Sargent starts up asphalt plant in Hermon
See pp. 4-5

The asphalt plant team stands in front of the Sargent Materials asphalt plant silos. From left: Ed Barnes, Douglas Morrison, Vaughn Thibodeau III, Dustin Plummer, and Donnie Kepple.

INSIDE THIS ISSUE
- Dewatering critical for Oxford sewer project . . . pp. 6-7
- Sargent working on 2 projects to upgrade 4 Maine Turnpike interchanges . . . pp. 8-9, 10-11
- Sargent installing underground 115 KV line in Lewiston . . . pp. 18-19
- Turf replacement completed at Husson . . . pp. 22-23
A message from Herb R. Sargent

Investments in equipment, resources, people

“...a couple of years of strong performance gives us opportunities to invest heavily in our future, and we’re doing that. We’re doing it in the forms of investments in equipment and trucks; improvements in and acquisition of natural resources; but most of all, investments in our most important asset: people.”

I wrote that to you in last winter’s issue of ON TRACK, and the evidence of those investments has become tangible in recent months. We have taken what were conceived as broad concepts last year and, through the hard work of our team, have executed many of those concepts to reality.

In terms of equipment, we have always managed our fleet in a way dictated by the markets in which we work—and we continue to do so. Just a year ago, our fleet was geared to very heavy earthwork, but our outlook for 2016 forecast underemployment of that horsepower. Over the course of the winter, we’ve maximized our equipment dollar by replacing much of that equipment with a nimbler fleet that can better respond to the current market demand. In addition, Doug Morrison and his crew have taken the idea of asphalt manufacture from drawing board to production, having received several MDOT-approved mix designs in the last few months. In order to better serve the expected rise in aggregate needs, we upgraded our crushing capacity for TJ Langerak and crew in the Plymouth quarry. And Tim Richards’ equipment department has managed these changes masterfully.

In terms of investment in people, in my mind we swung for the fences last fall when Kevin Gordon agreed to lead the charge to outline the different opportunities available to individual employees—and to help them map their way to success in those opportunities. In that regard, Kevin has taken on the role of Director of Workforce Development—and I know Kevin well enough to know our employees are in the hands of one of the best teachers and mentors there is. Already, Kevin has met with dozens of employees who have shown the qualities necessary to advance, and he is working with them in an effort to get them the mentoring necessary for them to reach their potential. Also, Kevin, along with Jason Frederick and John Milligan of United Technologies Center, put together the first-ever Sargent Construction Academy during June and July. This program gave 11 immediate high school graduates a six-week orientation of our company and the work we do. It was a very hands-on program, and I’m proud that they started helping you out in the field a couple weeks ago. We will be repeating this program in 2017.

As the above investments speak to the future—and in some ways are more focused on the long-term future—as I promised, we’re not taking our eye off the ball for today. No team has had sustained success without proper emphasis on short-, mid-, and long-term plans. In that regard, we continue to focus heavily on work acquisition and execution, and those efforts are showing in both our current backlog and results. Pat Dubay’s estimating team has us enjoying a tremendous backlog at this point in the year, and the Operations Managers are working hard, as always, to deliver the best possible projects humankind can possibly deliver.

A particular example of planning for the short- and long-term is a change in the direction of our Mid-Atlantic operation. We believe the controlled, profitable growth of this region is necessary to offset what has been a shrinking northern Maine economy (with the exception of windpower work). Adding to our incredible workforce there has been a challenge, most notably brought on by the past necessity to travel north, beyond Washington, DC and into Pennsylvania and Maryland. In a move to reduce our employees’ travel times from as much as 6-8 hours to just a few hours, we have redefined our primary market—both by segment and geographically—in a way that we believe enhances our ability to recruit and retain great employees. In addition, we have added Justin Embrey to our staff as an HR/Safety/Recruiter and promoted longtime employee Aaron Tidd to estimator. These moves were all made in an effort to better saturate certain segments of the market—and, hopefully, to grow in a controlled fashion in a smaller geographical area.

There have been many changes over the last year—perhaps more managerial changes than at any one time in the company’s history—and through all those changes, you all continue to perform in a way that draws rave reviews from the people who trust us with their work. I believe this is a testament to the belief in and strength of our direction, a direction I can take little credit for setting. By saying “direction” in this sense I don’t mean what we do for work; I mean how we do that work. That direction (how) was set decades ago by leaders in this company who knew that—every day—they had to keep honing their craft and take care of everything that was in their control.

You are earning legendary marks for being stewards of that direction, and I’m thankful for your every effort.

—Herb
Sargent crew completes construction of Orono Village Green

A Sargent crew from the Bangor Region has completed construction of the Orono Village Green, a small amphitheater and community focal point behind the Orono Public Library.

The site has granite seating with matching granite steps, stone and gravel walkways with bollard lighting, a small stage for concerts or speakers, and a flagstone patio.

It also has a Japanese-style pergola seating area—a wood frame with cross beams creating an open lattice.

Underneath the seating area, the crew installed a drainage system with drainage pipes set in a layer of crushed stone.

“We didn’t want the granite seats moving because of frost,” said Sean Milligan, Bangor Region manager for Sargent Corp.

The granite seats, which range from 18 to 22 inches high, were acquired by the town before the project was started.

When the project was put out to bid in April 2016, Sargent Corp. was the low bidder, but the bid exceeded the amount that the town had budgeted.

Tim Folster, Vice President-Operations, for Sargent Corp., and estimator Dave Preble met with Mandy Olver of Olver Associates, the engineer for the project, to discuss value engineering opportunities to reduce the cost while retaining the authentic features that the town was looking for.

By reducing some of the more expensive aspects of the original design, they were able to bring the project cost down to $213,000, a figure that was acceptable to the town. The contract was signed on May 14, and work began on May 31, the day after Memorial Day.

One of the value engineering changes was to substitute less finished and lower cost materials instead of stamped concrete, which is very decorative but quite expensive.

However, after Sargent contacted Frank Clement, an Orono resident who owns CMI Masonry, Mr. Clement offered to donate the extra stamping at no cost to the town.

The original design also specified that the front steps be pre-cast concrete units. However, Craig Shorey, project manager for Sargent, determined that granite steps could be used instead, as they would match the seating, be better looking, and cost be about the same. Sargent agreed to install the granite steps at no additional cost.

When the crew started work on the project, the first task was to prepare the site—strip the grass, remove a few trees, grade the amphitheater area to accommodate the granite seats, and add fill on a hillside to create a patio area next to the amphitheater.

After the drainage was installed and the granite seats put in place, the crew did box cuts for the concrete patio areas and the footings for one 18-tread precast stair unit on the backside of the amphitheater. The precast stairs located in the front of the amphitheater were changed to granite steps so that they would match the granite seating. The crew also installed light bases for the bollards, with underground conduit to each individual bollard light.

Then the crew moved on to some of the more decorative items in the project, such as the flagstone patio and erection of the pergola kit. The project was completed in July.

Matt Chambers was the supervisor for Sargent on the project. Dave Preble was the estimator, and Wanda Landry was field cost manager.

The crew included Art Morin, excavator operator; Randy Goodwin, skidsteer operator; and Dave Douglas and Tyler Barnes, laborers.

Art and Randy both said they enjoyed working on the project because it was it was out of the ordinary and gave them a chance to use some creativity.

Art told Craig that the project wasn’t “just the same cookie-cutter plan to put in some pipe and dig.” Rather, he said he was able to see the vision and help make something that was aesthetically pleasing.

Art normally operates a 26-ton excavator. For this project, he downsized to a smaller Doosan 140, a 14-ton excavator.

Randy also told Craig that “it’s always nice to do something different and creative.”

The owner was the Town of Orono, led by public works director Rob Yerxa.

Sean noted that Rob was very helpful on the project. “He’s very good to work with,” Sean said. “He has a vast amount of construction experience, and he’s very practical.”
Sargent starts up asphalt plant in Hermon

Sargent Corporation is now in the asphalt business.

The company has constructed a new asphalt plant at its Emerson Mill yard in Hermon that is capable of manufacturing 325 tons of product per hour.

The operation is being directed by Doug Morrison, who was previously general manager of Sargent’s Mid-Atlantic Region.

Other key people at the asphalt plant are Ed Barnes, plant manager; Dustin Plummer, plant technician; Vaughn Thibodeau III, QC manager; and Donnie Kepple, loader operator.

The plant is a continuously-operating counterflow drum plant, in which material is put into cold-feed bins and metered into a composite aggregate drum, where the aggregate is heated up to 300 to 400 degrees for 3 to 4 minutes. After the aggregate is mixed together and heated, liquid asphalt is injected, and the mixing process continues for another couple minutes, when the asphalt mix drops onto a slat conveyor that distributes it to one of three heated silos.

With three silos, the plant can produce three different mixes for clients, changing from one mix to the next on the fly.

Site work on the plant started in December 2015, and utilities were installed at the site in the spring. The asphalt plant components arrived at the site on March 27; the plant was assembled and started producing mix on May 4.

Doug started the process in the fall of 2015 by doing a feasibility study to determine what kind of asphalt plant the company should build.

“A lot of the older plants are batch plants, where the plant makes one batch of asphalt at a time,” Doug says. “It’s a slower process with many more moving parts, but it’s effective if you’re making many different types of asphalt, because every batch you make can be a different mix.”

However, he says the industry is moving towards counterflow drum plants—the type of plant that was installed at Emerson Mill—because it’s a continuous plant and a much more cost-effective process for most producers.

Another advantage of a drum plant is that it can run higher percentages of RAP (recycled asphalt pavement) than a batch plant.

“The industry standard for Maine right now is a maximum of 20% RAP, because that’s the maximum that a batch plant can produce,” Doug says. “We see RAP content increasing to 30% in the future, and that’s something we can do with our new plant.”

During May and June, the crew did a lot of trial batching to ensure that the various mix designs met MDOT specifications for gradation, asphalt content, air voids, and other volumetric properties. That meant making trial batches of about 100 tons and then running samples through the QC lab.

“A lot of the pavement jobs in Maine require MDOT certification in order to put the mix that job,” he says.

Certification is an annual process—something asphalt plants have to do every year.

“The specs don’t change that much, but aggregate sources can change, and variability in quarries can change,” Doug says.

He says one of the challenges that Sargent has faced is that every mix design is new.

“Some plants figure that nothing has changes, so they can submit the same mix design as the previous year,” Doug says. “We don’t have any carryover mix designs, so we’ve had to start from scratch. It’s been a real learning curve.”

After the asphalt has been produced, the customer who buys it is responsible for hauling it to the site and placing it.

“Whoever buys the asphalt hauls it,” Doug says. “All the paving companies have their own trucks, plus they have other companies that haul for them.”

The new plant has one 125-foot-long scale and one 75-foot-long scale, which are used for both asphalt and aggregates. The longer scale is used to evaluate the empty weight and the loaded weight of the trucks to determine the amount of asphalt loaded.

Before the asphalt is placed, the truck beds are sprayed with a release agent—an environmentally friendly chemical that prevents the asphalt from sticking to the truck bed.

Doug says that at this point, Sargent isn’t planning to get into the business of placing the asphalt.

“We just want to sell it,” he says. “Our main goal is to have the flexibility to provide our own mix on our projects, and hopefully provide asphalt mix to numerous other placing companies throughout the area.
Bangor Region develops Emerson Mill yard for asphalt, concrete

The Emerson Mill yard in Hermon is now home to Sargent Material’s asphalt plant and one of its concrete plants.

The yard was originally a clay borrow site. After the clay was excavated, the site served as an area to place surplus fill for a number of years until it was developed into a storage yard. For the past four years, it served as a stockpile area, as well as the location for the Sargent Materials portable concrete plant.

In December, a crew from the Bangor Region started excavating for the new asphalt plant—table-topping the site and crushing and processing stockpiles of concrete and rock from various projects. At the same time, the crew started box-cutting and under-cutting approximately 15,000 cubic yards under the footprint of the new asphalt plant and refilling the area with processed material.

Then the crew started placing cast-in-place concrete footings for the plant, installed two sets of truck scales, and also built nine large bins for the aggregates that would be needed to produce asphalt pavement.

Another part of the site was leveled to provide a new home for Sargent Materials’ portable concrete plant.

Utilities—sewer, water, electrical, etc.—were installed for both the asphalt and concrete plants, and a QC Lab was built for use by both plants. In addition, sediment ponds were constructed on the site that required 10,000 cubic yards of excavation.

In preparation for the asphalt plant, the crew placed footings for a 30,000-gallon propane tank and installed a containment area for liquid asphalt.

