unanimous vote.

Mr. McCormack invited Andrea Adams, Senior Regulatory Planner, to present the draft decision.

Ms. Adams began to review the draft decision page by page with the subcommittee noting the areas that need to be filled in.

Under the Testimony portion of the draft decision, Ms. Sue Leven, Town Planner for Brewster, noted that on page 4 in the second paragraph at the end of the first sentence "staff report" should be replaced with "site visit." She also noted that in the fourth paragraph she suggested striking the word "provide," and suggested adding the word "that the" to the first sentence of the last paragraph on the page. On page 6, Ms. Leven suggested adding a title to identify Mr. Ojala.

Ms. Adams continued to review the draft decision page by page with the subcommittee. She noted a mistake with the numbering of the Water Resources Findings on page 29. Under AHF1 "RPR" was changed to "RPP." She also noted that AHF1 was repeated and the findings will have to be renumbered. Within AHF2, she noted that "prepared" should be added before "for Peter Copelas" and that "revised August 25, 2010" should be added after the date of the plans.

Mr. Austin Knight stated that this was just a subdivision and asked why the decision talks about building permits.

Ms. Adams stated that the conditions will take place prior to any development or building permits.

Mr. Knight expressed concern that the Affordable Housing component will not take place until development takes place.

Ms. Adams suggested that the conditions could read, "prior to any development," rather than "prior to issuance of a building permit." She noted that the approval is only good for seven years and if they do nothing in those seven years then nothing will take place and the approval expires.

Commission staff, the subcommittee, and the Applicant's representatives discussed options for addressing the concerns of the subcommittee, including conditioning the decision upon the Applicant deeding the Affordable Housing lots (7 and 17) "prior to any development" in Conditions AHC1 and AHC2.

Mr. Ojala expressed concerns about deeding land without a road being built to access it.

Attorney Idman expressed similar concerns regarding the sale of two lots of land without providing any infrastructure.

The subcommittee, Commission staff, the Applicant's representatives and Ms. Leven discussed these concerns and how they should be addressed.

Ms. Leven acknowledged the concerns of both parties but stated that when the Town approves a subdivision, the lots cannot be built on until the roads are substantially complete.

Mr. Ruchinskas asked whether the road will require a permit through the Town.

Ms. Leven responded that the road is permitted through the subdivision.

Ms. Enos asked whether the decision should state that once the road is built, the lots shall be conveyed.

The subcommittee and the Applicant's representatives discussed this possibility and compared this to the phrasing "prior to development."

Mr. Knight suggested that condition should also include installation of utilities if the Affordable Housing units are to be deeded after construction of the road.

Ms. Senatori noted for the record that the term "development" per the Cape Cod Commission's regulations and definitions includes the subdivision of land into parcels.

Attorney Idman stated that the Applicant would be amenable to conveying the Affordable Housing lots after the installation of utilities and construction of the road.

Commission staff, the Applicant's representatives, Ms. Leven and the subcommittee discussed this further.

Martha Hevenor, Planner for the Commission, stated that in the past they have differentiated between Certificates of Compliance in the General Findings of the decision to clarify the timing of the conditions. She suggested that this could be done so that the conditions relate to Certificate of Compliance Number 1 or Number 2 rather than "prior to development."

Ms. Brookshire moved to change the language of AHC1 to read "After construction of the road and installation of utilities, but prior to the first Building Permit." Mr. Short seconded the motion.

Mr. Ruchinskas asked Attorney Idman how long construction of the road and installation of utilities would take.

Mr. Ojala responded that it would take anywhere from four months to a year and a half.

Mr. Ruchinskas replied that if it was a shorter time frame he would urge that the drafting of the deeds be completed earlier but he is comfortable with that time frame.

Ms. Brookshire's motion passed unanimously.

Mr. Knight moved that the same language be applied to AHC2. Ms. Brookshire seconded the motion and it passed unanimously.

Ms. Adams addressed Water Resources Condition 1 and stated that Scott Michaud, Hydrologist for the Commission, suggested that the last sentence of that condition could be stricken as it is repetitive. Also, under WRC5, she noted that Mr. Michaud suggested adding "to ensure compliance with MPS WR7.10" should be added to the beginning of the condition, and "to bring the system into compliance" should be removed from it as it is also repetitive.

When discussing the Open Space Condition, Ms. Adams noted that she will work with Ms. Hevenor to address the concerns with the Preliminary Certificates of Compliance to deal with the Open Space Condition.

Ms. Hevenor stated that normally the Commission requires that the Open Space lots be donated prior to conveyance of any lot so clarifying when the Certificates are issued should resolve any confusion.

A discussion ensued regarding the language of the Open Space Condition. The subcommittee decided to change the Open Space Condition to read "Prior to conveyance of any lots."

Ms. Adams addressed the issue of distinguishing between Certificates of Compliance and suggested that on page 38 under GC7 the condition should read "Prior to conveyance of any lots, the Applicant shall obtain."

Ms. Hevenor stated that her suggestion had been to set up the language so that there is a Certificate of Compliance number 1 and number 2 and specifies the timing of each, but she said that it was substantively the same. She asked Ms. Adams if that language affected GC5.

Ms. Adams stated that it did not because that condition relates to modifications.

Mr. Putnam asked if in GC7 "a" was changed to "any" if that would address the issue.

Ms. Adams stated that the current language deals with the building permit and we want it to deal with conveyance because that happens first. She noted that she can work with Ms. Hevenor to number the Preliminary Certificates.

Mr. Putnam moved to make the specified change to GC7. Ms. Brookshire seconded the motion and it passed unanimously.

Ms. Adams returned to the Water Resources Findings.

Ms. Senatori stated that she spoke with Scott Michaud and WRF6 can remain and WRF7 can be stricken, as they are generally the same finding.

Mr. Putnam moved to strike WRF7. Ms. Brookshire seconded the motion and it passed unanimously.

Mr. Idman added an editorial change to page 16 where he was quoted regarding the average price of lots, he changed the word "homes" to "lots."

Mr. Short moved to approve the draft decision, as amended. Ms. Brookshire seconded the motion and it passed unanimously.

Mr. Knight moved to recommend approval by the full Commission. Ms. Brookshire seconded the motion and it passed unanimously.

JURISDICTION

The project qualifies as a Development of Regional Impact (DRI) pursuant to Section 3(c) of the Commission's *Enabling Regulations* (revised March 2011) as *"[a]ny development that proposes to divide parcel(s) of land totaling 30 acres or more in common ownership or control on or after September 30, 1994, including the assembly and recombination of lots..."*

FINDINGS

The Commission has considered the Limited DRI/DRI application for the proposed residential subdivision, and based on the information presented at the public hearings and submitted for the record to date, makes the following findings, pursuant to Sections 12 and 13 of the Act and Sections 3, 5, and 7 of the *Enabling Regulations*:

General Findings

GF1. As the date of the first substantive public hearing on the proposed project as a Limited DRI/DRI was June 15, 2011, the project was reviewed subject to the 2009 RPP, as amended in May 2011, which is the RPP in effect at the time of the first substantive public hearing on the project.

GF2. The proposed project that is the subject of this decision is the subdivision of 55.20 acres of vacant, wooded, residentially zoned land into 20 single-family lots. The project site is comprised of several parcels owned by Peter Copelas. The proposed new subdivision will be accessed by a new road to be built off of Slough Road in West Brewster. The project will also include two (2) lots to be set aside as open space.

GF3. As of the date of this decision, the Town of Brewster did not have a Commission-certified Local Comprehensive Plan (LCP). The project, as proposed, is nevertheless consistent with Brewster's LCP, as confirmed by written testimony received 6/1/11 and 6/3/11 from Susan Leven, Brewster's Town Planner, which notes that the 1997 draft LCP encourages open space protection. As such, the Commission finds that the proposed project is consistent with this criterion.

GF4. As provided in written testimony dated 6/13/11 from Susan Leven, Brewster's Town Planner with regard to local zoning, the project filed at the local level before the effective date of Brewster's Natural Resources Protection Design Bylaw. As such, the Commission finds that the project is consistent with this criterion.

GF5. The project is located within Brewster's Water Resources Protection District of Critical Planning Concern (DCPC). However, according to the written testimony dated 6/13/11 from Susan Leven, Brewster's Town Planner, household uses and subdivisions are exempt from this DCPC, although they still must undergo Town permitting. As such, the Commission finds that the project is consistent with this criterion.

GF6. The Commission finds that the probable benefits of the project outweigh the probable detriments of the proposed project. The project's probable benefit is that it will provide open space in excess of RPP requirements that will be permanently protected and will provide public access to it.

Land Use Findings

LUF1. The project site is mapped as a Resource Protection Area (RPA) on Brewster's Land Use Vision Map (LUVM). A proposed project's consistency with the LUVM category for which the site is mapped is one of the scoping questions/criteria for consideration on the Limited DRI review checklist. The RPP characterizes a RPA as *"not appropriate for additional growth"* due to the presence of underlying resources.

LUF2. While the project adds new residential development to an RPA, the proposed subdivision is designed to protect the underlying resources through the clustering of the lots, the preservation of over 70% of the site as open space, and the use of a shared on site wastewater treatment facility. Given these design features which protect the underlying resources, a Commission Subcommittee finds that the proposed project is consistent with the RPA land use category and therefore inclusion of the RPP Land Use section in the scope of Limited DRI review is not warranted.

Economic Development Findings

EDF1. The Scoping Checklist for New Development contains four questions that relate to a proposed project's consistency with the Land Use Vision Map, including whether the project involves gaming, or creates infrastructure. The proposed project does not involve Class III gaming, nor does it create new capital facilities or infrastructure. Also, MPS ED1.1 (*Location in Economic Centers*) states in part *"[t]his standard does not apply to residential subdivisions...."* Based on this, a Commission Subcommittee found that the proposed project does not trigger any of the Limited DRI Scoping Checklist questions for New Development, nor does the project substantially deviate from the Economic Development MPS of the RPP or have significant impact upon the purposes and values identified in Section One of the Commission Act. Further, a Commission Subcommittee found that the RPP Economic Development section does not apply to the proposed project, and does not need to be included in the scope of DRI review.

Water Resources Findings

WRF1. The site is located in the Brewster Water Protection DCPC. As such, the Commission also finds through the Subcommittee that the proposed project may involve a substantial deviation from RPP Water Resources MPS, and may have significant impacts both quantitative and qualitative on the purposes and values identified by Section One of the Commission Act with respect to Water Resources. As such, the Commission finds, through the Subcommittee that the RPP Water Resources section shall be included in the DRI review scope.

WRF2. The Commission finds the project meets or can be conditioned according to Water Resources Conditions WRC1 and WRC2 to meet the following General Aquifer Protection Minimum Performance Standards under Section WR.1:

a) The project's nitrogen loading concentration is 1.8 milligrams Nitrogen per liter (ppm-N). Therefore, the Commission finds the project meets MPS WR.1.1 which limits nitrogen loading to 5 ppm-N.

b) According to MPS WR.1.2, development must identify drinking water wells on properties within 400 feet of the project site and assess the impact of the development on the water quality of these drinking water wells that may potentially be affected by the proposed development. Project septic systems and other sources of contamination must be sited to avoid adverse impacts to downgradient existing or proposed wells. The Applicant's engineer, Daniel Ojala PE reported in correspondence received on July 12, 2011 that only one property abutting the project site is served by a private drinking water supply [Wegman; Map 51 pcl 3]. The well's location on the abutting property was not identified. The abutting property with the private drinking water supply is located to the north of the project site. Regional maps depict groundwater flow in a southerly direction at the project site, suggesting that groundwater impacted by the development will flow away from the private drinking water supply.

c) The project will be connected to the Brewster public water supply. Therefore, the Commission finds that MPS WR.1.3, which relates to water withdrawals, does not apply.

d) The project clusters development, will be connected to a community water supply, and provides for shared wastewater infrastructure. Therefore, the Commission finds that the project meets MPS WR.1.4.

e) The project's landscaping and management plan are consistent with MPS WR1.4 which requires low-impact landscaping designs and are consistent with MPS WR1.5 which requires native and drought resistant plantings. Therefore, the Commission finds the project meets MPS WR1.4 and MPS WR1.5.

WRF3. The project is located in a Zone II Wellhead Protection Area. The Commission finds that the project meets or can be conditioned to meet Drinking Water Minimum Performance Standards under Section WR.2 by Water Resources Conditions WRC1, WRC2 and WRC7:

a) The project's nitrogen loading concentration is 1.8 milligrams Nitrogen per liter (ppm-N). Therefore, the Commission finds the project meets MPS WR.2.1 which limits nitrogen loading to 5 ppm-N.

b) The project is a residential subdivision consisting of 20 homes that can be anticipated to have household quantities of hazardous materials and wastes. Therefore, the Commission finds the project meets MPS WR.2.2 which limits Hazardous Materials and Hazardous Wastes to Household Quantities in Zone II Wellhead Protection Areas.

c) The project has wastewater design flows of less than 10,000 gallons per day (gpd). Therefore, the Commission finds that MPS WR.2.3, which relates to wastewater treatment facilities, does not apply.

d) The project does not comprise a use prohibited in Zone II areas under State regulations. Therefore, the Commission finds project meets MPS WR.2.4.

e) A letter was received from the Brewster Water Department on May 20, 2011 which states: *"At this time, the Brewster Water Commissioners do not have interest in considering the above referenced property as a potential public water supply area."* The Commission finds that the above referenced letter adequately demonstrates that the area is not considered a future water supply by the Town of Brewster. Therefore, as provided by Section WR.2 of the RPP, the Commission finds that MPS WR.2.5 and WR2.6 do not apply.

