- 2018 -



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2018 MCA EXCELLENCE AWARDS

Message from the Executive Director

Awards season is always an exciting time in the association world, and because this is my first such occasion with the Montana Contractors' Association (MCA), the process has been particularly interesting and informative. What better way to get to know our members than by reading about, and checking out pictures, of their best projects of 2018?

Your inspiring work on the construction of buildings, bridges, roads and more, clearly demonstrates that the member companies of this association are not only talented, but dedicated to overcoming whatever challenges come their way. What's more, I'm pleased to be here for the first presentation of the MCA Education Foundation's Workforce Innovators Award.

I would like to extend a heartfelt congratulations to our Excellence Award winners, and thank all of our MCA members for your dedication to our industry, and our association. We wish you all the best in 2019!

David Smith

DAVID SMITH Executive Director

JUDGES:

Alaska Chapter of the AGC DON CLEM, NRMCA Northwest Region DAVE FRENTRESS, CalPortland

MCA STAFF:

DAVID SMITH CAROLYNN BRIGHT NICOLE HANNI KEITH OUZTS



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AWARD WINNERS

Building Excellence Award - Excellence in Craftsmanship
Building Excellence Award - Best Custom Residence
Concrete Excellence Award - Residential Decorative
MCA Education Foundation - Workforce Innovators Award
Environmental Excellence Award - Special Recognition - Waste Management
Highway Excellence Award - Best Reconstruction of Urban/City Project
Concrete Excellence Awards - Bridges
Building Excellence Awards - Best Historic Restoration
Building Excellence Awards - Best Industrial Project
Concrete Excellence Award - Industrial/Commercial Between \$1-5 Million - Paving
Building Excellence Award - Best Institutional Project
Building Excellence Award - Best Commercial Project
Concrete Excellence Award - Technical Merit - Industrical/Commercial Greater than \$5 Million Commercial Decorative - Judges Choice Award

2018 Building Excellence Awards - "Excellence in Craftsmanship" MARTEL CONSTRUCTION

Whitefish Center for Sustainability & Entrepreneurship

The Whitefish School District Center for Sustainability & Entrepreneurship (CSE) is a revolutionary facility designed to help members of the Whitefish community engage with sustainable agriculture, sustainable building practices, sustainable energy systems, sustainable forestry, and green career pathways. This two-story classroom building with attached four-season greenhouse on three acress is located on the premises of the Whitefish High School Campus. This project was designed and constructed as the first Net-Zero Energy facility in Montana. It uses a Climate Battery system which works on solar gains and geothermal principal using the sun's contributions to the earth's constant temperature for both heating and cooling of the greenhouse. The CSE relies on a closed-loop geothermal system that enables a consistent baseline temperature to be maintained. The primary energy source is derived from photovoltaic panels located on the roof of the greenhouse and implement shed. Irrigation for the greenhouse is captured from an integral gutter system which stores and reuses rain water. Composting stations allow for carbon to be recaptured for the purpose of making microbial rich soil.

2018 Building Excellence Awards - "Best Custom Residence" DICK ANDERSON CONSTRUCTION Rock Creek Residence - Deer Lodge

This residence is a brand-new, 4,495 square-foot residence located on an 8.8-acre lot at the Rock Creek Cattle Company in Deer Lodge, MT. The design includes a three-car garage, four bedrooms, open great room/dining room/kitchen, wine room, mud room, laundry room, powder room and expansive covered front and back patios. A&E Architects from Missoula, MT was the architect on this project. A critical design component for the house was to blend in with the surrounding landscape and topography. A natural level bench provided the perfect spot to locate the new construction. Great effort was put in to ensure the views of the Flint Creek Range were aligned to optimize the view out of the master bedroom and dining/great room windows. The sometimes intense late afternoon sun was also taken into site and design consideration to lessen the glare when enjoying the covered back patio and outdoor fireplace.

