Owner – James Partridge Consulting, LLC – Forensic Engineers President – James Partridge Associates, Inc. – Design Engineers

## **CURRICULUM VITAE**

1981 to Present:

James Partridge Consulting, LLC (8/2001 to present)

Owner

Responsible for all forensic engineering, consulting and expert witness services to the legal, insurance and business communities for construction, design and installation defect disputes for all building types and all building systems. 40+ Years of experience in building codes and standards.

## James Partridge Associates, Inc. (2/1981 to 7/2022) Dissolved.

President

Responsible for all design, construction administration, engineering and project management; direct control of all mechanical, electrical, plumbing and fire protection engineering design and project management for institutional, industrial, health care and residential projects; client contacts, sales presentations.



BSME-Lawrence Technological University, 1970

## Registrations:

Registered professional engineer Michigan, 1972 National Council of Examiners for Engineering and Surveying (NCEES) - for State reciprocity

## **Professional Registrations Previously Held and Voluntarily Surrendered:**

Arizona	23423	New Hampshire	8562
California	26482	New York	072312-1
Colorado	30789	North Carolina	015122
Connecticut	17814	Ohio	E-46046
Florida	42261	Pennsylvania	PE051880E
Illinois	062-035483	Virginia	0402 054606
Indiana	PE60019350	Washington	31092
Louisiana	E-23179	Wisconsin	17248-006
Minnesota	18858		

#### **Certifications:**

- Certified Carbon Monoxide and Combustion Analyst (NCI)
- o Certified Fire and Explosion Investigator (CFEI)
- Licensed Residential Builder, Michigan, #2101192573
- Residential Electricity for Fire Investigators
- Investigation of Gas and Electric Appliance Fires
- o Certified Water Damage Restoration Technician (IICRC)
- Certified Applied Structural Drying Technician (IICRC)

## **Technical Society Memberships:**

- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
- National Fire Protection Association (NFPA)



- International Code Council (ICC)
- o Institute of Inspection, Cleaning and Restoration Certification (IICRC)
- o National Conference of States Building Codes and Standards (NCSBCS)
- National Roofing Contractors Association (NRCA)

## **Employment Experience 1972 to 1981:**

## Harley Ellington Pierce Yee Associates (3.5 years)

Mechanical Engineering Division Director (Partner)

Responsible for all mechanical systems design, specifications, cost estimates and related construction documentation requirements for hospitals, mausoleums, and computer facilities, industrial, residential, institutional and similar facilities. Responsible for heating and cooling load calculations, energy studies, sales presentations, client contacts, building condition surveys and construction field observations.

### Alden B. Dow, Associates (2.5 years)

Engineering Administrator:

Responsible for all mechanical, electrical and structural systems design, specifications, cost estimates and related construction documentation requirements for banks, hospitals, correctional facilities, residential, institutional, recreational, entertainment facilities and other commercial buildings. Responsible for HVAC system selection, operating cost estimates, alternate fuel selections, sales presentations, client contracts and construction field observations.

#### Hoyem Basso Associates (2 years)

Associate:

Poisonings:

Responsible for mechanical systems design associated with assigned projects including specifications for institutions, ice arenas, regional retail developments, zoological facilities, industrial complexes, recreational facilities and other diversified buildings. Also responsible for heating and cooling calculations, client contacts and construction field observations.

Fatalities:

Prior years of employment experience available upon request

#### **INVESTIGATIONS AND EXPERIENCE**

## **Carbon Monoxide Cases:**

1. 05-148 Staniasz	7. 18-122 Agee	10. 09-107 Pardy	16. 13-106 Horton
2. 05-205 Hancz	8. 20.132 Carron	11. 09-121 Flash/Brydges	17. 13-109 Hampton
3. 09-193 Russell		12. 09-229 Braga	18. 13-156 Sellick
4. 11-124 Jones		13. 11-124 Carpenter	19. 17-100 Simpson
5. 12-125 Zagloul		14. 12-157 Gregory	20. 17-126 Welch
6. 17-127 Kweller		15. 13-101 Arrington	21. 19-110 Fleming

## **Hypothermia Case:**

o 12-124 McLaughlin

## Water Intrusion/Mold Evaluations/Code and Construction Deficiencies:

- August 2001 thru October 15, 2021 593 Investigations
- Redacted sample report available upon request.

