

MARCELO PERLA M.Sc. P.E.

PROFESSIONAL EXPERIENCE

2006 - Present

PE Group Consulting Engineers Inc

Miami, Florida

SENIOR ENGINEER ASSOCIATE

○ **Participated on the following Structural Engineering Peer Review Projects:**

- Stoik's guest house building, Miami, Florida
- The Markers at Grove Island, Miami, Florida: buildings V expansion.
- Windwood green, Boca Raton, Florida. 12-story residential building.
- Cocowalk Center, Miami, Florida. Design review for the renovation and expansion of the existing 5-stories and 2 basement levels commercial building
- The Markers at Grove Island, Miami, Florida: two residential buildings 5 and 6 stories height respectively and a 3-story height commercial building.
- Biscayne Hotel, Florida: 13-story residential building.
- AC Hotel in Miami, Florida: 7-stories Hotel Building with rooftop pool.
- River Landing in Miami, Florida: two interconnected 18 & 20 story towers residential building.
- Residences by Armani in Sunny Isles Beach, Florida: 56-stories residential tower.
- Parque Towers at St. Tropez in Sunny Isles Beach, Florida: two 27-story & 30-story towers residential buildings.
- Da Vinci in Sunny Isles Beach, Florida: 25-stories residential tower.

○ **Participated on the following Forensic Structural Engineering Projects:**

- Structural Engineering Review and Categorization of Structures for Beach Erosion Control and Hurricane Protection Project Miami Beach Renourishment 2021 (Segment 1)
- Champlain Towers South – 3D Finite Elements model, Structural analysis of as built condition.
- Structural Engineering Review and Categorization of Structures for Beach Erosion Control and Hurricane Protection Project – Bal Harbour 2021, Miami-Dade County, Florida
- Dalkland, Monroe – Structural Assessment Review.

- Bongo's Cuban Café, Orlando – Structural analysis of post tensioned slabs for a cost effective and safe demolition procedure.
- The Corinthian Pool – Rehabilitation of steel corrosion in pool walls.
- Aqualane Shores Naples – Swimming pool pile foundation failure
- Echo Brickell Building - 57-stories residential tower in Miami, Florida: 48th story scaffold Collapse – Transfer of Custody.
- Altis at Fairway Commons - 6-stories residential Building in Boca Raton Florida – Investigation of cracking and deflection issues on some balconies.
- W Atlanta Midtown Renovation - 21-stories Hotel Building in Atlanta, Georgia: Structural analysis investigation and design of the proposed modifications, new loads, stairs, elevator and hanging wall in the Lobby and ballroom areas in the hotel.
- IndCor Warehouse – Partial roof collapse cause and origin investigation.
- Ocean 4 Condominium - 52-stories residential Building in Miami, Florida: Assessment of existing conditions in common areas.
- Jade Ocean Condominium - 51-stories residential Building in Miami, Florida: Assessment of existing conditions in common areas.
- Chateau Ocean Residences - 12-stories residential Building in Surfside, Florida: Structural analysis investigation of the maximum expected deflections in elevated cast in place post-tensioned concrete floor slabs.
- Hotel Collection – 5-stories hotel building in Key West, Florida: Structural Inspection after a non-structural demolition.
- Brickell House Condominium - 46-stories residential Building in Miami, Florida: Parking slabs concrete topping causes of de-bonding investigation.
- Seacoast Tower - Perles Residence Renovation - 16-stories residential Building in Miami Beach, Florida: Structural analysis investigation and design of the proposed modifications, new loads and new slab openings for stairs in a two stories penthouse unit.
- Jade Building - 51-stories residential Building in Miami, Florida: Structural investigation analysis for proposed new opening for a new elevator in existing post-tensioned elevated slab.
- Haiti Medishare – Port Au Prince, Haiti - Structural investigation analysis and inspection of structural capacity of 3 buildings partially damaged by 2010-Earthquake.
- Miami Dade College – West Campus Parking Garage – 6-stories precast concrete building. collapse investigation.
- Anthony's Coal Fire Pizza - Miami Beach, Florida. Structural investigation analysis of new openings in existing elevated ground slab.