2018 Concrete Excellence Awards - "Residential Decorative" HELENA SAND & GRAVEL

Ode to Edward James Concrete was poured and painting completed by August, 2018 as planned. The challenge was to design and build an architectural scale (20' high x 15' wide x 25' feet long) fabric formed - concrete sculpture. The unique aspect of this sculpture/project is that it is formed with fabric inside a wood structure. This process enables the artist to create soft forms in concrete. The end result is that it looks as if was inflated. The site was challenging, because it is confined and sloped. Traditional scaffolding could only be used to a limited degree. Large timbers and additional supports were required. The finish on this concrete sculpture/project is paint and acid stains which creates a bright and eye-catching appearance. The sculpture is unusual in design and use of materials. The use of fabric to form the concrete on the architectural scale is unique, visually attractive and is not

common. The visual appeal, combined with the scale, color and soft forms that are integrated with the landscaping create an interesting and unusual finished product.

2018 MCA Education Foundation - "Workforce Innovators Award" JACKSON CONTRACTOR GROUP Missoula Under Construction

Missoula Under Construction brought heavy equipment and hands-on activities inspired by the construction trades to the children and families of Missoula at Fort Missoula Regional Park. About 30 pieces of equipment were available for the kids to explore, and the "When I Grow Up" tent allowed kids to see themselves IN construction professions like electricians, plumbers, drywallers, masons, and more. The "When I Grow Up" tent was 60'x300' in size and had 20 stations including an electrical station where kids could learn what electricians do, a nail station where they learned to pound nails with kid-sized hammers, a drywall station, and paint and paint brushes to paint cardboard houses. Masonry walls were built brick by brick. Kiddie pools were filled with sand, and trowels were supplied so kids learned how to finish 'concrete'. Funnels and pipes demonstrated the flow of water and the need for plumbers. Plus, the children could decorate their hard hats and try on Personal Protective Equipment.











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2018 Environmental Excellence Awards - "Special Recognition - Waste Management" MISSOURI RIVER CONTRACTORS

Fromberg Wastewater Improvements

This project, in the town of Fromberg, included rehabilitating the existing lift station, construction of a two-cell aerated lagoon system to meet secondary treatment, construction of a Submerged Attached Growth Reactor (SAGR) polishing reactor to reduce BOD, TSS, as well as provide year-round ammonia removal, a new UV disinfection system, and a new UV/Blower building. Substantial completion of the project was issued July 24, 2018 and it became the first operational SAGR system in Montana. This project is an example of professionals in the engineering and construction industries coming together to help implement a relatively large project for a small Montana community to ensure continued quality of life, public health and safety, and protection of the environment. The project is a result of innovative thinking by industry professionals and finding the right solution for the town of Fromberg, leading to the first operational SAGR system in Montana, providing further reduction of BOD and TSS levels after lagoon treatment, and year-round ammonia removal.

2018 Highway Excellence Awards - "Best Reconstruction of Urban/City Project" COP CONSTRUCTION CIP City of Livingston

The 2018 Livingston CIP was a much-needed downtown update for a historic district of Livingston, MT. The project was scheduled to be completed in the summer months of 2018, which was agreed upon by all businesses owners and city representatives. With all business owners partially funding the improvements in the outdated store fronts, it showed that it was a project the entire community stood behind and took great pride in having done. The project was started in early April to try to get as much as possible completed before the busy summer months, which sees the arrival of tourists from all over to enjoy what Livingston has to offer. During the project, COP Construction replaced all utilities within the streets, rebuilt and regraded the downtown from building to building, while preserving all historical features on the project. This project was a challenge due to all of the pedestrian traffic present on the site to minimize impacts on businesses during construction. In working with the city, COP Construction was able to complete the project ahead of schedule and return the project area for the residents of Livingston to enjoy.