WRF4. The project is located in the Herring River watershed. The Commission finds that the project meets or can be conditioned according to Water Resources Conditions WRC3 to meet Marine Water Minimum Performance Standards under Section WR.3:

a) The trophic health of the Herring River estuary is presently being evaluated under the Massachusetts Estuaries Project (MEP). A critical nitrogen load or Total Maximum Daily Load (TMDL) has not been published. Therefore, the Commission finds that MPS WR3.1, WR3.2, WR3.3 & WR3.4 do not apply.

b) According to MPS WR3.5, an Applicant may be required to make a monetary contribution toward the development or implementation of appropriate nitrogen management strategies in watersheds where the critical nitrogen load has not been determined, not to exceed $20 per gallon of design flow of wastewater per day. The wastewater design flow for the 20-unit subdivision is 6,600 gpd, limiting the monetary contribution to $132,000. The Commission finds that a monetary contribution of $88,000 is an appropriate monetary contribution for the development of nitrogen management strategies in the Herring River watershed.

c) The project has wastewater design flows of less than 10,000 gpd. Therefore, the Commission finds that MPS WR3.6, which relates to wastewater treatment facilities, does not apply.

WRF5. The project is located in the White Pond watershed. The project parcel is located over 1,000 feet from White Pond. The project's wastewater disposal area is located well beyond the 300-foot pond setback requirement. Therefore, the Commission finds that Fresh Surface Water Minimum Performance Standards under Section WR.4 have been met.

WRF6. The project is not located in a Water Quality Improvement Area. Therefore, the Commission finds that Minimum Performance Standards under Section WR.5 do not apply.

WRF7. According to MPS WR6.9, projects with wastewater design flows greater than 2,000 gpd that require advanced treatment efficiencies greater than that allowed by a Department of Environmental Protection permit to meet Minimum Performance Standards, shall demonstrate operation, monitoring and compliance through an Operation, Monitoring and Compliance agreement between the Board of Health and the Cape Cod Commission. The project meets Commission MPS WR1.1 and WR2.1 referenced in Findings WRF.2 and WRF.3 respectively based on a 25-ppm-N treatment efficiency recorded in the Provisional Permit issued by MADEP for the proposed FAST wastewater system. Therefore, the Commission finds that MPS WR6.9 does not apply.

WRF8. The Commission finds that the project meets or can be conditioned to meet Stormwater Minimum Performance Standards under Section WR.7 according to Water Resources Conditions WRC4, WRC5 and WRC6:

a) The project results in no new direct discharges of untreated stormwater to surface waters or wetlands. Therefore, the Commission finds that the project meets MPS WR7.1.

b) The project manages all stormwater on site, consistent with MPS WR7.2. The Commission finds it appropriate to require that other provisions of MPS WR7.2 and requirements of MPS WR7.3 through WR7.11 be met as conditions of approval where applicable.

Coastal Resources Findings

CRF1. According to the May 20, 2011 revised project narrative submitted by Attorney Idman on behalf of Mr. Copelas, the proposed project *"is not located with nor does it involve coastal wetlands/resources or the 100-foot buffer thereto; or areas within 250 feet of mean high water [sic]."* The project site is located well inland of any of the coastal resources described and addressed by the RPP Coastal Resources section. The proposed project also does not involve any of the activities or resources described in the four Coastal Resources questions in the Scoping Checklist for New Development.

CRF2. Based on the information submitted for the record, a Commission Subcommittee found that the proposed project does not trigger any of the Limited DRI Scoping Checklist questions for New Development, nor does the project substantially deviate from the Coastal Resources MPS of the RPP or have significant impact upon the purposes and values identified in Section One of the Commission Act. Therefore, the RPP Coastal Resources section does not apply to the proposed project, and does not need to be included in the scope of DRI review.

Wetlands Findings

WETF1. The project does not trigger any of the Limited DRI Review checklist criteria for Wetlands (i.e. it does not involve alteration of any wetlands greater than 500 square feet; nor does it involve alteration of a 100 foot buffer to a wetland, and will not result in direct stormwater discharge to a wetland). As such, the proposed subdivision does not involve substantial deviation from the Minimum Performance Standards of the RPP and does not have significant impacts upon the purposes and values identified in Section One of the Act. As such,

the Commission finds through the Subcommittee that the RPP issue area of Wetlands does not need to be included in the DRI review scope.

Wildlife and Plant Habitat Findings

WPHF1. The proposed subdivision is located within a mapped Significant Natural Resources Area (SNRA) due to the presence of state-listed rare species habitat and because it is located within a public Wellhead Protection Area.

WPHF2. According to the Limited DRI Review Scoping Checklist for New Development, the project's location within mapped rare species habitat and SNRA and the proposed disturbance of land within SNRA indicate that Wildlife and Plant Habitat RPP issue area should be included in the scope of DRI review. As such, the Commission also finds through the Subcommittee that the proposed project may involve a substantial deviation from RPP Wildlife and Plant Habitat MPS, and may have significant impacts both quantitative and qualitative on the purposes and values identified by Section One of the Commission Act with respect Wildlife and Plant Habitat. As such, the Commission finds, through the Subcommittee that the RPP Wildlife and Plant Habitat section shall be included in the DRI review scope.

WPHF3. MPS WPH 1.1 requires applicants proposing to alter undeveloped areas to provide a Natural Resources Inventory (NRI) of the project site. LEC Environmental Consultants conducted site evaluations in late July and early August 2010 and submitted an NRI dated August 31, 2010 consistent with RPP requirements.

WPHF4. MPS WPH 1.2 requires that clearing of vegetation and alteration of natural topography be minimized and that specimen trees be protected. According to the NRI, the site does not contain any standing specimen trees. The Commission finds the proposed subdivision design clusters the development and site disturbance on 15 acres and preserves the remaining 40 acres as protected open space.

WPHF5. MPS WPH 1.3 requires that fragmentation of wildlife and plant habitat be minimized by providing greenways, wildlife corridors, and cluster or open space design that protects large unfragmented areas. The Commission finds that the project is designed to minimize the development area while protecting the remaining 70 percent of the site as open space. The Commission finds the open space parcel is to be located adjacent to conservation land and will preserve unfragmented habitat and wildlife travel corridors.

WPHF6. For DRIs within critical plant and wildlife habitat areas, MPS WPH 1.4 requires that applicants consult with the Massachusetts Natural Heritage Endangered Species Program (NHESP) for review and comment. DRIs that adversely affect the habitat of local populations of rare wildlife and plant habitat shall not be permitted. Projects may be permitted where an Applicant can demonstrate that the development will not adversely impact such habitat. The northeastern portion of the site falls within a NHESP mapped Priority/Estimated habitat area that extends from Elbow Pond, across Slough Road and along the site's frontage. According to NHESP correspondence, three plant species (Plymouth Gentian, Redroot, and Bladderwort) and three damselflies (Scarlet Bluet, New England Bluet, and Pine Barrens Bluet) protected under the Massachusetts Endangered Species Act regulations have been found in the vicinity of the site.

WPHF7. The Applicant submitted plans and correspondence to NHESP in February 2011, noting that the rare species are associated with Elbow Pond, located across Slough Road, and

that the project's work/disturbance area is over 200 feet away from Elbow Pond. It notes that approximately 140-180 feet of forested upland lies between the pond's bordering vegetated wetland and Slough Road.

It further notes that the rare plant species grow along the shores of coastal plain ponds such as Elbow Pond and are not found in the forested upland conditions on the project site. The correspondence explains that the damselflies are also associated with Elbow Pond, as they inhabit the water and shoreline area and surrounding woody vegetation that runs parallel to the shoreline depending on the stage of their life cycle.

In a letter dated April 11, 2011, NHESP determined that as proposed the project will not involve a prohibited "take" of rare species and requires no further review by the agency. The Commission finds that such determination satisfies the requirements of MPS WPH 1.4 to demonstrate that the proposed development will not adversely impact rare wildlife and plant habitat.

WPHF8. MPS WPH 1.5 prohibits development within 350 feet of a vernal pool and new stormwater discharge within 100 feet of a vernal pool. According to the NRI, the site does not contain any vernal pools, and therefore, the Commission finds this MPS does not apply.

WPHF9. MPS WPH 1.6 requires development on sites where an NRI has identified invasive plant species to provide an invasive species management plan. According to the NRI, no invasives were found on the site. As such, the Commission finds that is MPS does not apply.

Open Space Findings

OSF1. The project's location within mapped rare species habitat and SNRA and the proposed disturbance of land within SNRA are factors listed on the Limited DRI Review Checklist for New Development that indicate the Open Space Regional Policy Plan issue area should be included in the scope of DRI review. As such, the Commission finds through the Subcommittee that the proposed project may involve a substantial deviation from RPP Open Space MPS, and may have significant impacts both quantitative and qualitative on the purposes and values identified by Section One of the Commission Act with respect to open space. As such, the Commission finds, through the Subcommittee that the RPP Open Space section shall be included in the DRI review scope.

OSF2. DRIs located within SNRA are required under MPS OS1.1 to cluster the development away from sensitive resources and maintain a continuous corridor to preserve wildlife habitat. The Commission finds that the proposed subdivision lots and associated development is to be clustered on approximately 15 acres of the 55 acre site, with approximately 40 acres protected as open space, and therefore meets MPS OS1.1.

OSF3. MPS OS 1.2 requires that preserved open space within proposed developments be contiguous and interconnecting with adjacent open space and subject to Article 97 of the Massachusetts Constitution or similar conservation mechanism. The Commission finds that the proposed project complies with this standard by providing approximately 40 acres of contiguous open space connected to existing open space, and which will be protected through donation to either the Town of Brewster for conservation purposes or to a non profit land/conservation trust.

OSF4. Projects located within SNRA are required under MPS OS 1.3 to provide permanently restricted upland open space at a 2:1 ratio of Open Space to Developed Area. According to the application, the project's Developed Area is approximately 15 acres. The open space requirement is approximately 30 acres. As noted in Open Space Findings OSF2 and OSF3, approximately 40 acres, located primarily on west/southwest portion of the site, will be permanently protected. The Commission finds that the open space amount proposed by the Applicant exceeds the RPP requirements.

OSF5. MPS OS 1.4 requires that significant natural resources, including critical plant and wildlife habitat, be protected. As discussed in Findings WPHF5 and WPHF6-WPHF9, the Commission finds that this project is consistent with this standard.

OSF6. MPS OS 1.5 requires residential subdivisions to be designed as clusters unless inconsistent with local bylaws. The Commission finds the proposed subdivision is designed to cluster the residential lots on approximately 15 acres, while protecting the remainder of the site as open space.

OSF7. MPS OS 1.6 requires that where development is proposed adjacent to land held for conservation or preservation purposes, the development be configured so as to prevent adverse impacts to these lands and maximizes contiguous open space. The Commission finds that the subdivision is configured so that the development area is clustered on approximately 15 acres, with approximately 40 acres protected as open space that connects to adjacent existing open space areas, thus minimizing impacts to such land and complying with the standard.

OSF8. The Applicant's representatives indicated at the June 15, 2011 public hearing that the Applicant would allow public access along Old Brewster-Harwich Road to the project's proposed open space. The Commission finds that making protected open space permanently accessible to the public could be a project benefit as it exceeds the requirements of the open space Minimum Performance Standards.

Transportation Findings

TF1. The Scoping Checklist for New Development contains four Transportation-related questions, two of which ask: *"[w]ill the project generate more than 250 new daily trips."* Commission Transportation staff analyzed the Traffic Impact and Access Study (TIAS) (dated 4/12/10) and the August 26, 2010 TIAS update submitted by the Applicant's consultants, Vanasse Hangen Brustlin, Inc. (VHB). As outlined in the Institute of Transportation Engineers (ITE) *Trip Generation,* Eighth Edition, 2008, the unadjusted traffic impacts of the proposed single-family detached residential subdivision are shown in the table below:

Proposed Development	Morning Peak Hour[1]	Afternoon Peak Hour[1]	Daily[1]
20 Lots – Single family detached homes	24	25	237

[1] Based on ITE Land Use Code 210, *Single-family detached housing*

Based on the trip generation of a 20-lot residential subdivision, the Commission finds the project will not generate more than 250 daily trips and therefore the proposed project is not anticipated to have a significant congestion impact on the roadway networks.

TF2. The third transportation question in the New Development Scoping Checklist is *"[d]oes the project have direct access on or does the project directly abut a regional roadway."* The

project will have access onto Slough Road through construction of a new subdivision road, Windrift Lane. According to the Cape Cod Metropolitan Planning Organization (MPO) functional classification, Slough Road is considered a regional roadway. The intent of this Scoping Checklist question is to ensure that all projects meet MPS TR1.8 (*Sight Distance Requirements*). MPS TR 1.8 requires all Developments of Regional Impact to meet and maintain acceptable sight distances at all access and/or egress locations. The following stopping sight distances were measured and documented by VHB in the April 20, 2010 TIAS:

STOPPING SIGHT DISTANCE		
Traveling	Required	Measured
Northbound	370'	580'
Southbound	420'	500'

Commission staff confirmed these figures through on-site measurement. The Commission finds that the measured stopping sight distance on Slough Road at the proposed Windrift Lane satisfies the minimum requirements set forth by the American Association of State Highway and Transportation Officials (AASHTO) and satisfies MPS TR1.8. Therefore the Commission does not expect this project to cause a degradation in public safety.

