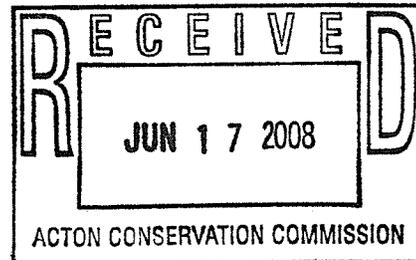


**Acton Survey & Engineering, Inc.**  
P.O. Box 666, 97 Great Rd. #6 • Acton, MA • 01720  
Phone: (978) 263-3666 • Fax: (978) 635-0218  
Email: [actonsurvey@verizon.net](mailto:actonsurvey@verizon.net)

June 16, 2008

Acton Conservation Commission  
472 Main Street,  
Acton, MA 01720



Re: Grassy Pond Place  
DEP 085-0965  
6673W161

Dear Commission Members:

Please find enclosed our letter to the Planning Board outlining proposed changes to the stormwater system at Grassy Pond Place.

The proposed changes are within your jurisdiction and we desire to meet with you to discuss them at your earliest convenience.

Please accept this letter as our client's request to amend the Order of Conditions if the Commission should find that an amendment should be required.

Thank you for any considerations you may give to these matters.

Very truly yours,  
Mark T. Donohoe, PE

For:   
Acton Survey & Engineering, Inc.

Cc: Westchester Corp., Inc.  
Acton Planning Board  
Acton Engineering Department

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June 16, 2008

Acton Planning Board  
472 Main Street,  
Acton, MA 01720

Re: Grassy Pond Place  
6673W161

Dear Board Members,

We are in the process of finalizing the retaining wall design for the shared driveway at Grassy Pond Place. This driveway provides access to one existing and three recently permitted homes. During our review of the drawing dated April 30, 2007 prepared by Stamski & McNary Inc. we found a conflict in the drainage design within the limits of this wall.

The current design calls for two catch basin at the low point of the drive with discharge pipes connecting to the diversion manhole located 80 feet to their northeast. As designed, the outlet pipes meet at the same invert elevation and with an acute angle of only 7°. Given these dimensions the two pipes cannot physically enter the manhole and intercept each other approximately 10 feet outside the manhole as illustrated on the attached drawings.

The driveway has been designed to slope to a low point between two retaining walls where stormwater is to be collected by the two catch basins.

The driveway passes between two bordering vegetated wetlands and wall footings cannot extend beyond the outer limits of the wall resulting in either the footings required for a cast in place wall extending below the road or the utilization of five foot deep precast concrete units. Either the retaining wall footings or precast units would extend into the area of the catch basins.

With a driveway width of 12 feet we believe that the driveway can be adequately served by one double grated catch basin at the center of the driveway.

A catch basin at the center of the driveway would also be less susceptible to freezing and frost heaving.

A single 24 inch reinforced concrete culvert is proposed under the driveway to replace the existing 8 inch cross drain.

The precast concrete blocks have a height of 16 inches and we recommend that the single 24 inch pipe be replaced with three 12 inch smooth interior high density polyethylene pipes. This would allow the pipes to fit with one course of the wall so that integrity of the wall will not be compromised.

As an alternative we have asked the wall manufacturer to determine if a 3'WX1'H inside dimension box culvert could be fabricated as a possible substitution.

We believe that these required changes can be considered as "Red-Lined Revisions" and we will be happy to meet with the Board or Town Staff to discuss them.

A copy of the design of a wall utilizing precast units is enclosed. The wall angles have been replaced by curve sections to increase structural stability and ease of installation.

The project was submitted and approved prior to the issuance of the States new Stormwater Guidelines and we believe that some consideration should be given to incorporating Low Impact Development [LID] concepts in the design of the stormwater management system. As the extent of the changes required to integrate LID principles into the design exceed the changes the Board might consider as being Red-Lined Revisions we will first discuss them with Town Staff.

Thank you for any considerations you may give to these matters and please contact us if you should desire for us to attend a meeting.

Very truly yours,  
Mark T. Donohoe, PE

For:   
Acton Survey & Engineering, Inc.

