

# 2020 Excellence in Energy-Efficient Design Awards







Recognizes outstanding efforts in reducing energy use in new construction, additions and major renovations

Award recipients were selected from projects whose designers participated in the Commercial New Construction Program and completed program verification between July 1, 2019, and June 30, 2020









**City of Washington Fire Station Farnsworth Group and MODUS** 



#### **Key Energy Efficiency Features**

- Improved wall and roof insulation
- High Efficiency heating and cooling
- CO control of ventilation in apparatus bays
- LED Lighting

"This project was very important to the City of Washington as it was the catalyst project which resulted in the increased size of the Fire Department, City Hall & the Police Department. The CNC program was a great way to evaluate multiple bundle options and determine the best option for the City of Washington."

Kristofer Orth
 Farnsworth Group, Inc.





Centerville CSD Lakeview Elementary Renovation & Addition RDG Planning & Design



#### **Key Energy Efficiency Features**

- Water-source VRF system for heating and cooling
- Energy Recovery
- Demand Control Ventilation
- LED Lighting with vacancy control

"The upgrade of the mechanical system to Lakeview Elementary School was an exciting milestone in this building's history. The building was originally designed in the early 1970s to be complete with air conditioning. In the end, cooling was not installed. Nearly 50 years later, teachers and students alike are enjoying comfortable indoor air quality in ALL seasons, and the school district is saving money on their utility bills due to the efficiency of the new system."

Michelle CunliffeRDG Planning & Design





Kirkwood Community College Automotive Technology Program
OPN Architects and Design Engineers



#### **Key Energy Efficiency Features**

- Improved Glazing
- CO control of ventilation in vehicle maintenance area
- High efficiency boiler
- LED lighting with daylighting and occupancy control

"Geared to take Kirkwood Community College students into the future, this state-of—the-art Automotive Technology space to educates students and prepares them with an optimize environment for learning crucial automotive diagnostic and repair skills for the rapidly changing automotive maintenance and repair market. The CNC program was key in setting the bar and incentives during design so that the design team could achieve and exceed energy savings strategies without sacrificing function and comfort for Kirkwood Community College and its students."

Carly Weber
 OPN Architects





Mount Vernon CSD High School Performing Arts Addition ISG and MODUS



#### **Key Energy Efficiency Features**

- Improved glazing and roof insulation
- Total Heat Recovery and demand control ventilation
- High efficiency cooling
- LED lighting with daylighting and occupancy controls

"We got the right people together early in the design phase, including the school district, design team, and CNC team. That was critical to get the enhanced design incorporated into the project and within the overall project budget."

- Kevin Bills ISG





Waukee CSD Radiant Elementary School frk architects + engineers and Farris Engineering



#### **Key Energy Efficiency Features**

- High efficiency boiler and watercooled chiller
- Demand Control Ventilation
- Improved wall and roof insulation, low U-value glazing
- LED lighting with daylighting and vacancy sensors

"WCSD would like to highlight the collaborative, siteadaptive process for elementary building construction. ...We are honored to accept this award and are grateful for the partnership with our design team."

- Kirk Johnson, Chief Operations Officer Waukee Community School District





IAARNG Davenport Readiness Center
The Opus Group and Morrissey Engineering, Inc.



#### **Key Energy Efficiency Features**

- High efficiency glazing
- VRF heating and cooling system
- Energy recovery
- LED lighting with occupancy controls and daylighting

"The Davenport Readiness Center immediately impacted the readiness of the Iowa Army National Guard by allowing for improved classroom and training space, and greatly expanded space for units to store vehicles and equipment. This LEED Silver project—certified such by the U.S. Green Building Council—was delivered via designbuild in collaboration with The OPUS Group of Minnetonka, MN and coordinated with Willdan to identify further energy saving strategies, most of which were implemented by the design-builder."

Michael Brothers
 Iowa Army National Guard





Iowa Public Works Complex Phase 1
Neumann Monson Architects, MODUS, and C-Wise



"The design team worked meticulously to bring value through strategies that reduced operation costs, enhanced and created a safer work environment and provided flexible and adaptable design."