The asphalt plant itself arrived on March 27—and it was assembled and producing mix by May 4.

The portable concrete plant, which had spent the winter in Bingham providing concrete for a 56-tower wind farm project, was set up at Emerson Mill in this spring.
Sargent Corporation crews are nearing completion of a $3.2 million project to install 17,000 linear feet of force main and gravity sewer lines as part of the town of Oxford’s new sewer system.

The project required a major dewatering effort in a 1.2 mile long section along Route 26, where the water table was at 4 feet below grade and the sewer pipe was being installed 14 feet below grade.

Sargent rented dewatering pumps and pipe and brought in a subcontractor, Griffin Dewatering of Bolton, CT, to provide field support and expertise. Most of the labor for dewatering was provided by Sargent employees.

Glenn Adams, operations manager for Sargent Corp., said dewatering was the driving force behind everything that happened on the project.

“The project would not have been possible without a major dewatering system,” he said. “It was clear from the geotechnical report that dewatering would be required on the job, but what we got into was definitely more significant.”

In effect, without dewatering, the 14 foot trench for the sewer line would have been filled with about 10 feet of water.

The dewatering system involved drilling wells about 4 feet apart along the trench line, using a 24-foot-long track punch to drill into the sandy soil. When the steel rod was pushed in as far as it could go—usually about 24 feet below grade—the end cap was flipped up and a PVC pipe was inserted to become the well. Then the track punch was pulled out and the process repeated 4 feet down the line.

The PVC wells were then connected to the main dewatering header pipe, which was ran on the ground surface and connected to a vacuum pump that drew the water out of the ground.

While the dewatering was underway, up to four pumps with a capacity of a million gallons per day each were hooked up to the header line, drawing water from 300 feet of wellheads (75 wellheads 4 feet apart) at a time. The water, which was extremely clean, was discharged at predetermined locations every 1,000 to 2,000 feet along the roadway and piped 500 to 800 feet.
One of the challenges involved in the dewatering process was preventing fines in the sandy soil from clogging the dewatering wells. “We had to use a washed sand to backfill the dewatering wells to keep fines to a minimum,” Glenn said.

When the system was operating as designed, it would take two or three days for the pumps to draw down the groundwater to the appropriate level. If fines clogged up the wells, the drawdown period could be extended to four or five days.

“It was a tough job,” said Glenn. “The dewatering crew and the main line crew had to work as a team to make sure that the dewatering crew kept ahead of the main line crew.”

The dewatering crew had to take the water out of the ground; then the main line crew dug the trench in the area that had been dewatered and installed the sewer pipes.

“Theoretically, the main line crew would be working in relatively dry ground, but that wasn’t always the case,” Glenn said. “Sometimes, the crew encountered a sand layer, then a clay layer, and then more sand. When the different layers of soil change, that can affect the nature of the aquifer and how much vacuum is needed.”

Glenn said the goal of the dewatering crew was to remove enough water so that the main line crew could work effectively and comfortably.

“Some days they were able to get by, but on other days, additional pumps had to be brought in because the existing pumps left two feet of water in the bottom of the trench,” he said. “It’s definitely been a challenge.”

Work on the project started in September 2015 with Jim Lagasse as lead foreman. Work was halted for the winter at the beginning of December; it restarted in April 2016 with Seth Watts as superintendent. The job is expected to be completed around the end of August.

Adam Kapaldo is the project manager. In addition to Jim, the foremen are Rob Wilson and Bobby Mann. Pat Dubay was the estimator.

In addition to the sewer lines, the project included a pump station adjacent to the Oxford Plains Speedway parking area, consisting of a wet well and a pre-cast valve vault—a concrete vault with valves and mechanical piping.

The pump station required a sheet pile coffer dam to allow construction of the wet well, which was 25 feet below grade. The foundation for the valve vault was about 15 feet below grade.

The project required 8,000 linear feet of 12” sewer, 600 linear feet of 10” sewer, 6,000 linear feet of 6” force main, 800 linear feet of 6” sewer services, 600 linear feet of 8” sewer services, 30 4-foot diameter manholes, and 3 5-foot diameter manholes.

Traffic control on Route 26 was a major challenge, as the contract required that Sargent maintain one-way alternating traffic flow through a long work zone. The traffic included a lot of trucks, including wide-load traffic from a manufactured housing plant in South Paris.

In addition to Griffin Dewatering, key subcontractors have been ETTI (Enterprise Trenchless Technologies, Inc.) of Livermore Falls, which installed all of the long-side sewer services which required boring underneath the roadway; Glidden Paving of Gorham; Express Electrical of Skowhegan; and I&C Systems Engineering of Scarborough, ME, which handled the controls and instrumentation work for the pump station.

The primary materials suppliers are E. J. Prescott of Gardiner, pipe and fittings; and Superior Concrete of Auburn, precast concrete structures.

The owner is the Town of Oxford. The engineer is Woodard & Curran, with Maggie Connolly, project manager; Rob Polys, technical engineer; and Kevin Hughes, resident engineer.

The Area C project is the third project that Sargent crews have done for the Town of Oxford’s new state-of-the-art sewage collection and treatment system, which will use ultraviolet light rather than traditional chemical methods to sterilize the wastewater before it is discharged into the river.

The first project, Area A, began in July 2014 and was completed in early January 2015. It involved construction of a 2.2-mile sewer line along Route 26 from Rabbit Valley Road to King St., plus a 900-foot section on Route 121 to the site of the new treatment plant.

Work on the second project—the foundation and outfall for the new sewage treatment plant—began in September 2014 and was completed in the spring of 2015.

In 2012, Oxford voters authorized town officials to borrow more than $20 million for the project. In April 2014, the town received $23.7 million in federal funding.

The dewatering system wellpoints and header pipe line the shoulder of Rt. 26 in Oxford, ME.
Sargent crew replacing toll plaza, adding 3rd on-ramp lane at Maine Turnpike’s West Falmouth Interchange 53

Sargent Corporation is working on a $3.6 million project to replace the existing toll plaza on the Maine Turnpike’s West Falmouth Interchange 53, including construction of a third on-ramp lane on the north side of the interchange, a new administration building, and a new employee parking lot.

Work on the project started in November 2015; the scheduled completion date is November 2017.

Paul Gervais is the project superintendent for the Interchange 53 project, as well as a second Maine Turnpike Authority contract to upgrade the toll systems at three other Maine Turnpike interchanges (see story on pp. 10-11).

At the start of the project, Colby Currier was the operations manager and Glenn Adams was the project manager. In January, Colby assumed operational responsibilities for the northern area of the company, and Glenn became the operations manager and Adam Kapaldo took over as the project manager.

Pat Dubay was the estimator.

After mobilizing at the site in November, the crew started the earthwork and pipe installation to allow excavation and construction of the foundation for the new toll administration building. The crew worked through the winter, erecting a huge tent around the construction site in January, heating it, and building a masonry structure inside the enclosure.

Glenn said working through the winter was costly, but it was necessary in order to start work on the new on-ramp lane in the spring.

“We had to complete the new admin building before we could start on the rest of the project,” he said. “We finished the building in July.”

Completing the new admin building was critical in order to move MTA employees out of the old administration building, which had to be demolished because it sat in the path of the new on-ramp lane.

Sargent crews self-performed the earthwork and concrete foundations, including the rebar, form work, and concrete placement. Once the structure was completed, Sargent crews installed prefabricated roof trusses and sheathed the roof. Then IRC Industrial Roofing Companies of Lewiston installed a metal roof and O&P Glass of Augusta installed aluminum doors and windows.

Other subcontractors on the building were ABM Mechanical of Bangor, mechanical, plumbing, and HVAC; Moulison North of Biddeford, electrical; and Tito Masonry of Portland, masonry.

Construction of the toll booth for the new lane began in July and will be completed in September. When that is done, the crew
Sargent crew replacing toll plaza, adding 3rd on-ramp lane at Maine Turnpike West Falmouth Interchange 53

A Sargent crew pours the toll administration building footings at Exit 53 in West Falmouth.

Sargent summer intern Ethan Eckhoff works on the lane 5 toll booth pit foundation in West Falmouth.

A view of the new toll administration building and the widening for the new lane 5 at the MTA Exit 53.

will start replacing the existing toll plaza one lane at a time.

For each lane, Sargent will demolish the existing toll booth and island and install a shoring system that allows the crew to excavate for the new foundations for the toll booth and canopy system—8 feet down, 24 feet long, and no more than 14 feet (one lane width) wide.

On the on-ramp side, construction will include three new islands for two booths and one EZ Pass lane. The EZ Pass lane doesn’t have a booth, but it has a similar island foundation structure.

A reusable steel form was fabricated by Red Rancourt and the Stillwater fabrication shop for the noses of the crash barrier sections. The form is very complicated with a lot of angles and would have been very difficult to build out of wood for each island.

“Once the rebar is in place, the crew can set the steel form and start pouring concrete,” Glenn says. “This will save a lot of time forming and stripping forms—and it’s reusable.”

Sargent will be self-performing the concrete and rebar work, as well as the structural steel erection for the new directional and toll booth signs.

When the crew gets to the off ramps (lanes 3 and 4) next spring, they’ll construct a temporary bypass on the south side of the exit which will carry traffic while the two lanes are reconstructed.

In all, the project will require 400 cubic yards of concrete, 15 tons of reinforcing steel, and about 8 tons of fiberglass reinforcing bar.

The fiberglass rebar is used in areas where steel rebar would interfere with the EZ Pass reader system.

Other subcontractors and suppliers on the project are Glidden Paving of Gorham; C. A. Newcomb of Carmel, guard rails; HarMac Rebar & Steel of Fryeburg, steel rebar; Newport Industrial of Newport, structural steel; Auburn Concrete of Auburn; and Sundown Construction of Auburn, concrete slabs.

The engineer for the Maine Turnpike Authority is Charlie Myers of HNTB in Westbrook. The on-site project engineer is Mike Cloutier of Parsons Brinckerhoff.
Sargent crews led by superintendent Paul Gervais are working on a $4.5 million project to upgrade the toll systems at three Maine Turnpike interchanges serving Biddeford, Saco, and the Portland Jetport.

Work on the project began in February 2016 and is scheduled for completion at the end of November 2017.

The crews are excavating and reconstructing the existing structural slabs for all eight entrance lanes at Interchanges 32, 36, and 46, and for the five exit lanes at Interchanges 32 and 36.

Two of the interchanges—Interchange 32 (Biddeford) and Interchange 46 Northbound (Portland Jetport)—will also get new on-ramp lanes.

The project also includes upgrading the cash toll systems at all three interchanges, including the installation of tolling equipment in the utility buildings, canopy, toll booths, toll booth pits and islands; widening the northbound on ramp at Interchange 32; and the installation of signing and traffic control devices.

At all three interchanges, the work is being done one lane at a time to ensure minimum disruption to the flow of traffic. For the same reason, the contract requires that some of the work be done at night.

At Interchange 32 in Biddeford, which is the busiest on the turnpike system, the project included widening both the northbound and southbound on-ramps and adding a couple of drainage ponds. The new 4th lane on-ramp will have a new canopy system that will be approximately two feet
Higher than the canopy on the three existing lanes.

During the final phase of the project, the existing canopy at Interchange 32 will be raised two feet to match the new canopy.

“It’s one of the last things we’ll do,” said Glenn Adams, operations manager for Sargent Corp. “We’ll either jack it or pick it with a crane. All we know right now is that it has to be done in one night — on a Friday night next summer. The big challenge will be to figure out how to do it structurally.”

At Interchange 36 in Saco, a new EZ Pass lane 6 was installed a couple years ago, increasing the number of on-ramp lanes to four (along with two exit lanes) and eliminating the need for new lane work and new canopies.

However, the heavy slabs underneath the entire plaza had to be reconstructed because they were deteriorating and because the new EZ Pass system needs slabs with fiberglass rebar, which doesn’t interfere with the EZ Pass signal.

In addition, the entire electrical and communication system related to toll collection has to be replaced. That work is being done by Moulison LLC and Transcore.

For Interchanges 32 and 36, the crews have to coordinate their schedules to ensure that the right-hand lanes (the wide-load lanes) aren’t under construction at the same time.

“The right-hand lane has to be open at one of those two interchanges all the time, so that wide loads can enter the Turnpike at either Biddeford or Saco,” said Glenn. At Interchange 46 NB (Portland Jetport), the crews will be adding a new on-ramp lane and toll booth.