2018 Concrete Excellence Awards - "Bridges" General Contractor: COP CONSTRUCTION Concrete Producer: HAVRE READYMIX Milk River

The Milk River project consisted of reconstruction of approximately 0.5 miles of gravel roadway, demolition of an existing truss bridge and construction of a new, two-span steel truss bridge with a concrete deck. The project had 32 16" pipe pile to de driven at three bents. Bent 2 required a sheet pile cofferdam approximately 50' x 20' deep for the seal slab and footing construction. Once the three bents were complete, the steel truss bridge was delivered in large pieces that had to be bolted together and lifted into place. The two trusses for the 147' span required a 300 ton crane to install them. The shorter trusses for the 78' span were placed with the COP owned 110-ton crane. The project was challenged with significant flooding in April 2018. Of the 21 available working days in April, COP was only able to work eight of those days due to record flooding on the Milk River. The project was completed on September 6, 2018.

2018 Building Excellence Awards - "Best Historic Restoration" DICK ANDERSON CONSTRUCTION Sperry Chalet - Glacier National Park

Restoring a burned-out shell of a building to its former glory can be a daunting task. Doing that at 8,500 feet above sea level in a construction season that spans only four months at best makes it a real challenge. That doesn't even include the 6.7 mile hike that increases in elevation by 3,400 feet, to the job site, and delivery of materials to the chalet by helicopter and pack train. The DAC crew knew that intrepid hikers who will make the journey to Sperry Chalet will expect to be rewarded with old-world craftsmanship. They will not be disappointed. The team from On Site Management were able to provide superb timber-framing craftsmanship. The detail provided by the master joiners created a final project that would have made the original builders proud. "It was humbling to have people tell our crews on the trails, with tears in their eyes, how much it really meant to them. You don't see that a lot in our field of work." Travis Neil, Project Manager, Dick Anderson Construction.

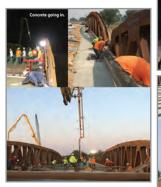
2018 Building Excellence Awards - "Best Industrial Project" BARNARD CONSTRUCTION

CryptoWatt Substation Upgrade Project, Phase 1 With the goal of operating 300 MW worth of cryptocurrency mining and blockchain technology data centers across Montana, CryptoWatt's project involved retrofitting existing buildings to house the data centers in addition to performing brownfield substation upgrades to support the projected server load. The CryptoWatt Substation ties into NorthWestern Energy's power supply, which required Barnard maintaining close communication with, and obtaining design approvals from, NorthWestern Energy. The substation previously provided 20 MW of power to an existing industrial complex, which Barnard upgraded to a 66.7 MW capacity. As part of the upgrade, Barnard installed a 161-13.8kV transformer, associated protection and control equipment, and overhead distribution to the buildings around the site. Barnard also installed multiple 13.8kV to 480kV padmount transformers at each building to support the larger server load in the building. To minimize the project's procurement time, Barnard sourced used and refurbished electrical equipment from across the United States. This approach ensured timely start-up of the data center and that Barnard successfully met the fast-paced schedule.

















2018 Concrete Excellence Awards - "Industrial/Commercial Between \$1-5 Million" "Paving" GENERAL CONTRACTOR: TREASURE STATE, INC. CONCRETE PRODUCER: CONCRETE MATERIALS OF MONTANA

Bozeman Yellowstone International Airport Apron

This project required the placement of more than 2,150 cubic yards of concrete within the 16" thick apron with 20" thickened edges. More challenging is that most of the work had to be completed outside of the prime construction season due to the emphasis of tourism to the Gallatin Valley. Thus, the team planned the apron concrete to spread over eight concrete pave days with each phase having its own 45-calendar day duration even though the scope could have been completed in 45 days. The 25-foot-wide concrete pave strips were slip-formed with our mmGPS stringless concrete paver that read a complex surface model that incorporated a valley gutter 3/4 the length and 1/2 the width of the 730 lf, 50 ft wide apron. The valley was installed in real time with the help of a mmGPS rover that signaled the machine operator when to mechanically bend the screed to match the flowline slope. Installing the concrete apron while allowing flights to taxi around the project work area provided a level of complexity that one doesn't experience in an ordinary concrete paving jobs as we had to yield construction activities to the large commercial jets. The team wildly exceeded client expectations by turning over the project a month ahead of time.