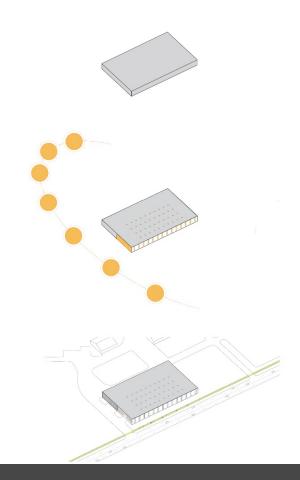
- Jesse Bulman Neumann Monson Architects





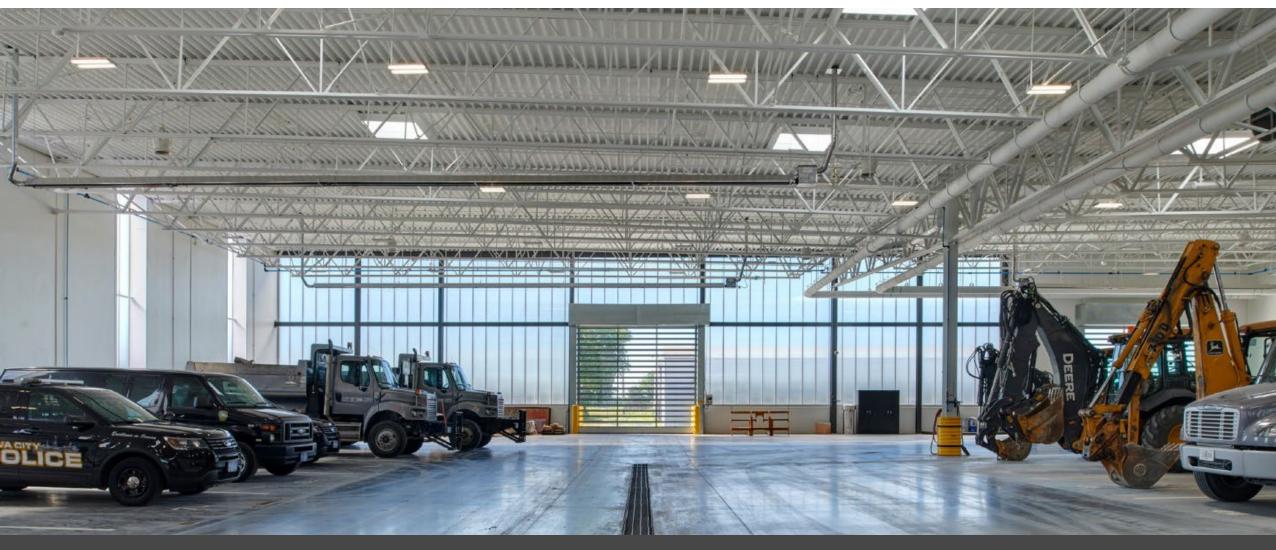
#### **Key Energy Efficiency Features**

- Translucent panel walls for daylighting
- VRF heating and cooling in office
- Heat recovery
- CO control of vehicle area ventilation









