Minor State Capital Outlay Project
2013 Indefinite-Scope Indefinite-Delivery General Professional Design Services

(Architecture, Engineering, Landscape Architecture)

Proposal to:

Department of Technology, Management and Budget
Facilities and Business Services Administration
Design and Construction Division
530 W. Allegan Street
Second Floor, Stevens T. Mason Building
Lansing, MI 48933

Prepared by:

DiClemente Siegel Design Inc.
28105 Greenfield Road
Southfield, Michigan 48076

DiClemente Siegel Design Inc.
Engineering and Architecture

May 16, 2013

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Department of Technology, Management and Budget
Facilities and Business Services Administration
Design and Construction Division
530 W. Allegan Street
Second Floor, Steven T. Building
Lansing, MI 48933

ATTN: Ms. Irene Jackson Henry, RA, NCARB
Ms. Melissa Sambiagio

RE: Proposal for 2013 ISID General Professional Design Services
DSD Prospective Project No. 12-9413.16

Dear Ms. Henry and Ms. Sambiagio:

DiClemente Siegel Design Inc. (DSD) is pleased to submit our proposal to provide General Professional Design Services for 2013 ISID Minor State Capital Outlay Projects. DSD brings the following specialties to the State of Michigan in implementing your project:

- ***Relevant Experience***: DSD has held numerous on-call A/E contracts over our 44 year history. Our current blanket contracts include: City of Southfield (since 2004), Oakland County (since 2008), Ford A/E Alliance Program R&E Center (since 1999), GM Tech Center and Proving Grounds (since 1990), and University of Michigan Hospitals (since 1995).
- ***ISO Certification for Quality Control:*** This certification is awarded only to firms who have a record and maintain a systematic approach to maintaining quality control.
- ***In-House Expertise:*** We have experienced leadership in the fields of architectural and engineering design services. In-house engineering includes mechanical, electrical and information technology.
- ***Cohesive Team***: DSD has assembled a responsive, creative, and service-oriented team that has numerous years of past experience working together. Desai Nasr Consulting Engineers will provide structural engineering, Johnson & Anderson for civil engineering and surveying, NTH for roofing and environmental engineering, and Land Resource Planning & Design for landscape architecture.

We value our working relationship with the State of Michigan and believe our experience and knowledge makes us highly qualified to provide the required services for this project. We look forward to being of service to you on this project.

Respectfully,
DiCLEMENTE SIEGEL DESIGN INC.

Louis A. Trama

Louis A. Trama, PE, LEED AP
President and CEO

28105 Greenfield Road, Southfield, MI 48076 VOICE 248-569-1430 FAX 248-569-0096 E-MAIL mktg@dsdonline.com

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Part I – Technical

I. Understanding of Project and Tasks

DiClemente Siegel Design Inc.
Engineering and Architecture

I. UNDERSTANDING OF PROJECTS AND TASKS

DSD understands the Indefinite-Service, Indefinite-Delivery (ISID) contract is for general professional design services for State of Michigan facilities maintenance, alteration, and construction projects, and is intended to provide the State of Michigan with a simple and streamlined qualifications-based selection process for obtaining professional architectural and engineering services for minor, emergency, and/or routine professional services. The term of the contract is three years.

We understand the intended projects from this contract may be located within developed or undeveloped areas across the State of Michigan, and projects may include building alterations, additions, various facility upgrades, and special maintenance projects.

For each project resulting from this contract, a DTMB Project Director will contact a firm holding the ISID contract for a specific proposal of services and fees for that project (based on the approved hourly rates included herein). Once approved and accepted by DTMB, the project will proceed.

DSD understands the services sought for these projects may include the following phases:

- Phase 100 - Study
- Phase 200 - Program Analysis
- Phase 300 - Schematic Design
- Phase 400 - Design Development
- Phase 500 - Construction Documentation
- Phase 600 - Construction Administration - Office Services
- Phase 700 - Construction Administration - Field Services

DSD Experience

DSD holds a number of On-Call/Blanket Contracts similar to the State of Michigan's ISID contract. The projects for these blanket contracts are often routine renovation and/or maintenance related projects requiring quick response times. Our team takes pride in our ability to respond to multiple requests in a timely fashion while maintaining our high level of quality control standards.

Our experience with governmental clients dates back to our inception in 1969 and has included federal, state, and local levels of government. We are familiar with the standards and processes of the DTMB and have implemented them on a number of projects. We have included project summaries of experience which we feel is relevant to DTMB in this section.

Caro Center Heating Decentralization

State of Michigan Department of Community Health
Caro, Michigan

COMPLETION DATE
2011

PROJECT COST
$2.3 M

GROSS AREA
7 Acres, consisting of 13 Buildings totalling 281,663 SF

RESPONSIBILITY
Full Service Design

REFERENCE
Mr. Dave Sproul, PE
State of Michigan DTMB
517.373.8322

Mr. David Hiser
State of Michigan Caro Center
989.672.9240

The site wide heating system at the Caro Center, a State of Michigan Department of Community Health Hospital, had deteriorated over the years and was in need of major upgrades and replacements. This project included the decentralization of the central steam system.

The cottages/residences located at the sets are a 24 hour per day, 7 day per week, 365 days per year operation.

The entire campus is heated by a steam system supplied from the Central Power Plant, which is located on the very north end of the campus. The plant originally delivered 125-psi steam to the remote buildings but has since been converted to a 12-psi steam distribution system. The existing steam boilers still were operating at 125-psi and the steam is now reduced to 12-psi through two main pressure regulators located in the CPP basement. The CPP consists of a 300 BHP 1997 Johnston boiler, and new deareator installed in 2008/2009 and a 400 BHP (modified to a 600 BHP) Wicks boiler that dates back to 1938. The 600 BHP Wicks boiler was the main boiler for the facility, and the 300 BHP Johnston boiler was operated in spring and fall during low loads.

The Caro Center steam piping distribution system installed in 1938 extends to its furthest point of 4000 ft and consists of approximately 9600 ft of asbestos insulated steam and condensate piping. The piping is run in approximately 2900 ft of tunnels and in some cases, directly buried. The piping system was in very poor condition resulting in condensate loses between 7,000 and 15,000 gallons per day. The system required constant repair due to its age and in most cases was very difficult to access without a backhoe. The concrete walls, floor, and walls of the tunnel system were deteriorating as well. A failure in a strategic point in the steam system would have shut down the entire campus heating system. The existing site is presently broken down between the North and South Campuses.

Various options were reviewed in the process of developing a finalized scope of work and schematic design for decentralizing the Caro Center steam system.

Municipal Architectural/Engineering Consultant

City of Southfield
Southfield, Michigan

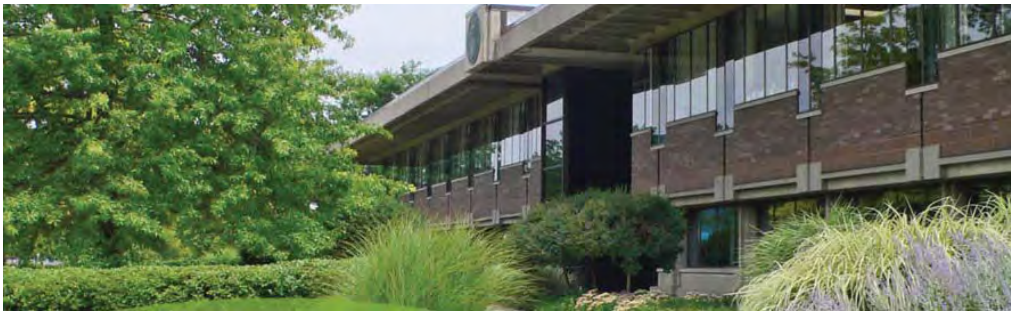
COMPLETION DATE
On-going blanket contract
since 2004

RESPONSIBILITY
Architectural & Engineering
Design Services

REFERENCE
Mr. Wayne Jewell
Previous Building Official
810.231.1333 Ext. 106

Mr. Mark Brandt
Coordinator, Building Maintenance
Department
248.796.4839

Mr. Fred Zorn
248.796.5110



In December 2004, DiClemente Siegel Design Inc. was awarded an on-call architect/engineer/planner contract by the City of Southfield. DSD provides our services to meet the City of Southfield's needs for retrofitting of existing buildings, expanding existing buildings, constructing new buildings, capital replacement of equipment and parts of structures for city owned facilities. The following is a listing of projects DSD has successfully completed for the City of Southfield:

- Firehouse #4 HVAC Renovation
- Fire Station #2 Renovation
- Administration Building, Computer Room Emergencies Services
- Public Safety Building Structural Issues
- Municipal Building HVAC Upgrade
- 46th District Court Computer Room Upgrade
- Department of Public Works HVAC Upgrade
- Municipal Building RTU Replacements
- 46th District Court UPS Installation
- Berg House Ramp
- Beech Woods Arena Entry
- Simmons House Historic Renovations
- Department of Public Safety Storage Building
- Department of Public Safety Summer Boiler
- Municipal Complex Generator Replacement Study
- Department of Public Safety Locker Renovation
- Municipal Complex Generator System Installation
- Beech Woods Arena Entry Door Replacement
- John Grace Community Center Boiler Replacement
- Berberian Woods Bridge Repair
- EECBG Project Implementation:
    - Activity # 2 Ice Arena Retrofit
    - Activity #3 & 6 Energy Audit Program
    - Activity#4 Administration Complex Retrofit
    - Activity #5 Civic Center LTG Retrofits
    - Activity #8 Beechwood Ice Arena
- Municipal Building Cashier's Office Renovation
- Ice Arena Locker Room Renovation Study
- Police Department Gun Range Stair Evaluation

IDIQ Contract

Oakland County
Oakland County, Michigan

COMPLETION DATE
On-going blanket contract since 2008

RESPONSIBILITY
Architectural & Engineering Design Services

REFERENCE
Mr. Paul Hunter
Consultant
248.858.0131

Ms. Mary Griffiths
Director of Planning and Community Development
248.858.0949

Mr. James Emerick
Construction Engineer
248.858.0141

DSD was awarded an IDIQ contract with Oakland County covering all 13 County Parks and various other County facilities. The following are two sample projects completed under this IDIQ contract.

Mental Care Facility Renovation
Oakland County Community Mental Health Authority (OCCMHA) commissioned DSD to renovate the existing 48,000-square-foot Medical Care Facility located in Pontiac, Michigan to provide an all-inclusive environment for their patients. In order to obtain a bond to fund this renovation, OCCMHA required professional design services to provide programming, schematic design, and probable construction cost estimating for the proposed renovation of the facility.

There were a number of other issues addressed in this $14M project, including:

- Combining eight departments that are currently on different sites into one building using the shared amenities
- Replacement of mechanical and electrical systems
- Roof and window evaluations and replacement
- Improvement to the building's site including expansion of parking areas and patient drop-offs
- Development of two enclosed exterior courtyard areas
- Development of new building entries at the public entrance and ambulance entrance
- Incorporation of sustainable practices into the design

DSD met with the Medical Care Facility's future users, the directors of the OCCMHA, and Oakland County's staff to develop the new program and related floor plan for the facility. The result is a $14M renovation that will provide mental health care in a facility that has all the necessary amenities together, including a Crisis Residence for patients to stay for up to two weeks. DSD focused on patient comfort and staff efficiency for all design aspects. Patient flow was created with ease and privacy in mind. Mechanical spaces are located away from patient areas. A penthouse will be constructed to house most of the mechanical equipment.

Sustainable design was also a goal for the project. This includes new windows, wall insulation, energy efficient mechanical and electrical systems, and sustainable site design. OCCMHA began construction of the new Medical Care Facility in December of 2012.

Children's Village/MCF Kitchen Renovation
Oakland County commissioned DSD to renovate the existing MCF Building for use by Oakland County Mental Health Authority. As part of this renovation, an existing 2,875-square-foot kitchen located within the facility was renovated for use by the Oakland County Children's Village program, which was located in another building on the campus. In order to proceed with this renovation, the county required that a schematic design and cost estimate package be developed for the proposed renovation of the existing kitchen, which included the relocation of food service equipment from then current Children's Village Kitchen facility.

DSD provided architectural and engineering services for the schematic design phase and developed the probable construction cost estimate for this project.

A/E Alliance Program — Research & Engineering Center

Ford Motor Company
Dearborn, Michigan

COMPLETION DATE
1999 - Present

RESPONSIBILITY
Full Service Design

REFERENCES
Mr. Bob McCoy
Ford Land Project Manager
313.322.7858

On June 9, 1999, DiClemente Siegel Design Inc. was officially awarded 38 of 48 Ford Motor Company Research and Engineering Center (R & E Center) buildings in the A/E Alliance program. This includes most of the facilities at the R & E Center as well as the Denver High Altitude Emissions Test Lab. With this program DiClemente Siegel Design is the sole provider of any architectural, mechanical and/or electrical services for these buildings as well as the document archivist.

Building Distribution

- Power House & Site Infrastructure
- Powertrain Operations Engine Engineering (POEE)
- Experimental Engines Building
- Wind Tunnel Building
- Certification Test Laboratory (CTL)
- Technology Review Center
- Automotive Safety Center (ASC)
- Ford Motor Company Conference & Events Center
- Crash Barrier Building
- Product Review Center
- Climatic Wind Tunnel 3
- Environmental Wind Tunnels 4 & 5
- Explorer Electrical Substation
- Product Development Center (PDC)
- Main Electrical Switching Station
- Dynamometer Laboratory
- Village Road Meter House
- Powertrain & Fuel Subsystems Laboratories (PFSL)
- Advanced Engineering Center
- Vehicle Center 2
- Advanced Vehicle Technology - Buildings 3, 4, & 5
- Allen Park Test Laboratory (APTL)
- Truck Engine Engineering Building
- Advanced Powertrain Engineering Operations
- Engine Manufacturing Development Operations
- Ford Fitness Center
- Denver High Altitude Emissions Laboratory

Warren Technical Center and Milford Proving Ground Projects

General Motors Corporation
Warren, Michigan

COMPLETION DATE
1990 - Present

RESPONSIBILITY
Full Service Design

REFERENCES
Mr. Mike Quinlan
586.524.4125

DSD has provided architectural and engineering design services for General Motors for more than 20 years under a blanket contract for professional services up to $50,000 per project. Over the last 10 years we have completed numerous projects at the Tech Center in Warren, Michigan and at the Milford Proving Ground in Milford, Michigan under this contract. A sampling of projects for each location includes:

Tech Center

- Design Center Dust and Vacuum System and Study
- VEC Cooling Tower Study
- Engineering Building Dust Collection Piping
- Dyno Lab CO Intrusion
- VABA-Sound Abatement Booth
- HVAC Installation Design N Lobby
- 28 Ton Chiller Test Cell 8
- Tunnel Evaluation Engineering Building
- Leak Evaluation Engineering Building Basement
- Site Backflow Preventers
- SLS System Installation
- Install Environmental Chambers
- Global Visualization Cadwall HVAC Revisions
- Compressed Air Upgrade Study

Milford Proving Ground

- B7 Vehicle Exhaust
- B72 Chiller Numbers 2, 3 and 4
- B3 VT30 Canister Purge Ventilation
- B40 Steam Line Noise Abatement
- B42A Boiler Replacement
- B31 Liquid Nitrogen System
- 4WD Dynamometer Test Site 33
- B9 Replace P.H. Boiler Controls
- B31 Electric Vehicle Charging Station
- 10% Test Track Access Controls
- B83 Door Control Upgrades

Professional Service Blanket

University of Michigan Hospitals
Ann Arbor, Michigan

COMPLETION DATE
1995 - Present

PROJECT COST
Over $15 Million

RESPONSIBILITY
Architectural, Mechanical & Electrical Design Services

REFERENCE
Mr. Robert C. Harris, Jr., PE
Director, F.P.&D.
734.763.4414

IMAGE
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The University of Michigan is home to one of the largest health care complexes in the world. Today, the University of Michigan Health System continues to be on the cutting edge of research and patient care.

In 2009, "U.S. News & World Report" magazine ranked the University of Michigan Hospitals among the best of the best – 14th out of only 21 hospitals throughout the nation, having elite scores in 8 medical specialization categories.

DiClemente Siegel Design Inc. (DSD) was awarded a professional service blanket contract at the University of Michigan Hospital in 1995. Since award of that contract DSD has provided professional investigative study, design and construction phase services for numerous projects including:

- Livonia Surgery Center Fire Suppression
- Blood Bank Laboratory Renovation
- Trauma Burn Center Office Renovation
- Mott
  Machine Room Upgrade; Pediatric Cardiology Reading Room Video Support
- Taubman Health Center
  Power Evaluation; Printer Room Upgrade; Machine Room Upgrade; Computer Room Expansion; Fire/Security Door Installations; Medical Vacuum System Replacement; Upgrade Bathroom Lighting
- Main Entrance Canopy Renovations
- Mail Room to Office Renovations
- Pediatric Surgery Office Renovation
- Rolling Fire Door Installation Report
- Med Inn - Guest Elevators Replacement
- Radio System Upgrade
- Gift Shop – Loss Prevention Technology System Renovations
- Computer Room Fire - Suppression
- Link Stress Lab US to Echo Lab
- Eisenhower Facility - Park West Clean Room HVAC Renovation
- Pharmacy Refrigeration Remote Alarm

Recreation Centers Continuous Improvements

City of Detroit
Detroit, Michigan

PROJECT COST
$2.2 M

RESPONSIBILITY
Architectural & Engineering Design Services

REFERENCES
Ms. LaJuan Jackson
DRD Construction Project Coordinator
313.224.1100

Mr. Scott Brinkmann
DRD Contract Specialist
313.224.1109

The Detroit Recreation Department operates 30 athletic facilities located in neighborhoods throughout the metropolis. The recreation center's vary in age, with the oldest having been built in the early 1900's. As part of a city-wide renewal, the Recreation Department was expanding its recreation programs and refurbishing many of the existing community centers.

DiClemente Siegel Design Inc.(DSD) embarked on a program to assist with the renovation planning and design process. Projects included mechanical and electrical upgrades, interior and exterior lighting renovations, swimming pool modifications, architectural programming and small additions. To provide overall efficiency within the recreation department's maintenance operations, DSD worked on the following:

- Standardization of mechanical equipment and controls for citywide recreation facilities
- Installation design of a citywide Building Automation System (BAS)
- Incorporating videotaped instructions as part of Operation and Maintenance instruction provided by the manufacturer or contractor
- Developing maintenance personnel training for mechanical controls, equipment and use and HVAC concepts

The following is a listing of Recreation Centers where DSD completed these services:

- Kronk Recreation Center
- Johnson Recreation Center
- Brewster/Wheeler Recreation Center
- Heilman Recreation Center
- Patton Park Recreation Center
- Clemente Recreation Center
- Coleman Young Community Center
- Belle Isle Casino
- Stone Pool Shelter
- Lipke Recreation Center
- Farwell Recreation Center
- Tindale Recreation Center
- RogellGolf Course

In addition to these smaller renovation and upgrade projects totaling $2.2M, DSD completed large-scale renovations for the City of Detroit as well. The Crowell Recreation Center upgrades included $2M in renovations. The Patton Recreation Center upgrades included $8M in renovations. The Northwest Activities Center upgrades included $15M in renovations.

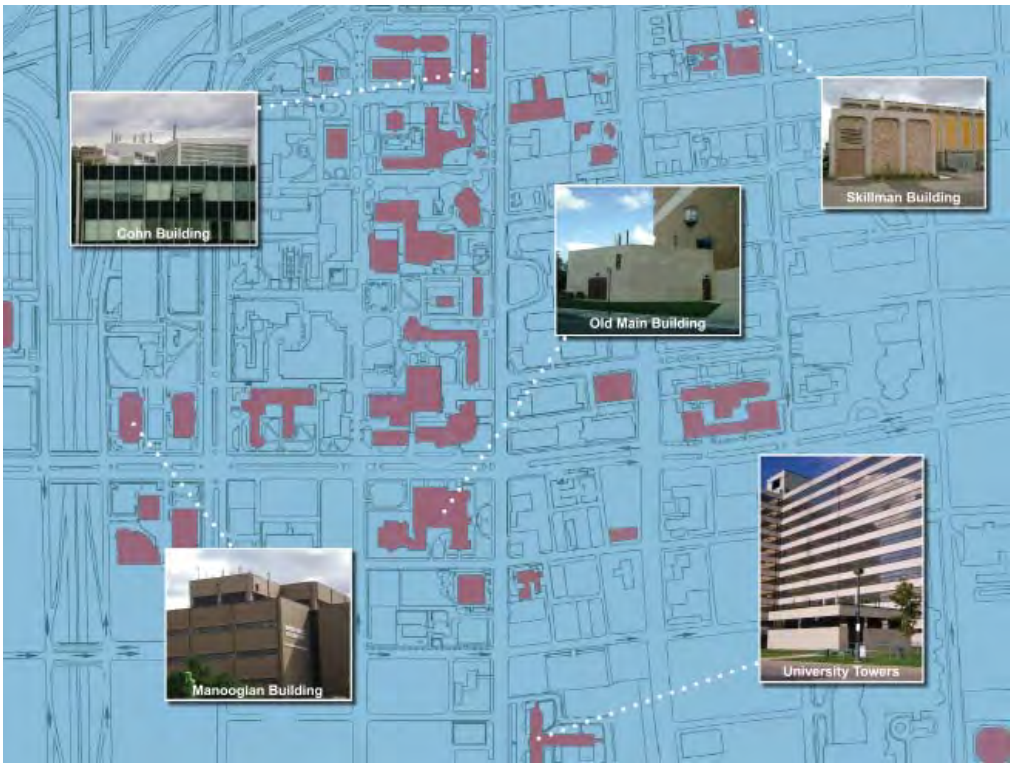
Blanket Contract & Campus Boiler Plant Implementation

Wayne State University
Detroit, Michigan

COMPLETION DATE
On-going blanket contract since 2000

RESPONSIBILITY
Architectural & Engineering Design Services

REFERENCE
Mr. James Sears
Associate VP, Facilities Planning & Management
313.577.7658



DSD was awarded a Preferred Vendor Design Professional IDIQ contract at Wayne State University in 2000. Projects included under this contract are renovations, capital renewal and deferred maintenance. Since award of that contract we have provided professional investigative studies, planning, HVAC renovations, commissioning, chiller replacements and boiler modifications.

In 2005, the Wayne State University (WSU) Board of Governors approved a plan to issue $46.2 million in bonds to pay for the design, permitting, and construction of multiple boiler plants to self-generate steam for the Detroit campus. The university commissioned DSD to provide architectural, mechanical, electrical, civil, environmental, and structural engineering design services for this project.

To implement the project, DSD designed a mix of individual and cluster steam plants to serve 51 campus buildings. The cluster steam plants serve three to five buildings each and consist of a boiler plant in similar configuration as the individual boiler plants.

