



June 15, 2009

Ms. Natalie Rew, Auditor  
Wisconsin Department of Public Instruction  
P.O. Box 7841  
125 South Webster Street  
Madison, WI 53707-7841

RE: Qualified School Construction Bond "QSCB" Allocation

Dear Ms. Rew:

The purpose of this letter is to make a formal application for an \$800,000 allocation of Qualified School Construction Bonds. The Middleton-Cross Plains Area School District (MCPASD) appreciates the federal legislation and the support of the Wisconsin Department of Public Instruction in making this interest free (or low interest) bond program available. The District seeks any part of the \$800,000 request that is made available to us under the program.

**History:**

In October 2008, the District approved a Preliminary Facilities Study to be conducted by Johnson Controls, Inc. (JCI). JCI presented its Preliminary Facilities Report to the District in March 2009. Following a review/analysis of the report, the District began development of a Request for Proposal/Qualifications for the Implementation of Facilities Improvements through a Guaranteed Cost Reduction Program (performance contract). The RFP/RFQ was issued by the District in May 2009. On June 8, 2009, the School Board approved Johnson Controls to serve as the Energy Services Company (ESCO) for the proposed performance contract. On June 8, 2009, the Board also adopted the attached resolution authorizing the issuance of debt (using QSCB) not to exceed \$800,000.

**Potential Project(s) Summary and Preliminary Cost Estimates:**

Through the implementation of this facility improvement program, MCPASD Facilities and its occupants would benefit in the following areas:

- Enhanced learning environment for students
- Lowered utility consumption and related costs
- Increased equipment life cycle and avoidance of capital requirements through replacements and upgrades
- Positive impacts on community perception
- Increased flexibility with regards to operation of mechanical systems
- Positive impacts on operations and maintenance activities

Based upon a preliminary assessment of the District's facilities, performed by Johnson Controls, the cost of facility improvement measures (FIMs) were estimated along with potential energy savings and available grants from Focus on Energy. The proposed performance contract would have a estimated total cost of \$2.85M with approximately \$183,000 in grants from Focus on Energy and would save approximately \$144,000 annually in energy and operational costs, with corresponding reduction in greenhouse gas emissions. We are including options for solar and wind energy generation in an integrated curriculum program. Based on ARRA guidelines, our proposed project would create 31.1 jobs. A breakdown for each school buildings and overall district is provided below. Additional details are available in the attached Preliminary Facilities Report.

### **District Wide**

- Integration of all building automation systems into a single-communications portal for remote monitoring and optimization of building systems. The portal will enable students to monitor energy performance and renewable energy projects.

### **District Administrative Center - \$131,000**

- Steam to Hot Water System Conversion or Steam Trap Replacement
- Ground Source Heat Pump System Implementation
- Upgrade Building Automation System to Direct Digital Controls (DDC)
- Retrofit/Upgrade Existing T12 Lighting System to T8 Technology with Electronic Ballasts
- Replace Any Remaining Incandescent Lighting with Compact Fluorescent Lighting
- Upgrade Existing Exit Signs to LED Technology
- Lighting Control through Occupancy Sensor Technology
- Parking Area LED Lighting Addition with Solar PV

### **District Operations Center - \$15,000**

- Upgrade Pneumatic Control System to Direct Digital Controls (DDC)
- Water Conservation Upgrades

### **Elm Lawn Elementary- \$312,000**

- Retrofit/Upgrade Remaining T12 Lighting System to T8 Technology with Electronic Ballasts
- Convert Multizone Air Handling System to Variable Air Volume
- Water Conservation Upgrades
- Boiler System Replacement
- Gym fan system Control through Occupancy Sensor
- Installation of Variable Frequency Drives on fan systems with inlet vanes
- Installation of Solar Thermal System to Supplement Existing Domestic Hot Water Heating System

### **Glacier Creek Middle School - \$724,000**

- Retro-Commissioning
- Boiler System Replacement
- Ground Source or Solar supplement to Heat Pump System Core Loop
- Water Conservation Upgrades
- Lighting Control through Occupancy Sensor Technology
- Installation of Solar Thermal System to Supplement Existing Domestic Hot Water Heating System

### **Kromrey Middle School - \$297,000 (Tentative)**

- Retro-Commissioning
- Retrofit/Upgrade Remaining T12 Lighting System to T8 Technology with Electronic Ballast  
Replace Existing Incandescent Lighting with Compact Fluorescent Lighting
- Replace Existing Cafeteria and Gym High Bay Lighting with T8/T5 Technology.
- Hot Water Boiler System Replacement
- Lighting Control through Occupancy Sensor Technology in classrooms.
- Convert Multizone Air Handling Systems, for fan systems 1, 6 and 8, to Variable Air Volume
- Water Conservation Upgrades
- Installation of Solar Thermal System to Supplement Existing Domestic Hot Water Heating System
- Gym fan system Control through Occupancy

