

# DCNR DESIGN AND CONSTRUCTION JOURNAL



Bureau of Facility Design & Construction, 400 Market Street, 8<sup>th</sup> Floor RCOB Harrisburg, PA 17101  
 Phone: 717-787-7398 Fax: 717-705-5549  
<https://www.dcnr.pa.gov/about/Pages/Facility-Design-and-Construction.aspx>

## Director's Notes:



Alfred Uzokwe, P.E.

When we first got the “stay at home” message, as part of safety measures geared towards controlling pandemic spread, I was grappling with how to ensure that while we teleworked, our staff, mainly made up of designers, will still be able to discharge their duties.

On that day, our staff had to come back to the office to pick up their desk top computers to take them home for set up. As soon as set up was completed, working from home no longer posed an obstacle to production. Most, if not all the work that were done with computers when we physically worked out of the office, were now being done from home and have continued.

Many of the meetings that would normally be held face to face, were converted to Skype meetings. Design review meetings with consultants or inhouse staff were conducted virtually. Interdisciplinary coordination meetings, both for inhouse–design or consultant–design projects, were conducted the same way too. This continues to this day.

Construction projects were paused for a brief period but were permitted to open back up on May 1. Opening of each project required the fulfilment of some conditionality. These were the emplacement of safety action plans to assure that all construction personnel, from our own staff to contractors’ staff, were safe while performing their construction duties. Each contractor was required to submit a safety plan that met all the guidelines as entrenched in the CDC and Department of health guidance statements. These included but are not limited to wearing face masks all the time, handwashing, social distancing, converting all previous face to face meetings into virtual meetings, submission of all construction documents to our staff via the electronic route and many more. Things have been going on smoothly in our 60 or more construction contracts going on concurrently.

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One of the major adjustments we have had to make, which became a blessing in disguise, is in the manner we sign design documents. When we were back in the office, at the completion of any design project, the project designer or coordinator had to physically pass the hard copies of the drawings to the section manager, division chief and finally me for review and signature. But this became an issue as we teleworked, not just from a practical perspective but a set of drawings that could sometimes number between 80 to 100 for signature, being passed around physically from person to person, is not exactly the best way to keep safe during this pandemic era. I am happy to say that through the efforts of a small bureau committee, we have developed a virtual system that allows all of us to review, comment on or sign drawings in the virtual realm. It turns out to be a very good system that makes the process even faster than when it was done physically. It also precludes the multiple handling of drawings physically, which could make it difficult to maintain the safety guidelines.

I hope everyone is staying safe. Enjoy your Summer.

## Seven State Parks in Western PA Receive EV Charging Stations

*James J. Kalp, LEED AP*

DCNR continues its aggressive approach not only of the physical and practical aspects of Electronic Vehicle (EV) Charging Station installation, but also as a means to further expand the general public knowledge and awareness of the quickly expanding Electronic Vehicle (EV) industry. Publicly available electric vehicle charging stations help reduce greenhouse gas emissions and improve air quality. They also aid in filling the statewide gaps between urban area charging stations and more rural locations.

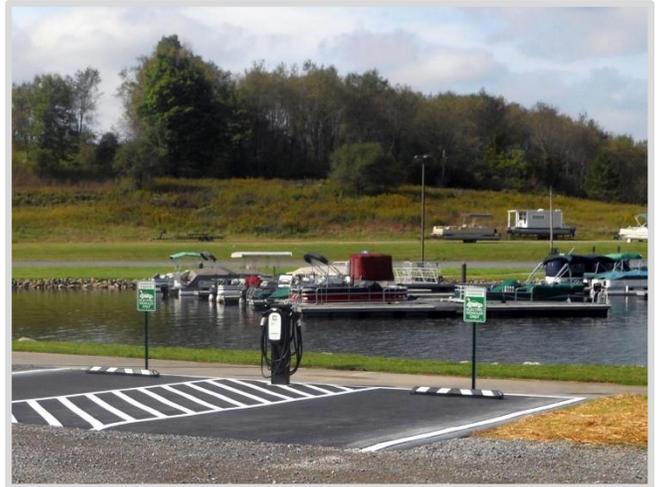
FDC yet completed another EV charging station project. A different approach was taken in that to maximize efficiencies in both the design and construction ends, work at seven different state parks was combined into a single project. As FDC looks to find ways to maximize efficiencies in our efforts of addressing DCNR's significant project backlog, "bundling" of projects is one way to support that. By bundling projects by type, geographic or other common aspects, FDC can minimize duplicating efforts across our design, bidding and construction management/inspection processes.

This project included the design and installation of dual, EV charging stations at seven parks in the Bureau of State Parks Region 2 in the southwestern part of the commonwealth. EV charging stations were installed at Jennings Environmental Education Center and McConnells Mill State Park, Butler County; Keystone State Park, Westmoreland County; Raccoon Creek State Park, Beaver County; Oil Creek State Park, Venango County; Ohiopyle State Park, Fayette County and Pymatuning State Park, Crawford County.