# <u>Selected</u> Investigations / Expert Witness Experience:

2022

- o Residence—Co2 Poisoning
- o Abrams Residence—Indoor spa construction
- Morbach apartment—Mold issues
- Sungal Residence—Wet Basement
- Cayman Islands apartment—Mold issues
- Residence—Metal Roof failure
- Kaplan Environmental Issue
- o Apartment Complex—Roofing issue
- Great Lakes Ship—Mold Issues
- Laboratory—HVAC issues

#### 2021

- Samona Residence masonry issues
- o Laird Residence repair deficiencies
- o Friedman Residence home overheating issue
- o Szabla truck lift gate investigation
- Scio Condominiums hail damage to asphalt shingles
- o Minister's Residence contractor repair deficiencies
- o Warren Residence indoor pool de-humidity and other issues
- Alzayadi roof hatch failure
- Dental Office roofing damage
- Excavation collapse fatality
- Ferndale 2 homes with roof storm damage
- o Ann Arbor 3 buildings, 384 apartments construction deficiencies

#### 2020

- Mackinaw City retail store roof collapse
- o Smith Residence roofing issues
- Lurencelle Residence construction code violations
- Hadid subcontractor work deficiency
- Carron Residence CO carbon poisoning
- o Canton toddlers scalded
- Angott Residence bay window leak
- o Detroit sidewalk steam scald
- Rehbein Residence roofing issues

#### 2019

- o Art industrial Plaza: Evaluation of roof wind damage
- o 5 Capri Lane: Evaluation of roof shingle installation
- o 400 Arlington: Evaluation of roof water intrusion issues
- 575 East Maple- Hamilton Residence: Evaluation of roof membrane installation
- o Julie & George Work- Residence: Evaluation of home deficiencies
- Fleming: Evaluation of Carbon Monoxide deaths of 2 people
- o Phylric Plumbing: Evaluation of fan---- failure
- o Hawthorne: Evaluation of indoor pool construction and humidity issue
- o Charles Pugh Co. Wood furnace smoke in house
- Becker Residence Tub faucet failure
- Kukes-Schwartz Residence house odors

## 2018

- o Zaleski: Evaluation of fire damage in Florida shop
- UC Davis: Evaluation of window installation and construction deficiencies
- Zlatkin: Evaluation of mold in apartment
- Sanborn: Evaluation of storm water issues at apartment complex

- Clinton Arts Center: Evaluation of adequacy of art center HVAC
- Weverhauser: Evaluation of fire door constructed with asbestos
- o Agee: Rental Home- Evaluation of Carbon Monoxide poisoning of 4 people
- o Philamer Apartment Buildings: Evaluation of wind damage on 3 apartment buildings
- Connection Point Church: Evaluation of high relative humidity in new church
- 6 Mid Century Plaza: Evaluation of roof wind damage
- o LTD Investments: Evaluation of roof wind damage
- o Gratiot Ave: Evaluation of structural and cosmetic damage to building
- o AKDY: Evaluation of failed floor mounted faucet
- o Pott Residence: Evaluation of construction deficiencies
- Regency Apartments: Evaluation of interior mold

#### 2017

- o O'Brien Construction: Evaluation of 5000 windows installed incorrectly (Representing Defendant)
- o Ingersoll: Residence- Evaluation of water damage (Representing Homeowner)
- Kay Residence: Evaluation of major water loss in residence (Representing Homeowner)
- Woodward Apts: Roof assessment (Representing Building Owner)
- o Flora: Home assessment of lightning strike (Representing Homeowner)
- Osterhout: Evaluation of water loss and mold (Representing Homeowner Plaintiff)
- Spruce Cabins, New Mexico: Evaluation of family of 4 Carbon Monoxide exposure (Representing Defendant)
- o InvestUS: Evaluation of Carbon Monoxide fatality (Representing Deceased Estate)
- o Detroit Area Church: Evaluation of roof membrane damage (Representing Plaintiff)
- Custom Builders: Evaluation of radiant floor failure in ice rink (Representing Plaintiff)
- Versatube vs. Belfor: Evaluation of large manufacturing plant fire
   reconstruction deficiencies (Representing Owner)
- SALO: Evaluation of double fire fatality (Representing Plaintiff)
- Evan Souliotis: Historic Home Evaluation of shrunken spray foam (Representing Plaintiff)
- Beverage Dispenser (Plymouth Bar): Evaluation of Carbon Monoxide Fatality (Representing Deceased Estate)

