

MEPA Analyst: *Rick Boorée*

Phone: 617-626-1130

NPC

Notice of Project Change

The information requested on this form must be completed to begin MEPA Review of a NPC in accordance with the provisions of the Massachusetts Environmental Policy Act and its implementing regulations (see 301 CMR 11.10(1)).

Project Name: Tall Timbers Estates (Phase IV) (formerly known as Fountain Knoll Estates)		EOEA #: 13395
Street: Elm Street		
Municipality: Kingston	Watershed: South Coastal	
Universal Transverse Mercator Coordinates: N 2817485 E 858411 (NAD88)	Latitude: N 41°-58' Longitude: W 70°-45'	
Status of project construction: 0 %complete		
Proponent: Tall Timbers Estates, LLC (formerly Fountain Knoll Estates, LLC)		
Street: 5 Evergreen Lane		
Municipality: Hingham	State: MA	Zip Code: 02043
Name of Contact Person From Whom Copies of this NPC May Be Obtained: Bradley C. McKenzie, P.E.		
Firm/Agency: McKenzie Engineering Group, Inc	Street: 150 Longwater Drive, Suite 101	
Municipality: Norwell	State: MA	Zip Code: 02061
Phone: 781-792-3900	Fax: 781-792-0333	E-mail: bmckenzie@mckeng.com

In 25 words or less, what is the project change?

The project change involves a reduction in project density from 156 units to 80 units and a corresponding reduction in supporting infrastructure and related project impacts.

Date of ENF filing or publication in the Environmental Monitor: 11/10/2004

Was an EIR required? Yes No; if yes,
 was a Draft EIR filed? Yes (Date:) No
 was a Final EIR filed? Yes (Date:) No
 was a Single EIR filed? Yes (Date:) No

Have other NPCs been filed? Yes (Date(s):) No

If this is a NPC solely for lapse of time (see 301 CMR 11.10(2)) proceed directly to "ATTACHMENTS & SIGNATURES" on page 4.

Not applicable.

PERMITS / FINANCIAL ASSISTANCE / LAND TRANSFER

List or describe all new or modified state permits, financial assistance, or land transfers not previously reviewed: Not Applicable.

Are you requesting a finding that this project change is insignificant? (see 301 CMR 11.10(6))

Yes No; if yes, attach justification.

Are you requesting that a Scope in a previously issued Certificate be rescinded?

Yes No; if yes, attach the Certificate

Are you requesting a change to a Scope in a previously issued Certificate? Yes No; if yes, attach Certificate and describe the change you are requesting:

Summary of Project Size & Environmental Impacts	Previously reviewed	Net Change	Currently Proposed
LAND			
Total site acreage	167	11	178
Acres of land altered	30	-2	28
Acres of impervious area	16.2	-4.8	11.4
Square feet of bordering vegetated wetlands alteration	0	0	0
Square feet of other wetland alteration	0	0	0
Acres of non-water dependent use of tidelands or waterways	0	0	0
STRUCTURES			
Gross square footage	312,000	-112,000	200,000
Number of housing units	156	-76	80
Maximum height (in feet)	35	0	35
TRANSPORTATION			
Vehicle trips per day	1466	-666	800
Parking spaces			
WATER/WASTEWATER			
Gallons/day (GPD) of water use	46,000	-10,800	35,200
GPD water withdrawal	0	0	0
GPD wastewater generation/ treatment	46,000	-10,800	35,200
Length of water/sewer mains (in miles)	2.7 wtr./0 swr.	-0.7 wtr./0 swr.	2.0 wtr./0 swr.

Does the project change involve any new or modified:

1. conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97? Yes No

2. release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction? Yes No

3. impacts on Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities? Yes No (**reduction in impacts to habitats**)

4. impact on any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth? (**reduction in impacts**)

Yes No; if yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? Yes No

5. impact upon an Area of Critical Environmental Concern? Yes No
If you answered 'Yes' to any of these 5 questions, explain below:

PROJECT CHANGE DESCRIPTION (attach additional pages as necessary). The project change description should include:

- (a) a brief description of the project as most recently reviewed
- (b) a description of material changes to the project as previously reviewed,
- (c) the significance of the proposed changes, with specific reference to the factors listed 301 CMR 11.10(6), and
- (d) measures that the project is taking to avoid damage to the environment or to minimize and mitigate unavoidable environmental impacts. If the change will involve modification of any previously issued Section 61 Finding, include a proposed modification of the Section 61 Finding (or it will be required in a Supplemental EIR).