Glenn says the crews have been using the same general sequence for the work — driving sheets to protect adjacent lanes while the foundation excavation is completed, then installing the toll booth island with reinforcing rebar and the heavy slab underneath the lane, and finally replacing or repainting the toll booths and canopy system where required.

When one lane is completed, the process will be repeated for the next lane.

Glenn says some structural steel work will be required to construct new canopy structures and toll booths on Interchanges 32 and 46 and new sign structures on all three interchanges.

In addition to the work on Interchanges 32, 36, and 46, Sargent crews are replacing the toll plaza on Interchange 53 (West Falmouth). The projects were originally included in a single contract, but the Maine Turnpike Authority split off the Falmouth job because it was a much larger project than the other three.

Paul Gervais is the superintendent for both contracts, which has made him a very busy man.

“Paul has been doing a very good job managing two contracts at four separate project sites,” Glenn said. “He puts on a lot of miles between the sites. We’re asking a lot of him to manage two separate contracts with more than $9 million worth of work.”

Adam Kapaldo is the project manager. Pat Dubay was the estimator.

The project will require 2,000 tons of pavement, 750 cubic yards of structural concrete, 15 tons of epoxy-coated steel rebar, and 23 tons of fiberglass rebar.

Sargent is making 3,000 tons of base and subbase (Type A and Type D) gravel at the Chandler pit in New Gloucester, which is being used at all three project sites.

Other subcontractors on the project are Glidden Paving of Gorham; Main Line Fence of Cumberland Center, guard rails; HarMac Rebar & Steel of Fryeburg, steel rebar; Concrete Protective Products of North Carolina, fiberglass rebar; Newport Industrial of Newport, structural steel; Auburn Concrete of Auburn; Sundown Construction of Auburn, concrete slabs; Keely Construction Company, structural concrete; IRC Industrial Roofing Companies of Lewiston; and Copia Specialty Products of Brewer, paint removal and repainting of the canopies.

In addition, Sargent crews are working closely with Transcore, the vendor that supplies and maintains toll collection equipment for the Maine Turnpike Authority. When old toll collection equipment is taken out and new equipment installed, Transcore has to test everything and then commission the new lanes.

The engineer for the Maine Turnpike Authority is HNTB of Westbrook. The resident engineer on the project is Bruce Munger of HNTB; the inspector is Jody Dyke of the Maine Turnpike Authority.
Sargent crews complete 12.5-acre cell at Rockville, VA landfill

Sargent Corporation crews have completed Cell 10, a 12.5-acre cell at Republic Services’ 623 Landfill in Rockville, VA.

About 5.5 acres of the cell was new construction, while the remaining 7 acres was piggybacked onto an existing cell. The landfill takes construction demolition and debris.

The owner, Republic Services (623 Landfill, Inc.) wanted the cell completed by May 2016. Sargent crews started work on the project in December 2015 and worked through the winter months to meet the owner’s schedule needs.

Justin Porter, operations manager for Sargent, said the crew’s success in meeting the deadline was due to outstanding teamwork at all levels.

Travis Ridky was the project manager, Jeff Marsh was the project superintendent, and Marc Denis, John Madigan, Shawn Rybski, and Keith Aucoin were the foremen.

Mike Thibodeau and Aaron Tidd were the estimators.

The project engineer for Republic Services was Geosyntec Consultants. Quality control was performed by Draper Aden Associates.

The project required 18 acres of site preparation, including clearing, grubbing, and grinding. In addition, an existing stormwater basin had to be decommissioned to make room for the new cell, and a replacement basin had to be constructed adjacent to the new cell.

Part of the site preparation involved adding fill in areas which had been used for tree and brush disposal, which made access and placement a challenge for the crews.

The crews excavated a total of 69,000 cubic yards of base grade material, most of which went to fill (some of the material was found to be unsuitable). The crews also imported 103,000 cubic yards of base grade borrow, both from on-site stockpiles and from an adjacent property owned by Luck Stone.

After the cell was constructed, American Environmental Group came in as a subcontractor to install the liner system, which included a geocomposite layer, a geomembrane liner, and a geotextile layer.

Because there was only one access point for hauling in the stone drainage layer, the crews could not start placing stone until all the liner operations were complete.

The drainage layer required 29,000 cubic yards of drainage stone, which was brought in from the Luck Stone quarry. During drainage stone placement, Sargent crews assisted Luck Stone in setting a new total daily tonnage record across their scale of 17,760 tons, of which Sargent hauled 5,985 tons.

Sargent crews then installed 2,300 linear feet of 8” HDPE leachate collection piping and cleanouts and 2,000 linear feet of 8” HDPE gas vent piping.

The project also included construction of a sump house, force main, and riser pipes; construction of a new access road around the outside of the cell, which required 14,000 square feet of new stone base, and construction of 4,200 linear feet of stormwater diversion berms on the side slope of the existing landfill to keep water from running onto the newly constructed Cell 10.

The crew also installed 250 linear feet of RCP storm drain piping—170 linear feet of 24” pipe that was a triple run into the new stormwater basin, and the 80 linear feet of 36” pipe that ran under the new access road to outlet the newly constructed channel.

In addition to regular hydroseeding, the owner decided to move ahead with a “spray matrix” product on the back slope of the cell in order to expedite grass growth while limiting erosion issues.

In addition to American Environmental, subcontractors on the project were Eastern Clearing, Bealton, VA, clearing, grubbing, and grinding; Landsaver Environmental, Richmond, VA, silt fence; Ace Hydroseeding, Richmond, VA, seeding; ICSE, Ashland, VA, electrical work for the sump house and stormwater pump; JKS Construction, Fredericksburg, VA, sump house concrete and concrete ditches; and Maxwell Welding, Ashland VA, steel framing for the sump house.
Stormwater channel improvements completed in Waldorf, MD

Crews from Sargent Corporation’s Mid-Atlantic Region have completed most of the work on a $1.2 million stormwater channel improvement project at the Northwood and Tanglewood subdivisions in Waldorf, MD.

The project was designed to convert a failed stormwater management facility into a step pool stormwater conveyance system with associated outfall channel improvements.

Work on the project began in December 2015 and continued through the winter months. The job was completed in May 2016, except for landscape plantings that will be completed during the fall 2016 planting season.

Justin Porter was the operations manager for Sargent Corp., Travis Ridky was the project manager, and Mike Thibodeau and Aaron Tidd were the estimators.

Mark Nicklin was the project superintendent until May, when foreman Shawn Rybski stepped up to complete the project. The other foremen were John Madigan and Keith Aucoin.

The job included construction of 10 step pools using 2,000 cubic yards of boulders, cobbles, and a sand/wood chip mix. The crew also had to install 660 linear feet of 12”, 30”, 42”, and 54” RCP and HDPE storm drain piping and six large diameter manholes for the stormwater bypass system.

The majority of the work was performed in very wet conditions during the winter.

“We had to import quick-lime in order to dry soil for backfill during the pipe installation activities,” said Justin. “Much of the storm pipe was large diameter and deep in the ground, and the site was very small compared to the size of materials that we had to install. This made material laydown a challenge throughout the project.”

Justin said the crew also had to be very conscious of the environment while working in and around the existing stream.

The project required 2 acres of site preparation, including clearing, grubbing, and stump grinding and 5,500 cubic yards of surplus excavation and disposal of trench spoils off-site.

The owner is Charles County, MD; the project engineer is Vista Design, Inc.

Subcontractors on the project were Kim Engineering, Beltsville, MD, quality control, and Cobey Trucking & Construction, Indian Head, MD, on-road dump truck services. Denison Landscaping, Waldorf, MD, will do the landscape plantings in the fall.

“In general, this project was very different from other projects we normally construct,” said Justin, “but the crews succeeded in the diversification and the owner was very satisfied with the end product.”
Sargent Corporation is constructing a 410,000-gallon CSO (combined sewer overflow) retention basin for the City of Gardiner, ME, to minimize overflow discharges into the Kennebec River.

In Gardiner, like many communities, the storm drainage and sewer systems aren’t completely separated, so when a major rain event occurs, the sewage treatment plant is overwhelmed, causing untreated sewage to overflow into the river.

In the past, this has happened 5 to 7 times during an average year. When the CSO retention basin becomes operational late this fall, the first 410,000 gallons of sewer-stormwater overflow will be diverted into the basin and later pumped back into the treatment plant for treatment. Only when the total overflow exceeds the capacity of the basin will it be discharged directly into the river. That will probably happen only once or twice a year, and when it does, most of the overflow will be stormwater.

The new CSO basin is part of a $3.8 million upgrade to the Maine Avenue Pump Station, which is located at the confluence of the Kennebec River and Cobbosseecontee Stream. The project also includes screening upgrades at the pump station.

Colby Currier, who has been operations manager for Sargent Corporation since January, said the project has presented the crews with several major challenges.

First, the project is located on the north side of the pump station in a very confined area, with the Kennebec River 50 feet to the east, Cobbosseecontee Stream 40 feet to the north, and an old railroad line 30 feet to the west.

Within this area, the crews had to excavate 7,000 cubic yards of dirt, rocks, and artifacts to construct the basin, a cast-in-place underground storage structure 100’ long, 32’ wide, and 20’ deep, with an additional 7’ deep sump at one end. Excavation for the project required construction of a very large coffer dam with steel sheets on three sides.

Second, the area where the excavation took place contained large rocks and other debris that made construction of the coffer dam much more difficult.

“The project area was probably under water 150 years ago,” said Colby. “Over the years, it was filled in with debris from a couple big fires in the town, as well as sawmill waste. There was a lot of stuff in the ground.”

While the crew was digging for the foundation, Colby said they came across numerous artifacts and big pieces of wood, especially on the west side near the railroad tracks, which made driving the steel sheets very difficult.

“When the crew hit a big rock or large timber, they couldn’t drive steel sheets, so they had to dig down to find out what the obstruction was and remove it so they could finish driving sheets down,” he said. “Driving steel sheets can be challenging under the best of circumstances; having obstructions in the ground makes a hard job really difficult.”

Excavation and installation of steel sheet piles for the coffer dam took almost
of Gardiner to minimize overflow discharges to Kennebec River

2½ months. Work began on December 1, and the last steel sheet was put in place on February 8—44 work days later.

Colby said the sheet pile design, which was done by Summit Geoengineering Services of Auburn, was one of the most intricate that he’s ever seen.

The outside perimeter used 40’ tall steel sheets. Because the sump end needed to be further underground, the design called for another set of 30-foot steel sheets, called the “horseshoe,” which went down an additional 20 feet below the bottom of the exterior sheets.

“That allowed us to get down to the elevation of the sump, which was 24½ feet below sea level,” Colby said.

Third, the depth of the excavation—particularly in the sump end—and the proximity to the Kennebec River and Cobbosseecontee Stream meant that groundwater infiltration was a challenge.

“As the crew started digging on the sump end, they started encountering a lot of groundwater,” Colby said. “A lot of water came from the river at high tide, but a lot of it was groundwater that came in from below the steel sheets right up through the ground.”

The crews had to install multiple pumps to allow the crews to continue working. At one point, there were three 6” electric pumps, three high-flow 4” electric pumps, and a couple other regular 4” electric pumps—all needed to keep up with the water inflow.

“As we got deeper and deeper in the excavation, if a pump went down, or if a generator went down for any length of time, we could lose our hole for the water—it would just full up with water, and it could take half a day or a day to get caught back up,” said Colby. “We had to get redundant pumps and a second generator, so if we had a generator fail, we could switch over without delay and maintain pumping capacity.”

Colby commended the crew that worked in the horseshoe coffer dam.

“They had to maintain those pumps and keep the area dewatered down to subgrade, so we could get our stone in,” he said. “We prevailed—we don’t give up.”

The concrete subcontractor, N. S. Giles, made the first pour in sump area—55 cubic yards for a 3-foot concrete slab—on March 4. The last wall pour was made on June 20.

N. S. Giles poured the cast-in-place concrete cover for the basin on July 29, and Sargent then backfilled with 6-7 feet of dirt on the sump end.

Other subcontractors on the project were E. S. Boulos of Westbrook, electrical; Knowles Mechanical of South China, HVAC; and Wingate Landscape and Garden Center of Gardiner, planting.

Tim Folster started the project as operations manager for Sargent until Colby took over in January. John Sturgeon is the project manager, and Troy Harvey is the supervisor. Pat Dubay was the estimator.

In addition to the retention basin, the project had several upgrades to the pump station, including new mechanical screens that will able to clean debris from the screen automatically.

