

- ✓ ASME NQA-1 Supplier
- ✓ General Contracting
- Process-Piping
- ✓ Mechanical

- Lean Construction
- ✓ BIM
- ✓ Design-Build/Design Assist
- ✓ Fabrication

Corporate Office: 501 Eubank Blvd. SE | Albuquerque, NM | 87123 | 505.292.8955

# **MISSION & VISION**

### VISION

We are committed to moving our nation forward by being the preferred employer, contractor, and fabricator.

### MISSION

JB Henderson Construction is a General/Mechanical Contractor and custom Fabricator. We develop and retain long-term relationships by delivering the highest level of safety, quality, integrity, and operational excellence. We do this by integrating skilled trade professionals with process-based project management. We are building the future by providing diverse career and job opportunities to support individuals, families, and communities.

### **CORE VALUES**

Safety, Quality, Honesty, and Integrity







# Section 1: Company Overview

MARLEY



#### Introduction

We appreciate the opportunity to introduce you to our company, J.B. Henderson Construction Company Inc. (JBH). We are a general and mechanical contractor with extensive experience working for customers including National Laboratories, Universities, Hospitals and microelectronics manufacturers. Each customer requires a variety of skills and awareness, and all require a strict adherence to high quality, security and safety standards. JBH excels at working for customers in need of cutting-edge capabilities, helping them meet their strict regulations. We have significant experience working with progressive companies and welcome the opportunity to work for you.

#### **Company Background**

Jack B. Henderson established JBH in 1959, providing general contracting services. In 1967, IBH branched out from performing strictly as a general contractor and added a mechanical division. In 1990 after the death of Jack B. Henderson, his son Mark G. Henderson took over as President/CEO of the company and in 2012, longtime employee John Stroud was named President of the company. Mark and his wife Linda have been personally involved in running the company since 1990, maintaining the core values of Safety, Quality, Honesty and Integrity. In 1993, IBH built a pipe fabrication facility for the fabrication of carbon steel, stainless steel and other piping systems and components at the main physical plant. Two years later, a Class 100 clean room was built to enhance our services to the local microelectronics industry. In 1996, after operating in Albuquerque for 37 years, IBH opened an office in Los Alamos, New Mexico primarily to serve Los Alamos National Laboratories. In 2003, JBH completed work on our Rio Rancho, New Mexico office, dedicating a staff to address the construction needs of one of our core customers in that area. Currently, JBH maintains operations in New Mexico and Arizona. Additionally, JBH has made project-specific expansions to Colorado, Utah, North Carolina, Hawaii, Costa Rica, New York, Virginia, and Nevada.

#### **Moving Forward**

Today JBH has the capacity to perform architectural and mechanical work, construct clean rooms, supply pipe and sheet metal fabrications, provide design/build and design/assist services, and BIM development and interface. To provide our customers with a streamlined construction experience, we have the capability of performing up to 75 percent of our contracts with in-house personnel. Additionally, JBH has an award winning safety program recognized both locally and nationally. We also have a documented quality management program that has been described as "world-class" by our customers and has successfully passed numerous external audits conducted by our most demanding clients. JBH is an approved DOE Order 414.1D and NQA-1 supplier and has the expertise, resources, and commitment to execute any project safely, within budget, on schedule and to the most demanding quality standards. Our process based project management approach ensures predictable results on every project we perform.

Section 2: Qualifications

# **QUALIFICATIONS**



Name of Company:	Jack B. Henderson Construction Company Incorporated Jack B. Henderson Mechanical Contracting (AZ only)					
Offices:	<b>Corporate Office</b> 501 Eubank Blvd SE Albuquerque, NM 87123 505.292.8955		<b>Albuquerque</b> 10100 Trumbull Albuquerq 505.29	e <b>Office</b> Ave. SE Jue, NM 92.8955	<b>Rio Ra</b> 1549 Ste Rio Ranch 5	<b>nncho Office</b> phanie Road o, NM 87124 05.897.4231
	<b>Average Personnel Capacity</b> Administrative: 120 Field: 800		Los Alamos 1285 Trinity Driv Los Alamos, NM 505.66	<b>s Office</b> ve, A&B 1 87544 52.1910	Ar 1675 N. Chandle 4	<b>izona Office</b> Delaware St. er, AZ 85248 80.768.8302
				C	ontracting Li NM, AZ, NV,	censes Held In: OR, VA, UT, WA
Established: Executive Team:	May 5, 1959 Mark G. Henderson John M. Stroud Linda S. Henderson Bart J Davis Charles A. Watson Jim Ed Baylor-Eichhorst Todd Krist Melissa Gomez	Date of Inco Chief Execut President Secretary/T VP, Northerr VP, Controll VP, Albuque VP, Arizona VP, Estimati	orporation: cive Officer reasurer n New Mexico Are er rque Area Manager Area Manager ng and Corporate	ea Manager er e Support	June 19, 196	57
Federal ID Number: NAICS Codes:	85-0200020 General Contractor	236220	Fabricated Pipe Manufacturing	e and Pipe F ( <i>small busir</i>	itting 1ess)	332996
	Mechanical Contractor Industrial Building Construction	238220 236210	All other Misc. Fabricated Metal Product Manufacturing 33299 ( <i>small business</i> )		332999	
Bonding/Insurance Agent:	Menicucci Insurance Agency Mark Menicucci, CEO 505.923.9925		DUNS:	00-711-22	238, Rating: 4A	.1
Bonding Capacity: Bank Reference:	Single Project: \$100M, Aggre First National 1870, a divisio	gate: \$200M on of Sunflow	<b>EMR:</b> er Bank	202147	202049	201959

#### **Personnel Profile:**

*Our People are Our Greatest Resource*; JBH invests in our people and counts job creation as one of the most important things we do. JBH employs qualified and driven professionals in the following roles, each ready to make your project their next project. The JBH family is comprised of the following professionals;

Admini	strative	Profess	iona	S
•	Executiv	/es		

- Area Operations Managers
- Project Managers
- Project Coordinators
- BIM Managers and Personnel
- Safety Managers and Personnel
- Quality Managers and Personnel
- Estimators
- Accounting Professionals
- Human Resources Professionals

