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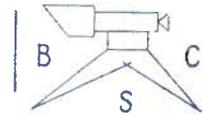
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Land Surveyors and Civil Engineers

A division of BOSTON SURVEY CONSULTANTS, INC.

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March 13, 1978

Acton Conservation Commission
14 Forest Road
Acton, Mass. 01720

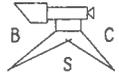
Re: Arborwood Highlands
Plan Revisions

Dear Commission Members:

Since your Public Hearing on this project we have revised the plans to meet site distance requirements set by the Engineering Department. The changes with respect to drainage are minor.

The high point of the roadway shifts toward the property line thereby reducing drainage to the existing roadway. Now 50 feet vs. 75 feet drains back toward Arborwood and Fernwood Roads.

I understand some residents in the vicinity of Brucewood Road have some questions concerning the impact of our drainage in this area. The combined peak 100 year flow in this area is 315cfs. Our calculated 0,5cfs increase over a ½ hour period will not have any effect on flood stages in this area. For storms of less than a 5 year return interval the proposed street drain does not discharge to the brooks at all. Our proposed project can have no effect on flooding problems that now occur on a yearly basis. It is our understanding that a temporary 18" culvert is under Brucewood Road. Installation of the proposed 30" and 36" culvert, as the plans call for, will help correct the problem in the area.



The changes in the plans are very minor and do not affect the overall design of the project. We hope you can incorporate the revised plans in your forthcoming Order of Conditions.

Thank you for your cooperation . If you have any questions please do not hesitate to call.

Sincerely,

Bruce M. Stanski, P.E.

Enclosures

c.c. DEQE

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March 9, 1978

Mr. Ed Chambers
Acton Conservation Committee

Dear Mr. Chambers:

At the most recent Conservation Committee meeting (Wed. 3/8/78, 8:30), I described to the committee a flooding problem which I think would be aggravated by Mr. DeVincent's proposed development on Arborwood Road. After some discussion, it was clear that some investigation was necessary so the committee advised that I describe the problem in writing and also meet with Eric Durling in Engineering for discussion, which I have done.

Briefly, the drainage ditch behind my house overflows in heavy rain and during spring runoff. Approximately one third to one half of my property gets filled with about 12 inches of water when it overflows. Discussion with Eric Durling seems to indicate that the problem is most likely caused by the cross culvert at Station 25+10 on a proposed section of Brucewood Road. For the past 4-5 years, there has been a "temporary" cross culvert there about 12-18 inches in diameter. The development plan (Charles Tremarche, I believe) shows 2 large 4 foot diameter cross culverts at this station. This cross culvert receives the runoff from several acres of wetlands on either side of the DeVincent Plan as well as the road drainage since all three of these runoffs join above this culvert. It will also receive any new runoff caused from the DeVincent Plan due to regrading, paving, etc.

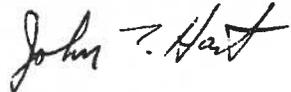
Since there is already a known flooding problem, what I am requesting is:

1. That the Conservation Commission have the developer for the Arborwood Road Plan (Mr. DeVincent) do a calculation of flooding impact due to the increased load on this cross culvert (Station 25+10).

2. That the planning board, in conjunction with Engineering, review these calculations and determine when the increased size cross culvert on the Tremarche Plan should be installed. Eric Durling suggested that since the Brucewood Road Section may not be built at all, an even simpler alternative might be to simply remove the 18" cross culvert and widen it to an appropriate width.

It appears that the problem is not a difficult one to resolve, but does require some attention. I will help in any way I can.

Sincerely yours,



John Hart
10 Arborwood Road
Acton, Massachusetts

JH/lc

cc: Mrs. Dora Sherman,
Acton Planning Board

Mr. Eric Durling,
Engineering