



# ROAD BUSINESS

A newsletter for municipal employees, public and private road-related organizations, and citizens.

## On the Road in NH:



### Durham's First Roundabout: A Successful Traffic Calming Project

~Interview with Michael Lynch, Durham Public Works Director, and article submitted by Kaitlyn Nagle, T<sup>2</sup> Student Assistant

In fall 2010, the Town of Durham Public Works Department and the University of New Hampshire successfully constructed the Town's first roundabout. A roundabout allows vehicles to travel in one direction around a center island, without typically stopping, to reach their destination. A roundabout does not have any traffic signals or stop signs.

The construction of this roundabout was one of the projects included in the *Durham Public Works Department Capital Improvement Plan* and the *University of New Hampshire's Master Plan*. The Plan involves two connecting University roads; North Drive and South Drive. South Drive is not fully developed yet, but when completed, it is predicted to be the most traveled intersection in the town.

A roundabout was chosen in this location for many reasons. First, roundabouts improve safety by reducing fatalities, injuries, and crashes and they make conditions safer for pedestrians by slowing vehicle speed. Second, they reduce congestion by allowing vehicles to continue moving. Third, they reduce pollution and fuel use due to fewer stops, less abrupt accelerations and less time idling.

The main materials used for this project were recycled asphalt, porous pavement, new LED street lighting, thermal plastic street markings, and granite curbing. The Durham DPW utilized roadway reclamation when reconstructing Main St. The project took three years of planning and the construction took one year to complete.

The total cost for constructing this roundabout was \$200,000.00, and the University of New Hampshire funded 100% of the roundabout project.



The Town of Durham's first roundabout.

Grant funding was awarded from the Federal Highway Administration's (FHWA) American Recovery and Reinvestment Act and Traffic Enhancement (TE) programs for the rest of the project under the Master Plan.

Those involved in this project included Durham's Director of Public Works, Mike Lynch, Durham's Town Engineer, Dave Cedarholm, and several University representatives, including Paul Chamberlin, Paul Henry, Steve Pesci, and Doug Bencks. *(Con't on Page 3)*

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UNH Technology Transfer Center Mission: To provide training and services concerning the technology and management of roads and bridges to municipal highway department officials.

### Master Roads Scholar—Barry Mueller



Barry has been working for the NHDOT for the past 8 years. He began his involvement in public works as a truck driver. Currently his District is working on rebuilding two roads. Barry likes everything about his job and he advises new public works employees to

enjoy their job too.

Barry will continue to attend training with UNH T<sup>2</sup> because knowledge motivates him. His favorite part of the Roads Scholar Program is learning about new technology in the public works field.

*(Con't from Page 1)*

While building the roundabout, the Town of Durham and UNH also built a smaller, multipurpose path that can be used as an off-road bike lane, walking or running path, for skating-boarding and roller-blading or other methods of transportation. The multipurpose path travels all the way out to Route 155A and up into UNH's West Edge parking lot. The entire path is lit with energy efficient LED technology and includes the infrastructure to install several University Blue Box Security Systems. This campus-wide system allows for quick-dial during emergencies. The multipurpose path is made out of porous pavement, allowing it to absorb water, as opposed to traditional pavement where erosion and icing can occur.

In addition to the roundabout project, Mike Lynch has also been involved in other traffic calming projects. For example, one project focused on speed tables. A speed table is a raised elevation change in the road which contains a six foot long entrance ramp, a 10 foot long level platform and then a six foot long exit ramp on the other side. The speed table is 4 inches tall. A speed table is utilized because it is not as invasive as a speed bump or hump and it has been shown to be an effective traffic calming device.

Mike will soon be tackling another project in Durham on Pettee Brook Lane, a one-way street located in the downtown area. His department plans to narrow the road to add parking spaces and bump out traffic islands. They also plan to install new sidewalks, decorative street lighting along the entire length of

### Master Roads Scholar—Phillip Sylvia



Phillip is a Light Equipment Operator with the City of Laconia Department of Public Works.

Phillip would like to continue attending training with the UNH T<sup>2</sup> Center Roads Scholar Program. He advises new public works employees to attend training. He says there is a lot to learn about the public works field.

Phillip has a daughter named Terikah.

### Congratulations to all our Master Roads Scholars!



*Drawing of the construction plans for Pettee Brook Lane, Durham.*

roadway, a new bike lane, and kiosk parking meters; improve existing sidewalks; reset the granite curbing and construct a speed table to elevate the mid location crosswalk and slow down traffic.

Mike advises other road managers to involve the community with the decision-making process before completing final designs of new town projects. He says that holding public meetings to explain the new technology and showing renderings (see above) of plans will create excitement and support for a new project. Before implementing the roundabout, Mike had a professional visit the town to explain what a roundabout is and the benefits of having one. This seemed to help with gaining support from the community.

- For questions on this project, contact Michael Lynch, 603-868-5578 or [mlynch@ci.durham.nh.us](mailto:mlynch@ci.durham.nh.us).
- For more info. on roundabouts: <http://safety.fhwa.dot.gov/intersection/roundabouts/fhwas08006/>