1216 Elkins Lake Huntsville, Texas 77340

## **BACHELOR of SCIENCE in MECHANICAL ENGINEERING**

The University of Texas, El Paso, Texas

## ASSOCIATE VICE PRESIDENT, FACILITIES MANAGEMENT

Sam Houston State University, Huntsville, Texas

June 2016 to Present

- Responsible for Facilities Management including organizes, directs and controls planning and construction, operations and maintenance of campus facilities and custodial and grounds services.
  - o Provide long-range vision and guide development of the campus master plan and capital outlay programs.
  - o Work closely with University Advancement in their efforts to raise gifts for capital projects. Responsible for the administration of grant programs for campus facility improvements.
  - Oversee, recommend, develop, and implement the University's comprehensive Campus Master Plan and strategies for allocation of space to meet organizational objectives. Lead design efforts for building projects, and establish principles and design framework for future campus development.
  - o Provide oversight for the development of plans, goals, objectives, timelines, policies, and procedures for completion of capital construction projects, and participate in the development of request for proposals, bids, and contracts for construction and facilities related services.
  - O Direct and guide on the most appropriate design solutions, proper selection of building materials, and suitable construction delivery methods to ensure that new and existing facilities meet both programmatic and functional needs, and budget and schedule constraints. Ensure timely procurement and management of architectural and engineering consultant services as well as construction management firms.
  - O Develop, monitor, and manage all aspects of the budget to assure the most efficient and effective use of university resources.
  - o Supervise and direct the physical operation and maintenance of the campus, including the financial, operational, and personnel management responsibilities for Facilities Management.
  - Ensure appropriate technical expertise in management, staff, and the campus community on matters relating to maintenance and remodeling, including architectural trades, mechanical/electrical trades, engineering services, grounds, custodial, and central administration operations.
  - Effectively manage organizational development, set goals and priorities, address safety issues, analyze performance factors, resolve personnel matters, and investigate complaints associated with facilities management.
  - o Develop and execute construction policies and procedures and act as the final authority on construction related matters.
  - o Responsible for real estate documentation, environmental compliance, and financial planning in support of capital outlay and plant management objectives.
  - Act as the campus Executive Facilities Officer responsible for representing the University in dealings with TSUS Chancellor's Office regarding facility matters for community groups, elected officials, and local, state, and federal agencies.

## DIRECTOR OF MAINTENANCE

Austin Independent School District, Austin, Texas

February 2012 to 2016

- ♦ Responsible for all of the Maintenance Operations at AISD, 290 Staff, Maintenance Budget \$54 million, Bond Construction Budget \$352 million, 130 Schools & Support Buildings, 630 Portables, 56 Chillers, 68 Cooling Towers, 14.5 million square feet, 80 percent of Buildings DDC Controlled, 82,000 Students
  - Plant Improvements: Engineering, Architectural, Project Planning and Management, Drafting Services
  - o Administrative: Personnel and Business Services
  - o Building Optimization: Building Instrumentation and Controls, Refrigeration, HVAC
  - o Facilities Control and Management Systems: Schneider iNet (Legacy), Trane & Tracer, Tridium (Web-based), TAC (Schneider) Vista
  - o Environmental Health and Safety: Asbestos Abatement and Mold Remediation
  - o Building Maintenance: Building Operators, Electrical, Plumbing, Carpentry, Welding, Painting, Structural, Integrated Pest Management, Audio/Visual, Locks & Keys
  - o Grounds Maintenance: Landscaping, Forestry, Heavy Equipment Operation, Playscapes, Fencing
  - o Support Operations: Custodial, Automotive Services, Warehouse Operations, Help Desk
  - o Energy & Asset Management: Sustainability and Resource Recovery
  - o Facilities Condition Assessment
- Collaborated with Construction Management in order to provide administrative direction related to operations and maintenance for planning and construction of new facilities.
- Developed the Facilities Master Plan (FMP), in conjunction with other District administration and vetted through the FMP Committee, in order to address long-range facilities planning.
- Involved in reviewing the school growth data for recommendations for construction of new schools.
- Reduced energy use by 12% over a three and a half year period, and prior to utility rates increasing in 2012-2013, realized a savings of \$2.1 million and a cost avoidance of \$13 million, included lighting retrofits, installation of high efficiency mechanical systems, summer shutdowns in conjunction with staff shortened work week, internal behavioral modification, client outreach and education, coordination with external departments to maximize building use for educational program support.
- Reduced water use by 32% over a three and half year period, saving 160 million gallons and realizing a savings of \$2 million per year, which included water audits in conjunction with Austin Water, plumbing retrofits, ongoing water use awareness programs, improved athletic field water management, replacement of inefficient irrigation systems. Received the 20 15 Excellence in Water Conservation Award from Austin Water for AISD's commitment to conserving Austin's water resources and a sustainable environment.
- ♦ Created a Custodial Allocation Analysis to determine the appropriate cleaning square footage per custodian in order to improve custodial efficiencies. Factors considered in analysis were: number of commercial sites bordering school, building condition, enrollment, campus property size, extra program building use by AISD sponsored programs.
- Responsible for creating position and hiring lead Arborist to provide oversight for all trees in District for over 2,000 acres, including inventory, health conditions, removal and tree mitigation.
- Instrumental in creating a Sustainability Coordinator position for the District.
- Work closely with Directors for Food Services, Transportation, and AISD Chief of Police to ensure students have an engaging, healthy and safe learning environment.