For the 6 cluster plants, site distribution included a combination of direct burial, shallow trenches, and tunnels at building entrances. Service vaults were strategically placed where required. A grand total of 30 individual and cluster steam plants with a total of 70 boilers were included in the project.

Each new boiler plant required an architectural addition, renovation, or new building that was woven into the campus fabric. DSD was able to save WSU approximately $1 million by pre-purchasing the equipment required for the project.

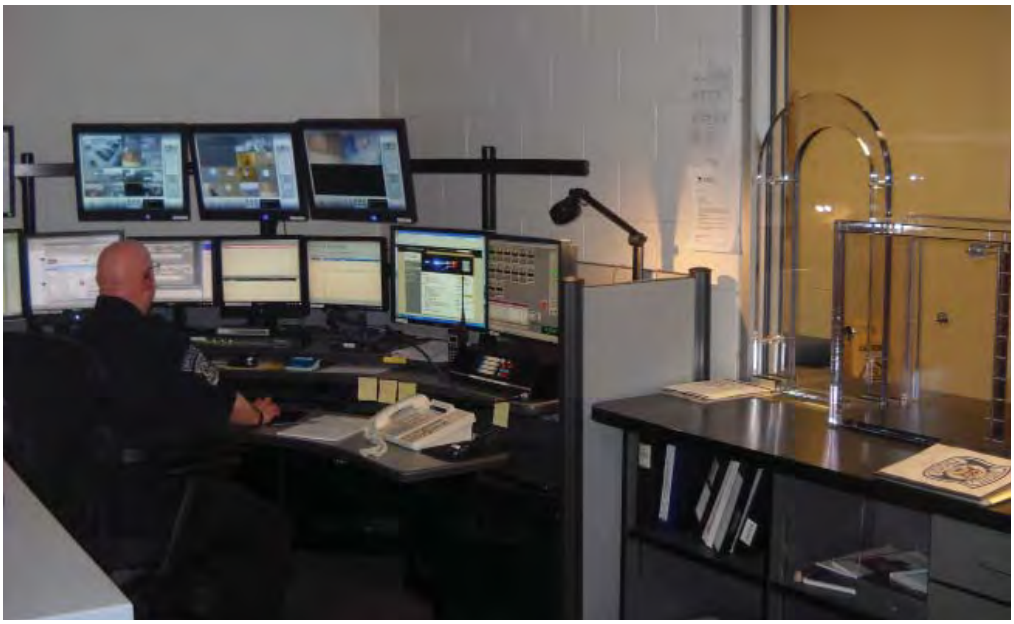
Blanket Contract

Oakland University
Rochester, Michigan

COMPLETION DATE
On-going blanket contract since 2007

RESPONSIBILITY
Architectural & Engineering Design Services

REFERENCE
Mr. Terry Stollsteimer
Associate Vice President for Facilities Management
248.370.2160



DSD has held a blanket contract with Oakland University since 2007, and completed projects for the University for many years before award of that contract.

In 1999, Oakland University commissioned DSD to study the main campus 13.2-kV underground primary electrical distribution system and incoming service from Detroit Edison, and recommend a program for complete replacement of the primary distribution system. DSD then implemented the findings of the study.

Since 2007, DSD has completed the following projects for Oakland University:

- Police Department Renovation
- Wilson Hall Heating Hot Water Pump & Heat Exchanger Replacement
- North Foundation Hall Heating Hot Water Pump & Heat Exchanger Replacement
- Dodge Hall Supply Fan Heating and Cooling Coil Replacement
- Engine Dyno Installation
- Spencer Substation
- Domestic Water Heater
- Vandenberg Hall Hot Water System
- Vandenberg Hall Gas Piping
- Lighting Phase I
- Site Lighting
- CHP Master Plan
- Retention Pond
- Campus Infrastructure
- North Foundation Hall Renovations
- Student Accounts and Financial Aid Office Renovation

EECBG Energy Saving Upgrades

Charter Township of Waterford
Waterford, Michigan

COMPLETION DATE
2010

PROJECT COST
$307,000

RESPONSIBILITY
Electrical Engineering Services

REFERENCE
Mr. Bill Fritz, PE
Director of Public Works
248.618.7464

The Charter Township of Waterford (CTW) commissioned DSD to implement energy saving methods in accordance with their Energy Efficiency & Conservation Strategy. Funding was available through the EECBG Program specifically for LED lighting improvements at the CTW Civic Center Campus and for wind energy conversion systems. DSD performed a previous study to evaluate portions of the CTW Civic Center lighting systems including the Library and Town Hall parking lots and a portion of the campus roadway. The LED lighting improvements upgraded previously existing HID parking lot lighting, building mounted lighting and roadway lighting with LED fixtures at the following areas:

- Fire Station No. 1
- Parks & Recreation Building
- 51st District Court
- Police Station
- Township Hall
- Department of Public Works
- Library
- Campus Roadways

The goal was for one to one replacement of HID fixtures with LED. However, some installations required additional luminaries including new LED fixtures, poles and concrete bases in order to achieve recommended footcandle levels in accordance with the Illuminating Engineering Society (IES). The estimated savings based on reduced energy usage and maintenance was $17,000.

The wind energy conversion upgrades, including two 1.2KW vertical axis wind turbines, were installed with one unit near the Town Hall building and the other unit off site at the Hatchery Water Treatment Facility.

EECBG Implementation

West Bloomfield Township
West Bloomfield, Michigan

COMPLETION DATE
2010

PROJECT COST
$304,425

GROSS AREA
7 Facilities

RESPONSIBILITY
Architectural & Engineering Services

REFERENCE
Mr. Terry Broemer, PE
Johnson & Anderson
248.681.7800

Mr. Marshall Labadie
Charter Township of West Bloomfield
Development Services Director
248.451.4818

West Bloomfield Township (WBT) applied for and was awarded a grant under the EECBG portion of the American Recovery and Reinvestment Act (ARRA). WBT allocated funding from this grant for various energy efficiency and weatherization measures at 7 township owned facilities.

West Bloomfield commissioned DSD to assist with the design and bidding of projects that included:

- HVAC Upgrades
- Radiant heat
- High efficiency boiler system installations
- High efficiency furnace replacements

A description of the specific projects for each of the facilities is as follows:

Town Hall

- Building Evaluation and recommendation of energy reduction measures along with associated probable construction cost
- Replacement of a Bryan Flextube boiler
- Replacement of 4 A/C units
- Replacement of gas fired unit heater with radiant tube heaters
- Replacement of pneumatic controls with DDC controls
- Replacement of a Liebert unit in the Computer Room/Data Center with 2 units. The replacement was designed so that the Computer Room/Data Center remained in service throughout implementation.

Police Station

- Replacement of gas fired unit heaters with radiant tube heaters in vehicle maintenance garage
- Gun Range Evaluation including:
  - Replacement of Hastings roof top unit serving the Gun Range
  - Revisions to the air distribution in the Gun Range

Water & Sewer Building

- Replacement of 3 York down flow furnaces with high efficiency furnaces
- Installation of radiant tube heaters
- Revisions and additions to address Make Up Air deficiencies/requirements

Fire Stations #1, #2, #3, & #4

- Replacement of unit heaters with radiant tube heaters
- Replacement of either furnaces or boilers with high efficiency equipment
- Adjustments to provide additional supply air

City Hall Renovation

City of Trenton
Trenton, Michigan

COMPLETION DATE
Spring 2009

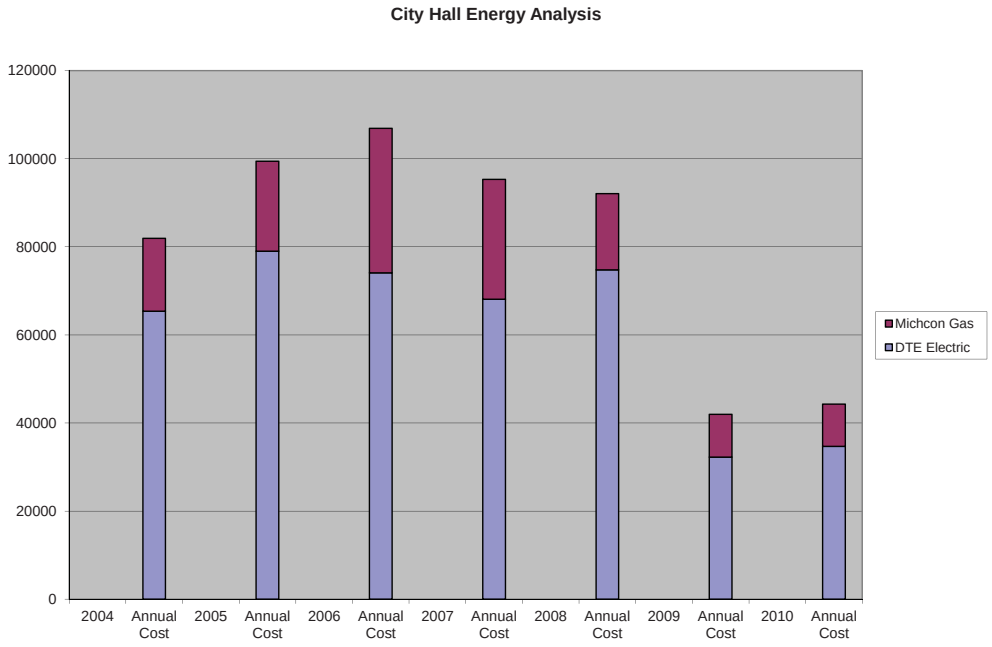
CONSTRUCTION ESTIMATE
$ 778,000

NET AREA
25,000 SF

RESPONSIBILITY
MEP Design Services

REFERENCES
Mr. Robert Howey, AIA
R.J. Howey Architects - Founder/ Owner
734.675.5000

Mr. William Hogan, PE
Trenton City Engineer
734.675.8251



DSD provided engineering services for the Trenton City Hall Renovation. The building is a two-story, partial basement building of approximately 25,000 square feet built in the early 1970's and houses the Municipal Offices for the City of Trenton.

Prior to the renovation project, DSD performed a Mechanical System Condition Analysis in the year 2000 which led to a condition analysis performed for the entire building in 2007.

The report findings indicated that the facility was still in need of an upgrade to the mechanical systems including replacement of HVAC systems including boilers, controls, piping systems and a new fire protection system. Electrical system upgrades recommended in the report included lighting system replacements, fire alarm upgrades, communication system upgrades and miscellaneous receptacle outlets to be added. MEP upgrades were required throughout the building with the exception of the main lobby area.

An energy analysis performed on the renovated City Hall in 2011 by City Officials revealed that the savings exceeded the City's expectation of a 30% reduction in costs. The pre-renovation average annual costs of $95,136 was reduced to an average of $43,132 per year. The new system came online in April 2009 and has resulted in an annual savings of $52,004 or 54.7%. These savings were realized during the 7-year gross rate increase of 14.5% for electricity and 44.4% for natural gas.

Hall of Justice Mechanical Systems Upgrade

City of Troy
Troy, Michigan

COMPLETION DATE
Spring 2009

CONSTRUCTION COST
$1.5 M

NET AREA
72,000 SF

RESPONSIBILITY
Mechanical & Electrical Engineering and Architectural Design Services

REFERENCE
Mr. Steven A Pallotta
Director of Building Operations
248.524.3368

DSD provided design services for the Major Mechanical Systems Upgrade for the City of Troy Hall of Justice Building. The City of Troy devoted 2007/2008 capital project monies for planning, design, and construction of this project.

The Troy Hall of Justice Building was built as an addition to the main City Hall in mid-1977 and occupied in 1978. It is now considered the North/South wing and is occupied by the Police and City Attorney offices. The East/West wing is occupied by the City Clerk, Risk Management, Fire, Building Operations and Purchasing.

Renovations to the facility has been ongoing since 2002. The installation of new variable air volume boxes reduced the extreme amount of calls due to improper comfort levels, however there was more to be done. The objectives of the work that DSD provided included the following:

- Refurbishment of the existing Police Gun Range air handling unit, including identification of problems, correction of inefficiencies, replacement of existing Trane custom air handling units along with two ceiling mounted Trane return fans, replacement of the outdoor Trane 80 ton condensers with air cooled chiller modules with 30% Propylene Glycol, & replacement of heating hot water boiler, all main pumps, circulation pumps, and associated hydronic specialties.
- All systems were upgraded to chilled water with the goal of reducing operating costs through improved efficiency. Included in the project was the installation of new Airstack modular chillers, system pumps, and hydronic specialties and the redesign of the system for chiller and pump redundancy.
- The remaining old Troy Hall of Justice Building temperature controls system was converted from pneumatic to DDC, and all systems mentioned about were integrated into the City of Troy existing building management and control systems (Andover Controls).
- Reduced noise and vibration transmission in all mechanical systems.
- Establishment of temporary HVAC requirements, during construction that maximized comfort and minimized downtime to all internal spaces.
- Identification of heating equipment/systems that should be backed up by standby generator to provide building freeze protection in the event of a prolonged, winter power outage.
- Replacement of damaged pipe, duct and equipment insulation within the mechanical systems.

Boiler Replacement

Monroe County Jail
Monroe, Michigan

COMPLETION DATE
2010

PROJECT COST
$615,000

RESPONSIBILITY
Mechanical and Electrical Engineering Services

REFERENCE
Mr. Michael G. Bosanac
County of Monroe
734.240.7267

As part of the American Recovery and Reinvestment Act (ARRA), the County of Monroe received an allocation under the Energy Efficiency Community Block Grant (EECBG) Program of $615,000.00. This allocation along with supplemental funding from the County, was used to fund several energy upgrades in the county as well as funding some additional energy audits.

One of the first proposed projects to be funded under this program was the replacement of 1 of the 2 existing Bryan Flextube Hot Water Heating Boilers in the Sheriff's Building/Jail with 2 high efficiency condensing type boilers. These new boilers are vented independently horizontally across the mechanical room and exit on the side wall of the building. The length of the existing breeching exceeds the length of the existing flue piping for high efficiency condensing boilers.

The Bryan Hot Water Boiler that was removed previously provided domestic hot water to the building by way of a tube heat exchanger installed internal to the boiler. The Bryan Hot Water Boiler that remains does not have this feature, so before the first boiler was removed, a new plate and frame heat exchanger was installed and piped to the common header where the remaining boiler is connected, so that the building had domestic hot water during installation of the high efficiency condensing hot water boilers that replaced the removed boiler.

Part I – Technical

II. Personnel

DiClemente Siegel Design Inc.
Engineering and Architecture

II. PERSONNEL

Each discipline leader and key members of the project team were selected on the basis of their past experience with ISID projects. This team most recently collaborated on the Caro Center Heating Decentralization in Caro, Michigan for the State of Michigan, along with many others for Southfield, GM, and Ford blanket contracts.

Mr. Lou Trama, PE, President and CEO of DSD, will serve as the Principal-in-Charge and oversee all aspects of the contract. The Project Manager for the proposed ISID contract will be Mr. Andy Wieland, LEED AP BD+C. Andy is known for his ability to successfully manage projects with budget and schedule challenges, along with skillfully managing both internal and external team members.

Our consultants for the SOM ISID contract will be Land Resource Planning & Design for landscape architecture, Desai Nasr Consulting Engineers for structural engineering, Johnson & Anderson for civil engineering and surveying, and NTH for roofing and environmental engineering. All of these companies have extensive prior experience in collaborating with DSD on numerous projects similar to ISID projects proposed by DTMB.

Team Organization Chart

DTMB Technology, Management & Budget

Management
DiClemente Siegel Design Inc.
Louis A. Trama, PE, LEED AP
Principal-in-Charge

Project Management
DiClemente Siegel Design Inc.
Andrew T. Wieland, LEED AP
Project Manager

Architecture
DiClemente Siegel Design Inc.
Lee J. Mamola, AIA, NCARB
Andrea L. Zammitt, LEED AP

Mechanical Engineering
DiClemente Siegel Design Inc.
Nathaniel C. Stalker, PE, LEED AP
Simo D. Milosevic, PE

Electrical Engineering
DiClemente Siegel Design Inc.
Samuel Molin, Jr., PE, LEED AP
Thomas B. Reschke, PE

Information Technology
DiClemente Siegel Design Inc.
Nick DiGesu, RCDD, ITPM

Lansdcape Architecture
Land Resource Planning & Design, LLC
Greg Baughman, LEED AP, ASLA

Structural Engineering
Desai Nasr Consulting Engineers
Athanacios Nasr, PhD, PE
James Moravek, PE
Nick Belmonte

Civil Engineering & Surveying
Johnson & Anderson
Gregory Gucwa, PE
Nancy Kolinski, PE
Timothy Weir, PS

Roofing & Environmental Engineering
NTH
John Stadnicar, PE
Richard Bresso, PE, RRC
Michael McGillis, PE
Tabetha Martel, EIT
Thomas Mitchell
Laura Willem

CAD & Clerical Support as Required

Louis A. Trama, PE, LEED AP

President and CEO

PROJECT ROLE
Principal-in-Charge

REGISTRATIONS
Professional Engineer: MI (1976)

EDUCATION
Masters of Engineering, University of Detroit, Detroit, MI, 1973

Bachelor of Mechanical Engineering, Magna Cum Laude, University of Detroit, Detroit, MI, 1973

EXPERIENCE
DiClemente Siegel Design Inc. President, Executive Vice President

Giffels Hoyem Basso, Inc. President and Director of Engineering

ASSOCIATIONS
American Society of Heating, Refrigerating, & Air Conditioning Engineers (ASHRAE)

American Society of Mechanical Engineers

Michigan Society of Professional Engineers

National Society of Professional Engineers

Tau Beta Pi - National Engineering Society

National Council of Examiners for Engineering and Surveying

U.S. Green Building Council

Engineering Society of Detroit

Lou Trama has been with DSD since 1990 and is responsible for over-all administration of the firm's operations and coordination of the disciplines and resources within the firm. He is responsible for strategic planning, resource allocation, and the firm's quality control program. Lou commonly combines administrative responsibilities with project involvement. Known for his solid mechanical engineering skills and wealth of automotive testing facility project and managerial experience, Lou provides exceptional leadership as Principal-in-Charge with a track record for bringing projects to completion on time and within budget.

Project Experience

- Government Complex Underground Parking, State of Michigan, Lansing, MI
- Library Archives and Museum, State of Michigan, Lansing, MI
- Lewis Cass Building, Computer Rm. Upgrade, State of Michigan, Lansing, MI
- Treasury Building Data Center, State of Michigan, Lansing, MI
- Huron Valley Men's Facility, Michigan Department of Corrections, Ypsilanti, MI
- Utility Study, Michigan Department of Corrections, Ypsilanti, MI
- Condensate Tank and Deaerator Replacement, Michigan Department of Corrections, Ypsilanti, MI
- Cassidy Lake, Michigan Department of Corrections, Ypsilanti, MI
- SAI Boiler Replacement, Michigan Department of Corrections, Ypsilanti, MI
- Fort Custer Maintenance Facility, Michigan Army National Guard, Augusta, MI
- Building M&E Renovations, Selfridge ANG-Base, Mt. Clemens, MI
- Dearborn Heights Post Office, United States Postal Service, Dearborn, MI
- Birmingham Post Office, United States Postal Service, Birmingham, MI
- Detroit Post Office, Comprehensive Energy Analysis, United States Postal Service, Detroit, MI
- Detroit Recreation Department, Northwest Activity Center Office Relocation, City of Detroit, MI
- 4th Precinct Public Service Mall, City of Detroit, MI
- Fire Stations #1, #2, & #4 HVAC Renovations, City of Dearborn, MI
- McFadden Ross Home HVAC Renovations, City of Dearborn, MI
- Municipal Architectural/Engineering Services Contract, City of Southfield, MI
- City Hall Renovations, City of Trenton, Trenton, MI
- Hall of Justice Mechanical System Upgrade, City of Troy, MI
- Site Utility As-Builts, Ford Motor Company, Ford Rouge Center, Dearborn, MI
- Phases 1-4 Site Primary Electrical System Upgrade, Ford Motor Company, Ford Rouge Center, Dearborn, MI
- Phases 3-4 Trestles, Substations, Ford Motor Company, Ford Rouge Center, Dearborn, MI
- Utility Master Plan & Updates, Ford Motor Company, Ford Rouge Center, Dearborn, MI
- Site Utility Infrastructure Master Plan, Ford Motor Company, Research and Engineering Center, Dearborn, MI
- Buildings 1, 3, & 5 (630,000 SF) phased HVAC & Electrical Renovations, Ford Motor Company, Research and Engineering Center, Dearborn, MI

Andrew T. Wieland, LEED AP BD+C

Senior Associate

PROJECT ROLE
Project Manager

EDUCATION
Bachelor of Science
Facility Management, 1999
Eastern Michigan University

EXPERIENCE
DiClemente Siegel Design Inc.
Project Manager
2005 – Present

Spectrum Strategies/
Harley Ellis
Project Manager for Ford Land Engineering and Construction Team
2003 – 2005

Spectrum Strategies/
Harley Ellis
Facility Planner and Project Manager at Ford Land
2000 – 2003

Spectrum Strategies/
Harley Ellis
Ford Land Site Manager at Product Development Center
1999 – 2000

AFFILIATIONS
U.S. Green Building Council

Mr. Wieland has been with DSD for eight years as a Project Manager managing projects in a variety of market segments including government, higher education, K-12, automotive, healthcare, recreation and transportation. He is known for his ability to successfully manage complex projects with budget and schedule challenges. Andy implements the latest techniques in project delivery including the Six Sigma problem-solving methodology. His ability to skillfully manage both internal and external team member is an important aspect to his successful project management approach.