When sewage comes into the pump station, a bar screen keeps debris from getting into the pumps. Previously, the screens had to be cleaned manually, and the debris hand-carried out for disposal. Now, the debris is removed from the screen mechanically, brought to a compactor where the water is squeezed out, and then dumped into a container for disposal.

The owner is the City of Gardiner. The engineer is Hoyle, Tanner & Associates. The scheduled completion date for the project is the end of October.
Sargent completes Phase 2 of Castine infrastructure improvements

Sargent Corporation crews led by superintendent Chris Lynch have completed the Phase 2 Infrastructure Improvement Project for the Town of Castine.

The project included a complete rebuild of about 2,300 linear feet of Main St. from the town dock to Battle Ave. with new sewer, water, and storm drainage lines, underground electrical and communications duct banks, concrete sidewalks, and new curbing.

The project also provided for improvements on parts of Water St., Sea St., Perkins St., and Court St. and all of Stevens St.

The owner is the Town of Castine, and the engineers are Olver Associates of Winterport for the underground infrastructure and WBRC Architects and Engineers of Bangor for the landscape and surface features, including sidewalks, roadway, landscape features, and electrical work.

The project had been in various stages of planning for several years, generating a lot of interest among the townspeople, when Olver and WBRC invited Sargent Corporation in the fall of 2014 to put together a team to finish the design and negotiate the project with the town.

John Sturgeon, project manager for Sargent Corp., said the project was negotiated during the fall of 2014, the contract was awarded in February 2015, and the notice to proceed was received on March 2, 2015.

The project required 5,000 linear feet of sewer pipe, 4,000 linear feet of water line, 4,000 linear feet of storm drain, 10,000 linear feet of conduit trenches, 11,000 cubic yards of excavation for roads and sidewalks, and 11,000 cubic yards of gravel.

The project also required close attention to detail to preserve the historic appearance of the town.

“Castine has a lot of elm trees that are hundreds of years old, and it is very protective of them,” John said. “When we were digging near an elm tree, there was an arborist on duty to make sure the roots weren’t damaged. The sidewalks had to have a special aggregate finish to try to match the old sidewalks.”

In some areas where tree roots were close to surface, the crews used pavers instead of concrete, because they couldn’t get the depth of gravel that would be needed to support the concrete.

As a result of these and other efforts, not only did Castine get a street with new sewer and water, but also a street with no overhead power or utility lines.

Work started in March 2015 and was completed by July 1, 2016. The work was done in phases to allow for timely completion of the upgrades with minimum disruption to individual businesses and homeowners.

Phase 1, which ran from March through May 2015, covered the lower part of Main St., including Water St. and Sea St. When that part of the job was completed, the crews halted work for the summer.

Phase 2, which ran from September 8 to December 16, 2015, focused on the upper 1,000 feet of Main St., from Court St. to Battle Ave., a primarily residential area.

“We skipped the main business section in phase 2, because they were going to be open through Christmas, and they didn’t want us tearing up the street during the holiday shopping season,” said John.

Phase 3, the final phase, started at the end of March 2016 and covered the main business section of Main St., from Water St. to Court St.

“It was a real foot race to get the work done by July 1, but we did it,” said John.

Tim Folster was the operations manager for Sargent Corp. when the project started; Colby Currier took over in January of 2016. Dave Preble was the estimator.

Subcontractors were Hampden Electrical, Wellman Paving, Dirigo Slipform, CMI (masonry), P. A. Lyford (landscape), and Fineline Paving and Marking.

Colby said the project was very challenging for the crews.

“We had three or four crews during any given time period installing water, storm drain, and sewer lines on a very short section of the street,” he said. “It was very congested. The crews worked from daylight to dark—and on weekends, too—to meet the schedule.”

The job required a lot of coordination between the crews.

“We were installing pipes that had to criss-cross each other,” Colby said. “The crews had to make sure they got the right pipes in at the right time.”

When the crews were excavating, they encountered a lot of existing pipes—cellular drains and and sewer services—that nobody knew anything about.

“The crews had to find out if the pipes were active,” Colby said. “A drain pipe might come from a residence several hundred feet up the road. The pipes were installed a long time ago. They also had to backtrack sewer services to where they came from—that was challenging, too.”

Another challenge came up near the end of phase 2 in December, as the crews were able to dig some trenches in the travel way. That allowed the crews to install some additional sewer lines, but it also meant the company had to find a substitute for asphalt pavement to close up the trenches.

“All the paving plants were closed for the winter, but we had to put something in to allow the roadway to be plowed,” said John. “Ordinarily, we would use cold patch as a temporary solution, but it’s susceptible to freeze-thaw cycles, which causes it to break up. Instead, we closed up the trenches with about 4” of concrete. It was a gamble, but we thought the concrete would hold up better than cold patch. For the most part, it worked very well—it reduced our maintenance requirements significantly and enabled us to keep going later into the winter than we ordinarily would have done.”

Colby and John said Chris Lynch did an outstanding job as superintendent, working closely with town manager James “Jimmy” Goodson III and others to meet the needs of interested townspeople while still adhering to the construction schedule.

“Jimmy was a great facilitator,” John said. “He really helped the project. He tried to accommodate the people as best he could, but he also looked out for the town’s welfare, as well as Sargent’s ability to get the project done on a timely basis. He worked with all of the different factions in town.”

* * *

While the infrastructure improvements were underway, Sargent crews also completed an addition to the Town of Castine’s existing water treatment plant.

The project included construction of a new surface water treatment system with new pumping, filtration, and disinfection system to augment the town’s water supply.

The project was done under a separate contract. Work began in late October, with Sargent constructing the foundation and slab and Dunbar & Brawn of Bangor coming in as a subcontractor to erect the

(Continued on next page)
Sargent installs new water line in downtown Caribou

Sargent Corporation has completed a three-month project to install a new water line on North Main St. in downtown Caribou from Water Street to Westwind Drive, near the airport.

The project includes installation of 2,900 linear feet of 12” pipe, 160 linear feet of 6” pipe, 8 hydrants, and 600 linear feet of 3/4” copper service lines to about two dozen houses.

Work on the project began May 1; it was completed the end of July.

The new water line replaced one of the city’s original water pipes, which was installed in 1890.

Colby Currier, operations manager for Sargent Corp., said the crews had to deal with some significant challenges, including heavy traffic and a lot of underground utilities.

“We were replacing a pipe that was put in 126 years ago,” Colby said. “A lot of stuff has been put in the ground since then.”

Caribou went through a wave of downtown revitalization during the late 1970s, and when they did, construction crews built right over a lot of existing storm drains, sewer lines, and telephone and electrical conduit—even a section of concrete roadway.

Colby said when the crews encountered conduit, they had to make sure that Fairpoint came out and declared them no longer in use before they dug through them.

“It was very congested down in the southern part of North Main St.,” Colby said.

Because the new water line followed the path of the old one, Sargent had to come up with a plan to provide temporary water service to customers whose service would be interrupted.

Colby said project superintendent Mike Gordon came up with some pretty innovative ways to provide temporary water service without having to trench across a lot of streets or driveways with the temporary lines. For example, some temporary lines were run on top of the ground between two houses and then branched off to provide service to both of them so the line wouldn’t have to cross their driveways. Mike also routed some temporary water lines through existing storm drains to allow the lines to cross the street without digging a trench.

Travis Fernald was the project manager for Sargent, and Chris Wilson was the foreman. Cody Jean was the estimator.

Key subcontractors were Steelstone Industries of Houlton, paving, and Project Flagging, flagging. The owner was the Caribou Utilities District.

Colby said the people from the Caribou Utilities District and the City of Caribou were very good to work with.

“They were a great group of people,” he said. “Everyone was extremely cooperative.”

He said the utilities district was particularly helpful when crews had to tie into a low-level above-ground water tank on North Main St. near Country Road, which feeds a second, high-level tank located a few hundred yards north on North Main St. near the airport.

“In order to do that, we thought we would have to shut down the low-level tank and do a major bypass to keep water flowing to the high-level tank, which serves one entire side of Caribou,” Colby said. “We went to the town and talked to them about this, and they came up with a plan to supply the low-level tank from another direction by opening up some valves. They’d never done this before for very long, but they were able to test it out prior to our crews breaking ground.”

Castine infrastructure improvements

(Continued from preceding page) building during the winter. Sargent crews did the yard piping in late winter and the mechanical work in the spring. Seeley Electric of Otis was the subcontractor for the electrical and instrumentation work.

The crews were finished at the end of June.

The new system was designed by Olver Associates of Winterport. It provides new piping for an existing drilled well that serves as a filtration and chlorination system. After the water was chlorinated, it went through a PVC loop, where the disinfection process was completed.
Sargent crews construct 1.2 mile trench for 115 KV transmission line in downtown Lewiston

Sargent Corporation crews are working nights this summer on the construction of a 1.2-mile long underground 115 KV transmission line between two Central Maine Power substations in Lewiston.

The new underground line will run from the new Middle Street Substation along Chapel Street, Main Street, Canal Street, and Lisbon Street to the Lower Lewiston Substation on Strawberry Patch Lane.

The line, which is linked to CMP’s Maine Power Reliability Program (MPRP), will be the only 115 KV transmission line in Maine that is underground.

The owner is Avangrid (formerly Iberdrola USA), which is the parent company of CMP. The owner’s representative is Burns & McDonnell, a national construction management company with a local office in New Gloucester.

Glenn Adams is the operations manager for Sargent Corp., Ian McCarthy is the project manager, and Matt Thibault is the superintendent. Pat Duibay was the estimator.

At the start of the project, the Sargent team included Cody Jean as QA/QC/Safety supervisor; he was later replaced by Ronnie Dube. Jim Lagasse and Jeshua Dearborn have been the foremen.

Moulison LLC is the subcontractor to Sargent on the electrical part of the job.

The 115 KV line will be carried by a duct bank with four 6” pipes encased in 3,000 psi concrete and buried underground at depths of up to 12 feet. In most areas, the duct bank will be 2½ feet square; in some areas, the duct bank will be 1’x4½, either vertical or horizontal, in order to avoid conflicts with ledge, utility lines, or other obstructions.

After the transmission line duct bank is put in place, the trench is backfilled with a fluidized thermal backfill—a mixture of water, sand, and cement with a maximum compressive strength of 300 psi. The flowable fill is used instead of dirt for backfill because its heat-conductive properties allow heat from the 115 KV cable to escape and dissipate in the road gravels.

It also allows for easier backfilling around existing utilities, and it is strong enough to support the roadway above it. At the same time, someone who needs access to the duct bank or the surrounding area can dig through it by hand.

Glenn says the project involves a number of challenges—in particular, the number of pipes and other underground utilities that can’t be disturbed, as well as the need for concrete testing, soil testing for contamination, and the requirement that most of the work be done at night.

Glenn says a survey of utility plans along the route by Burns & McDonnell found that some areas—especially along Main Street and Canal Street—can have 30 to 40 utility crossings in a 100-foot section of roadway.

And that doesn’t include pipes that aren’t shown on any plans.

The design for the duct bank tries to miss as many utilities as possible. However, the crews need as much flexibility as possible to go up or down, right or left, to avoid conflicts with crossing pipes.

Consequently, the crews have been using a trench boxes in combination with hydraulic shoring and 1” thick steel sheets.

The hydraulic shoring system resembles a trench box, but the steel sides are connected by up to three hydraulic cylinders depending on the depth of the trench.

“A trench box has to be put in by machine,” Glenn says. “By contrast, the hydraulic shoring system can be lowered manually, and the hydraulic system pushes the steel plates out to keep the trench from collapsing. It makes it a lot easier to move up and down to avoid utilities when we come upon them.”

In areas where multiple pipes makes digging difficult, the crews can bring in a vacuum excavator operated by subcontractor New England Boring Contractors of Glastonbury, CT.
“It’s like a giant shop vac on a truck,” says Glenn. “The crew loosens up the material with a machine or by hand, and the vacuum excavator sucks it out of the trench.”

In addition to the 6,110 linear feet of transmission duct bank, the project includes 1,600 linear feet of distribution duct bank, mostly on Chapel Street to provide connections to the Middle Street Substation and on and Strawberry Patch Lane to provide connections to the Lewiston Lower Substation.

The distribution duct banks have 16 conduits and are about 4’x5’. Like the transmission duct banks, they are encased in 3,000 psi concrete. There are also two 20-ton distribution/transmission manholes—24’x7’x8’—that connect the transmission lines to the two substations.

