



Marcello Tronci, P.E.

SENIOR STRUCTURAL ENGINEER

Mr. Tronci specializes in structural engineering design, with experience in structural assessment, investigation and retrofitting of existing multi-story buildings. His project experience includes execution of contracts and construction administration, on-site project representation to clients and contractors, assisting, planning, and coordinating required work modification of standard engineering techniques in accordance to procedures and criteria. Mr. Tronci became a licensed Structural Engineer in Italy where he practiced for 4 years during which time he focused on integrated design of modular building systems for commercial, industrial and residential use. During this period of time he also performed design of repairs and structural rehabilitation of historic landmark buildings.

At CTLGroup, Mr. Tronci utilizes his expertise in structural engineering to perform feasibility studies, risk analysis and investigations in connection with the repair and rehabilitation of buildings and structures, and for new construction consulting.

Academic Credentials

Bachelor of Structural Engineering
Universita' degli Studi di Cagliari
Italy

Licensure/Certification

New York State Professional Engineer
ICC Welding Special Inspector
Structural Bolting Special Inspector
ACI CCSI Special Inspector

Contact Information

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Representative Project Experience

Heathcote Bypass and Heathcote Road Bridge Rehabilitation | Scarsdale, NY

Performed structural condition assessment and investigation, computed bridge load analysis using AASHTO LRFD Design Manual; prepared layout of existing steel girders, deck, abutment walls, piers. Computed load reactions at bearings; designed new overlay reinforced concrete walls and anchorage to existing abutment wall using ACI 318, ACI 301; determined percentage of section loss due to deterioration and prepared structural steel reinforcement details; prepared construction sequence and protection of traffic per NYC DOT guidelines. Design of new wing wall repair.

Facade and Balcony Repairs

Performed site investigation through close up inspections and balcony structural assessment, coordinated, directed and witnessed probes at several locations including core sample for laboratory test analysis. Performed structural analysis and design of repairs, prepared construction documents for DOB filing and construction.

- Esplanade Gardens, NY
- Village View, NY
- Trump Village, Section 3, Brooklyn, NY
- Coop City, Bronx, NY
- 83-33 Austin Street, Queens, NY
- 90-50/60 Union Turnpike, Ridgewood, NY
- Pratt Institute, Brooklyn, NY
- 30-35 Crescent Avenue, Queens, NY
- Kingsley House, White Plains, NY
- 16 North Broadway, White Plains, NY

Pool Structure Repair and Roof Replacement | Theodore Community Center, Greenburgh, NY

Structural investigation and assessment, design of structural repair and roof replacement. The client's request to keep the pool open to the public during restoration brought us to come up with the solution of realizing a temporary suspended platform around the interior perimeter of the building to allow workers to perform the work in a safe manner without interfering with the use of the pool and protect the pool users at the same time. Designed the steel frame temporary suspended platform attached to the existing truss with use of Lindapter steel connection system that requires no on site drilling or welding, saving both time and money when a safe, high strength connection can be quickly accomplished by clamping two steel sections together.

Developed demolition plan and designed structural steel frame; designed lateral resistance system for framing on the ground floor and computation of base shear; designed of new bond beam using two layers of reinforced and fully grouted CMU blocks in order to utilize portion of existing CMU wall; Designed of new seismic cable bracing system for the upper level of the building.

Pool Roof Structure Repair - YMCA | New Rochelle, New York

Performed Structural Assessment and investigation of existing roof survey of structural frame and preparation of framing plans, Structural Analysis and Design of steel members using AISC Steel Design Manual, ASCE 7-10 and NYS Building Code to evaluate the existing roof load capacity. Prepared construction documents including structural drawings and project manual for permitting and construction.

Structural Design of New High Parapet with Terra Cotta Units in NYC Landmark Buildings (from 6 to 24 stories)

Conducted close-up inspection; Probe investigation to determine structural connections and attachments of terra cotta blocks; Design of new parapet and preparation of construction documents for filing and construction.

- 154 West 14th Street, New York, NY
- 475 Amsterdam Avenue, New York, NY
- 64 Grand Street, New York, NY

New Deck Design and Sidewalk Vault Steel Reinforcement

Structural investigation of entire sidewalk vault; Prepared demolition plan and design of temporary shoring and permanent repairs to file with NYC DOB and construction.

