Administration Building HVAC Replacement - W. Hartford, CT Cabotville Industrial Park Building - Chicopee, MA

Chiller Replacements - Amherst, MA

Chlorine Building - Manchester, NH

City Hall HVAC Upgrades - Westfield, MA

City Hall Upgrades - Gardner, MA

Clark School Heating System Evaluation - Worcester, MA

Community Wind Projects - MA

Electric and Steam Improvements - Deerfield, MA

Energy Management Services - Westfield, MA

Engineering/Permitting Services for Solar Energy - MA

Greenwood Memorial Pool - Gardner, MA

Holyoke Community College Lighting and Security - MA

Housing Modernization Services - Holyoke, MA

Lake Gaillard Pump Station - North Branford, CT

Massachusetts School Building Authority Green Repairs - MA

Medical Gas Air Compressors - University of Rhode Island

Metropolitan District HVAC System - Hartford, CT

Regional Water Authority Arc Flash Study - New Haven, CT Senior Center Electrical Upgrades - East Longmeadow, MA

Standby Generator Upgrades - Worcester, MA

United Lens - Southbridge, MA

**Aquarion Water Company** 

Deerfield Academy

**Dutchess County Water and Wastewater Authority, NY** 

Gardner, MA

Hampshire College

Holyoke Community College

Manchester, NH

Massachusetts School Building Authority

**Massachusetts State Trial Courts** 

The Metropolitan District Commission

**Peoples Bank** 

Rhode Island College

South Central Connecticut Regional Water Authority

**University of Connecticut** 

**University of Massachusetts** 

University of New Hampshire

University of Rhode Island

Worcester, MA

Yale New Haven Hospital

Yale University











For more information: Michael A. Toto MEP Group Manager Ph: 413.572.3218

MAToto@tighebond.com





# Mechanical, Electrical, Plumbing, and Fire Protection Services

Tighe & Bond is a full service engineering firm that offers a wide variety of services to our clients. As the demand for mechanical, electrical, and plumbing engineering services has grown, we have expanded our staff and technical offerings. The following is a list of representative project types and the wide variety of services we can provide.

# **Project Types**

- **♦** Education
- ♦ Dormitories
- ♦ Healthcare Facilities
- ♦ Industrial, Commercial, and Multi-Family Residential
- ♦ Office Buildings
- ♦ Renewable/Green Energy (Solar, Wind, Hydro-electric, Fuel Cell, Biomass)
- ♦ Research and Pharmaceutical Labs and Buildings
- ♦ Water and Wastewater Facilities
- ♦ Food and Beverage Facilities
- Underground Parking Garages

## **Our Design Experience Features:**

- ♦ Building Energy Modeling for LEED Compliance
- ♦ AutoCAD MEP, Revit, and NavisWorks
- ♦ Conditions Assessment and Equipment Evaluation
- ♦ Construction Feasibility, Sequencing, and Coordination
- ◆ Design/Build or Design/Bid/Build
- ♦ Employee Training Services (NFPA 70E)
- ♦ LEED Documentation
- ♦ Life Cycle Cost Analysis
- ♦ Master Planning
- ♦ Opinion of Probable Cost and Value Engineering
- ♦ Permitting and Rebate Applications
- ♦ Startup Assistance

#### Heat, Ventilation, and Air Conditioning

- ♦ High Performance Systems & Sustainable Design
  - Heat Recovery Systems
  - Dedicated Outdoor Air Systems
  - Chilled Beam and Radiant Technologies
  - Combined Heat Power
- ♦ Building Ventilation Systems
- ♦ Hot Water and Steam Heating Plants
- ♦ Chilled Water Plants
- ♦ Dehumidification Systems
- ♦ Instrumentation and Control Systems
- ♦ Variable Refrigerant Flow System Design
- Mitsubishi Electric Certified Designers

#### **Electrical**

- ♦ Medium and Low Voltage Distribution
- ♦ Cogeneration and Combined Heat & Power
- ♦ Construction Management
- ◆ Fire Alarm Systems
- ♦ Generator Design (Emergency and Standby)
- ♦ Grounding and Lightning Protection
- ♦ Lighting, Photometric Calculations and **Control Systems**
- ♦ Control Systems
- System Integration and PLC Programming
- Instrumentation and Controls
- Power Distribution Systems
- Security, Card Access, and CCTV
- System Troubleshooting (Code and Field Wiring) - Tel/Data and Computer Networking
- ♦ NFPA 70E Compliance System
  - Electrical Safety and Arc Flash/ **Coordination Studies**

## **Plumbing**

- ♦ Legionellosis Risk Management for Building Water Systems
- ♦ Domestic Systems (Hot Water Production, Hot and Cold Water Distribution)
- ♦ Sanitary Drainage Systems
- ♦ Storm Water Systems
- ♦ Process Systems
- ♦ Emergency Eyewash and Shower Stations

### **Fire Protection**

- ♦ Performance Specification for Fire **Protection Systems** 
  - Wet Pipe
  - Dry Pipe
  - Pre-action Deluge
  - Clean Agent
- ♦ Sprinkler Service Entrance Design
- Rise Layouts
- Fire Pump Layouts
- ♦ Sprinkler Head Layout Plans

# **Utility & Process Systems**

- ♦ Combustion Calculations
- ♦ P&ID, Instrumentation and Controls
- ♦ Pipe Sizing and Pressure Drop Analysis
- ♦ Pump Upgrades
- ♦ Steam, Compressed Air Generation, and Distribution
- ♦ Thermal Calculations





