



SHEPPARD ENGINEERING, P.C.

966 LIVERNOIS
TROY, MI 48083-2709
PH. (248)585-4240
FAX: (248) 585-7371

John J. Gruber

President and Project Engineer



REGISTRATION

Professional Engineer in Michigan
Professional Engineer in Colorado
Professional Engineer in Virginia
Structural Engineer in Illinois
Licensed Residential Builder in Michigan

AREAS of SPECIALTY

Residential Structure Design
Commercial Structure Design
Industrial Structure Design
Hotel Structure Design
Failure Investigation
Truss Collapse Investigation
Third Party Quality Assurance for Metal Plate
Wood Truss Fabricators
Building Assessment and Inventory

EXPERIENCE

Since joining Sheppard Engineering in 1991, Mr. Gruber's range of assignments includes the design and oversight of residential, commercial, light industrial, hotel and church projects. Structural design responsibilities include the design of light and heavy timber structures (including connection design), steel structures (including some connection design), masonry structures, light gage steel framing, and concrete design. Foundation design including spread footings, piles and retaining walls. Civil design responsibilities include site grading and balancing, storm sewer design, sanitary sewer design, and stormwater detention design.

Additionally, his experience includes analysis and inspection of wood trusses, assessment of construction materials, and the assessment of insurance claims.

Mr. Gruber's other areas of specialty are collapse investigation, including the collapse of steel, wood and masonry structures.

REPRESENTATIVE PROJECTS

Residential Structure Design:

- Taft Knolls Subdivision, Novi, MI – Designed structural framing and foundations for single-family dwellings.
- Milford Knolls Condominiums, Milford, MI – Structural framing and foundations for multi-family dwellings.

Commercial Structure Design:

- Office Building, Bloomfield Hills, MI – Designed steel and concrete structure, including foundation, for 3-story building.

Industrial Structure Design:

- 100,000 sq. ft. Industrial Building, Armada, MI - truck wells and overhead cranes.
- Iroquois Industries, Warren, MI – 1,000,000 lb. Press pit designs.
- Slitter machine foundations.

Churches:

- St. John the Evangelist Catholic Church, Allenton, MI – 10,500 sq. ft. glulam timber tudor arches and masonry.
- Principal of Faith Missionary Baptist Church, Detroit, MI – Glulam timber tudor arch and masonry.

Hotels:

- Inn at Bay Harbor, Bay Harbor, MI – Part of the structural engineering design team.
- Concorde Inn, Clinton Twp., MI – Designed 160 room hotel with pool and banquet facility.

Forensic Engineering:

- North Congregational Church, Farmington Hills, MI – Investigation of an installation collapse of 55'-3" wood scissor trusses.
- DuBois Lumber, Grayling, MI – Investigation of an installation partial collapse of 79'-8" wood roof trusses.
- Sav-mor Drugs, Westland, MI – Investigation of a steel framed building collapse due to snow and ice loads.

Timber Structures:

- Freeland United Methodist Church, Freeland, MI - Designed glulam framing and prepared shop drawings.
- Private Residence, Forestville, MI – Designed 97' timber ridge truss, prepared shop drawings, and provided CAD drawings for automated fabrication of steel gusset plates.
- Fox Run, Novi, MI – Inspection of fire-damaged trusses to determine extent of replacement.



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Timber Structures, continued:

- Design repair and modifications of metal plate connected wood trusses.
- Design permanent and temporary lateral bracing of metal plate connected wood trusses.

Metal Plate Connected Wood Truss Quality Assurance:

- Provide quarterly third party inspection services for 5 truss manufacturing facilities.
- WTCA QC Certified third party inspector.

EDUCATION

Lawrence Technological University
Bachelor of Science, Civil Engineering, 1991
Wayne State University
M.S. Civil Engineering with Structural
Concentration (December 2006)

TECHNICAL PAPERS

- *Permanent Bracing of Metal Plate Connected Wood Trusses*, World Conference of Timber Engineering, August 2006

PROFESSIONAL AFFILIATIONS

American Concrete Institute (ACI)
American Consulting Engineers Council (ACEC)
American Society of Civil Engineers (ASCE)
American Welding Society (AWS)
Concrete Reinforcing Steel Institute (CRSI)
Structural Engineers Association of Michigan (SEAMi)
Wood Truss Council of Michigan (WTM)
Wood Truss Council of America (WTCA)

TECHNICAL COMMITTEES

WTCA Engineering & Technology Committee
ANSI/TPI1-07 Project Committee