- Marketing Professionals
- Information Technology Professionals
- Lean/Continuous Improvement Professionals
- Administrative Professionals

#### **Field Professionals**

- Project Superintendents- Architectural, Pipe, HVAC
- Project Foreman- Architectural, Pipe, HVAC
- Project Journeymen Architectural, Pipe, HVAC
- Project Apprentices- Architectural, Pipe, HVAC
- Fabrication Managers- Pipe and Sheet Metal
- Welders



# Section 3: Capabilities

# CAPABILITIES

ENDERSC CONSTRUCTION



- **Project Management** 
  - Process Based Life-Cycle **Project Management**
  - BIM
    - » FARO Laser Scanning
    - » Pre-Processing
    - » Modeling
  - Schedule/Budget **Development and** Management
  - ✓ Complete Estimating Services

### **General Contracting**

- ✓ Site Prep
- Concrete
- Carpentry
- Excavation
- Civil
- Steel Erection

## Mechanical/Piping – Fabrication

### **Equipment Installation**

- ✓ Boilers
- Chillers
- Cooling Towers
- ✓ Indoor Air Handling Units
- **CRAC Units**
- Ground Source Heat Pumps
- Ice Storage
- ✓ Waste Heat Recovery Systems
- ✓ Life Cycle Equipment Replacement
- ✓ High-Tech Process Tools

- Construction Safety Management
- ✓ Nuclear Quality Assurance 2008 (NQA-1)
- ✓ DOE 414.1D Quality Compliance

- Pre-Engineered Building
- Rigging
- Painting
- Demolition
- ✓ Drywall
- Framing

### Piping

- Process
- ✓ Ultra High Purity
- ✓ PVDF
- ✓ ASME Stamps: S, U, R
- Carbon Steel
- ✓ Plastics , LP

### **Sheet Metal**

- ✓ HVAC/R
- ✓ Stainless Steel
- ✓ Duct & Hoods
- ✓ FRP Duct

# **CAPABILITIES**



### **Fabrication Capabilities**

Each of our fabrication facilities are available to support your project:

#### **Albuquerque Office**

10100 Trumbull Ave. SE Albuquerque, NM 87123 505.292.8955 Fax 505.299-6212

#### **Rio Rancho Office**

1549 Stephanie Road Rio Rancho, NM 87124 505.897.4231 Fax 505.897.4293

#### **Arizona Office** 1675 N. Delaware St.

Chandler, AZ 85225 480.722.1900 ASME Certified JBH maintains ASME Stamps: U, S, R demonstrating our ability to construct, design, and repair; pressure vessels, Section I boiler equipment, and piping for the power industry

JBH maintains fabrication shops at our New Mexico and Arizona facilities including clean room fabrication areas. JBH is an approved NQA-1 Supplier and proud member of the Pipe Fabrication Institute and Mechanical Contractors Association. We are available to provide all of your fabrication needs and are experienced working with materials ranging from 1/16" through 42" and can ship our products throughout the United States. Our qualified fabricators offer the following capabilities:

#### **Pre-Fabrication Capabilities:**

- BIM
- Design-Assist
- Estimating
- Integrated 3D modeling and spool detailing
- Positive Material Identification Testing
- Procurement
- Project planning
- Scheduling
- Last Planner System<sup>™</sup> Facilitation and Management
- Collaborative Design Sessions
- Value Engineering

#### **Project Controls:**

- As-Built Documentation
- Approved Supplier List
- Electronic Traceability
- Design and Specification Reviews
- Development and Maintenance of weld
  maps
- Document Control Management System
  Software
- Target Pricing; Develop and Manage

#### Fabrication Capabilities:

- Commercial Pipe Systems
- Clean Room Pipe Fabrication
- Cold pipe bending
- Industrial Pipe Fabrication
- Machining
- Modules and Skids
- API Petro Chemical Fabrication
- Specialty Blinds
- Supports
- Structural Work
- Piping Laterals
- ASME Vessels and Piping
- NQA-1 Systems
- Control and Development of Inspection and Testing documents
- Material Test Report/Certificates of Conformance
- Project close-out documentation
- Proprietary Weld Tracking Processes
- Purchase Order Database
- Spool status and traceability
- Welder certifications and continuity management



CATION INST



#### Welding Processes:

- Brazing/Soldering
- Hot Wire Tip Tig Welding
- Orbital
- Plastic Fusion
- FCAW (Flux Core Arc Welding)
- GMAW (Gas Metal Arc Welding)
- GTAW (Gas Tungsten Arc Welding)
- SAW (Submerged Arc Welding)
- SMAW (Shielded Metal Arc Welding)

#### **Post-Fabrication Services Inspection:**

- All welds inspected by Level II certified inspector
- CWI and Level II Inspectors, certified through the American Weld Society available at all sites

#### Material Comprehension:

<u>Metals</u>	<u>Non-Metals</u>
Alloy 20	C/PVC
Aluminum	Eslo-clean
Carbon Steels	FRP
Chrome Moly	HDPE
Copper	PFA
Hastelloy Inconel	PVDF
Monel	Poly-propylene
Stainless Steels	Contain-It™
Titanium	

### Non-Destructive Testing:

- Brinnell Testing
- Hydrostatic and pneumatic testing
- Magnetic particle, dye-penetrant, ultra-sonic and radiographic testing
- Post-weld heat treat

### Material Applications for Painting, Coating, Prep and Finish:

- Coating and wrapping
- Chlorination
- Insulation
- Oxygen cleaning
- Passivation
- Prime and paint, including specialty finishes
- Sand and bead blasting

#### **Process Piping Services and Capabilities:**

- ANSI, API, and ASME codes
- Design/Build
- Design assistance and/or review
- Complete CAD services supporting installation and fabrication
- Piping support systems
- Fabrication and Modularization
- High-Purity Purge and Packaging

- - Pre-commissioning and start-up assistance
  - Routine maintenance and repair to existing systems
  - Seismic restraints and system upgrades
  - Pickling
  - Systematic logistics planning for shop to field transport

