

December 3, 2013

To: Durham Planning Board

From: Durham Energy Committee

*Re: review of energy checklist from Madbury Commons project*

The Energy Committee met with individuals (Barrett Billotta, COO of Golden Goose Properties, Fred Kell of GGP and Shannon Alther of TMS Architects) representing the development team for Madbury Commons on Tuesday, November 19th. We reviewed the energy checklist and the overall impact of the new development on our three energy pillars: building efficiency, renewable energy sourcing, and transportation.

The developers are to be commended for taking a long-term building ownership perspective on the project. Their financial model of flat fee rentals with heat and electricity included provides them with incentives for making the building envelope and systems as efficient as possible; this is a model for how student developments ought to be built and operated in Durham.

Golden Goose plans to meet or exceed Durham's stringent code in many areas. They also plan to install end use monitoring systems, careful controls on the range of heat allowed in each space, and a system of charge backs for heavy energy users. This, in our opinion, is a model that addresses all the usual disadvantages and split incentives of student rental housing.

Their renewable energy commitment also impressed the committee. The developer has identified two flat roofs with southern exposures for a solar installation. It was too early in the process to provide firm estimates of PV or hot water heating, but the developer seemed committed to maximizing the use of renewable energy sources and attested that in their preliminary analysis the payback periods for solar hot water looked very promising. We recommended close study of the Bryant project on 155A where solar hot water applications have led to long term savings for that building, in our understanding.

On transportation, the proposed project hit a number of our recommended points for reducing the transportation impact of development in Durham:

- it is sited in the downtown area, within walking distance of campus
- provides convenient and public pedestrian avenues
- rebuilds and maintains bridges over Pettee Brook, and
- has no on-site parking for tenants which discourages car ownership and use.

The planned bicycle storage outside was less than the UNH ratio per student bed, which was a concern of the committee. Golden Goose did indicate a willingness to expand the bicycle storage into areas in the garage not suitable for auto parking. The committee argued strongly that the developer should not wait until demand for bike storage increased, but should ensure the project is a model for bike access and secure, covered storage. The prospect of a convenient, secure, dry, all-weather storage area for bikes — complete with easy exit points onto campus-bound paths — would send a strong message to tenants about the green credentials of the living space and significantly encourage new occupants to bring bikes at the start of the year — sometimes the last time to make such a decision.

The Committee urges the Planning Board to applaud the plans Golden Goose has for building energy performance made possible by the incentive structure associated with the building owner paying energy costs. We urge the Planning Board to consider that equally significant attention ought to be given to bicycle storage in this development. The Committee also urges the Planning Board to take into account the communication by Steve Pesci (UNH) regarding the significant increase in pedestrian activity and associated traffic impact from this downtown development, the accommodation of moped parking, and the possibility of car sharing.