Project Change Description

(a). Recently Reviewed Project

The most recently reviewed project, Fountain Knoll Estates, was a proposed 156 unit single-family residential development permitted in accordance with Massachusetts General Laws 40B §20-23. Twenty-five (25) percent of the units were proposed as affordable units that would be dispersed throughout the development and sold to buyers whose income does not exceed 80 percent of the median income as defined by the U.S. Dept. of Housing and Urban Development. The proponent proposed that the project would be developed in 5 phases over a 4 to 6 year period. The project consisted of the construction of 10 roadways totaling approximately 12,400 linear feet to provide access to approximately 105 single-family home lots and approximately 51 lots restricted to occupants who are 55 years of age and over. The age-restricted units were proposed to be located within a 50 acre enclave in the northern portion of the property. The lots proposed in the non-age restricted portion of the development are compatible with the surrounding area in that they range in size from approximately 30,000 s.f. to approximately 156,122 s.f. with the average lot size approximately 42,115 s.f. The lot frontages range from approximately 125 feet to 528 feet with an average of approximately 175 feet.

The recently reviewed site is comprised of approximately 167 acres of land on the northerly side of Elm Street in Kingston, Massachusetts. The approximate 60-70 acre southern portion of the subject property has been significantly altered in that it has been used as a sand and gravel and concrete batch operation for approximately 40 years. The remaining northern portion of the site is heavily wooded. The site is interlaced with a series of trails with an overhead power line easement encroaching into the western portion of the property.

The project exceeded a threshold for the mandatory preparation of an Environmental Impact Report (EIR) because it would have created 10 or more acres of impervious area.

(b). Material Changes to Project Previously Reviewed

The proposed project, Tall Timbers Estates, Phase IV, will be an eighty (80) lot single family residential development situated on approximately 178 acres of land. The proponent is proposing that the project be developed in 3 phases over an approximate 5 year period. While the proposed developed perimeter of the site has been increased by approximately 11 acres, the project will result in a reduction of impervious area by 4.8 acres and an overall reduction in new land alteration by approximately 2 acres. Additionally, approximately 56 acres of offsite land owned by the project proponent consisting primarily of cranberry bogs has been added to the site perimeter of the project as conservation-restricted open space as a condition of the Conservation Management Permit that will be issued by the Natural Heritage & Endangered Species Program (NHESP) of the Massachusetts Division of Fisheries & Wildlife (Parcels H and K - see Rare Species Section below). The project involves approximately 159 acres of conservation-restricted open space in aggregate (Parcels A through K).

The development will be permitted as a Planned Residential Development (PRD) in accordance with Section 5.3 of the Kingston Zoning By-Law. The residences will be serviced by a network of 4 roadways totaling approximately 10,000 feet in length. Approximately 75% of the lots will have a minimum lot area of 40,000 square feet (s.f.). The remaining lots will have a minimum lot area of 30,000 s.f. The average frontage for all lots will be 150 feet. All roadways will be constructed in compliance with the Kingston Planning Board Rules and Regulations.

The redesigned 80 lot project does not exceed any thresholds for the mandatory preparation of an Environmental Impact Report (EIR).

Transportation

A Traffic Impact Assessment prepared by Abend Associates, Inc. concluded that traffic generated by the project previously reviewed (156 units) would have a minimal impact on Elm Street and adjacent intersections. The report states that Elm Street currently operates well below its capacity so that the new trips can be accommodated without any significant effect on local traffic condition. The project will not affect the level of service at the adjacent intersections. Therefore, it was concluded that the previously reviewed project will not result in a significant impact on traffic operations in the vicinity of the site.

Traffic generated by the redesigned project will be nearly 50% of that generated by the recently reviewed project due to the significant reduction in units (156 to 80). The project will continue to have its primary access at Elm Street to the west with a secondary access to Phase 3 of Tall Timbers Estates at Pine Hill Road to the south. Traffic generation will not be reduced by a directly proportional amount in that the age restricted housing is being eliminated in this new project and all housing will now be standard non age restricted single-family dwellings. By nature the age restricted housing would generate fewer vehicle trips in that the units are likely to be occupied by two adults, as opposed to single family dwellings which may be occupied by two adults and one or more children. The reduction in traffic generation will nonetheless be substantial (from 1466 vehicle trips to approximately 800).