Project Experience

- Caro Center Heating Decentralization, State of Michigan, Caro, MI
- Tranter Street Facility Expansion – Task D, Capitol Area Transit Authority, Lansing, MI
- Blake Transit Center, Ann Arbor Transportation Authority, Ann Arbor, MI
- Sheriff Offices and Jail Hot Water Heater Installation, Monroe County, Monroe, MI
- Recreation Center Phase II Expansion, Macomb Township, Macomb, MI
- Veteran's Memorial, Managed construction including coordination between multiple community and governmental entities, City of Allen Park, Allen Park, MI
- Civic Center EECBG HVAC Upgrades, EECBG Funded Project, City of Novi, Novi, MI
- City Hall HVAC Renovation, City of Livonia, Livonia, MI
- EECBG Implementation, West Bloomfield Township, MI
- Town Hall HVAC and DDC Controls Study and Upgrade, EECBG Funded Project, West Bloomfield Township, MI
- Police Station HVAC and DDC Controls Study and Upgrade, EECBG Funded Project, West Bloomfield Township, MI
- Police Headquarters Renovations, Oakland University, Rochester, MI
- Wilson Hall Heat Exchangers Replacement, Oakland University, Rochester, MI
- Wilson Hall Heat Hot Water Pump Replacements, Oakland University, Rochester, MI
- North Foundation Hall Heat Exchanger Replacement, Oakland University, Rochester, MI
- Hillberry Theater Back of House Upgrades, Wayne State University, Detroit, MI
- Bonstelle Theatre Back of House Upgrades, Wayne State University, Detroit, MI
- 5425 Woodward Avenue Electrical Upgrades, Wayne State University, Detroit, MI
- SRV/PRV Master Plan Evaluation, Wayne State University, Detroit, MI
- Campus Boiler Plant Implementation, Wayne State University, Detroit, MI
- Boiler Plant Commissioning, Wayne State University, Detroit, MI
- Manoogian Hall Phased Architectural, Mechanical and Electrical Renovations, Wayne State University, Detroit, MI
- Freer House HVAC System Upgrade, Wayne State University, Detroit, MI
- Freer House Cooling Tower Installation, Wayne State University, Detroit, MI
- Freer House Fluid Cooler Replacement, Wayne State University, Detroit, MI
- Dynamometer Building Diesel Upgrade, Ford Motor Company, Dearborn, MI
- Fairlane Plaza Global Comp., Ford Motor Company, Dearborn, MI
- 2 Building Renovations, Ford Land, Dearborn, MI

Lee J. Mamola, AIA

Senior Associate, Director of Architecture

PROJECT ROLE
Project Architect

REGISTRATIONS
Registered Architect: MI (1980)

EDUCATION
Master of Architecture, University of Detroit, Detroit, MI, 1976

Bachelor of Science in Architecture, University of Detroit, Detroit, MI, 1974

EXPERIENCE
Mamola Associates Architects, Founder

ASSOCIATIONS
American Institute of Architects

Novi Planning Board (Past)

Novi Construction Board of Appeals

Novi Historic District Study Committee (Past Chair)

Michigan Architectural Foundation (Past Treasurer)

Novi Chamber of Commerce (Past President)

Novi Rotary Club (Past President)

University of Detroit Mercy Alumni Council for Architecture (Past Chair)

Adjunct Professor in Design and Construction Technology, University of Detroit Mercy (Past)

Mr. Mamola has more than 35 years of architectural experience, ranging from key roles on some of the largest design and construction projects in North America to a diverse range of small scale interior renovation projects and successfully obtaining difficult municipal approvals involving zoning and code approvals in southeast Michigan. Project types include hi-tech research, industrial office, engineering research, and institutional projects. Lee's code approval knowledge and knowledge with code officials in multiple municipalities are also invaluable to the project team.

Project Experience

- City of Novi Library Expansion & Interiors, Novi, MI
- Oak Meadows Residential & Community Center Addition & Renovations, Michigan State Housing & Development Authority (MSHDA), Albion, MI
- Plan Review for Conformance to Standards & Guidelines, Michigan State Housing & Development Authority (MSHDA), Various Cities, SE MI
- Grayhaven Balconies Restoration, Michigan State Housing & Development Authority (MSHDA), Detroit, MI
- Ypsilanti Freight House Renovation, City of Ypsilanti, MI
- Hines Park Lincoln Mercury, Plymouth Township, MI
- Hines Park Ford, Lyon Township, MI
- Village Ford Service Center, Dearborn, MI
- Village Ford Showroom, Dearborn, MI
- Quality Care Service Center, Canton, MI
- Mercedes of Novi, Novi, MI
- Belle Tire Store, Novi, MI
- Belle Tire Store, Waterford, MI
- Tributary Industrial Office Center, Novi, MI
- Clements Industrial Center, Novi, MI
- Bluewater Plastics, Marysville, MI
- Rossi Office Building, Novi, MI
- Milford Corporate Park, Milford, MI
- Johnson's Printing Services, Novi, MI
- Bishop Creek Office Building, Novi, MI
- Biotech Laboratories, Novi, MI
- RE/MAX Office Building, Novi, MI
- Programmed Products, Novi, MI
- Monte Costella & Co., Novi, MI
- Iron Workers Local 25 Union Hall, Novi, MI
- Iron Workers Local 25 Fringe Benefit Office, Novi, MI
- Vincenti Office Building, Novi, MI
- Cort Furniture, Novi, MI
- Breckenridge, Novi, MI
- Mill Valley Retail Center, Milford, MI
- Baker's Restaurant & Banquet Center, Milford, MI
- Cedar Ridge Shopping Center, Novi, MI
- Diamond Castle, Novi, MI

Andrea Zammitt, LEED AP BD+C

Architectural Designer

PROJECT ROLE
Architectural Designer

EDUCATION
Bachelor of Science
Architecture, 2005
Lawrence Technological University

EXPERIENCE
DiClemente Siegel Design Inc.
Architectural Designer
2004 – Present

AFFILIATIONS
U.S. Green Building Council

Ms. Zammitt is an Architectural Designer with eight years of experience responsible for the project phases of schematic design, design development, and construction documents for a variety of clients. Additional responsibilities include programming analysis, feasibility studies and code analysis as well as technical assistance to project team members. Andrea has completed a number of interior office renovation projects focusing on sustainable materials and solutions that meet the client's budget while enhancing and enlivening their workspace. She is proficient at CAD and 3D BIM, and is LEED certified.

Project Experience

- Caro Center Heating Decentralization, State of Michigan, Caro, MI
- Northwest Activities Center Renovation, Detroit Recreation Department, Detroit, MI
- Northwest Activities Center Roof Replacement, Detroit Recreation Department, Detroit, MI
- Crowell Recreation Center Renovation, Detroit Recreation Department, Detroit, MI
- City Hall HVAC Renovation, City of Livonia, Livonia, MI
- Simmons House Renovations, City of Southfield, Southfield, MI
- Department of Public Services Building Renovation, City of Southfield, Southfield, MI
- Medical Care Facility Renovation, Oakland County Community Mental Health Authority, Pontiac, MI
- Campus Boiler Plant Implementation, Wayne State University, Detroit, MI
- Old Main Flooring Replacement, Wayne State University, Detroit, MI
- Natural Science 2nd Floor Laboratory, Michigan State University, East Lansing, MI
- EARL Laboratory Renovation, Michigan State University, East Lansing, MI
- ERC Addition, Michigan State University, East Lansing, MI
- EAA Equipment Replacement, University of Michigan Health System, Ann Arbor, MI
- ENT Mini CAT Installation, University of Michigan Health System, Ann Arbor, MI
- Blood Bank Laboratory Renovation, University of Michigan Health System, Ann Arbor, MI
- Hematology Diagnostic Rooms Renovation, University of Michigan Health System, Ann Arbor, MI
- Beech Daly Rapid Prototype Plant Building Revisions, Ford Motor Company, Dearborn Heights, MI
- Testing Laboratory Building 4 Climate Control Build Out, Ford Motor Company, Dearborn, MI
- Rouge Center Phases 3 and 4 Site Primary Electrical Upgrades, Ford Motor Company, Dearborn, MI
- Rouge Center Phases 5 and 6 Site Infrastructure Upgrades, Ford Motor Company, Dearborn, MI
- West Park Center, Ford Motor Company, Dearborn, MI
- Road 4 Trestle at Ford Rouge, Ford Motor Company, Dearborn, MI

Nathaniel C. Stalker, PE, LEED AP BD+C

Senior Associate

PROJECT ROLE
Project Mechanical Engineer

REGISTRATIONS
Professional Engineer: MI

EDUCATION
Bachelor of Science, Mechanical Engineering, Michigan Technological University, Houghton, MI, 1998

EXPERIENCE
DiClemente Siegel Design Inc.
Senior Associate, Project Mechanical Engineer

ASSOCIATIONS
American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE)

U.S. Green Building Council

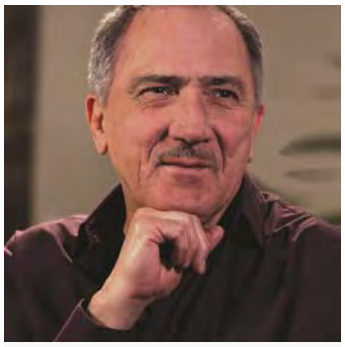
Mr. Stalker has 15 years of mechanical engineering experience. He is our commissioning expert and is responsible for nearly all of the commissioning projects DSD undertakes. His solid mechanical engineering skills and code knowledge is also an asset to the project team. Nate has completed a number of large code compliance studies, and projects with extensive hydronic and energy modeling, including ones for automotive testing sites.

Project Experience

- Huron Valley Men's Facility, Michigan Department of Corrections, Ypsilanti, MI
- Utility Study, Michigan Department of Corrections, Ypsilanti, MI
- Condensate Tank and Deaerator Replacement, Michigan Department of Corrections, Ypsilanti, MI
- Cassidy Lake, Michigan Department of Corrections, Ypsilanti, MI
- SAI Boiler Replacement, Michigan Department of Corrections, Ypsilanti, MI
- Washtenaw County Juvenile Detention Facility, Washtenaw County, Ann Arbor, MI
- Family Independence Agency, Flint, MI
- Boiler Replacement, Genesee Valley Regional Center, Flint, MI
- HVAC Upgrades, City of Waterford, MI
- Fire Station #2, City of Trenton, MI
- HVAC Upgrades, City of Trenton, MI
- Tindale Recreation Center Replace Roof-top Units, Detroit Parks and Recreation, Detroit, MI
- Johnson Recreation Center Swimming Pool Renovations, Detroit Parks and Recreation, Detroit, MI
- Kronk Recreation Center, Mechanical Renovations, Detroit Parks and Recreation, Detroit, MI
- Hannah Community Center Adaptive Reuse, City of East Lansing, MI
- HVAC Renovations, City of East Lansing, MI
- Library HVAC Study, Michigan State University, East Lansing, MI
- Freer House HVAC Upgrade, Wayne State University, Detroit, MI
- Grounds Building Alterations, Wayne State University, Detroit, MI
- Campus Wide Boiler Implementation, Wayne State University, Detroit, MI
- Engine Dynamometer Installation, Oakland University, Rochester, MI
- Wilson Hall Heat Exchanger Replacement, Oakland University, Rochester, MI
- North Foundation Hall HL HT Exchanger Replacement, Oakland University, Rochester, MI
- Dodge Hall SF-2 Coil & Valves, Oakland University, Rochester, MI
- Fire System Separation, Oakland University, Rochester, MI
- Engineering Research Center (ERC) Addition, Michigan State University, East Lansing, MI
- Data Center UPS, Oakland University, Rochester, MI
- Department of Public Safety Retro-Commissioning, Eastern Michigan University, Ypsilanti, MI
- Phase II Steam Meter Installation, Eastern Michigan University, Ypsilanti, MI

Simo D. Milosevic, PE

Senior Associate



PROJECT ROLE
Senior Mechanical Engineer

REGISTRATIONS
Professional Engineer: MI

EDUCATION
University of Belgrade, Faculty of Mechanical Engineering, Yugoslavia

Graduate Courses in Data Processing, Lawrence Technological University

Industrial Ventilation Course, Lansing, MI

EXPERIENCE
DiClemente Siegel Design Inc. Senior Associate, Senior Project Engineer

Giffels Associates Mechanical Engineering Group Leader

General Dynamics Service Co., Egypt, from 1987 to 1989 Mechanical Engineer – Construction Specialist

ASSOCIATIONS
American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE)

Mr. Milosevic has over 30 years of experience in engineering mechanical systems for buildings. While the major focus of his project experience is designing manufacturing facilities, offices and testing labs for automotive clients, his engineering expertise extends to other building types. Simo has worked extensively on automotive campuses and is well versed in designing mechanical systems that fit into the overall infrastructure requirements. Automotive clients appreciate his input when determining goals and strategies.

Project Experience

- Taylor Armory Renovations, State of Michigan Department of Management & Budget, Taylor, MI
- Selfridge ANG – Base, Bldg. 17 Renovation, Mt. Clemens, MI
- Selfridge ANG – Base, Bldg. 9/10 Renovation, Mt. Clemens, MI
- Selfridge ANG – Base, Bldg. 1942 Renovation, Mt. Clemens, MI
- Dearborn Sewage Building Office Renovations and Addition Feasibility Study, City of Dearborn, MI
- Main Sewage Lift Station Ventilation, City of Dearborn, MI
- Several Viaducts Storm Lift Stations Design, City of Dearborn, MI
- Police Station HVAC Upgrades, City of Dearborn, MI
- Dearborn Fire Station #1 HVAC Renovation, City of Dearborn, MI
- Dearborn Historical Museum HVAC Renovation, City of Dearborn, MI
- Police Department Building HVAC Study, City of Dearborn, MI
- Emergency Generator Installation Study, City of Dearborn, MI
- Schaefer Road Storm Lift Stations Upgrade, City of Dearborn, MI
- West Bloomfield Township Police Station HVAC and DDC Controls Study and Upgrade, EECBG Funded Project, West Bloomfield Township, MI
- Steam Generation Program Study & Evaluation, Wayne State University, Detroit, MI
- Boiler Plant Implementation, Wayne State University, Detroit, MI
- Northwest Campus Heating Hot Water System Extension, Oakland University, Rochester, MI
- Research and Engineering Center, Site Utility Infrastructure Master Plan, Ford Motor Company, Dearborn, MI
- Research and Engineering Center, Steam Tunnel (Hatch #1 to EVB) Steam Pipe Support Retrofit, Ford Motor Company, Dearborn, MI
- Research and Engineering Center, New Steam Line for “C” Tunnel, Ford Motor Company, Dearborn, MI
- Research and Engineering Center, Wind Tunnel 2 Building, Fuel Storage/Dispensing Room, Ford Motor Company, Dearborn, MI
- Research and Engineering Center, Dynamometer Laboratory - Steam Condensate Upgrade & Cylinder Test Cell 6E , Ford Motor Company, Dearborn, MI
- Research and Engineering Center, Powertrain & Fuel Systems Laboratory, Cooling Water System Upgrade, Ford Motor Company, Dearborn, MI
- Research and Engineering Center, Electronic Test Facility HVAC, Ford Motor Company, Dearborn, MI

Sam Molin, Jr., PE, LEED AP BD+C

Senior Vice President, Director of Electrical Engineering

PROJECT ROLE
Senior Electrical Engineer

REGISTRATIONS
Professional Engineer: MI (1993)

EDUCATION
Bachelor of Science, Electrical Engineering, Western Michigan University, Kalamazoo, MI, 1985

EXPERIENCE
DiClemente Siegel Design Inc.
Senior Vice President, Director of Electrical Engineering

Edelstein Associates
Electrical Engineer

DS&A Consulting Engineering
Electrical Engineer

ASSOCIATIONS
U.S. Green Building Council

Mr. Molin joined DiClemente Siegel in 1989. Besides analysis, documentation, engineering, specifications, overseeing preparation of construction documents and field observation, Sam has administrative responsibilities including supervision of electrical design, project management, and construction administration.

Mr. Molin has 26 years of experience designing electrical power systems including lighting, instrumentation and controls. He has provided engineering services for many electrical primary and secondary power distribution studies and building electrical system evaluations.

Project Experience

- Police Station HVAC Upgrades, City of Dearborn, MI
- Emergency Operations Center, City of Dearborn, MI
- Dearborn Fire Station #1 HVAC Renovation, City of Dearborn, MI
- Dearborn Sewage Building Office Renovations and Addition Feasibility Study, City of Dearborn, MI
- Emergency Generator Installation Studies, City of Dearborn, MI
- Streetscape Lighting and Electrical Upgrades, City of Trenton, MI
- Kennedy Recreation Center, Teifer Arena Electrical Renovation, City of Trenton, MI
- Fire Station #2 HVAC Upgrades, City of Trenton, MI
- Waterford Township Hall and Courthouse, HVAC Controls Upgrade, Waterford Township, MI
- Town Hall Fire Alarm Upgrade, Waterford Township, MI
- Fourth Precinct Public Service Mall, City of Detroit, MI
- Livingston County 911 Call Center, Livingston County, MI
- I.T. Server HVAC, City of Pontiac, MI
- Detroit City Airport Executive Terminal Renovation Feasibility Study, City of Detroit Airport Authority, MI
- Northwest Activity Center Renovation, Detroit Recreation Department, Detroit, MI
- Pray Harrold Data Center Power Study, Eastern Michigan University, Ypsilanti, MI
- DOIT Center Upgrade, Eastern Michigan University, Ypsilanti, MI
- Student Apartments, Oakland University, Rochester, MI
- Site Infrastructure Analysis, Oakland University, Rochester, MI
- Primary Power Analysis, Oakland University, Rochester, MI
- Site Lighting Replacement, Oakland University, Rochester, MI
- Brody Hall, New Dorm, Michigan State University, E. Lansing, MI
- Brody Complex Programming, Michigan State University, E. Lansing, MI
- Rouge Center, Site Primary Electrical Upgrade Ph. 1-4, Ford Motor Company, Dearborn, MI
- Rouge Center, Utility Master Plan & Updates, Ford Motor Company, Dearborn, MI
- Rouge Center, Primary Power Distribution Study, Ford Motor Company, Dearborn, MI

Thomas B. Reschke, PE

Senior Associate

PROJECT ROLE
Electrical Engineer

REGISTRATION
Professional Engineer: MI (1999)

EDUCATION
University of Michigan, Bachelor of Science, Electrical Engineering, Ann Arbor, MI, 1990

EXPERIENCE
DiClemente Siegel Design Inc.
Senior Associate

Engineering Specialty Group Principal

ASSOCIATIONS
National Society of Professional Engineer

Illuminating Engineering Society of Michigan

Mr. Reschke has over of 22 years of experience in all phases of electrical engineering. He consistently demonstrates his exemplary capabilities in project engineering and design. His impeccable track record has earned him the highest respect amongst his peers in the industry. Mr. Reschke's capabilities include administration, engineering, and design of projects that include power distribution, indoor lighting, outdoor site lighting, stand-by/emergency power, fire alarm systems, and telecommunications.

Project Experience

- Blake Transit Center, Ann Arbor Transit Authority, Ann Arbor, MI
- Tranter Street Facility Expansion - Task D, Capitol Area Transit Authority, Lansing, MI
- Dearborn Intermodal Facility, Dearborn, MI
- Department of Public Works Building HVAC Renovation, City of Farmington Hills, MI
- MCF Redesign, Oakland County Mental Health Association, Oakland County, MI
- 5057 Woodward Avenue Historical Renovation, Wayne State University, Detroit, MI
- Hillberry Theater West Basement Repair, Wayne State University, Detroit, MI
- Hillberry Theater Fire Alarm System, Wayne State University, Detroit, MI
- Scott Hall Exercise Room, Wayne State University, Detroit, MI
- Lande Building Laboratories Noise Evaluation & CDs, Wayne State University, Detroit, MI
- Athletic Complex Utilities, Wayne State University, Detroit, MI
- Art Building and Old Main Exhaust Ventilation Improvements, Wayne State University, Detroit, MI
- Manufacturing Engineering Building Exhaust System, Wayne State University, Detroit, MI
- Engineering Building Room 1338 Dynamometer Installation, Wayne State University, Detroit, MI
- Helen Deroy Health Clinic, Wayne State University, Detroit, MI
- Chemistry Laboratory Domestic Water Contamination Prevention Study, Wayne State University, Detroit, MI
- College of Engineering Fire Alarm Installation, Wayne State University, Detroit, MI
- State Hall Computer Center 3rd Floor Server Room Additional Power, Wayne State University, Detroit, MI
- Education Department HVAC Rooms Upgrade, Wayne State University, Detroit, MI
- Chemistry Building Room 80, Wayne State University, Detroit, MI
- Engineering Building Room 3330 Separation, Wayne State University, Detroit, MI
- Scott Hall Chemical Storage Room, Wayne State University, Detroit, MI
- Laboratory Fume Hood Installation, Wayne State University, Detroit, MI
- Computer Technology Building Toilet Ventilation Upgrade, Wayne State University, Detroit, MI
- Pharmacy Building Room 511, Wayne State University, Detroit, MI
- Bioengineering Building Ballistics Lab, Wayne State University, Detroit, MI

Nick DiGesu, RCDD, ITPM

Senior Associate, Information Technology

PROJECT ROLE
Project Technology

REGISTRATIONS
Registered Communications Distribution Designer, 2003

Information Technology Project Management (TPM), 2009

Certified Novell Administrator, 2001

EDUCATION
Bachelor of Arts, Honors
Urban Planning, University of Windsor
Windsor, Ontario, 1995

EXPERIENCE
DiClemente Siegel Design Inc.
Technology Engineer, IT Manager, Electrical Designer

ASSOCIATIONS
Building Industry Consulting Service International (BICSI)

Telecommunications Project Management Association (TPMA)
Tampa, Florida

AutoDesk User Group International (AUGI)

Detroit Area BIM User Group (DABUG)

Mr. DiGesu has more than 15 years' experience in electrical design, technology design, and network management. His project experience covers a broad range of applications including automotive and corporate markets. Nick's technology design experience encompasses voice, data, network, audio/video, electronic safety and security, and other low-voltage systems. Other areas of technological expertise include infrastructure planning, code analysis, grounding and bonding, horizontal distribution systems, backbone distribution systems, telecommunication rooms, network operation centers, and data centers.

Project Experience

- ICT Data Mark Jefferson Science Bldg. Structured Cabling System Replacement, Eastern Michigan University, Ypsilanti, MI
- ICT Data Time and Material Specification, Eastern Michigan University, Ypsilanti, MI
- Technology Infrastructure Enhancement, Fiber Optic Backbone, Eastern Michigan University, Ypsilanti, MI
- Student Union ICT Technology Systems, Eastern Michigan University, Ypsilanti, MI
- Pray Harrold Data Center, Cabling Infrastructure, Eastern Michigan University, Ypsilanti, MI
- Eugene Applebaum College of Pharmacy and Health Sciences, Wayne State University, Detroit, MI
- Fitness Center, Technology and Security Systems Upgrade, Wayne State University, Detroit, MI
- Law School Addition and Renovation, Wayne State University, Detroit, MI
- Manoogian Hall, Technology Improvement including Smart Classrooms, Wayne State University, Detroit, MI
- Site Infrastructure, Oakland University, Rochester, MI
- Ford Hall Fire Alarm Replacement, Eastern Michigan University, Ypsilanti, MI
- Warner Hall Fire Alarm Replacement, Eastern Michigan University, Ypsilanti, MI
- Co-generator/Emergency Operations Installation, Ferris State University, Big Rapids, MI
- Pharmacy Building Chiller Replacement, Ferris State University, Big Rapids, MI
- Blood Bank Lab Renovations, University of Michigan Health System, Ann Arbor, MI
- Mott Machine Room to Computer Equipment Room, University of Michigan Health System, Ann Arbor, MI
- Bond Renovations – Technology, Mt. Clemens Schools, Mt. Clemens, MI
- High School, Madison Public Schools, Madison Heights, MI
- Monroe Building,Madison Public Schools, Madison Heights, MI
- High School Audits, Madison Public Schools, Madison Heights, MI
- Research and Engineering Center, Site Utility Infrastructure Master Plan, Ford Motor Company, Dearborn, MI
- Rouge Center, Electrical Infrastructure Design, Ford Motor Company, Dearborn, MI
- Rouge Center, Data Communication Systems, Ford Motor Company, Dearborn, MI

LANDRESOURCE
PLANNING & DESIGN, LLC

Gregory M. Baughman

Registered Landscape Architect

Overview

Gregory Baughman's career covers a period in excess of thirty years. During this time he has participated in a diverse range of projects including site planning, park design, regional shopping malls, housing developments, and streetscapes. He has been responsible for the preparation of conceptual and preliminary designs, construction documents, cost estimation, and site project implementation.