TF3. The fourth and last transportation question in the Scoping Checklist for New Development is *"[w]ill the project generate more than 25 new peak hour trips at a high crash location."* A high crash location is defined as a location where three (3) or more crashes have occurred for three (3) consecutive years. The proposed project is estimated to generate 25 new trips in the project's Afternoon Peak Hour. However these 25 trips will be split at the subdivision roadway. The highest distribution of traffic will be to/from the south on Slough Road. Based on information contained in the TIAS, 16 vehicles will travel south on Slough Road during the afternoon peak hour. In addition, the TIAS did not identify any intersection experiencing 3 or more crashes per year within the study area. Therefore, the Commission finds that this project will not generate twenty-five (25) or more trips through a known high crash location.

TF4. Based on the information submitted, a Commission Subcommittee found that the proposed project does trigger the Limited DRI Scoping Checklist question relative to access onto a regional roadway. Slough Road does have adequate stopping sight distance at the location of the proposed subdivision road. A Commission Subcommittee found that this project meets the intent of the Scoping Checklist question. A Commission Subcommittee found that the project is not expected too exceed any other of the Limited DRI Scoping Checklist questions for New Development, nor does the project substantially deviate from the Transportation MPS of the RPP or have significant impact upon the purposes and values identified in Section One of the Commission Act. Further, a Commission Subcommittee found that the project, as described above, does not have a significant impact on the regional roadway and that the RPP Transportation issue area does not need to be included in the DRI review scope.

Hazardous Waste Management Findings

HWMF1. The Scoping Checklist for New Development includes questions concerning a project's potential to use, handle, generate, treat, or store Hazardous Wastes. MPS WM1.5 requires that *"[a]ny development or redevelopment that uses, handles, generates, treats, or stores Hazardous Waste..."* be in compliance with the state's Hazardous Waste regulations. The proposed project is a residential subdivision of currently vacant land located in an existing Wellhead Protection Area. The Applicant's project narrative includes a statement that the

project will not generate Hazardous Wastes, but provides no other information. The Commission Subcommittee found that because the project is a residential subdivision where the Applicant will not construct the houses that the types of Hazardous Wastes generated is likely to be relatively limited. As such, the Subcommittee found that DRI review under the RPP Hazardous Waste section was not warranted.

Solid Waste Management Findings

SWMF1. A Commission Subcommittee found that a significant amount of solid waste (stumps, brush, wood chips, etc) would be generated from land-clearing activities. Given this, the Subcommittee found that the project may substantially deviate from the Solid Waste/Recycling MPS of the RPP or may have significant impact upon the purposes and values identified in Section One of the Commission Act. Further, a Commission Subcommittee found that DRI review under the RPP Solid Waste/Recycling section is warranted, to address the land-clearing wastes.

Energy Findings

EF1. Based on the information submitted for the record, a Commission Subcommittee found that the proposed project does not trigger any of the Limited DRI Scoping Checklist questions for New Development, nor does the project substantially deviate from the Energy MPS of the RPP or have significant impact upon the purposes and values identified in Section One of the Commission Act. Further, a Commission Subcommittee found that the project does not have a significant impact on Energy resources, and that the RPP Energy section does not apply, and therefore does not need to be included in the DRI review scope.

Affordable Housing Findings

AHF1. The Scoping Checklist for New Development poses three questions in the area of Affordable Housing. Two of these three questions are the same: *"[d]oes the project include 10 or more units/lots in a Town without an inclusionary bylaw that applies to this project."* As the Applicant is proposing a twenty lot, single-family subdivision (with two open space lots) in a Town without an inclusionary bylaw that would apply to this development, the Commission finds that the project shall be scoped for RPP Affordable Housing sections AH1 (*Promotion and Creation of Affordable Housing*) and AH2 (*Fair Housing/Equal Opportunity*). The Commission also finds that Section AH3 (*Community Participation*) applies to commercial developments and therefore excludes Section AH3 of the 2009 RPP from the scope of Limited review.

AHF2. As there will be twenty (20) house lots, the Commission finds that the Applicant's proposal to donate two on site lots, identified as Lot 7 and Lot 17 on the *Definitive Subdivision Plan of Windrift Acres in Brewster, MA* prepared for Peter Copelas by Down Cape Engineering dated April 12, 2010 (revised 8/25/10), to the Town of Brewster or another qualified, experienced entity, as determined by Commission staff, after consultation with the Applicant and the Town of Brewster, satisfies the 10% affordability requirement of MPS AH 1.2 (*Ten-percent Requirement for Subdivisions of 10-plus Lots*) and MPS AH 1.4 (*Calculation of Affordable Units).*

AHF3. The Commission finds that compliance with the remaining applicable MPS in Sections AH1 and AH2: AH 1.8 (*Timing and Mix of Units*), AH 1.9 (*Size and Integration of the Affordable Units*), AH 1.10 (*ENERGY STAR requirement*), AH 1.11 (*Pricing and Rents of the Affordable Units*), AH 1.12 (*Permanent Affordability*), AH 1.13 (*Monitoring of Affordability*), MPS AH 2.1 (*Non-discrimination),* AH 2.2 (*Visit-ability and/or Accessibility*), and MPS AH 2.3

(Affirmative Marketing and Selection of Buyers/Tenants) will be the responsibility of the entity or organization that holds title to the lots.

AHF4. The Commission finds that MPS AH 1.1, 1.3, 1.5, 1.6, 1.7, 1.14, 2.4, and all of RPP Section AH 3 are not applicable to the proposed project.

Heritage Preservation Findings

HPF1. The Scoping Checklist for New Development includes questions that ask if there is a building or site listed on the National Register of Historic Places or within a National or Local Historic District. Another question on the Checklist asks if there is *"a building or structure on the property which is more than 75 years old or known to be historically significant."* The proposed project is the subdivision of vacant, wooded land in West Brewster into 20 residential house lots, and with 2 lots reserved as open space. The project site is not located within any local or State Historic Districts. The proposed subdivision is adjacent to the Old Kings Highway Historic District in Dennis, but the Applicant proposes to set aside on-site open space areas along that border. As such, a Commission Subcommittee found that RPP MPS dealing with Historic Preservation, HPCC1.1 (*Historic Structures*) and HPCC1.2 (*Cultural Landscapes*) do not apply in this case.

HPF2. The Scoping Checklist also includes a question, which asks if any part of the site is *"known to be archeologically sensitive, including areas within 100 feet of a wetland or waterbody."* As the site is currently undisturbed, there is a concern that land clearing and construction activities could impact potential archeological resources. Included with the Applicant's information is a copy of a June 4, 2010 letter from Edward Bell, Technical Services Division, Massachusetts Historical Commission (MHC), which states *"[t]he project area does not include any properties in the MHC's inventory of Historic and Archeological Assets of the Commonwealth, nor any properties included in the State Register of Historic Places."* Based on this, a Commission Subcommittee found that MPS HPCC1.3 (*Archeological Sites*) does not apply to this project.

HPF3. Based on the information submitted for the record, a Commission Subcommittee found that the proposed project will not substantially deviate from the Heritage Preservation MPS of the RPP or have significant impacts upon the purposes and values identified in Section One of the Commission Act. Further, a Commission Subcommittee found that the RPP sections on preservation of historic structures and archeological sites do not need to be included in the Limited DRI review scope.

Community Character Findings

CCF1. The Scoping Checklist for New Development includes three questions that relate to site and building design. One questions deals with the massing of buildings; one with whether the project is consistent with the Commission's Design Manual. The third question is whether the development is *"proposed within a distinctive area, such as a historic district, along a scenic road, cultural landscape, regional road or shoreline."* Slough Road is classified as a regional roadway by the Cape Cod MPO. The project site is adjacent to the Old Kings Highway Historic District, but will maintain an open space area along that border. Also, no buildings are proposed as part of the subdivision, and the design and configuration of the subdivision appears to be clustered.

CCF2. Included with the Applicant's submissions is a 12/16/11 Memo from Dan Ojala, Down Cape Engineering, Inc. which shows a technical cut of a single proposed pole-mounted fixture to

be used to illuminate the intersection of Slough Road and the proposed new subdivision road to be called Windrift Lane. The 12/16/11 Memo also provides a foot-candle plan. Based on the information submitted for the record, including testimony provided by the Applicant's Attorney at the 6/15/11 public hearing, the proposed luminaire will be fully shielded/full cutoff.

CCF3. Based on the information submitted for the record, a Commission Subcommittee found that although the proposed project is adjacent to the Old Kings Highway Historic District, and Slough Road is a regional roadway, the project does not substantially deviate from the Community Character/Site Design/Building Design MPS of the RPP or have significant impact upon the purposes and values identified in Section One of the Commission Act. Further a Commission Subcommittee found that the RPP Community Character section does not apply, and does not need to be included in the DRI review scope.

CONCLUSION

Based on the above findings, the Commission hereby concludes:

1. That the scope of the Limited DRI Review shall include the RPP issue areas of Affordable Housing, Open Space, Water Resources, Wildlife and Plant Habitat, and Solid Waste Management.

2. That upon satisfaction of the conditions identified in this decision, the proposed project is consistent with the 2009 Regional Policy Plan (as amended).

3. The project can be found consistent with Brewster's Local Comprehensive Plan as outlined in Finding GF3. The proposed project can be found consistent with Brewster's local development by-laws/ordinances, as outlined in Finding GF4.

4. The project is located within Brewster's Water Resources Protection District of Critical Planning Concern, and household uses and subdivisions are exempt from this DCPC, as noted by Finding GF5. As such, the proposed project can be found to be consistent with this criterion.

5. That the probable benefits of the proposed project are greater than the probable detriments. This conclusion is supported by Finding GF6.

CONDITIONS

The Commission hereby approves, with conditions, the DRI/Limited DRI application of Peter Copelas as represented by Attorney Idman for the proposed residential subdivision project to be located off Slough Road, West Brewster, MA provided the following conditions are met:

General Conditions

GC1. This decision is valid for a period of 7 years and local development permits may be issued pursuant hereto for a period of 7 years from the date of this written decision.

GC2. The Applicant shall obtain all necessary federal, state, and local permits for the proposed project.

GC3. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, and remain in compliance herewith, shall be deemed cause to revoke or modify this decision.

GC4. No development work, as the term "development" is defined in the Cape Cod Commission Act, shall be undertaken until all appeal periods have elapsed or, if such an appeal has been filed, until all judicial proceedings have been completed.

GC5. Prior to issuance of a Preliminary Certificate by the Cape Cod Commission for any proposed "development" as defined by the Cape Cod Commission Act and as approved herein, the Applicant shall submit final plans as approved by state, federal, and local boards for review by Commission staff to determine their consistency with this decision. If Commission staff determines that the final plans are not consistent with those plans approved as part of this decision, the Commission shall require that the Applicant seek a modification to this decision in accordance with the Modification section of the Commission's *Enabling Regulations* in effect at the time the modification is sought.

GC6. All development and redevelopment shall be constructed in a manner consistent with the following plans and other information attached hereto as Exhibit A:

- *Definitive Subdivision Plan of Windrift Acres in Brewster, MA*, prepared for Peter Copelas. Dated April 12, 2010. Revised 8/25/10 (convert 2 proposed lots to open space). By Down Cape Engineering, Inc.

- *Road Profile Plan to Accommodate Definitive Subdivision Plan of Windrift Acres in Brewster, MA*, prepared for Peter Copelas. Dated April 12, 2010. Revised 8/25/10 (convert 2 proposed lots to open space). By Down Cape Engineering, Inc. Profile Sheets 1-5, Two in Plan View, Two in Profile View, and Road Profile Plan Details.

- *Conceptual Landscape to Accompany Definitive Subdivision Plan of Windrift Acres in Brewster, MA*, prepared for Peter Copelas. Dated April 12, 2010. Revised 8/25/10 (convert 2 proposed lots to open space). By Down Cape Engineering, Inc.

GC7. Prior to conveyance of any lots, the Applicant shall obtain a Preliminary Certificate of Compliance from the Commission that states that all conditions in this decision pertaining to prior to lot conveyance have been met. Such Certificate of Compliance shall not be issued unless all applicable conditions have been complied with.

GC8. Prior to the issuance of a Building Permit for development, the Applicant shall obtain a Preliminary Certificate of Compliance from the Commission that states that all conditions in this decision pertaining to issuance of a Building Permit have been met. Such Certificate of Compliance shall not be issued unless all applicable conditions have been complied with.

GC9. Prior to issuance of a Certificate of Use/Occupancy, the Applicant shall obtain a Final Certificate of Compliance from the Commission that states that all conditions pertaining to issuance of a Certificate of Use/Occupancy have been met. Such Certificate of Compliance shall not be issued unless all applicable conditions have been complied with.

GC10. Prior to the issuance of a Preliminary or Final Certificate of Compliance, the Applicant shall provide written proof to the Commission that a copy of this decision has been provided to

the general contractor(s) at least thirty (30) calendar days prior to commencement of construction.

GC11. The Applicant shall notify Commission staff in writing at least thirty (30) calendar days prior to its intent to seek a Preliminary and Final Certificate of Compliance. Such notification shall include a list of key contact(s), along with their telephone numbers, mailing addresses, and email addresses, for questions that may arise during the Commission's compliance review. Commission staff shall complete an inspection under this condition, if needed, and inform the Applicant in writing of any deficiencies and corrections needed. The Commission has no obligation to issue any Certificate of Compliance unless and until all conditions are complied with.

GC12. The Applicant agrees to allow Commission staff to enter onto the property, which is the subject of this decision, after reasonable notice to the Applicant, for the purpose of determining whether the conditions contained in this decision including those linked to each Preliminary and Final Certificate of Compliance have been met.