Wetlands and Drainage

The recently reviewed project was designed to minimize impacts to wetland resource areas. The proposed roadways were designed to not require any alteration of wetlands and to maximize the buffer between the limit of work and the wetland resource areas. An erosion control barrier consisting of double-staked haybales and/or siltation fencing is proposed to be installed between work areas and wetland resources in order to prevent sedimentation due to erosion within cleared work areas. The boundaries of the wetland resource areas were approved by the Kingston Conservation Commission under an Order of Resource Area Delineation (ORAD).

The project will be designed to fully comply with the Department of Environmental Protection Stormwater Management Policy (SMP). Stormwater runoff from new impervious surfaces will be managed to be in full compliance with all standards of the SMP. There will be no increase in peak rates of runoff at downgradient wetlands and properties as a result of project development. In addition, a minimum of 80% of total suspended solids will be removed from stormwater runoff prior to discharge into wetland resources as required under the SMP. Construction phase and post-construction phase BMP Operation and Maintenance Plans will be provided to comply with the requirements of the SMP. Erosion control measures are proposed at the limit of work to minimize the potential for adverse impacts to wetland resources.

The changed project will minimize impacts to wetland resource areas by maximizing distances between construction activity and resource areas, placing erosion control barriers wherever needed, removing a minimum of 80% of total suspended solids, and mitigating post-development stormwater flows to below pre-development rates. The project will thereby be in full compliance with the DEP Stormwater Management Policy.

Water Supply and Wastewater Generation

Wastewater generated from the lots for the recently reviewed project was proposed to be directed to individual subsurface sewage disposal systems. The systems will be designed to fully comply with the requirements of Title 5 (310 CMR 15.00). Soils information obtained from the Soils Conservation Service (SCS) Survey of Plymouth County, Massachusetts indicated the presence of extremely permeable, well-drained soils that will be suitable to accommodate the proposed septic systems. Preliminary soil testing conducted throughout the site corroborated the SCS Survey and confirmed the presence of permeable

soils suitable for on-site disposal of sewage as well as for disposal of stormwater.

Individual on-site disposal systems designed in compliance with Title 5 are proposed for each of the 80 proposed single family dwellings in the redesigned project. Wastewater generated by the changed project will be approximately 75% of that generated by the recently reviewed project. Wastewater will not be reduced by a directly proportional amount in that per Title 5 age restricted housing generates 150 gal./day (gpd) per dwelling (up to two bedrooms per dwelling unit) whereas a four bedroom single-family dwelling will generate 440 gpd. Therefore, elimination of the age restricted housing represents a disproportionate decrease in the volume of wastewater generated. The total volume of wastewater will be reduced from 46,000 gpd to 35,200 gpd.

Water supply for domestic use and fire protection for the recently reviewed project and the changed project will be provided by connections to the existing municipal system in Elm Street and Pine Hill Road. Preliminary investigation indicates that both volume and pressure of water in the Elm Street system is adequate to support a development of this magnitude. Demands on water supply associated with the changed project will be reduced by an amount comparable to wastewater. The amount of water required for this proposed development is expected to be about 75% of that required by the recently reviewed project.

Rare Species

The Natural Heritage & Endangered Species Program (NHESP) of the Massachusetts Division of Fisheries & Wildlife reviewed the Environmental Notification Form and project plans in December 2004. NHESP determined that two species of "Special Concern", the eastern box turtle (*Terrapene carolina*) and blue-spotted salamander (*Ambystoma laterale*) were documented in the vicinity of the proposed project and that the previously reviewed project, Fountain Knoll Estates, may result in a "take" of the species under the Massachusetts Endangered Species Act (MESA)(M.G.L. Ch. 131A) and it's implementing Regulations (321 CMR 10.00). NHESP recommended a habitat assessment and field surveys of suitable upland/wetland habitats be conducted for the project site.

The project proponent contracted with Hyla Ecological Services, Inc. (HES) of Concord, Massachusetts to complete the requested habitat assessment and field survey. HES submitted a proposed survey protocol to NHESP on April 22, 2005 with details of all proposed survey methodologies. The survey protocol was approved and HES completed the survey and habitat assessment during the spring and summer of 2005.