Experience

Land Resource Planning & Design: Bloomfield Hills, Michigan

LRPD to broaden the traditional landscape architectural services to include sustainable design projects in the areas of responsible resource design. LEED directed design such as stormwater management; light pollution reduction, heat island effects, and construction activity pollution reduction are all areas where LRPD can help our clients produce responsible and exciting developments.

URS Corporation: Southfield, Michigan

URS is a large, multi-disciplinary corporation but their Southfield office lacked landscape architects. I was hired to develop a landscape architecture division by both assisting the other professional divisions and by utilizing the contacts I had made in my previous office.

Gregory M. Baughman Associates, Bloomfield Hills, Michigan

GMBA was established to focus on exterior landscape site design for a variety of developments. During the years, the range of work has included retail, industrial, municipal, and interior plantscaping projects. Operating my own office was both stimulating and challenging.

Lawrence Technological University, Southfield, Michigan

Adjunct professor in the School of Architecture teaching site design, site grading, and landscape architecture in two different courses. Class size is generally 14-16 students in a studio environment. These are integrated classes consisting of an architect and landscape architect.

Education

BLA / 1979 / Landscape Architecture / Michigan State University

Registration

Registered Professional Landscape Architect / Michigan

Registered Professional Landscape Architect / Indiana

2008 / LEED AP accreditation

Professional Societies / Affiliates

American Society of Landscape Architects

Trout Unlimited, Challenge chapter - President & Conservation Chair

Clinton River Watershed Council – Member

DESAI NASR
CONSULTING ENGINEERS

ATHANACIOS N. NASR, PH.D., P.E.

TITLE

Senior Project Manager, Vice President, Principal

EDUCATION

- Bachelor of Civil Engineering, June 1974
  University of Alexandria, Egypt

- Master of Science in Geotechnical Engineering, March 1980
  University of Alexandria, Egypt

- Ph.D., in Civil Engineering, April 1986
  Wayne State University, Detroit, Michigan

EXPERIENCE

Currently as a Principal Structural Engineer and Vice President with Desai/Nasr Consulting Engineers, Inc., previously as a Senior Structural Engineer with Giffels Associates (Advanced Technology Department). Since 1974, involved in Academia on a part time basis. University of Alexandria, Egypt (Instructor 1975-1980), Wayne State University, Detroit, MI (Instructor 1981-1986)University of Detroit, Detroit, MI (Adjunct Professor 1987-1989), University of Windsor, Windsor, Ontario, Canada (Post Doctor Fellow 1987-1989), Lawrence Tech University, Southfield, Michigan (Adjunct Professor 1992-2000) teaching graduate and undergraduate courses, including theory of structures, steel design, concrete design, foundation design, geotechnical engineering, surveying and engineering drafting.

Work experience includes geotechnical engineering, structural hydraulic construction engineering, special foundation design, noise and vibration control. Project types extend from office buildings, school and hospital buildings, hotels and convention centers, shopping centers, housing and educational facilities, religious facilities, sports and recreation facilities, to industrial complexes such as auto and semi-conductors facilities, as well as major renovations and structural investigations and legal expert witness. Personal responsibilities for the structural engineering projects extend from schematic phases, preparation of construction documents to construction phases and field supervision.

REPRESENTATIVE PROJECTS

Flint, Saginaw and Port Huron Armories – Renovations and Addition
Wayne State University – Fitness Center – Detroit, Michigan
VAMC Renovation - Battle Creek, Michigan
Ferris State University IRC renovation – Big Rapids, Michigan
Michigan State University Food Services Building – East Lansing, Michigan
Kronk Recreation Center - Structural Renovations - Detroit, MI
Troy Community Center – Troy, Michigan

LICENSES EARNED

- Registered Professional Engineer State of Michigan
- Registered Professional Engineer State of Louisiana, Texas, Pennsylvania

PROFESSIONAL AFFILIATIONS

Member - American Society of Civil Engineering
Member - Egyptian Institute of Civil Engineering

HONORS

Wayne State University Engineering Hall of Fame 2005
Best Teaching Assistant. Civil Engineering Department, Wayne State University.1982-1983.
Alexandria University Scholarship during the undergraduate program (1969 to 1974).

DESAI NASR
CONSULTING ENGINEERS

JAMES E. MORAVEK, P.E.

TITLE
Senior Structural Engineer

EDUCATION

- Master of Science in Structural Engineering, April 1974
  University of Michigan, Ann Arbor, Michigan

- Bachelor of Civil Engineering, June 1972
  Michigan State University, East Lansing, Michigan

EXPERIENCE

Currently Sr. Structural Engineer with Desai/Nasr Consulting Engineers. Previously as Structural Department Manager for SSOE, Inc., Troy, Michigan for the Healthcare and Institutional Division. Performed as Structural Group Leader and Project Manager at Doshi and Associates, Inc.

Work experience involves structural engineering for a variety of different project types. Project types include hospitals and healthcare facilities, schools, educational buildings for colleges and universities office buildings, research facilities, industrial facilities, and building renovations. Responsibilities extend from schematic design phase of project through construction administration – in office and field – services.

REPRESENTATIVE PROJECTS

- Condition Assessment – Matthaei Physical Education Center-Wayne State University
- Boiler Implementation - Wayne State University – Detroit, Michigan
- Stair Restoration – Hilberry Theater – Wayne State University – Detroit, Michigan
- Zaragon Lofts – Mixed Use – Ann Arbor, Michigan
- Condition Assessment – Review of seven (7) YMCA of Metro Detroit
- Bryan Community Hospital Expansion – Bryan, Ohio

LICENSES

Registered Professional Engineer – State of Michigan – License # 6201030780

PROFESSIONAL AFFILIATIONS

Board of Directors – Structural Engineers Association of Michigan (SEAMI)

NICK A. BELMONTE
Senior CAD Coordinator

EDUCATION

Construction Engineering design at Macomb Community College;
Lawrence Institute Of Technology.

Additional Non-Matriculating Courses

EXPERIENCE

Currently as a Senior Structural Drafter with Desai/Nasr Consulting Engineers, Inc., (January 1989 to Present). Responsible for preparing Structural Contract Documents for parking decks, office buildings, shopping centers and industrial facilities. Also responsible for coordination of structural drawings with other disciplines, review of shop drawings and supervision of Drafters. Previously as a Structural Drafter Trainee with Smith, Hinchman & Grylls Associates (August 1965 to December 1965), Structural Drafter (January 1968 to December 1972) and Senior Structural Drafter (January1973 to December 1985). Responsible for preparation of structural drawings for large industrial, commercial and health care facilities, and review of structural shop drawings.

As a Building Trades Estimator with Smith, Hinchman & Grylls Associates (January 1986 to December 1988). Responsible for budget estimates of large industrial, commercial and health care facilities.

Contract Document preparation and project coordination include major project such as:

- State of Michigan – C.S.M.S. –Lansing, MI
- State Legislative Office Building - Vertical expansion, renovations - Lansing, MI
- Michigan State Police Forensics Lab - Lansing, MI
- Kronk Recreation Center - Structural renovations - Detroit, MI
- Structural Rehabilitation of Reptile Museum - Detroit Zoo - Royal Oak
- 16 story Grand Tower, Office Building - Lansing, MI
- Kellogg Foundation Headquarters Office Building & Parking Deck – Battle Creek,MI
- 14 story Office Building for Health Care Real Estate Co. – Southfield, MI
- Parking Structure at Detroit Zoo - Royal Oak, MI.
- First of America, Arcadia Creek Project - Renovation, Kalamazoo, MI
- Above Ground Connector Bridge - Western Michigan University - Kalamazoo, Michigan
- Engineering Center Building, University of Michigan - Ann Arbor, Michigan

POSITION: Principal

SPECIALIZATION: Water Treatment and Storage, Wastewater Treatment, Pumping Stations, Site Plan Design, Road Design

QUALIFICATIONS: B.S. Civil Engineering
Michigan State University

REGISTRATION: Professional Engineer: Michigan

EXPERIENCE: 15.7 years with Johnson & Anderson, Inc.
21.2 years with various other firms

PROJECT EXPERIENCE:

- Project engineer for the replacement of the underground fuel storage tanks related to the 2011 and 2012 boiler replacement at the Detroit Metropolitan Airport power house with responsibilities to include coordinating and overseeing a site topographic survey, designing the pavement removal plan, designing site modifications and grading, and preparing a traffic detour plan.
- Project Manager for new 3,000 GPM iron filtration plant in Waterford Township. Project consisting of three new wells, two pressure filters, chemical additions, sanitary sewer pump station, and force main for filter backwash disposal, the treatment plant building, and all necessary controls (including SCADA) and appurtenances was funded with a Drinking Water Revolving Fund Loan.
- Project Manager for Rehabilitation of the Clinton River Pump Station in Waterford Township. The Project included complete rehabilitation of the pump station consisting of a new chopper type dry well submersible pump, wet well mixer, sluice gate, new valves with pneumatic operators, new flow meter, odor control, new electrical equipment and controls, and SCADA equipment.
- Project Manager for Rehabilitation of the Water Street Pump Station in Port Huron Township. The project included complete rehabilitation of the existing triplex submersible pump station converting to a larger duplex submersible pump station with variable speed drives. A new control building with new electrical equipment, variable speed drives and control system was part of the project. A natural gas fed generator with automatic transfer switch was provided.
- Project Manager for Phase I Pilot Treatability Study for water treatment plant in Waterford Township to determine if increased capacity of treated water could be accomplished at an existing treatment plant. Three processes were evaluated and design for plant upgrade and expansion included a new well, pressure filters, chemical additions, building additions, and all necessary controls and appurtenances.
- Project Manager/Engineer for the civil site work associated with the design and construction of the new utility trestle at the Ford Rouge manufacturing facility. Design work included topographic survey, utility relocations and site grading.
- Project Manager/Engineer for city water and fire line replacements at the Ford Rouge facility in Dearborn, Michigan.
- Project Manager for topographic survey for the proposed route and development of the civil plans and specifications for the installation of the new steam line extension to serve the new Public Policies building at the University of Michigan. This project required interface and coordination with the City of Ann Arbor Engineering Department as the proposed steam line route crossed Monroe Street and was adjacent to South State Street. Standard City of Ann Arbor construction details were incorporated into the plans. Road closure and traffic control plans were prepared, reviewed and approved by the City's Engineering Department.

POSITION: Project Engineer

SPECIALIZATION: Civil Engineering – Site Development, Water and Sanitary and Storm Sewer Design

QUALIFICATIONS: Bachelor of Science Civil Engineering
Wayne State University
MDEQ – Certified Storm Water Operator
MDEQ – Soil Erosion and Sedimentation Control Training

REGISTRATION: Professional Engineer: Michigan, Arizona

EXPERIENCE: 16 years various Engineering Firms

PROJECT EXPERIENCE:

- Consulting Engineer for West Bloomfield Township, Michigan – included:
  - Attend Planning meetings;
  - Office hours at Township Hall;
  - Answer questions by citizens, township employees, developers, design professionals;
  - Research of historical data;
  - Assist Engineering aide with plot plans, grade certifications, drainage issues
  - Review drainage issues; complete site visits if necessary;
  - Plan review - understanding the importance of having “constructable” plans that comply with ordinances and are cost effective and not cost prohibitive.

- Consulting Engineer for the Village of New Haven, Michigan – included:
  - Managing NPDES Phase 2 Storm Water Requirements;
  - Project Management of the North Gratiot Interceptor to protect the interests of New Haven;
  - Assistance with Initial Distribution System Evaluation Compliance for Stage 1 and Stage 2 Disinfection Byproduct Rule;
  - Preparation of Act 51 Report as required by MDOT for road maintenance finance;
  - Developed an Infiltration/Inflow reduction plan;
  - Developed water main replacement plans.

- Project Engineer for Glacier Club Development, a ±500 unit residential development with both single and multiple family dwellings units in and around an 18 hole golf course:

  - Prepared overall conceptual plan and individual phasing plans for lots that are 52' wide with a zero lot line;

  - Completed drainage master plan including 8 detention basins with one pond having 3 weirs, enclosed storm sewer, swales, and ditches;
  - Completed sanitary sewer district plan;
  - Prepared construction plans which include sanitary sewer, water main, storm sewer, grading, and soil erosion plans;
  - Completed plot plans for builders to submit for building permits;
  - Prepared and coordinated drawings for Act 451, Parts 301 and 303 permits;
  - Completed as-built drawings for final acceptance;
  - Prepared extensive utility easements.

- Project Engineer for Cherry Creek Corporate Park, a ±100 acre Industrial and commercial development:

  - Completed site plan;
  - Design of Cherry Creek Drive which is one mile quarter line road extending from 23 Mile Road to 24 Mile Road;
  - Redesign of the intersection at 24 Mile and Jewell Roads;
  - Designed over 5,800 lineal feet of sanitary sewers ranging in size from 8-inch to 15-inch diameter, with over 250 acres of tributary area;
  - Designed drainage districts and corresponding drainage system which included relocating and enclosing a County Drain with 84-inch pipe, design of a drop structure for the 84-inch pipe, three detention ponds, and enclosed storm sewer;
  - Designed over 6,600 lineal feet of the water main system ranging in size from 12-inch to 16-inch diameter.

- Project Engineer for Brookstone Condos, a 72 unit single family development:

  - Designed County Drain improvement plan for the Crooked Brook. Approximately 800 lineal feet of drain was relocated and improved into a 2,200 lineal feet double trapezoid cross section including multiple storm sewer connections and two road crossings;
  - Completion of drawings for a flood plain analysis and preparation of a Letter of Map Revision (LOMR);
  - Design of sanitary pump station;
  - Completion of construction plans.

POSITION:	Survey Manager
SPECIALIZATION:	Surveying Engineering
QUALIFICATIONS:	Bachelor of Science in Surveying Engineering Ferris State University 1999
REGISTRATION:	Professional Land Surveyor: Michigan License # 50457 Professional Land Surveyor: Ohio License # 8505
EXPERIENCE:	6 years with Johnson & Anderson, Inc. 9 years with various Surveying/Engineering Firms
AFFILIATIONS:	Michigan Society of Professional Surveyors (MSPS) National Society of Professional Surveyors (NSPS) American Congress on Surveying & Mapping (ACSM)

PROJECT EXPERIENCE:

- Project Surveyor – Detroit Metro North Power House. Detailed mapping of existing utilities for relocation purposes to accommodate new underground fuel tanks.

- Project Surveyor – Boundary and Topographic Map for Proposed Bakers Field Park. Consisted of mapping 50 plus acres of land adjacent to the Black River. Mapped the floodplain contour, wetland flags and cross sectioned the Black River for boat launch calculations. Provide conversion from NGVD 1929 to IGLD 1985 for Army Corps of Engineering Review. Site located in Port Huron, Michigan. Provide construction staking and layout control.

- Project Surveyor – Ford Research and Engineering Facility. Mapped subterranean pedestrian tunnel for blind steam line connections. Project included layout of the rerouted steam lines and detailed mapping to accurate intercept specific points within the subterranean pedestrian tunnel.

- Project Surveyor – Land Division for Great Lakes Towers, L.L.C. located in the City of Monroe and owned by the Port of Monroe. Surveyed 38 acre industrial development and created railroad/utility easement exhibits. Coordinated control survey and easement exhibits with other consultants.

- Project Surveyor – ALTA/ACSM Land Title Survey for 1812 Battlefield. ALTA Survey Certified to the United States. Consisted of utilizing GPS and traditional surveying methods to locate improvements over the 40 plus acre Brownfield located in the City of Monroe, Michigan. Consulted with Port Attorney and Title Company to abandon certain easements no longer in service.

- Project Surveyor – West Bloomfield Water Main Extensions (DWRF). Coordinated the mapping of over 6 miles of R.O.W. for Water Main Extension. Scheduled and reviewed Inspection & As-built services. Provide As-Builts on State Plane Coordinate System for incorporation into Township GIS.

CONTINUING EDUCATION CREDITS:
Advanced Mapping Seminar -February 2012
Professional Liability Seminar – April 2011
Legal Education for the Professional Surveyor – June 2010
Geodetic Leveling and GPS Techniques Workshop – March 2009
CORS, OPUS and RTN Workshop – March 2009

John B. Stadnicar, P.E.

Senior Vice President

Expertise

Mr. Stadnicar has more than 34 years of practical engineering and management experience with:

- Construction materials testing and evaluation
- Condition assessment of pavements and structures
- Geotechnical investigations
- Pavement design and engineering
- Restoration design for concrete and steel structures

With his wide range of experience, his current role focuses on asset / infrastructure preservation programming for buildings, systems, and infrastructure. He also manages and serves as a technical consultant for numerous restoration, demolition, design and forensic studies.

Education

Bachelor of Science, Geology; University of Dayton (1977)

Experience

Asset Management

Project Manager

He is responsible for coordinating the development of a comprehensive asset management program for DTE Energy facilities that includes inventory and condition assessment data collection, as well as data entry and web based reporting. This program compliments Detroit Edison's existing maintenance management database for roofing and pavement systems. Specific components included:

- Visual assessment of approximately 90 Detroit Edison sites
- Documentation of deficiencies and condition ratings
- Information gathering and input to a computerized database
- Development of condition assessment reports and budget forecasts

He was responsible for the inspection and evaluation of mechanical and electrical systems for Cranbrook Schools' asset management program. Cranbrook's numerous schools, many constructed between 1905 and 1942, include the Academy of Arts, the Art Museum, the Institute of Science, Brookside School, Cranbrook School and Vaughan School, and many support facilities. Several buildings were added in the 60's and 70's, and restoration programs have been undertaken throughout the history of Cranbrook.

- Worked with Cranbrook to identify the various mechanical and electrical systems and evaluate their condition
- Processed and analyzed data
- Integrated the information into a maintenance management program (Mainsaver) for asset management and preventative maintenance programming

Responsible for the inspection / evaluation of seven buildings in the State of Michigan's Capitol Complex, including the Lewis Cass Building, Stevens T. Masons Building, G. Mennen Williams Building, the Treasury Building, Transportation Building, Ottawa Office Building, and the Hannah Office Building.

Asset Management (cont'd)

Project Manager

- Evaluated the existing condition of the facilities
- Identified and prioritized maintenance and restoration requirements for the State's asset management program.

Responsible for the investigation / evaluation of the exterior walls of the Detroit Executive Plaza, two office towers owned by the State of Michigan. Exterior walls consist of cast-in-place architectural concrete on one tower and a curtain wall system with prefinished aluminum panels on the other tower.

- Performed close-up inspection and detailed mapping of defects on each tower from swing stage equipment
- Compiled the survey, evaluations, laboratory test results, and engineering data in a comprehensive report, with recommendations for immediate and long-term repair programming for the exterior walls

Responsible for the inspection and evaluation of spillway and tail race structures at 13 hydroelectric plants in Michigan. The objective was to determine the cause and extent of concrete deterioration, assess the structural integrity of these components and prioritize the restoration work.

- Calculated lateral earth and hydrostatic pressures
- Evaluated structural integrity according to U.S. Army Corps of Engineers and American Concrete Institute requirements
- Prioritized needs in a comprehensive restoration / rehabilitation program

Responsible for the investigation / evaluation of the concrete / structural steel components for bridges, parking structures, overpasses, building envelopes, manufacturing facilities, dams, spillways, plaza decks and pavements.

- Managed inspection, destructive and nondestructive materials testing, and evaluation of properties for rehabilitation
- Prepared restoration plans, specifications and bid documents on cast-in-place, pre-cast, and composite structures

Restoration & Rehabilitation

Project Manager

Responsible for the development of Standard Specifications and details for restoration programs provided on job order contracts at the Detroit Wastewater Treatment Plant.

Responsible for the investigation, evaluation, and restoration design of the Aeration Basins at the Detroit Waste Water Treatment Plant. The project includes:

- Investigation and documentation of deterioration
- Restoration design
- Restoration construction in the four aeration basins, as well as appurtenant structures
- Conversion of Basin Number 1 from an air dissolution system to a pure oxygen dissolution system

Restoration & Rehabilitation (cont'd)

Project Manager

He was responsible for the structural evaluation and restoration design for the parking structure at the Detroit Waste Water Treatment Plant. The project includes:

- Condition assessment review
- Developing the basis of design report for the restoration program

He was responsible for the condition assessment and coordinated rehabilitation of a pre-stressed parking structure for a major university.

- Identified type and extent of deteriorated / distressed areas
- Evaluated conditions, and recommended repair materials and procedures
- Prepared life-cycle cost analysis and construction documents
- Performed contract administration and quality control

Directed the investigation, evaluation and design of a restoration program for a cast-in-place concrete parking deck, identified the extent of deteriorated concrete and performed destructive and nondestructive concrete testing in the field and laboratory. Performed and evaluation of the sound concrete and steel reinforcement to develop repair alternatives. Restoration alternatives were also evaluated based on life cycle cost analyses.

Demolition

Project Consultant

Assisted the Project Manager identify environmental concerns, prepare of plans and specifications for demolition, solicit and review contractor bids. The project comprises approximately 750,000 square feet of building space (four buildings, four and five stories in height) at the Warren Service Center for Detroit Edison (DTE). Onsite construction management / contract administration services were also performed. The environmental remediation and demolition project involves the removal of asbestos, lead based paint, PCB's, utility shutoff and abandonment, and demolition.

Project Manager / Technical Consultant

Responsible for the evaluation and design documents associated with the demolition of an abandoned building on Woodward Avenue. NTH was responsible for an environmental assessment of the facility for asbestos, lead-based paint, PCBs, and mercury. NTH also prepared technical specifications for the demolition of the structures and coordinated environmental abatement work with the demolition contractor.

Project Manager

He was responsible for establishing the vibration monitoring program during the demolition of Station KYW studios in Philadelphia, Pennsylvania. The studios are located within one block of the Liberty Bell, as well as several other historical buildings. The vibration plan used three seismographs that recorded vibrations 24 hours a day, seven days a week. Vibration trigger and alarm alerts were established significantly below levels known to cause structural damage in adjacent buildings. Approximately once each day, the seismographs uploaded their data to a central server. If the trigger level was exceeded, the data were uploaded immediately and a page was sent to the NTH field engineer. The engineer would determine if the demolition activities were the likely vibration source and take action as appropriate. Vibrations have not damaged the adjacent buildings or other nearby structures.