Cc: Westchester Corp., Inc.  
Acton Conservation Commission  
Acton Engineering Department  
G. Nichols Construction, Inc.



Acton Survey & Engineering, Inc.

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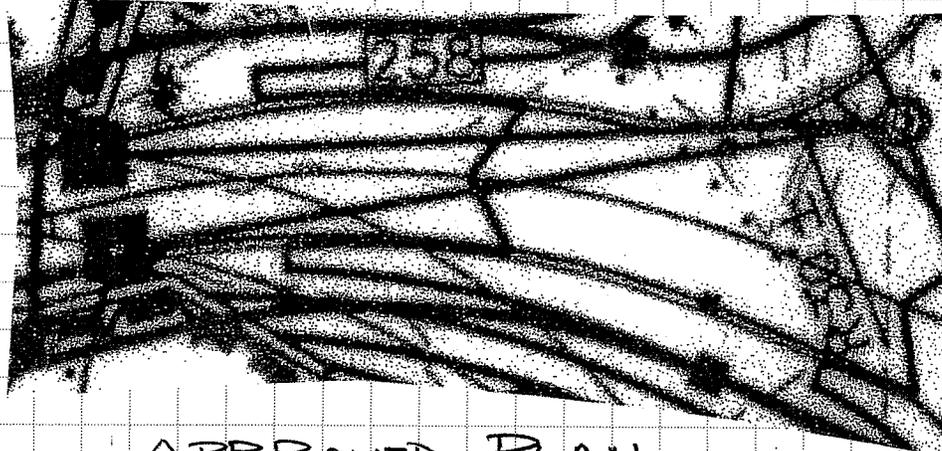
JOB GRASSY POND PLACE

SHEET NO. 1 OF 1

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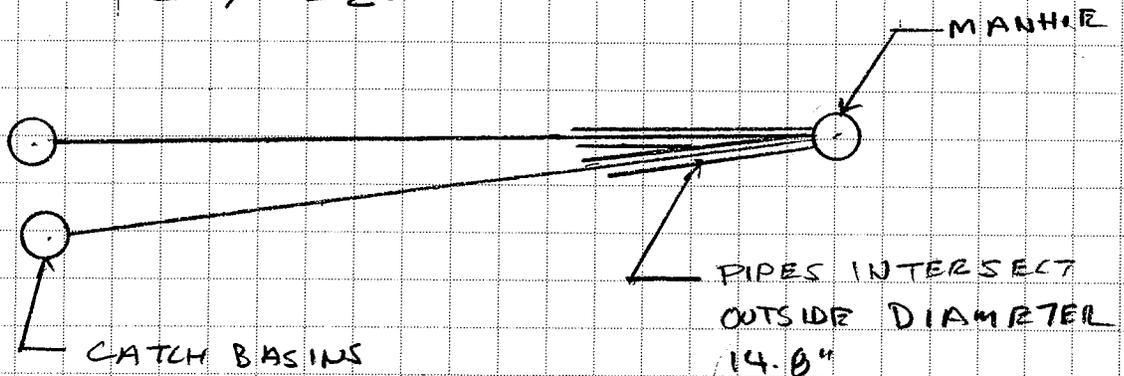
CHECKED BY \_\_\_\_\_ DATE \_\_\_\_\_

SCALE 1" = 20'

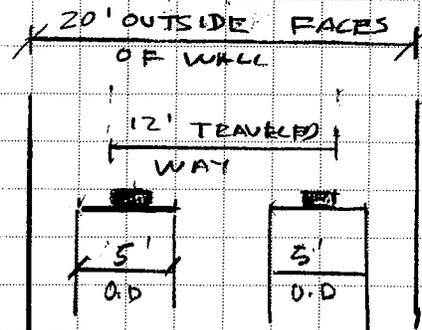


APPROVED PLAN

@ 1" = 20'



PIPES INTERSECT 1" = 20'



2.5' TO OUTSIDE FACE OF WALL  
PRECAST BLOCKS 4-6' THICK FOR  
Ø-10' HIGH WALL

ROAD CROSS-SECTION 1" = 20'

