The Orange Brigade

Summer 2020 **Logan County Engineer's Office** **Volume 57**

Coleman's Comments

This past winter season was mild, and the road system has held up rather well through spring. We spent $354,651.80 on winter road treatment, which is near the average cost of $369,000 and $130,000 less than we spent the previous season. This past winter, we paid $87.94 per ton for salt. We just received the results of the statewide bid for road salt, and our cost for this coming winter will be $62.45 per ton. So we know heading into winter that we will experience a significant decrease in road salt costs. We plan to maximize our use of Beet Heet® sugar beet molasses for pre-wetting our salt and controlling our material costs while maintaining our level of service for road treatment.

Spring has presented both new and old challenges. We started with the Coronavirus outbreak and stay at home orders in March and new state and federal legislation regarding Coronavirus impacts. The Logan County Engineer's Office closed our offices to the public, but we never shut down our operations. We adopted social distancing, enhanced sanitation, and face coverings and continuously adapted as guidelines were adjusted. We were able to conduct all of our construction and maintenance projects around the county throughout the stay at home orders. Another new challenge was attending meetings, and we have very quickly learned several web-based video conferencing programs. We have found them to be a very efficient way for us to conduct business. We have also been able to continue doing business through email and providing public records through our website.

The old challenges have been dealing with multiple high-intensity rain events and drainage concerns. A few bridge and culvert structures required storm repairs, and several berm washouts were repaired. The 2019 county paving contract was bid at $2,158,165.04 for 16 miles of roads by The Shelly Company. Asphalt prices increased by about 1 percent this year. Township chip sealing of 30.2 miles was awarded to Ray Hensley Inc. in the amount of $347,914.84. Township paving was awarded to The Shelly Company for $410,683 and will cover 4.8 miles.

Sincerely,

Scott C. Coleman, P.E., P.S.
Logan County Engineer

FEMA Flood Insurance Rate Map (FIRM) Update

By Scott C. Coleman, P.E., P.S.

In March of 2014, the Ohio Department of Natural Resources (ODNR) and Federal Emergency Management Agency (FEMA) notified Logan County officials that they had updated the base flood elevation (BFE) and Flood Insurance Rate Map (FIRM) for Logan County.

- July 2014, ODNR and FEMA held public meetings to present the revised flood maps to the public.
- Late 2014, we requested that ODNR/FEMA consider several adjustments.
- December 2014, ODNR/FEMA notified Logan County that the 90 day appeal period for the new flood maps had begun.
- March 6, 2015, Logan County filed our appeal.

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Web page: www.lceo.us **Facebook:** www.facebook.com/LoganCountyEngineer

Continued from front page

- August 31, 2016, FEMA approved our request to adjust the BFE of Indian Lake from 997.6 feet to 997.5 feet (NAVD88).
- September 2016, the Logan County Commissioners requested FEMA to incorporate the BFE of 997.5 feet into the new FIRM. They also asked for FEMA to provide Logan County with a Flood Insurance Advocate to assist us with our appeal of the preliminary flood rate maps and required good-faith consultation with FEMA.
- June 6, 2017, FEMA may adjust the FIRM maps for Indian Lake to reflect the adjusted BFE of 997.5 feet (NAVD88), but they intend to adopt the preliminary maps.
- In December 2017, the County Commissioners contracted with DLZ Engineering complete high accuracy surface modeling of the Indian Lake area that provides the county with excellent elevations of the lakefront and surrounding properties. The commissioners plan to appeal the preliminary FIRM maps and submit our high accuracy surface model to be included in the final FIRM update.
- July 17, 2018, FEMA awarded the continuation of the Logan County Mapping Project to STARR II.
- July 23, 2019, web-based conference meeting with Logan County and FEMA
- August 7, 2019, STARR II, on behalf of FEMA, completes a comparison map of the original FEMA surface model from April 2014 and the high accuracy surface model that Logan County had created.
- In September 2019, we requested that FEMA incorporate a highly accurate surface model that the Logan County Commissioners had created by Woolpert Inc. of Dayton, Ohio.
- January 13, 2020, FEMA updated the FIRM with the Logan County surface model and 997.5 feet BFE.
- February 12, 2020, Logan County Commissioners notified FEMA that they have no objection to the revised FIRM.
- May 29, 2020, STARR II and FEMA completed the Logan County, OH Revised Preliminary Digital Flood Insurance Rate Map. (Due to COVID19 shelter-in-place orders FEMA will defer mailing of hard copy materials to your office for the Preliminary DFIRM map panels, FIS text, and SOMA. A mailing will be arranged following the release of shelter-in-place orders. In the interim you may view and download the digital files via download at the FEMA Map Service Center, at https://www.msc.fema.gov.)