Construction

Project Manager

He is responsible for the construction contract administration services for the City of Dearborn CSO Control program between 2008 and 2012. The program involved four heavy civil construction projects involving sinking caissons used as CSO Retention and Treatment Shaft facilities for CSO overflows. The four projects' construction costs were over $135 Million. During construction, NTH lead the construction administration team including on-site resident engineering, as-needed construction engineering, submittal reviews, contractor substitutions, construction observation and materials testing, observation of system testing and start-up, review of O&M manuals, review of as-built documents, budget coordination, review of construction schedules, Owner requested upgrades, review of pay applications, and public relations. Final system start-up and construction activities are to be completed in the summer of 2012.

He was responsible for developing the concrete mixture design for I-75 projects: one near Monroe, Michigan and the other near Pontiac, Michigan. The concrete mixtures were designed using fly ash as a replacement for Portland cement. The mixtures and aggregate properties were tested and evaluated in accordance with MDOT requirements.

He was responsible for developing the vibration monitoring program during pile driving operations near the New Jersey coast and residential development. The project is located within 250 feet of municipal and residential structures. For the vibration plan, we analyzed the specific pile driving activities and geotechnical information to develop a plan that would record vibrations during construction activities. The vibration plan used three seismographs set up with solar panels for power to record vibrations 24 hours a day, seven days a week. Vibration trigger and alarm alerts were established significantly below levels known to cause structural damage in nearby buildings. Once each day, the seismographs uploaded their data to a central server and the information was posted to a website. If the trigger level was exceeded, the data were uploaded immediately and a page was sent to the NTH field engineer. The engineer would determine if the construction activities were the likely vibration source and take action as appropriate. Vibrations have not damaged the adjacent buildings or other nearby structures.

Director of Construction Materials Laboratory

Responsible for construction materials laboratory testing including; aggregates, soil, rock, concrete, and asphalt; calibration and certification of laboratory equipment used for testing. Construction materials are tested in accordance with ASTM, AASHTO, and MDOT testing procedures. In addition to performing laboratory testing in-house, responsibilities include coordinating specialized materials testing performed by subconsultants.

Professional Licenses

Licensed Professional Engineer: State of Illinois (1990) – License No. 062-045621
Commonwealth of Pennsylvania (2003) – License No. PE062818
State of Delaware (2003) – License No. 13284

Richard A. Bresso, P.E., RRC

Vice President and Senior Associate
Manager – Asset Preservation

Expertise

Mr. Bresso has over thirty years experience in a wide range of roofing technology projects. He currently serves as the Manager of the Asset Preservation Group. Additionally, he acts as project manager on numerous projects, develops construction documents, plans, conducts and manages roofing evaluations/surveys and implements quality assurance/quality control programs for in-progress roofing work.

Education

Graduate Studies, Business Administration; University of Michigan
Bachelor of Science, Construction Engineering; Lawrence Institute of Technology (1976)

Continuing Education

- Participant in NTH's Project Management Academy (PMA), an annual, intensive, two-day seminar. The PMA is designed to build solid fundamentals of project management and professional practice.
- Participant in continuing education seminars provided by the Great Lakes Chapter of the Roof Consultants Institute.
- Participant in annual continuing education seminars provided by area roofing manufacturers such as Koppers, Johns Manville, GAF, Soprema, Siplast, Sarnafil and Firestone.

Experience

Project Management

His responsibilities have included:

- Coordinated investigation, evaluation and analysis of roof conditions at industrial manufacturing facilities for a major automotive manufacturer. Prioritized over 150,000,000 square feet of roofing at approximately 75 manufacturing plants located in the United States, Canada and Mexico.
- Coordinated the investigation, evaluation and analysis of over 5,000,000 square feet at various electrical utility power plants and facilities throughout Michigan. A Roofing Asset Management Program was used to evaluate the overall condition of the roofing systems, rate the condition and prioritize the work using index criteria. The program evaluated the existing condition of the roof membrane, flashing and insulation, and predicted future deterioration rates. Based on the mathematical models, roofing restoration projects and budgets were identified.
- Developed roof management programs for school districts throughout the United States. Evaluated and prioritized all school building roof areas. Developed five to ten year replacement and repair programs.

Design Development and Construction Document Preparation

His responsibilities have included:

- Prepared design specifications and construction documents for roof replacement and repair projects throughout the United States for a major automotive manufacturer. Construction value estimated at over $200 million to date.
- Prepare design specifications and construction documents for roof replacement projects throughout Michigan for a major telephone utility company. Since 2003, over 40 projects have been designed, competitively bid and successfully constructed.

Richard A. Bresso, P.E., RRC

Roofing Quality Assurance

His responsibilities have included:

- Coordinated and managed the design and construction of a $5,000,000 roof replacement program for a major electrical and gas utility manufacturer. Provided a full range of construction management services, including full time on-site monitoring during construction operations at 20 power plants and service centers.
- Coordinated and managed design and construction of new roofing systems for a national retail chain, at 13 shopping mall department stores throughout southern Michigan. Assisted with architectural design of new single-ply roof systems. Provided full time quality assurance monitoring throughout installation of new roofs.
- Coordinated and managed design and construction of roofing systems for a $2,000,000 roof removal and replacement project at an international airport. Prepared the technical specifications, including contract documents. During the re-roofing construction work, provided quality assurance/quality control to verify compliance with contract documents. The project was designed not to interrupt airport operations and not to affect passengers.
- Coordinated and managed design and construction of roofing system replacement at numerous educational facilities (K-12 and universities) throughout the United States. Developed plans and specifications, assisted with bidding for award of contract and provided full-time monitoring during construction.

Certifications and Registrations

Registered Professional Engineer (P.E.) – State of Michigan

Registered Roof Consultant (RRC) – June, 1993 - Present

- The RRC certification is considered to be the highest achievement within the roof consulting industry. As an RRC, he has demonstrated ability in the field of roof evaluation, design and project management.

Memberships

Roof Consultants Institute (RCI, Inc.) – June, 1993 - Present

- Member, Great Lakes Chapter of RCI, Inc.
- Currently serves as President on the Board of Directors, Great Lakes Chapter of RCI, Inc.

Michael T. McGillis, P.E.

Project Engineer

Expertise

Mr. McGillis has more than 18 years experience in building design and engineering. His experience includes forensic investigations, project management, structural repairs, pavement assessments, pavement repairs, building and structure evaluations, site development, building renovations, construction observation, design and implementation of facility restoration / repairs, and development of asset preservation programs, including estimating repair and renewal costs. During his employment, Mr. McGillis has gained a well-rounded knowledge of all building systems including site / civil, foundations, structural elements, façades, roofs, architectural features / finishes, and mechanical systems.

Education

Bachelor of Architectural Engineering, Pennsylvania State University (1993)
Five year professional degree, ABET accredited

Experience

Forensic Investigation

Performed forensic investigations on structural collapses and failed building components including masonry walls, reinforced concrete structures, wall assemblies and roofing systems. Both destructive and non-destructive investigative techniques were utilized during the investigative process that included the use of specialized testing equipment.

Project Management

Served as the Architect's representative during the construction of K-12 Facilities for 8 school districts, with projects ranging in size from 34,000 square feet to 240,000 square feet. Responsibilities included project development, project specification development, bidding assistance, contract administration, construction observations, quality assurance, and owner training. During the construction of the facilities all building systems were observed, including site development, foundation systems, structural systems, wall systems, roofing systems, mechanical systems, plumbing systems and electrical systems.

Asset Preservation Programs

Developed and implemented asset preservation programs for electric generating utility companies and medical facilities. Programs encompassed façade evaluations of 940 structures (approximately 9 million SF), pavement evaluations of approximately 15 million SF and mechanical/plumbing/electrical evaluations in multiple buildings (approximately 2 million SF). Condition ratings of components were provided along with associated repair estimates and the development of five-year repair budgeting plans. Also assisted with the development of Website display of the asset management program findings.

Michael T. McGillis, P.E.

Structural Repairs
Coordinated investigations, evaluations, design of repairs and construction observations of miscellaneous structures including precast concrete bleachers, concrete slabs, building facades, loading docks and timber framing roof trusses. The work included developing the Engineer's opinion of probable costs, preparation of plans and specifications for the work, and construction observations while being implemented, assuring that the work was completed in accordance with the specifications.

Building Condition Assessments
Performed, coordinated and reported on building condition assessments of school district campuses, high rise building, retail building, restaurants and office complexes. Reports included information on site work and structures, building structures, building facades, roofing systems, architectural finishes and mechanical systems. Based on conditions, provided estimates for repair and deferred maintenance.

Building Renovations
Provided project management services for the renovations of educational facilities. Renovation projects ranged from the replacement of architectural finishes to the replacement of athletic facilities including all weather tracks to complete building renovations as well as façade, roof, mechanical, plumbing and electrical system replacement.

Certifications
Masonry Certification from the Masonry Institute of Michigan

Professional Licenses
Licensed Professional Engineer – PA

Publications
McGillis, Michael T., Stadnicar, John B., "Asset Preservation", The Military Engineer, September-October 2009

Tabetha A. Martel, E.I.T.

Staff Engineer

Expertise

Ms. Martel has performed a variety of engineering analyses and evaluations related to building inspection projects. She has developed written job reports and performed quality-control tests on concrete.

Education

Master of Science, Civil/Structural Engineering; University of Michigan (2010)
Bachelor of Science, Civil Engineering; University of Michigan (2009)

Experience

Quality Control Testing

Performed construction observations and quality control testing on various concrete placement projects. Quality control testing included molding concrete cylinders for compressions tests, executing concrete cylinder compression tests, conducting air-entrainment and slump tests, and monitoring ambient air and concrete temperatures during placement procedures. Also generated daily field reports presenting construction observations and testing results for each project.

Asset Preservation Programs

Assisted in the development and implementation of asset preservation programs for electric generating utility companies and medical facilities. Programs encompassed pavement evaluations of approximately 5.3 million SF at multiple locations, mechanical/plumbing/electrical evaluations in multiple buildings (approximately 212,000 SF), building envelope/site evaluations of approximately 778,000 SF. Condition ratings of components were provided along with associated repair estimates and the development of five-year repair budgeting plans.

Structural Repairs

Performed field observations and assisted with design repairs and construction documents of miscellaneous building facades. Materials included precast concrete panels, clay brick masonry, concrete masonry units, limestone, and structural steel. Assisted with the development of the Engineer's opinion of probably costs, preparation of plans and specifications for the work, and construction observations during implementation. Generated daily field reports during construction observations.

Building Condition Assessments

Performed and reported on building condition assessments of school district campuses, high rise buildings, retail buildings, and office complexes. Reports included information on site work, building façade, roof systems, architectural finishes and mechanical systems. Based on conditions, provided estimates for repair and deferred maintenance.

Registrations

EIT – Engineer in Training (2009)

Associations

American Society of Civil Engineers
Chi Epsilon
Society of Women Engineers

Thomas W. Mitchell

Senior Project Roofing Professional

Expertise

Mr. Mitchell has over 30 years experience in the field of asset preservation and roof consultation. His experience has centered on clients in education, industry and energy. This experience includes project management, in-field design data collection, development of construction documents, existing condition evaluations/surveys, and quality assurance observation during construction. Mr. Mitchell has prior experience as a roofing contractor estimator and as a roofing manufacturer representative.

Education

Continuing Education

- Participant in NTH's Project Management Academy (PMA), an annual, intensive, two-day seminar. The PMA is designed to build solid fundamentals of project management and professional practice.
- Participant in annual continuing education seminars provided by area roofing manufacturers such as Koppers, Johns Manville, GAF, Soprema, Siplast, Sarnafil and Firestone.

Experience

Project Management and Design

Acts as project manager, performs in-field and in-office development of design specifications and drawings for roof replacement and/or repair of existing roof systems for clients such as Berkley Schools, DTE Energy, General Motors and Royal Oak Schools. His responsibilities include the following:

- Conducts pre-proposal site visits, collects proposal information and writes proposals.
- Collects in-field design data, including freehand sketches, measurements and photographs of existing conditions.
- Develops construction documents utilizing software such as Microsoft Office.
- Schedules and conducts pre-bid, pre-construction and progress meetings.
- Provides clients with comprehensive bid analysis and recommendations.
- Reviews submittals and certificates for payment.
- Prepares project close-out documentation.
- Coordinates annual inspections of work to ensure performance.
- Serves as NTH client contact on projects.

Condition Survey and Evaluation

Performs in-field condition surveys of existing roof systems for clients such as Berkley Schools, DTE Energy and General Motors. His responsibilities include:

- Performs visual evaluations of existing built-up, single-ply and steep-slope roof systems.
- Performs non-destructive moisture surveys of existing roof systems utilizing thermographic imaging cameras and nuclear moisture density gauges.
- Provides follow-up consultation with clients.

Roofing Quality Assurance

Serves as the on-site representative of the design consultant during construction for clients such as DTE Energy. His responsibilities include the following:

- Ensures conformance of all construction to design specifications and drawings.
- Facilitates communication between owner, design consultant and contractor during the construction phase.
- Coordinates construction activity between building owner and contractor.
- Prepares written documentation of all in-field activity, specifically daily field reports and documentation of all construction activity.

Laura Willem

Assistant Project Scientist

Expertise

Ms. Willem offers over twelve years of experience in environmental and industrial hygiene projects. Ms. Willem has conducted numerous building inspections for asbestos, mold, lead-based paint and other hazardous materials within many school, residential, industrial and commercial buildings for EPA and OSHA compliance. She is experienced in developing abatement specifications for asbestos, lead-based paint, and other hazardous materials and has performed asbestos and lead air monitoring, as well as indoor air-quality testing. Additionally, Ms. Willem has experience performing Health and Safety audits and studies.

Education

Bachelor of Science, Environmental Studies/Geography; Central Michigan University (1998)

Experience

Currently serves as asbestos, lead, mold, and other hazardous indoor material specialist and technician manager for compliance, renovation, demolition, and emergency projects.

Asbestos, Lead, Mold and Other Hazardous Materials Projects

- Manage and coordinate contractor activities on large-scale asbestos, lead, mold, and other hazardous material remediation projects to assure compliance with EPA, AHERA, and OSHA guidelines and standards.
- Perform hazardous materials, asbestos, lead-based paint, mold and indoor air-quality surveys
- Coordinate contractor compliance with federal, state and local regulations regarding asbestos and lead-based paint abatement procedures
- Develop Technical Specifications for contractor compliance on asbestos abatement and lead and hazardous materials remediation projects.
- Provide air monitoring for asbestos, lead, mold and other airborne hazards to assure contractors adhere to EPA, AHERA, NIOSH and OSHA guidelines and standards.
- Administer the Proficiency Analytical Testing (PAT) program and intra-laboratory “Round Robin” studies to maintain compliance for analyzing asbestos air-samples.

Indoor Air Quality

- Conduct indoor air quality monitoring for fungi, total hydrocarbons, formaldehydes, various metals, total respirable particulates, as well as carbon monoxide, temperature, humidity and carbon dioxide. NIOSH/EPA formats are followed, as appropriate.

Health and Safety

- Perform Health and Safety (H&S) Audits for a regional major utility company.
- Conduct Job Hazard Assessments (JHAs), for tasks requiring personal protective equipment (PPE), as required by OSHA.

Laura Willem

Certifications

40-Hour Hazardous Waste Activities Health and Safety Training per 29 CFR 1910.120,with yearly 8-hour refresher courses as required.
NIOSH 582 Equivalency Course
Manufacturer's Training Course for the NITON Spectrum Analyzer Asbestos
Building Inspector #A25682, State of Michigan
Asbestos Management Planner #A25682, State of Michigan
Asbestos Contractor/Supervisor #A25682, State of Michigan
Asbestos Project Designer #A25682, State of Michigan
Asbestos Hazard Evaluation Specialist #ES34575, State of Ohio
Asbestos Hazard Abatement Project Designer #PD60711, State of Ohio

Part I – Technical

III. Management Summary, Work Plan, and Schedule

DiClemente Siegel Design Inc.
Engineering and Architecture

III. MANAGEMENT SUMMARY, WORK PLAN, AND SCHEDULE

Management Summary

DSD will utilize a single project manager, Andrew Wieland, LEED AP as the primary interface between the design team and the State of Michigan personnel. The project manager will be involved closely with the project from the initial kick-off during design through to project close out. At the outset of the project the project manager will review the scope with Lou Trama, Principal in Charge, to understand what members of the core team included in this proposal have the necessary expertise, experience and availability to be assigned to the project. This is also the point when any necessary specialty expertise not in the core team's portfolio will be added. By understanding the scope and selecting the right team members from our deep bench at the outset of the project, we set the project on a solid foundation for success from the initial kick off. We have found this model to be consistently successful on the numerous blanket contracts that DSD has been involved in.

The project manager will track and coordinate the project team activities through the study, design and construction phases. The project manager will be responsible for documenting meetings and distributing correspondence during all phases of the project. During design, in-house progress meetings are held with the assigned team to monitor project status, schedule and budget. A list of open issues and responsible party is also maintained as part of the in-house meeting process. The project is monitored and quality checked by the Principal-in-Charge through all phases of work. Prior to being issued for bids, every project receives a final, comprehensive in-house check from a Senior Licensed Architect and/or Engineer independent of the project team to check for accuracy, completeness and interdisciplinary coordination.

Then the project reaches construction, the same project manager is used to conduct construction progress meetings, monitor construction status and coordinate the construction phase service requirements for the professional services contractor.

Work Plan

In an Indefinite Service Indefinite Delivery (ISID) type contract, there could be different types of projects with different phases required to meet the project requirements. As such we have provided a general overview of the tasks and services that will be included within each of these phases. When a specific project is received and the phases defined, DSD creates a work plan specific to that project that follows with the same general tasks and services.

Phase 100 – Study

The study phase of each project will be used to gather data and determine the exact requirements of the project. The Study phase will include the following tasks:

- Kick-off meeting(s) - Conduct a kick-off meeting with the State of Michigan personnel to verify DSD's complete understanding of the project scope, schedule, budget, etc.
- Information Gathering – Through meetings with the state agencies, information regarding the exact requirements of the building systems will be gathered.

- As-built documents - Review existing as-built documents, including drawings and existing equipment specifications and cut sheets (where available).
- Field survey – DSD will field survey the existing building and systems. With input from operating personnel, DSD will determine which existing pieces work now and which need to be designed in a different manner to support the new system.
- Report – Following the research of what is required for the program, a report will be prepared outlining the problems, conclusions, and recommendations. This report, including discussions and details, will be reviewed to discuss the findings and confirm the project is on track. Following receipt of review comments, the final report will be prepared and distributed.

Phase 200 – Program Analysis

During the Program Analysis phase, the functional needs of the agency will be refined into physical space requirements. This will be used to develop preliminary space layouts showing locations of each function in relation to the existing building and other functions. This phase will include the following tasks:

- Program analysis – Based on information gathered in the study phase, each space's functional requirements and equipment footprints are summarized and translated into physical space requirements. Relationships of each of the spaces/equipment to other spaces/equipment will be established and coordinated.
- Project Development – Once the space requirements are established, this will be used to determine how well the new program fits into the existing facility and the extent of the modifications/additions required.
- Cost Estimate – A preliminary construction cost estimate will be prepared. This will be used to make decisions regarding the overall scope of the project.
- Analysis Report – The information developed during the program analysis phase will be summarized in a final report. This report will be reviewed and upon receipt of all comments, the final, approved program analysis will be presented in both hard copy and in an oral presentation to the state agency/department.

Phase 300 – Schematic Design

During the Schematic design phase, DSD will develop preliminary construction documents based on the approved scope of work from the study and program phases. This phase will include the following tasks:

- Coordination – During all phases of the project, the project manager will provide the required coordination between the State of Michigan and the design team and promote interdisciplinary coordination between members of the design team. This includes distribution of correspondence, progress meeting minutes, and schedule and budget information.
- Field investigation – Floor plans, utilities, site conditions, etc. will be field verified. Existing structural, mechanical, electrical and plumbing systems will be surveyed for system adequacy and equipment life.

- Code review – During schematic design, code impacts of the proposed work will be reviewed. Areas of work where significant cost will be incurred because of new or revised code requirements will be identified and planned for early. Plan review and permitting requirements will be presented to and reviewed with the State of Michigan DTMB.
- Schematic Design Documents – A schematic design narrative will be provided; describing proposed architectural, structural, mechanical and electrical systems. Preliminary drawings will be developed to show schematic level architectural designs and locations of major mechanical and electrical equipment.
- Budget – A cost estimate will be prepared to establish a complete project budget, including design, DTMB and construction cost. If necessary, adjustments to the project scope will be made to bring the project back to within the desired overall project budget.
- Schedule – A preliminary design and construction schedule will be prepared based on the included schedule in this proposal.
- Schematic Design Review – The preliminary design information will be submitted for review, discussion and approval. Upon incorporation of all comments and final approval, the schematic design will be presented to the project team.

Phase 400 – Preliminary Design

During the preliminary design phase, DSD will develop preliminary construction documents based on the approved scope of work from the schematic phase. This phase will include the following tasks:

- Coordination – During all phases of the project, the project manager will provide the required coordination between the State of Michigan and the design team as well as ensure interdisciplinary coordination between members of the design team. This includes distribution of correspondence, progress meeting minutes, and schedule and budget information.
- Field investigation – The accuracy of floor plans, equipment sizes, equipment locations, etc. will be field verified. Existing control component locations and sizes will also be verified.
- Code review – During preliminary design, code impacts of the proposed work will be reviewed. If any proposed work will require significant additional work due to code requirements (i.e. adding a duct smoke detector for AHU shutdown may impact an existing fire alarm system), this condition will be identified and, with input from the State of Michigan, addressed during preliminary design.
- Design – Preliminary designs will be completed for equipment sizing and selection.
- Drawings – Preliminary Architectural, Structural, Mechanical and Electrical drawings will be developed.
- Specifications – Design narratives will be developed for architectural, structural, mechanical and electrical work.
- Budget – The construction cost estimate will be reviewed and updated to verify that the project is within the allotted construction budget. If necessary, adjustments to

the project scope will be made to bring the project back to within the construction budget.

- Schedule – A preliminary construction schedule will be prepared based on the included schedule in this proposal.
- Preliminary Design Review – At several intervals, 50% and 90% or as requested by the State of Michigan, the preliminary design information will be submitted for review and approval. Proposed equipment data, specifications, budget, schedule, calculations (where applicable) and code impacts will be submitted for review, discussion and approval.

