



The



Spring 2010

**TFM**<sup>®</sup>

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- Traffic Engineers
- Structural Engineers
- Land Surveyors
- Landscape Architects
- Planners

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**Green Buildings**

*Alternatives to LEED?*

**TFM News**

Many clients ask us "I want a LEED building, but I am concerned about the cost—are there any alternatives?"

**LEED** (*Leadership in Energy and Environmental Design*) is a rating system introduced by the U.S. Green Building Council in 2000 as a yardstick for sustainable buildings. It is probably the most well-known of the green building rating systems in common use. There are four levels of LEED certification: Certified, Silver, Gold, and Platinum. The USGBC estimates that the cost premium for the most common level, Silver, is about 2%. However, they point out that the savings can be substantial; in energy costs, in increased employee productivity and reduced absenteeism, and in increased sale or rental prices. The system does require fees for project registration, documentation of building performance from building professionals, as well as independent verification of results. The certification level achieved by a building is often not known until after the owner takes occupancy.

However, there are alternative, simpler systems. Perhaps the most well-known of

these is the EPA "**Energy Star Buildings**" program established in 1999. The system relies on a Portfolio Manager software tool that allows organizations to measure and compare the energy use of their buildings over the internet. The Portfolio Manager assigns buildings a score between 1 and 100 to indicate their energy performance relative to similar buildings. To earn the Energy Star label, a building must score at least 75. The system is designed for non-building professionals, and is relatively simple and easy to use.

"**Green Globes**" is another web-based building performance tool. It was developed in Canada in the 1990s and has been introduced to the U.S. by the Green Building Initiative. It generates scores up to a total of 1,000 points in seven categories. These scores can be used as self-assessments internally, or they can be verified by third-party certifiers.

These are just a few of the many green building tools available today. TFM can help you find the right tools—as well as grants and rebate programs—that are most applicable to your project's needs.



**Greenerborough III**

In April, TFM exhibited various Green Practice techniques and demonstrated how porous pavement works in New England's third annual Green Living Expo and Festival held in downtown Peterborough, NH.



**TFM on Three Teams of Plan NH 2010 Merit Award Winning Projects**

The annual Plan NH Merit Awards dinner was held in March at the Derryfield Country Club. Five projects were awarded as meeting the Plan NH criteria of excellence in sustainable planning, design and development of the built environment in New Hampshire. TFM provided engineering services for three award winning projects below:



Sullivan Construction  
Bedford



Cross Roads House  
Portsmouth



Centrix Bank/Apartments  
Dover

**CONGRATULATIONS** to all the award winning projects and team members for their creative approaches in promoting smart growth, sustainability and social responsibility for a better future.

To learn more about Plan NH visit:  
[www.plannh.org](http://www.plannh.org)



## PROJECTS in Progress

■ **Innovative Homes, Claremont, NH:** TFM is preparing a site plan for a sales center that will display a variety of model homes. The company is a distributor of modular homes throughout NH and VT.

■ **Structal Bridges, Claremont, NH:** TFM is assisting with site plans and foundation structural design to enable the plant's expansion. Structal Bridges is a division of CanAm Steel, one of North America's leading manufacturers of steel products for highways, stadiums and other large facilities.

■ **PSNH, Mobile Substation Facility, Bow, NH:** TFM teamed with Architect Udelsman Associates in completing Public Service Company of NH's first Mobile Substation Facility. The facility will house PSNH's mobile substation units, which are critical for restoring power during a system emergency, until such a time as they are needed. The approximate 12,500 sf of floor area between the two buildings will provide a safe, secure location for the storage and repair of PSNH's mobile substation units.

■ **Town of Sutton Department of Public Works, Sutton, NH:** TFM provided survey, civil engineering, and structural services for a proposed new public works garage. The building, approximately 10,000 sf will contain 7 garage bays and 1 wash bay in addition to office space, a break room, parts room, mechanical room and storage space. The project also involves a proposed septic system. The Town approved the warrant article at the March meeting.

■ **NH Army National Guard Center, Strafford, NH:** TFM performed an evaluation of NHANG facilities drinking water and septic systems. Construction Plans and Specifications were created along with bid documents through the NH Bureau of Public Works. TFM work closely with Army National Guard personnel throughout the design and permitting for the facility improvements. The project is currently out to bid, with the expected work to be completed by fall of 2010.