### 2016

- Franklin Wright Settlement: Evaluation of cause of water loss (Representing Owners)
- Piety Hills Condominiums: Evaluation of boilers and water heaters (Representing Condo Assoc.)
- Pullum Windows: Evaluation of code implications after a fire (Representing Owner)
- o Tittle Brothers: Evaluation of replacement roof (Representing Builder)
- o Kuzak- Residence: Evaluation of mold issues (Representing Owners)
- DZI Construction Service: Evaluation of HVAC installation (Representing Defendant)
- o Valeo: Building condition survey and Estimate (Representing Owner)
- o McPhail: Evaluation of home addition construction deficiencies (Representing Owner)
- o Popoff- Rental Home: Evaluation of mold (Representing Tenant)
- o Latosky: Evaluation of foundation wall backfill (Representing Owner)
- Archdiocese of Detroit: Evaluation of office building odor and comfort conditioning problems (Representing Archdiocese)
- o Boffi: EIFS Inspection (Representing Potential Buyer)
- o Turner Controls: Evaluation of dome collapse (Representing Construction Defendant)
- o Abernathy Residence: Evaluation of roof deficiencies (Representing Owner)
- o Metro Baptist Church: Evaluation of frozen sprinkler (Representing Insurance Carrier)
- Pott Residence: Evaluation of home reconstruction deficiencies (Representing Owner)
- o Holiday Inn Express: Evaluation of water infiltration event resulting in mold (Representing Hotel Management)
- Michigan Metal Roof: Evaluation of ridge vent water intrusion (Representing Installer)

### 2015

- o Pawlik Residence: Evaluation of indoor air quality (Representing Plaintiff)
- Dart Properties: Evaluation of apartment furnaces replacement (Representing Plaintiff)
- St. Regis Church: Evaluation of contract documents' deficiencies (Representing Plaintiff)

- Ghazaly: Evaluation of Slip and Fall incident (Representing Defendant)
- o Bridgewater Condominiums: Evaluation of water loss (Representing Defendant)
- Hoover v Payne: Evaluation of basement sewer backup (Representing Defendant)
- o Tru-Wall Construction: Evaluation of construction site ground rod issue (Representing Defendant)
- Davita: Evaluation of HVAC issue at Leased Property (Representing Plaintiff)
- Mt Zion: Evaluation of roof collapse (Representing Defendant)
- Derocher: SPF insulation consultation
- o Kearns: Condominium attic ventilation consultation
- DPS: Contract compliance assessment
- Garbowai: Design of storage platform (Representing Owners)
- Schwartz: Evaluation of boiler issue (Representing Owners)
- o Center Street Condo: Evaluation of water intrusion (Representing Defendant)
- Cavallaro: Evaluate and resolve patio construction deficiency (Representing Plaintiff)
- o Weisberg- Residence: Evaluation for Environmental deficiencies (Representing Defendant)
- o Richards- Residence: Evaluation of construction deficiency (Representing Defendant)
- o Berry- Residence: Evaluation of construction deficiency (Representing Defendant)
- Mahoney: Evaluation of frozen water line (Representing Plaintiff)
- o Zamler: Evaluation of ground water in underground ducts (Representing Plaintiff)
- Palace Fuel: Evaluation of gasoline dispenser (Representing Defendant)

Additional investigations available upon request

#### **Arbitration, Deposition, and Expert Witness Court Testimonies**

Available upon request.

#### **Publications:**

Co-authored the following publications:

- o Economic Feasibility of Variable Speed Drives
- Operable versus Fixed Sash Window
- HVAC Replacement (44% Energy Cost Avoidance)

## **Presentations and Lectures:**

- Building Facility Managers Association "Changes to the 2011 Electrical and 2012 Plumbing Codes"
- Lawrence Technological University School of Architecture and Design Part-time Teaching
- University of Michigan Energy Cost Avoidance in Buildings
- o ASHRAE Winter Meeting Dallas Lumen Christi High School
- World Energy Engineering Congress Lumen Christi High School
- o ASHRAE Technical Seminars Presentations
- o AIA Chapter Technical Meetings Presentations
- Mechanical Inspectors Association of Michigan Continuing Education
- Lorman Education Services "Solving Water Intrusion Problems in Michigan"
- o United Auto Workers Legal "Mold: Causation and Remediation"
- o Lorman Education Services "Solving Water Intrusion Problems in Michigan
- Lorman Education Services "Advances In Environmental Mold Issues"
- University of Detroit Mercy/School of Architecture Continuing Education Conference "Mold, Codes, and Water Intrusion"
- Architectural offices (several) "Water Intrusion & Mold"
- o American Society of Plumbing Engineers Technical Presentation
- Lorman Education Services "Reducing Liability Associated With Water Damage and Mold during Construction and Renovation in Michigan"
- Lorman Education Services "Mold Remediation and Water Restoration in Michigan"