Phase 500 – Final Design

Following approval of the preliminary design, DSD will continue with the final design phase of the project. The final design will include updating drawings and specifications with details for bidding and construction. This phase will conclude with receiving bids and making a recommendation for contract award. The specific tasks will include the following:

- Coordination – The project manager will continue to provide the required coordination between the State of Michigan and the design team as well as ensure interdisciplinary coordination between members of the design team.
- Specifications – Final specifications will be developed for the project. Front end specifications, based on the State of Michigan standard front end document, will be finalized, including bidding and contract requirements, bidding and construction schedules, general and supplementary conditions, etc.
- Drawings – Architectural, Structural, Mechanical and Electrical drawings will be fully detailed as required to receive bids for the full project.
- Codes – The final construction documents will comply with the relevant codes, including Building, Mechanical, Electrical, Plumbing, applicable NFPA sections and Energy codes. At the completion of final design, DSD will submit the plans for Base Review.
- Hazardous Materials – During final design, we'll assist the State of Michigan by identifying the areas of construction that could contain hazardous materials and would require abatement.
- Budget – The construction budget will be considered throughout the final design process. The budget will be refined as the details of the construction documents are finalized. If the scope of the project is revised, the impact of any changes will be evaluated against the budget.
- Schedule – With input from the State of Michigan personnel, the construction schedule will be finalized and incorporated into the bidding documents. All critical schedule impacts will be noted in the schedule.
- Final Design Review and Checking– At several intervals, 50% and 90%, or as requested by the State of Michigan, the final design documentation will be submitted for review and approval by the State of Michigan. Any review comments will be incorporated into the final bid and construction documents. Our final documents will also undergo

a thorough in-house check for completeness, accuracy and interdisciplinary coordination.

- Bidding and Contract Award – DSD will assist the State of Michigan in receiving bids for the construction portion of the project. DSD will distribute the bid documents and manage bid security (if applicable), conduct the pre-bid meeting, answer any pre-bid questions and issue addendum(s) as required, review and evaluate the bids and make a contract award recommendation to the State of Michigan.

Phase 600 – Construction Phase Services – Office Services

During construction, DSD will perform shop drawing review, issue construction progress meeting minutes and field surveys, monitor the contractor's performance and construction progress and review and process payment request. The specific tasks for this phase include:

- Shop drawings – DSD will review shop drawings for compliance with the contract documents. Only specified products and manufacturers will be approved. Any request for substitution will be carefully reviewed by DSD and if approved by the State of Michigan, will be allowed only after a bulletin for the substitution is approved.
- Construction progress and contractor payments – DSD will monitor contractor progress and performance throughout the construction contract. DSD will issue meeting minutes for construction progress meetings and review and approve contractor payment request. While monitoring the construction progress and performance, the contractor will be notified of any construction deficiencies or schedule problems. Items of concern will be closely tracked and monitored until corrected.
- Contract Changes – If any contract modifications are required for the completion of the project, bulletins will be issued, following approval from the State of Michigan, for these changes.
- Punch List – At the completion of construction, DSD will prepare and distribute a punch list, noting any construction deficiencies.
- Project Closeout – DSD will provide the contractor with a list of required contract closeout documents and submittals. DSD will receive the closeout documents and distribute to the appropriate State of Michigan or facility staff. DSD will revise the AutoCAD drawings to revise any changes noted on the contractor's as-built documents.

Phase 700 – Contract Phase Services – Field Services

DSD will conduct construction progress meetings to monitor the contractor's progress and schedule, address any issues that surface during construction, review the quality of the work and hear any safety or operational concerns noted by the facility during construction. Specific task for this phase include:

- Pre-construction meeting – DSD will participate in the initial pre-construction meeting; record meeting minutes and distribute to all parties involved.
- Construction progress meetings – DSD will conduct regular progress meetings during construction (typically bi-weekly). These meetings will track submittals, construction

progress and all open issues. DSD will document all meetings. We have a meeting minute format that has been on other state projects (most recently the Caro Center Heating Decentralization project) and has been proven to be successful in tracking all issues and holding all parties accountable for actions.

- On site construction review – DSD will visit the construction site and perform on-site review of the construction status and quality of work. DSD will also conduct and document any required on site problem solving meetings for issues that may arise during construction.
- Final inspection – At the completion of construction, DSD will perform a final on-site inspection and project walk thru to generate the contractors punch list.

Schedule

DSD prides itself on the ability to respond quickly to many different requirements from numerous clients. The work plan is the basis for planning and project management. Schedule compliance is achieved through an organized process, responsiveness to issues, continuous tracking of progress and anticipation of potential problems. We meet schedules based on accurate projection of the requirements of the project through a highly productive and dedicated staff.

Part I – Technical

IV. Questionnaire

DiClemente Siegel Design Inc.
Engineering and Architecture

Questionnaire for Professional Services

Department of Technology, Management and Budget
2013 Indefinite-Scope Indefinite-Delivery – Request for Qualifications
Architecture, Engineering, and Landscape Architecture Services
Various Locations, Michigan

INSTRUCTIONS: Firms shall complete the following information in the form provided. A separate sheet may be used if additional space is needed; please key the continuation paragraphs to the questionnaire. Answer questions completely and concisely to streamline the review process.

ARTICLE 1: BUSINESS ORGANIZATION

1. Full Name: DiClemente Siegel Design Inc.
   Address: 28105 Greenfield Road, Southfield, MI 48076
   Telephone and Fax: 248-569-1430; 248-569-0096
   Website: www.dsdonline.com E-Mail: mktg@dsdonline.com
   Professional(s) federal I.D. number(s): 38-1900034

   If applicable, state the branch office(s), partnering organization or other subordinate element(s) that will perform, or assist in performing, the work: DSD Burton, MI Branch Office (MEP); Johnson & Anderson, Inc. (Civil Engineering & Surveying); Desai Nasr Consulting Engineering, Inc. (Structural); NTH, Ltd. (Roofing & Environmental Engineering); Land Resource Planning & Design, LLC (Landscape Architecture).

2. Check the appropriate status:

   ☐ Individual firm ☐ Association ☐ Partnership ☒ Corporation, or ☐ Combination – Explain:

   If you operate as a corporation, include the state in which you are incorporated and the date of incorporation: Michigan - 1969

   Include a brief history of the Professional's firm: DiClemente Siegel Design was formed in 1969 as a result of the merger of two local engineering firms led by Gino DiClemente and Ed Siegel. The firm's main clients from the start were Ford Motor Company and General Motors. While we continue to serve these automotive clients today, we are proud to have added clients across diverse market segments, including governmental. In 1983, DSD opened a branch office in Burton, Michigan which continues to serve our clients in the Flint area. DSD has been providing architectural services since 1996 when Gunnar Birkerts Associates merged with DSD. Our design philosophy demonstrates a consistent commitment to innovation in response to program, budget, schedule, sustainability and energy conservation. DSD is dedicated to serving clients with professionalism, skill, creativity, and integrity while maintaining sensitivity to client requirements. We are driven by the desire to exceed client expectations and attain long-term client relationships.

   Provide an organization chart depicting all personnel and their roles/responsibilities.

Provide an organization chart depicting key personnel and their roles for a typical assigned project. Include generic supporting staff positions.

ARTICLE 2: PROJECT TYPES AND SERVICES OFFERED

Identify the project types and professional services for which your firm is exceptionally qualified and experienced. Provide attachments illustrating a minimum of three examples, with references, of successful projects performed in the last five years for each item checked. Identification of specialties will not exclude selected firms from project types, but will assist the DCD Project Directors in matching firms with projects.

- ☒ ADA facility assessment and remodeling
- ☒ Boilers and steam systems
- ☐ Bridges – pedestrian and vehicular
- ☒ Building and structure additions
- ☒ Building envelope investigation, repair, upgrade
- ☒ Correctional facilities
- ☒ Door and window replacement
- ☒ Fire and security alarm systems
- ☐ Fish passage structures
- ☒ General architectural and/or engineering design
- ☒ HVAC equipment replacement, upgrade, selection
- ☒ HVAC controls replacement, upgrade, selection
- ☒ Interior remodeling and renovation
- ☒ Laboratory facilities
- ☐ Landscape architecture
- ☐ Land Planning
- ☐ Locks and dams
- ☒ Maintenance and facility preservation
- ☐ Marine work - boat launch facilities, docks, harbors
- ☐ Parking and paving
- ☒ Roof repair, restoration and/or replacement design
- ☐ Site surveying
- ☐ Stormwater management and drainage plans
- ☐ Structural investigation and assessment
- ☒ Toilet and/or shower room remodeling or design
- ☐ Trail design and development
- ☐ Wastewater systems
- ☐ Water supply systems
- ☐ Water diking systems, water control structures

ARTICLE 3: PROJECT LOCATION

Identify the regions where your firm can most efficiently provide services. Assignments may vary from the regions checked, depending on the specialties and services required.

- ☐ Western Upper Peninsula (west of Marquette)
- ☐ Eastern Upper Peninsula (east of Marquette)
- ☐ Northern Lower Peninsula (north of Grayling)
- ☒ Saginaw Bay area (east of 127, north of I-69 and M 57, south of Grayling)

Team Organization Chart

DTMB Technology, Management & Budget

Management
DiClemente Siegel Design Inc.
Louis A. Trama, PE, LEED AP
Principal-in-Charge

Project Management
DiClemente Siegel Design Inc.
Andrew T. Wieland, LEED AP
Project Manager

Architecture
DiClemente Siegel Design Inc.
Lee J. Mamola, AIA, NCARB
Andrea L. Zammitt, LEED AP

Mechanical Engineering
DiClemente Siegel Design Inc.
Nathaniel C. Stalker, PE, LEED AP
Simo D. Milosevic, PE

Electrical Engineering
DiClemente Siegel Design Inc.
Samuel Molin, Jr., PE, LEED AP
Thomas B. Reschke, PE

Information Technology
DiClemente Siegel Design Inc.
Nick DiGesu, RCDD, ITPM

Lansdcape Architecture
Land Resource Planning & Design, LLC
Greg Baughman, LEED AP, ASLA

Structural Engineering
Desai Nasr Consulting Engineers
Athanacios Nasr, PhD, PE
James Moravek, PE
Nick Belmonte

Civil Engineering & Surveying
Johnson & Anderson
Gregory Gucwa, PE
Nancy Kolinski, PE
Timothy Weir, PS

Roofing & Environmental Engineering
NTH
John Stadnicar, PE
Richard Bresso, PE, RRC
Michael McGillis, PE
Tabetha Martel, EIT
Thomas Mitchell
Laura Willem

CAD & Clerical Support as Required

Firm Organization Chart

Firm Leadership	Gino DiClemente - Chairman Louis Trama - President & CEO						
Departments	Architecture	Mechanical Engineering	Electrical Engineering	Marketing	Administrative Services	Burton Office	Information Technology
Senior VPs (Engineers)		Bart Reed Director of Mechanical Engineering	Samuel Molin Director of Electrical Engineering				
Vice Presidents (Engineers/ Administrative Director)		Joe Aragones Steven DiClemente	Robert Ebersberger Jonathon Ogle Director of Technology		John DiClemente Director of Administrative Services		
Senior Associates (Architects/ Engineers/Project Managers/ Designers)	Lee Mamola Director of Architecture John Ritchie	Simo Milosevic Nathanial Stalker Andrew Wieland	Thomas Reschke Paul Avolio Jonathon French	John Ritchie Andrew Wieland		Danny Lutes	Nick DiGesu
Designers/ CAD Operators/ Administrative Personnel	Andrea Zammitt Michelle Stock Dave Losinski Luke Finney	Zaklina Stojanov William Grayzar Justin Grzywacz Eric Johnston Robert Foxwell Travis Jones Minoo Inamdar Mohammad Emamdjomeh Samantha Mabbitt Britanny Watton	Sadegh Danesh Chuck Kosiak Huong Nguyen Sean O'Hare Kasey Freeman Demiz Moore Sam Parise Michael Pietrzak	Laura Rogers	**Human Resources/ Accounting** Barb Gaddes Nancy McArthur **Clerical** Jane Laurie Gina Matthews Sharon Yeager Ricardo Lawson	Robert Sopko Debbie Alex	Dave Perkins

ADA Facility Assessment & Remodeling

City of Southfield Simmons House Renovation (2010)
Mark Brandt – 248.796.4839

The Simmons home currently houses the City of Southfield Human Services Department. The previous use of the Simmons House was residential, so the purpose of the project was the bring the building up to commercial codes to reflect the new classification, while maintaining the historical integrity. This involved electrical ground feed to the building, barrier-free accessibility, and additional revisions throughout. In addition, DSD completed a renovation project for the Simmons House in 2009. The renovation included architectural and structural revisions to the building, as well as minor M & E upgrades.

Detroit Recreation Department Crowell Rec Center Renovation (2011)
Scott Brinkmann – 313.224.1109

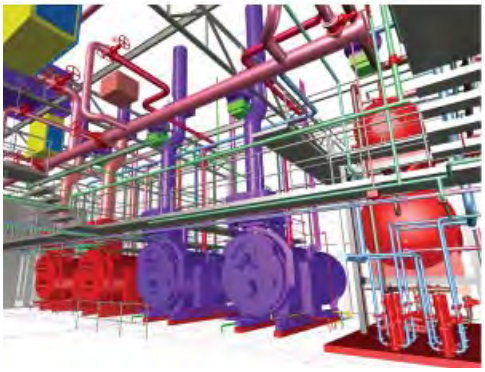
The DRD Howard Hardy Crowell Recreation Center is a 26,760 square foot single story structure constructed in 1974. DSD was commissioned to investigate and prepare an analysis report of the existing conditions of various aspects of the building. This included the review of conditions for deferred maintenance, barrier free access, operational condition, code compliance, and safety. In addition, DSD was asked to develop recommendations and suggestions for improvements and prioritize these improvements based on necessity. Following this phase of the project, a renovation design was completed, including barrier free compliance. Interior doors, many of which were inoperable, were replaced to meet barrier free and security requirements.

Wayne State University Manoogian Hall Upgrades (2008)
Jim Sears – 313.577.4301

Located on the Wayne State University campus, Manoogian Hall underwent an extended period of renovations that will add years of useful life to the nearly 30-year-old classroom facility. DiClemente Siegel Design (DSD) was commissioned to assess the building systems, master plan the upgrades and perform design services for the entire process. The renovations to this general classroom building with multiple large lecture halls were planned so that the facility could remain open throughout the renovation, while select areas were closed off for 8-10 weeks for demolition and completion of new work. Manoogian Hall renovations involve replacements and upgrades to the following infrastructure systems: architectural building envelope, mechanical systems, electrical and communications systems, elevators, fire protection and life safety, and Michigan Barrier Free compliance.

Boilers & Steam Systems

Wayne County Airport Authority North Powerhouse Upgrades (2012)
John Philbrook – 734.247.7146



The WCAA commissioned DSD to provide a full range of planning, engineering, construction phase services, and services related to the refurbishment/ replacement of steam plant equipment at Detroit Metropolitan Wayne County Airport. The boilers in the North Powerhouse Building 611 were beyond their useful life, oversized for existing and projected loads, unreliable, and inefficient. These boilers are being replaced with 4 fire tube steam boilers, each rated to deliver 16,726 lb/hr of steam at 125 psi. In order to provide continuous steam supply to meet the heating demand, this project is being implemented in 3 phases.

State of Michigan Caro Center Heating Decentralization (2011)
Dave Sproul – 517.373.8322

The site wide heating system at the Caro Center, a State of Michigan Department of Community Health Hospital, had deteriorated over the years and was in need of major upgrades and replacements. The State of Michigan commissioned DSD to provide study and design work for this project. The project included the decentralization of the central steam system. The entire campus was previously heated by a steam system supplied from the Central Power Plant, which is located on the very north end of the campus. The existing underground piping system routing to the south end of the campus was past its useful life and required constant costly and disruptive emergency repairs. After consideration and pricing several alternatives in a study phase, DSD moved forward with design of a new boiler plant dedicated to the south portion of the campus. The boilers were located in an existing storage building converted into a boiler room. Underground conduit piping was routed over a mile of underground piping in a loop configuration to serve 8 cottage buildings housing patients on the south campus. The piping had take offs to the building and changes in elevation in 5 steam vaults located across the campus. The project was completed and boilers and new underground piping was brought on line in the Fall of 2010.

Wayne State University Boiler Plant Implementation (2008)
Jim Sears – 313.577.4301

On April 20, 2005, Wayne State University (WSU) Board of Governors approved a plan to issue $46.2- million in bonds to pay for the design, permitting, and construction of multiple boiler plants to self-generate steam for the Detroit campus. The university commissioned DSD to provide professional services for this project. To implement the project, DSD designed a mix of individual and cluster steam plants to serve 51 campus buildings. The cluster steam plants serve three to five buildings each and consist of a boiler plant in similar configuration as the individual boiler plants. A grand total of 30 individual and cluster steam plants with 70 boilers were included in the project.

Building & Structure Additions

Johnson Controls Meadowbrook Li-Ion Battery Plant (2011)
Ken Layman – 517.769.2102

Johnson Controls, Inc. (JCI) was pursuing the lithium-ion battery manufacturing market that did not yet exist in the United States. By converting an existing Johnson Controls warehouse facility, JCI had the Holland, Michigan plant in operation before the end of 2010 assembling packs, with cell production following early in 2011. When operating to full capacity, the plant is projected to produce 15 million lithium-ion cells annually to power the company's global customers. This building was awarded a LEED Gold Certification through the U.S. Green Building Council's LEED rating system. Additions to the existing building include the formation process addition (30,000 SF) and a chiller/electrical addition (12,800 SF).

Armenian General Benevolent Union Manoogian School Addition (2010)
Hosep Torossian – 248.569.2988

The Armenian General Benevolent Union (A.G.B.U.) Manoogian School was established in 1969 by Alex and Marie Manoogian. DSD was contracted to build a high school addition north of the existing permanent school. This required moving the existing modular classroom facility to allow for the addition. This addition required site preparation to the east of the existing school media center in order to move the existing modular classroom facility to allow for the addition. Site preparation activities for moving the building include providing new foundations, sanitary, water, communication, alarm and electrical utilities and the extension and relocation of existing walkways. The 2-story addition includes an Auditorium/Multipurpose Room, Lobby, Computer Lab, 8 Classrooms, 2 Science Labs, Offices, Activities Room, and a Tutoring Room.

Wayne State University Boiler Plant Implementation (2008)
Jim Sears – 313.577.4301

In 2005, DSD completed an evaluation of all WSU campus buildings to determine the feasibility of self-generating steam on campus. The study was WSU's response to the sharp rise in the cost of purchasing steam from the local utility company. The study concluded that the best economic recourse for WSU in the long run, was to convert existing buildings to self-generating boiler plant facilities. To implement the project, DSD designed a mix of individual and cluster steam plants to serve 51 campus buildings. A grand total of 30 individual and cluster steam plants with 70 boilers were included in the project. Many of these steam plants required building additions to house the boilers and associated equipment. These additions were designed to fit in with the existing campus fabric and not to stand out as newer sections of the buildings.

Building Envelope Investigation, Repair, Upgrade

Wayne State University Manoogian Hall Renovation (2008)
James Sears – 313.577.4301

Located on the Wayne State University campus, Manoogian Hall underwent an extended period of building and HVAC renovations that will add years of useful life to the nearly 30-year-old classroom facility. DSD was commissioned to assess the building systems, master plan the upgrades and perform design services for the entire process. The renovations to this general classroom building with multiple large lecture halls were planned so that the facility could remain open throughout the renovation, while select areas were closed off for 8-10 weeks for demolition and completion of new work. Building envelope work includes window and windowsill replacement, soffit repair, support steel rust removal, and repair of exterior masonry wall cracks.

Johnson Controls Meadowbrook Li-Ion Battery Plant (2011)
Kenneth Layman – 517.769.2102

Johnson Controls, Inc. (JCI) was pursuing the lithium-ion battery manufacturing market that did not yet exist in the United States. By converting an existing Johnson Controls warehouse facility, JCI had the Holland, Michigan plant in operation before the end of 2010 assembling packs, with cell production following early in 2011. When operating to full capacity, the plant is projected to produce 15 million lithium-ion cells annually to power the company's global customers. The existing warehouse required envelope investigation and repairs in many circumstances. The existing glazing was replaced with more efficient glazing/sash, insulation was added to the exterior walls, as well as the addition of insulation to the truck dock enclosures created a better building envelope.

Detroit Recreation Department Northwest Activities Center (2007)
Scott Brinkmann – 313.224.1109

The Detroit Recreation Department (DRD) operates 30 athletic facilities located in neighborhoods throughout metro Detroit. The recreation centers vary in age, with the oldest having been built in the early 1900s. As part of a city-wide renewal, DRD is expanding its recreation programs by closing some centers and refurbishing others. As a part of the renewal, DRD has relocated their Administrative Offices (approximately 20,000 square feet) to the Northwest Activities Center. The 150,000 SF building built in 1956, was in a state of disrepair. DSD was commissioned to renovate the entire facility, including the building envelope which required a number of repairs throughout.

Correctional Facilities

Monroe County Jail Boiler Replacement (2010)
Michael Bosanac – 734.240.7267

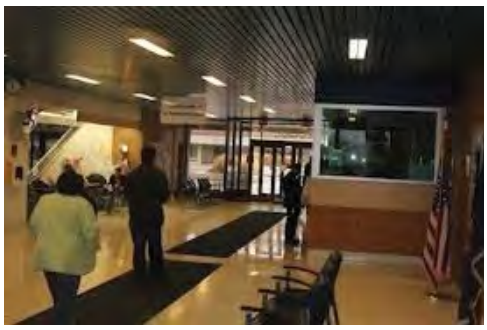
As part of the American Recovery and Reinvestment Act (ARRA), the County of Monroe received an allocation to fund several energy updates in the county as well as funding some additional energy audits. One of the first proposed projects to be funded under this program was the replacement of 1 of the 2 existing Bryan Flextube Hot Water Heating Boilers in the Sheriff's Building/Jail with 2 high efficiency condensing type boilers. These new boilers are vented independently horizontally across the mechanical room and exiting on the side wall of the building. The length of the existing breeching exceeds the length of the existing flue piping for high efficiency condensing boilers.

Township of West Bloomfield Police Department HVAC Upgrade (2012)
Terry Broemer – 248.681.7800

The Township of West Bloomfield Police Department Headquarters, which houses offices, dispatch, holding cells, vehicle maintenance, property/evidence storage and a gun range had mechanical equipment which had exceeded its useful life. DSD reviewed the existing mechanical equipment and provided an assessment and estimate for the required work scope which the Police Department then used to secure funding for the project. The scope of the project included: demolition and removal of the existing boiler; installation of a new high-efficiency hot water boiler with recirculation pumps, expansion tank air separator and associated insulated piping; demolition and removal of the existing roof top air conditioning unit serving the original police station building; installation of a new 60-ton roof top air conditioning unit (RTU-1) with variable frequency drives on supply and return fans; new DDC controls for the new RTU-1 unit, boiler, all existing VAV boxes, existing three (3) package HVAC units serving the addition to the police station and two (2) Liebert Computer Room units; replacement of pneumatic damper operator with electric on garage HV unit; and architectural and electrical adjustments necessary to allow above mechanical work to be completed.