I am hopeful that the shelter-in-place orders will soon be lifted so that the new FIRM panels can be finalized in the middle to late 2021.

The County Commissioners and County Engineer continue to advocate on behalf of our residents for accurate Flood Insurance Rate Maps.

** FEMA does not reimburse landowners for elevation certificates that result in a Letter of Map Amendment (LOMA). However, landowners may be eligible for reimbursement of flood insurance premiums*

Highway Update

By Joel Miracle
Highway Superintendent

The Highway Department had a busy winter season clearing brush and cutting trees in our county right-of-way with our bucket truck. Due to the lighter snowfall than usual, we also managed to replace some culverts and tiles on a few roads.

As spring weather came, the crews started asphalt pavement maintenance, such as Dura-patching, crack sealing, asphalt repair, asphalt paving, berming, ditching, and tile repairs. We have over 3,000 tons of #8 stone stockpiled around the county for the chip seal program to start around the first of July. Along with or own road maintenance, we managed to perform roadwork with townships and villages throughout the county.

Evolution of the Hard Hat

Before 1919, there were no “hard” hats for those working in construction, mining, or other jobs requiring protective headgear today. Protective headgear wasn’t required until the early 1970s, almost 51 years after the hard hat was invented over 100 years ago.

Lt. Edward Wheatley Bullard of the US Calvary in WWI is to thank for this industrial safety movement. In 1919, after the war, Bullard returned to the United States and saw skyscrapers going up all across the country, and dams and bridges were growing ever larger. These projects brought new life to cities after World War I, but they also presented new dangers for the construction workers who placed girders, poured concrete, and pounded nails.

Edward W. Bullard’s father had a business making carbide lamps and other supplies for miners. Edward W. Bullard had an idea: What if the company built a helmet for miners and other laborers? His inspiration came from the metal helmets worn by infantrymen in the war to deflect bullets.

The Bullards cobbled one together and called it the Hard Boiled hat. It was made of steamed canvas and leather (metal was too expensive), and covered with black paint and featured a suspension system.

The standard hard hat design has evolved over the years, from canvas to metal to fiberglass and, eventually, to plastic.

In its fifth generation of family ownership in Kentucky, Bullard plans to introduce a new line of hard hats in 2020 that will have foam padding and integrated chin straps, similar to climbing helmets, but designed for industrial workers.

Map Room

By Suzie Cochran
Map Room Supervisor

The Map Room records can be found on the Logan County Engineer’s Office website at www.lceo.us under the Map Room link in the upper left-hand corner of the main web page. These records include surveys, field books, subdivision plats, railroad plans, highway plans, cemetery plats along with the individual township, and City of Bellefontaine tax books ranging from 1870 to 1977. There are links to the county shapefiles, school district maps, voting precinct maps, tax district maps & fire district maps. The current County Tax maps with and without the 2017 aerial photography are available along with aerial photos from 2011 & 2005. Additionally, there is a link to FEMA for the flood plain maps.

If you need assistance locating a specific record, the Map Room can be reached at (937) 599-7230 or at maproom@co.logan.oh.us

Effective July 6th, the MAP Rooms hours will be:

- Monday through Wednesday 6:30 a.m. to 4:30 p.m. Closed 12 p.m. to 12:30 p.m for lunch
- Thursday 6:30 a.m. to 4:30 p.m. Closed 12 p.m. to 1:00 p.m for lunch
- Friday—Closed

Bridge Crew Update

By Dan McMillen
Bridge Superintendent

The Bridge Crew got off to a busy start with projects as we entered spring. To date, they have cleaned 50 bridges and installed four large culverts; a 48-inch by 80-foot culvert on CR 63, a 48-foot by 60-foot culvert on CR 12, just north of St. Rt. 47 and a 50-inch by 40-foot and a 36-inch by 40-foot culvert on CR 28. Crew members have water-proofed and pave prepped bridge BR CR 61-0.84 and bridge BR CR 11-0.14 at the Degraff corporation limit and currently finishing a drainage project in Zanesfield.