Iowa Public Works Complex Phase 1
Neumann Monson Architects, MODUS, and C-Wise





**City of Ankeny Kirkendall Public Library OPN Architects and Design Engineers** 

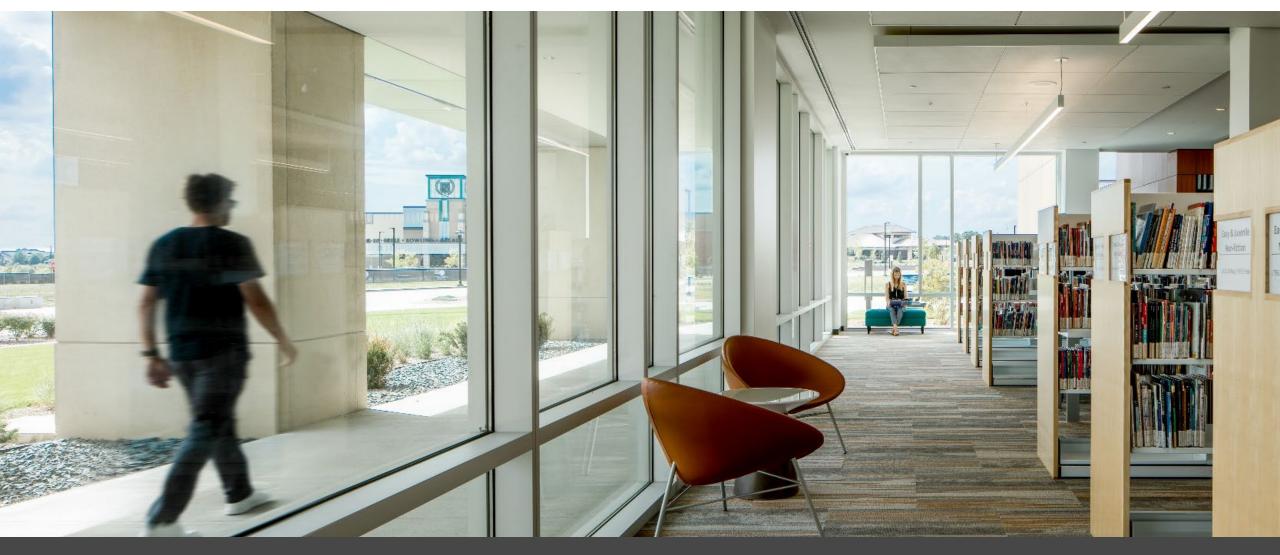


"The energy modeling process helped us dial in the correct combination of architectural envelope, mechanical systems, and lighting power densities. This was particularly useful due to the long Southwest façade, which incorporated large windows and had a big impact on both the solar heat gain and daylighting strategies."

- Carly Weber OPN Architects







**City of Ankeny Kirkendall Public Library OPN Architects and Design Engineers** 



#### **Key Energy Efficiency Features**

- Ground-source distributed water-source heat pumps
- Hydronic radiant in-floor heating system
- Dedicated outdoor air system with energy recovery and integrated heat pumps
- Daylighting in lobbies, stack areas, stairwells and along Southwest façade
- Occupant-controlled lighting



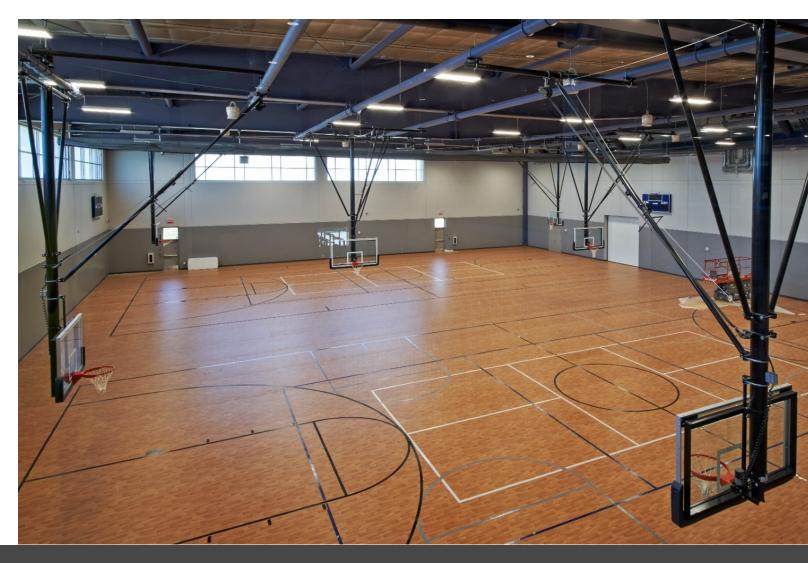






"The whole purpose behind the facility was to assist the students in their mental and physical health. So the facility was designed to aid *in that with multi-functional areas* to accommodate multiple activities. As such, many areas had to be able to adjust to lighting, air flow, room conditioning, etc. to the activity happening in a given area at a given time. A lot of coordination was taken into account to have all systems working together for optimal comfort/use of the entire facility."