City of Southfield Police Department Security Renovations (2013)
Fred Zorn – 248.796.5110

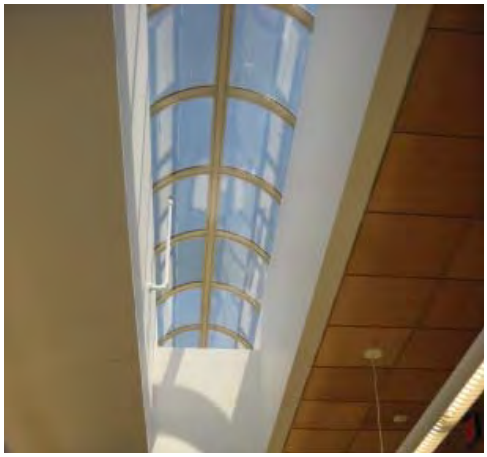
DSD is currently assembling construction documents for modifications to The City of Southfield Police Building Lobby and adjacent offices with the goal of improving security and providing a more secure environment that shields the officers and employees from harm. This renovation includes modifications to provide new level three ballistic materials as well as modifications to HVAC systems and lighting within the area of work. Some of the items to be addressed include: replacement of doors with solid ballistic doors; replacement of glass sidelites at doors with bullet resistant glazing; replacement of half height glass and front counter with full height bullet resistant transaction counter glazing, new solid surface countertops, barrier-free transaction counter and drawer and shelf above glazing for 10 smaller monitors; replacement of glass wall at escalator with gypsum wall covered in ballistic wall protection and built-in standing height counter with privacy dividers and electrical/data connections for future computer stations; and replacement of display case and door with new barrier-free bullet resistant cashier's style transaction counter with millwork below on secure side.



Door and Window Replacement

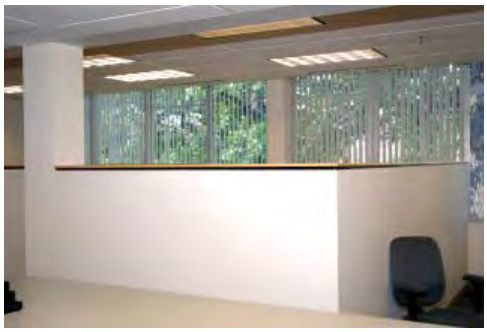
Detroit Recreation Department Crowell Rec Center Renovation (2011)
Scott Brinkmann – 313.224.1109

DSD was commissioned to investigate and prepare an analysis report of the existing conditions of various aspects of the building. In addition, DSD was asked to develop recommendations and suggestions for improvements and prioritize these improvements based on necessity. Following this phase of the project, a renovation design was completed. Interior doors, many of which were inoperable, were replaced to meet barrier free and security requirements.



Wayne State University Manoogian Hall Renovation (2008)
James Sears – 313.577.4301

Manoogian Hall renovations involve replacements and upgrades to the following infrastructure systems: architectural building envelope, mechanical systems, electrical and communications systems, elevators, fire protection and life safety, and Michigan Barrier Free compliance. Building envelope work included window and window sill replacement, soffit repair, support steel rust removal, and repair of exterior masonry wall cracks. Upgrades also included the overall aesthetics from the existing sterile finishes and overall feel, to a more colorful and vibrant aesthetic that enhances the overall learning environment and aids in recruitment and retention goals.



Johnson Controls Meadowbrook Lithium-Ion Battery Plant (2011)
Kenneth Layman – 517.769.2102

Johnson Controls, Inc. (JCI) was pursuing the lithium-ion battery manufacturing market that did not yet exist in the United States. By converting an existing Johnson Controls warehouse facility, JCI had the Holland, Michigan plant in operation before the end of 2010 assembling packs, with cell production following early in 2011. When operating to full capacity, the plant is projected to produce 15 million lithium-ion cells annually to power the company's global customers. This building was awarded a LEED Gold Certification through the U.S. Green Building Council's LEED rating system. Some of the sustainable features designed into the facility include the replacement of existing glazing with more efficient glazing/sash and the addition of a skylight to add daylighting to the lobby.

Fire & Security Alarm Systems

Veteran's Affairs Hospital Upgrades, Ann Arbor (2012)
Rod Ipakchian – 734.845.5125

The VA Medical Center in Ann Arbor required upgrades to the Information Technology Infrastructure for an estimated construction budget of $14.9 Million. The project team produced a schematic level submission with possible alternatives leading to the primary objective of the project being the upgrade of the I.T. Infrastructure. The project included all aspects of the design from structural, architectural, mechanical, electrical, fire protection, interior design, and all other aspects of the design to result in a complete and usable facility. The team placed special emphasis on LEED and Green facility design. Included in Master Plan B of this project was the design of the fire and security alarm systems and their integrations.

Detroit Recreation Department Northwest Activities Center (2007)
Scott Brinkmann – 313.224.1109

DSD designed a fully integrated card access/ security system and a separate video surveillance system for use in a newly renovated 150,000-SF facility. Proximity readers were used for access control in lieu of insertion type readers. The system included door monitoring for intrusion detection, security remote door release, and door magnetic locks for security and door monitoring purposes. Hardware and software for creation of proximity badges were integrated into the security control package.

Wayne State University Manoogian Hall Renovation (2008)
James Sears – 313.577.4301

This project was part of an extended multi-phase project DSD was completing with WSU to replace building systems that have failed, upgrade systems as needed to function properly, and add additional life safety measures to meet current codes, revitalize the furnishings, and technology to accommodate the University's instructional requirements for the next 30 years in this building. DSD initially completed a complete infrastructure assessment of this 5-story, 157,000 SF brick structure in 1999. The resulting report provided a road map for phased upgrades. The 1st phase involved replacement of building chillers and the fire pump. Phase II involved replacement of all building air handlers. With the major mechanical equipment upgraded, the phasing then moved to renovation of the first floor in Phase III. The project included the following in relation to fire and security alarm systems: fire alarm system backbone for the entire building, with new devices integrated into the 1st floor renovation, new fire suppression system, new voice/data communication cabling and provisions for new instruction technology within all classrooms.

General Architecture and/or Engineering Design

Detroit Public Schools Henry Ford High School (2011)
Michelangelo Cereghino – 313.340.1688

Henry Ford High School received a $17 M overhaul, including a complete interior makeover to create classrooms suited for 21st century learning in the existing building, as well as an expansion of the existing student dining area and the addition of two sustainable technology labs. The electrical, mechanical and plumbing systems were upgraded and improvements to the technology systems were implemented. An exterior courtyard was created to support green and renewable energy initiatives at the school. Security needs were also addressed though the renovation.

Oakland County Community Mental Health Authority Conversion of Medical Care Facility into Mental Health Facility (2013)
Paul Hunter – 313.858.0131

Oakland County Community Mental Health Authority (OCCMHA) commissioned DSD to renovate the existing 48,000 square foot Medical Care Facility located in Pontiac, Michigan to provide an all services under one roof mental health facility for their patients. DSD met with the Medical Care Facility's future users, the directors of the OCCMHA, and Oakland County's staff to develop the new program and related floor plan for the facility. The result is a $14 million dollar renovation that will provide mental health care in a facility that has all the necessary amenities under one roof. DSD focused on patient comfort and staff efficiency for all design aspects of the project. Sustainable design was also a goal for the project. This includes new windows, wall insulation, energy efficient mechanical and electrical systems, and sustainable site design.

Armenian General Benevolent Union Manoogian School Addition (2010)
Hosep Torossian – 248.569.2988

The Armenian General Benevolent Union (A.G.B.U.) Manoogian School was established in 1969 by Alex and Marie Manoogian. DSD was contracted to build a high school addition north of the existing permanent school. This required moving the existing modular classroom facility to allow for the addition. This addition required site preparation to the east of the existing school media center in order to move the existing modular classroom facility to allow for the addition. Site preparation activities for moving the building include providing new foundations, sanitary, water, communication, alarm and electrical utilities and the extension and relocation of existing walkways. The 2-story addition includes an Auditorium/Multipurpose Room, Lobby, Computer Lab, 8 Classrooms, 2 Science Labs, Offices, Activities Room, and a Tutoring Room. The addition will provide the owner and user a number of sustainable features that will not only save the owner on operation costs, but reduce the carbon footprint of the building itself. DSD implemented sustainable design features into all disciplines; architectural, mechanical/ plumbing, and electrical.

HVAC Equipment Replacement, Upgrade, Selection

Detroit Recreation Department Northwest Activities Center (2007)
Scott Brinkmann – 313.224.1109

The Detroit Recreation Department (DRD) operates 30 athletic facilities located in neighborhoods throughout metro Detroit. The recreation centers vary in age, with the oldest having been built in the early 1900s. As part of a city-wide renewal, DRD is expanding its recreation programs by closing some centers and refurbishing others. As a part of the renewal, DRD has relocated their Administrative Offices (approximately 20,000 square feet) to the Northwest Activities Center. The 150,000 SF building built in 1956, was in a state of disrepair having had the majority of its mechanical and electrical equipment exceed its useful life. DSD was commissioned, in spring 2006, to design the building's complete renovations. This project included major renovations to the mechanical and electrical systems of the building.

West Bloomfield Township Town Hall Upgrades (2010)
Marshall Labadie – 248.451.4818

West Bloomfield Township (WBT) was awarded a grant under the EECBG portion of the American Recovery and Reinvestment Act (ARRA). WBT allocated funding from this grant for various energy efficiency and weatherization measures at 7 township owned facilities. The following is a listing of the HVAC upgrades designed for the Town Hall Building: building evaluation and recommendation of energy reduction measures along with associated probable construction costs, replacement of a Bryan Flextube boiler, replacement of 4 A/C units, replacement of gas fired unit heater with radiant tube heaters, replacement of pneumatic controls with DDC controls, and the replacement of a Liebert unit in the Computer Room/Data Center with 2 units. The replacement was designed so that the Computer Room/Data Center remained in service throughout implementation.

Michigan State University Library Chiller Replacement (2012)
Jacob Sabins – 517.355.6493

Michigan State University commissioned DSD to conduct a study and ultimately to replace the chillers and associated equipment in the main Library. To accommodate such a project, new wall openings into the chiller room for equipment entry were provided and restored after the equipment was installed. New roof structural steel was also necessary for the equipment entry and installation. The existing 500 kVa substation was replaced with a new 1500 kVa double-ended substation. The system was designed to allow for minimal down time of the building electrical power. A new sub-grade substation room was constructed to accommodate the new substation including area ways to allow for room ventilation.

HVAC Controls Replacement, Upgrade, Selection

Detroit Public Schools Henry Ford High School (2011)
Michelangelo Cereghino – 313.340.1688

Henry Ford High School received a $17 M overhaul, including a complete interior makeover to create classrooms suited for 21st century learning in the existing building, as well as an expansion of the existing student dining area and the addition of two sustainable technology labs. The electrical, mechanical and plumbing systems were upgraded and improvements to the technology systems were implemented. Included in the HVAC upgrades were DDC controls for each area of the school.

Wayne State University Manoogian Hall Renovation (2008)
James Sears – 313.577.4301

Located on the Wayne State University campus, Manoogian Hall underwent an extended period of building and HVAC renovations that will add years of useful life to the nearly 30-year-old classroom facility. DSD was commissioned to assess the building systems, master plan the upgrades and perform design services for the entire process. Highlights of the mechanical and electrical upgrades include: ventilation system improvements through variable volume terminal boxes and fans with variable frequency drive, replacement of hot water reheat system and coils and pre-heat steam coils, two new 300-ton electric centrifugal chillers and new chilled water coils, steam piping replacement, lighting replacements and design of the data communications infrastructure. This also included distribution of air from new mechanical units through new ductwork to classrooms and offices with a VAV system controlled through occupancy sensors for energy optimization.

Oakland County Parks Energy Management System Upgrade (2012)
Robert Lissner, Jr. – 248.343.6218

The Oakland County Parks are currently all controlled by a Honeywell XCEL Energy Management System (EMS) and are connected to the Pontiac central location through telephone lines. There are thirteen (13) sites (one (1) being added currently) that have these control systems. The points include thermostat loops, alarms, start-stop of equipment and status of equipment and spaces. It is proposed that the existing EMS be upgraded for web based access as the Base Project. In addition, OCP deployed Energy Management Procedures as of October 5, 2009 for the Parks and Recreation Department that state: “Facility Management will monitor energy usage in all buildings and facilities”. To comply with this requirement, Oakland County Parks is proposing as an add alternate to the base project the remote monitoring of utility meters. The meters at each site will be either upgraded or replaced to accomplish this. DSD developed the concept and costs for implementation of the aforementioned EMS upgrade and there is funding allocated in this year’s budget for implementation.

Interior Remodeling & Renovation

University of Michigan Law Library Jackier Rare Book Room (1996)
Dave Stockson – 734.764.3414

The Jackier Rare Book Room at the University of Michigan is devoted to creating a visible monument representing the University of Michigan Law School's place in the history of American law. Monumentality and delicacy was the client's consideration for designing the setting for the rare book treasures. The ambience of the Rare Book Room, multidimensional in height, wrapped in custom-designed oak millwork and bathed in specially controlled incandescent ambient and task lighting, is climatically enhanced with filtered tempered air and humidity to preserve the collection. This overtly celebrates the book, what it represents and preserves the authenticity of the original work. The University of Michigan Law School's long institutional life and natural prominence has made this library, designed by DSD, a repository for rare and unique books. The student and researcher exhibit room conveys an atmosphere of quiet traditions. With oak paneled walls, shelving and furniture, all custom designed to convey the unique quality of the nationally recognized underground designed law library. The room is fully carpeted and with a high ceiling, it creates an acoustically dampened environment conducive to intensive research. Both the Rare Book Room and Collection Storage contain lighting with special UV filters to shield the rare books from the harmful effects of ultraviolet light.

Detroit Recreation Department Crowell Rec Center Renovation (2011)
Scott Brinkmann – 313.224.1109

DSD was commissioned to investigate and prepare an analysis report of the Howard Hardy Crowell Recreation Center in Detroit. This included the review of conditions for deferred maintenance barrier free access, operational condition, code compliance, and safety. In addition, DSD was asked to develop recommendations and suggestions for improvements and prioritize these improvements base on necessity. Following this phase of the project, a full interior renovation design was completed. Renovations to the locker and toilet rooms included architectural changes. The ceiling and lighting systems throughout the facility were redesigned and replaced entirely. All spaces with the exception of the main gym were refinished with a new flooring and pain. Interior doors were replaced as well.

Detroit Public Schools Henry Ford High School (2011)
Michelangelo Cereghino – 313.340.1688

Henry Ford High School received a $17 M overhaul, including a complete interior makeover to create classrooms suited for 21st century learning in the existing building, as well as an expansion of the existing student dining area and the addition of two sustainable technology labs. The school, with about 1,500 students, was separated into a 9th Grade Leadership Academy, an Academy for Green and Renewable Energy and an Academy of Business and Technology. Each academy has its own floor or wing.

Laboratory Facilities

Ferris State Michigan College of Optometry (2011)
Mike Hughes – 231.591.2924

The Ferris State Optometry program was located in a renovated dormitory intended only to be a temporary location – for more than 30 years. With the complexities of new technology and the changes in patient care delivery, a new facility became necessary. The new 3-story building has a Community Eye Center/Clinic, classrooms, a library, administrative & faculty offices, a clinical procedures lab, other labs, & a student lounge.

Genesys Regional Medical Center Pharmacy Clean Room (2007)
Rod Jones – 810.606.5277

The Genesys Medical Center Pharmacy Preparation and Compounding Area was renovated to provide a Class 10,000 Clean Room space of approximately 800 square feet. The clean room requirement was a regulation modification that was being enforced for the preparation of open drugs and materials. The room temperature desired was in the 60 degrees F to 65 degrees F range with a relative humidity in the 30% range year-round. The HVAC system was comprised of an outdoor air-handling unit served by a packaged air-cooled process chiller. The system was also provided with humidification, electric reheat, and DDC controls with a special dehumidification cycle incorporated. Ventilation was provided from the existing building system. Renovation of the space was completed and the Pharmacy has been in compliance since.

University of Michigan Hospitals Centralized Instrument Processing Expansion (2011)
Bob Harris – 734.763.9811

DSD was commissioning by UMH for the multi-phased renovation of 14,000-SF and the expansion of the Central Sterile Processing Department located on level 2B of University Hospital on the University of Michigan Health Systems Campus. The project included the relocation of the bulk of Instrument Processing from the Surgical Department on level 1. The unique MEP project approach to this multi-phased project has been the key to the successful completion of this project. In the preliminary design phase, the MEP team executed an in-depth evaluation of the existing building service capacities, followed by completing the final design phase without retrofitting the main systems. The project team then deconstructed the final phase in order to create the MEP drawings at each phase. Area pressurization maps were also provided at each phase, in order to monitor and maintain the necessary pressure relationships required by codes, and allowing the facility to be partially operated continuously during construction.

Maintenance & Facility Preservation

St. Hugo of the Hills Stone Chapel (2000)
Monsignor Anthony Tocco – 248.642.8331

St. Hugo of the Hills Stone Chapel was designed in 1929 and built between 1931 and 1936. During the past 70 years, little upgrading and maintenance had occurred. The structural, waterproofing, mechanical and electrical systems were failing, resulting in architectural damage throughout. DSD was contract for a full renovation program requiring interior and exterior restoration as well as code conformance upgrades. The perimeter drives and parking were redesigned and re-built; the entire mechanical and electrical system, including utility company services were replaced; air conditioning was added; the nave floor, roof, ceiling, sacristies, and priests vesting areas were all redesigned and replaced; and the lower level crypt and chapel were restored.

Wayne State University Manoogian Hall Renovation (2008)
James Sears – 313.577.4301

Located on the Wayne State University campus, Manoogian Hall underwent an extended period of building and HVAC renovations that will add years of useful life to the nearly 30-year-old classroom facility. DSD was commissioned to assess the building systems, master plan the upgrades and perform design services for the entire process. The renovations to this general classroom building with multiple large lecture halls were planned so that the facility could remain open throughout the renovation, while select areas were closed off for 8-10 weeks for demolition and completion of new work. The first phase of the project resulted in an assessment which culminated in a report identifying building systems that had failed and required correction, systems that needed improvements to function properly and/or satisfy current building codes, and mechanical, electrical and accompanying architectural modifications necessary to accommodate the University's instructional requirements for the next 30 years.

Detroit Recreation Department Northwest Activities Center (2007)
Scott Brinkmann – 313.224.1109

The Detroit Recreation Department (DRD) operates 30 athletic facilities located in neighborhoods throughout metro Detroit. The recreation centers vary in age, with the oldest having been built in the early 1900s. As part of a city-wide renewal, DRD is expanding its recreation programs by closing some centers and refurbishing others. As a part of the renewal, DRD has relocated their Administrative Offices (approximately 20,000 square feet) to the Northwest Activities Center. The 150,000 SF building built in 1956, was in a state of disrepair having had the majority of its mechanical and electrical equipment exceed its useful life. DSD was commissioned, in spring 2006, to design the building's complete renovations including the replacement of the mechanical and electrical infrastructure to preserve the facility for many more years.

Roof Repair, Restoration, and/or Replacement Design

Greektown Casino Roof Replacement (2011)
Mr. Cleveland M. Simmons – 313.223.2964

DSD provided architectural and engineering services for Greektown Casino in Detroit, Michigan to replace portions of the roofing and the waterproofing protection of the parapet walls in the northeast quadrant of the casino along Monroe Street. This portion of the roof, located over the historic Trapper's Alley structure in the Casino, is divided by a parapet wall into sections which the Owner completed in successive phases. The roof had multiple structural, HVAC equipment, and vent penetrations and DSD worked closely with the roofing manufacturer to get specific details finalized prior to the issuance of bid documents. Some structures and equipment were no longer functional and DSD identified with the Owner which could be removed. DSD design services also included review and confirmation of the roof drainage system design to confirm compliance with the 2006 Michigan Building Code. In addition, an alternate for removing the former elevator machine room and repairing the roof was integrated into the project.

Building Audit including Complete Roof Assessment (2011)
Mr. Kurt Van De Wiele – 313.833.7871

The Detroit Institute of Arts was seeking a comprehensive building audit, including a complete review of interior and exterior building systems including: roof assessment, external finishes, sealants, doors and windows, corrosion control, water infiltration, air infiltration, all structural systems, all mechanical systems – including attached storm and sanitary systems exiting the building, all electrical systems, hazardous materials assessment, and life safety systems. The purpose of the audit was to thoroughly assess the existing physical condition and performance of the building and supporting systems leading to prioritized recommendations of system maintenance and or replacement based on systems' ability to provide optimal service levels, overall importance to support life safety and art protection, projected lifespan, and required repair sequencing. These recommendations being used to address major and minor, urgent and long-term requirements for corrective action, for short and long-term financial planning and to define regular maintenance requirements (corrective and preventive).

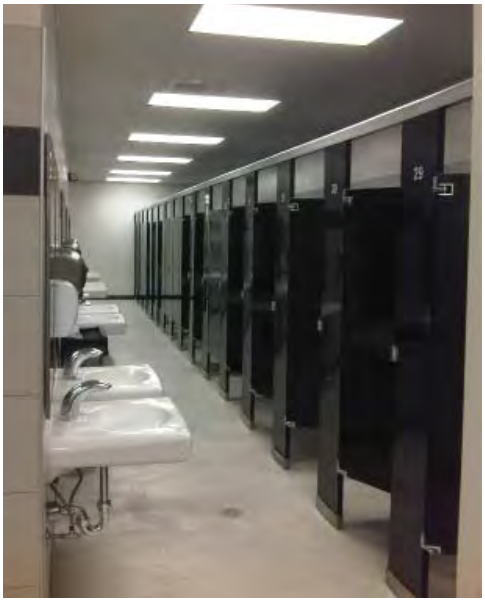
Oakland County Community Mental Health Authority Conversion of Medical Care Facility into Mental Health Facility (2013)
Paul Hunter – 313.858.0131

Oakland County Community Mental Health Authority (OCCMHA) commissioned DSD to renovate the existing 48,000 square foot Medical Care Facility located in Pontiac, Michigan to provide an all services under one roof mental health facility for their patients. DSD met with the Medical Care Facility's future users, the directors of the OCCMHA, and Oakland County's staff to develop the new program and related floor plan for the facility. The result is a $14 million dollar renovation that will provide mental health care in a facility that has all the necessary amenities under one roof. Roof and window evaluations and replacement along with verification of the condition of the existing roof were items addressed by DSD for this conversion.

Toilet and/or Shower Room Remodeling or Design

Joe Louis Arena Mezzanine Level Toilet Room Renovations (2012)
James Lavallee – 313.471.6543

Ilitch Holdings, Inc. commissioned DSD to renovate the Concourse Level of the Joe Louis Arena to provide ADA compliant facilities and to add mezzanine level toilet rooms to the arena. The renovation work included the following: an addition of the Mezzanine Level new Linear Toilet Facilities, the upgrades to the Concourse Level existing Toilet Facilities to ADA compliance, AME services to reflect the new Concourse Level Food Courts, upgrades to the sewage ejector, and upgrades to the domestic booster pump systems for improved suite level water pressure.



