

MEMORANDUM

TO: Michael Behrendt
FROM: Jim Lawson
DATE: January 29, 2014
SUBJECT: Revised Analysis of Madbury Commons Commercial Parking

The Planning Board requested an analysis of whether the commercial parking needs of Madbury Commons can be accommodated with the project's onsite parking and the available Durham public parking in the downtown area. The original parking analysis dated January 21, 2014 has been updated based on an additional 1,200 square feet of commercial space in the South Building.

The analysis is based on 1) Durham public parking capacity and usage data, 2) the Interoperability Lab (IOL) parking strategy jointly developed by Durham, UNH and Golden Goose, and 3) the Durham parking changes and expansion planned for the early spring of 2014.

Data on downtown parking use has been collected and analyzed periodically since 2010, and was used in the Durham Parking Pricing/Management Report completed in 2011 by TND Engineering. The most recent parking data was collected during September 2013, and is used in this analysis. There has been no significant addition to Durham's downtown commercial inventory since data was collected last September.

As detailed below, existing downtown parking capacity, new business permit parking and parking provided by Madbury Commons will accommodate both the requirements of the UNH IOL and the additional commercial space located at the project. There is sufficient capacity for the Planning Board to grant the parking exemption allowed under Zoning Ordinance 175-112:A.2.

Meeting the Parking Requirements of the UNH Interoperability Lab

The UNH Interoperability Lab was started in 1988, and has developed a worldwide reputation for the testing of communication equipment and applications that use advanced and emerging standards. Their current facility is located on Technology Drive, and their services, expertise and multivendor testing events (called "plug-fests") bring hundreds of visitors to Durham every year. Nearly 200 industry leading companies from around the world are UNH-IOL members including Cisco Systems, Apple, Hewlett Packard, Intel, Huawei Technologies, Juniper Networks, Microsoft and many more.

The parking requirements for the IOL are unique because plug-fests create a temporary demand for up to sixty parking spaces to accommodate staff and visitors. However, this peak demand is not the typical day-to-day requirement of the IOL. To address this parking demand, Durham, the University and Golden Goose have developed a plan using multiple parking resources. The resource required from Durham in the plan, in addition to those provided by UNH and Golden Goose, is parking capacity sufficient for up to forty (40) Business Parking Permits.

Madbury Common's location on the north side of the Central Business District allows the project to use new permit parking spaces planned on Strafford Avenue where there is a need to implement parking controls and on Garrison Avenue where there is sufficient space for parking and the need for traffic calming east of Rosemary Lane. These parking controls and plans were incorporated into Durham's 2014 budget¹. Garrison and Strafford Avenues will provide approximately thirty-eight (38) new spaces, and the parking usage data from September 2013 shows that there is an average of six (6) permit-only spaces available in the Pettee Brook parking lots. As shown in Figure 1, all of these permit parking areas are within the 5 minute walking "pedestrian shed" recommended by the Commercial Core Strategic Plan².



Figure 1 – Madbury Commons Pedestrian Shed and New Business Permit Parking Areas

¹ Summary of Downtown Parking Changes, J. Lawson. Document presented to Town Council on 12/9/2013 and discussed on 12/9/2013 and 12/16/2013. The parking changes were incorporated into 2014 Budget. Purchase of the parking kiosks was authorized at the 1/13/2014 Town Council Meeting.

² Durham Commercial Core Strategic Plan - Charrette Book, November 2009. B. Dennis Town Design

Resources for Meeting Madbury Commons Commercial Parking Requirements

In addition to the IOL, Madbury Commons will have approximately 6,800 square feet of commercial space. The Town of Durham Parking Pricing and Management Report recommends a shared parking space ratio of 3.2 – 3.4 spaces per 1,000 square feet of commercial space³. Thus, the commercial parking requirement for Madbury Commons is approximately 22 – 23 shared parking spaces. The Madbury Commons site plan shows 17 spaces, eight of which will be reserved for the IOL. The remaining 9 spaces would be available for commercial activity, and an additional 14 public parking spaces would be required based on the recommended ratios.

Figure 1 shows that all of Durham's downtown parking is within Madbury Commons' pedestrian shed, however, only the parking in closer proximity to the project was analyzed. The calculation of available parking is based on the 85% maximum threshold recommended in the Durham Parking Pricing and Management Report, and the parking usage data is from the September 2013. The number of parking spaces in the Pettee Brook lot was reduced by nine from forty-eight (48) to thirty-nine (39) in anticipation of reconfiguring the parking lot to accommodate greater pedestrian traffic and the restoration of the brook. As shown in Table 1, the public parking in proximity to Madbury Commons has the capacity to provide parking for an additional twenty (20) users, and the total available parking of 29 is well above the 23 spaces required for Madbury Commons' commercial floor space.

Table 1. Public Parking Capacity in Proximity to Madbury Commons

Parking Lot	Parking Spaces	Avg. Spaces used 9/13	85% Threshold	Available Spaces Below 85% Threshold
Pettee Brook Lot (Revised Capacity)	39	36	34	0
Madbury Road	22	14	19	5
Madbury Road Meter	8	5	7	2
Pettee Brook Lane	21	15	18	3
Tedeschi Lot	44	28	38	10
TOTAL AVAILABLE - PUBLIC PARKING				20
Available at Madbury Commons				9
TOTAL				29

³ Town of Durham – Parking Pricing & Management Report, February 2011. TND Engineering, Page 34
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