Concrete for the duct banks and the fluidized thermal backfill is being provided by Sargent Materials from its plant in Monmouth, ME. The project requires 2,400 cubic yards of 3,000 psi concrete to encase the duct banks and 5,000 cubic yards for 300 psi flowable fill for backfilling.

The duct banks require a custom concrete design with a lot of fly ash and aggregate with certain geologic properties. For example, the concrete has to use aggregate has to use stone that’s low in mica, because mica doesn’t conduct heat. The goal is a product that’s strong enough to protect the cable and with thermal properties that allow it to dissipate the heat that’s generated by high-voltage electrical generation.

Another challenge on the project is the need to identify and deal with contaminated material.

“It’s a concern on the entire job, but particularly in the former mill areas, where there’s a lot of coal ash,” Glenn says.

The crews have a very detailed contaminated waste protocol. If we think soil might be contaminated, samples are sent out for testing, and if the test results say it’s contaminated or hazardous, it’s sent to a landfill or to a recycling facility.

“We have to check every bucket we take out of the ground to make sure there’s no discoloration, odor, or sheen in the water,” he says. “It’s a little more challenging at night, because it’s a lot easier to see in daylight.”

Most of the work on the project is being done at night between the hours of 6:30 p.m. and 5 a.m. At the end of each shift, the crew has to cover about 100 feet of open trenches with two layers of 1” steel plates, which are tack-welded together so that they don’t slide. The crews then apply reclaimed pavement to the edges of the steel sheets to make it easier for vehicles to drive across them all day long.

Sargent purchased a large number of steel sheets to ensure that there would be enough to keep traffic flowing without interruptions. The crews also applied an anti-skid coating to the steel sheets with rollers to make them more driver-friendly.

In addition to Moulison LLC and New
Sargent crews completing work on 56-tower wind farm with

Sargent Corporation is finishing work on a 56-tower wind farm that has been under construction in Bingham and Kingsbury, ME, since April 2015.

Sargent has been a subcontractor to Reed & Reed for the earthwork for the project, which included 30 miles of access road and crane path atop four ridges along Route 16.

Most of the site work for the access roads and tower pads was completed last summer and fall, so that the owner could bring in components—tower sections, nacelles, and blades—in late fall and throughout the winter.

The foundation work for the towers was completed in March. Erection of the towers began in April and is scheduled to be completed by the end of July.

Sargent crews are currently completing the site work for towers that have been erected—doing the final grading to ensure proper drainage of the tower sites and narrowing the access roads once they are no longer needed as a crane path.

The crews are also doing the site work for a substation on the north ridge and an O&M building that will serve as headquarters for the wind farm after construction is complete. Sargent was contracted by Bowman Construction of Newport for the O&M building foundation excavation and backfill, along with the underslab utilities and fine grading.

The scheduled completion date for the project, including the substation, O&M building, and final grading, is late September 2016.

Tim Folster was the operations manager for Sargent Corp. at the start of the project, and Dee Hobart was the superintendent. Dee retired in November and was replaced by Scott Blanchard. Colby Currier replaced Tim as operations manager in January.

Travis Fernald is the project manager. Dave Preble was the estimator.

Key foremen have included surveyors Jason Millett and Pete Williams, along with Tim Blais, Mark Wright, Richard Otis, Matt Tenan, and Scott Haynes.

The project required 333,000 cubic yards of stripped topsoil, 530,000 cubic yards of earth excavation to fill, 345,000 cubic yards of rock excavation to fill, 56,000 cubic yards of aggregates crushed on site using a Sargent-owned crusher, 11,000 linear feet of storm drain, 144 ditch turnouts, 45,500 cubic yards of foundation excavation, 93,000 linear feet of electrical trenching, 8,000 cubic yards of rip rap, and 110,000 cubic yards of placed aggregates.

Of the 56 tower foundations, 25 were rock-anchor foundations, in which the foundations were bolted to the ledge, and 31 were spread footing foundations, concrete pedestals that are large enough and

Underground 115 KV transmission line

(Continued from preceding page)

England Boring, key subcontractors are Pike Industries, paving; Enpro of Portland, soil testing and contaminated waste disposal; and Summit Geoengineering Services of Lewiston, excavation design and monitoring well installation.

The field inspector from Burns & McDonnell is Guy Ordway, who also serves as construction manager. Leah Gymziak, community relations for Burns & McDonnell, has done a great job of notifying abutters and other stakeholders about project activities and changes to the schedule.

Planning for the project started in 2015. Sargent Corp. was notified in October 2015 that it was going to do the job, and the contract was signed in December. Work started on May 9, 2016, and the job should be substantially complete by mid-November.

Tie-ins will be made during the spring of 2017, with final completion in August 2017.
Sargent crews completing work on 56-tower wind farm with 30 miles of access road, crane path in Bingham, Kingsbury.

Sargent Materials provided close to 25,000 cubic yards of concrete on the project as a subcontractor to Reed & Reed (see ON TRACK, Winter 2016, pp. 20-21).

Subcontractors to Sargent on the project were Comprehensive Land Technology (CLT), clearing; Maine Drilling and Blasting; and Norpine Landscaping (seeding).

Colby said the challenges included both the size of the project and the fact that the schedule was expedited to allow the owner to bring wind tower components to the site 6 to 8 months earlier than planned.

The original schedule called for the owner to start hauling components to the site in the spring of 2016 after mud season and to start erecting towers in the summer. Under the new schedule, components were brought in during the late fall and winter months and erection of the wind towers began in April.

For that to happen, the foundation work had to be completed during the fall and winter, and road construction also had to be accelerated. “The crews had to work long hours and weekends to accommodate the new schedule,” Colby said.

Sargent also had to keep the roads open all winter and during the spring mud season to allow the crews to keep working.

“In the original plan, the tower components weren’t coming on site until spring, so all we would have had to plow during the winter was a path for the trucks to get through,” he said. “With components coming in, we had to plow the entire width of the roadway (36 feet). Sometimes keeping up with the snow was a challenge. Fortunately, we didn’t get as much snow as usual during the winter of 2015-16.”

The crew also had to keep the roads open for traffic during mud season.

“During mud season, when all the DOT roads were posted, Reed & Reed had enough components on site so that they were able to start erecting the towers,” Colby said. “Gravel roads typically break up when the frost starts to come out of the ground, so trying to maintain access for cranes and other large equipment was a challenge sometimes.”

The sheer size of the project was also a challenge, Colby said.

“There were 30 miles of access road and crane path,” he said. We had to maintain dust control and keep the roads graded. We had two graders on the project full-time maintaining the roads, and a lot of calcium was put out for dust control.”

The project was originally developed by First Wind, which has built five other wind farms in Maine. First Wind was purchased by wind power developer SunEdison in January 2015. When the project was proposed in 2013, its was described as the largest wind farm in New England, with the capacity to generate enough electricity to power more than 65,000 homes.
Sargent selected to supply concrete for Eastport breakwater repairs

Sargent Materials has been selected to supply 2,500 cubic yards of concrete for the reconstruction of the Eastport breakwater, a portion of which collapsed in December 2014.

The reconstruction project began in May 2016, with a projected completion date of early 2017.

CMP Construction of Freeport is the general contractor for the project. Sargent Materials is a subcontractor to CPM.

Chad Comstock, manager of Redi-Mix Operations for Sargent Materials, said the concrete was being supplied from the company’s East Machias plant.

He said the project is “pretty standard work” from the standpoint of a concrete supplier.

“We don’t have to go too far out on the pier,” he said. “The crane can reach to where we’re pretty much on land.”

He said CPM Construction had to drive sheet piles during the winter to shore up the L-shaped pier and breakwater so that it could handle the weight of the crane.

Overall, Chad said Sargent Materials is looking at a pretty good year.

“We’re ahead of where we were last year at this point,” he said. “That’s a good sign.”

He said the concrete plants had been dealing with a lot of smaller jobs, including increased residential activity in the areas served by the Monmouth and Hancock plants.

“We’re waiting for the commercial jobs to get going,” he added.

Chad noted that Sargent Materials will be supplying Cianbro Corp. with 2,500 cubic yards of concrete for a small windmill project in Clifton. Cianbro will be erecting five windmills on Pisgah Hill between Routes 9 and 180 in Clifton.

Sargent completes replacement of turf

Sargent Corporation has completed a two-month project to replace the turf field at Husson University’s Dr. John W. Winkin Athletic Complex, home to Husson’s baseball, field hockey, and football teams.

Work on the project started on May 9 and was completed on July 13.

The project included removal of the old field, installation of a new perimeter drainage system, and installation of the new field.

In addition to the artificial playing surface, the new field includes a 1” thick shock pad and drainage layer called Brock PowerBase, which is designed to reduce player injuries by absorbing some of the force when a player hits the turf.

“Instead of hitting the turf with a layer of infill on crushed stone, the player has an extra layer of PowerBase to absorb some of the shock,” says Sean Milligan, operations manager for Sargent.

Field Turf says the new PowerBase layer can reduce the potential for injuries by as much as 50%.

The PowerBase layer also improves drainage by wicking some of the water toward the perimeter drains, while allowing some to drain through and be absorbed into the ground.

Sean Milligan was the operations manager for Sargent Corp., and Craig Shorey was the project manager. Wanda Landry was field cost manager and Dave Preble was the estimator. Pete Parizo was the project supervisor for Sargent.

After putting up a silt fence and other erosion controls, Sargent brought in subcontractor R.A.D. Sports to remove the old field.

R.A.D. Sports used a machine that acts like a sod cutter to slice the turf, scoop it up, shake off the rubber infill material, and then put old turf into bags for recycling.

The used turf is a high-grade plastic which can be recycled to make lawn furniture or other plastic items.
field at Husson’s John W. Winkin Athletic Complex

Fan’s eye view of Husson University’s new turf field.

The infill material, a combination of sand and fine rubber particles, was collected so it could be re-used on the new field. The infill is spread between the turf fibers to provide softness on impact and the correct firmness—in effect, simulating the soil on which natural turf grows.

Husson purchased new turf, but decided to re-use the infill. Reusing the infill material can offer the owner substantial savings when a turf field is replaced.

After the old field was removed, Sargent installed the new perimeter drainage system—1,500 linear feet of 12” drainage pipe with plastic field cleanouts located at strategic points around the field, so that any blockage in the system can be addressed.

Then the drainage pipe trenches were backfilled with 3/4” crushed stone for drainage, and concrete footings were installed for the outfield fence, to allow sections of the fence to be removed during the winter so that snow can be removed from the outfield.

After the footings were in place, a slip-of concrete curb was installed around the perimeter of the field to anchor the turf. Previously, Husson had anchored the turf to pressure-treated lumber, but the concrete curb provides a more durable and more stable anchor point for the artificial turf system.

Dirigo Slipform installed the curb, using a curb mold with a 1”x3” notch that’s specifically designed for turf fields. The 12” curb is set in a trench, leaving the surface of the notch level with the turf, and the edge of the turf is glued to the 3” surface of the notch.

While the curb was being installed, Sargent started regrading the field, making some very slight changes to create a couple of new drainage areas. A high point was created behind second base, so that the outfield pitched down to drainage and the infield pitches to the sides of the drainage.

To complete the grading process, Sargent hired a subcontractor, Eston Ross of Northeast Laser Grading LLC, a New Hampshire firm that specializes in grading athletic field complexes.

Ross has a miniature grader, about the size of a farm tractor, complete with a blade with laser sensors on it. Sargent gave him the grade specifications, which he entered into his computer, and then he used his grader to push the dirt around the field while the grader blade automatically sets itself to the proper elevation.

At the conclusion of the process, Field Turf, the turf installer, has to come in and approve the grading of the field.

“The Field Turf people got out their string lines and 10-foot straightedges, and checked the field to make sure that there weren’t any waves—rises or dips in the field,” Sean said. “They said it was one of the best-graded fields they’ve ever seen.”

Sargent assisted Ross by delivering materials as needed. Clarence Churchill on a skidsteer was tasked with supporting the grading efforts, while Pete and the rest of the crew worked with Dirigo. C. A. Newcomb of Carmel installed the fence posts and the black vinyl-coated wire fence.

In mid-June, Field Turf started installing the new field. They completed their work on July 1, leaving Sargent time to complete the final cleanup before turning the field over to Husson on July 13.

The turf field also used for football and field hockey, as well as baseball. Football and field hockey lines are paint using non-permanent paint that is visible during the fall, but which gradually disappears by the time baseball season comes in the spring.
Team effort credited as crews complete Cell E in just 2 months

A good team effort from all concerned resulted in the successful completion of Cell E at the Prince Edward County Landfill in Farmville, VA, in just two months.