### **Middleton High School - \$277,000**

- Retro-Commissioning
- Replace existing Gym and Shop Area High Bay Lighting with T8/T5 Technology
- Upgrade Existing Exit Signs to LED Technology
- Pool Boiler Heating System Supplement (Solar Thermal)
- High Efficiency Motor Implementation on Pool Hot Water Pumps
- Upgrade Unit Ventilators to Direct Digital Control
- Replace pneumatic actuation with electric
- Water Conservation Upgrades
- Vending Miser Implementation on Vending Machines

### **Northside Elementary - \$174,000**

- Retrofit/Upgrade Remaining T12 Lighting System to T8 Technology with Electronic Ballasts.
- Replace indirect lighting in classrooms with new fixtures
- Installation of Solar Thermal System to Supplement Existing Domestic Hot Water Heating System
- Water Conservation Upgrades
- Gym fan system Control through Occupancy Sensor
- Vibration Analysis for fan system serving 2001 Addition
- Lighting Control through Occupancy Sensor Technology

### **Park Elementary - \$146,000**

- Retrofit/Upgrade Remaining T12 Lighting System to T8 Technology with Electronic Ballasts
- Lighting Control through Occupancy Sensor Technology in classrooms
- Enclose Air Cooled Compressor Exhaust System in Kitchen
- Gym fan system Control through Occupancy Sensor
- Water Conservation Upgrades
- Installation of Solar Thermal System to Supplement Existing Domestic Hot Water Heating System

**Sauk Trail Elementary - \$34,000**

- Retrofit/Upgrade Remaining T12 Lighting System to T8 Technology with Electronic Ballasts.
- Lighting Control through Occupancy Sensor Technology.
- Gym fan system Control through Occupancy Sensor

**Sunset Ridge Elementary - \$427,000**

- Variable Frequency Drive Implementation on Hot Water Pump.
- Heat Pump Control through Occupancy Sensor
- Ground Source or Solar supplement to Heat Pump System Core Loop
- Gym and Classroom HVAC Control through Occupancy Sensor
- Upgrade Existing Exit Signs to LED Technology
- Lighting Control through Occupancy Sensor Technology
- Thermostat Control Re-Commissioning
- Installation of Solar Thermal System to Supplement Existing Domestic Hot Water Heating System

**West Middleton Elementary- \$121, 000**

- Retrofit/Upgrade Remaining T12 Lighting System to T8 Technology with Electronic Ballasts
- Water Conservation Upgrades
- Re-Commissioning of fan system 1 Control related to boiler operation
- Installation of Solar Thermal System to Supplement Existing Domestic Hot Water Heating System

A majority of the possible projects included in the application are replacing existing / end of life equipment and optimize operations to meet the objectives of **Green and Healthy Schools & Safe and Healthful Schools**. These projects will go a long way to improve the overall energy efficiency and the safety of the District's facilities. In addition, the District intends on having these projects serve as an educational opportunity for our students by including them in monitoring the effectiveness and impact of these projects.

**Summary:**

The District's project is "shovel ready" and will fulfill the intended goal of the ARRA legislation by creating or maintaining jobs on and near the construction worksite. We also feel that our project meets the longer-term goal of "reinvesting" in our local community by improving the public infrastructure that serves our citizens in an energy-efficient and sustainable manner.

Discussions of project details have been completed by the Board of Education and we are working closely with our financial advisor and bond counsel. We believe we have met the requirements for participation in the Qualified School Construction Bond program and your review of our request for an allocation is appreciated.

In addition to Board of Education authorization of debt, the District has hired Johnson Controls, Inc. to manage our performance contract project. JCI is a Wisconsin-based company, with global headquarters in Milwaukee, and a vast majority of the ARRA funds that MCPASD receives will remain in our state. The Middleton-Cross Plains Area School District is ready to have projects underway within a short period of time from when the District receives this award from the Department of Public Instruction.

The District is confident that these projects will adhere to the “*Prevailing Wage*” requirements of the Davis-Bacon Act. Every step will be taken by the District and our Energy Services Company to ensure all reporting requirements are met.

On behalf the Middleton-Cross Plains Area School District Board of Education, I respectfully submit this application for your consideration. Please feel free to contact me with any questions you may have related to the information provided or if there are any further steps needed to complete the application process. I can be reached at (608) 829-9002 or via e-mail at [twohlleber@mcpasd.k12.wi.us](mailto:twohlleber@mcpasd.k12.wi.us).

Sincerely,

Thomas E. Wohlleber  
Assistant Superintendent of Business Services

#### Attachments

- C: Board of Education (letter only)
- Dr. Donald Johnson, Superintendent (letter only)
- Bill Eberhardt, Facilities Services Manager (letter only)
- Lisa Voisin, Robert W. Baird (letter only)
- Jeffrey Mangan, JCI (letter only)