# **CAPABILITIES**



### **High Tech Capabilities**

#### Microelectronic Experience:

- 40 years' experience in microelectronics high purity and ultra-high purity
- Class 100 with class 10 workstations
- Clean room w/ purified gas supply and DI water Supply
- Highly skilled, formally trained personnel
- Fabricated Assemblies
  - Gas sticks
  - $\circ$  Gas cabinets
  - Valve boxes
- Process Cooling Systems
- Modules and Skids
- Supports

#### **Tool Installation:**

- Complete Tool Assembly
- Bulk gas and chemical generation and distribution
- HVAC Piping
- DI / RO water systems
- Instrumentation & Controls
- Pedestals
- Process Sub-Assemblies
- Raised Metal Flooring
- Seismic bracing and restraints
- Specialized rigging, handling, and setting

# Specialty chemical, gas, and water installations:

- PFA, PVDF, HDPE, PVC piping & systems
- Coaxial process lines
- Exotic alloys
- Gas and chemical cabinets, VMB's and gas sticks
- High-purity stainless steel piping & systems

#### Waste Treatment Processes:

- Acid Waste
- Reclaim
- Solvent Waste
- Cyanide Waste
- Hydrofluoric Acid Waste

#### Installation:

- Equipment modifications
- Auxiliary Equipment
- New Equipment
- Retrofits

### **BUILDING INFORMATION MODELING**



Approximately 75% of JBH's current projects incorporate BIM or BIM practices at some level. JBH employs corporate and project level detailing personnel supporting our customers.

### **Capabilities**

- ✓ Development of project 3D models to include piping and mechanical systems utilizing AutoCAD MEP
- Creation of final shop drawings for fabrication of all piping and mechanical systems
- Perform laser scanning to capture and process project "asis" conditions or final redline conditions



JBH modeled, then pre-fabricated the pipe on the above rack before installation

Coordinate entire project modules utilizing Navisworks to import models for each trade, run automated clash detection, issue clash reports to all trades, and ensure collisions are corrected to create a conflict free model.

### **Benefits**

- ✓ Improved coordination for all crafts
- ✓ Enhanced communication with engineers and designers, reducing design issues and possible rework
- ✓ Increased ability to fabricate off-site and make on-time delivery possible
- $\checkmark$  Allows for pre-planned routing in tight spaces further supporting schedule

✓ Automated detailing efforts support increased accuracy and timeliness when compared to hand-detailing

### **Preconstruction**

- ✓ Maximize pre-fabrication opportunities
- ✓ Automate project material buyout
- ✓ Maximize project coordination with customer and other trades
- $\checkmark$  Automate collision identification before the start of construction Complete Bill of Material for scope completed



Sample rendering of stainless system for high-tech manufacturing

### **BUILDING INFORMATION MODELING**



#### **Construction**

 Reduce RFI's and field changes during construction by identifying clashes early
 Increase schedule control

✓ Establish and measure key metrics

✓ Reduce rework and improve field productivity

### <u>Closeout</u>

✓ Complete coordinated
 3D drawings showing all
 equipment and associated
 piping

and mechanical areas

✓ Full set of record drawings upon project completion



Sample Model Layout

Written records from all coordination meetings detailing all clash detections

### **BIM Software Capabilities**

JBH owns and operates the following BIM software: Navisworks Manage, Simulate, AutoCAD MEP, AutoCAD Fabrication, and FARO Scene

Experienced with pre-fabrication transport to sites throughout the United States.



Section 4: Experience

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### **CONFIDENTIAL SEMI-CONDUCTOR FACILITY, MANASSAS, VA**

MECHANICAL WET HYDRONICS AND SUB-FAB

**Project Description**: IBH completed work at the confidential site from 2019-2020 completing mechanical installation and fabrication for the following spaces at the Virginia facility; new Fab Facility (including cleanroom space), new Central Utility Plant, Site Extension, existing Central Utility Plant modifications, and existing Fab Facility work. The contract includes installation of the following quantities of equipment and supporting routing and connections from setting through installation and start-up: Chiller (4), low temp centrifugal chiller (1), AHU (6), MHU (7), Fire Tube HHW Water Boilers (3), HHW primary pumps (3), lowtemp condenser water pumps (4), low temp cooling towers and fans (4), low temp primary CHW pumps (4), low temp secondary pumps (3), secondary CHW pump (1), scrubber deck MAU (1), HHW secondary pumps (2), MAUs (2), utility level AHUs (3), chem/gas MAUs (3), low temp equalization recirc pump (1), CHW primary pump (1), CUP lift station intake (1), MAU (1), corridor AHU (1). Capacities range from 8,000-48,000 CFM, 1100 BoHP, 4250-7250 gpm, and 2189-2900 ton.

All pipe fabrication was completed at JBH's Albuquerque facility and transported to the VA site for installation.

**Value:** \$55M





# **PROJECT PROFILES**



### **OUTDOOR FIRING RANGE**

CONFIDENTIAL LOCATION

**Project Description**: Provide design and construction of an outdoor live firing range that allows owner's Protective Forces the flexibility to conduct realistic tactical exercises in various operational modes necessary to maintain a tactically proficient fighting force.

Scope required design and construction services for the construction of a 10 Lane 200 yard rifle range, and a 20 Lane 100 yard progressive firing range.

- Install shooter firing positions
- Install turning and running man target system
- Install general area lighting and target lighting to provide day and nighttime simulated training.

Included design and install of a drainage system for entire range facility to return site to pre-development flow patterns and installation of asphalt cold milling surface treatment and sidewalks to provide safe walkways for personnel and staff at all ranges





Value: \$4M



### **CONFIDENTIAL GIGA FACTORY, SPARKS, NV**

**Project Description**: Serving as prime contractor, JBH managed the installation of twenty (20) 1700 gpm, 231,566 lb Evapco Cooling Towers and (4) 500hp Armstrong

Pumps. Cooling Towers are closed circuit configuration to produce medium temperature chilled water for comfort cooling hydronic equipment and process cooling equipment for approximately 15 million square feet of battery & electric automobile manufacturing.

