APRIL 2024

# **DANIEL A. WOJNOWSKI, PH.D., P.E.**

## Senior Vice President



#### Summary

In 2017, Dr. Daniel A. Wojnowski joined Thornton Tomasetti to lead the Chicago Forensics team, with over 30 years of experience and expertise in forensic investigation of construction and structural related matters. Dan's knowledge covers construction engineering, evaluations of distressed and failed structures, including commercial and residential buildings, bridges, shoring, scaffolding, industrial and agricultural plants and cranes. He has testified as an expert witness on these topics as well as construction site safety and premises liability. His civil, structural and metallurgical background allows for all-encompassing investigative skills when structural materials and systems are involved. He is a frequent author and presenter at the ASCE Engineering Forensic Congresses.

## **Areas of Technical Expertise**

- Forensic Structural Engineering & Material Science
- Construction Engineering
- Construction Safety/OSHA Compliance
- Emergency Response

#### **Education**

- Ph.D., Metallurgical Engineering, 1994, University of Illinois at Chicago
- M.S., Metallurgical Engineering, 1983, University of Illinois at Urbana-Champaign
- B.S., Civil Engineering, 1981, University of Illinois at Urbana-Champaign

#### Registrations

- Registered Professional Engineer in AR, FL, IA, IL, IN, KY, LA, MI, NJ, NY, OH and WI
- OSHA Certifications: 10 and 30 Hr. Construction Safety, Fall Protection, Introduction to Safety and Health Management, Trainer in Occupational Safety and Health Standards for Construction, Health Hazard Awareness, and Confined Space
- Safety Training in City of Chicago for Scaffold User Training;
  Aerial Boomlift Operator Certification

#### **Professional Activities**

- Member, American Society of Civil Engineers (ASCE)
- Member, Structural Engineering Institute of the American Society of Civil Engineers
- Member, Illinois Society of Professional Engineers (ISPE)
- Member, National Society of Professional Engineers (NSPE)
- Member, International Building Code Council (IBC)

## **Select Project Experience**

## **Forensic Structural Engineering**

The Peninsula at Saint John's, Jacksonville, FL. Investigation of alleged defects of panel screen façade assemblies used in the construction of the parking garage. Offered assessment of alleged design and construction defects and delineated the scope of repairs by causation.

**Transmission Tower Collapses,** Forensic investigation of guy wire tower collapses. Towers as tall as 2000 feet have been analyzed to determine the cause of collapse. Analyses included the effects of wind, ice and/or snow upon tower and guy wire components.

**Waste Water Plant,** OH. Investigation of alleged defectively designed and constructed plant. Analyzed the design of the precast concrete structure as well as the construction.

**Grain Bin,** Prince Rupert, BC. Forensic Investigation involving structural design and construction related defects of four 108-foot-tall by 90-foot-diameter bins. Offered opinion on standard of care issues related to delegated design.

#### **Forensic Material Science**

**Airport,** Chicago, IL. Environmental corrosion of structural support brackets of pedestrian bus shelters and life expectancy determination.

**HCI Production Plant,** IA. Chemical attack of precast concrete piping, reinforced concrete flat work and reinforced concrete tanks due to an accidental HCI acid spill at a chemical plant facility during the commissioning process following construction of plant.

**High Rise,** FL. Investigation of structural framing corrosion allegedly due to water intrusion from hurricane.

**Residential High Rise,** FL. Investigation of corrosion issues pertaining to structural steel and fasteners.

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### **Construction Engineering**

**4th & Race,** Cincinnati, OH. Provided on-site engineering consulting. Daily engineering included the design and/or evaluation of concrete shoring, hoists, mast climbers and pole scaffolding used in the construction of the building.

**Cincinnati MLS Stadium,** Cincinnati, OH. Peer review of concrete shoring utilized in the construction of a post-tensioned concrete structure.

**Lakeshore East,** Chicago, IL. Peer review of concrete shoring utilized in the construction of a post-tensioned concrete structure. On-site quality control inspection of erected shoring prior to concrete pour.

**50 East Randolph,** Chicago, IL. Provided shoring/re-shoring design used in the construction of a post-tensioned concrete 25-story structure.