In Zanesfield, the crew performed over 800-feet of ditching, removed an old stone box culvert at Bellefontaine Street, and Main Street and installed a new concrete box culvert. Also, installed six new plastic culverts, 260-feet of 36-inch plastic drainage tile to replace the dated 18-inch clay tile.

Zanesfield Drainage Projects Nearing Completion

By Michael Kerns, P.E.
Assistant Engineer

The years-long, multiple-phased projects to improve drainage in the Village of Zanesfield will be complete near the end of June. These projects were broken up into phases to better secure funding opportunities through the Ohio Public Works Commission (OPWC), whose grants help local governments maintain local infrastructure. A summary of the projects is below.

In the summer of 2016, Levan's Excavating of Bellefontaine performed Phase 1, which involved the following: relocating and constructing approximately 800-feet of an open ditch in Hall-Fawcett Park, installing twin 36-inch diameter pipes at the park entrance, and the leveling of spoils to improve a park field. Phase 1 project costs totaled $ 38,709.46, with OPWC funding $32,731.00 of the cost and the village paying $5,978.46.

Our county crews performed 400-feet of open ditch work within the right-of-way along the north side of CR 153. This work began at the Phase 1 termini just east of the park entrance and went eastward until the open ditch was able to enter the Mad River.

Phase 3 was performed by our county crews after emergency resolutions were passed by the Village, with guidance from the Village Solicitor and County Prosecutor, authorizing the county to do the work. Estimated cost was $102,328 with OPWC funding a maximum of $91,072 of project costs. This work included open-ditch excavation, installation of three parallel 18-inch drainage pipes with precast concrete headwalls at both the Green Alley and Walnut Alley crossings, the installation of a 44-foot long 6-foot wide by 3-foot tall precast concrete box culvert under Bellefontaine Street, and the installation of a 36-inch diameter tile under Main Street. The inlet of this 36-inch tile was in the 2-4 catch basin installed in Phase 4, and its outlet was into the open ditch of Phase 3. Minor roadway work, including new pavement, was performed on all street crossings - Main Street, Bellefontaine Street, Green Alley, and Walnut Alley.

J & J Schlaegel, from Urbana, performed Phase 4 of the project. The estimated cost to do this work was $26,712, with OPWC funding a maximum of $21,857. This project consisted of tearing out and replacing an existing 18-inch diameter clay tile with a 36-inch diameter tile and installing a 2-4 catch basin. New pavement was placed to repair the road cut across Buckeye Street.

At the western termini of Phase 4 (at the village limits), county crews continued westerly and replaced an 18-inch diameter clay tile with 205-feet of 36-inch diameter tile within the CR 10 right-of-way. A precast concrete headwall and dump rock was placed at the inlet.

Ditch Maintenance & Traffic Department

By Steve Tracey
Ditch/Traffic Superintendent

The Ditch Department has started its 2020 mowing season. Currently, we are mowing our second round of the top pass (along the edge of roadway) and mowing intersections back for sight distance issues.
We have been running our Boom Mower and have completed the mowing of all township bridges and performed some sight distance mowing and brush mowing for some townships. Right now, we are going around the county boom mowing guardrails, county road bridges, and sight distance also. At this time, we are spraying our roadside ditches as well. Throughout the spring, the ditch department has performed maintenance on several ditches. We placed dump rock on the Rowand Ditch for slope protection, pulled numerous logs out of the South Fork, dipped a portion of the Hankinson and Madriver ditches, and cleaned outlets of the tiles at McClure and Stony Creek ditches, also repaired a broad bankside on the Hankinson Ditch.