Work on the $1.33 million project began in May 2016 and was completed in July 2016.

The 4-acre municipal solid waste landfill cell required 30,000 cubic yards of base grade excavation, with 1,000 cubic yards used for fill while the remainder went to stockpile.

Some 14,000 tons of #68 stone was imported and placed for the leachate drainage layer, along with 1,800 linear feet of 6” and 8” HDPE leachate collection piping and cleanouts and 300 linear feet of 24” corrugated HDPE storm drain piping and drop inlet. Due to the short duration of the project and the long lead time for acquiring #68 stone, most of the stone had to be imported and stockpiled ahead of time to ensure that it would be on-site and available when needed.

The liner subcontractor, Hallaton, Inc. of Sparks, MD, installed 4 acres of geo-synthetic clay liner, HDPE liner, cushion geotextile, filter geotextile, and rain cap.

Sargent crews imported and installed 1,000 tons of rip rap for the perimeter channel.

Justin Porter was the operations manager for Sargent Corp., and Travis Ridky was the project manager. Jeff Marsh was the project superintendent, and John Madigan was the foreman. As the only foreman on site, John played a key role in coordinating the field operations during the different stages of construction.

In addition to Hallaton, subcontractors were Erosion Control Services, Virginia Beach, VA, seeding and erosion and sediment controls; and J.R. Tharpe Trucking Co., Inc., Burkeville, VA, which coordinated and hauled aggregates for project, including the entire quantity of #68 stone.

Project owner was Prince Edward County, and the project engineer was Resource International, LTD.
Kevin Gordon named Director of Workforce Development, will serve as ‘mentor’ to new employees, junior foremen

Kevin Gordon, manager of the Bangor Region since Sargent & Sargent acquired H. E. Sargent in 2005, has been named Director of Workforce Development for Sargent Corporation.

In his new position, Kevin will work with junior foremen and other new foremen to ensure that they understand their responsibilities and their career opportunities, and he’ll talk with laborers about what they have to do to become truck drivers, equipment operators, or foremen.

He’ll also be responsible for the Sargent Construction Academy, an intensive 6-week training program for new employees, which recently sent its first class of 11 employees into the field. (See story on pp. 28-29.)

Herb Sargent, President and CEO of Sargent Corporation, described Kevin as “our company mentor.”

“He’s the person who will follow our promising people and try to make sure they’re in the right place to succeed, both for themselves and the company,” he said.

His current focus is primarily the company’s junior foremen and newer foremen, but he’ll also be talking to employees who don’t have supervisory responsibilities—for example, laborers who may want a chance at being an equipment operator.

“He’ll be looking at the whole breadth of the company,” Herb said. “What we’re trying to do is better formalize a mentoring process,” he says.

Herb says Kevin is the perfect person to lead both the Academy and the mentoring effort.

“I’ve known Kevin since 1982, and we’ve worked together on dozens of projects. He loves teaching—he was a physical education teacher when I called him and asked him to work for me at Sargent & Sargent.

“He’s really good at working with people,” Herb says. “I’ve watched him develop people over the years. He knows how to convey what’s important and what’s not—both in hard skills and operational skills.”

Herb said the focus on mentoring goes back to a meeting of the company’s superintendents about three years ago.

“The superintendents said they all needed to do a better job of mentoring,” he said. “Then we went to work that summer, everyone got busy, and the mentoring project got put on the back burner.”

What are the benefits of mentoring?

Herb mentioned an incident when Kevin visited a job site where a young junior foreman was finishing up a project.

“Kevin arrived in the morning, talked to the foreman, and asked him about several aspects of the project,” Herb said. “After a while, it became pretty clear that some things needed to be done that the foreman hadn’t considered, so Kevin decided to spend the rest of the day with him. It’s not that the foreman wasn’t trying,—he just hadn’t been through enough. If we’d let that guy go at that same pace, we would have been a lot longer [at that job site] and probably would have had some problems. I’m sure the time Kevin spent with the foreman saved the company a lot of money over the course of the project—and resulted in a lot less frustration for the foreman.”

In addition, the company will save even more money in the coming months and years when the foreman remembers the lessons he learned from Kevin and doesn’t make the same mistakes on future projects.

“This is not a two-year effort,” Herb added “This is an effort that will pay off over the next 10 or 20 years. In 10 years, when Kevin has had the opportunity to mentor several hundred people coming up in the company, I dare anybody to try and beat us.”

Herb points out that 30 percent of the company’s workforce is 55 and older, which means that if employees retire at an average age of 65 over the next decade, the company will have to replace 120 to 150 people just to keep the same workforce.

“We don’t want people to feel they have to retire at 65,” he says, “but we do want them to realize that the company is making plans so that we will be able to replace employees if they decide to retire.”

Kevin said most of the foremen and superintendents recognize the importance of mentoring, but they have too much going on to be able to devote much time to it.

“We’d like to have them spend time with the employees, showing them what they need to do, but realistically, they have so much on their plate already—paperwork and dealing with owners, inspectors, etc. When they have someone who doesn’t know everything they need to know or who needs help, I can come in and work with him or her and not have to worry about other things like keeping equipment running. All I have to worry about is making sure that this person has what he or she needs and knows what they need to know—and I can work with them as long as I need to.”

Kevin Gordon (kneeling) shows new employees how to mark up and read a grade stake.
Sargent welcomes 11 new employees with 6 weeks of

Sargent Corporation has a great workforce now, but we need to look to the future.

That’s why 11 new Sargent employees recently spent six weeks of intensive training at Sargent Construction Academy during June and July before starting full-time employment with the company on August 1.

And that’s why the company has asked Kevin Gordon, who was in charge of the Academy, to work full-time on mentoring promising employees, including junior foremen, the Sargent Academy graduates, and others.

The Academy was held in the basement conference area of the Sargent Materials building in Stillwater. The students, all high school graduates, came from across the state, having enrolled in CTE (career and technical education) programs in Bangor, Belfast, Dexter, and Lewiston.

While the Academy was in session, the students were housed at Husson University and bused to Stillwater or wherever field trips were scheduled. Breakfast was available at 5:30 a.m., with the bus leaving at 6. On most days, the students were scheduled for clean-up at 4:45, and the bus took them back to Husson at 5.

Kevin said the students stayed at Husson because the company wanted them to understand what it’s like to be on the road. “Some of them have never been away from home for a week at a time before,” he said. “Being on the road means staying in a motel and being away from family and friends. You have to know how to do this—how to handle yourself. It was also a team-building exercise. All of the students stayed at Husson on Sunday nights, even though they could have shown up Monday morning and taken the bus to Stillwater.”

The curriculum for the Academy included a combination of classroom presentation, field trips, and hands-on demonstrations covering safety, hand tools, equipment operation, job planning, surveying and layout, utility installation, earth moving, materials testing, and pit and quarry operations.

The primary classroom instructor for the Academy was John Milligan, instructor in the heavy equipment operation program at United Technologies Center in Bangor and a former Sargent employee. Jason Frederick, safety and training supervisor for Sargent Corp., did a lot of the behind-the-scenes work—preparing outlines, scheduling, lining up equipment, coordinating all the housing, and arranging the busing, as well as doing some of the classroom presentations. John Ellis, a semi-retired heavy equipment operator for Sargent, helped by working with the students on equipment operations and providing guidance on various topics.

When the class visited the Sargent gravel pit in Alton, the students operated some of the equipment, loading and screening gravel, operating a mini excavator along with a Cat D3K dozer. TJ Langerak mobilized his testing trailer to run sieve analysis to help the students better understand the various materials stockpiled there and what they are used for.

The students also worked on several projects at the Old Town Recreation Center, next to the Stillwater office, including playground excavation and placement of wood chips, two sandbox projects, installation of a scoreboard that had been donated by Husson when their baseball and football field was reconstructed, and installation of underground electrical conduit in the Rec Center’s outfield.

“We wanted to expose them to everything we could,” said Kevin. “They all knew that the initial goal was that they’d be laboring for a while after leaving this class. Eventually, a lot of them will be doing other things—driving a truck, operating equipment, serving as foreman, etc.—but we think it’s important that they learn from the ground up like most of us did. We told them they were going to be exposed to a lot more stuff than anyone starting out has ever been exposed to before. We also told them that when they leave here, they need to hit the ground running.”

Whenever possible, John and Kevin had Sargent employees talk to the Academy students about their careers—what they’re doing now and how they got there.

For example, operator Ken Thurlow spoke to the class about being an equipment operator and answered questions for an hour.
intensive training at Sargent Construction Academy

“We tried to do that everywhere we went,” Kevin said. “When the group visited the job site at the Portland Air Freight project in Bangor, Bangor Region Operations Manager Sean Milligan talked to them about how he got to where he is now. When we toured the Plymouth Quarry, TJ Langerak explained how he got to where he is and what students will need to do in the field in order to be successful and be promoted, and Kenny Clark from the Dispatcher’s office did the same thing when he came and talked to us. It was good for the students to hear that these people weren’t handed their positions; they had to work hard for them. It took some time, but they did get there. There is upward mobility in the company.”

Kevin, a former physical education teacher, says his teaching experience has helped him as a supervisor and operations manager for Sargent—and as the person responsible for the Academy.

“I like to teach people new things, and with this new position, I can take as long as needed to make sure that they understand it,” he says.

Kevin says another part of his job at the Academy is to make sure that the students “are good hard workers when they leave here—and and are in shape to do what they need to do.”

That means a generous portion of physical labor, including pick ax, shoveling, raking, and wheel barrow work.

“In most job sites, when the crew installs silt fence, they use an excavator,” Kevin says. “When the students at the Academy put in a silt fence, they did it by hand with a pick and shovel. I wanted them to understand what it is to work hard, and how to use a pick and shovel when conditions aren’t the best, and that even if the weather’s not the best, they’re still out there working. I wanted them to understand what’s expected out there when they go out into the field. I’m a little bit of a hard pusher in that regard.”

In addition to job-related skills, the Academy curriculum covers a variety of other topics, such as retirement planning and personal finance.

“We want the students to understand how to manage their money,” Kevin says.

The students were given the opportunity to participate in a retirement planning exercise that involved a miniature savings plan that was designed to mimic a 401(k) plan.

Every day, the students were allowed to put up to $3.50 in a jar, with the company matching the first $1.50 each day (the program was optional, but students had to put in the minimum amount each day they wanted to participate in order to receive the company match). The company paid interest at the rate of 8% per day. With one day in the mini-401(k) equaling a year, the students were able to see how a 401(k) retirement plan could grow over a period of 30 years (5 days x 6 weeks).

“The students caught on pretty quickly that the more money they put in, the more money they’d have at the end,” Kevin said.

As the Academy graduates head out into the field as full-time Sargent employees, Kevin says he’ll be going out in the field with them.

“I’ll be job shadowing them, along with the new junior foremen,” he said.

“Hopefully, I’ll be able to get them matched up with other Sargent employees who will serve as mentors. I’ve already talked to some people who have said they’re willing to help any way they can.”

Kevin says mentoring someone in heavy construction isn’t the easiest thing to do, because construction workers get moved around a lot.

“We put people where we need them,” he says. “They could be at a job site one day and shipped to another job site the following Monday.”

Kevin says the company has never really tried to have one person focus on making sure new employees are continually improving, as well as talking to them about their future goals with the company, but he’s looking forward to the challenge.

“If I have to work with someone for two days to help them get through a situation, that’s what I’ll do,” he says “I don’t have a home base to worry about—all I have to do is keep in contact with all these new people. I’ll work with them if they need it—and I’ll make sure they know they have someone they can call if they have questions or concerns.”

John Milligan and Jason Frederick worked extremely hard on developing the curriculum, working out all the details as well as being very flexible throughout the entire 6 week program. John Milligan is an excellent instructor which made for a very rewarding experience for the students and staff. John Ellis was also instrumental in helping the students have a very fun yet educational experience.

Thank you to all of them!
Sargent Corporation has completed construction of a 5-acre cell at the Shenandoah County landfill in Edinburg, VA. Work on the $2.7 million project started in August 2015 and was completed in January 2016.

The project included 128,000 cubic yards of excavation, of which 24,000 cubic yards was rock excavation which required blasting. Sargent crews had to stay ahead of the blasting crew to locate and expose all of the pinnacle rock within the cell footprint before the blasting subcontractor, Maine Drilling & Blasting, demobilized.