More EV charging stations are in the construction or design phase as these units will be installed at various locations by the end of the year. EV charging stations encourage visitation to state parks and forests. Visitors can re-energize themselves and their vehicles while enjoying DCNR's scenic public lands.

### Project Capsule

*Project Number:* FDC-200-102658  
*Project Coordinator:* John Dubaich, P.E.  
*Project Designers:* John Dubaich, P.E.  
*Construction Manager:* Daniel Kauffman, P.E.  
*Project Inspector:* Daniel Kauffman, P.E.  
*Electrical Contractor:* A & MP Electric, Inc.  
*Construction Cost:* \$116,359.00



*The dual EV Charging Station installation at the marina in Prince Gallitzin State Park*



*The dual EV Charging Station installation along Route 504 in Black Moshannon State Park*



*A dual charging station is a single post mounted unit that can charge two vehicles simultaneously*

## Rothrock State Forest Enhances Safety & Water Conservation Efforts

*Kenneth D. Kozak, EIT; James J. Kalp, LEED AP*



*The project added twenty new parking spots and six dark sky compliant LED pole lights*

Rothrock State Forest was formed as a direct result of the depletion of the forests of Pennsylvania that took place during the mid-to-late 19th century. Conservationists like Dr. Joseph Rothrock, for whom the forest is named, became concerned that the forests would not regrow if they were not managed properly. In 1895 when Dr. Rothrock was appointed the first commissioner of the Pennsylvania Department of Forests and Waters, the forerunner of today's Pennsylvania Department of Conservation and Natural Resources, a focused conservation effort for the commonwealth's forests took root. Dr. Rothrock became known as the "Father of Forestry" in Pennsylvania.

Rothrock State Forest is comprised of 96,975 acres that spread across the rugged ridges of Huntingdon, Centre and Mifflin County's. The Districts Office is in Huntingdon.

A project was developed to alleviate the heavily congested parking area and provide safe directional traffic flow through the complex. The design and construction added an additional 20 new parking spots, maneuverability considerations for tractor-trailers which often make deliveries to the facility and repaving of the existing complex.

The project also addressed another issue. The Districts Headquarters building is currently tied into the Huntingdon Borough water system. During the spring, summer and fall, the District fights and maintains readiness to fight forest fires. They also wash the districts equipment fleet regularly to maintain operational readiness and maintenance. Filling up the mini-pumpers and washing District equipment is a necessary endeavor that can be

expensive. As such, part of the design effort included collecting rain water off the parking lot and directing the flow into a new 5,000-gallon Underwater Storage Tank. A 4" multi-stage submersible effluent pump with a performance of 30 GPM was installed inside the tank to fill the mini pumpers and to wash District Equipment. Any runoff from the storage tank would be diverted into a newly constructed rain garden. Such efforts show the bureau of Facility Design & Constructions efforts to minimize costs and conserve natural resources. Additional work included in the project was the removal of an existing retaining wall and installation of approximately 110 lineal feet of new Modular Retaining Wall and approximately 30 lineal feet of concrete reinforced retaining wall; installation of new, dark sky compliant LED pole lights in the parking lot and new paving around the existing Maintenance Building.

This project provides the necessary added parking capacity and vehicular flow to enhance safety for both district staff and visitors, as well as economic savings in the districts operational budget.



*Surface water is collected and stored in a 5,000-gallon underground tank. The water is used for filling mini pumpers and washing district vehicles*

### Project Capsule

<i>Project Number:</i>	<i>FDC-005-6200</i>
<i>Project Coordinator:</i>	<i>James Ross, P.E.</i>
<i>Project Designers:</i>	<i>Ken Kozak, EIT John Dubaich, P.E.</i>
<i>Project Inspector:</i>	<i>Jack Horton, T.W. Consultants</i>
<i>General Contractor:</i>	<i>George S. Hann &amp; Son Inc.</i>
<i>Electrical Contractor:</i>	<i>Southern Contractors</i>
<i>Construction Cost:</i>	<i>\$445,585.00</i>

## Laurel Hill State Park Goes Solar with Installation at Scenic View

James J. Kalp, LEED AP

DCNR continues its sustainability and climate change mitigation efforts with the completion of another solar array project. Facility Design & Construction completed the design and construction of a new array at Laurel Hill State Park in Somerset County. A popular Park for outdoor recreation in the region, Laurel Hill State Park's 4,200 plus acres offers visitors a wide range of all-season recreational activities. Laurel Hill State Park also is home to The Laurel Hill Recreational Demonstration Area Historic District. This area, comprised of 1,352 acres, includes 202 buildings and structures, all of which retain a significant amount of original integrity, and built during the Civilian Conservation Corp era. It is the largest collection of CCC era architecture in Pennsylvania State Parks.

In August of 2016, DCNR acquired the former Penn Scenic View complex which includes numerous, modern structures along with 184 scenic acres and made it part of Laurel Hill State Park. The complex's mix of woodlands, fields and developed areas offered the ideal setting for the installation of a large-scale solar array.