All onsite installation for the project was aided by JBH's Fabrication Facility in Albuquerque, NM; pre-fabricating pipe assemblies and runs for the chiller installation and additionally completed the assemblage of nine skids supporting the factory's production capabilities.

Value: \$15M Chiller Yard Expansion \$2M Hot Oil Skis











### SANDIA NATIONAL LABORATORIES, BUILDING 725 EAST ADDITION, DATA CENTER

**Project Description:** Participating as a joint-venture partner to women owned, service-disabled veteran owner small business Payne Consulting Inc., IBH managed the design-build delivery of a one story, 17,156 sf addition on the east side of existing Building 725 meeting the criteria of LEED Gold under LEED-BD+C version 4.0 for data centers. Existing Building 725 and the addition are considered one building by code but will operate as two separate facilities with the east wall of the existing building separating the facilities. The occupancy classification is IBC Business Group B Electronic Data facility Processing and the is considered normally unoccupied. The addition is composed of a 13,342 sf high bay computer room and a 3,187 sf low bay support area including a receiving dock, combined mechanical and electrical room, a restroom, a janitor closet, a conference/office, an entry vestibule, and а storage room/future restroom. Access to the high bay roof and low bay roof is by an enclosed stairway entered from the exterior of the building. The high bay was constructed as a Closed Area with the boundary at the north and south exterior walls, at the existing building east wall, and at the demising wall between the high bay and the low bay. The building entry addresses the southeast corner of the site and the intersection of the two frontage streets.



The facility is the first LEED Gold Data Center in New Mexico.

Value: \$8M Named an AGC Best Building 2019 in the Design-Build Category



### ALBANY MOLECULAR RESEARCH INCORPORATED (AMRI) SYRINGE LINE

**Project Description**: The Syringe Line production suite project includes the complete construction of interior Clean Room Aseptic Suites as well as the exterior utility yard. Design Assist was required for completion of the project from the 60% drawings available at bid time. JBH completed the mechanical and process piping scope for both the interior spaces and exterior utility yard including installation of the following processes systems: Nitrogen, Chilled Water, Clean Steam Condensate, Heating Hot Water, Duct System for air handlers and exhaust, High Pressure System, Pump Condensate, Water for Injection (WFI), Reverse Osmosis (RO) water, fire protection system (subcontractor). All process and systems were modeled prior to fabrication and installation and all BIM files remained accessible to CM throughout project for integration into their federated model.



JBH served as prime mechanical and process-piping contractor during the designassist and construction portions of the project. The project was regulated by several entities including the Food and Drug Administration (FDA) requiring regular inspections all work installed.

Value: \$4.9M

Project named Best Building 2019 for Outstanding Specialty Work by the Associated General Contractors NM Building Branch.

Award video: <u>AMRI JBH Video Link</u>



# URENCO USA- GAS CENTRIFUGE URANIUM ENRICHMENT FACILITY A NRC NQA-1 SITE

**Project Description**: Participating as an owner of H-Y Tech Construction Services *LLC*, JBH dedicated administrative, field, and safety management personnel to the work at the gas centrifuge uranium enrichment facility in Eunice, NM, a multi-billion dollar operations facility operating under a Nuclear Quality Assurance-1 (NQA-1) designation. The company spent over three years on the site dedicating Project Director. а Architectural Superintendent/Project Manager, Mechanical Superintendent, and Safety Manager to the site to support multiple individual contracts. JBH personnel contributed to the overall site safety statistics which reached a top industrial safety record, including 17.7 million manhours worked without a single construction



related lost-time injury as reported by URENCO\*. JBH provided significant mechanical, process piping, plumbing, and architectural support to the overall site inclusive of the ground-up construction of several buildings on site and installation of key infrastructure including site utilities. Additional key contributions to the impressive site were the installation of 12 closed circuit hybrid cooling towers each approximately 268 tons in capacity, and the installation of a centrifuge cooling water system including installation and hook-up of tower water for the centrifuge building.

Fabrication Contribution: The JBH pipe and sheet metal fabrication facilities contributed heavily to this project supporting orders for pre-fabricated stainless steel, carbon, structural steel, and additional systems for integration on site.

\* Figures obtained from URENCO- Lessons Learned-Project White Paper found at urenco.com

# LOS ALAMOS NATIONAL LABORATORY (LANL)- TRU-WASTE FACILITY (TWF),

NQA-1

**Project Description:** Los Alamos National Laboratory developed TWF the project initiative in direct response to a Consent Order executed between New the Mexico Environment



Department and LANL. The order called for closure of an outdated technical area, requiring transfer of operations to manage solid radioactive waste generated from on-going research and development supporting LANL's

mission of solving national security challenges through scientific excellence.

Environmental

stewardship and social responsibility were two key factors during the



design and construction of the facility, a mini-campus consisting of 4,180 sf operations support bldg., six storage buildings, and a utility building issued for construction under the ASME's Nuclear Quality Assurance 1 (NQA-1) level compliance. The facility's operational goal of temporary storage of Transuranic Nuclear Waste transformed construction from ordinary to extraordinary, elevating expectations from RFP through project closeout stages.

As defined on the United States Nuclear Regulatory Commission's website, Transuranic Waste is 'Material contaminated with transuranic elements—artificially made, radioactive elements, such as neptunium, plutonium, americium, and others—that have atomic numbers higher than uranium in the periodic table of elements. Transuranic waste is primarily produced from recycling spent fuel or using plutonium to fabricate nuclear weapons.'