- Bokamper's Sports Bar & Grill, Fort Lauderdale, Florida: 2-story building. Structural analysis investigation and design of the new proposed ground slab on piling.
 - Tower Park North Condominium, Miami, Florida – four 3-story and Sixteen 2-story buildings – Structural Inspection assessing of damages related to Hurricane Wilma.
 - Orlando VA Medical Center – Chappell, Orlando, Florida: Precast concrete walls cause of cracks investigation.
 - The Vue at Lake Eola, Orlando, Florida: 35-stories residential Building – Elevated concrete slabs cause of cracks investigation.
 - One Bal Harbor, Bal harbor, Florida: 27th floor scaffold collapse investigation.
 - Kendall Lakes East Lakeview Townhome, Miami, Florida: Eighteen 2-story residential buildings – Structural Inspection assessing of damages related to Hurricane Wilma.
- **Over 400 investigative assignments completed, including:**
- Hurricane damage
 - Structural failures
 - Collapse
 - Fire damages on structure
 - Concrete Deterioration
 - Roof damage
 - Foundation failures
 - Flooring failure
 - Ground settlement
 - Pool and pool decks failure
 - Vehicle collision with structures
 - Building Code compliance.
 - Sinkhole claims.
 - Post Disaster Structural Assessment
 - Air Conditioning water related damages.
 - Building Envelope – Water Intrusion
 - Plumbing leaks and related water damages.
 - Dangerous condition evaluation on existing building
 - Substantial Structural Damage analysis and evaluation.
 - Construction Defect Analysis
 - Corrosion on structural components

○ **Court Testimony:**

PEGroup File #: 18-171 Hernandez v. Citizens, July 20, 2021, Circuit Court of the 17th Judicial Circuit, Broward County, Florida Case No.: CACE 18-029112
Hernandez Attorney: Gimenez and Carrillo, LLC.

Citizens Attorney: Miriam R. Merlo of Gaebe, Mullin, Antonelli & DiMatteo
Expert for Citizens – Hurricane Irma

○ **Depositions Under Oath:**

PEGroup File #: 18-171 Hernandez v. Citizens, March 16, 2021, Circuit Court of the 17th Judicial Circuit, Broward County, Florida Case No.: CACE 18-029112

Hernandez Attorney: Gimenez and Carrillo, LLC.

Citizens Attorney: Miriam R. Merlo of Gaebe, Mullin, Antonelli & DiMatteo
Expert for Citizens – Hurricane Irma

2002 - 2019

Abacus Consulting Engineers

Miami, Florida

PRINCIPAL

- Provide Consulting Services on Structural Analysis and Design for new and existing Structures. Research Analysis and Design review of existing structures, and Forensic Engineering.
- Participated on the following Design Projects:
 - Haiti Medical School - Port-au-Prince, Haiti: Seismic and Wind analysis and design of superstructure, slabs and foundation for two 3 stories buildings and one-2 stories building – University Classrooms, laboratories and auditorium.
 - Golden Hills Condominium – North Miami, Florida - analysis and design of superstructure, slabs and foundation for a 5-stories residential building.
 - Koi I Building – Pompano Beach, Florida - analysis and design of superstructure, slabs and foundation for a 4-stories residential building.
 - Davie II at College Crossing - Building A-T2.1-Type 2 - Davie, Broward, Florida - analysis and design of superstructure, slabs and foundation for a 4-stories residential building.
 - Davie II at College Crossing – Club House Building - Davie, Broward, Florida - analysis and design of superstructure, slabs and foundation for a 3-stories building.
 - Nicaraguan New National Baseball Stadium, Managua, Nicaragua – Preliminary design of a 3 Deck levels ballpark – Design subject of seismic and wind lateral loads using Special Reinforced Concrete Moment Frames on shallow foundations.
 - Vintage Park, Pompano Beach, Florida - Analysis and design of superstructure and foundation for a four 6-stories and one 5-stories residential buildings.