The crews had to install a leachate collection system, which was excavated 2 feet deep into the clay layer, with a 1-foot bottom and 1:1 side slopes. To allow the crews to excavate the ditches efficiently, Sargent designed a unique bucket to meet the ditch dimensions and had it fabricated at a local facility. Superintendent Rick Powell said that using this bucket accelerated the excavation process, so that it only took about a quarter of the time it would have with a standard bucket.

Local rock and rock blasted on-site could not be used for the leachate collection layer because it was limestone. Consequently, rock for the leachate collection system had to be imported from a quarry about two hours away. (A Sargent crew was able to hoe ram approximately 500 cubic yards of rock from on-site to be used as rip rap in the stormwater channels.)

After the leachate collection system was installed, Hallaton Inc. of Sparks, MD, installed a 60-mil textured liner, a geocomposite layer, and a geosynthetic rain cover.

Doug Morrison was the operations manager for Sargent, and Justin Porter was the project manager. Rick Powell was the project superintendent, and Nick Rossow was the foreman. Mike Thibodeau was the estimator. Draper Aden Associates of Richmond, VA, was the quality control subcontractor.

The project owner was the Shenandoah County Department of Solid Waste. The project engineer was SCS Engineers, Norfolk, VA.

Sargent earns Build Maine Award for Veazie Dam removal

For the third year in a row, Sargent Corporation of Stillwater has won a Build Maine Award from the Associated General Contractors of Maine. This year’s Award was in the Specialty Environmental Category for removal of the Veazie Dam during the summer and fall of 2013. The project, which resulted in a free-flowing river from Old Town to the Atlantic Ocean, received favorable coverage from the national TV networks, the New York Times, and the Boston Globe.

The $3.9 million project consisted of a number of different elements, including removal of the concrete forebay walls and buttress style dam; removal of upstream legacy dam structures dating back to the late 1800s; removal of a powerhouse; site remediation, and the creation of a park with walking paths, informational kiosks, benches, decorative boulders, some salvaged pieces from the powerhouse and an area for launching hand boats and canoes.

The first step in the demolition process was to remove a 200-foot portion of the dam next to the power plant on the Veazie side in order to lower the upstream impoundment level so that work on the remaining portions of the dam could proceed.

Once that was accomplished, the crews removed the initial rock cofferdam road on the Veazie side and relocated it to the Eddington side of the river to start removal of the 600’ long buttress portion of the dam. At that point, the conventional solution would have been to demolish the buttress dam from west to east, using the cofferdam road on the Eddington side. In order to gain back some of the time lost to weather and high river level delays, Sargent crews proposed working east to west and shifting the cofferdam as they worked to maintain a usable platform.

The crew had an excavator, a bulldozer, and two haul trucks working on the cofferdam. The excavator breached the cofferdam at the Eddington shore, creating an island, and loaded the material into the haul trucks. The trucks dumped their loads at the opposite end of the roadway, and the bulldozer pushed the material into the river, in effect moving the “island” toward the Veazie shore. This process continued for two days as the island continued its journey across the river and was

The new cell at the Shenandoah County landfill
Aerial photo from October 10, 2013: The 800-foot buttress dam section has been removed, and the cofferdam and roadway that was constructed upstream of the dam to facilitate the demolition process has been breached at the Eddington shore (right), in effect creating a cofferdam island. An excavator (right) is excavating rock from the Eddington side, which is carried to the Veazie side by two haul trucks and pushed into the river by a bulldozer. This process continued for two days, until the cofferdam and roadway were joined to the Veazie shoreline above Powerhouse A (left).

Build Maine Award for Veazie Dam removal

re-connected with the Veazie shore. During this period, the equipment was fueled using a fuel hose that was pulled over to the island on a cable, while the operators and drivers were transported there by boat.

Once the cofferdam reached the Veazie shoreline, additional cofferdam material was brought in from Sargent’s Plymouth quarry and moved upstream to construct access roads to facilitate removal of timber-crib “legacy” dams that were built starting in the 1830’s to harness water power from the Penobscot for at least three sawmills.

Five legacy dams were submerged when the Veazie Dam was built in 1912, and there has been very little deterioration to the timbers that formed the dams, as they have remained underwater.

Two of the five legacy dams and a portion of a third were demolished by Sargent crews, creating three distinct channels that will help with fish passage.

Kevin Gordon was the operations manager for Sargent on the project, and Craig Shorey was the project manager. Steve Raymond was the superintendent.

In 2015, Sargent Corp. received a Build Maine Award in the Municipal/Environmental Category for the final closure of the Presque Isle landfill, a design-build project that was completed under budget and more than a year ahead of schedule.

In 2014, Sargent received a Build Maine Award in the Municipal Category for the City of Portland’s Baxter Boulevard North Storage Conduit Combined Storage Overflow Project.

The 2016 Build Maine Awards were presented at AGC Maine’s annual meeting on April 16 at the Augusta Civic Center.

In addition to celebrating the best projects of the year at the awards ceremony, AGC Maine also recognized graduates of the Construction Leadership Institute. The program introduces current and future construction leaders to regulatory, legislative and business challenges in the construction industry. This year nine students completed the course, including Adam Kapaldo and Jeff Costello of Sargent Corporation.
LiveHealth Online

... where the doctors are always in!

Anthem’s LiveHealth Online will allow those enrolled in Sargent Corporation’s Medical Plan access to non-emergency medical care by using a smartphone, tablet or computer with a webcam. LiveHealth Online eliminates sitting in urgent care waiting rooms and enables you to have a face-to-face visit with a doctor. The service is available 24/7 almost anywhere in the country where internet access is available. If you have a true emergency, call 911 or go directly to the emergency room.

LiveHealth Online makes the sign up easy by going to www.livehealthonline.com or downloading the app LiveHealth Online to your device. It is wise to sign up early, so when you do need this service it will be at your fingertips. Once logged in, you will see your choice of doctors and are able to research each doctor’s credentials. You will see how many (if any) patients are ahead of you for each doctor and are able make the decision on which doctor is best for you. These doctors will answer medical questions, make a diagnosis and write a basic prescription if needed.

Your appointment will cost $49 and normally last about 10 minutes. Since this is a medical appointment, you are able to pay using your HSA Debit Card. The visit charge will be applied towards your in-network deductible and you will receive an Explanation of Benefits (EOB) from Anthem for your records.

Do you need help with depression, anxiety or just feel the need to talk with somebody? By using LiveHealth Online, you are able to make an appointment to speak with a psychologist or therapist in the comfort of your own home. When logged in to LiveHealth Online, you are able to go to the psychology tab, select the date you want your appointment and see the psychologists and therapists who have appointments that day. After researching their credentials and deciding which one is the best fit for you, you will then be given the opportunity to book this appointment on-line. You are also able to have your appointment by phone by calling 1-844-784-8409.

These appointments usually last 45 minutes and the cost is comparable to what you would pay for an office visit - $80-$90 per visit. These visits would be considered a medical expense, so you are able to pay with your HSA Debit Card. The visit will be applied towards your in-network deductible and you will receive an Explanation of Benefits (EOB) for your records.

Anthem’s 24/7 NurseLine continues to be available FREE to those enrolled in Sargent Corporation’s Medical Plan. You will be able to talk with a registered nurse who is able to help you answer medical questions anytime – day or night. Also, the NurseLine offers hundreds of pre-recorded messages on a wide variety of healthcare topics.

Through AIG’s Benefit Solutions, an Employee Assistance Program (EAP) available to all Sargent Corporation and Sargent Materials employees. This EAP benefit is available to all benefit eligible Sargent Corporation & Sargent Materials employees and their immediate family members. When contacting the EAP via telephone, simply inform the EAP that you are an employee of Sargent Corporation. The EAP can help with a wide variety of life challenges and concerns – big or small, home or work. You can go on-line to www.aigbenefits.com/eap (username: aig / password: eap) to research a wealth of information or call 1-888-673-1149 to talk with someone and if needed, you can make an appointment. You are able to receive up to 5 face-to-face counseling sessions.
producing safety video for small mining operations

Chip Laite, Jason Frederick, and T. J. Langerak were interviewed for safety video produced by the Mine Safety & Health Association

This spring, the director of educational field services for MSHA came to Augusta to present the DVD at the MAA’s annual “Spring Thaw” safety seminar and to thank the MAA for its participation. Since then, the DVD has been getting out into the field, both in Maine and across the country.

Crew meetings are an important part of mine safety.

AGGREGATE SAFETY

Sargent Corporation has been recognized by the Maine Aggregate Association State Council for the Joseph A. Holmes Safety Association for achieving zero mine-related accidents during 2015. Mine-related accidents are reported on the Quarterly Mine Employment and Coal Production Report, which are submitted to the Mine Safety and Health Administration. During 2015, Sargent employees compiled a total of 9,855 workhours at 10 mine sites that fall under MSHA jurisdiction, including various crusher, screening, and wash plant operations. Chip Laite, aggregate resource manager for Sargent Corp., says about 20 employees were involved in the mining operations that were included in the MSHA statistics. He says Sargent also reported zero mine-related injuries during the first six months of 2016, as well as in 2014. Chip is currently serving as President of the MAA State Council of the Joseph A. Holmes Safety Council, the safety committee of the mining industry in Maine.

MAINE AGGREGATE ASSOCIATION, INC.
Joseph A. Holmes Safety Association Council

Sargent Corporation

In recognition of the company’s commitment to the safety of its employees for operations reported to the Mine Safety & Health Administration. The company has had zero accidents as reported on the Quarterly Mine Employment and Coal Production Reports for the year 2015.

ACHIEVEMENT IN SAFETY

In Witness Whereof, the Association has caused this Certificate to be executed by its duly authorized officers.

This Certificate is awarded
April 29th, 2016

Parker R. Lante, Jr., President
Eugene, Vice President
What is Wellness? Pete Parizo’s story

By Pete Parizo
Project Supervisor
Sargent Corporation

If I’m being honest, I never much cared about how heavy I was, and truthfully I still don’t. This is the story of how I decided I wanted to live a healthy lifestyle.

Growing up I played sports where size was an advantage—football, basketball, and track (throwing events—shotput, discus, and javelin). I was 6’3” tall and well over 200 pounds by my sophomore year in high school. I was very active and could eat whatever I wanted without gaining any weight. By the time I entered college I was around 250 pounds, but I was still very active—intramural sports, skiing, rock climbing and biking filled my free time. I continued to eat (and drink) to excess but all the activity I was getting kept my weight somewhat in check. Soon after graduating from college in 2002 I started at Sargent & Sargent. I was in my early 20’s and between working, skiing, climbing and biking I still managed to keep my weight in what I considered to be an acceptable range.

As I got older and started having kids, my activity level plummeted. I was no longer participating in as many physical hobbies; I was spending my free time with my growing family while transitioning at work. This consisted of more time in the office behind a desk, yet I continued to eat and drink the way I had for years. Cooking, drinking beer, and eating good food (read: tasty good, not necessarily healthy good) became some of my favorite pastimes. Herb likes to say “everything in moderation…” and I was definitely not one to moderate anything.

In 2007, when Sargent Corporation started a wellness program, I happily joined. I liked Derek’s enthusiasm, and I figured we could all be a little healthier, right? I was 282 pounds in March of 2007 but I didn’t “feel” fat. I would meet with Derek and he would encourage me to “substitute” unhealthy choices for healthier ones. I can’t say I was “all in” at that point, more like I was just going through the motions. I was in my early 30’s and I still felt fine. Sure, my blood pressure was a little high and my weight was increasing but I was still able to do active things as time permitted. At Derek’s urging I started to “substitute” some poor food choices for healthier ones. I gave up Dunkin Donuts coolattas completely, and tried to eat fewer donuts. Overall I was still consuming far more unhealthy food and beer than I should have been. I was drinking soda and iced coffee full of cream and sugar every day. I was eating a lot of pizza and drinking a lot of beer. All the while, as you can imagine, Derek was there gently pushing me. Our wellness meetings consisted of a lot of talk about my blood pressure and healthy food choices. To Derek’s credit, he never gave up on me—he continued to offer me ideas and encouragement. Even though I was making small changes, I wasn’t doing enough and my food and beer intake far exceeded
During the winter of 2014-2015, several things happened that made me reassess my health situation. First and foremost, I was feeling pretty crummy. I was lethargic and tired all the time and experiencing horrible heartburn anytime I ate, which was also interfering with my sleep. My blood pressure was sky high and I couldn’t participate in activities like skiing at the level I once could. I was getting old and tired, and I was out of shape. At the same time my wife was having a serious – albeit treatable – medical issue that was very hard on us. My physical and mental wellness was at an all-time low. We had a very snowy winter that year and as I plowed snow I would drink a lot of Mountain Dew and iced coffee to stay awake. One morning – and I’m not even sure Derek knew this – I weighed in at 292 pounds with my boots on. I knew something needed to change. I was realizing life is short and I wanted to be around to spend time with my family.