Water Resources Conditions

WRC1. Prior to issuance of a Preliminary Certificate of Compliance by the Commission, and prior to issuance by the Town of Brewster of any Building Permit, the Applicant shall identify the locations of drinking water wells on abutting properties within 400 feet of the project site. Well locations and impact assessments shall be reported in writing to Commission staff for review and approval, and the project's septic system and other sources of contamination shall be sited to avoid adverse impacts to any identified wells consistent with MPS WR1.2.

WRC2. Prior to issuance of a Preliminary Certificate of Compliance by the Commission, and prior to issuance by the Town of Brewster of any Building Permit, the Applicant shall submit to Commission staff all necessary approvals and permits for the FAST wastewater system. Wastewater design flows shall not exceed 6,600 gpd.

WRC3. Prior to issuance of the Preliminary Certificate of Compliance by the Commission, and prior to issuance by the Town of Brewster of any Building Permit, the Applicant shall contribute $88,000 towards development of nitrogen management strategies in the Herring River watershed consistent with MPS WR3.5. The contribution shall be held in escrow by the Barnstable County Treasurer/Commission and shall be disbursed at the discretion of the Executive Director of the Commission for its intended purpose.

WRC4. To ensure compliance with MPS WR7.10 prior to issuance of any Final Certificate of Compliance by the Commission, and prior to issuance by any Certificate of Use/Occupancy by the Town of Brewster, as-built grading & drainage plans consistent with approved plans shall be submitted to Commission staff for review and approval by Commission staff.

WRC5. To ensure compliance with MPS WR7.10, one (1) year following construction of the drainage system, a licensed professional engineer (PE) shall inspect the drainage system and submit a letter to the Commission certifying whether the system was installed and is functioning as designed. If the system is not functioning as designed, a written plan and schedule for returning the stormwater system to compliance shall be submitted for Commission staff review and approval. The plan shall contain a schedule for subsequent inspections following corrective actions and certifications by a professional engineer whether the system is functioning as designed.

WRC6. Information submitted under conditions WRC4 and WRC5 shall be stamped by a licensed professional engineer (PE) certifying that plans meet MPS WR7.1, WR7.2, & WR7.4.

WRC7. Any emergency generator used at the site or brought to the site in connection with the proposed project shall be limited to not more than 275 gallons or less of liquid petroleum based fuels or shall be powered by compressed gas fuels to comply with Finding WRF3 and with MPS WR2.2.

Open Space Conditions

OS1. Prior to the issuance of Preliminary Certificate of Compliance by the Commission, and prior to conveyance of any lots, and prior to issuance of the Town of Brewster of a Building Permit the Applicant shall donate the open space identified on *Definitive Subdivision Plan of Windrift Acres in Brewster, MA*, prepared for Peter Copelas, dated April 12, 2010, revised 8/25/10 (convert 2 proposed lots to open space), by Down Cape Engineering, Inc. as Open Space Parcel either to the Town of Brewster to be held under the care, custody, and control of the Conservation Commission or to an approved land/conservation trust. Commission Counsel shall approve the form and content of the deed prior to recording.

Solid Waste Management Conditions

SWMC1. Prior to issuance of the Preliminary Certificate of Compliance by the Commission, and prior to issuance of the first Building Permit by the Town of Brewster, the Applicant shall submit for Commission staff review and approval a written plan or protocol to address management of solid waste (stumps, brush, wood chips, etc) generated from land-clearing activities. This plan or protocol shall include an estimate of the amount of land-clearing wastes to be generated, and methods for removal and recycling or disposal, including the final destination facility. Unless the Commission staff issues a written approval of the plan/protocol submitted by the Applicant, the Preliminary Certificate shall not be issued.

Affordable Housing Conditions

AHC1. After construction of the subdivision road and installation of project related utilities, but prior to the issuance of a Preliminary Certificate of Compliance by the Commission and prior to issuance of the first Building Permit by the Town of Brewster, the Applicant shall provide to Commission Counsel for review and approval drafts deeds for the two lots that will require the entity or organization that holds title to the lots to comply with the following Minimum Performance Standards: AH 1.8 (*Timing and Mix of Units*), AH 1.9 (*Size and Integration of the Affordable Units*), AH 1.10 (*ENERGY STAR requirement*), AH 1.11 (*Pricing and Rents of the Affordable Units*), AH 1.12 (*Permanent Affordability*), AH 1.13 (*Monitoring of Affordability*), AH 2.1 (*Non-discrimination*), AH 2.2 (*Visit-ability and/or Accessibility*), and AH 2.3 (*Affirmative Marketing and Selection of Buyers/Tenants*).

AHC2. After construction of the subdivision road and installation of project related utilities, but prior to the issuance of a Preliminary Certificate of Compliance by the Commission and prior to issuance of the first Building Permit by the Town of Brewster, the Applicant shall donate the two lots to the designated entity or organization. The deeds shall be in the form approved by Commission Counsel as required in Condition AHC1. The Applicant shall provide copies of both the recording information and the deeds to the Commission as evidence of satisfaction of this condition.

SIGNATURES

Peter Graham, Commission Chair

8/4/11
Date

COMMONWEALTH OF MASSACHUSETTS

Barnstable, ss

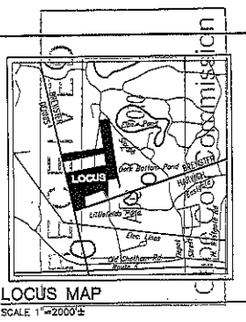
August 4, 2011

Before me, the undersigned notary public personally appeared Peter Graham in his capacity as Chairman of the Cape Cod Commission, whose name is signed on the preceding document, and such person acknowledged to me that he signed such document voluntarily for its stated purpose. The identity of such person was proved to me through satisfactory evidence of identification, which was [_] photographic identification with signature issued by a federal or state governmental agency, [_] oath or affirmation of a credible witness, or [✓] personal knowledge of the undersigned.

Gail P. Hanley
Notary Public

My Commission Expires: 10.13.11

12pm



LOCUS MAP

SCALE 1"=2000'±

ASSESSORS MAP 51 PARCELS 3,4,6, 9-11, 47, &74
LOCUS AREA = 54.91 ACRES

LOCUS IS WITHIN FEMA FLOOD ZONE C AS SHOWN ON COMMUNITY PANEL #250003 0015D DATED 6/19/1985
DATUM: NAVD 88

ZONING SUMMARY

ZONING DISTRICT: RR RURAL RESIDENTIAL DISTRICT

MIN. LOT SIZE	100,000 S.F.
MIN. LOT FRONTAGE	200'
MIN. LOT WIDTH	180' AT FRONT SETBACK
MIN. FRONT SETBACK	40'
MIN. SIDE SETBACK	25'
MAX. BUILDING HEIGHT	30'
MAX. BLDG. COVERAGE	15%

SITE IS LOCATED WITHIN STATE ZONE II WATER PROTECTION DISTRICT

SOIL TYPE = CARVER COARSE SANDS

TOWN WATER TO DEPT. SPECIFICATIONS PLANNED, SHARED SEPTIC SYSTEM PLANNED.

FOR REGISTRY USE

BREWSTER PLANNING BOARD

APPROVAL UNDER THE SUBDIVISION CONTROL LAW IS REQUIRED

DATE: _____

NO DETERMINATION AS TO COMPLIANCE WITH THE ZONING ORDINANCE REQUIREMENTS HAS BEEN MADE OR INTENDED BY THE ABOVE ENDORSEMENT.

I, _____ CLERK OF THE TOWN OF BREWSTER, CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN WAS RECEIVED AND RECORDED IN THIS OFFICE AND THAT NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT FOLLOWING THE RECEIPT AND RECORDING OF SAID NOTICE.

_____ DATE _____ TOWN CLERK

RECORD OWNER/APPLICANT:

PETER COPELAS
96 MAYFLOWER TERRACE
SOUTH YARMOUTH, MA 02664

REFERENCES

DEED BOOK 2548 PAGE 345
DEED BOOK 3605 PAGE 275
PLAN BOOK 255 PAGE 63
LC PLAN 39519A
MAP OF LOWER TIER OF DIVISION OF 1760

NOTES:

LAND IS HEREBY SUBDIVIDED UNDER SECTION 179-35 CLUSTER RESIDENTIAL DEVELOPMENT OF THE TOWN OF BREWSTER BYLAW AND NO ADDITIONAL BUILDING LOTS ARE TO BE CREATED THROUGH FUTURE LAND DIVISIONS WITHIN THIS CLUSTER RESIDENTIAL DEVELOPMENT.
CLUSTER FRONTAGE: 50' MIN.
5,000 SF MIN. LOT AREA
SETBACKS REDUCE TO 1/2 OF RR SETBACKS EXCEPT WHERE ABUTTING ADJACENT PROPERTIES. WHERE FULL SETBACKS APPLY.

THE PROPERTY SHOWN ON THIS PLAN IS ASSESSED TO AND CLAIMED BY PETER A. COPELAS UNDER THE FOLLOWING DEEDS:

DEED BOOK 2548 PAGE 346
DEED BOOK 3605 PAGE 275

THIS PLAN AND THE ACCOMPANYING CERTIFICATIONS DO NOT CONSTITUTE A CERTIFICATION OF TITLE TO THE PROPERTY DISPLAYED HEREON. THE OWNERS OF THIS PROPERTY AND OF ABUTTING PROPERTY ARE SHOWN ACCORDING TO CURRENT TOWN RECORDS.

ALL MONUMENTS SHOWN ARE AS LOCATED BY INSTRUMENT SURVEY BY DOWN CAPE ENGINEERING, INC.

CEMENT BOUNDS TO BE SET ON ALL ROAD POINTS OF CURVATURE, POINTS OF TANGENCY, AND AT POINTS DETERMINED REQUIRED BY THE PLANNING BOARD.

BASIS OF NORTH AND COORDINATES ARE THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM, NAD83 BASED ON GPS OBSERVATIONS UTILIZING THE MTS RTK NETWORK.

NOTE: PRELIMINARY PLAN FILED ON: 8-22-2009 (REF. MGL CH 40A SEC. 6) FOR ZONING ISSUES.
DEFINITIVE PLAN FILED ON: 4-20-2010

I CERTIFY THAT ALL SURVEYING CONFORMS TO THE TECHNICAL STANDARDS FOR PROPERTY SURVEYS OF THE AMERICAN CONGRESS ON SURVEYING AND MAPPING, AND THAT THIS PLAN WAS PREPARED UNDER MY DIRECT SUPERVISION.

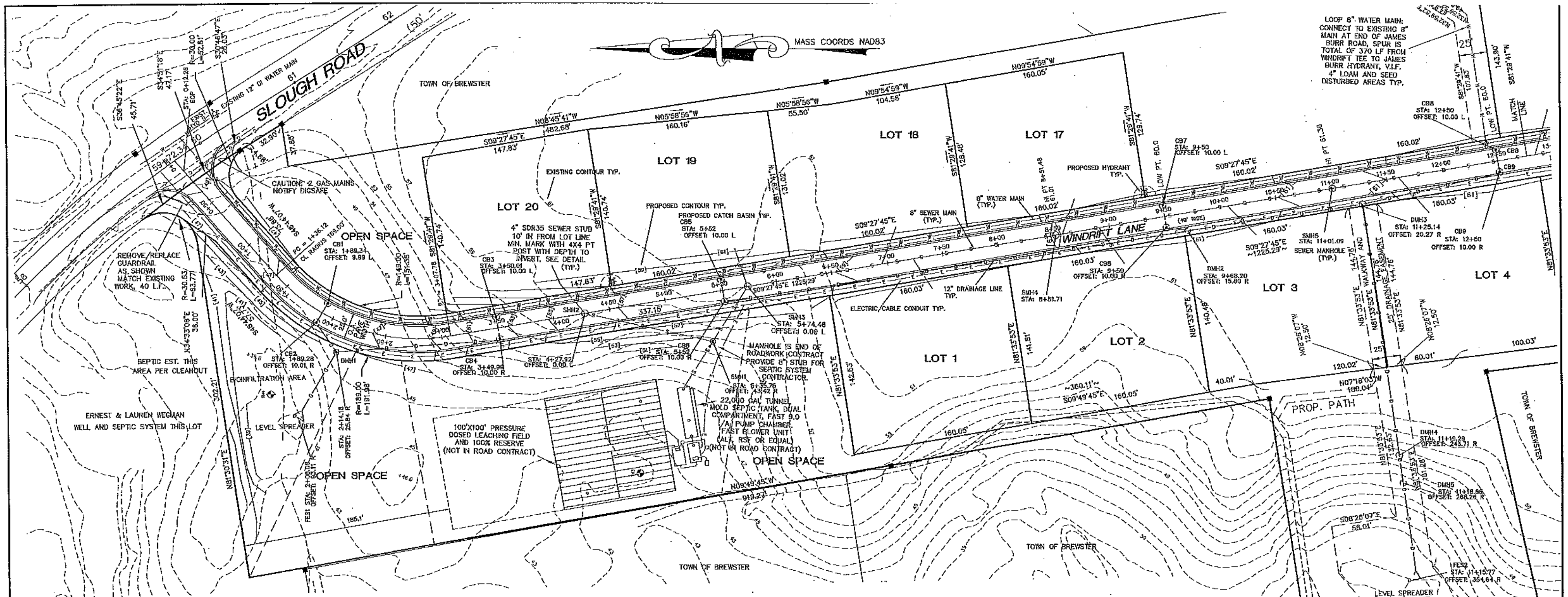
DANIEL A. OJALA No. 40980 REGISTERED PROFESSIONAL LAND SURVEYOR

8-25-10 DATE DANIEL A. OJALA, P.L.S.