Innovative measures include; 8" thick concrete foundations for each storage unit serving as a buffer between the waste containers and the ground-water; a 35' standing fire-water tank designed to operate even if the facility's electricity is compromised, a Metalith barrier wall embracing the entire compound, and a LEED Gold designation for the Operations Bldg. underlining LANL's dedication to the environment. **Value:** \$23M



### LOS ALAMOS NATIONAL LABORATORY: RADIOLOGICAL LABORATORY UTILITY OFFICE BUILDING

The Chemical and Metallurgy Research Replacement (CMRR) Radiological Laboratory Utility Building Office (RLUOB) Equipment Installation (REI) project required specialized HVAC and pipe fabrication. This was a highly complex LEED silver laboratory project requiring the following critical elements to complete the scope of work: Fabrication and installation of the Ventilation systems and laboratory Special Facility Equipment (SFE) for the Spectrometer Mass Labs. Radiological Chemistrv Lab. Trace Elements Lab #2 and Trace Elements Lab #3. This scope of work also included the installation of three (3) supply air diffusers and one (1) zone 2 duct and diffuser exhaust between the phoenix valves and



ceiling in each of the shelled laboratories. The work included all necessary submittals, 3D modeled and produced shop drawings; lay out, cleanup and coordination as necessary to provide a complete installation and fully operational system. Specific project tasks required JBH to furnish the fabrication and provide for installation of ventilation system commodities such as the headers above the Overhead Service Carrier steel (OSCs), final ventilation systems tie-ins into the existing ventilation systems with supports including duct drops from the zone exhaust ventilation into the lab rooms and supply air services, and final ventilation systems commodity tie-ins to the SFE equipment. Installation of piping supports, trellises and piping headers below OSCs. While excavation and



traffic constraints were not a facet in this project, the site constraints were critical as pipes and vents were being installed concurrently with electrical, making scheduling, coordination, and communication critical for this project. **Value:** \$12.8M

#### **TUCSON ELECTRIC POWER: MECHANICAL WORKS**

completed the IBH Mechanical Works Scope inclusive of tower boiler piping, interconnecting pipe including pumps and storage tanks, steam blows, and testing and commissioning support to this concentrated solar power (CSP) addition Electric to Tucson Power's H. Wilson Sundt Generating



Station. TEP's Sundt Solar Boost Project uses Areva Solar's compact linear fresnel reflector (CLFR) solar steam generators to produce up to 5 MW of power during peak demand periods.

The TEP Solar Boost Project is a joint venture in clean energy between AREVA and the Tucson Electric Power Company. It is potentially one of many Solar Steam Generators (SSGs) to come. AREVA has built these in Australia, India, California, and Nevada as well as the FAST project at Sandia National Laboratories.

Value: \$2,300,000







### Sandia National laboratories- Molten Salt Test Loop

#### **Project Description**:

Consistent expert presence was critical to implementing this technology which consists of pumping molten salt through various types of solar collectors such as parabolic troughs or elevated tower receivers. In a



functioning loop, mirrors are used to track the sun and focus concentrated solar energy onto solar collectors, which contain circulating molten salt. There are

currently no facilities in the world capable of performing accelerated lifecycle testing of flow components in a high temperature molten nitrate salt environment. The system maintains nitrate salts in the molten state at various temperatures and pressures in order to pump the salt through parallel test sections containing components under test. The system also heats/cools the salt to desired conditions for each test



and offers specialty controls and capabilities allowing researchers to collect data from the process.

The mechanical scope of work included both fabrication and installation of this unique loop system. Specifically, work included the order, delivery and hook-up of critical specialty equipment along with the fabrication of several unique components. In addition to the specialty HVAC equipment, JBH performed installation of unique plumbing modules to direct the highly specialized flow of salt throughout the system. The flow is directed by a configuration of stainless steel pipes, and pumps, maneuvering the liquids through various temperature changes to reach their desired state.

Value: \$2,004,713

Awarded ENR SW's Best of 2012 Project in the Specialty Contracting Category and the Associated General Contractors NM Building Branch Best Buildings 2013 in the Specialty Contracting Category



#### **DEPARTMENT OF ENERGY**

### SANDIA AND LOS ALAMOS NATIONAL LABORATORIES- NEW MEXICO

JBH performs mechanical, piping/plumbing, and sheet metal/HVAC work under multiple active and completed DOE contracts. These facilities are subject to frequent modifications and alterations in support of multiple missions. They contain specialized functions such as cleanrooms, ceramics functions, metallurgical processes,





The World's Greatest Science Protecting America

thin films, microcircuit production, and electronic fabrications. At times, the work involves diverse hazards such as radioactive material, radiation-generating devices, OSHA regulated carcinogens, hazardous gases, and liquids. Often, these contracts require multiple tasks to be completed concurrently. JBH furnishes all project management, supervision, labor, materials, consumables, tools, and equipment to perform the structural/mechanical/high-purity installations and/or relocations for all machining/manufacturing/production facilities and associated incidental utilities in special access areas. Additionally, these contracts may require ground-up facility additions and work in the Specialized micro-electronic production facility managed by the DOE.

### SANDIA NATIONAL LABORATORIES- MICROSYSTEMS SCIENCE TECHNOLOGY AND COMPONENTS DIVISION AND NEUTRON GENERATOR PRODUCTION ENTERPRISE FACILITIES BOA CONTRACT

**Project Description:** This project was completed under the Department of Energy 0414.1C quality mandate. Our presence at Building 858 began in approximately 1987 with the installation of the original tools under the Radiation Hardened Integrated Circuits (RHIC) contract. Our successful completion of that groundbreaking project translated to the award of this Sustaining contract. This Contract is a 10 year, \$40,000,000 contract. The project consists of the construction and modification of work in the Microsystems Science, Technology and Components Division and Neutron Generator Production Enterprise Facilities at Sandia National Laboratories. These facilities are subject to frequent modifications and alterations in support of multiple missions. They contain specialized functions such as cleanrooms, ceramics functions, metallurgical processes, thin films, microcircuit production, and electronic fabrications. At times, the work involves diverse hazards such as radioactive material, radiation-generating devices, OSHA regulated carcinogens, hazardous gases and liquids. On occasion, this contract requires multiple tasks to be completed concurrently. JBH furnishes all project management, supervision, labor, materials, consumables, tools, and equipment to perform the structural/mechanical/electrical/high purity and/or relocation for all machining/manufacturing/production facilities and associated incidental utilities in special access areas.



