HARVARD CONSERVATION COMMISSION MINUTES OF MEETING NOVEMBER 4, 2010 APPROVED: December 16, 2010

Chairman Paul Willard called the meeting to order at 7:00pm in the Town Hall Meeting Room

Members Present: Paul Willard, Wendy Sisson, Charlie Gorss, Don Ritchie, Jim Breslauer, Janet Waldron and Patrick Doherty

Others Present: Liz Allard (LUB Admin), Eric Broadbent, Steven Roy, Warren Henderson, Carter Scott (Transformations, Inc.), Jeff Richards (Transformations, Inc.), Steve Roy (Goesyntec Consultants, Inc.), Daniel Bourdeau (Goesyntec Consultants, Inc.), Lou Russo (L.D. Russo, Inc.), Rob Carrona, Bruce Ringwall (GPR, Inc.), Mark Shaw, Dennis Wagner and Jack Whelan

Harvard Energy Advisory Committee - Green Community Designation

Eric Broadbent was present to speak with the Commission about Harvard becoming a Green Community and obtaining the support of the Commission at the up coming Special Town Meeting. Mr. Broadbent reviewed with the Commission how the Harvard Energy Advisory Committee (HEAC) got to where they are now. Mr. Broadbent explained the five criteria needed to be designated a Green Community by the State.

Jim Breslauer asked how requirement of Criteria number 3, Energy Baseline and Reduction Plan, was going to be achieved and how much it would it cost the Town. Mr. Broadbent stated that a plan was set forth to the Board of Selectmen on Tuesday, which will require reduction in energy use mostly at the schools by switching to gas heat. As for the cost there is State grant money available for a number of these requirements, along with low cost loans. Paul Willard asked if there is a reason do to this now rather than at the Annual Town Meeting. Mr. Broadbent explained that available grant funding deadline is November 18th. Mr. Willard stated that the only concern in the Commissions purview would be the location of the "As-of Right Siting" (Criteria #1) of a renewable energy generating facility, should it be within a wetland buffer zone. With no further comments or questions, Patrick Doherty made a motion to endorse the Harvard Energy Advisory Committee on their efforts in designating Harvard as a Green Community. Wendy Sisson seconded the motion. The final vote was 3 in favor, 2 opposed and 2 abstained.

Continuation of a Notice of Intent Hearing – Transformations, Inc., Stow Road (Map 36 Parcel 85 & 86.1). Opened at 7:34pm

Notice of Intent Hearing – Wheeler Realty Trust, 69 Lancaster County Road, Lot B Lancaster County Road and 203 Ayer Road, Harvard#1010-2. Opened at 8:37pm

Request for Determination of Applicability – Harvard Conservation Commission, Tully Land, Depot Road, Harvard#1010-03. Opened at 8:51pm

Culvert Repair/Upgrade on Still River Road

Liz Allard informed the members that on October 26th she was contacted by Harvard resident Jack Whelan in regards to work that had just taken place on the abutting property to him at 389 Still River Road by the Highway Department. When Ms. Allard arrived to review the site a new trench had been dug from an existing culvert to the bank of an existing stream. The trench consisted of exposed soil, as well as the stream bank. Ms. Allard spoke with Highway Director, Rich Nota, who stated that he would correct the situation by placing jute matting within the trench along with rip rap check dams. The soil on the bank would be removed and stabilized with rip rap as well. Ms. Allard has since reviewed the site and work has been done as described.

Mr. Whelan and Dennis Wagner, who also resides at 389 Still River Road, were present this evening. Mr. Whelan submitted a letter to the Commission outlining the events (See Attachment A). Mr. Whelan explained that there is a catch basin across the street in which a pipe from it runs under Still River Road and drains out onto the north side if the driveway easement for the abutting property. Mr. Whelan stated that the pipe has been mostly blocked since they have lived in the house (19 years). Mr. Whelan stated that the Highway Department usually comes out and digs out the end of the pipe annually. Now that the pipe has been unblocked additional water could potentially, cause damage to the pond on Mr. Whelan's property. Paul Willard asked when the culvert in the stream on the abutting property washed out. Mr. Whelan estimated about 15 years ago.