2018 Building Excellence Awards - "Best Institutional Project" SWANK ENTERPRISES

Digestive Health Institute of Montana

The Digestive Health Institute of Montana started out as a vision of the late Kalispell Regional CEO Velinda Stevens. She had the forethought to see the need of a place where patients of the Flathead Valley and beyond could come for specialized gastrointestinal care. The doctors and staff are excited to be providing these services all in one location, where the innovative design of the building matches the state-of-the-art care the patients are receiving inside it. What started out as an addition to the Health Center on the main campus of Kalispell Regional Medical Center, has become a visual cornerstone for the hospital. Swank Enterprises collaborated with the owner, architects, and numerous trades made it possible to overcome the challenging aspects of creating a building with so many inventive design features. From the bowed front canopy to the convex and concave curves of the structure, the design concepts come across strong in the final touches of aluminum paneling and detailed brick work. The exterior elements are further enhanced on the inside by the curved glass balcony and substantial art feature that chutes up two stories and over the railing. The leading-edge MRI suites help to put patients at ease with the high-tech green medical lighting and TW patient relaxation systems. Together we have created a sophisticated building that will provide for our clients' needs, and we are honored to have been a part of that.

2018 Building Excellence Awards - "Best Commercial Project" FISHER CONSTRUCTION

911 Call Center

This building is a state-of-the art call center constructed with anchor block, structural steel, slab on grade and slab on deck (roof). The interior of the building is divided into three pods. Pod 1 consists of offices, living suite, kitchen, workout room and bathrooms. Pod 2 houses the call center and control offices. Pod 3 consists of the data and mechanical rooms. Pods 2 and 3 have full access floors for the electrical routing for the call stations. The facility houses two generators (natural gas and diesel), two UPSs, cooler towers/racks and chillers. Bullet resistant glass was installed at the public vestibule/refuge area. A 150-foot-tall communication tower was completed with this project and houses new and relocated equipment. The facility is equipped with complete lightning protection and a full grounding ring.

2018 Concrete Excellence Awards - "Technical Merit" "Industrial/Commercial Greater than \$5 Million" "Commercial Decorative" "Judge's Choice Award" GENERAL CONTRACTOR: SWANK ENTERPRISES CONCRETE PRODUCER: ROCK SOLID MATERIALS MSU Northern Diesel Tech

Montana State University Northern is second in the nation for its Bachelor of Science - Diesel Technology program. This is amazing considering that the classrooms that previously housed the program were undersized, out of date and terribly inefficient for the Northern Montana winters. With the classroom complex dating back to the 1950s, and being a hodge-podge of additions over the years that didn't meet building codes, it was identified in the early 2000s that to take the program to the next level, a new complex would need to be constructed. This project finally began in the fall of 2016. It included razing 75 percent of the existing space which involved asbestos removal and complete removal of its foundation. Early in the design process, recycling was made a priority. The existing foundations and site concrete and asphalt was hauled off site and crushed to make the base for all of the parking areas and site concrete. This alone kept some 5000 ton of material out of landfills and went a long way in the recycling credit required in the Green Globes program, in which this project received a Two Globes Designation.

To maintain its aggressive schedule, foundation concrete needed to be placed during the unusually windy winter. Keeping soils unfrozen, and curing placed concrete, was a challenge during the winter. To overcome the poor soils on site, the foundation included widespread footings, and at minimum, 2 feet of compacted structural base under the footings. Concrete was designed at a minimum of 4000 psi. Materials testing routinely came back at 150 percent of design while meeting air and slump specifications. The concrete floor in the building, which was specified to be a F(F) 50 and F(L) 50, would be cut and polished to provide a strong durable surface for decades to come. The mix was required to be virtually crack free in order maintain the desired appearance. The site of the DTC also had many challenges. For example, 30" reinforced concrete pipe was needed to be rerouted around the new building and was over 17 feet in depth. During the site construction, it was found that some of the existing water main was only 3 feet in depth and needed to be replaced due to age and grade changes related to the new building and site layout. The Diesel Technology Center at Montana State University Northern is the largest single project on the campus ever. It will benefit Auto Diesel Technology students for decades to come.









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