- Work directly with and advise Risk Management Office during times of emergency operations and programmatic disruptions for schools. Immediate attention and operational planning are required to address possible school closures, temporary functional school requirements, and renovation requirements if necessary.
- Received *RAVE Award* from the Principals for ensuring that all schools were ready for the beginning of school year, a first ever achievement for the District.

## ASSOCIATE DIRECTOR FOR FACILITIES SERVICES

The University of Texas, Pickle Research Campus, Austin, Texas

November 2004 to February 2012

- Responsible for all of the Facilities Services Operations at the J.J. Pickle Research Campus (PRC), Budget \$12 million
  - o Engineering, Architectural, and Drafting Services
  - o Administrative, Personnel and Business Services
  - o Project Planning and Management
  - o Facilities Control and Management System (FCMS)
  - o Central Stores, Custodial, Landscaping, Welding and Automotive Services
  - o 4-Chilling Stations, Help Desk
  - o Electrical, Plumbing, Carpentry and Painting Shops
  - o General Construction, including Demolition and Heavy Equipment Operation
  - o Refrigeration, HVAC, Fire and Life Safety, Instrumentation and Controls Shops
  - o Waste Management and Recycling
- ♦ Involved in Demand Side Energy Management and Conservation project from its inception to completion, which includes energy savings with lighting retrofits, steam trap replacements and water conservation measures; \$17.7 million budget.
- ♦ Received Excellence Service Award from the Director of Facilities Services for displaying innovative use of Facilities Administration Management Information System (FAMIS) technology for improving the monthly Capital Projects presentation. Project Management and Construction Services (PMCS), a newly created department under Campus Planning & Facilities Management, is modeling this method of reporting.
- Successfully established monthly project update meetings with high profile clients.
- ♦ Responsible for the fully completed PRC Chilled Water Study that evaluated the retrofit of chillers from R-11 refrigerant to more environmentally friendly refrigerants such as R-123 or R-134a, and also evaluated the hydraulic system that services entire PRC campus.
- Established a "Fire and Life Safety Shop" to inspect 27 fire alarm systems, 30 fire sprinkler systems, and 14 fire suppression systems.
- Installed 3D TRASAR, a state-of-the-art, real time, water-monitoring system for chilling stations; providing outstanding, instantaneous results, conserving enormous quantities of water for the University.
- Successfully applied for and received grant for \$2 million Photovoltaic project (solar panels).
- Reorganized the reporting structure at PRC in order to achieve increased efficiency and effectiveness.
- Selected to mentor a member of the Executive Leadership Program within the Senior Associate Vice President's portfolio.

## INTERIM ASSOCIATE DIRECTOR FOR FACILITIES MAINTENANCE

The University of Texas, Main Campus, Austin, Texas

September 2008 to August 2009

- ♦ Zone Maintenance Responsible for mechanical, electrical, and plumbing (MEP) trouble calls
  - o North Campus
  - o Central Campus
  - o East Campus
  - o South Campus
  - o LBJ Library
- ♦ Instrumentation and Controls
- ♦ Controls and HVAC Design
- ♦ Fire and Life Safety
- ♦ Preventative Maintenance
- ♦ Lock and Key Services
- ♦ Warranty and Commissioning
- ♦ Renovation and Renewal
- ◆ Facilities Control and Management System (FCMS)
- ♦ Demand Side Energy Management and Conservation