- 27 West 23rd Street, New York, NY
- The Plaza, 5th Ave & Central Park South, New York, NY
- 443 Park Avenue South, New York, NY
- 504 West 110th Street, New York, NY

Structural Renovation and Design of New Mezzanine in Existing Factory Building

Performed structural investigation and assessment of a 1900s factory building for a change of occupancy. Witnessed geotechnical investigation and analyzed geotechnical report. Prepared probing plan to investigate the existing foundation and existing frame connection. Performed new load analysis using IBC code and ASCE 7 to determine the structural capacity with the addition of new mezzanine loads; design of new structural steel frame system with composite deck at 2 different elevation. Structural design of new steel stairs with bolting and welding connections; structural design of new light-gage frame bulkhead at roof level, develop of structural calculations and details. Developed lateral load resisting system with employ of sheathed panel systems consisting of cold-formed steel frames sheathed with gypsum board. Performed structural stability special inspection and reinforced concrete special inspection with weekly frequency.

Structural Assessment of Existing Commercial Building of a Food Market with New Mezzanine Floor

Structural investigation and assessment coordination of geotechnical investigation; Design of new Mezzanine floor and connections to the existing building structure.

- 2141 Palmer Avenue, Larchmont, NY

Landmark Building Structural Repair | 139 Franklyn St, New York, NY

Performed site investigation through close up inspections, structural assessment, coordinated, directed and witnessed probes at several locations due to visible facade damages. Conducted a survey, performed structural analysis and design of repairs of the spandrel panels at different floors using AISC Steel Manual, ASCE 7-10, IBC 2015. Prepared construction documents for DOB filing and for construction.

New Roof Dunnage for HVAC Units

Conducted structural survey in conjunction with mechanical survey to determine location of the new dunnage based on analysis and evaluation of the existing structure. Design of new dunnage and connections to the existing building structural frame.

- Food Market, 21 Center St., Ardsley, NY
- Food Market, 7 Halstead Ave, Harrison NY
- Food Market, 43 Fifth Ave, Pelham NY
- 230 West 38th Street, New York, NY
- 36 East 36th Street, New York, NY
- YMCA, New Rochelle, NY

Roof Structural Evaluation for Solar Panel Installation

Conduct Existing structure survey. Perform structural condition assessment and investigation, new load analysis to determine the structural capacity with the addition of solar panel loads.

- 417 Center Ave, Mamaroneck, NY
- 28 South 4th Street, Fords, NJ
- 2 Lawrence street, Ardsley, NY

Structural Assessment and Evaluation for Proposed Roof Terrace

Performed site investigation through close-up inspections, structural assessment. Coordinated, directed and witnessed probes at different locations due to visible façade damage. Conducted survey, perform structural analysis and design of repairs. Prepared construction documents for DOB Filing and for construction.

- 1412 Broadway, New York, NY
- 139 Franklin Street, New York, NY
- 363 Greenwich Street, New York, NY

Structural Roof Terrace

Reviewed existing building occupancy conditions to verify ability of roof to be used as occupied space. Verified capacity of existing roof to support the new loads by reviewing existing as-built documents, prepared probing plan showing locations and extents, conducted site visit to inspect completed probes and attain information of as-built conditions.

- 55 Central Park West, New York, NY
- Georgian House, 118-11 84th Avenue, Queens, NY

Water Tower Roof Structural Support and Repairs

Performed site investigation through structural assessment. Structural analysis and design of temporary shoring system. Design of structural repairs and prepare specifications to file with the NYC DOB and for construction.

- 58 Bleeker Street, New York, NY
- Trump Village, Section 3 Building 4, Brooklyn, NY
- Goodwill Terrace, 4-21 27th Avenue, Queens, NY

Pool Equipment Vault Replacement | Camp Nabby, 1 Nabby Hill, Mohegan Lake, NY

Performed structural design of the vault, concrete stairs and a retaining wall and prepared structural drawings with specifications suitable for filing with the Municipality, for bidding and for construction

Structural Assessment of Parking Garage Repairs

Performed site investigation and structural assessment. Computed garage load analysis and design of repairs.

- 440 West 57th Street, New York, NY
- 33 West Main Street, Elmford, NY
- 2289 5th Avenue, New York, NY



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Fire Escape Structural Assessment and Repairs

Perform structural conditions assessment and investigation. Design of repairs and structural connections.

- 64 Grand Street, New York, NY
- 240 West 37th Street, New York, NY
- 135 Madison Avenue, New York, NY
- 122 West 27th Street, New York, NY
- 139 Franklin Street, New York, NY