- Mechanical Inspectors Association of Michigan "HVAC and Mold"
- o American Society of Plumbing Engineers "Legal Issues and Liabilities Regarding Mold"
- Institute of Real Estate Management & Detroit Metropolitan Apartment Association "Air Sealing/Building Envelope Improvement"
- AIA Detroit Chapter, ARE, M/E/P Facilitator

## Radio Appearances:

- "The Handyman" with Glenn Haege: Periodic guest expert answering listeners calls regarding building problems and solutions
- "Hire-It-Done" with Adam Helfman: Periodic guest discussing building science

#### Seminars:

- o Mold Seminar: US Army, Hawaii
- o Building Enclosure Science & Technology (BEST) Conference, Minneapolis
- o National Fire Protection Association (NFPA) Conference, Las Vegas: "Fire & Explosion Investigations (NFPA 921)"
- o Conference, Bloomfield Hills, Michigan; "What to do When Construction Projects Go Bad In Michigan"
- o University of Wisconsin; "Water Entry Prevention and Moisture Control in Buildings"
- o Construction Dispute Resolution Services (CDRS); Mediation & Arbitration Training, Southfield, Michigan
- Institute of Inspection Cleaning and Restoration/DRI-EAZ: Applied Structural Drying Course. Examination taken, certification obtained.
- Mold Abatement Projects: "The Remediation Strategy & Project Oversight" Presented by Mid-Atlantic Environmental Hygiene Resource Center (a program of the University City Science Center)
- DRI-EAZ: Restorative Drying Symposium
- American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Trade Show and Conference
  - Seminar: "Vapor Control Strategy: Placement and Permeance of Vapor Retarders"
  - Symposium: "Innovations and Advances in Room Air Distribution"
  - Seminar: "Certified Ratings for Energy Recovery Ventilation: What You Need To Know"
  - Seminar: "New Tools for Psychrometrics"
  - Seminar: "Mold, Mildew Mitigation in Construction"
  - Seminar: "Business Management for ASHRAE Members"
  - Seminar: "Codes & Standards: Perspectives About Commercial Kitchen Ventilation"
  - Public Session: "Residential and Small Building Humidity and Mold Control"
  - Seminar: "Humidification: Back To Basics"
  - Seminar: "Case Studies of Smoke Management System Application"
- Michigan State University: "The Role of the Expert Witness"
- American Indoor Air Quality Council: Certified Indoor Air Quality Consultant. Qualifications to take course reviewed and accepted, examination taken, and certification obtained
- Update training on the State of Michigan Plumbing Code
- Institute of Inspection Cleaning and Restoration (IICRC): Certified Water Damage Technician. Examination taken, certification obtained
- Toxic Mold Environmental Conference (Ontario, Canada)

## **CASE TOPICS**

- Air Conditioning
- Attic Moisture and Mold
- Basement Leaks
- Building Code Compliance
- Building Condition Assessment
- Carbon Monoxide
- Construction Administration
- Construction Codes
- Construction DefectsContract Compliance
- o Design Documents

- Drainage Failure
- Engineering Investigation
- o Engineering Design
- Engineering HVAC
- Mechanical Engineering
- Fire Investigation

- Fire Protection Engineering
- o Fire Sprinkler Systems
- Gas Systems
- Ghosting/Soot Damage
- Hot Water (Potable) Systems
- Heating, Ventilating and Air
  Conditioning (HVAC)
- o Ice Damming and Damage
- Infrared Thermography
- Mechanical Code
- Mechanical Systems Failures
- Moisture Damage
- o Mold and Mildew Damage
- Plumbing Code
- Plumbing SystemsEngineering
- Roof Drainage/Leaks
- Scald Injuries
- Water Intrusion

Owner – James Partridge Consulting, LLC Forensic Engineers



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