The traffic department has been busy replacing damaged and vandalized signs throughout the county. The Sign Shop has been busy making new signs for townships and villages when requested to do so. The traffic department has also been busy replacing and installing signs for townships per their request. Currently, the Sign Shop is maintaining over 7,000 signs.

Importance of Staying Hydrated

Water is essential to life, and your body will alert you when it's becoming dehydrated. When you become dehydrated, your body sends specific signals – such as having a dry mouth, fatigue, feel weak, loss of appetite, irritation, light-headed, dry skin, dizziness, headaches, muscle cramps and feeling thirsty. It's essential to not ignore these dehydration symptoms, especially in the summer, as it helps prevent heat exhaustion and heatstroke. Responding to dehydration is as simple as drinking more water.

Tips for increasing your water intake:

- **Keep a water bottle with you at all times -** This is the easiest way to remember to drink more water. Whether you're working outside or in an office, make sure you have a bottle of water.
- **Start and end your day with water** - To increase your water intake, start by drinking 8 oz. water at dinner and right after you wake up. Your body loses water while you are asleep, and following this routine will help you stay hydrated throughout the day.
- **Drink water even when you're not thirsty** - Don't wait till you're thirsty or possibly dehydrated. Sip water throughout the day.
- **Drink more if you sweat a lot** - If you sweat more than an average person, you also need to be careful about rehydrating yourself.
- **Use a tracker app** - Set a daily goal on your phone app and update it throughout the day. You don't want to realize that you still have more than half of your daily water left to drink at the end of the day.
- **Drink a glass after every bathroom break -** You'll already be getting up, which means it's a perfect time to hydrate. The more water you drink, the more you'll have to go to the bathroom, which means the more water you will drink, and so on.

Permits and work Requests

Did you know that you can print forms for permits and work requests on our website, www.lceo.us? Permits and Work Requests available online: Request for Survey Work, Request for Drainage Analysis, Access Permit Request, Permit to Haul Oversized/ Overweight Load, Application for Permit to Make Installation and/or Work along or across Roads or Streets.

PERMITS AND WORK REQUESTS:

Request for Survey Work and Right-Of-Way Staking Form
Request for Drainage Analysis
Access Permit Request
SPECIAL PERMIT TO HAUL OVERSIZED/OVERWEIGHT LOAD
Application for Permit to make Installation and/or Work Along or Across Roads or Streets

ADDITIONAL INFORMATION:

LCEO No Passing Zone Study 2018
Cast-in-Place Concrete Decks
LCEO County Employee Handbook
Access Management Regulations
Procedure For Filing A Vacation Petition
Functional Class Map
Driveway Pipe Detail
Steel Bridge Preparation and Painting
Concrete Deck Presentation

New Hires, Milestones and Promotions

By Misty Centers
Personnel Specialist

We have had several new hires join our organization this spring. Welcome aboard!

- Joe Rose - Fleet Tech
- Bryan Wilhelm - Highway Tech
- Hayley Boling - College Intern
- Cole Harbour - College Intern
- Chad Straker- Seasonal Driver
- Ken Neinberg - Seasonal Driver
- Misty Centers - Personnel Specialist

Work Zone Driving Tips

By Mark Hilty
General Superintendent

Summer is upon us once again. Traveling along our County roads, chances are you will come across some construction work zone. These work zones are usually a one-lane closure in a fixed area or a one-lane moving operation, such as with our chip seal operation. If you enter one of these areas, we ask that you please:

- Reduce your speed as county roads have less room to work with than State routes.
- Pay attention to the signs as this will help you get through the work zone safely.
- Obey flagger's directions and stay in the lane assigned by flagger until instructed to change lanes.
- Stay alert! Avoid distractions such as changing radio stations or using cell phone while driving through work zones.
- Keep a safe distance between you and the car ahead of you. Rear end collisions are the most common accidents in work zones.
- Keep a safe distance between you and the workers and their equipment.

If you happen to come across our chip seal operation or a freshly chip sealed road, please reduce your speed to 45 MPH or less to avoid pelting workers or oncoming traffic with stones. Lets all pitch in to make this Summer safer.