Wendy Sisson suggested the Highway Department do some drainage calculations and plans as to how the water should be directed. Mr. Willard suggested asking the Highway Department to redirect the water so that it did not end up on Mr. Whelan and Mr. Wagner's property might resolve the situation of silt in the pond.

After members and the Conservation Agent discussed the options further, Jim Breslauer made a motion to issue an Enforcement Order that requires a restoration plan of the resource area, along with pre- and post-storm water computations. Wendy Sisson seconded the motion. The vote was unanimously in favor of the motion.

Members requested the Board of Selectmen liaison attend the next meeting to discuss how communication between the Commission's Agent and the Highway Director can be improved to avoid situations such as this.

Land Stewardship Sub-committee Request to Burn Brush in Long Field at Holy Hill Wendy Sisson requested that the Land Stewardship Sub-Committee be allowed to burn brush in the Long Field at the Holy Hill Conservation Land in January. Ms. Sisson stated the Committee intends on follow the required fire rules and will have water packs from the fire department available during the burning. Jaye Waldron made a motion to allow the Land Stewardship Sub-committee to burn brush in the Long field at the Holy Hill

Conservation Land. Charlie Gorss seconded the motion. The vote was unanimously in favor of the motion.

Request for Certificates of Compliance – Little, 10 Madigan Lane, DEP#177-569 Liz Allard explained that the requirements to obtain a Certificate of Compliance have been met by Matt Little at 10 Madigan Land. Jim Breslauer made a motion to issue a Certificate of Compliance for DEP#177-569. Jaye Waldron seconded the motion. The vote was unanimously in favor of the motion.

Adjournment

Don Ritchie made a motion to adjourn the meeting at 10:10pm. Wendy Sisson seconded the motion. The vote was unanimously in favor of the motion.

Respectfully submitted,

Harvard Conservation Commission Continuation of a Notice of Intent Hearing Meeting Minutes Transformations, Inc., Stow Road (Map 36 Parcel 85 & 86.1) Harvard#1010-01 November 4, 2010

The public hearing was opened at 7:34pm by Chairman Paul Willard under the Massachusetts Wetland Protection Act, Ch. 131 §40 in the Town Hall Meeting Room

Members Present: Paul Willard, Wendy Sisson, Charlie Gorss, Don Ritchie, Jim Breslauer, Janet Waldron and Patrick Doherty

Others Present: Liz Allard (LUB Admin), Eric Broadbent, Warren Henderson, Carter Scott (Transformations, Inc.), Jeff Richards (Transformations, Inc.), Steve Roy (Geosyntec Consultants, Inc.), Daniel Bourdeau (Geosyntec Consultants, Inc.) and Rob Carrona,

This hearing was continued from October 21, 2010 for a Notice of Intent filed on behalf of Transformations, Inc. for the construction of a roadway, 17 residential buildings, septic system and public water supply source within the 100' wetland buffer zone on Stow Road (Map 36 Parcel 85 & 86.1), Harvard.

Steve Roy and Daniel Bourdeau of Geosyntec Consultants, Inc. were present to present the Stormwater Management design for Pine Hill Village on Stow Road in a power point presentation. Mr. Bourdeau outlined the ten standards as required by the Massachusetts Stormwater Regulations. Standards 5 -7 do not apply to this project. Standards 1 -4 were outlined in detail as they apply to the project. The intention of Stormwater Management design is to control water on site and have it act the way it did prior to construction. The design calls for a large number of rain gardens and bioretention swales at the upper portion of the properties watershed. A swale designed for the north side of the roadway will discharge to a constructed wetland. Stormwater currently drains overland from the forested area to one of two outfall locations referred to as Compliance points. Compliance point 1 is located in a topographic low-point on the north property boundary which receives water from approximately 3.34 acres of forest. Compliance point 2 is located in the unnamed tributary of Elizabeth Brook at the culvert of Stow Road. This Compliance point receives the majority of runoff from the forested site including the wetland complex in the eastern portion of the site. The design incorporates a Low Impact Development (LID) based Stormwater Management system that discharges to the same Compliance points. Mr. Bourdeau further explained the designs of the bioretention cell, rain gardens and the constructed wetlands.