■ **Saint Gabriel the Archangel Church, Upton, MA:** TFM is providing structural engineering services for Mauge Architects for the proposed construction of a new church building with mixed-use worship, gathering areas, and offices. The new construction will be single story conventional timber and steel construction with a full walkout basement. This project features exposed tube steel scissor trusses in the open vaulted sanctuary area.

■ **The Wells School, Peterborough, NH:** TFM recently completed the survey and received approval for a subdivision on Middle Hancock Road.

■ **CDM, North Conway, NH:** TFM was recently awarded the survey by CDM on an additional 1,600 lf of survey for sewer design.

■ **CDM, Lowell, MA:** TFM is completing the survey for sewer design on Father Morrisette BLVD and the UMass Outfall.

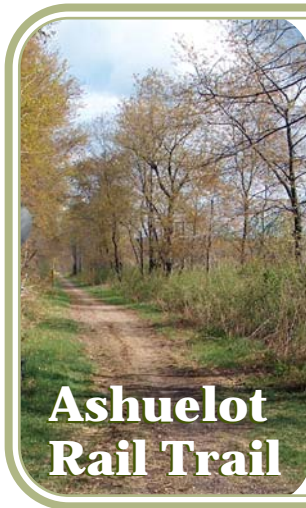
## TFM in the news . . .

*A new Lexus dealership is coming to Bedford.*



Rendering courtesy of:  
The Curtis Architectural Group

**Group 1 Automotive Inc.** of Houston, Texas is proposing a new Lexus Automotive Dealership on Kilton Road in Bedford, NH. The site is currently the location of CR Sparks Restaurant and Conference Center. The project includes a 2-story 33,300 sf footprint building that will provide sales, parts and repair services to customers. The redevelopment project will decrease the total impervious coverage on the site by 5%, provide improved stormwater treatment and additional landscaping. The project was approved by the Town of Bedford Planning Board in January 2010. Construction is set to begin in the summer of 2010.



### Ashuelot Rail Trail

The Town of Swanze is planning a project along a 13,000 foot section of State-owned railroad right-of-way to improve the existing railroad bed to a crushed gravel hard pack surface. The project will also include grading, stormwater drainage, erosion control and sight distance improvements. Permitting for this project includes a NHDES AoT Waiver & Shoreland Permit, and NHDOT Cultural and Historical Resources meetings (*associated with the Federal funding for the Transportation Enhancement program*).



Rendering courtesy of Warrenstreet Architects

TFM provided structural engineering services to **Warrenstreet Architects** who designed this new two-story, 29,000 sf medical facility centrally located on Route 108 in Somersworth, NH. With the help of a \$4.97 million grant awarded by President Obama last year, the non-profit agency will be able to serve an additional 3,000 new patients and consolidate their four locations into one. **Hutter Construction** plans completion for spring 2011.

## Hillsborough County Superior Court North

Manchester, New Hampshire



TFM provided civil engineering services for **Lavallee Brensinger Architects** for this project which includes approximately 78,000 sf of interior renovation and reconstruction of the existing building. In addition, the project included some minor building additions, a new front plaza layout, a lower level sally port, discontinuance and reconfiguration of Barrister Lane, as well as miscellaneous site grading, drainage, utility, and landscape design. The project is currently under construction.



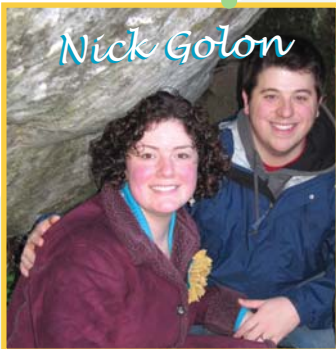
Rendering above courtesy of Lavallee Brensinger Architects



**NH Food Bank**, a program of NH Catholic Charities, is relocating their existing Food Bank facility from West Brook Street to 700 East Industrial Park Drive in Manchester. Together with Jim Minnie from **Minnie Erecting Ltd.** TFM has obtained Planning Board and State approvals to retrofit and renovate

the existing industrial site and building to accommodate their various operations, such as, receiving, cleaning, an repackaging of donated food items; storage of donated food products; preparation of meals; distribution of food to organizations in need; and a culinary certificate training program. TFM also provided structural engineering services.