## ASSOCIATE DIRECTOR FOR POWER PLANT AND CHILLING STATIONS

The University of Texas, Austin, Texas

September 2001 to November 2004

- Ensured that the University community had continuous and uninterrupted use of all electricity, chilled water, steam, distilled water, and compressed air.
- Proposed a \$13 million 25-megawatt steam turbine (ST-9); installation complete and system operational with 30-year payback.
- Proposed and installed a steam pressure control system on a 36-megawatt gas turbine, generating an estimated annual savings of \$3 million.
- Oversight of 112 employees between the Power Plant and Chilling Stations. Direct reports included Manager of Operations, Manager of Maintenance, Project Engineer, Controls Engineer, Utilities Operations Supervisor, Water Lab Supervisor, Departmental Buyer, and three Administrative Assistants.
- Recommended an engineering study to install a new 25-megawatt gas turbine to provide needed electrical demand and improve overall power plant efficiency. This gas turbine became operational in Summer 2010.
- Researched, proposed, and installed a "Dump Condenser System" which allowed the shutdown of the largest steam turbine in the Power Plant, generating an annual savings of over \$750,000.
- Established an annual synopsis entitled "State of the Power Plant and Chilling Stations Address" to inform employees of past, present, and future challenges.
- Directed and supervised a major overhaul of the main gas turbine, including all associated equipment. This in-house project milestone was successful and unprecedented; completed ahead of schedule, under budget, and resulted in savings of \$400,000.
- Upgraded two reverse osmosis trains and three demineralizer units; produced 1.6 million gallons per regeneration, a significant improvement from the 350,000 gallon depletion rate, saving the University \$50,000 annually.

- Recommended and hired a Controls Engineer and a Water Lab Supervisor in order to improve overall efficiency of the Power Plant. Positive results confirmed within first year of employment.
- Directed and supervised a major overhaul of a steam driven chiller and all associated equipment. This major in-house project milestone was successful and unprecedented, providing a desperately needed reliable steam source for the Power Plant.
- Developed and implemented a preventative maintenance schedule for all eight electrical chillers.
- Installed a state-of-the-art refrigeration monitoring system, providing a safer work environment for the Chilling Stations' personnel.
- Designed and installed two rotary type compressors for instrument air purposes and Power Plant reliability.
- Implemented a Chilling Stations' Safety Committee by establishing a charter, giving the committee authority to investigate accidents, unsafe work areas or conditions, and establish a mandatory monthly safety meeting.
- Project oversight and design review of a new welding shop, employee break room, and electrician bench room.
- Public Relations First Responder to address media inquiries for all Power Plant incidents.

## ASSISTANT DIRECTOR FOR POWER PLANT

The University of Texas, Austin, Texas

May 2001 to August 2001

- ◆ Proposed and implemented the reconstruction of Cooling Tower No. 1, doubling its capacity from 35,000 gallons per minute (GPM) to 70,000 GPM without increasing the square footage. This was an \$8 million project and was done under budget.
- Directed the removal of three steam turbines and two coal-fired boilers providing valuable needed space for the installation of upgraded electrical switchgear.
- ♦ Provided feed water pump training for four Plant Maintenance Mechanic III's, and four Plant Maintenance Mechanic II's, generating a savings of \$35,000 per pump for a total savings of \$280,000 for eight pumps.
- Developed a partnership with the Lower Colorado River Authority (LCRA) to share their "R" stamp to perform code-weld procedures for Power Plant facilities saving the University \$75,000 per year and certifying our in-house welders for code welding.
- Directed a team of insulators to insulate 1000 square feet of un-insulated steam piping in the utility tunnels, generating an annual savings of \$62,000.

#### INTERIM ASSISTANT DIRECTOR FOR POWER PLANT

The University of Texas, Austin, Texas

November 2000 to April 2001

• Recommended engineering design revisions for the renovation, upgrade, and/or installation of key equipment to provide the Power Plant with the latest state-of-the-art technology.

- Ensured that the Power Plant was in compliance with all City, County, State, and Federal Regulations. Performed analysis of the plant's operational and energy costs to develop more economical and efficient methods of operating, which included replacing antiquated equipment.
- Coordinated the sequence of "Start-Ups" and "Shut-Downs" of the plant's utilities generating equipment, such as the 36 mega-watt gas turbine and the 500,000 pounds of steam per hour boiler.