Jaye Waldron asked if evaporation is considered when determining storage capacity. Mr. Bourdeau stated that is not considered in the calculations. Mr. Bourdeau further explained that the recharge volume required for the site is 2,550 cubic feet, however the

proposed design provides approximately 13,500 cubic feet of storage, which exceeds the requires recharge volume.

Wendy Sisson asked what type of plants like bioretention cells. Mr. Bourdeau stated facultative wetland species. Residents in attendance had questions on the maintenance of these systems. Mr. Bourdeau stated that an Operation and Maintenance plan will outline the up keep of the systems and that the home owners association will be responsible for maintenance. Residents also had concerns of a phased project that is never fully completed. Carter Scott stated that he is part of the homeowners association until the final lot is sold.

Patrick Doherty asked if Mr. Bourdeau could explain how pollutants are removed from the stormwater. Mr. Bourdeau stated pollutants such as nitrogen and phosphorus are removed through the plants; total suspended solids are removed through the slow discharge of water by settling out of solids that may exist. Ms. Sisson asked how long the testing is done at the compliance sites. Steve Roy stated there is no testing. Mr. Doherty asked about the location of the structures. Mr. Bourdeau stated the constructed wetland is in an ideal location as it should be associated with ground water. Ms. Sisson stated that the site has some flood plain on it, some of the lower area floods and extends beyond the FEMA areas. Ms. Sisson further questioned if you put a constructed wetland in an area subject to flooding and that is already functioning as a vegetated recharge area would you not be diminishing that area's capacity to retain, take up and clean runoff by clearing the established trees and shrubs and bulldozing the swamp in order to build the constructed wetland. Mr. Roy stated he did not have the numbers in the presentation in front of him, but would have to review the report. Ms. Sisson stated looks like you taking away natural wetland and replacing it with a constructed wetland. Mr. Roy stated that a constructed wetland needs to be adjacent to a functioning wetland to work properly. Ms. Sisson asked what percentage of the runoff from the site will be captured by the bioretention cells and rain garden. Mr. Bourdeau stated 70% would go through the rain gardens before going to the constructed wetland. Mr. Bourdeau added that every rain garden is designed for a ten year event without overflow, basically 4"of rain over a 24 hour period, rains over that amount would drain through the overflow.

With other hearings still to be opened and discussed this evening the applicant agreed to continue the hearing to a later date. Jim Breslauer made a motion to continue the hearing to November 18, 2010 at 7:45pm. Jaye Waldron seconded the motion. The vote was unanimously in favor of the motion.

Respectfully submitted,

Harvard Conservation Commission Notice of Intent Hearing Meeting Minutes Wheeler Realty Trust, 69 & Lot B Lancaster County Road & 203 Ayer Road, DEP#177-589, Harvard#1010-03 November 4, 2010

The public hearing was opened at 8:37pm by Chairman Paul Willard under the Massachusetts Wetland Protection Act, Ch. 131 §40 and the Harvard Wetland Bylaw, Code of the Town of Harvard, Chapter 119 in the Town Hall Meeting Room

Members Present: Paul Willard, Wendy Sisson, Charlie Gorss, Don Ritchie, Jim Breslauer, Janet Waldron and Patrick Doherty

Others Present: Liz Allard (LUB Admin), Lou Russo (L.D. Russo, Inc.) and Bruce Ringwall (GPR, Inc.)