HES identified blue-spotted salamander larvae in two on-site vernal pools. In addition, HES captured 15 eastern box turtles. HES used radio-telemetry to track the locations of ten of the box turtles throughout spring and summer. HES recorded a total of 242 turtle observations during the survey. HES submitted their final report to NHESP on December 13, 2005.

Based on the findings of the report, the project proponent, entered into discussions with the NHESP to determine an appropriate layout of the project. MEG submitted a proposed layout to NHESP for project review on March 13, 2006. Through the project review process, additional project layouts were developed and negotiated. The discussions with NHESP were completed throughout the winter, spring, and summer of 2006. A final layout and mitigating measures was agreed to by Tall Timbers Estates, LLC and NHESP at a September 26, 2006 meeting. The project proponent has revised the plan set based on the September 26 meeting for final review by NHESP. Upon approval from NHESP, the project proponent will apply for a Conservation Management Permit.

Historic and Archaeological Resources

The Massachusetts Historical Commission (MHC) reviewed the Environmental Notification Form in December 2004. The MHC determined that a known historical archaeological site (MHC #KIN.HA.17) was located within the limits of the proposed development. The site is a late 19th and early 20th century homestead of Dan Fuller. MHC requested an intensive (locational)/site examination archaeological survey (950 CMR 70.00) be conducted for the project.

The project proponent retained Mass Archaeological Professionals (MAP) of New Bedford, Massachusetts in February of 2006 to complete the locational site examination of the site. MAP developed a permit application for the intensive survey fieldwork in March 2006. The purpose of the permit application was to determine: (1.) if any archaeological deposits associated with Native settlement were present and (2.) investigate archaeological significance associated with the previously identified and recorded cellar hole. MHC issued a permit to conduct archaeological field investigation in May 2006.

MAP completed the field investigation and issued a report in July 2006. The report recommended that no further testing was required for Native American settlements. The report detailed an additional two cellar holes with the project area. The three cellar holes and their surrounding areas were considered to have potential to make significant contributions to a better understanding of the local or regional framework of nineteenth century history. It was recommended that the cellar holes and surrounding house yards be avoided and left intact. The report further recommended that if this was not possible that an archaeological site examination be completed. The MHC completed a technical review of the report on December 11, 2006. The MHC requested that an archaeological site examination (950 CMR 70) be conducted at all three cellar holes. The purpose of the site examination will be to gather sufficient information to assess whether the three cellar holes meet the criteria for eligibility (36 CFR Part 60) for listing in the National Register of Historic Places. The project has been reconfigured to avoid impacts to 2 of the sites. Lots 39 and 40 were reconfigured and Lot 44 relocated to avoid impacts within 30 feet of the sites. The proponent has engaged MAP to perform an intensive site examination archaeological survey in accordance with 950 CMR 70.00 for the remaining site located on Lot 28.

(c.) Significance of Proposed Changes to Project

As demonstrated above, the scope of the proposed project has been reduced by a significant amount from the previously reviewed project. The number of dwelling units has been reduced from 156 to 80 (nearly a 50% decrease), while the amount of roadway has been reduced from 12,400 linear feet to 10,000 linear feet. This reduction in project density will result in an obvious overall reduction in impacts relating to land alteration, traffic generation, wastewater volume and water supply demands and a reduction in impacts to rare species and historic and archeological resources. The project previously reviewed exceeded a threshold for the mandatory preparation of an Environmental Impact Report (EIR) because it would have created 10 or more acres of impervious area. The redesigned 80 lot project does not exceed any thresholds for the mandatory preparation of an Environmental Impact Report (EIR).

Due to the significant reduction in project scope, the project complies with the requirements under 301 CMR 11.10(6)(a) and (b) in that it results in obvious **decreases** in environmental consequences.

301 CMR 11.10(6)(c): Due to project redesign to reduce density from 156 to 80 units and to minimize impacts to rare species and historical and archeological resources, the estimated date for commencement of construction has been delayed from spring 2005 to fall of 2007 with the estimated completion date changed from 2011 to 2012.