- Ponce and Bird Residential Development, Miami, Florida - Analysis and design of superstructure, slabs and foundation for three 8-stories residential buildings.
 - National Blood Transfusion Center, Port-au-Prince, Haiti: Seismic and Wind analysis and design of superstructure, slabs and foundation for a 3 stories medical building facility.
 - Marie Ann Collage, Port-au-Prince, Haiti: Seismic and Wind analysis and design of superstructure, slabs and foundation for a 4 stories classroom building facility.
 - Centre Prescolaire - Carmen Rene Durocher - Port-au-Prince: Seismic and Wind analysis and design of superstructure, slabs and foundation for a 2-stories classroom building facility.
 - Hope Village - Port-au-Prince: Wind analysis and design of new roof wood frame structure for six one-stories buildings.
 - Tidewater in Panama City, Florida: Analysis and Design of superstructure, slabs, pile foundations and steel pedestrian bridge for a 31-stories residential tower.
 - Palm Isles in Punta Gorda, Florida: analysis and design of superstructure, slabs and foundation for a 4-stories residential building.
 - Tradewinds in Panama City, Florida: Analysis and Design of superstructure, slabs and pile foundations for a 23-stories residential tower.
 - Laketown Warf in Panama City, Florida: analysis and design of superstructure, transfer slabs and pile foundations for three 23-stories residential towers.
 - Auditorium of Haiti University in Haiti: analysis and design of foundation and structural slab.
 - Up Town Loft in Altamonte Springs, Florida: retaining walls design.
 - Alta West in Atlanta, Georgia: analysis and design of steel pedestrian bridge.
 - Beach Side Key West in Key West, Florida: pile foundations design for six different 4-story residential buildings.
 - River West Apartments, Miami, Florida: analysis and design of superstructure, transfer slabs and pile foundations for an 18-stories residential tower.
 - The Fountains on Brickell, Miami, Florida: analysis and design of post-tension slabs for a 5-story residential building.
- Participated on the following Structural Engineering Peer Review Projects:
 - Dadeland - Modera Metro Building, Miami, Florida: 25-stories residential tower. Review of superstructure and pile foundation.
 - Haiti Ministry of Interior Building, Port-au-Prince, Haiti: 9-stories with basement Governmental office building. Review of seismic and wind design of superstructure and pile foundation.

- Guatemala Naval Academy, Puerto Quetzal, Escuintla, Guatemala. Review of seismic and geotechnical study prepared by GeoConsult, Guatemala for new 2-story classroom/dormitory building.
- Archstone at Hibiscus in West Palm Beach, Florida: 8-stories residential tower.
- Madruga Condominium, Coral Gables, Florida: 4-stories residential building Existing Foundation Evaluation.
- Participated on the following Forensic Engineering Projects:
 - Paramount Bay, Miami, Florida: 47-story building - Parking Garage Elevated concrete post-tensioned slabs cracks assessment investigation.
 - Omni International Mall, Miami, Florida: 8-story building – Assessment of Weights and point of lifting for disassembly of existing precast concrete wall panels.
 - National Archive Building, Cayman Islands: 2-story governmental building Inspection and assessment of current condition of building structure.
 - Almeira Park Condominium Building, Coral Gables, Florida: Construction Defects Investigation.
 - Grand Flamingo, Miami Beach, Florida: Settlement Investigation.

2002 - 2003

The Raul Puig Group

Miami, Florida

PROJECT MANAGER

- Research Analysis and Design of existing structures, Design and Project Management of New High-Rise Buildings.
- Participated on the company teams on the following projects: Grand Flamingo Settlement Investigation, Brickell Emerald, and Setai Hotel.

2000 - 2002

DMc Structural Engineers

Miami, Florida

PROJECT MANAGER

- Design, Design Review, Construction Management and Threshold inspections.
- Participated on the company teams on the following projects: Ritz Carlton – Coconut Grove, Courts Brickell Key, and Tower of Dadeland.

1998 - 2000

Desimone Consulting Engineers

Miami, Florida

SENIOR PROJECT ENGINEER

- Analysis and Design of Concrete slabs (normal reinforced and post-tensioned), Shallow and deep foundations, Retaining walls, beams, columns, shear walls.
- Analysis and Design in steel, wood and masonry.

- Threshold inspections.
- Participated on the company teams on the following projects: Diplomat Hotel and Resorts, Mandarin Oriental, Tequesta III, Lucayan Resort, West Palm Beach Marriott Hotel, Ocean Golf Club, Ocean Grill Restaurant, University of Miami School of Communication, Miami Beach Public Library.

1993 - 1998

BIS, Building Inspection Services

Miami, Florida

PROJECT ENGINEER

- Structural Re-certifications, Condominium Conversions, Condominium Assumptions, Building Code Compliance, Expert Witness inspections.
- Inspect Commercial, Industrial, Residential and High-rise buildings for real-estate transactions, Investment, Refinance and Insurance purposes.
- Over 800 investigative assignments completed.

1983 - 1989

Seismic Structures Laboratory of the Engineering Department, Pontifical Catholic University of Peru (PUCP)

Lima, Peru

PLANT ENGINEER

- Responsible for develops, design and construct structural test setups.
- Produce methods and procedures for structural experiments.
- Create and develop software for seismic loading research projects.
- Field instructor of techniques to prevent seismic collapse by the use of PUCP's improved construction techniques on traditional local building methods and materials.
- Field investigation, evaluation and testing on damaged structures.

1988

Faculty of Architecture, National University of Engineering **Lima, Peru**

ASSISTANT PROFESSOR

- Part-time Professor and Coordinator of the course of Surveying.

