The following is in response to application review comments dated April 27, 2006 from Jeff Dennis regarding the subject project. For ease of reference, we have included Jeff's comments along with our responses below:

Comment 1:

My preliminary look at it suggests that phosphorus will be okay, and I won't even have to review the buffers, as long as I can keep the steep slopes in the parcel area calculation. I'm pretty comfortable with doing this because the normal practice of subtracting steep slopes from the parcel size before calculating the parcel's allocation is based on the assumptions that (1) the steep slopes will not get developed (likely true for most types of development, but not this one); and (2) the steep slopes in the watershed have already been subtracted from the watershed area when calculating the area available for development and the per acre phosphorus allocation (I didn't do this when calculating the per acre phosphorus allocation. I conservatively assumed that the entire watershed was available for development.) So, since both the assumptions were not relevant I feel it is appropriate to allow them to use allocation for the steep portions of their parcels. If they do, and if they effectively limit the long term road width to 12 ft., they have enough allocation to meet the standard without taking credit for the buffer treatment that they will be getting in some places, and the buffers are essentially important gravy.

Response:

Comments noted with no response required.

Comment 2:

My biggest concerns do not involve the phosphorus calculations but echo Art's and Dave's concerns that they are not mimicking natural drainage paths enough. On the mountain slopes that we're talking about, increasing an intermittent channel's drainage area by a factor of 2 or 3 should have disastrous ramifications. We saw it at Saddleback Mountain a few decades ago when they diverted two intermittent streams into the snow making pond which drained to only one of those streams, thus increasing its drainage area by a factor of 3 or 4. The result during spring rains was a mountainside gulley that you could have almost fit the Harlow building into and that did a number on the stream draining to Saddleback Lake, not to mention depositing a huge delta in the lake and causing reduced transparencies for a while. If the road does not have very frequent cross drainage, either with culverts or with Dave's alternative road design, there will likely be a lot of gully wash outs below their culverts, at least in the steeper areas, and that could result in a huge amount of short term phosphorus loading.

Response:

The roads will have very frequent cross drainage as supported by the preliminary project drawings and details. David Rocque's cross drainage concerns have been addressed in the response to his questions – included in this document package.

Comment 3:

The other question involves erosion control mix. I agree with Dave that it's the material that should be used, but they will need a huge amount of it, and they should start looking now into its availability and probably start stockpiling. Wood chips will not do the trick, and even local stump grindings may not be cohesive enough for these slopes, nor will they provide as good a seed bed for natural vegetation.

Response:

Where the term "wood waste" is used, it will be amended to erosion control mix or stump grindings meeting the Maine DEP specification for erosion control mix throughout the project application for the final LURC submission.

On the order of 20,000 cubic yards of erosion and sedimentation control mix is estimated to be required for this project. Approximately 45,000 cubic yards of stumps are estimated to result from the proposed development; therefore, processing less than 50% of these stumps would provide the required erosion control mix for the project. New England Organics has been contacted and has indicated they could provide on the order of 10,000 cubic yards of erosion control mix for this specific project in any given year.

Erosion control mix will be stockpiled within the footprint of the project where no additional clearing of vegetation is required.