The Ground Mounted Solar Photovoltaic (PV) System consists of multiple, post mounted racks having a combined DC rating of approximately 108kW by utilizing 72-cell, 360-watt rated solar modules. The solar array will lower utility bills and reduce grid-based energy reliance by "net-zeroing" all seven electric accounts at Scenic View as well as eight additional metered accounts in the park. Any



*The array, arranged in five rows, sets in an open, down sloping field offering optimum exposure to the sun*



*Usage meter, panels and equipment are mounted to a free-standing electrical kiosk constructed on site*

excess electricity generated is put back into the utility's electrical grid.

Construction began in late September and finished in early 2020. The project included the complete installation and coordination of agreements with the respective utility companies; trenching and backfilling for conduit and conductor installation; electrical kiosk construction; installation of bi-directional and solar production meters; AC and DC circuitry systems and equipment; ground mounted rack assemblies including foundations and structural racking systems; solar modules, inverters, and a web-based solar production monitoring system; complete system hookup, testing and commissioning.

The solar array at Scenic View at Laurel Hill, not only reduces utility costs, but furthers DCNR's mission of conservation of natural resources, by reducing our carbon footprint. This lowers operating costs, improves air quality and aids in combatting climate change.

### Project Capsule

*Project Number:* FDC-207-102065  
*Project Coordinator:* John M. Dubaich, P.E.  
*Project Designer:* John M. Dubaich, P.E.  
*Construction Manager:* Daniel Kauffman, P.E.  
*Construction Inspector:* Jamie Pritts  
*Electrical Contractor:* Green Solar Systems, LLC  
*Construction Cost:* \$279,000.00

## Yellow Creek Swimming Area Receives Major Overhaul

James J. Kalp, LEED AP



*The swimming beach was downsized to match anticipated usage and reconstructed to resist erosion*

Located in Indiana County, the 2,981-acre Yellow Creek State Park with the 720-acre Yellow Creek Lake, offers an abundance of outdoor recreational resources as well as environmental educational opportunities for park visitors. Originally opened to the public on July 4, 1976, the park's beach and day use area was designed to accommodate 4,000 visitors and be the key attraction to the park, attracting visitors from the Pittsburgh regional area. The expansive 800-foot sand beach area included a large bath house structure with changing areas, showers and toilets; a large food concession building and a life guard & first aid building.

As often is the case, as competing swimming pools, water parks and other resources in the region developed over time, the public usage at the swimming beach saw a steady decline. The size and aging condition of the existing facilities, as well as the large sandy beach area, made them very expensive to operate and maintain in both manhours and dollars. Over the last several years, the facility's condition eventually led to operational restrictions and closures.

The beach still draws a sizeable crowd for summer recreation but not to the extent of its original design. To make the beach more welcoming and accommodating to today's visiting public, a project was developed to downsize the facilities, beach and buildings to better serve the actual usage demand. This downsizing would ensure efficiencies in operational costs and manhour investment, as well as provide the public, upgraded, modern facilities.

A design effort was initiated and began in the summer of 2017. It included extensive discussion on future park considerations. One critical issue was on determining the size of the new beach area as well as the size of the new toilet/changing facilities. As with most parks, the park tracks facility usage. Using this data and factoring in the unofficial "build it and they will come" philosophy, which simply means a new facility may spur increased usage, an average usage load of 400 persons was established to dictate the design parameters. Certainly a far cry from the original anticipated peak usage of 4,000 persons established in 1976. Usage would likely be less during weekdays and more on holidays. The other major issue concerning the project was the expansive wetlands of the entire surrounding area.

*Continued page -6-*



*The new Comfort Station is well lit with natural lighting and new trees will offer shaded areas as they mature*



*The new Comfort Station offers a changing bench in both the Men's and Women's Toilet Rooms*

## Yellow Creek

### ...Continued

The project effort included demolition of all the existing structures. To save on costs, this part of the work was performed by the park and regional staff. The project included downsizing and reconstructing the sand beach area to approximately 360 feet. A new Comfort Station with changing benches was designed. In lieu of interior showers, an outside rinse station shower was provided. A new 80-person pavilion offers lake side views adjacent to the beach, as does a new beach side playground and shade canopy. The project also incorporated new ADA parking spaces and a fully ADA accessible route from the parking lot to all new facilities including access into the lake. Additional work included trails, an informational kiosk, landscaping, including lawn and meadow areas as well as trees. To accommodate any future concession operations, a food truck pad was provided that provides water, sanitary and electrical connections. The architectural styling is based off the Camping Cottage Shower House on the north side of Yellow Creek Lake. That design in 2006 was developed to establish a new, common architectural style for all future park development.

The new Comfort Station offers modern, low flow water conserving fixtures and incorporates natural daylighting with easy to maintain finishes. The pavilion includes a serving counter to accommodate large group rentals. An engineered sand was placed at the beach to help minimize erosion from both wind and high water that lashes at the beach during heavy north-west storm events throughout the year.