This hearing is for a Notice of Intent filed on behalf of Wheeler Realty Trust for the construction of a gravel access road and temporary disturbance for the installation of a water service line within the bordering vegetated wetland, and the installation of three public water supply wells, construction of an access road and water service line within the 100' wetland buffer zone at 69 & Lot B Lancaster County Road, Harvard.

Bruce Ringwall, of GPR, Inc., along with Lou Russo, of Wheeler Realty Trust, were present. Mr. Ringwall explained the site to the members and how the wells for the elderly affordable housing facility on Ayer Road will be constructed on private property at 69 Lancaster County Road. Water lines will then transverse an additional piece of private property then on to Mass Highway land and then back on to another parcel owned by Mr. Russo and across Ayer Road to the facility. Mr. Ringwall further explained that a gravel access road will be constructed off the existing driveway at 69 Lancaster County Road that will require the crossing of a wetland. A culvert will be installed at this crossing, requiring the replication of wetlands at a 1:1.5 in another location. The design potentially eliminates the requirement to remove any mature trees. Once the wells and water lines have been installed the gravel access road will only be accessed to maintain the wells. During the installation of the water lines trenches will be dug 40' –50' at a time, placement of the pipe and then backfill with sand and replacing organics. The plan show the use of hay waddles, which will be moved along as the project is completed.

Jaye Waldron asked why erosion controls are not on both sides of the proposed access road. Mr. Ringwall stated that the area is sloped and there is not a concern for erosion. Don Ritchie asked about the location to the Harvard Green wells. Mr. Ringwall stated they are 400' – 500'away. Paul Willard asked if there would be any junction boxes along the water line. Lou Russo stated he did not know, but believes there should be at grade.

The members discussed the requirements of the wetland replication, Chapter 147-23, and agreed that all of the terms under that section could be meet with the exception of 147-

23A, that required the replicated wetland be constructed and conditionally approved before any other work is to begin. The members agreed that the replication could be done after the installation of the wells and the associated water lines. An amount for the required bond was agreed upon. Routes for accessing the site were discussed and indicated on the plan.

With no further questions, Wendy Sisson made a motion to close the hearing and issue an Order of Conditions to include the following special conditions: all stock material is to be surrounded by hay waddles, equipment shall access site as indicated during on the plan, project shall be completed by March 2011, all ditch to be covered same day, wetland replication shall be completed in compliance with the Wetland Protection Regulations, Chapter147-23, as-built plan shall indicate the new location of the wetland replication area between wetland flags 155 and 160 and the location of the pull boxes shall be included on the as-built plan. Jaye Waldron seconded the motion. The vote was unanimously in favor of the motion.

Respectfully submitted,

Harvard Conservation Commission Request for Determination of Applicability Hearing Meeting Minutes Harvard Conservation Commission, Harvard#1010-04 November 4, 2010

The public hearing was opened at 8:51pm by Chairman Paul Willard under the Massachusetts Wetland Protection Act, Ch. 131 §40 and the Harvard Wetland Bylaw, Code of the Town of Harvard, Chapter 119 in the Town Hall Meeting Room

Members Present: Paul Willard, Wendy Sisson, Charlie Gorss, Don Ritchie, Jim Breslauer, Janet Waldron and Patrick Doherty

Others Present: Liz Allard (LUB Admin)

This hearing is for Request of Determination of Applicability filed on behalf of the Harvard Conservation Commission for the repair to an existing culvert within a bordering vegetated wetland on the Tully Land, Depot Road, Harvard.

Liz Allard explained to the members that the application is for the repair of an existing culvert on the Tully Land that the Harvard Snowmobile Club has volunteered to complete. The plan is replace the non-functioning culvert to re-create and maintain the historic level of the wetland on either side of the culvert. Paul Willard agreed that either he or Liz Allard will be on site when the work is to be done.