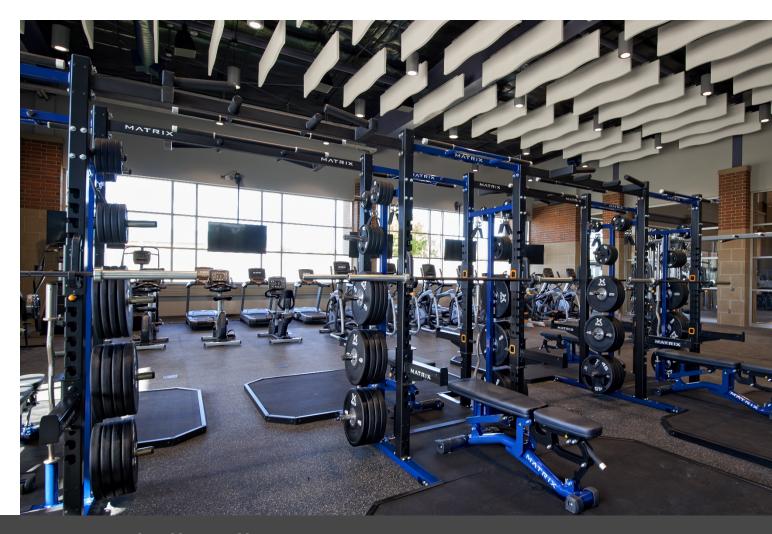
- Matt O'Reilly HGM Associates Inc.





#### **Key Energy Efficiency Features**

- Daylighting
- Low-e glazing
- High efficiency VAV heating and cooling system
- Heat recovery and demand control ventilation











Dubuque County West Campus Office & Maintenance Garage FEH Design and MEP Engineers



"The program helped to provide scientific data, from a source outside of the design team, for the evaluation of return on investments for a variety of energy efficiency scenarios. This process helped our design team to validate and it reinforced the strategies that were implemented in the final building designs for these two structures."

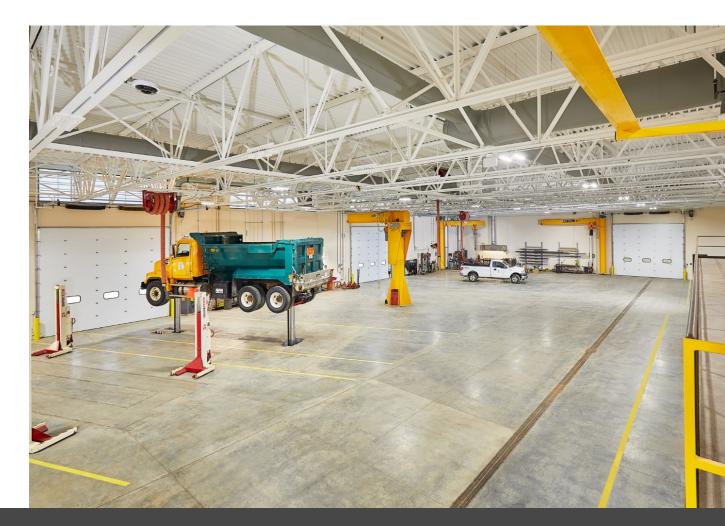
- Kevin Eipperle FEH Design





#### **Key Energy Efficiency Features**

- VRF heating and cooling for office area
- In-floor radiant heat in vehicle area
- Translucent panels provide daylighting
- Power over ethernet LED lighting with occupancy and daylighting controls







Dubuque County West Campus Office & Maintenance Garage FEH Design and MEP Engineers



#### **Enrolling in CNC**

Complete Online Application: energyassistance.willdan.com/CNC