The new facilities should be a welcoming, enjoyable feature for beachgoers and will certainly aid the park in improving operational efficiencies and minimizing costs.



*The new lake side pavilion can accommodate up to 80 people and includes a food layout counter and hydrant*



*The entire beach area complex including water access and playground is fully ADA accessible*



*The new playground is located between the Comfort Station and Beach Area*

#### Project Capsule

**Project Number:** FDC-216-7803  
**Project Coordinator:** James Kalp, LEED AP  
**Design Consultant:** DRS Architects  
**Construction Manager:** Scott Schaffer  
**Construction Inspector:** Ron Carney / Jamie Pritts  
**General Contractor:** Mid State Construction, Inc.  
**Mechanical Contractor:** Marc-Services, Inc.  
**Plumbing Contractor:** McRandal Plumbing & Heating Company, Inc.  
**Electrical Contractor:** Mashan, Inc.  
**Construction Cost:** \$1,257,112.00

## Lake Arthur Water Line Crossing Complete at Moraine State Park

*John Jaskolka, PE; James J. Kalp, LEED AP*



*The new 6" seamless water main as it emerges from under the lake bed*

The 16,725-acre Moraine State Park not only serves northwestern PA with extensive outdoor recreational opportunities including everything from picnicking to overnight camping and everything in between. It also is host to the Bureau of State Parks Western Regional Office and the Bureau of Facility Design & Construction's Western Engineering Office. The 3,225-acre Lake Arthur offers multiple swimming beaches, boat launches and a modern marina. Moraine sees on average over one million visitors annually.

For years the park has struggled with a failing, forty plus year old water main that feeds all the park facilities on the south shore as well as the Regional Park Office Complex. This water main crosses Lake Arthur and is anchored to the lake bottom with concrete anchors. The deteriorating water line has experienced numerous leaks over recent years presenting numerous challenges and expensive repairs.

Leak detection and repair work had to be made by underwater divers in less than ideal conditions. This repair work has become extremely tedious and expensive. As such a project was identified to replace the existing water main. On both sides of the lake, common trench excavation was a simple means of replacing the waterline. The lake crossing however was not so simple. Numerous



*Workers place buoys to track the drill head location as it progresses under the lake bed*



*Workers place another section of drill bit to the horizontal directional drilling machine*



*The drill head is shown at the horizontal directional drilling machine set up site*

*Continued page -8-*

## Water Line Crossing

...Continued

options were investigated. With modern technology options available today, the clear choice was to replace the water main via directional drilling under the lake bed. This protects the new piping from underwater hazards and degradation and removes the need for underwater divers for making inspections and repairs.

The project included the placement of new 6" diameter fusible PVC piping under Lake Arthur via horizontal directional drilling (HDD) technology and equipment. At a length of 2,384 lineal feet and at a depth of over 40-feet, ensuring the pipe was installed in competent bedrock, it was still a challenging effort.

The HDD Process is first drilling a pilot hole across followed by pre-reaming to enlarge the pilot hole to a sufficient size to then pull the PVC pipe. While pre-reaming, drilling fluids are pumped to stabilize and clean cuttings from the hole. The final step is the pipe pullback into the pre-reamed hole. During the pullback fluids are pumped down hole to provide lubrication.

The new water main can carry a volume of 500 gallons per minute. The project also included installation of various, new PVC and ductile iron piping by traditional open trench method; new precast concrete valve vault and miscellaneous valves for system isolation and air release. It also included efforts for proper plugging and abandonment of the existing, problematic 6" diameter water main anchored to the bottom of Lake Arthur.

Completion of this project ensures a consistent source of clean water supply to the park for decades to come. One of many FDC projects that don't carry a lot of splash and glamour, but certainly critical for successful and economic park operations, and continued public enjoyment.

### Project Capsule

**Project Number:** FDC-210-102016  
**Project Coordinator:** Shawn Beeler, P.E.  
**Project Designer:** Shawn Beeler, P.E.  
**Construction Manager:** John P. Jaskolka, PE  
**Construction Inspector:** Ron Carney  
**Contractor:** Hogens Heros, Inc, dba J5  
**Construction**  
**Construction Cost:** \$696,000.00



*The 6" diameter fusible PVC pipe sections are prepped and fused together in a single machine operation*



*The continuously fused, joint free pipe is laid out for pulling through the bore hole or for trench placement*



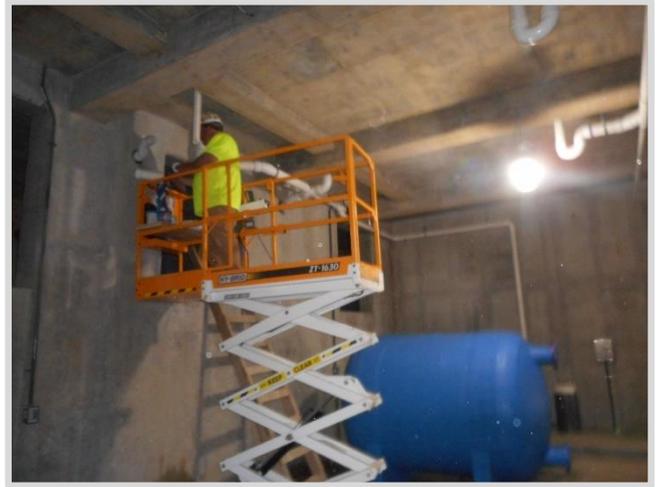
*Precast concrete vaults will provide maintenance access to major control valves and equipment*