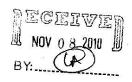
With no further questions, Charlie Gorss made a motion to close the hearing and issue a Negative #2 Determination. Jaye Waldron seconded the motion. The vote was unanimously in favor of the motion.

Respectfully submitted,

ATTACHMENT A

November 4, 2010
Harvard Conservation Commission

Dear Commissioners,



We are writing as a follow-up to an issue of excavation that took place by the Harvard DPW on October 26, 2010 on property abutting our own. We have serious concerns about the project, and a number of questions that we would like responses to.

Our house sits 10 feet from the bank of the pond. The pond level is at the same grade as the lower level of the house. An earthen berm under the deck prevents water from coming into the house during periods of high water. There is a very real threat that our house could flood, although to date this has not happened, especially if road runoff increases into our pond.

Every year, we have increasing sedimentation from road runoff. We have lost a significant amount of pond depth. The potential is there to lose the pond to sedimentation. This pond is a significant financial asset to our property. It offers great beauty, and a habitat for such species as brook trout (small brookies come from the Nashua and Still Rivers to spawn in November), river otters, and muskrats. Minks hunt along the bank. We also get a wide variety of waterfowl including hooded mergansers, green herons, least bitterns and wood ducks. The area is so rich in unusual wildlife that the downstream wetlands are considered an Area of Critical Environmental Concern (ACEC). Our property is part of an area that is recognized as a Priority Habitat of Rare Species and an Estimated Rare Species Habitat by the Natural Heritage and Endangered Species program. Some of these species are routinely seen in the area around our pond and yard.

The DPW recently engaged in alterations to the drainage of road runoff that could severely impact our property. Here is the sequence of events:

On October 26, 2010 at about 8:00 am we became aware that there was excavation taking place by the Harvard DPW on a driveway easement abutting our property (owned by a property owner named Hoch). There is a pipe running from a catch basin, under Still River Road, and opening on the north side of the driveway easement. A trench, 2 feet x 2 feet, had been dug that morning, from the end of drainage pipe. The trench ran diagonally across the driveway (cutting off driveway access) for about 50 feet, and into a stream. The stream continues another 75 feet and empties into the pond in our backyard. The trench was bare soil, and the bank of the stream had been disturbed, with loose soil placed into it. When questioned, the DPW worker was polite, and stated that he was "just doing what he was told to do".

I was told by the DPW that the purpose of this system is to relieve pressure from runoff on the catch basin. Frequently, the catch basin fills with sediment and becomes ineffective. Prior to the recent excavation, water and sediment from the pipe ran parallel to the driveway easement in a 1 foot wide x 1 foot deep channel, sheeting into the woods

and adjacent field, or flowing into the stream. For some of the 19 years we have been living in town, this sediment was removed by DPW workers with shovels, at the mouth of the pipe most years.

We made telephone calls to members of the Conservation Commission: Paul Willard (voice mail left, call returned that night), Wendy Sisson, and Liz Allard (both made aware of the situation). A telephone call was made to Bill Johnson (voice mail left, call returned) of the Board of Selectmen, and to Rich Nota of the DPW (message left, no return phone call to date). All calls expressed distress over the loose soil left to erode into our pond which could ultimately destroy it, the lack of reasonable process (permitting and public hearings) allowing for public comment, and the fact that private property was destroyed in the process. We were then, and continue to be, outraged by the complete disregard shown by the DPW with regard to wetland regulations and individual private property rights.

At 10:00 am, after we had complained, a DPW worker returned and blew leaves over the project completely covering it. When asked what he was doing he replied, "Trying to make it look more natural. Just doing what I was told to do."

At 11:15 am Liz Allard came to inspect. We brought our own leaf blower to the site to reveal what had been done and concealed. She expressed her dismay, and stated that it was a clear violation of the law. She left to try and meet with Rich Nota at the DPW and stated that she would be in touch with me later in the day.

At 1:30 pm Liz Allard called to report that DPW would come back and stabilize the area. She explained the interim plan for stabilization, and that the Conservation Commission would determine follow-up action.