### AMERICAN SOCIETY OF RADIOLOGIC TECHNOLOGISTS- 4-STORY RENOVATION AND ADDITION

**Project Description:** ASRT is the premier professional association for radiologic science professionals. Their headquarters are located in the east mountain canyon of Albuquerque, NM. While an unlikely location for the



world's largest organization of its kind, the mountain backdrop appropriately frames their newly expanded national headquarters which moved from Chicago, IL to Albuquerque, NM in 1983.

JBH constructed a 24,000 sf, 4-Story addition inclusive of executive office suites, a kitchen facility, and a 4,400 sf museum devoted to the radiologic science profession and its history. Additionally, JBH remodeled 15,000 sf of existing office space.

ASRT incorporated glass, natural stone and wood finishes throughout the interior of the building. The exterior design includes a synthetic exterior finish with stone accents. The combination of these elements within a modern executive office building required precision installation, craftsmanship, and a

keen attention to detail. Finishes were exceptionally critical to areas with the curtain wall system, which enabled choice spaces to be prominently visible from both the inside and the outside of the building.

Value: \$6.8M





Awarded 2013 Eagle Award in the Office Building Category by the National Association of Industrial and Office Properties (NAIOP)



### LOS ALAMOS NATIONAL LABORATORY- TA 16- PROTECTIVE FORCE INDOOR FIRING RANGE

**Project Description:** The LANL Indoor Firing Range is an 18,100 sf CMU building constructed exclusively for the Alamos National Los Laboratory Protective Force. The range facility consists of a 20 position tactical firing range with a wide bullet trap, automated target turning system, and control booth. The facility also includes а weapons storage room. cleaning room, classrooms, document



and range storage rooms, and restroom facilities. Included in the 18,000 sf is a 1,587sf administration area and 16,563sf range building containing 4' wide, 50 yard long individual firing lanes.

Innovations were developed to combat key construction activities during the frigid winter months. An estimated 90% of the earthwork, concrete and CMU operations had to be performed and protected in sub-freezing temperatures. This included tenting of the areas under construction to allow for the carpenters to work safely, blanketing the foundation concrete to prevent the slab from



freezing and cracking, and schedule modifications to accommodate delays caused by digging into dirt with a similar consistency to ice during November-February.

The accommodations required for installation of a running man target system, associated controls, pursuit target, granulated rubber berm trap, ceiling system including overhead ballistic steel baffles, shooter booths and enclosure guards aren't typical to most construction projects. The enclosed facility required heightened HVAC specifications to comply with clean air needs during sessions where firearms were live.

#### Value: \$6M

Awarded 2013 Best Building 5-10Million by the Associated General Contractors New Mexico Building Branch



# LOS ALAMOS NATIONAL LABORATORY (LANL)- NATIONAL SCIENCES AND SECURITIES BUILDING (NSSB)

**Project Description**: The NSSB is a single story, 25,000 square foot office building that includes offices, conference rooms, kitchenettes, storage space and was designed to earn 26 Leadership in Energy and Environmental Design (LEED) points from the United States Green Building Council (USGBC). To meet budget and environmental requirements the project team used a combination of new and recycled Concrete Masonry Units (CMU). The recycled CMU's make up the majority of the building's exterior, with new white and maroon CMU's to supplement and accent.

To capitalize on funding, the architect used simplicity as the theme. The building was designed to minimize wasted floor area and maximize functionality. The design of the building includes several sustainable features. The construction team installed the following energy efficient materials; structural insulation, Solex glass, double glazed windows, mechanical systems, electrical systems, and an ambient lighting system. Also included were water efficient plumbing fixtures and a long-life cycle roof system. Recycled steel, aluminum, gypsum board and carpet were also used in the building.

The design/build project delivery method allowed JBH to consult with the architects and engineers during the design phase assuring constructability of the specifications and drawings. During pre-construction, JBH helped identify several valueengineering ideas to accommodate the project budget established by the owner.



Value: \$7.5M

Awarded Best Building 2009- in the Design/Build category by the Associated General Contractors- New Mexico Building Branch



### **UNIVERSITY OF NEW MEXICO- CHILDREN'S HOSPITAL CRITICAL CARE PAVILION**

**Project Description**: This 465,250 square foot addition to the University of NM Hospital is located in Albuquerque, New Mexico and is comprised of six stories plus a basement structure. The building includes an emergency department, diagnostic and treatment departments, and inpatient rooms. JBH's scope of work included HVAC, plumbing and vent. comfort waste piping, underground utility installation and installation of the medical gas system.

The HVAC System has a capacity of 606,000 cubic feet per minute and 1282 tons of existing chiller capacity. The plumbing and vent system serves the entire hospital including patient rooms, restrooms, reception areas, waiting rooms and the commercial kitchen facility.

The medical gas systems include

medical compressed air, medical vacuum, oxygen, nitrous oxide, nitrogen, and a waste anesthetic system. The comfort piping systems include chilled water, high and low pressure steam, steam condensate, and a hot water system.

JBH self-performed the underground utility work on the project including the installation of 1,000' of underground piping comprised of; an 8" PVC domestic water main, an 18" PVC sewer main at the existing facility and a 16" PVC sewer main for the addition. An 8" ductile iron fire main was run from the existing hospital to the new hospital along with several hundred feet of 48" reinforced concrete pipe (RCP) for storm drains and several hundred feet of 18" RCP with several drop inlets.

Value: JBH Scope: \$34,000,000.00 Total Project Value: \$120,000,000

#### Awarded Best Building 2009-Public Project 20M+ category by the Associated General Contractors-New Mexico Building Branch







#### **VETERAN'S ADMINISTRATION AMBULATORY SURGERY EXPANSION PROJECT**

**Project Description**: JBH recently completed the 18 month, 5.7M addition and renovation to the Veterans Administration Hospital's Ambulatory Surgery Wing. JBH was a subcontractor on the project performing the architectural and mechanical scope to Veteran-Owned contractor Faith Enterprises. All work was completed on an active, elevated jobsite in the 2nd floor interstitial, 3rd floor, 3rd floor interstitial, and 3rd floor roof areas of the busy hospital.