Detroit Recreation Department Crowell Rec Center Renovation (2011)
Scott Brinkmann – 313.224.1109

DSD was commissioned to investigate and prepare an analysis report of the existing conditions of various aspects of the building. This included the review of conditions for deferred maintenance, barrier free access, operational condition, code compliance, and safety. In addition, DSD was asked to develop recommendations and suggestions for improvements and prioritize these improvements based on necessity. Following this phase of the project, a renovation design was completed. Renovations to the locker and toilet rooms included major plumbing work as well as architectural changes to meet codes and barrier free compliance.

Detroit Recreation Department Northwest Activities Center (2007)
Scott Brinkmann – 313.224.1109

The Detroit Recreation Department (DRD) operates 30 athletic facilities located in neighborhoods throughout metro Detroit. The recreation centers vary in age, with the oldest having been built in the early 1900s. As part of a city-wide renewal, DRD is expanding its recreation programs by closing some centers and refurbishing others. As a part of the renewal, DRD has relocated their Administrative Offices (approximately 20,000 square feet) to the Northwest Activities Center. The 150,000 SF building built in 1956, was in a state of disrepair having had the majority of its mechanical and electrical equipment exceed its useful life. DSD was commissioned, in spring 2006, to design the building's complete renovations including the replacement of the mechanical and electrical infrastructure. This included a complete renovation of the building's locker rooms, restrooms, and toilet systems.

☐ Western Lower Peninsula (west of 127, north of Muskegon, south of Grayling)
☒ Central Lower Peninsula (east of Battle Creek, west of Chelsea, south of M 46 and M 57)
☐ Southwestern Lower Peninsula (west of Battle Creek, south of Muskegon)
☒ Southeastern Lower Peninsula (east of Chelsea, south of I-69)

ARTICLE 4: CONTRACT UNDERSTANDING: The following items should be addressed on the assumption that your firm is awarded an Indefinite-Scope, Indefinite-Delivery contract. (See attached sample contract).

4.1 Is it understood that your firm is required to respond to small projects (less than $25,000) as well as large projects?
Yes ☒ No ☐

4.2 Is it understood that there is no guarantee of any work under this contract?
Yes ☒ No ☐

4.3 Is it understood that your firm will be required to execute the attached standard State of Michigan contract language for professional services?
Yes ☒ No ☐

4.4 Is it clearly understood that professional liability insurance is required at the time of execution of the ISID contract? (See Article 5 of the attached Sample Contract.)
Yes ☒ No ☐

4.5 Is it understood that your firm must comply with State of Michigan law as it applies to your services?
Yes ☒ No ☐

4.6 It is understood that your firm must obtain a State of Michigan, Department of Civil Rights Certificate of Awardability (see RFP for information regarding the Certificate of Awardability)? If your firm currently has a Certificate of Awardability, provide its expiration date. Our understanding is that Certificate of Award is obtained per project and thus do not have an experation date as per previous.
Yes ☒ No ☐

ARTICLE 5: CAPACITY AND QUALITY

5.1 Briefly describe your firm's methods and procedures for quality control for your deliverables and services. Quality control is the process of verfying the professional services required against accepted standards of professional care. Every member of the firm is trained to understand that quality services are about preventing errors from occurring, not about correcting them. In addition to instilling this attitude, principals of the firm are responsible for periodic coordination and completeness checks of all instruments of service. Prior to issuing contract documents for construction, the construction phase service representative assigned to the project conducts an additional, independent coordination and completeness check. The quality of professional services provided can be measured by range of competitive bids received, by the cost of correcting errors and omissions compared to total construction cost and, most importantly, by satisfied clients.

DSD has been ISO 9001 certified for over 13 years. ISO 9001 is an internationally recognized standard of quality for design firms and DSD has embraced its use in our daily operations. Companies awarded ISO 9001 have passed a rigorous training and auditing process, which includes twice-a-year, 2 day external

audits. DSD clients can expect consistency, a disciplined approach and clarity of roles and responsibilities as a result of well defined procedures and work instructions. This is especially important on a project which includes partners sharing disciplinary work. DSD uses its quality management system and its quality design procedures to meet client's budget, schedule and to deliver exceptional service, time after time.

5.2 Has your firm been involved in claims or suits associated with professional services errors and/or omissions?
Yes ☒ No ☐

If yes, explain: St. Hugo - Carillon Tower: In this lawsuit, the stone mason had a claim for $600,000+/- on his original $400,000+/- construction project. The stone contractor sued Barton Malow who then added the Archdiocese of Detroit who then added DSD to the list of defendants. DSD then added the structural engineer as well. In mediation, the suit was settled as follows: Barton Malow - $375,000.00, DSD - $25,000.00, Robert Darvas (Structural Engineer) - $65,000.00.

GM Spray Booths 42 & 43: DSD shared in the cost of modifications of the air houses due to changing operation to 100% outdoor air from a recirculation system.

5.3 Will there be a key person who is assigned to a project for its duration?
Yes ☒ No ☐ See project team chart.

5.4 Please present your understanding of the relationship between your firm, the DTMB Design and Construction Division, and the State Agency for whom a project will be completed.
Our understanding, based on past projects, is that the State DTMB holds the Professional's contract and provides the direction on the project. The DTMB Design and Construction Division works for the State Agency as an internal client. While DSD as the professional listens closely to the State Agency and seeks to understand their requirements for the project, the final direction will come from the DTMB Design and Construction Division. It is important that the Professional, DTMB Design and Construction Division and State Agency work closely as a team and have a common understanding of project goals and key success factors. From the beginning of the project, a clear understanding of roles, lines of communication and approval chains must be set so that the Professional does not change direction or perform an additional service without written direction and approval from the DTMB design and Construction Division. On the Caro Center project, the roles were discussed up front at the Kick-Off meeting for the project and lines of communication were established that did not limit interactions between all parties but made clear what the chain of command was for the project. By arranging this early in the project in a non-confrontational way, common expectations are established early on and set the foundation for a successful project relationship between these three parties.

5.5 Describe your approach if a bidder proposes a substitution of a specified material during bidding.
During the design phase DSD works closely with the Owner to review the specified products/equipment and approved manufacturers included in the drawings and specifications. When these drawings and specifications are released for bids, prospective bidders have the opportunity to propose substitutions and alternate manufacturers as part of their bid. The bidding phase before the bids are due is the acceptable time when the contractor has opportunity to submit these substitution requests. The bidders have different reasons for submitting these substitution requests and it is important that these submittals are reviewed in detail by DSD on the Owner's behalf. When DSD evaluates these requests, we look closely at the substitution to confirm that it provides equal or better quality and value to the Owner when compared to the products and specifications included in the base bid documents. If the product does not measure up

in this regard, then DSD's evaluation ends and the substitution request is denied as the substitution will not provide the Owner with the desired result. If the substitution request is equal in quality, maintainability, etc., DSD will then review the substitution request with the Owner before making a final decision as sometimes a product meets the specification but the Owner may not want that particular manufacturer or product because it is not compatible with existing products and systems at their facility. If the substitution request is found to be equal to base specification and is acceptable to the Owner, we also review the dimensions and electrical characteristics to confirm that the proposed substitution will not create coordination issues during construction. If the substitution passes all of these evaluation points, then approval is provided for the bidder to proceed with the substitution in the form of a formal addendum within seven (7) days of bids. It is important through this evaluation that the Owner's best interests are kept in mind and only substitutions that will meet or exceed the base specifications and provide superior price advantages are approved.

5.6 Describe your approach if a contractor proposes a substitution of a specified material or detail with shop drawing submittals or in construction.

DSD does not approve substitutions during the review of shop drawings or in the construction phase. During the design phase of the project, specific products, equipment, etc. is specified based on a number of factors including reliability, cost, owner preference, performance and other factors depending on the client and their project. When a substitution is proposed in the construction phase of the project, it is typically proposed because the contractor is seeking to save money and is not usually proposed in the best interests of the Owner. The contractor had ample opportunity prior to this time to suggest other acceptable products. So while these substitutions requests would be considered, they would only be examined in detail if we are able to see a significant benefit and value to the Owner in making the change. If it appears to benefit the Owner, then we would review the substitution request in more detail to confirm that it will be equal or superior in performance and reliability to the product specified. In addition, we also ask the contractor to confirm the proposed pricing change (add or deduct) prior to approving a substitution request at this phase of the project.

5.7 How will your firm provide consistent and continuous communication pertaining to project activities and project status to the State of Michigan during the progress of projects?

Our approach to communication is to establish a level of trust and rapport where we can immediately surface any issues and get them resolved as early in the process as possible. DSD follows our ISO 9001:2008 communication and problem solving processes that have been utilized and proven on a wide range of projects. Some of the core communication and problem solving principles we employ when an issue arises include:

- Listen and understand the problem
- Define the problem – not just the symptoms
- Identify all the alternatives
- Don’t assess blame
- Select the best alternative based on the information available
- Take positive, authoritative action
- Assess the results

ISO 9001 is an internationally recognized standard of quality for design firms and DSD has embraced its use in our daily operations. Companies awarded ISO 9001 have passed a rigorous training and auditing process. DSD clients can expect consistency, a disciplined approach and clarity of roles and responsibilities as a result of well defined procedures and work instructions. This is especially important on a project

which includes partners sharing disciplinary work. DSD uses its quality management system and its quality design procedures to meet client's budget, schedule and to deliver exceptional service, time after time.

The following are only a few examples of the tools used in DSD's processes to assure that project control and quality objectives are met on all projects. These tools include:

1. Status Reports – every project in our office is reviewed every Monday morning at 9:30 am. The project completion status is reported and documented in the status report and senior level team members offer support to resolve any issues hindering project progress.
2. Construction Reports – project in construction are also reviewed bi-weekly.
3. Intra-Office Team Meeting – DSD has a standard agenda for in-house kick-off meetings that prompts discussion and action on key elements that will determine the overall success of the project.
4. Meeting Attendance – Accurate recordings of meeting attendees.
5. Meeting Agenda – Standard agenda format for client kick-offand ongoing meetings that capture important aspects which must be reviewed and confirmed at the outset of the project.
6. Report of Contact – Written documentation of out of office or telephone/conference communications.
7. Project Plan Checklist – Architectural, Mechanical & Electrical – All projects are checked by a senior discipline leader prior to leaving the office of DSD and these checklists are completed for each discipline by the independent person performing the check.
8. Shop Drawing Responsibility – Form to communicate to our shop drawing clerk the person(s) responsible in each discipline for shop drawing reviews.
9. Shop Drawing Routing Slip – In-office transmittal document.
10. Shop Drawing Status Report – Tracks the time duration for all active shop drawings to confirm that they are returned within DSD's 10 business day turn around commitment.
11. Field Observations – Construction observation and status reports.
12. Punch List – Standard punch list format.

5.8 Does your company have an FTP or similar site for quick posting and distribution of information, drawings, field inspection reports, and other communications?
Yes ☒ No ☐

5.9 Describe your method of estimating construction costs and demonstrate the validity of that method.
DSD has an outstanding track record regarding designs within budget. DSD will monitor estimated construction costs (including contingencies) throughout the course of design to ensure that available funding is not exceeded. DSD utilizies a standard spreadsheet for cost estimating. The spreadsheet is filled in specifically for the project and includes CSI categories and formatting to ensure completeness of all probable construction cost estimates. DSD is extremely cost conscience and treats the client's budget as its own. Some Examples include:

Detroit Recreation Department Northwest Activities Center
Initial Estimate: $14.9 Million
Successful Bid Amount: $14.0 Million

University of Michigan Hatcher Chiller Plant
Initial Estimate: $3.7 Million
Successful Bid Amount: $3.3 Million

Wayne State University Boiler Plant Implementation
Initial Estimate: $39.4 Million
Successful Bid Amount: $36.5 Million *
* Note: This number is less than the stated $45.0 million project cost due to boiler pre-purchase and cost of natural gas line paid direct to DTE Energy (MichCon) but conceptually determined by DSD.

5.10 Describe your approach to minimizing construction cost over-runs.
DSD understands that our projects must be delivered on budget and on time and once a project budget is established, DSD uses proven methods to monitor and control the budget.

1. On-Going Review & Scrutiny: DSD, well known for attention to detail and considers the client's budget to be our budget. Every week during in-house project meetings, the project team, including the DSD Principal-in-Charge, scrutinizes project budgets and value engineering opportunities. Should project costs start to move in unexpected directions, "alarms sound" and corrective actions are taken in the earliest stages.
2. Aligning the Budget and the Program: All of DSD's State of Michigan Department of Management and Budget projects are designed to a budget and the project cannot proceed to the next phase of design without confirmation that the Budget and Program are aligned. By aligning the budget and program early in the project, it has allowed us to make design changes and provide value engineering early while they are relatively easy to implement on the project.
3. Value Engineering: Value Engineering provides information on cost-saving opportunities. It looks for ways to achieve cost savings without affecting the project size and program. In cases where estimates exceed the budget, value engineering provides an avenue for finding cost-reduction opportunities. DSD's philosophy on the concept of "value engineering" is to perform it concurrent with the design process as opposed to removing desired items from the design or program at the end when it is "discovered" that the project is over the budget. The proper project approach is captured in the initial design and bid document phases through close monitoring of the scope and budget. Through teamwork and accountability in this area, a more successful project is realized. Without this approach, the client loses valuable elements or with an uncoordinated building and ultimately often regrets the process. Where conditions in the market change or the client's budget is altered, DSD approaches value engineering by helping the client truly understand the "real value" of each component. Where necessary, this results in a more satisfied client who is not surprised by the final product.

5.11 What percentage of construction cost should be devoted to construction administration (office and field)?
20%

5.12 What portion of the assigned work will be performed with your staff and what portion will be provided by sub-consultants?
Depends upon content of project. See project team chart for sub-consultants on the team.

5.13 On a typical project, what would be your response time, from the time receive a project assignment to starting investigation and design work? A typical project might be one involving several disciplines and in the neighborhood of a $25,000 fee.)
7 days (Our standard turnaround time is 7 days, but that can and has been reduced depending upon urgency.)

5.14 How do you assess whether a construction bidder is responsive and responsible?
A bidder is responsive and responsible when they have submitted all requested bid documentation within the bid form/project manual including but not limited to:

- Firm information, identification numbers, etc.
- Base bid amount and any alternate bid amounts requested
- Appropriate signature and notary
- Bid Bond
- Performance Bond/Payment Bond
- Schedule of change order prices and/or allowances, if requested
- Proposed schedule, if requested
- Proposed subcontractors, if requested
- Certificate of Insurance
- Similar project references, if requested
- Assurance of receipt of all addenda released during the bid period
- State of Michigan Certification forms (Certificate of Michigan Based Business, Preference Certification, Certificate Regarding Debarment, Suspension and other Responsibility Matters, etc.)

If the bidder submits all of the requested information, it must also be confirmed that a representative was present at the Mandatory Pre Bid Walkthrough/Meeting so that they are fully familiar with the project. A final confirmation is a Post Bid Review meeting so that the State of Michigan and the design professional can review the scope of the project with the bidder and confirm through question and answers that the bidder is fully familiar with the contract documents and is confident in the pricing they provided to complete the project.

5.15 Describe your firm's understanding of Sustainable Design and LEED Certification.
DSD is a member of the U.S. Green Building Council and works diligently to promote buildings that are environmentally responsible, healthy places to occupy. DSD is pleased to have 35% of our professional staff as LEED accredited. These accredited staff range in our company from up-and-coming intern level engineers and architects to the President & CEO. Passing the LEED AP exam demonstrates a knowledge and understanding of green building practices and principles, a familiarity with LEED requirements, resources and processes.

The LEED AP title indicates an experienced building industry practitioner who has demonstrated knowledge of integrated design and the capacity to facilitate the LEED certification process on the LEED Professional Accreditation exam. The exam tests an individual's understanding of green building practices and principles, and familiarity with LEED requirements, resources, and processes. For team members who do not have their LEED accreditation, DSD has an internal training program in sustainability and LEED design to increase the teams level of expertise and give everyone an opportunity to become a LEED AP.

DSD has been able to demonstrate our LEED knowledge and skill on a number of LEED Certified projects ranging from certified to platinum. This list includes the Johnson Controls Lithium-Ion Battery Plant in

Holland, MI (Gold), the Wayne County Community College District Northwest Campus Building (Seeking Platinum), the Ferris State University Michigan College of Optometry (Gold), the Flint IRS Building (Silver), and many more.

One of the major reasons DSD has been successful in the implementation of sustainability is that our philosophy is not simply to "apply LEED techniques when the client intends to pursue LEED certification". Instead, appropriate sustainable design is a part of every project DSD is involved with. A good example of this is the recently completed Manoogian High School addition. For this project, the Owner did not request any sustainable features, but DSD offered the owner the option of including a number of sustainable features that will save on operation costs and reduce the carbon footprint of the building.

Another key aspect of successful LEED projects is to establish the desired LEED level and then track the status at each step along the design path, similar to the way we establish a scope and budget. On LEED projects, DSD sets a target with the Owner and completes a LEED scorecard that becomes a reference for all team members to track and confirm all LEED target points. This process also ensures that these points have been incorporated into the project budget. This method of planning and communication works well on projects designed through the State of Michigan Department of Technology, Management and Budget (DTMB) for the State's higher education campuses. On these projects the DTMB requires a confirmation at each stage in the design process that the project scope, budget and LEED certification level are all in alignment.

DSD seeks to give Owners all the facts – not only the first cost, but also the maintenance implications, anticipated life of various equipment alternatives, and annual operating costs so that the Owner can make a good business decision based on the lifecycle cost and not just the lowest installation cost.

5.16 Describe your experience with similar open-ended contracts.

DSD has been involved in eighteen (18) open-ended/blanket contracts with requirements similar to those requested in the Minor Capital Outlay Project – 2013 Indefinite Scope Indefinite Delivery RFP. We are able to be responsiveness on smaller projects with compressed timeframes by having multiple team members per discipline that are available to respond as the project requires. The contracts are:

- Ford Motor Company
- General Motors
- Severstal
- Midland Cogeneration Venture
- Wayne State University
- Eastern Michigan University
- Michigan State University
- Oakland University
- Mott Community College
- University of Michigan Hospitals
- Beaumont Hospital
- Genesys Health System
- Davita Dialysis Regional Blanket
- Detroit Recreation Department
- Oakland County
- The City of Southfield
- The State of Michigan

- Archdiocese of Detroit

5.17 Describe your methodology for obtaining information about the existence and condition of an existing, facility's components and systems.
DSD's expertise is in renovation projects. Approximately 85% of our project types are renovation projects. Our employees are very familiar with field survey requirements and documentation of existing conditions to avoid changes in construction. As an example, much of our documentation for Ford Motor Company and GM is developed for the internal UAW trades to actually complete the construction work. With in-house trades, there are the same skill levels as outside skilled trades, but there is not always the same level of coordination and organization and so detailed and clear documents are required. In addition to this experience, our team also has extensive experience with Facility Condition Analyses in which site observation and documentation of existing conditions are key to providing an accurate and detailed report for the Owner.

Beyond reviewing existing facility drawings (when available) and spending extensive time field surveying and documenting conditions, taking measurements and identifying potential conflicts, we have also successfully used other strategies on various projects to document conditions early in the project when they are relatively easy to address and not later in the process when the adjustments can be very costly, including:

a. Selective demolition to determine "hidden" conditions
b. Test and balance services
c. Ground penetrating radar
d. Utility and topographic surveys
e. Electrical metering/testing
f. Data loggers to track temperature and humidity

5.18 Describe your approach to securing permits/approvals for the following: campgrounds, critical dunes, coastal zone management, projects adjacent to Michigan lakes and rivers.
The Joint Michigan Department of Environmental Quality and United States Army Corps of Engineers Permit application is used for projects that are on, within, or involve a stream, river, ditch or drain, floodway, pond, channel/canal, inland lake, 100-year flood plain, legally established County Drain, Great Lake or Section 10 Waters (navigable), designated high risk erosion area, designated critical dune area, designated environmental area, natural river, dam, wetland, new marina, structural removal, utility crossing, and/or 500 feet of an existing water body and covers the following:

- Natural Resource & Environmental Protection Act 1994 PA 451
- Part 31 Floodplain/Water Resources Protection
- Part 301 Inland Lakes and Streams
- Part 303 Wetlands Protection
- Part 315 Dam Safety
- Part 323 Shorelands Protection and Management
- Part 325 Great Lakes Submerged Lands
- Part 353 Sand Dune Protection and Management

Campgrounds are permitted by the Michigan Department of Environmental Quality Resource Management Division and the Application for Campground Construction Permit under Part 125 of 1978 PA 368 must be filed and approved. Plans and specifications for the specific projects are developed and submitted with all permit applications.

Frequently a joint application is required for projects adjacent to lakes and rivers in the State of Michigan. The joint application, as described in 5.18 above, is submitted to the U.S. Army Corps of Engineers and the Michigan Department of Environmental Quality. Required project plans (drawings) and specifications are developed and included in the permit application package.

Often a joint permit application for work in and near a floodplain/floodway requires hydraulic modeling of the river. The members of the project team have experience in the hydraulic modeling (and with developing the hydrology) of rivers and developing flood insurance studies for the Federal Emergency Management Agency.

5.19 Describe your approach to a construction contractor's request for additional compensation for a change in the project scope.

1. The first step is to reference the project specifications for the timing requirements, etc. to submit a claim and confirm that the request is in compliance with these requirements.
2. The next step is to confirm that the quote provided gives a thorough material and labor breakdown for the Design professional to review against the proposed scope for which the contractor is seeking additional compensation.
3. If the additional compensation quote has the necessary breakdowns by material and labor, the breakdowns will be compared to industry and DSD documented standards including Architectural, Mechanical and Electrical RS Means 2013 Estimating Manuals, Mechanical Estimating Manuals provided by the Mechanical Contractors Association (MCA), and Electrical Estimating Methods as published by Means. Finally, all of the above resources are utilized along with the site specific information to make an assessment and recommendation to the Owner on the additional compensation requested for the change in scope.

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If your company is interested in participating in the MiDEAL program, please sign below and return to this letter to the letterhead address, Attention: Melissa Sambiagio

FOR THE STATE OF MICHIGAN

Robert C. Hall, RA, NCARB, Director
Design and Construction Division
Facilities Administration

FOR THE PROFESSIONAL

DiClemente Siegel Design agrees to extend the terms, conditions, and pricing of our 2013 General ISID Architectural/Engineering Services contract, No. 00429, to MiDEAL members and will remit the one percent (.01) administrative payment fee along with the quarterly report as outlined.

Louis A. Trama
Signature

1/23/14
Date

LOUIS A. TRAMA / PRESIDENT
Print Name/Title