### MEET...



Nick & his wife Jen recently visited Ireland's countryside.

Nick joined TFM in 2006 and works as an Engineering Project Manager in the Bedford office where he focuses on Industrial and Power Generation projects. He is a graduate of Wentworth Institute of Technology where he received a Bachelor of Science degree in Civil Engineering Technology. Nick is actively involved in the American Society of Civil Engineers (*he was a judge at the ASCE/AISC student steel bridge competition*)

and in his spare time enjoys brewing his own beer which he someday hopes to market. Nick is a loyal New England sports fan and enjoys attending Red Sox, Patriots and Celtics games whenever possible. Nick and his wife Jen live in the Manchester area and are expecting their first child later this year.

# TFM<sup>®</sup> Planning Update

### Town of Enfield, NH

The 2010 Town Meeting approved the inclusion of the **Huse Park** improvement plan into the Town's Tax Increment Finance (TIF) plan with an estimated final design and construction cost of \$300,000. In 2009, TFM Planning worked with the Town to prepare a conceptual improvement plan. Huse Park is a very well used neighborhood park located at the intersection of US Route 4 and Main Street.

### City of Nashua, NH

TFM is assisting the City of Nashua's Community Development Department with the administration of the City's **Neighborhood Stabilization Program (NSP)** award from the NH Community Development Finance Authority. The purpose of the NSP is for the City to acquire vacant, foreclosed or abandoned properties for redevelopment. TFM Planning is assisting the City



with a concept plan for the redevelopment of a 4.5 acre site in the Pine and Ledge Street area of the "Tree Street" Neighborhood and structural analysis of a building to be acquired.

**Alene Candles** TFM Structural Engineers provided engineering services for Aliens Inc. of Amherst, NH for the design of a 17,000 sf addition to the candle manufacturing facility on Scarborough Lane in Milford, NH.

Alene Candles specializes in the production of superior quality, custom-designed, fragrance candles for the gift, cosmetic and retail trades.





Rendering courtesy of Whitlock Architects

TFM Structural Engineers provided design services for the new **Jerry Remy's Sports Bar & Grill** located on Boylston Street in Boston. The renovation project involved analysis of the two story flat slab concrete structure and design of reinforcing for new stair, elevator and mechanical openings. In addition, the exterior wall openings were expanded to allow for better views of Fenway Park. The restaurant opened in March and is a big hit with fans.



### *Ford of Londonderry Gets a New Look*

TFM is providing structural engineering services for **Bruce Hamilton Architects** and **Jewett Construction** for the construction of a new showroom, replacing the old one of similar size and location. The new construction will be single story conventional steel construction. This project features a new entrance "brand" wall aligned with the Ford prototype.

## TFM Staff News

**Daniel Blais** recently received his CESSWI (*Certified Erosion, Sediment and Storm Water Inspector*) certification. The nationally accepted certification is relative to the requirement for qualified persons performing SWPPP (*Stormwater Pollution Prevention Plan*) inspections. Mr. Blais is assisting clients to deliver environmentally friendly and sustainable site development projects.

**Paul Carideo** is TFM's first Certified Professional in Erosion and Sediment Control (CPESC). A CPESC must demonstrate proficiency in the erosion and sediment control field which is now being required by State of NH programs such as NHDOT and NHDES Alteration of Terrain as well as some Federal permitting programs. Professional development units are required to maintain professional and technical knowledge up to date as well as ethical and technical competence. The International Certification program is administered by Envirocert International.



**Tom Lamb**, one of TFM's Structural Engineers, along with his wife Morgan, proudly announced the birth of their first child Myles Thomas Lamb. Myles was born on March 30<sup>th</sup> weighing 8lbs. 14oz.

*Congratulations to Tom & Morgan!*

### WHAT IS A TREE WORTH?

This tree was one of three large spruce trees on a work site, and in the way of building a new road. The trees were planted by the previous residential owner to provide a privacy screen. The new owner decided to save the trees by having **Greeno Tree Spade** of Hudson, move the trees to a new location, rather than cut them down. All in all, the cost was far outweighed by the result.



**Spring has sprung!** Last fall TFM's Landscape Architect, Anne Cruess with the help of Joe Sears planted over 100 daffodil bulbs in front of TFM's Bedford office.



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