IBH provided all architectural, mechanical, and plumbing/med-gas piping labor, material, equipment and supervision in accordance with applicable VA construction standards, specifications and procedures to complete the renovation. This included selective demolition and installation activities to support the project scope, which included 2<sup>nd</sup> floor renovations to complete offices, flex space, and a mechanical room along with the complete transformation from open roof area to a 3rd floor surgery suite. The addition included interstitial space, supporting a complete install of plumbing, mechanical, electrical, medical gas, and special systems for the modern operating room space. The project area is approximately 19,300 square feet plus interstitial space. This project was completed in two main phases to accommodate the occupied hospital.

Value: JBH Scope: \$5.7M

Award of Excellence NAIOP 2015 Medical Project of the Year









### UNIVERSITY OF NEW MEXICO-ANDERSON SCHOOL OF MANAGEMENT

**Project Description:** The latest addition to Anderson School of Management is the Student Services Center. This beautiful, multi-functional 4,500 square foot addition to the building is a welcoming place for students. The original building was a dark, closed area space that wasn't functional for the daily influx of students. To transform the space into something functional the University created the Student Services Center addition project.

The addition caters to its market of university students with its eye catching two story multi-colored convex glass wall and sleek style. The building also features top of the line technology utilized to facilitate learning and provide a sense of real world financial management. The interior is full of bold colors such as the orange stripe in the carpet that follows the curvature of the upstairs classroom and leads the eye up to the bold maroon classroom accented by glass panels.

Special features include the multi-panel glass wall that boasts energy efficient Solarban 70XL glass. This allows the sunlight to be dispersed to help keep the interior cool, yet allow the sunlight in. Insulated Solarban Annealed glass was used on the upper rows of the wall while Solarban tempered glass was used on the bottom row as well as on the doors and surrounding panels. Disbursed throughout the wall are sheets of glass in various colors.

Upstairs is the second story technology classroom that houses a video-wall of ten flat panel monitors. The bottom row of glass enclosing the upstairs structure is covered in an opaque frost that helps lessen the feeling of instability that may come from standing next to an unusually shaped glass wall seemingly suspended in midair.

Value: \$1,175,470

Awarded Best of 2007-Higher Education category by ENR Southwest









### UNIVERSITY OF NEW MEXICO- PETE AND NANCY DOMENICI HALL

#### **Project Description**:

Located on the University of New Mexico's North Campus, the Pete & Nancy Domenici Hall greets its visitors in a two-story main lobby, featuring a two-ton stone fountain, illuminated by the structural skylight high above. This stunning building houses one of the premiere neuroscience and mental illness research facilities in the nation. The project began with a 9,855 sq. ft remodel of UNM's existing MIND and COBRE CMRRC facility and ended with a 42,315 sq. ft. two-story addition. The new structure is primarily structural steel, with areas of masonry and wood accents. The building engages its site through the skillful use of radiused cast-in-place concrete site walls with accompanying ramps providing ADA access. The exterior is primarily stucco, with exposed architectural concrete elements. Of particular interest is a two-story vertical cylindrical conference room clad in zinc-plated metal.





Value \$17,000,000.00 Total Project managed by JBH-contracted directly to owner \$7,000,000.00- JBH contract value

Awarded 2005 AGC Best Building Award in the Interior Design category, the Southwest Contractor Best of 2005

Award in the Education Project category and the NAIOP 2005 Award of Excellence in the Education Project category





### IM FLASH TECHNOLOGIES-PROCESS SPECIFIC SPECIALTY SYSTEMS (PSSS) CHEMICAL AND GAS DISTRIBUTION

**Project Description**: This project involved the installation of all PSSS chemical systems and bulk gas systems throughout microelectronics manufacturing facility in Lehi, UT. The chemical systems consisted of 10,000-20,000 gallon bulk tanks and bulk delivery units that supply a chemical distribution unit to feed laterals throughout the fabrication facility. Materials used include PVDF, Teflon, stainless steel tubing, carbon steel pipe, and double containment piping.

The bulk gas delivery systems consisted of NF3, NH3, SiH4, H2 and N2O gases. JBH installed all bulk delivery systems and piping into the



building from bunkers located away from the primary building. The bulk gases were then fed to the main valve box, a distribution valve box and then to a valve manifold box.

JBH also installed all of the inert gases for the area. JBH crews ran lines from the inert gas room cabinet to laterals in the fab and subfab throughout the building.

Value: \$21,000,000



### MICROELECTRONICS MANUFACTURER- TOOL INSTALL |PSSS |BASEBUILD

**Project Description:** JBH has performed multiple process piping installations for extensive tool install projects at various sites of a global microelectronics manufacturer. Under these contracts, JBH provides labor, materials, equipment, and supervision to complete the demolition, re-location, piping prefacilitation and final connections necessary for process tools and associated ancillary equipment.

Initial portions of this work include the installation of systems



to support distribution of specific gasses and chemicals from bulk storage to individual process tools. Additionally, the contracts may require the completion of building improvements to support the modified layout of the tools. This may include the installation of cleanroom floors, ceilings, walls, and supporting laboratory spaces.

The scope may also included the furnish, installation, removal and replacement of vacuum fore-line systems, utility piping, and installation of drain system components between facility and tool connections. Removal and re-installation of the bulk chemical distribution system piping is also required along with the fitting of tubing for the vital monitoring detection apparatus used at the facilities.

JBH has completed this type of work for the following contracts:

<b>Confidential Microelectronics</b>	Confidential Microelectronics	Confidential Microelectronics	
Manufacturer, Tool Install: AZ	Manufacturer , Basebuild: NM	Manufacturer, Tool Install: CO	
\$68M	\$19M	\$5M	
Confidential Microelectronics	Confidential Microelectronics	Confidential Microelectronics	
Manufacturer, Basebuild: AZ	Manufacturer, Tool Install: NM	Manufacturer, PSSS: NM	
\$28M	\$17M	\$13.5M	



# HYATT TAMAYA RESORT AND SPA DOMESTIC HOT-WATER SYSTEM REPLACEMENT

**Project Description**: The Hyatt Tamaya Resort is one of Albuquerque's most luxurious destinations with amenities including 350 guest rooms, multiple swimming pools, executive meeting spaces, reception areas, four-star dining, over 70,000 square feet of indoor/outdoor event space, a private golf-course, stables, and spa. Critical to the facility is a sophisticated Domestic Hot-Water system.