## MANAGER OF MAINTENANCE FOR POWER PLANT

The University of Texas, Austin, Texas

September 1999 to November 2000

- Evaluated mechanical and electrical drawings for proper selection of equipment.
- Developed a preventative maintenance plan to insure that work tasks were completed in a timely and efficient manner by all departments, including the Machine Shop.
- Approved all of the Power Plant's purchasing, ensuring all University and State procurement procedures were followed.
- Responsible for the Lab and Instrumentation Shops, ensuring that our water treatment chemistry conformed to strict specifications, and that necessary boilers were "blown-down" according to the manufacturer's recommendations.
- Reviewed all of the Power Plant's personnel evaluations for consistency, verifying compliance with the University's policies and procedures.
- Recommended to upper management the hiring, promotion, and termination of personnel under the jurisdiction of the Power Plant.
- Implemented a Power Plant Safety Committee by establishing a charter, giving the committee authority to investigate accidents, unsafe work areas or conditions, and establish a mandatory monthly safety meeting.

## ASSISTANT DIRECTOR FOR HVAC & ENERGY MANAGEMENT

The University of Texas, El Paso, Texas

July 1991 to September 1998

- ♦ In charge of the Heating Ventilation and Air Conditioning (HVAC) Department. Implemented a very successful preventative maintenance program for 60 buildings totaling over 3 million square feet, drastically reducing the cost of unplanned or unscheduled maintenance. This created a savings of \$75,000 per year for the University.
- Oversight of three Central Thermal Energy Plants, including the daily operations of all major equipment. Completely revised the plant's operating procedures, which provided more efficient thermal energy and greatly reduced the number of unexpected equipment failures.
- Served as the Utility Manager, duties included tracking the University's utilities usage and recommending cost saving solutions to reduce the University's \$6 million energy budget. Recommended cost saving ideas that were researched and implemented, generating savings in excess of \$120,000 per year.
- Responsible for the Energy Management System (EMS) for the entire campus. EMS was converted from a central based computer network to a user friendly PC based computer system, providing improved climate control for the customer, and saving the University \$100,000 per year.

- Evaluated annual performances of six supervisors and made merit recommendations. Reviewed all employee evaluations to ensure consistency with the University's guidelines.
- ♦ 1993 Assigned supervision of a struggling plumbing department after setting up a successful HVAC preventative maintenance program. Installed a plumbing preventative maintenance model that reduced unplanned maintenance and created a scheduled maintenance system for better customer service.
- ♦ 1994 Given the responsibility of Automotive Shop that had experienced difficulty in maintaining scheduled safety inspections of 92 vehicles. Within one year, all automobiles were maintained and inspected annually, allowing the fleet to be increased to 180 vehicles. By performing most maintenance in-house, the University realized a savings of \$65,000 per year.
- ♦ 1996 Given the responsibility of managing the University's Motorpool. Since its inception in 1990, department had been operating in the red. At end of fiscal year 1997, department realized a profit of \$16,600. At end of fiscal year 1998, department saw a profit of \$38,400.

#### **ENGINEER**

Hercules Incorporated, Magna, Utah

March 1990 to July 1991

- ♦ Project Leader for Torque vs. Pre-Load and High Temperature O-ring testing series; responsible for preparing test procedures and directing a team of five Engineers to test according to a government standards schedule ensuring that cost goals were met.
- Solved assembly discrepancies during the joining of Titan Hardware components; and established criteria for O-ring selection in the nozzle and field joints for the Titan IV rocket.

## **ENGINEER/SCIENTIST**

McDonnell Douglas, Long Beach, California

December 1986 to March 1990

- ♦ Sole designer of the Overheat Manifold failure Detectors on the Computer Aided Design Drafting (CADD) for the C-17 cargo aircraft carrier for the Environmental Control System (ECS). Accumulated over 4,000 hours on CADD and finished design six months ahead of schedule.
- Directed a staff of seven Engineers and three Technicians to ensure completion of detectors; and interfaced with other engineering procedures to assure proper installation.
- ♦ Responsible for the complete development of the C-17 mock-up including scheduling, planning, and solving day to day technical and personnel problems. Implemented on site decisions for the C-17 Development Fixture as a Liaison Engineer.
- ◆ Analyzed applied loads and stresses on segments to size and select optimum design material; then created 3-D complex drawings utilizing the Computer Aided Design Drafting (CADD) for components of all Environmental Control Systems.

# MECHANICAL ENGINEER

Long Beach Naval Shipyard, Long Beach, California

May 1984 to December 1986

- Designed modification of mechanical and piping networks on board Naval Vessels. Provided on site direction to ensure proper installation.
- Programmed several complex database management systems for tracking the Fast Frigate Guided Missiles (FFG's) ship's equipment changes, resulting in many man-hour savings for the Naval Shipyard.