#### **Construction Safety/OSHA Compliance**

**Construction Site,** Chicago, IL. Investigation of construction hoist erection resulting in amputation of a worker's arm.

**Construction Site,** NJ. Investigation of a worker's fall from a water tower during renovation. Offered opinion on the safety responsibilities of the contractors, engineers and municipality.

**Construction Site,** Chicago, IL. Investigation of demolition practices and contractor safety responsibilities involving collapse of wall resulting in death of a worker.

**Construction Site,** Howell, MI.\* Investigation of aerial lift tip-over involving a sole proprietor working on a multi-employer construction site.

## **Emergency Response**

**Miller Park Crane Collapse,** Milwaukee, WI.\* Emergency response to document failed 500-foot-tall crane and conduct failure investigation.

**Superdome,** New Orleans, LA.\* Investigate the extent of damage to the dome as a result of Hurricane Katrina.

**4th & Race,** Cincinnati, OH. Emergency response to investigate failed concrete shoring that collapsed during concrete placement in a multi-story, mixed-use structure.

## **Alternative Dispute Resolution**

Logan Aluminum, Inc. v. Ace World Co. Ltd., Lexington, KY. Mediation regarding overhead crane design and construction where plaintiff alleged crane did not meet contract specs and defendant requested design changes.

#### Select Sworn Testimony (Complete List Upon Request)

Deposition, Domitrovich v. Menhall Lane Dev., LLC, et al., (In the Circuit Court of Cook County, Illinois County Department, Law Division). April 23, 2024.

Trial and Deposition, Machut v. Int'l Contractors, Inc., et al., (In the Circuit Court of Cook County, Illinois County Department, Law Division). April 1, 2024; August 4, 2023.

Trial and Deposition, Polino v. Toro Constr. Corp, et al., (In the Circuit Court of Cook County, Illinois County Department, Law Division). March 20, 2024; September 7, 2023.

Deposition, McKermitt v. McKinney Steel & Sales, Inc., et al. (In the Circuit Court of Cook County, Illinois County Department, Law Division). February 23, 2024.

Deposition, BRE/Point Parcel, LLC v. IBA Consultants, Inc. (In the Circuit Court, Fifteenth Judicial Circuit, In and For Palm Beach County, Florida). February 22, 2024.

Deposition, Rose v. JP Cullen & Sons, Inc., et al. (In the Circuit Court of Dane County, State of Wisconsin). December 18, 2023.

Deposition, Dunovsky v. Cives Steel Co., et al. (In the Circuit Court of Cook County, Illinois County Department, Law Division). August 29, 2023.

Deposition, Flores v. Power Constr. Co., et al. (In the Circuit Court of Cook County, Illinois County Department, Law Division). August 2, 2023.

Deposition, Grimaldo v. Hilco Redev., LLC, et al. (In the Circuit Court of Cook County, Illinois County Department, Law Division). July 25, 2023.

Deposition, Gonzalez v. Iron Gate Motor Condos, Inc., et al., (In the Circuit Court of Cook County, Illinois County Department, Law Division). April 28, 2023.

Trial, Indus. Equities - River Rd., LLC v. Curtis 1000, Inc., et al. (State of Minnesota - District Court, County of Anoka, Tenth Judicial District). April 20-21, 2023.

Deposition, New Hampshire Ins. Co. v. Havecon Projects B.V., et al. (United States District Court Western District of Michigan Southern Division). March 7, 2023.

Deposition, Veglia v. Target Corp. (In the Circuit Court of the 15th Judicial Circuit, in and for Palm Beach County, FL). February 1, 2023.

Deposition, Berezan v. BXH Constr., Inc., et al. (In the Circuit Court of Cook County, Illinois County Department, Law Division). December 21, 2022.

Deposition, Tucharski v. T.Y. Lin Int'l Great Lakes, Inc., et al. (In the Circuit Court of Cook County, State of IL, County Dept, Law Division). June 1, 2022.

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Deposition, Schouten v. DJK Custom Homes, Inc., et al. (In the Circuit Court of the 12th Judicial Circuit, Will County, Joliet, IL). May 11, 2022.