## Works in Progress

The following photographs represent some of BOFDAC's active construction efforts throughout DCNR



*DGS 142-9 (Phase 1) - Ryerson Station State Park  
Swimming Pool Complex  
Construction of a large retaining wall*



*DGS 142-9 (Phase 1) - Ryerson Station State Park  
Swimming Pool Complex  
Installation of plumbing system waste piping*



*FDC-214-102546 - Ryerson Station State Park  
Dam Structure Removal - Phase 2  
Workers demolish the dam structure*



*FDC-315-101854 - Whipple Dam State Park  
Sediment Removal  
Workers with long reach excavators remove lake bed sediment*



*FDC-448-102659 - Salt Springs State Park  
Stacked Stone Wall - Fall Brook Run  
Contractor reconstructing a stacked, large stone wall*



*FDC-207-103126 - Laurel Hill State Park  
Group Camp 2 Comfort Station  
Workers install roof shingles*

## Works in Progress

The following photographs represent some of BOFDAC's active construction efforts throughout DCNR



*DGS 197-41 Phase Penn Nursery  
New Wood Shop and Sign Shop  
Contractors installing gutters and downspouts*



*FDC-004-4232 – Rothrock State Forest  
Mount Davis Maintenance Complex Office Building  
Contractors erecting the radio tower*



*FDC-409-1815 – Hickory Run State Park  
Construct New Visitor Center  
Final grading and landscaping being performed*



*FDC-005-101776 – Rothrock State Forest  
Bear Meadows Road Over Galbraith Gap Run  
A crane and workmen setting a deck beam*



*FDC-213-102207 – Raccoon Creek State Park  
Dam Toe Drain  
Placement of precast concrete structures*



*FDC-131-103127 – Shikellamy State Park  
Repair and Replacement of Air Supply Pipes  
Using a jackhammer to access existing piping*

## DCNR and FDC Efforts Recognized with 2019 Forever Green Award

Jarod West, NCARB, LEED AP

During the Forever Green awards dinner on Thursday, November 7, the USGBC Central Pennsylvania honored FDC with a 2019 Leadership Award at Historic Ashland in Wrightsville. This marks the fifth year in a row, and sixth year overall, that FDC has earned a Forever Green Award. This year, DCNR garnered the Climate Champion Award for the solar array and electric vehicle charging station initiatives. This award, in USGBC Central PA's words, "Celebrates a project that demonstrates unique design solutions to address the particular concerns of building in the local environment."

In the summer of 2016, DCNR began an initiative to deploy solar arrays to take select buildings and complexes to net-zero energy consumption, reduce DCNR's carbon footprint, and save on utility costs. By the close of 2022, DCNR's solar arrays are planned to reduce CO<sub>2</sub> emissions by 635 tons annually which would be equal to removing 138 cars from the road per year. Since November 2017, DCNR has deployed a half dozen arrays of varying size.

At Caledonia State Park in Fayetteville, the off-grid, roof-mounted 1.75 kW array at a parking area restroom generates power for the LED lighting fixtures and hand dryers. The battery storage system banks power for use whenever necessary. Furnishing more comfort for visitors, this also lets the park alleviate a paper towel littering issue. Additionally, the solar array avoided a costly project to run power lines to the location situated between two high quality streams.

At the Mount Pisgah State Park Office in Troy, a 5.75 kW roof-mounted array takes the office's electric needs to net-zero. Constructed in tandem with a roof replacement project, this array is the first solar shingle system deployed by DCNR. Interestingly, this array replaced the first solar thermal array deployed by DCNR in the late 1970s which was no longer functional.

At Moraine State Park in Portersville, a 233-kW ground-mounted array generates power for the wastewater treatment plant. This first-of-its-kind deployment for DCNR takes the treatment plant's energy consumption to net-zero. It completely offsets the most energy intensive service at the park.

Fort Washington State Park, located in a suburb of Philadelphia, energized their 25.5 kW ground-mounted solar array in March 2019. The array generates enough



*FDC's Jarod West, RA, NCARB, LEED AP, discusses DCNR's Solar and EV Charging station efforts at the 2019 Forever Green Awards ceremony*

power to offset the park's entire annual electric needs. This makes Fort Washington the first net-zero park in the Pennsylvania State Parks system.

At Oil Creek State Park in Oil City, an off-grid, ground-mounted 0.5 kW solar array generates power for a remotely located warming hut that provides warmth and comfort to visitors who may be hiking, cross-country skiing, and simply enjoying the park throughout winter. This project allows power to be provided to an otherwise isolated location.