In February 2015, with Derek’s help and encouragement, I started to really focus on what I should and shouldn’t be eating. At first I started substituting fruits and vegetables into my diet and I tried to eat healthier overall. The funny thing is that I really didn’t know what I was supposed to be eating or how much. Derek was super patient with me and he spent a lot of time really helping me figure out what types of foods I should be eating. The 2015 construction season was a busy one so my activity level also rose. By the fall and early winter of 2015 I was ready to fully implement a healthy diet and some light exercise. I laugh when I think back at my first attempts to truly eat healthy; Derek gently explained that eating an entire bag of dried apricots or half a box of “healthy” cereal wasn’t going to help me be healthier because of all the sugar and calories. So I started to pay more attention to things like added sugar, calories, and sodium. I tried to follow the “80-20 rule” Herb spoke about in the Summer 2013 edition of ON TRACK – “...behave in healthy ways 80% of the time.”

The 2015-2016 Dig in for Health Winter Challenge couldn’t have come at a better time. I was already starting to do little things to improve my wellness but more importantly I was ready and motivated to commit to change. I sent Derek a list of 4 fairly simple things I was going to work on over the coming months:
1. 30 min. cardio at least 3x per week (running, walk-jogging, bike)
2. Eliminate caffeine entirely, drink 64oz water daily
3. Write a letter (on paper) to someone I need to connect with/resolve an issue with 1x per week
4. Eat 5 or more servings of fruit and vegetables every day

Every week, I would send Derek a progress report detailing how I did the previous week. I’m sure most of them were funny to read. I felt like I had a lot more failures than successes overall, but I gave it my best effort and I ended up winning a FitBit fitness tracker.

Putting on the FitBit for the first time was life-changing. I am a person who loves and needs constant information and feedback when I’m attempting to achieve something difficult. The FitBit instantly provided that. I could now track my activity level in real time and know how many calories I was burning throughout the day. Paired with the “MyFitnessPal” app on my phone, I could track my caloric intake and output along with my sodium intake, sleep duration, and sleep quality. All of this information allowed me to fine tune what I was already committed to doing – eating well and exercising. The biggest benefit of FitBit and MyFitnessPal is that I don’t feel like I’m sacrificing or dieting at all, I’m only focusing on burning more calories than I consume daily. If my family goes to Gifford’s to get ice cream and I have 500 calories to spare that day, I’ll get an ice cream. If I don’t have the spare calories, I’ll plan ahead and go for a run on the weekend or at night with my wife, so that I know I have calories to spare. I recently texted Derek and told him that I was down to 227 pounds which, according to the CDC body mass index calculator, puts me in the “overweight” category and out of the “obese” category for the first time in 20+ years. The bad news is that there is no earth-shattering or groundbreaking advice I can offer you as to how I cured half a lifetime of unhealthy living.

The secret to a healthier lifestyle (and in turn a healthier weight) really is as simple as eating a little less and moving a little more — and everything in moderation, of course.
Pat Findlen, 30 years of service with Sargent Corporation

When Tim Richards, equipment manager for Sargent Corp., who was this immediate boss.

He started at H. E. Sargent as a geologist. In that capacity, he researched projects prior to bidding to determine where the earth materials needed for the jobs—gravel, aggregates, fill material, different types of rock, etc.—would come from.

He also worked at finding and opening up new sources for materials, as well as negotiating with landowners and getting the necessary mining permits from towns and the Department of Environmental Protection.

Pat became safety director on Dec. 1, 2000, after H. E. Sargent was acquired by Fru-Con in St. Louis.

Pat said the transition from geologist to safety director was challenging at first, but ultimately very satisfying.

“There was a huge difference between trying to make positive things happen [as a geologist] and trying to prevent negative things from happening [as safety director],” he said. “At first, it was hard to know if our efforts were helping to prevent injuries. However, the more I worked on safety, the more it became obvious that the safety programs were working.”

He said the biggest reason for the success of the safety program over the years has been “the tremendous amount of support (Continued in next column)

Dennis Bernard, 31½ years of service with Sargent Corporation

When Dennis Bernard retired as Mid-Atlantic Region equipment manager last February, he and his wife Noreen decided they would go on a year-long journey and then make up their minds where they want to settle.

They’re about halfway through that journey after driving close to 7,000 miles around the southern and western perimeter of the U.S. (Florida, Georgia, Alabama, Louisiana, Texas, Arizona, California, and up the Alcan Highway to Cordova, Alaska, a small town on the east side of Prince William Sound, where Dennis grew up.

When ON TRACK caught up with Dennis in mid-July, he and Noreen were in Anchorage, getting ready to start their return trip the next day.

Their plan was to go back down the Alcan Highway and stop for a month or two in Arizona, where they left their camper. Then they’ll see what the weather looks like and drive across the U.S., eventually arriving in the Patten-Sherman area of Maine, where they lived when Dennis started working for H. E. Sargent on the Loring AFB project in Limestone in 1984.

“When we get back to Patten, we’ll see where we go from there,” Dennis says. “We’ll see if we’re tired of traveling.”

Dennis was born in Alaska and was spending the summer in Maine when he started driving a water truck on the Loring AFB project.

“I heard Sargent was a good outfit to work for, so I applied,” he said. “I got the job, enjoyed it, and stayed there, living in the Sherman-Patten area.”

The Loring assignment lasted about a year; after that, he worked on whatever projects were available. After working as an equipment operator for two or three years, he became a mechanic. In 1995, he transferred to the Mid-Atlantic Region as a mechanic.

“I was working in Trenton, when Bob Peters said he had a job in Baltimore and asked me if I’d like to go there for the summer,” Dennis said. “I said I’d talk to my wife—she said let’s go, and we wound up staying down there.”

In 2003, Dennis was promoted to equipment manager for the Mid-Atlantic Region.

For most of the time that Dennis was working in the Mid-Atlantic, he and Noreen lived in a Driftwood trailer in Ashland, VA.

“We bought a house in Virginia and had it for a couple of years, but my wife said she missed the trailer. I told her, ‘I can fix that,’” he said.

Dennis said he and Noreen haven’t settled on a final destination. They have a house in Sherman, but they also have their trailer. Their children are all grown—three boys in Patten and two girls in Cordova—and Dennis has a brother and sister in Cordova, as well as a brother in Oregon.

He says traveling is expensive, but their trip has been enjoyable.

“We’re having fun,” he says.

Remembering his years with the company, Dennis said the best part was always the people.

“I do miss the people,” he said.

He added that he enjoyed reporting to Tim Richards, equipment manager for Sargent Corp., who was his immediate boss.

“Tim was a super man to work for,” he said.

Pat Findlen, 30 years of service with Sargent Corporation

Pat Findlen, a Sargent employee for 30 years and safety director for the company for the last 16 years, has retired, effective June 8.

Pat started at H. E. Sargent as a geologist. In that capacity, he researched projects prior to bidding to determine where the earth materials needed for the jobs—gravel, aggregates, fill material, different types of rock, etc.—would come from.

He also worked at finding and opening up new sources for materials, as well as negotiating with landowners and getting the necessary mining permits from towns and the Department of Environmental Protection.

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Thanks for helping us through another Maine winter

On behalf of the Old Town - Orono YMCA Members, Board of Directors and employees, we would like to extend our sincere appreciation to you and all the staff at Sargent Corporation for helping us through yet another Maine winter.

We thank you for providing consistent plowing and sanding of our parking lot for the 2015-16 winter season. Because of your continued dedicated service and hard work, our parking lot remained safe and accommodating for all our members, guests, and employees. We couldn’t possibly manage the job of snow removal and road safety without your assistance. Year after year, community members and businesses alike continue to support our ongoing efforts to provide quality programming and services to area residents. Without direct support and involvement from friends like you, our YMCA would not be able to provide a high level of service and financial assistance to those who may need it.

In addition, we would like to continue to offer our corporate discount for all employees of the Sargent Corporation. We have a complete workout center with training and cardio equipment, as well as an indoor walking/running track, and the fabulous Sargent Family warm water therapeutic pool. We also offer more than forty exercise classes every week that are free with your membership to the Y! Please stop at the Member Service Desk to request a tour of the facility or ask questions about membership.

—Debra Boyd, Executive Director

2016 Heroes Hope Healing McDonald’s Golf Classic

Thank you for your participation in the 2016 Heroes Hope Healing McDonald’s Golf Classic. Your participation will help support care for children in central, eastern and northern Maine who are facing cancer and blood disorders. Thank you again for your thoughtful support.

—Michael Crowley, Chief Philanthropy Officer

Thanks for donation of concrete for camp Ranger’s residence.

On behalf of the Katahdin Area Council, Boy Scouts of America, and the Katahdin Scout Reservation - Camp Roosevelt, I would like to extend my sincere appreciation of the donation of an 11 cubic yards of concrete used for the boiler house at our camp Ranger’s residence. As a Scout is “Thrifty”, the addition of our new wood boiler will help us reduce energy costs in our camp operations, and your contribution of the concrete has helped us keep the cost of the project down.

Thanks again for your continued support of all that you give and do for our Scouts here in the Katahdin Area Council.

—R. Scott Harvey, Scout Executive/CEO

(Continued from preceding page)

from everyone concerned, including support from management and all Sargent employees’” He added: “That support starts right from the top, with Herb Sargent and his longstanding goal of ZERO ACCIDENTS.”

A native of Fort Fairfield, Pat got his bachelor’s degree in geology from the University of Maine and worked as a geologist for the Maine Department of Transportation for three years. He then went out west for a couple of years but came back to Maine and worked as a potato farmer in Aroostook County for the next 10 years Then Pat spent two years studying glacial geology in the graduate program at UMaine before being hired by H. E. Sargent in 1986.

Pat and his wife Anita have been married for 45 years. They live on Hopkins Pond in Clifton. “It’s like going on vacation every time I come home,” he says.

Pat and Anita have two grown daughters. Suzanne lives in Gloucester, VA, and works as curator of ceramics and glass at Colonial Williamsburg; Alissa, who has two daughters ages 1 and 6, lives in Newburyport, MA.

Pat’s plans for retirement include visiting the children and their families, playing with the grandchildren, traveling to new places, and playing in the water and building things at Hopkins Pond. When ON TRACK contacted Pat in mid-July, he was building some raised beds for growing vegetables on the property.

Pat has fond memories of his first week as an employee in Stillwater, when the company founder, Herb E. Sargent, came down to his office and introduced himself as follows:

“I don’t have much to do with the day-to-day business any more, but the boys listen to me sometimes,” Herb told Pat. “That said,” he continued, “my name is still on the door out front, so there are a couple things I’d like you to do. You’re going to be dealing with the public, and I always want you to treat them fairly—and if you make a promise to somebody, make sure you keep it.”

“Right then I knew I was in the right place,” says Pat. “I have had the great pleasure of working with so many fine people at Sargent Corporation, and I will miss them all.”
Club Motorsports completes paving of 2.2-mile road course

Club Motorsports has completed paving the 2.2-mile European-style road course in Tamworth, NH, that crews from Sargent Corporation constructed from August 2013 to June 2016.

The base layer of asphalt pavement was placed during the week of June 13, followed by the leveling (middle) layer during the week of July 11 and the final wear coat (top layer) during the week of July 18.

For the 2” base course, Club Motorsports had more than 40 trucks delivering asphalt 12-13 hours day, for a total of 12,195 tons of asphalt in five days. Paving of the road course proper was completed in a little less than two days, with two pavers working simultaneously with shuttle buggies to lay down a 42’ wide strip of asphalt.

For the leveling and final wear coat layers, an additional 16,280 tons of asphalt were placed for a total of 28,475 tons.

Sargent crews completed construction of the course with sub-base and base gravel last fall. Now that paving is complete, Club Motorsports will install the safety system, which will include large, paved run-off in all the downhill turns, 39” high Armco guard rail, 4,100 linear feet of catch fence, and tire barriers (with 41,000 tires) and other attenuators, as well as curbing.

The project required about 1.1 million cubic yards of excavation, including 900,000 cubic yards of earth and rock excavation for the roadway and other site improvements, 150,000 cubic yards of aggregates that had to be excavated and produced on site, and 60,000 cubic yards of rip rap and boulders for walls, slopes, and ditches.