AREAS:

AREA OF LOTS:	512,040± SF	11.756 AC.	21.41%
AREA OF ROAD:	82,485± SF	1.894 AC.	3.45%
OPEN SPACE:	1,797,303 ± SF	41.260 AC.	75.14%
TOTAL LAND:	2,391,828± SF	54.910 AC.	100.00%

ELBOW POND
(A GREAT POND)
N 2723597.5997
E 1030381.2197
SLOUGH ROAD
(50' - PUBLIC)
WINDRIFT LANE
(50' WIDE)
LOT 1 22,723 Sq Ft 0.52 Ac.
LOT 2 22,559 Sq Ft 0.52 Ac.
LOT 3 22,713 Sq Ft 0.52 Ac.
LOT 4 23,660 Sq Ft 0.54 Ac.
LOT 5 24,700 Sq Ft 0.57 Ac.
LOT 6 21,821 Sq Ft 0.50 Ac.
LOT 7 22,182 Sq Ft 0.51 Ac.
LOT 8 32,600 Sq Ft 0.75 Ac.
LOT 9 29,567 Sq Ft 0.68 Ac.
LOT 10 37,702 Sq Ft 0.87 Ac.
LOT 11 41,074 Sq Ft 0.94 Ac.
LOT 12 31,671 Sq Ft 0.73 Ac.
LOT 13 27,150 Sq Ft 0.62 Ac.
LOT 14 20,525 Sq Ft 0.47 Ac.
LOT 15 24,163 Sq Ft 0.55 Ac.
LOT 16 23,378 Sq Ft 0.54 Ac.
LOT 17 20,657 Sq Ft 0.47 Ac.
LOT 18 20,560 Sq Ft 0.47 Ac.
LOT 19 21,741 Sq Ft 0.50 Ac.
LOT 20 20,802 Sq Ft 0.48 Ac.
PARCEL A (OPEN SPACE) 1,797,303 Sq Ft 41.26 Ac.
OPEN SPACE PART OF PARCEL A
TOWN OF BREWSTER MAP 51 PCL 46 (NEW MAP 9 PCL 12)
TOWN OF BREWSTER DB 12018 PG 81 MAP 51 PCL 2 (NEW MAP 9 PCL 14) PB 233 PG 145 & PB 546 PG 74
TOWN OF BREWSTER DB 12018 PG 81 MAP 51 PCL 1 (NEW MAP 9 PCL 15) PB 546 PG 74
TOWN OF BREWSTER DB 11114 PG 228 MAP 38 PCL 93 (NEW MAP 9 PCL 16)
TOWN OF BREWSTER MAP 51 PCL 9-9 (MAP 9 PCL 21)
TOWN OF BREWSTER MAP 51 PCL 9-8 (MAP 9 PCL 20)
HABITAT FOR HUMANITY DB 22249 PG 185 MAP-51 PCL 9-6 (NEW MAP 9 PCL 19)
CHRISTOPHER & KAREN McGRATH DB 21873 PG 28 MAP 51 PCL 9-12 (MAP 9 PCL 10) PB 397 PG 3
FRANCIS C. ADAMS DB 7441 PG 286 MAP 51 PCL 114 (MAP 9 PCL 5)
DANIEL R. OZON DB 22613 PG 21 MAP 51 PCL 13 (MAP 9 PCL 4)
PETER & SUSAN NIELSEN DB 7441 PG 315 MAP 51 PCL 12 (MAP 9 PCL 3)
BELMONT PARK RD. (40' WIDE)
TOWN OF BREWSTER DB 7309 PG 85 MAP 51 PCL 100 (NEW MAP 19 PCL 4) PB 481 PG 38
CAPE COD FISH & GAME CLUB, INC. LC CERT.# 136693 MAP 51 PCL 45 (NEW MAP 8 PCL 3) LCP 39519A
TOWN OF BREWSTER C/O CONSERVATION COMMISSION "MARIE A. MURRILL LYNCH MEMORIAL CONSERVATION AREA" DB 5498 PG 305
MAP 51 PCL 48 (NEW MAP 8 PCL 2)
TOWN OF HARWICH MAP 77 PCL N5-1 PB 438 PG 60
HEIRS OF CYRUS BAKER HARWICH MAP 77 PCL N4 PB 438 PG 60
JULIUS F. NUGENT III DB 18532 PG 131 HAR MAP 77 PCL N5-2
CAPE COD FISH & GAME CLUB, INC. HARWICH MAP 77 PCL A2 LCP 39519A
OLD BREWSTER HARWICH ROAD
OLD BREWSTER-HARWICH ROAD 8'-11' WIDE
EDGE OF OVERGROWN CRANBERRY BOG
OVERGROWN THIS AREA ROADWAY CUT CLEARLY VISIBLE
VEH. TRACKS IN CLEARED AREA
PATH INTO CLEARED AREA
B' WIDE DIRT RD.
OLD HARBOR POINT ROAD
9' DIRT RD.
JAMES BURR ROAD (40' WIDE)
OLD STAGE RD.
NORTH SIDELINE SETUCKET RD.
TOWN LINE (BREWSTER) TOWN LINE (DENNIS)
PATH DOWN TOWN LINE
DENNIS WATER DISTRICT
PB 436 PG 56
MASS COORDS NAD83
500 SF ± FLAGGED WETLAND 0.01 ACRE ±
WASHBURN BOG POND
AKA GRASSY POND TOWN OF HARWICH 6015/59
N 2722813.6487 E 1026740.4654
N 2722830.2130 E 1030139.2341
N 2722468.8250 E 1030184.3912
N 2721945.4546 E 1030117.7424
N 2721965.8468 E 1030297.3404
N 2721352.8419 E 1030328.5605
N 2720936.8015 E 1029200.5405
N 2723022.8974 E 1030115.1573
N 2723412.533 E 1030207.468
N 2724082.3224 E 1030276.6945
1390.53'
1368.04' C.B TO C.B.
5' ± PATH
OPEN SPACE
S77°30'00"W 1362.83'
N78°37'44"E 1321.47'
S79°28'35"W 451.50'
S72°17'03"E 270.36'
S72°43'51"W 54.46'
N 66°45'01"E
CL RD. TO TOWN LINE BOUND/DISC IN BOG 96.43'
S85°50'39"W 672.28'
N13°46'24"W 1538.12'
S74°22'05"E
S15°37'55"W
N15°37'55"E
S20°04'37"E 135.40'
S20°49'27"E 275.79'
S72°43'51"W 107.47'
S25°16'49"E 324.38'
S05°17'43"E
S 09°58'07"E 45.79'
N 03°03'03"E 37.53' WATER ESMNT.
S 45°35'56"W 169.75'
N 45°35'56"E 169.75'
N 22°31'14"E TIE 30.33'
N 81°20'43"E
N 13°46'24"W 1654.80'
N 14°46'24"W 986.65'
N 78°37'44"E 1321.47'
N 13°46'24"W 1538.12'
N 72°43'51"W 107.47'
N 66°45'01"E 96.43'
S 85°50'39"W 672.28'
S 74°22'05"E 65.00'
S 15°37'55"W 160.00'
N 15°37'55"E 156.01'
S 20°04'37"E 135.40'
S 20°49'27"E 275.79'
S 72°43'51"W 107.47'
S 25°16'49"E 324.38'
S 05°17'43"E
S 09°58'07"E 45.79'
N 03°03'03"E 37.53'
N 81°33'53"E 42.53'
N 81°33'53"E 132.62'
N 81°33'53"E 144.78'
N 81°33'53"E 181.28'
N 81°33'53"E 141.51'
N 81°33'53"E 140.48'
N 81°33'53"E 191.10'
N 81°33'53"E 157.64'
N 81°33'53"E 149.04'
N 81°33'53"E 142.83'
N 81°33'53"E 131.02'
N 81°33'53"E 128.48'
N 81°33'53"E 129.74'
N 81°19'08"W 168.96'
N 89°49'37"W 219.27'
N 32°39'09"E 283.41'
N 32°39'09"E 253.94'
N 28°39'52"E 160.19'
N 28°39'52"E 160.19'
N 28°39'52"E 160.19



WINDRIFT LANE

PLAN VIEW

SCALE: 1" = 40'

NOTE: SEE NOTES ON OTHER SHEETS, ALL NOTES APPLY TO ALL SHEETS

REQUIRED INSPECTIONS: PER SEC. 290-35. INSPECTION AND CONTROL.

A. At the points hereinafter indicated, the construction of required and other improvements shall be inspected:

1. The installation of underground utilities, drainage and services shall be inspected by the respective agencies of the particular utilities, before the backfilling of trenches or other covering of structure.

2. The roadway and sidewalk subgrade shall be inspected by the Superintendent of Public Works prior to any further roadway construction.

3. Following the construction of the base course, the roadway shall be inspected by the Superintendent of Public Works.

4. Upon completion of the binder and surface courses and any shoulders, the roadway shall again be inspected by the Superintendent of Public Works.

5. Following the completion of all the improvements required by Article V, the subdivision shall be inspected by the Superintendent of Public Works and/or the Planning Board, or its designate.

B. Unless the approval of the work completed, including approval of materials used, to each of the above points has been given in writing, no further work shall be done.

C. All inspection shall be requested by the applicant at least forty-eight (48) hours in advance by notice to the respective individual listed above in Subsection A.

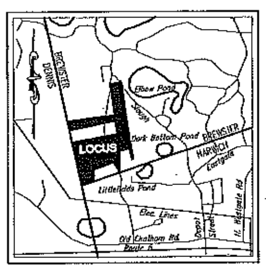
D. No inspections shall be made during the period between December 15 and the following April 1, except at the discretion of the Superintendent of Public Works.

E. For performance of the aforementioned inspection by the Superintendent of Public Works, the developer shall reimburse the town by the payment of an inspection fee as shown in the fee schedule.

LEGEND

- EXISTING CONTOUR
- EXIST. SPOT ELEV.
- PROPOSED CONTOUR
- PROPOSED SPOT EL.
- TEST HOLE
- SLOPE OF GROUND
- UTILITY POLE
- FIRE HYDRANT
- U.G ELEC/CABLE
- PROP. WATER MAIN
- PROPOSED GAS LINE
- PROP. DRAINAGE LINE

NOTE: NOT ALL SYMBOLS MAY APPEAR IN DRAWING



LOCUS MAP

SCALE 1"=2000'±

ASSESSORS MAP 51 PARCELS 3,4,5,9-11,47, &74

ROAD PROFILE PLAN

TO ACCOMPANY

DEFINITIVE SUBDIVISION PLAN

OF

WINDRIFT ACRES

IN

BREWSTER, MA

PREPARED FOR

PETER COPELAS

DATE: APRIL 12, 2010

REVISED: 8-25-10 (CONVERT 2 PROPOSED LOTS TO OPEN SPACE)

8-25-10
DATE

DANIEL A. OJALA, P.L.S., P.E.

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fax 508-362-9880
downcape.com ©
down cape engineering, inc.
civil engineers
land surveyors
939 Main Street (Rte 6A)
YARMOUTHPORT MA 02675

PROFILE SHEET 1 OF 5

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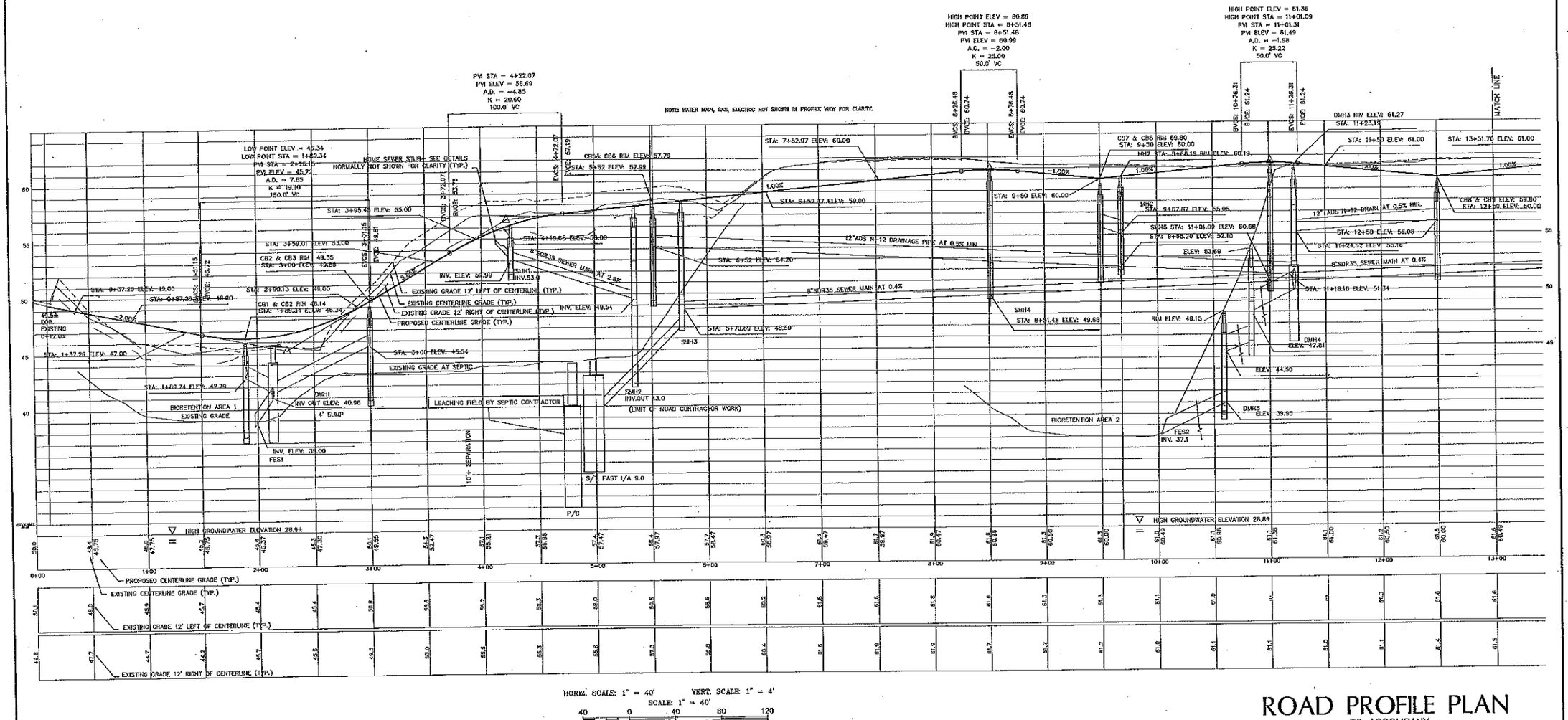

HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'
SCALE: 1" = 40'
40 0 40 80 120

PROFILE VIEW

LEGEND

- 99 — EXISTING CONTOUR
- +99.1 EXIST. SPOT ELEV.
- [99] PROPOSED CONTOUR
- [98.4] PROPOSED SPOT EL.
- TH1 TEST HOLE
- SLOPE OF GROUND
- UTILITY POLE
- FIRE HYDRANT
- E — U.G ELEC/CABLE
- W — PROP. WATER MAIN
- G — PROPOSED GAS LINE
- D — PROP. DRAINAGE LINE

(MAY NOT ALL SYMBOLS MAY APPEAR IN DRAWING)

GENERAL NOTES:

1. THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN IS APPROXIMATE. PRIOR TO ANY EXCAVATION ON THIS SITE, THE EXCAVATING CONTRACTOR SHALL MAKE THE REQUIRED 72 HOUR NOTIFICATION TO DIG SAFE (1-888-344-7233) AND ANY OTHER UTILITIES WHICH MAY HAVE CABLE, PIPE OR EQUIPMENT IN THE CONSTRUCTION AREA FOR VERIFICATION OF LOCATIONS.
2. ALL CONSTRUCTION MATERIALS, COMPONENTS, AND METHODS EMPLOYED ON THIS PROJECT WORK SHALL CONFORM TO THE TOWN OF BREWSTER SUBDIVISION REGULATIONS AND/OR THE MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS STANDARD SPECIFICATIONS FOR BRIDGES AND HIGHWAYS AS AMENDED TO PRESENT. ALL SEWER WORK AND MATERIALS TO CONFORM TO 310 CMR 15.00 TITLE 5, BREWSTER HEALTH REGULATIONS, AND, AS BREWSTER HAS NO SPECIFIC SEWER REGS, APPLICABLE DPW SPECIFICATIONS FOR SEWER CONNECTIONS CONTAINED IN ORDINANCES CH 991).
3. VERTICAL DATUM IS NAVD88 FROM RTK GPS MTS_NETWORK (ADD 1' TO GET NGVD29)
4. INSPECTIONS PER SUBDIVISION REGULATIONS AND UTILITY STANDARDS REQUIRED.
5. DESIGN LOADING FOR ALL PRECAST UNITS TO BE AASHTO-H-20 RATED UNLESS NOTED.
6. UG ELECTRIC AND GAS SERVICE PROPOSED. LINES TO RUN AS SHOWN OR AS DIRECTED BY NSTAR AND NSTAR. LINES ARE APPROXIMATE AS SHOWN.
7. ALL STORM RUNOFF FROM IMPERVIOUS SURFACES TO BE CONTAINED ON SITE.
8. 4" LOAM AND SEED ALL DISTURBED AREAS NOT PAVED, EROSION CONTROL NETTING ON SLOPES.
9. SEWER PIPING 8"SDR35 MAIN SET AT 0.00% FT/FT WITH 6X8 WYES AND 4" RISERS AT 2% TO LOT LINES WITH 6" TO 4" REDUCERS AND 4" SCH40 PVC BLDG CONNECTIONS AT 2% WITH CLEANOUTS
10. COMPONENTS NOT TO BE BACKFILLED OR CONCEALED WITHOUT INSPECTION BY HEALTH DEPT. AND OWNERS ENGINEER. AS-BUILT DRAWINGS INCLUDING ALL INVERT & RIM ELEV.'S REQ.
11. COORDINATE UTILITY INSTALLATIONS AND AVAILABILITY WITH APPROPRIATE VENDORS.
12. TOPOGRAPHY VERIFIED AND DETAIL FROM SURVEYS BY DOWN CAPE ENGINEERING, INC., OFFSITE-GIS DATA.
13. BREWSTER WATER DEPT. APPROVED WATER INSTALLER FOR WATER REQUIRED. SEE DEPT. SPECS.
14. TOWN OF BREWSTER APPROVED SEPTIC INSTALLER REQUIRED FOR SEWER INSTALLATION.
15. SIX INCHES OF STONE BEDDING REQUIRED UNDER ALL PIPING AND ALL MANHOLES.
16. MANHOLES SHALL BE VACUUM TESTED AND THE PIPELINE SHALL BE PRESSURE TESTED PRIOR TO THE SEWER BEING ACCEPTED BY THE OWNER.
17. SEE NOTES OTHER PAGES, ALL NOTES APPLY TO ALL SHEETS.
18. NO SEWER MAINS CROSS WATER MAINS ON SIDE. IF SEWER SERVICE LINES MUST CROSS WATER SUPPLY LINES, BOTH PIPES SHALL BE CONSTRUCTED OF CLASS 150 PRESSURE PIPE AND SHALL BE PRESSURE TESTED TO ASSURE WATER TIGHTNESS. SEWER LINES SHOULD BE 36" (18"MIN.) BELOW WATER SUPPLY LINES, BUT IF IT IS NECESSARY TO CROSS ABOVE A WATER UTILITY, BOTH PIPES SHALL BE ENCASED IN A CLASS 150 LARGER DIAMETER WATERTIGHT SLEEVE FOR A DISTANCE OF 10 FEET ON BOTH SIDES OF THE CROSSING. (REF. BARN. SEWER REGS, TITLE 5, AND 18-16)
19. ROAD OPENING PERMITS MAY BE REQUIRED. CONTRACTOR RESPONSIBLE FOR ALL PERMITS/SAFETY PRECAUTIONS.
20. ALL FILL TO BE PLACED IN LIFTS AND ROLLED WITH IN ACCORDANCE WITH ASTM-1557, METHOD 'D'
21. UNDERGROUND ELECTRIC/CABLE, SEWER, GAS & WATER SERVICES TO EACH LOT REQUIRED, NOT ALL DRAFTED FOR CLARITY.
22. CONTRACTOR TO CONFIRM ALL PIPE PITCHES, GRADES, RIMS, AND SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO ORDERING ANY PRECAST.

DANIEL A. OJALA CIVIL No. 40502 REGISTERED PROFESSIONAL ENGINEER
DANIEL A. OJALA No. 40502 REGISTERED PROFESSIONAL ENGINEER

8-25-10
DATE

DANIEL A. OJALA, P.L.S., P.E.

off 508-362-4541
fax 508-362-9880
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down cape engineering, inc.
civil engineers
land surveyors
939 Main Street (Rte 6A)
YARMOUTHPORT MA 02675

ROAD PROFILE PLAN

TO ACCOMPANY

DEFINITIVE SUBDIVISION PLAN

OF

WINDRIFT ACRES

IN

BREWSTER, MA

PREPARED FOR

PETER COPELAS

DATE: APRIL 12, 2010
REVISED: 8-25-10 (CONVERT 2 PROPOSED LOTS TO OPEN SPACE)

PROFILE SHEET 2 OF 5

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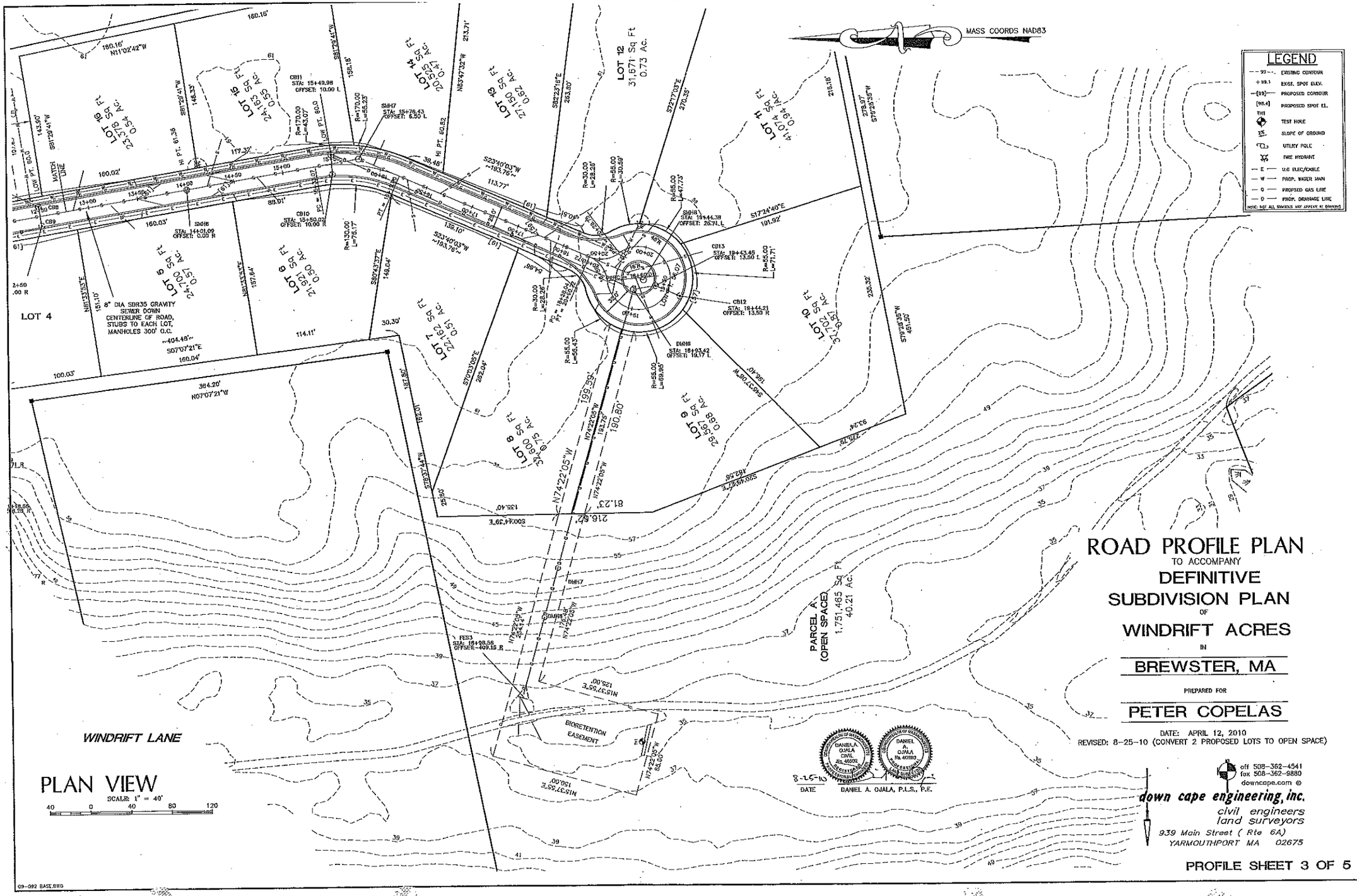
MASS COORDS NAD83
LEGEND
EXISTING CONTOUR
EXIST. SPOT ELEV.
PROPOSED CONTOUR
PROPOSED SPOT EL.
TEST HOLE
SLOPE OF GROUND
UTILITY POLE
FIRE HYDRANT
U.G ELEC/CABLE
PROP. WATER MAIN
PROPOSED GAS LINE
PROP. DRAINAGE LINE
NOTE: NOT ALL SYMBOLS MAY APPEAR IN DRAWING
LOT 12
31,671 Sq Ft
0.73 Ac.
LOT 4
8" DIA SDR35 GRAVITY SEWER DOWN CENTERLINE OF ROAD, STUBS TO EACH LOT, MANHOLES 300' O.C.
~404.48'~
S07°07'21"E
160.04'
364.20'
N07°07'21"W
100.03'
WINDRIFT LANE
BIORETENTION EASEMENT
PARCEL A (OPEN SPACE)
1,751,465 Sq Ft
40.21 Ac.
PLAN VIEW
SCALE: 1" = 40'
40 0 40 80 120
ROAD PROFILE PLAN
TO ACCOMPANY
DEFINITIVE
SUBDIVISION PLAN
OF
WINDRIFT ACRES
IN
BREWSTER, MA
PREPARED FOR
PETER COPELAS
DATE: APRIL 12, 2010
REVISED: 8-25-10 (CONVERT 2 PROPOSED LOTS TO OPEN SPACE)
8-25-10
DATE
DANIEL A. OJALA, P.L.S., P.E.
off 508-362-4541
fax 508-362-9880
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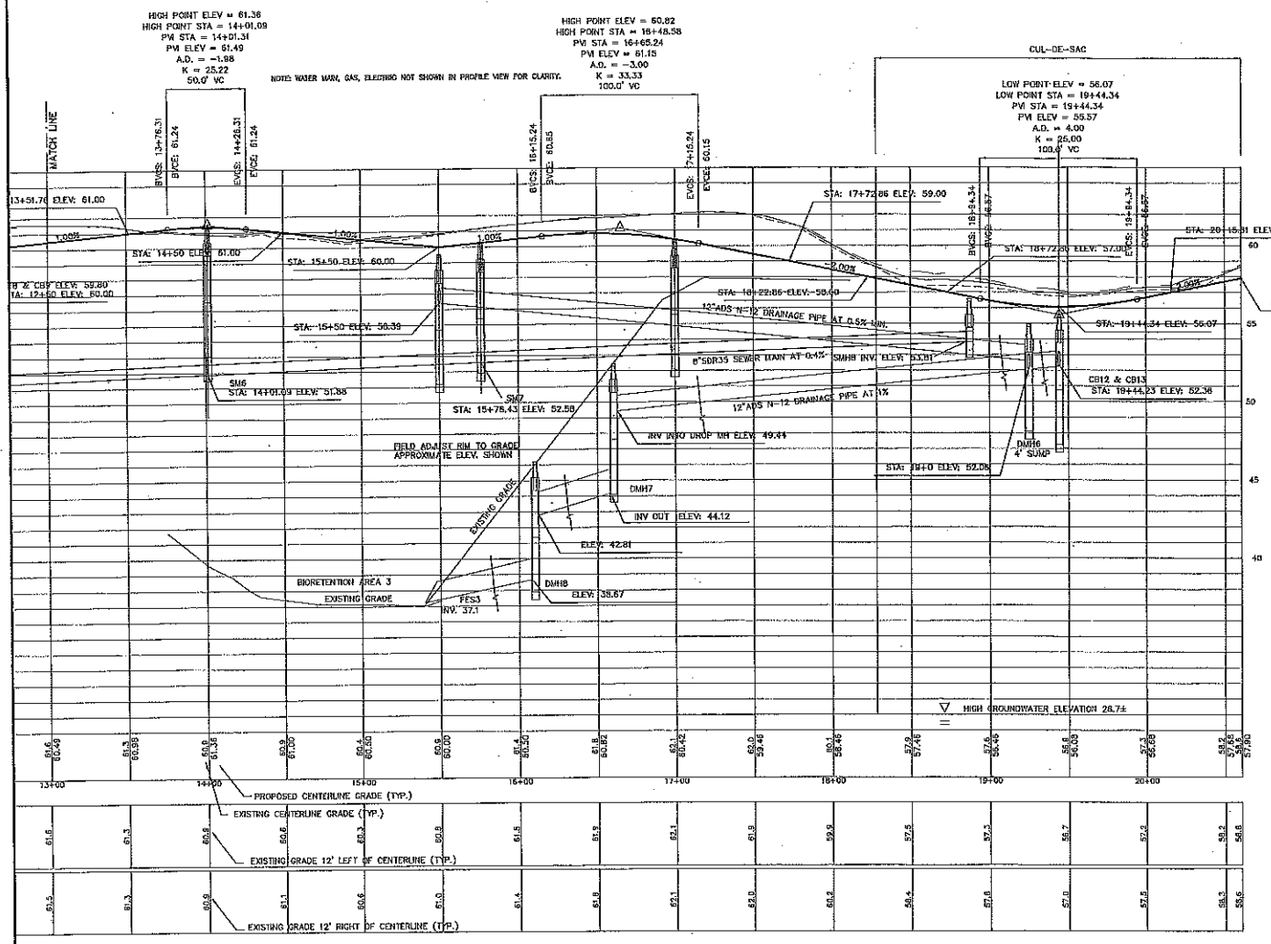
down cape engineering, inc.
civil engineers
land surveyors
939 Main Street (Rte 6A)
YARMOUTHPORT MA 02675
PROFILE SHEET 3 OF 5
09-092 BASE.DWG