On-line Project Bidding Update

By Todd Bumgardner
Administrative Coordinator

Our efforts in moving to an online bidding format this year fell into place with the outbreak of COVID 19. Three federal aid projects were successfully awarded this spring through this new (to our operations) bidding format. Two bid openings were conducted utilizing remote conferencing with the Logan County Commissioners. The projects were as follows:

- The $1,838,031.93 Bridge 21 - 1.00 replacement project outside Logansville over the Great Miami River was awarded to Eagle Bridge Company from Sidney, Ohio

- A $172,215.49 countywide pavement marking upgrade program was awarded to Dura Mark, Inc. from Stow, Ohio

- A $48,980.65 countywide sign upgrade project went to Lightle Enterprises of Ohio, LLC from Frankfort, Ohio

These projects represent $1,659,610.06 in federal aid funds coming into our county, paying Ohio contractors to perform work and provide products to meet our county's needs.

In addition to the above online bidding projects and before mid-March The Logan County Engineer's Office bid contracts for the following products and services.

- County and Township resurfacing programs two contracts totaling $2,568,848.04 to The Shelly Company from Findlay, Ohio

- Township chipseal program totaling $347,914.84 to Ray Hensley, Inc from Springfield, Ohio

- Liquid Bituminous product for the county performed chipseal operation with an estimated total of $332,928.55 awarded to Asphalt Materials, Inc. in Oregon, Ohio

In total, the Logan County Engineer's Office, in partnership with the Logan County Commissioners, have contracted over 5.4 million dollars in projects to Ohio producers and contractors made possible through local Sales Tax funding, federal aid dollars as well as auto gas and license fees. Thanks to all for allowing our office to manage your local tax dollars to maintain, upgrade, and provided necessary services for our county's infrastructure.

Protecting Yourself from Ticks and Mosquitoes

Ticks and mosquitoes may carry bacteria, parasites, or viruses. Ticks are in wooded or bushy areas, high grass, or leaf litter. They are most active during the spring, summer, and fall, but in warmer areas may be active all year round.

Mosquitoes are near standing water, or in weedy or wooded areas. They are usually most active during dawn and dusk in the warmer months.

Symptoms of Vector-borne Diseases
Body/muscle aches, Fever, Headaches, Fatigue, Joint pain, Rash, Stiff neck, Paralysis.

Protect Yourself

- Wear light-colored clothing, including a hat, long-sleeved pants tucked into boots, and a long-sleeved shirt.
- Apply insect repellent that contains 20 percent to 30 percent DEET on any exposed skin and reapply as often as necessary.
- Consider using Permethrin – a repellent that kills ticks on contact – on work clothes. However, be aware that Permethrin can be used only on clothing, not on skin.
- Thoroughly check clothing and skin every day for ticks. Check hair, underarms, and groin.
- Wash and dry work clothes to kill any ticks.
- If you find a tick on your body, grasp it firmly and as close to your body as possible with a fine-tipped tweezer. Pull the tick away in a steady motion, and clean the area with soap and water.
- If you develop symptoms of vector-borne disease, seek medical attention promptly. Tell your doctor that you work outdoors and report any tick or mosquito bites.

Poison Ivy

Poison Ivy Facts

- Grows in vines and small low lying shrubs and has three distinct leaves
- The leaves change color; bright red in the spring, green in the summer, reddish/yellow/orange in the fall
- Urushiol, which is extremely potent, is contained in/on the root, stem, and leaves of the plant
- Urushiol can stay active on clothing/materials for up to 5 years
- A rash develops within a few days or a week of exposure and can last up to 3 weeks, peaking with blisters

Preventing Exposure

- Know the area you are working in, look for poison ivy working outdoors
- Wear long-sleeved shirts and long pants, tucked into boots.
- Wear cloth or leather gloves
- Wear a poison ivy block to help poison ivy from entering the pores of the skin

Treatment After Exposure

- Wash your skin with a poison ivy soap and lots of cold water
- Keep rubbing alcohol accessible if the water is not available. It helps remove the oily resin up to 30 minutes after exposure
- To treat itchiness, use over the counter ivy treatment and take a non-drowsy antihistamine