Deposition, Lange v. Metropolitan Pier and Exposition Auth., et al. (In the Circuit Court of Cook County, Law Division, Chicago, IL). April 7, 2022.

Deposition, Martinez v. M/I Homes of Chicago, LLC, et al. (In the Circuit Court of Cook County, Law Division, Chicago, IL). March 8, 2022.

Deposition, Arch Specialty Ins. v. Canbai Constr. Co., LLC, et al. (In the Circuit Court for the County of Wayne, MI). February 1, 2022.

Deposition, Szilva v. Onni (In the Circuit Court of Cook County, Chicago, IL). December 16, 2021.

Deposition, Miller v. Taylor Morrison regarding an electrical subcontractor alleging injury by a general contractor employee (In the Circuit Court of Cook County, Law Division, Chicago, IL). September 30, 2021.

Deposition, J&J Fish On Center St., Inc. v. Crum & Forster Specialty Ins. Co. (In the Eastern District of WI, Milwaukee Division). August 18, 2021.

Deposition, Thiel v. Maris Constr. Corp. regarding death of employee on construction site (In the Circuit Court of Cook County, IL, County Dept, Law Division). April 26, 2021.

Deposition, Aria Longboat Key Condo. Ass'n v. BBC Key, LLC, et al. (In the Circuit Court of the 12th Judicial Circuit in and for Sarasota County, FL). 2021.

Deposition, Dula v. Rice Eng'g, et al. (In the Circuit Court of the 4th Judicial Circuit in Duval County, FL). 2021.

Deposition, McDermott v. Code Red, et al. (In the Northern District Court of IL, Eastern Division). 2021.

Deposition, Campbell v. Target Corp. et al. (In the Circuit Court of DuPage County, IL, County Dept, Law Division). 2020.

Deposition, Carter v. Edward T. Mansell Constr., et al. (In the Circuit Court of DuPage County, IL, County Dept, Law Division). 2020.

Deposition, Larsen v. Clark Constr. Grp., et al. (In the Circuit Court of Cook County, IL, County Dept Law Division). 2020.

Deposition, El-Jamaly v. Kirco Manix Constr., LLC, et al. (In the Circuit Court of the County of Wayne, MI). 2020.

Deposition, Estate of Adilson Vozniak v. Township of Denville (Superior Court NJ, Law Division — Morris County). 2019.

Deposition, The Peninsula at St. Johns Center v. Sterling Dula/ Sterling Dula v. Rice Eng'g. (In the Circuit Court of the 4th Judicial Circuit, Duval County, FL Civil Division). 2019. Deposition, Venegas v. Elite Storage Sol., LLC, et al. (In the Circuit Court of Cook County, IL, County Dept, Law Division).

Deposition, Jones v. Oberlander Electric Co., et al. (In the Circuit Court of Peoria County, IL, County Dept, Law Division). 2019.

Deposition, Zalud v. Hollywood Casino Aurora, LLC, et al. (In the Circuit Court of Kane County, IL, County Dept, Law Division). 2019.

Deposition, Jara v. Power Constr. Co., et al. (In the Circuit Court of Cook County, IL, County Dept, Law Division). 2018.

Trial and Deposition, Gillen, et al. v. F.H. Paschen/Cabo Joint Venture, et al. regarding damage to a sewer line from pile driving. Determine cause and assess custom and practice of parties (In the Circuit Court of Cook County, IL, County Dept, Chancery Division). 2018, 2017.

Deposition, Lopez v. St. Francis Community Health Center and Presence Health Care (In the Circuit Court of Cook County, IL County Dept, Law Division). 2018.

Deposition, Dale v. The Young Men's Christian Ass'n of Chicago a/k/a YMCA of Metropolitan Chicago (In the Circuit Court of Cook County, IL, County Dept, Law Division). 2018.

Deposition, Eberwein v. MML O'Hare Hotel, LLC d/b/a Hilton Rosemont at O'Hare, and Hilton Mgmt., LLC. (In the Circuit Court of Cook County, IL, County Dept, Law Division). 2018.

Deposition, Northstar Residential Dev., et al. v. Mack Indus., et. al. (In the Court of Common Pleas of Franklin County, OH). 2017.