HORIZ. SCALE: 1" = 40' VERT. SCALE: 1" = 4'

SCALE: 1" = 40'

40 0 40 80 120

PROFILE VIEW

LEGEND

- EXISTING CONTOUR
- EXIST. SPOT ELEV.
- PROPOSED CONTOUR
- PROPOSED SPOT EL.
- TEST HOLE
- SLOPE OF GROUND
- UTILITY POLE
- FIRE HYDRANT
- U.G ELEC/CABLE
- PROP. WATER MAIN
- PROPOSED GAS LINE
- PROP. DRAINAGE LINE

NOTE: NOT ALL SYMBOLS MAY APPEAR IN DRAWING

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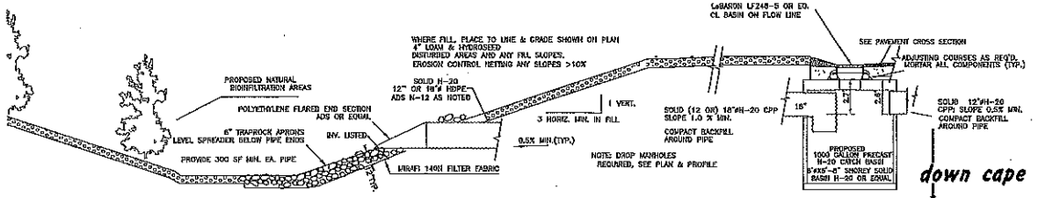
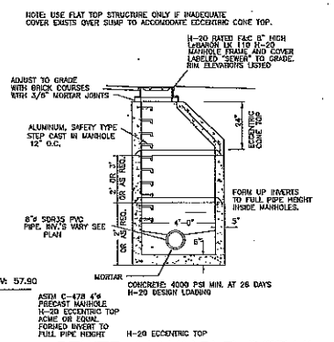


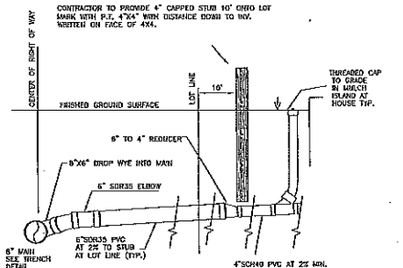
DRAINAGE SYSTEM DETAIL

SCALE: N.T.S.



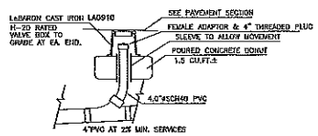
SEWER MANHOLE DETAIL

NOT TO SCALE



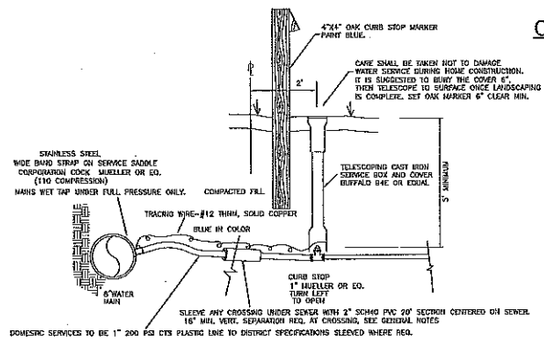
SEWER SERVICE LINES

NOT TO SCALE



CLEANOUT DETAIL

H-20 FOR USE IN PAVED AREAS
UTILITY PLASTIC COVER IN LAWN AREAS



DOMESTIC SERVICES TO BE 1" 200 PSI CTS PLASTIC LINE TO DISTRICT SPECIFICATIONS SLEEVED WHERE REQ.

CONTRACTOR TO PROVIDE A WATER SERVICE TO EVERY LOT IN SUBDIVISION:

DOMESTIC SERVICES ON SAME SIDE OF STREET AS WATER MAIN SHALL CONSIST OF 8' OF PLASTIC, OR AS NECESSARY TO HAVE THE CURB STOP INSIDE THE PROPERTY LINE BY 2 FEET, A CORPORATION, CURB STOP, BOX, AND MARKER

DOMESTIC SERVICES ON OPPOSITE SIDE OF STREET AS WATER MAIN SHALL CONSIST OF 33' OF PLASTIC, OR AS NECESSARY TO HAVE THE CURB STOP INSIDE THE PROPERTY LINE BY 2 FEET, A CORPORATION, CURB STOP, BOX, AND MARKER SLEEVE ANY CROSSING UNDER SEWER WITH 2" SCH40 PVC 20' SECTION CENTERED ON SEWER.

TRACING WIRE SHALL BE INSTALLED AND SPACED 12 INCHES ABOVE AND DIRECTLY ON TOP OF THE PLASTIC TUBING. CARE SHALL BE TAKEN SO THAT THE WIRE DOES NOT COME IN CONTACT WITH THE PLASTIC TUBING. WIRE SHALL BE STRIPPED AND WRAPPED AROUND THE C.C. THREADS OF THE CORPORATION AT THE WATER MAIN WITH ONE ADDITIONAL FOOT OF WIRE LOOSELY TIED TO THE CURB STOP.

WATER SERVICE SECTION

NOT TO SCALE

ROAD PROFILE PLAN

TO ACCOMPANY

DEFINITIVE SUBDIVISION PLAN

OF

WINDRIFT ACRES

IN

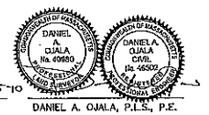
BREWSTER, MA

PREPARED FOR

PETER COPELAS

DATE: APRIL 12, 2010

REVISED: 8-25-10 (CONVERT 2 PROPOSED LOTS TO OPEN SPACE)



8-25-10

DATE

DANIEL A. OJALA, P.L.S., P.E.

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fax 508-362-9830
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YARMOUTHPORT MA 02675

TEST HOLE LOGS

ENGINEER: DANIEL A. OJALA, PLS., PE.
EXCAVATOR: PETER STOYICH– ELLIS BROS.
DATE: 3–22–2010
PERC. RATE = < 2 MIN/INCH
CLASS I SOILS P#

GROUNDWATER ADJUSTMENT DATA:
AW247 ZONE 0 : MARCH 2010
HIGHEST LEVEL EVER RECORDED– NO ADJUSTMENT REQUIRED.
(NOTE: ELEVATION CHECKS VS. ADJACENT POND ELEVATIONS LEVELS)

OBSV. = ADJ. HIGH G.W.

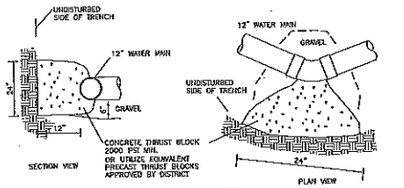
TH–1		ELEV. 34.2'
0"	O/A SL 10YR 3/2	
4"	E LS 2.5Y 7/1	33.5'
6"	B LS 7.5YR 6/8	33.7'
38"	GROUNDWATER	31.2'
66"	C MCS 10Y 6/6	28.7'
126"		23.7'

TH–2		ELEV. 37.1'
0"	O/A SL 10YR 3/2	
4"	E LS 2.5Y 7/1	36.8'
6"	B LS 7.5YR 6/8	36.6'
28"	GROUNDWATER	34.8'
96"	C MCS 10Y 6/6	28.8'
126"		26.6'

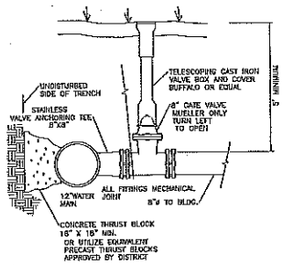
TH–3		ELEV. 43.5'
0"	O	
2"	A SL 10YR 3/2	43.3'
4"	E LS 2.5Y 7/1	43.2'
6"	B LS 10YR 5/6	43.0'
36"	C1 M/CS 10YR 6/7	40.5'
60"	C2 M/CS 2.5Y 8/3	38.5'
120"		32.8'

NO GROUNDWATER ENCOUNTERED

TH–4		ELEV. 38.0'
0"	O	
2"	A SL 10YR 3/2	37.8'
4"	E LS 2.5Y 7/1	37.7'
6"	B LS 10YR 5/6	37.5'
38"	GROUNDWATER	34.8'
108"	C M/CS 2.5Y 5/6	28.8'
120"		27.8'



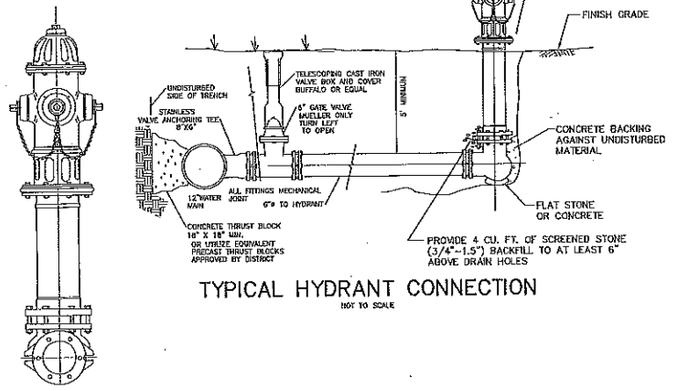
THRUST BLOCK
FOR 45 AND 22.5 DEG BENDS
NOT TO SCALE



GATE VALVE
NOT TO SCALE

WATER LINE NOTES:

1. ALL MATERIALS AND WORKMANSHIP TO CONFORM TO THE RULES, REGULATIONS AND SPECIFICATIONS OF THE BREWSTER WATER DEPARTMENT AS AMENDED TO PRESENT. DISTRICT HAS AUTHORITY TO AMEND PLANS.
2. WATER MAIN AND FIRE SERVICE LINE SHALL BE CEMENT LINED DUCTILE IRON PIPE CLASS 52 8" DIA. DOMESTIC SERVICE TO BE 200 PSI CTS PLASTIC LINE TO DISTRICT SPECIFICATIONS.
3. GATE VALVE SHALL BE MUELLER ONLY, IRON BODY, BRONZE MOUNTED, DOUBLE DISC, WITH TWO INCH OPERATING NUT WITH MECHANICAL JOINT ENDS. GATE VALVE SHALL CONFORM IN EVERY RESPECT TO ALL APPLICABLE AWWA STANDARDS. VALVE SHALL BE DESIGNED FOR 200 PSI WORKING AND 300 PSI TEST PRESSURE AND SHALL OPEN LEFT.
4. VALVES SHALL ALSO CONFORM TO THE SPECIFICATIONS OF THE AWWA AS TO SIZE STEM, PITCH OF THREAD, GASKET SEATING AREA SHALL BE FULLY MACHINED TO THE FIXED DIMENSIONS AND TOLERANCES AS PER AWWA SPECIFICATIONS. ALL VALVES SHALL BE PROVIDED WITH "O" RINGS. THE DESIGN OF THE VALVE SHALL BE SUCH THAT THE SEAL PLATE CAN BE FITTED WITH NEW "O" RINGS WHILE THE VALVE IS UNDER PRESSURE IN THE FULLY OPEN POSITION.
5. VALVE BOXES SHALL BE BUFFALO OR PIONEER AND SHALL BE FURNISHED AND INSTALLED FOR ALL VALVES. THEY SHALL BE CAST IRON, TAR COATED, SLIDING TYPE ADJUSTABLE VALVE BOXES TOGETHER WITH CAST IRON COVERS. SEE DISTRICT REGULATIONS.
6. CONCRETE THRUST BLOCKS AS SHOWN, CONCRETE SHALL BE 1 PART CEMENT TO 2 PARTS SAND AND 4 PARTS COARSE AGGREGATE. CONCRETE CLASS "C" WITH A 28 DAY COMPRESSION STRENGTH OF 2000 PSI MINIMUM. MAXIMUM AGGREGATE SIZE OF 1–1/2". THRUST BLOCKS SIZED PER SPECIFICATIONS. ALTERNATELY PRECAST THRUST BLOCKS TO DISTRICT SPECIFICATIONS MAY BE UTILIZED.
7. CARE SHALL BE TAKEN TO ENSURE THAT ALL CONCRETE THRUST BLOCKS BEAR AGAINST UNDISTURBED TRENCH WALLS, AND NOT TO ENCASE FLANGES AND BOLTS ON MECHANICAL JOINT FITTINGS. WHERE UNSUITABLE BEARING MATERIAL IS ENCOUNTERED, EXCAVATE AND PLACE SUFFICIENT CONCRETE BALLAST TO OFFSET THE ANTICIPATED THRUSTS.
8. BREWSTER WATER DEPARTMENT APPROVED CONTRACTOR AND INSPECTOR REQUIRED.
9. CONTRACTOR RESPONSIBLE FOR AS–BUILTS AND PLACING SAME ON ENGINEERED DRAWING AND SUBMITTING TO WATER DEPT. FOR THEIR RECORDS.
10. ALL FILL TO BE PLACED IN LIFTS AND ROLLED WITH A 10 TON VIBRATORY ROLLER TO ACHIEVE 95% MAX. DRY DENSITY IN ACCORDANCE WITH ASTM–1557, METHOD "D"



TYPICAL HYDRANT CONNECTION
NOT TO SCALE

MUELLER SUPER CENTURION 250 OR APPROVED DEPT. EQUAL.

TYPICAL HYDRANT
NOT TO SCALE

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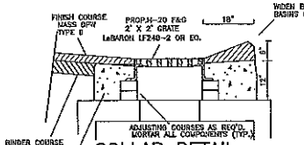
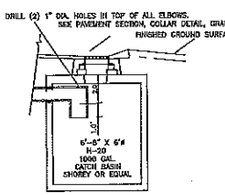
09–092 BASE.DWG

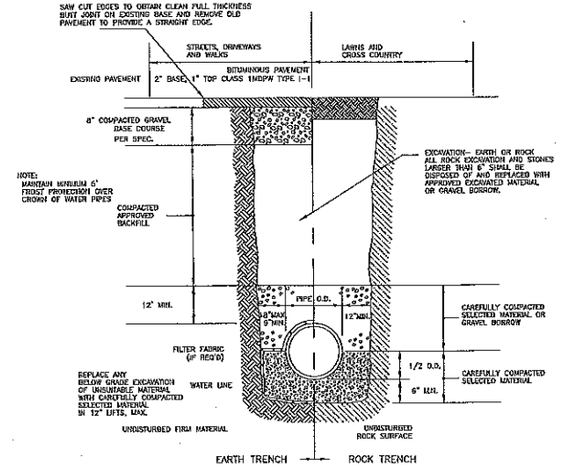


COLLAR DETAIL
NOT TO SCALE

BED FRAME IN FULL 12" X 12" CONCRETE COLLAR FLUSH WITH BASE COAT ASPHALT 3000 PSI CLASS I MIN.



SOLID CATCH BASIN
NOT TO SCALE

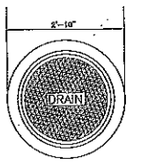


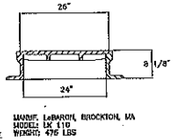
TYPICAL TRENCH
NOT TO SCALE

LEGEND

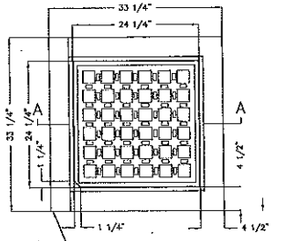
--99--	EXISTING CONTOUR
+99.1	EXIST. SPOT ELEV.
–(99)–	PROPOSED CONTOUR
[98.4]	PROPOSED SPOT EL.
TH	TEST HOLE
25%	SLOPE OF GROUND
	UTILITY POLE
	FIRE HYDRANT
— E —	U.G ELEC/CABLE
— W —	PROP. WATER MAIN
— G —	PROPOSED GAS LINE
— D —	PROP. DRAINAGE LINE

NOTE: NOT ALL SYMBOLS MAY APPEAR IN DRAWING





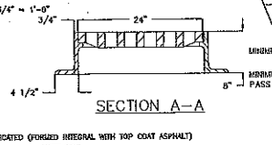
TYPICAL ACCESS COVER



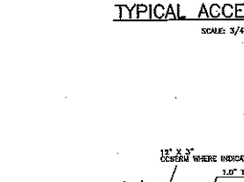
MINIMUM FRAME WEIGHTS:	3–FLANGE – 265 LBS. 4–FLANGE – 295 LBS.
MINIMUM GRATE WEIGHTS:	215 LBS.
PASS AREA:	225 SQ. IN.

FRAME AND GRATE

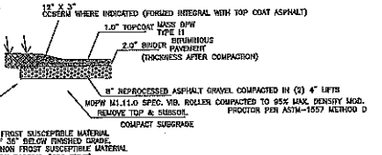
1" = 1'– 0"
LeBARON LF–248 4 FLANGE



SECTION A–A

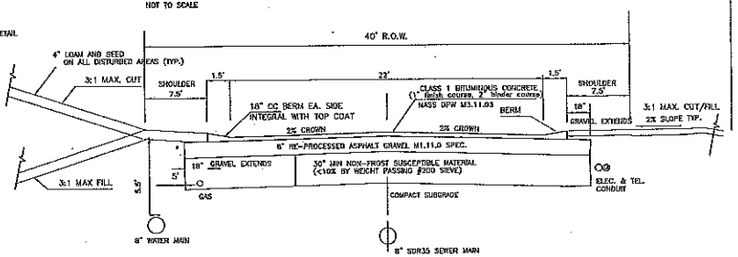


DRAINAGE MANHOLE DETAIL
NOT TO SCALE



NOTE: REMOVE FROST SUSCEPTIBLE MATERIAL TO A DEPTH OF 36" BELOW FINISHED GRADE. REPLACE WITH NON FROST SUSCEPTIBLE MATERIAL (LESS THAN 10% PASSING #200 SIEVE)

PAVEMENT CROSS SECTION
NOT TO SCALE



NOTE: UTILITY LOCATIONS TYPICALLY WATER AND GAS ON SOUTH AND EAST SIDE OF STREET. PHONE, ELECTRIC NORTH AND WEST SIDE OF STREET. PRIVATE SEWER ON CENTERLINE OF STREET

TYPICAL SECTION THRU ROADWAY
NOT TO SCALE

DANIEL A. OJALA CIVIL No. 46502 REGISTERED PROFESSIONAL ENGINEER
8-25-10

ROAD PROFILE PLAN DETAILS

TO ACCOMPANY

DEFINITIVE SUBDIVISION PLAN

OF

WINDRIFT ACRES

IN

BREWSTER, MA

PREPARED FOR

PETER COPELAS

DATE: APRIL 12, 2010
REVISED: 8–25–10 (CONVERT 2 PROPOSED LOTS TO OPEN SPACE)

PROFILE SHEET 5 OF 5

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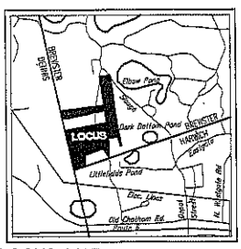
939 Main Street (Rte 6A)
YARMOUTHPORT MA 02675



LOCUS MAP

SCALE 1"=2000'±

ASSESSORS MAP 51 PARCELS 3,4,5,47, &74
LOCUS AREA = 55.2 ACRES

LOCUS IS WITHIN FEMA FLOOD ZONE C AS SHOWN ON COMMUNITY PANEL #250003 0015D DATED 6/19/1985
DATUM: NAVD 88

ZONING SUMMARY

ZONING DISTRICT: RR RURAL RESIDENTIAL DISTRICT

MIN. LOT SIZE	100,000 S.F.
MIN. LOT FRONTAGE	200'
MIN. LOT WIDTH	180' AT FRONT SETBACK
MIN. FRONT SETBACK	40'
MIN. SIDE SETBACK	25'
MAX. BUILDING HEIGHT	30'
MAX. BLDG. COVERAGE	15%

SITE IS LOCATED WITHIN STATE ZONE II WATER PROTECTION DISTRICT

SOIL TYPE = CARVER COARSE SANDS

ONSITE SEPTIC AND TOWN WATER TO DEPT. SPECIFICATIONS PLANNED.

OWNER / APPLICANT:

PETER COPELAS
96 MAYFLOWER TERRACE
SOUTH YARMOUTH, MA 02664

REFERENCES

DEED BOOK 2543 PAGE 345
DEED BOOK 3605 PAGE 275
PLAN BOOK 255 PAGE 63
LC PLAN 39519A

LEGEND

- 99 — EXISTING CONTOUR
- × 99.1 EXIST. SPOT ELEV.
- PROPOSED CONTOUR
- PROPOSED SPOT EL.
- TH1 TEST HOLE
- SLOPE OF GROUND
- UTILITY POLE
- FIRE HYDRANT

NOTE: NOT ALL SYMBOLS MAY APPEAR IN DRAWING

MASS COORDS NAD83

STORMWATER BIORETENTION AREA
PROPOSED STREET TREE (TYP.)
WINDRIFT ACRES OPEN SPACE
WASTE WATER FACILITY AREA
EDGE OF CLEARING (TYP.)
MAINTAIN EXISTING VEGETATED BUFFER TO ADJACENT PROPERTIES BOTH WITHIN AND OUTSIDE OF THE WINDRIFT ACRES SUBDIVISION
PROPOSED CAPE COD STYLE HOUSE (TYP. OF 6)
PROPOSED COLONIAL STYLE HOUSE (TYP. OF 7)
DRAINAGE & PATH EASEMENT
PROPOSED EXPANDED RANCH STYLE HOUSE (TYP. OF 7)
STORMWATER RETENTION AREA
LOT 1
LOT 2
LOT 3
LOT 4
LOT 5
LOT 6
LOT 7
LOT 8
LOT 9
LOT 10
LOT 11
LOT 12
LOT 13
LOT 14
LOT 15
LOT 16
LOT 17
LOT 18
LOT 19
LOT 20

EXISTING VEGETATION IS A TYPICAL SCRUB PINE OAK FOREST.

PROPOSED STREET TREE
SHALL BE 3" CALIPER AND A MIX OF AT LEAST TWO OF THE FOLLOWING TREE SPECIES:
RED MAPLE *(ACER RUBRUM)*
GREEN ASH *(FRAXINUS PENNSYLVANICA)*
NORTHERN RED OAK *(QUERCUS RUBRA)*
WHITE OAK *(QUERCUS ALBA)*
PRINCETON ELM *(ULMUS AMERICANA 'PRINCETON')*

COMMONWEALTH OF MASSACHUSETTS ANDREW R. GARULAY REGISTERED LANDSCAPE ARCHITECT

8-25-10
DATE

ANDREW R. GARULAY, RLA

CONCEPTUAL LANDSCAPE

TO ACCOMPANY

DEFINITIVE SUBDIVISION PLAN

OF

WINDRIFT ACRES

IN

BREWSTER, MA

PREPARED FOR

PETER COPELAS

DATE: APRIL 12, 2010
REVISED: 8-25-10 (CONVERT 2 PROPOSED LOTS TO OPEN SPACE)

Scale: 1"= 60'
0 30 60 90 120 150 FEET

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