

12/20/2017

Medway Conservation Commission
Medway Town Hall
155 Village Street
Medway, MA 02053

Re: Response to Comments from EcoTec for Timber Crest Estates

Dear Conservation Commission,

The following (in italics) are comments provided in a letter from Art Allen of EcoTec, Inc. to the Commission dated October 23, 2017. Our response to each comment is provided in bold.

Section 1. Proposed Wetland Alteration & Mitigation Areas

Comment #1.1

Utility Easement A & B Alterations: “Temporary” impacts associated with the proposed utility easement connecting Road D with Road I. I am not in a position to determine whether these impacts are necessary or not. This type of determination would need to be made by a qualified engineer. I have a concern with calling the impacts “temporary” because the alteration of the plant community will be permanent due to the need to prevent woody growth within the easement. In my experience, DEP considers permanent overstory clearing to be a wetland alteration requiring mitigation. I have a particular concern with the alignment of the easement at Alteration Area B. This alteration area is within a hummocky wooded swamp with evidence of seasonal ponding. I recommend that the existing stone wall within this area be located and the easement shifted slightly to the south to avoid and preserve the wall. The wall is having a damming effect on the wetland hydrology with evidence of deeper seasonal ponding to the north (upgradient) of the wall. The Construction Sequence for the easement lacks sufficient detail to ensure that the wetlands will be restored to the extent practicable. The pre-construction conditions, including detailed topography, should be documented so that existing topography and hydrologic conditions can be restored. Wetland top and sub - soils should be excavated, separately stockpiled and covered to preserve them for restoration. Proposed seed mixes and stabilization measures should be specified.

RESPONSE #1.1: The applicant has agreed to undertake horizontal directional drilling (HDD) for constructing the two utility crossings. This effectively eliminates all of the wetland impacts for these two areas, with the exception of 75 sf. A detailed Construction Sequencing description of the HDD process will be provided to the Commission prior to the start of work. The suggestions from Mr. Allen regarding a more detailed pre-construction survey of the northerly crossing route (Alteration Area B) and relocating the crossing to the south of the stone wall will no longer be necessary.

Comment #1.2

Intermittent Stream Crossing #1: *A permanent crossing structure spanning over a narrow, intermittent stream channel with no associated Bordering Vegetated Wetland ("BVW") impacts is proposed here. It appears that the proposed crossing structure meets Stream Crossing Standards but a qualified engineer would be required to analyze the specifics of compliance. As there will be no BVW fill, no wetland mitigation is required. This being said, a construction protocol should be provided detailing how the existing stream channel will be preserved or restored following construction.*

RESPONSE #1.2: **A detail of the crossing structure and its compliance with Stream Crossing Standards is provided on the revised Sheet #42 of the site plans (dated 12/15/17). Note that this crossing has been reduced to 15 feet width, reducing Bank alteration from 84 to 70 lf and LUW alteration from 366 sf to 270 sf. A detailed construction sequencing plan will be provided to the Commission following receipt of the Commission's Civil Engineering peer review comments on the project plans and drainage report.**

Comment #1.3

Wetland Alteration #2: *This alteration area involves a broad, seasonal sheet flow BVW with evidence of flow in three areas. It is also a connecting corridor between substantial wetlands and vernal pools to the north and south. It appears that this alteration is unnecessary as there is existing upland access to buildable areas on both sides of the alteration. Road I could become a cul-de-sac eliminating the alteration and preserving the wetland corridor. In addition to eliminating wetland impacts, disturbance to high quality, wooded buffer zones would be reduced. Assuming this alteration will be eliminated, I reserve comment on the proposed crossing methods and mitigation.*

RESPONSE #1.3: **This wetland crossing was determined to be necessary for emergency vehicle access during the Comprehensive Permit process with the Medway ZBA. Following a recent meeting with the Medway Fire Chief, this crossing has been reduced in width to 15 feet. This has resulted in a reduction of BVW alteration from 5,622 sf to 3,644 sf.**

Comment #1.4

Wetland Crossing #3: *This crossing involves a defined stream channel with Bank and Land Under Water as well as a BVW area with seasonal sheet flow. It appears that this crossing provides access to otherwise inaccessible upland areas. It appears that the proposed crossing structure meets Stream Crossing Standards but a qualified engineer would be required to analyze the specifics of compliance.*

A construction protocol should be provided detailing how the existing stream channel will be preserved or restored following construction.

An area of BVW with seasonal sheet flow will be impacted to the west of the stream channel. I recommend that a second culvert be provided (e.g., embedded pipe culvert or similar) to maintain hydrologic continuity within the BVW.

The proposed, 3,189 square foot mitigation/replication area (located east of Lots 124 & 125) should be re-designed to minimize wooded buffer impacts by re- locating it closer to the proposed lot construction disturbance (vicinity wetland flags 121-1 to 121 - 3 and 89 to 90) in an area with minimal existing overstory vegetation.

RESPONSE #1.4: A detail of the crossing structure and its compliance with Stream Crossing Standards is provided on Sheet #42 of the revised site plans (dated 12/15/17).

A detailed construction sequencing plan will be provided to the Commission following receipt of the Commission's Civil Engineering peer review comments on the project plans and drainage report.

Outback Engineering has added an 18" culvert to the west of the culvert as shown on revised sheet 23.

Outback Engineering has relocated the replication area for Crossing #3 closer to the development as shown on revised Sheet 25.

Section 2. Proposed Buffer Zone Impacts

Comment #2.1

I have observed the environment on the subject properties over several years and in various seasons. In my professional opinion, this site has very high quality, relatively undisturbed wetland and buffer zone complexes including many certified and certifiable vernal pools, and other habitat types, suitable for a range of common and uncommon wildlife species. While it appears there was some attempt to preserve the inner 15-foot Buffer Zones, I count at least thirty-one (31) discrete locations where work is proposed within 15-foot Buffer Zones. In many of these locations work extends up to the wetland. The loss of these inner buffers will have short-term impacts during construction due to a lack of room to work outside the wetland as well as long-term impacts due to the loss of pollutant filtering buffer vegetation, loss of shading and loss of organic matter inputs from buffer vegetation. I strongly recommend maintaining a minimum 15-foot undisturbed buffer zone with the possible exceptions of wetland crossings and critical roadway alignment areas such as Road F west of the Holliston Street entrance.

RESPONSE #2.1: Outback Engineering revised the project design extensively during the ZBA process to move the work as far as feasible from the wetland resource areas.

Comment #2.2

It is my understanding that the NOI under consideration includes only the roadways and associated infrastructure. This being said, the project plans show proposed house locations and limit of work sediment barriers for the roadways and infrastructure and for all house lots. I do not disagree with showing the house locations and associated work limits conceptually as lot development, in large part, dictates road layout - related wetland and buffer impacts. In my opinion, re-design of house and stormwater orientation, in combination with some reduction in

lots and roadway re-alignment, would significantly reduce, or eliminate, inner Buffer Zone impacts.

RESPONSE #2.2: A revised set of grading and drainage plans was submitted by Outback Engineering (dated revised 9/29/17; Sheets 19-27 of 49). These plans were revised to show only the erosion control necessary for roadway construction, stormwater management, grading and other infrastructure. The newly revised drainage sheets, dated 12/15/17 also reflect these changes.

Comment #2.3

I also recommend that for any infrastructure or lots with work within 50-feet of wetlands that permanent "Wetland Buffer Zone - No Disturb" markers be provided at the limits of work.

RESPONSE #2.3: The applicant will be glad to discuss this suggestion with the Commission at the next hearing.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Scott Goddard', written in a cursive style.

Scott Goddard,
Principal & PWS