

# **Personnel Qualifications**

# Dulce Maria Trejo, B.S. | Graduate Engineer



## **REGISTRATIONS**

• Texas, E.I.T. License No. 68533

## **EDUCATION**

**The University of Texas at Austin** *B.S. Architectural Engineering, 2019* 

# **PRACTICE AREAS**

- Forensic Investigation
- Structural Evaluation, Analysis, and Design
- Repair and Remediation
- Destructive and Nondestructive Testing

# **PROFESSIONAL AFFILIATIONS**

- American Concrete Institute (ACI)
- American Concrete Institute, Central Texas Chapter
- Structural Engineers Association of Texas (SEAoT)

#### **EXPERIENCE**

Dulce Maria Trejo has performed detailed condition assessments at CA involving construction methods, design defects and material failures. While at CA, Dulce Maria has performed evaluations of existing structures involving nondestructive testing services.

Prior to joining CA, Dulce Maria an undergraduate worked research assistant with the Construction Materials Research Group (CMRG) at The University of Texas at Austin (UT). The research involved evaluating the long-term durability of pre-stressed concrete beams with extensive surface cracking. The information gathered was used to create a service life prediction model for the fabrication and maintenance of precast beams. While working at CMRG, Dulce Maria also aided in analyzing alternative chemical solutions to durability-related issues pertaining to the use of fly ash in concrete.

As a student in the Architectural Engineering program at UT, Dulce Maria has worked on projects that have ranged from the design and cost-estimation of a reinforced concrete parking garage to the design and construction of a 3D-printed high rise model.

#### **SELECTED PROJECTS**

# **Forensic Investigation**

- Investigation of Concrete Quality in a Live Fire Training Facility
- Investigation of Residential Homes
  Exposed to Ground Vibrations
- Evaluation of Foundation Distress of Residence located in Houston, TX
- Investigation of Façade Failure of Apartment Complex near Dallas, TX
- Investigation of Construction
  Deficiencies of a 70,000 Square Foot
  Entertainment Center
- Investigation of the Construction of a Slab-on-Grade Foundation of Multi-Family Complex in College Station, TX
- Investigation of Distress of a Concrete Pavement Contraction Design (CPCD) Road near Dallas, TX

# **Destructive and Non-Destructive Testing**

- Ground Penetrating Radar (GPR)
  Scanning of Post-Tensioned Slabs:
  Seattle, Washington
- Bond Pull-Off Testing for Structural Repairs: Austin, TX
- Ultrasonic Pulse Velocity (UPV) Testing of Pre-Stressed Concrete Beams: Austin, TX

## **CONTACT INFO**

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