1987 - 1989

Faculty of Engineering, Pontifical Catholic University of Peru **Lima, Peru**

ASSISTANT PROFESSOR

- Part-time Professor and Coordinator of the courses of Surveying I & II

1982 - 1989 **Seismic Structures Research Engineering Department, Pontifical Catholic University of Peru (PUCP)** **Lima, Peru**

ASSISTANT RESEARCH ENGINEER

- Tapial Construction: Improvement of Shear Strength of Walls. (1989)
- Tapial Construction: Improvement, Design and Testing of Walls. (1988)
- Seismic Response of Quincha Structures. (1986)

ACCREDITATIONS AND LICENSES

1993 - Present **Professional Engineer, State of Florida, USA**

2002 - Present **Special Inspector, State of Florida, USA**

1985 - Present **Professional Engineer, PERU**

EDUCATION

2002 - 2007 **Florida International University (FIU)** **Miami, Florida**
Doctor of Philosophy Candidate in Civil Engineering

1997 - 2000 **Florida International University (FIU)** **Miami, Florida**
Master of Science in Civil Engineering

1985 - 1989 **Pontifical Catholic University of Peru (PUCP)** **Lima, Peru**
Master of Science Candidate in Structural Engineering

1976 - 1982 **Pontifical Catholic University of Peru (PUCP)** **Lima, Peru**
Bachelor of Science in Civil Engineering

AFFILIATIONS

2003 - 2018 **Florida Task Force 1 - Urban Search and Rescue – Structures Specialist**

- Responsible for performing various structural assessments for the Task Force during major incident operations. Such as assessing structural damages and structural hazards, recommend structural hazard mitigation, monitor structures for condition changes during rescue and recovery operations.

- Deployments:
 - September 2005: Hurricane Katrina – New Orleans, Luisiana.
 - May 2006: Bal Harbor, Florida. - 27th floor collapse.
 - September 2008: Hurricane Ike – Lafayette, Louisiana.
 - January 2010: Haiti Earthquake
 - October 2012: Miami Dade College –Parking Garage Collapse.

PROFESSIONAL MEMBERSHIPS

1995 - 2020	Member of the American Society of Civil Engineers (ASCE)
2000 - 2008	Member of the American Welding Society (AWS)
2002 - 2007	Member of the International Code Council (ICC)
2002 - 2020	Member of the American Concrete Institute (ACI)
2006 - 2020	Member of the Florida Structural Engineers Association. (FSE)
2013 - 2018	Member of the American Wood Council. (AWC)

PUBLICATIONS

- San Bartolome A., D. Quiun, M. Perla and C. Ballon (1990)
 “Tapial Construction: Dynamic Tests”
 8th National Congress of Civil Engineering. Piura, Peru.

- Perla M. and G. Villa Garcia (1988)
 “Aseismic Structures Laboratory at Service of the Construction Industry”
 7th National Congress of Civil Engineering. Huaraz, Peru.

- Perla, M., A. San Bartolome and R. Carbajal (1988)
 “Tapial Construction: Improvement of Shear Strength of Walls”
 7th National Congress of Civil Engineering. Huaraz, Peru.

- Perla M. and P. Repetto (1987)
 “Tests of Dispersion in Clay Soils”
 5th National Congress of Soil Mechanics. Lima, Peru.

- San Bartolome A., Perla M., and R. Carbajal (1987)
 “Tapial Construction: Improvement, Design and Testing of Walls”
 Engineering Department, Catholic University of Peru.

- Blondet, M., L. Zegarra and M. Perla (1986)
“Seismic Response of Quincha Structures”
6th National Congress of Civil Engineering. Cajamarca, Peru.

- Perla M. (1985)
“Influence factors in the Tests for Identifying Dispersive Clays”
Thesis to fulfill degree requirements for the Title of Civil Engineer.
Catholic University of Peru. Lima, Peru.

- Perla M. (1985)
“Tests for Identifying Dispersive Soils”
Thesis to fulfill degree requirements for Bachelor Degree in Civil Engineer.
Catholic University of Peru. Lima, Peru

SKILLS

- Proficient with ETABS, RISA3D, SAFE, ADAPT-PT, ADAPT-Floor, PCA, AutoCAD and Microsoft Office: Excel, Word and Power Point.
- Trained in Computer Languages as Pascal, Visual Basic, Fortran and Java.
- Developed several spreadsheets and programs for analysis, design, pre-processing and post-processing data related with structural analysis and design.

INTERESTS AND ACTIVITIES

- Lay Missionary of Charity.
- Develop computer programs.

LANGUAGES

Speak and write fluently in English and Spanish.