301 CMR 11.10(6)(d): The project perimeter has increased from 167 acres to 178 acres to include additional cranberry bogs owned by the applicant as conservation-restricted open space as part of the negotiations with NHESP. While the proposed developed perimeter of the site has been increased by approximately 11 acres, the project will result in a reduction of impervious area by 4.8 acres and an overall reduction in new land alteration by approximately 2 acres. Additionally, approximately 56 acres of offsite land owner by the project proponent consisting primarily of cranberry bogs has been added to the site perimeter of the project as conservation-restricted open space as a condition of the Conservation Management Permit that will be issued by the Natural Heritage & Endangered Species Program (NHESP) of the Massachusetts Division of Fisheries & Wildlife (Parcels H and K - see Rare Species Section below).

The project involves approximately 159 acres of conservation-restricted open space in aggregate (Parcels A through K).

301 CMR 11.10(6)(e), (f) and (g) are not applicable to the project.

(d). Mitigation Measures

The project proponent has reconfigured the project to avoid damage to the environment and to minimize unavoidable environmental impacts.

Rare Species

NHESP determined that two species of "Special Concern", the eastern box turtle (*Terrapene carolina*) and blue-spotted salamander (*Ambystoma laterale*) were documented in the vicinity of the proposed project. The proponent retained a biologist to perform a habitat assessment and field surveys of suitable upland/wetland habitats be conducted for the project site. As a result the project was significantly reconfigured to minimize impacts to the rare species. The project has been reconfigured with consideration given to preserving significant areas of habitat by creating approximately 103 acres of conservation-restricted open space in Parcels A through G within the site perimeter and an additional 56 acres offsite within Parcels H and K. The project also provides turtle tunnels and barriers to provide corridors to facilitate the safe movement of the eastern box turtles.

Historic and Archaeological Resources

The project has been reconfigured to avoid impacts to 2 of the archeological sites of the homestead of Dan Fuller. The proponent has engaged MAP to perform an intensive site examination archeological survey in accordance with 950 CMR 70.00 for the remaining site.

Wetlands and Drainage

The reconfigured project will minimize impacts to wetland resource areas by maximizing distances between construction activity and resource areas, placing erosion control barriers wherever needed, removing a minimum of 80% of total suspended solids, and mitigating post-development stormwater flows to below pre-development rates. The stormwater management system for the project will be in full compliance with the DEP Stormwater Management Policy.

Mitigation of Construction Impacts

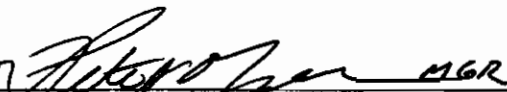
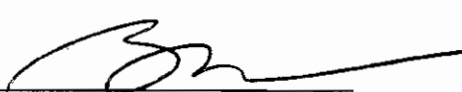
Standard erosion and sedimentation control practices will be used to minimize potential migration of sediment during and after construction. Air quality impacts during construction will be short term and limited primarily to fugitive dust from excavation and grading activities. Preventative measures include use of wetting agents, tarpaulin covered trucks transporting any soil, and street sweeping upon installation of pavement. Trucks and other construction equipment used on site will meet federal and state emissions standards. Construction activities will be limited to normal working hours to reduce noise impacts to adjacent properties. All construction and demolition debris will be hauled off-site by licensed haulers and disposed of legally in accordance with all local and state regulations. The construction process has been spread out over three phases to minimize construction traffic associated with construction materials such as pavement, lumber, curbing, etc.

ATTACHMENTS & SIGNATURES

Attachments:

1. Secretary's most recent Certificate on this project
2. Plan showing most recent previously-reviewed proposed build condition
3. Plan showing currently proposed build condition
4. Original U.S.G.S. map or good quality color copy (8-1/2 x 11 inches or larger) indicating the project location and boundaries
5. List of all agencies and persons to whom the proponent circulated the NPC, in accordance with 301 CMR 11.10(7)

Signatures:

5/31/07		MGR	5/31/07	
Date	Signature of Responsible Officer or Proponent		Date	Signature of person preparing NPC (if different from above)

<u>Peter Opachinski</u>	<u>Bradley C. McKenzie, P. E.</u>
Name (print or type)	Name (print or type)
<u>Tall Timbers Estates, LLC</u>	<u>McKenzie Engineering Group, Inc.</u>
Firm/Agency	Firm/Agency
<u>5 Evergreen Lane</u>	<u>150 Longwater Drive, Suite 101</u>
Street	Street
<u>Hingham, MA 02043</u>	<u>Norwell, MA 02061</u>
Municipality/State/Zip	Municipality/State/Zip
<u>508-746-3834</u>	<u>781-792-3900</u>
Phone	Phone