In the late afternoon, DPW workers returned and stabilized the area, following the plan described by Liz Allard. They widened the excavated area. The loose soil at the stream bank was removed and replaced with 2-4 inch rip-rap. Jute mesh was placed into the excavated drainage ditch, and rip-rap was incrementally placed several feet apart down the ditch, presumably with the intention of catching sediment.

At 5:30 pm Liz Allard came and assessed the stabilization progress. We expressed dissatisfaction with the project to the DPW worker when asked if we were satisfied with the project at that time. Private property rights had been violated and there was no public process, no plan, and no way of knowing whether this "fix" was going to be successful.

We have these questions:

1. Without drainage calculations, we have no way of knowing how much additional water will pass through the new system. Will an enforcement order be written by the Conservation Commission, requiring the DPW to present plans that will protect the integrity of our property and the vital stream and wetland area that surrounds it?

- 2. Is it appropriate for a small, privately owned pond to be used as the town's detention basin for street runoff? Isn't it time to start using best management practices and treat storm water runoff before it hits wetland systems?
- 3. With an enlarged system, what is the plan for treating storm water runoff and increased sedimentation before it reaches our pond?
- 4. What is the maintenance plan for the newly constructed drainage ditch? Surely sediment from sanded streets will fill the trench, just as it fills the catch basins.
- 5. I understand that there are times when the DPW is exempt from filing for projects, especially in the case of repairs. This is obviously not an exempted project, What happened to the permitting process? Does the DPW routinely file, thus protecting the integrity of our local wetland areas? Will the Conservation Commission and the Board of Selectmen work together to review DPW cases and ensure that filing for projects is done appropriately?

In our opinion, the town has destroyed the Hoch's private property in order to relieve pressure on catch basins along Still River Road. This was not a repair to an existing structure or system, it was a completely new project. The permitting process was ignored no drainage calculations were completed, no opportunity for public comment was provided, and no notification was given to property owners and abutters. The negligence involved could result in damage to our property, which may result in costly mitigation by the town, and could destroy a fragile ecosystem downstream. We respectfully request that you take the appropriate action to prevent any unforeseen but avoidable potentially damaging events.

Sincerely,

Jack Whelan and Denis Wagner

389 Still River Rd., Box 52 Still River, MA

01467

(978) 456-8550

DOCUMENTATION & OTHER EXHIBITS

Green Community Update from Energy Advisory Committee

- Copy of Assessors Map showing Transfer Station location, Map 17A Parcel 14
- Green Community Designation Criteria, not dated
- Letter from the Town of Harvard Energy Advisory Committee to the Conservation Commission, dated November 4, 2010
- Town of Harvard Green Communities Designation Executive Summary, no date

Continuation of a Notice of Intent Hearing – Transformations, Inc., Stow Road (Map 36 Parcel 85 & 86.1)

- WPA Form 3 Notice of Intent and associated documents, dated October 2010
- Notice of Intent Plan, Pine Hill Village, Harvard, Mass., Date October 8, 2010
- Power Point Presentation Pine Hill Village Harvard, MA Stormwater Management Design, prepared by Geosyntec Consultants, received November 4, 2010

Notice of Intent Hearing - Wheeler Realty Trust, 69 Lancaster County Road, Harvard#1010.02

- WPA Form 3 Notice of Intent and associated documents, dated October 2010
- Public Water Supply Notice of Intent Site Plan No. 1 Job 99116B, dated October 2010

Request for Determination of Applicability – Harvard Conservation Commission, Tully Land, Depot Road, Harvard# 1010-03

• WPA Form 1 Request for Determination of Applicability and associated documents, dated November 1, 2010

Request for Certificates of Compliance – Little, 10 Madigan Lane, DEP#177-569

 WPA Form 8A Request for Certificate of Compliance and associated plan, dated October 2, 2010