The LEED Silver Certified Buchanan State Forest Resource Management Center in McConnellsburg gained a 65-kW solar array. The roof-mounted array offsets the electric demands not only for the RMC building but also for the adjacent storage facility. The project has made this small campus even more energy efficient.

*Continued page -12-*



*After LEED Silver certification the Buchanan Resource Management Center enhanced it's sustainability credentials with installation of a 65-kW solar array*

## 2019 Forever Green Award ...Continued

Combined with previously existing solar arrays and planned installations, these arrays are expected to save over \$100,000 on utility bills and reduce grid-based energy reliance by more than 910,000 kWh annually by the end of 2022. This equates to the energy consumption of 84 average US homes every year. DCNR aims to have two state parks, three state forest district office complexes and five stand-alone facilities at net-zero by that time.

In May of 2018, DCNR created an initiative to provide a statewide network of electric vehicle (EV) charging stations to the public, free of charge, at Pennsylvania State Parks and Forests. Typically, two stations are mounted on a single pedestal, but a few locations have more. These Level 2 charging stations are capable of completely charging a plug-in hybrid or fully electric car within four to eight hours. By the end of 2022, DCNR plans to have stations deployed at a total of 40 parks and forests.

DCNR's first dual EV charging station was located at the LEED Silver Certified Kinzua Bridge State Park Visitor Center in Kane within the PA Wilds region. The next site to receive a charging station was the marina boathouse at Prince Gallitzin State Park in Patton, situated in the forested hills of the Allegheny Plateau. Next, the Washington Crossing Historic Park Visitor Center along the Delaware River became the home of two dual pedestal EV charging stations. Pine Grove Furnace State Park in Gardners at the northern tip of the Blue Ridge Mountains followed with a dual station of their own.

Soon, the upper marina at Codorus State Park on Lake Marburg in Hanover gained a station. Then, Black Moshannon State Park in Phillipsburg, surrounded by more than 43,000 acres of the Moshannon State Forest, deployed a dual charging station at their Route 504 Day Use Area. Moraine State Park in Portersville sited one at the North Shore bike concession near Lake Arthur. Lackawanna State Park in North Abington Township followed suit when placing an EV charging station close to the amphitheater. Next, near the LEED Gold Certified Nature Inn at Bald Eagle in Howard, a renovation and addition project to the Bald Eagle State Park Office saw the park set-up two dual charging stations.

The Cowan's Gap State Park Office, located in Fort Loudon and surrounded by the Allen's Valley area

of the Buchanan State Forest, was the first to deploy an EV charging station in 2019. Then, French Creek State Park which straddles the Schuylkill Highlands in Elverson positioned a charging station at their park office.

Greenwood Furnace State Park on the western edge of the Seven Mountains in Huntingdon situated their station near the park office. Next, Colonel Denning State Park in Newville, surrounded by the Tuscarora State Forest in the Doubling Gap, placed a dual EV charging station adjacent to one of the park's comfort stations.

There are several goals to this electric vehicle charging station initiative. One is to help reduce greenhouse gasses and improve air quality. Another is to aid in filling the gaps between charging stations statewide by focusing on more rural locations. And a third is to encourage visitation to state parks and forests. Visitors can re-energize themselves and their vehicles while spending time on DCNR's scenic public lands.

Special acknowledgment should go to Paula DeVore at the Bureau of State Parks for leading the "drive" for locating public EV chargers at State Parks and procuring electric vehicles for Parks' use. Individual accolades also go to John Dubaich for being FDC's stalwart Electrical Engineer Consultant. He will continue his exemplary work on both initiatives while also welcoming Jason Adams as a fellow Project Coordinator to the solar array projects, and Kathleen Rhoten assisting with future EV charging station projects. Together with 16 LEED certified buildings, environmental education programs, and climate change initiatives, these two initiatives help further DCNR's commitment to statewide sustainable design.



*The Electric Vehicle (EV) Charging Station at Ohiopyle State Park, is one of many being installed at state parks all across the commonwealth*

# FDC's COVID-19 Work From Home Collage

Staying safe. Making it happen. Getting it done.



**Bidding Summary - January 2020**FDC-005-102173.1 Rothrock State Forest  
Structure Rehabilitation

Bid Price:	\$74,920.00	Apparent Low Bidder:	Redrock Construction, Inc.
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FDC-131-101880.1R Shikellamy State Park  
Shikellamy Marina Building Partial Demo

Bid Price:	\$288,460.00	Apparent Low Bidder:	Spotts Brothers, Inc.
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FDC-200 102616.1 Laurel Hill/Linn Run State Parks  
Bridge Scour Repair

Bid Price:	\$142,000.00	Apparent Low Bidder:	Gregori Construction, Inc.
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FDC-410-101675.1 Neshaminy State Park  
Parkside Lift Station Replacement

Bid Price:	\$332,200.00	Apparent Low Bidder:	Eastern Environmental Contractors, Inc.
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FDC-207-103126.1 Laurel Hill State Park  
Group Camp 2 Comfort Station – General Construction