Deposition, Compagna v. Lorig Constr. Co. (In the Circuit Court of Cook County, IL, County Dept, Law Division). 2017.

Deposition, Burton v. Canterbury Plaza, et al., (In the Circuit Court of Cook County, IL, County Dept, Law Division). 2017.

Deposition, Sentry Select Ins. a/s/o The Krumland Co., LLC v. Eaglespan, Inc. d/b/a Haynes and Co., and Conlee Constr., LLC. (State of NM, County of Chaves, 5th District Court). 2017.

Deposition, Seneca Ins. a/s/o Waveland Recycling, Inc. v. Martinson Grp., Inc., et al. (In the Circuit Court of Cook County, IL, County Dept, Law Division). 2017.

Deposition, Kuecher v. CVS Caremark Corp., et al. (In the Circuit Court of Cook County, IL, County Dept, Law Division). 2017.

Deposition, Ness v. Cranbrook Custom Homes, LLC, et al. regarding custom and practice concerning construction safety regulations and responsibilities, (In the Circuit Court for the County of Oakland, MI). 2016.

Trial and Deposition, Cooper v. Carlson Bros. v. Lenny Szarek, Inc. regarding custom and practice concerning construction safety regulations and responsibilities, (In the Circuit Court of the 12th Judicial Circuit, Will County, IL). 2016, 2015.

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Deposition, Lechuga-Campos v. Clark Centurion Ltd. P'ship, et al. (In the Circuit Court of Cook County, IL, County Dept, Law Division). 2016.

Deposition (2nd), Soto v. Totzke (In the Circuit Court of Cook County, IL, County Dept, Law Division). 2016.

Deposition, Kerr v. Power Constr. Co., et al. (In the Circuit Court of Cook County, IL, County Dept, Law Division). 2016.

Deposition, Shorenstein, et al. v. Target Corp. (In the Circuit Court of the 15th Judicial Circuit in and for Palm Beach County, FL). 2016.

Deposition, Windle v. 79th St. Ltd., et al. (In the Circuit Court of Cook County, IL, County Dept, Law Division). 2016.

Deposition, Baron v. Power Constr. Co., LLC, et al. (In the Circuit Court of Cook County, IL, County Dept, Law Division). 2016.

#### **Select Papers, Lectures and Publications**

"Silo Discharge Design and Construction Influences on Wall Pressures," ASCE 9th Congress on Forensic Engineering, Denver, CO, November 6, 2022 (co-author and presenter)

"Construction Documents' Effects on Field Issues and Accidents," ASCE 8th Congress on Forensic Engineering, Austin, TX, November 30, 2019 (co-author and presenter)

"Analysis of Design Codes for Agricultural Storage Bins," ASCE 7th Congress on Forensic Engineering, Miami, FL, November 17, 2015 (co-presenter and co-author)

"Collapse of Agricultural Grain Bins," SEI Day 2014, St. Louis Chapter of Structural Engineering Institute, Masonry Institute of St. Louis, St. Louis, MO, October 3, 2014 (presenter)

"WilTel Technology Curtain Wall Framing Failure Investigation," Conference Proceedings of the 6th Congress on Forensic Engineering, San Francisco, CA, October-November 1, 2012 (author and presenter)

"Structural Roof Failure Due to Snow: The Implications of the Use of Minimum Design Criteria," Third International Conference on Forensic Engineering: Diagnosing Failures and Solving Problems, Institute of Civil Engineers, November 2005 (co-author and presenter)

"Analysis of a Hybrid Plate Girder Bridge During Erection: Collapse of Tennessee Highway 69 Bridge," Progress in Structural Engineering and Materials, Vol. 4 No. 1, John Wiley & Sons, Ltd., January-March 2002 (co-author)

"World Trade Center Disaster: Examining Structural and Geotechnical Damages and Perturbation to Our Local Community," National Science Foundation Earthquake Engineering Research Center, Urbana, IL, November 2001 (presenter) "Temporary & Permanent Bracing of Structures," Western Loss Association Fall Meeting, September 1997 (presenter)

"Fire Damage Evaluation of a Steel Structural Steel Building," ASM International Materials Week, Chicago, IL, October 1994 (presenter)



# CONTACT

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