JBH replaced the aging system in to include demolition of existing water heaters and



associated mixing valves and piping and subsequent installation of the following equipment and all associated piping:

- + 4-1800 btu Gas Water Heaters
- + 4- 500 gallon Hot Water Storage Tanks
- + 4-137 gpm in-line pumps
- + 3- Thermostatic Mixing Valves
- + 35 gallon Thermal Expansion Tank

The installation supported all guestrooms and facility operation areas inclusive of kitchens and laundry facilities. All construction was phased and sequenced as not to affect water services to the hotel. JBH crews installed, tested, and completed start-up of the new equipment prior to demolition and removal of aged system.

Value: \$500,000





Section 5: Executive Team

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### Mark G. Henderson- Chief Executive Officer

Mark has 50 years of experience in high-tech, commercial, government, and industrial projects and maintains applied knowledge of mechanical, piping, and architectural construction; project management, business development, and estimating. Mark began his career at JBH when he was just a child, assisting his father on the weekends with whatever work he could handle. Upon graduation from high school, Mark joined

the local plumbers and pipefitters union, successfully completing their apprenticeship program and becoming a piping journeyman. After years in the field supporting direct installation, Mark advanced through the company eventually becoming CEO in 1990. He has since successfully expanded JBH from a small family business to four offices throughout New Mexico and Arizona. Mark is an influential leader with the intrinsic talent for conceptualizing and communicating vision, identifying and resolving problems, and fostering consensus and cohesion for achievement of common goals. Mark utilizes his extensive business experience to ensure customer and employee satisfaction and has crafted a corporate vision that coupled with his leadership strategy, has accelerated the growth of the company to prominent status among general and mechanical contractors in the Southwest.

### John Stroud- President

John has worked for JBH for over 30 years continuously contributing to the company's safety, quality, and profitability goals. As President, John is responsible for the direct oversight of nine administrative departments encompassed in the JBH Corporate office, four area offices and over 1000 personnel; ensuring strategic corporate initiatives are met through a process-based management approach driving predictable results both at the project and organizational level. John holds a



BS in Construction Engineering from the University of New Mexico and completed a five-year piping apprenticeship from LU 412 Plumbers and Pipefitters. Additionally, John is the qualifying party for the company's multi-state mechanical contracting licenses. John is a hands-on leader with the experience required to influence successful construction projects including collaborative guidance and unsurpassed customer satisfaction. John guides the organization by consistently exercising its core values of honesty, integrity, safety, and quality.



#### Linda Henderson-Secretary/Treasurer

Linda has played an essential role in JBH management for over 30 years, inspiring employee implementation of the corporate vision. As Secretary/Treasurer, Linda is responsible for oversight of JBH financial operations including cash flow, management of JBH corporate funds, employee benefits and development of company accounting policies. Linda is instrumental in strategic planning and

executive level decision-making and manages the JBH Employee Stock Ownership Program and all company investments.

#### Bart Davis-VP, Northern New Mexico (NNM) Area Manager

Bart's tenure with JBH began over 30 years ago, underlined by his completion of a full apprenticeship in the piping trade, where Bart cultivated the leadership skills critical to his current position as the company's VP, NNM Area Manager. His responsibilities include management of personnel and fiscal resources for JBH's NNM

regional operations, specializing in Department of Energy work. Bart has extensive experience in the construction and retrofit of quality compliant government facilities, overseeing NQA-1 and Management Level 1-4 compliant projects at Los Alamos National Laboratory.

#### **Charles Watson-VP, Controller**

Charles joined JBH in 2002 with the acquisition of Davis & Associates. He brings over 25 years of accounting, finance, payroll, insurance and a variety of other construction related experience through his years of combined service. Charles' controller duties include; financial statement preparation activities, handling of

external audits, overseeing the job activities of the Payroll and Accounting administrators, and leading the revenue and expense analysis annually. In addition to corporate accounting, he also oversees management of the Information Technology Department. Charlie holds a bachelor's degree in finance from the University of New Mexico.







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#### James Baylor- Eichhorst-VP, Albuquerque Area Manager

Mr. Eichhorst has over 25 years of construction experience including general and mechanical contracting and is a licensed pipefitter and gasfitter with experience working in the institutional, commercial, government, high-tech, and industrial markets. He is experienced in both field and administrative level project management and currently serves as the Albuquerque Area Manager where he oversees the administration of general and mechanical construction for both local and federal

government as well as private industry clients. Mr. Eichhorst is responsible for the direct supervision of area project managers including oversight of concurrent projects and is ultimately responsible for the area's leadership including; personnel development, customer satisfaction, and revenue stability and is also accountable to ensure administrative and field compliance with JBH policies and procedures as directed by our quality management system.

#### Todd Krist-VP, Arizona Area Manager

Todd has been dedicated to the construction industry since 2009 when he began his career as a journeyman pipefitter. Currently serving as Site Manager for the company's thriving Arizona office, Todd is responsible for the overall organization of the area and its 500+ administrative and field personnel supporting the local microelectronics, higher education, and medical industries. Todd is an experienced leader who efficiently directs his team to meet

safety, quality, budget, and schedule milestones through a rigorous management process comprised of adherence to the JBH documented Project Management standards. His corporate responsibilities include the development of executive level revenue and performance goals and assurance that all area objectives are continually measured and ultimately met through strategic project-level administration.

#### Melissa Gomez-VP, Estimating and Corporate Support

Melissa is responsible for management of company marketing, corporate alignment, and estimating. Direct organizational support responsibilities include collaboration with the company's Management Team to define corporate and strategic planning efforts related to both marketing and organizational improvements. As Estimating Manager Melissa provides direction, leadership and oversight to the JBH estimating department encompassing HVAC, process and traditional piping,

plumbing, and architectural scopes of work. Melissa holds a BA in Journalism and Mass Communication from the University of New Mexico and holds the Certified Professional Services Marketer (CPSM) designation from the Society of Marketing Professional Services.