Bid Price:	\$224,380.00	Apparent Low Bidder:	Nevaeh Pipe Bursting LLC
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FDC-207-103126.3 Laurel Hill State Park  
Group Camp 2 Comfort Station – Plumbing Construction

Bid Price:	\$53,700.00	Apparent Low Bidder:	Darr Construction, Inc.
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FDC-207-103126.4 Laurel Hill State Park  
Group Camp 2 Comfort Station – Electrical Construction

Bid Price:	\$143,700.00	Apparent Low Bidder:	Bob Biter Electrical
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FDC-213-07019.1 Raccoon Creek State Park  
Repair Road Slips

Bid Price:	\$512,101.67	Apparent Low Bidder:	Penn Mechanical Group, Inc.
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FDC-004-101786.1 Forbes State Forest  
Pave Mount Davis Maintenance Area

Bid Price:	\$115,879.80	Apparent Low Bidder:	Keystone Lime Company
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FDC-205-07104.1R Keystone State Park  
UST Removal at Maintenance Area

Bid Price:	\$247,000.00	Apparent Low Bidder:	G. Salandro Excavating LLC
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**Bidding Summary - February 2020**FDC-316-101016.1 Codorus State Park  
Pool Rehabilitation

Bid Price:	\$344,554.31	Apparent Low Bidder:	CriLon Corp.
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FDC-100-102673.4  
Construct Solar Arrays at Three State Parks

Bid Price:	\$877,704.00	Apparent Low Bidder:	Energy Independent Solutions
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FDC-007-102494.1 Bald Eagle State Forest  
Structure Replacement

Bid Price:	\$363,700.00	Apparent Low Bidder:	Redrock Construction, Inc.
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FDC-203-102435.1 Jennings Environmental Ed. Center  
Culvert Replacement

Bid Price:	\$29,950.00	Apparent Low Bidder:	LM&R Excavating
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FDC-418-101230.1 Marsh Creek State Park  
Roadway Rehabilitation Phase 1

Bid Price:	\$380,177.00	Apparent Low Bidder:	Barwis Construction
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FDC-427-102143.1 Ridley Creek State Park  
Rehabilitate Road Residential Lease Access

Bid Price:	\$395,154.00	Apparent Low Bidder:	Barwis Construction
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FDC-020-102157.1 Loyalsock State Forest  
Flood Repairs

Bid Price:	\$4,130,187.94	Apparent Low Bidder:	Lycoming Supply, Inc.
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FDC-005-101580.1 Rothrock State Forest  
FDR Diamond Valley Road

Bid Price:	\$1,072,999.00	Apparent Low Bidder:	New Enterprise Stone & Lime
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FDC-222-07121.1 Erie Bluffs State Park  
Complete Rehab Elk Creek Access Road

Bid Price:	\$705,574.00	Apparent Low Bidder:	J. McCormick Construction Co.
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FDC-303-1535.1 Caledonia State Park  
Campground Paving

Bid Price:	\$ 781,342.83	Apparent Low Bidder:	Cottle's Asphalt Maintenance
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**Bidding Summary - March 2020**

FDC-306.103142.1 Gifford Pinchot State Park Replace Rubber Roofing at ELC			
Bid Price:	\$24,200.00	Apparent Low Bidder:	J.M. Young & Sons, Inc.
FDC-123-103128.1 Sinnemahoning State Park Rehabilitation of Main Park Road			
Bid Price:	\$188,788.00	Apparent Low Bidder:	Charles Construction Company
FDC-011-103047.1 Pinchot State Forest Reclaim Asphalt Roads Phase II			
Bid Price:	\$178,948.00	Apparent Low Bidder:	Wayco Inc.
FDC-012-101802.1R Tiadaghton State Forest Structure Replacement			
Bid Price:	\$411,915.50	Apparent Low Bidder:	Jay Fulkroad & Sons, Inc.
FDC-423-102988.1 Worlds End State Park Mineral Spring Road Rehab			
Bid Price:	\$299,777.00	Apparent Low Bidder:	Mitchell Knorr Contracting
FDC-010-102990.1 Sproul State Forest Repair Road Slip			
Bid Price:	\$472,450.00	Apparent Low Bidder:	HRI, Inc.
FDC-202-07102.1 Cook Forest State Park Repair Park Roadways			
Bid Price:	\$1,039,064.15	Apparent Low Bidder:	I A Construction Corp.
FDC-517-101299.1 Ricketts Glen State Park General Construction – Add Full Service Campsites			
Bid Price:	\$746,275.00	Apparent Low Bidder:	Rutledge Excavating, Inc.
FDC-517-101299.4 Ricketts Glen State Park Electrical Construction – Add Full Service Campsites			
Bid Price:	\$137,500.00	Apparent Low Bidder:	Vermilya Construction

**Bidding Summary - February 2020**

FDC-220-102544.4 Presque Isle State Park Electrical Construction – Install Charging Stations			
Bid Price:	\$113,750	Apparent Low Bidder:	A & MP Electric
FDC-226-100677.1 Pymatuning State Park Jamestown Campground Washhouse Replacement – Gen.			
Bid Price:	\$2,724,970.00	Apparent Low Bidder:	Chivers Construction Company
FDC-226-100677.4 Pymatuning State Park Jamestown Campground Washhouse Replacement – Elec.			
Bid Price:	\$249,900.00	Apparent Low Bidder:	Penn-Ohio Electrical Contractors
FDC-800-103108.1 Loyalsock and Tioga State Forest Construct Woven Wire Deer Fencing			
Bid Price:	\$188,491.00	Apparent Low Bidder:	Ali
FDC-800-103109.1 Tiadaghton and Bald Eagle State Forest Construct Woven Wire Deer Fencing			
Bid Price:	\$93,901.00	Apparent Low Bidder:	Ali
FDC-220-07024.1 Presque Isle State Park Design/Build Utilities Replacement			
Bid Price:	\$4,769,000.00	Apparent Low Bidder:	James T, O'Hara, Inc.
FDC-115-103129.1 Lyman Run State Park Rehabilitate Lower Campground Road			
Bid Price:	\$89,525.00	Apparent Low Bidder:	Solveson Contracting, Inc.

**Bid Summary Values:**

January Total Bids/Value:	10/\$2,134,341.47
February Total Bids/Value:	10/\$9,081,343.08
March Total Bids/Value:	16/\$11,728,454.65
Total:	36/\$22,944,139.20

**INTERESTED IN DOING WORK FOR DCNR?**

For a list of current projects out for bid, visit the Bureau's current bid proposal page at:

<http://www.dcnr.pa.gov/Business/ConstructionBids/Pages/default.aspx>

Be sure to check back frequently for updates

## A Note From the Editor

*James J. Kalp, LEED AP*

Wow time flies by. FDC issued our first newsletter "BOFDAC news" in December of 2006. Quickly approaching fourteen years ago. It was developed not only to communicate the depth of professional knowledge and skills executed by the bureaus broadly diverse and talented staff of survey, design, construction and administrative professionals, but also, as a means to effectively communicate the annual economic investment and job opportunities DCNR plays across the commonwealth. A large percentage of FDC's construction contracts are awarded to small, commonwealth businesses. In addition to "in-house" project design, we also award the design of many projects, as well as specialized services to professional design consultants. Again, many of those small, commonwealth businesses.

So as much as the Bureau of Facility Design & Construction supports our sister bureaus of Forestry and State Parks in the maintenance, upkeep and development of safe, functional buildings, bridges, dams, parking lots, landscapes, trails, sanitary and water systems, a broad spectrum of recreational elements and continuous land acquisitions, we are also helping to sustain local businesses and economies.

With this issue, (you may or may not have noticed), we have changed the name of the bureau's newsletter to DCNR Design And Construction Journal. In addition to the name change, we are transitioning from a bi-monthly issue to a quarterly issue.

The work we feature in each issue is just a sampling of the efforts completed, or actively taking place under our realm across the state. We hope our readers enjoy the content and encourage you to share with others. For additional information about the newsletter feel free to contact me.

James J. Kalp, LEED AP  
Architectural Designer II  
Chief Editor  
717-772-8391; [jakalp@pa.gov](mailto:jakalp@pa.gov)



## Bureau Activities & News

- FDC welcomes Adam Watchey, PE to its Southcentral Regional Engineering Office. Adam is a Civil Engineer (General) with a degree from Penn State University. His prior employment included two and one-half years with PENNDOT and approximately ten years with private engineering firms. Adan lives in Richland Township with his wife Erin and six-month old son Abraham. And their dogs Nemo and Bindi.
- Daniel Kaufman, PE, Senior Civil Engineer out of FDC's Western Engineering Office recently completed and passed PennDOT's Bridge Safety Inspector Training and Certification program. The 15-day training program and exam meet National Bridge Inspection Standards (NBIS) for conducting bridge safety inspections.
- FDC will be conducting a Microsoft Project training event Thursday, July 23. This will be the bureaus first bureau wide "virtual" training event. Microsoft Project is a project management software program to aid in efficient management of any project, large or small, by assigning and managing resources, tasks, etc.
- All FDC staff is taking LEAN Awareness Training. This training looks to, and values, front line employees, thoughts and ideas for becoming more efficient and productive in the execution and delivery of programs and services.

We're on the Web!

Visit us at:

<http://www.dcnr.pa.gov/about/Pages/Facility-Design-and-Construction.aspx>

### Questions - Comments?

We value our reader's feedback. Send your questions or comments to:

Chief Editor: Jim Kalp, [jakalp@pa.gov](mailto:jakalp@pa.gov)

Contributing Editor: Seeking Volunteers!

Administrative Support: Sharia Turner, [sharturner@pa.gov](mailto:sharturner@pa.gov)

### Bureau Mission:

To provide multi-disciplined technical support to the other bureaus in DCNR in the areas of project design, project inspections, construction management, contract administration, surveying and other technical advice and consultation.