

Lake County Engineer's

# Centerline News

Your Destination – Our Priority

## Best Wishes in your Retirement



**Lawrence Kral**  
Operator III, 30 Years



**Robert Welk**  
Operator II, 31 Years

## 2011 Employee Anniversaries (October – December)

### Administrative Department

Kathy Howell	11/10/2003	8 Years
Ingrid Panic	10/18/2004	7 Years

### Maintenance Department

Greg Combs	12/11/2000	11 Years
Don Dickard	12/02/1985	26 Years
Bruce Gurley	11/22/1982	29 Years
Todd Horne	12/11/2000	11 Years
Tom Kerestman	12/29/1980	31 Years
Ed Lawson	11/18/2002	9 Years
Lou Malek	11/13/2001	10 Years
Gary Miller	11/13/2001	10 Years
Gary Nicholson	11/29/2004	7 Years
Jeff Percival	12/04/2000	11 Years
Dennis Sanders	11/22/2010	1 Year
Joe Shoop	11/29/1981	30 Years
Chad Sines	11/26/2007	4 Years
Dave Tirpak	11/10/1977	34 Years
Chris Woodin	12/11/2000	11 Years

## Boxes of Hope

Our holiday collection of Wish List Items for Project Hope for the Homeless was a huge success!

Because of your donations, we were able to provide a truck full of the shelter's most needed items. The items we donated are critical to keep the shelter running smoothly.

This kindness truly makes a difference in the lives of those who rely on Project Hope for food and shelter.

Thank you for your generosity.

- Bri

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*From the desk of*

*Jim Gills*

## River Road Emergency Culvert

2011 has been a record year for rainfall. We're discovering drainage problems where we have never had them before.

Earlier this year, a heavy downpour washed out a culvert on River Road, near the SR84 intersection in Perry Township.

We were able to secure an emergency grant from the Ohio Public Works Commission (OPWC) in the amount of \$90,000.00. We also had

sufficient unused, large elliptical pipe in our yard which had previously been gifted to us by ODOT.

Using a combination of our forces and a local contractor, we were able to start repairs within two (2) weeks and finished the project in approximately forty (40) days – record time.



James R. Gills, P.E., P.S.  
Lake County Engineer

*"We were able  
to start  
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project -  
in record time"*

## Road & Bridge Projects

This year produced three bridge projects: a replacement of the Dodd Road Bridge in Willoughby Hills; a re-decking of the Prouty Road Bridge in Concord Township, east of Morley Road; and the Leroy-Thompson Road Bridge in Leroy Township.

The Dodd Road and Prouty Road Bridges were completed in November and the Leroy-Thompson Road Bridge will be completed in the spring.

Our two (2) major road building projects for this year - Lake Road East in Madison Township and Auburn Road resurfacing

in Concord Township - are complete and open to traffic.

The projects received approximately 3.5 million dollars in federal assistance. Lake Road received \$500,000 in leftover ARRA funds.

Our Vrooman Road Bridge project is still moving along. We hope to complete the environmental documents in January. Next will be a stakeholder's meeting, a formal public hearing, and then approval of a preferred alignment. We expect final design to start in June 2012. At that time we will also be hiring a consultant to

prepare final plans on the roadway section from the bridge to Interstate 90.

The Leroy Township Round-a-Bout Project has received an OPWC grant and loan amounting to \$900,000.

O.R. Colon is in the process of appraising the additional right-of-way property required and we anticipate purchasing the property this spring. We hope to bid the project in the fall of 2012 and be complete sometime in late 2013.

## Slow Down!

Winter is coming and our crews are ready. We ask that everyone remember to slow down when the roads are snow-covered. Our crews appreciate your consideration!



## Ohio Weather

by George Hadden



The changing weather in Ohio is always a topic of conversation and discussion. Even new acquaintances can talk about weather being too hot, too dry, too cold, or too wet. Recent years are vivid reminders of how weather conditions can vary in Ohio. Many people enjoy the variation that Ohio's weather brings seasonally - or sometimes daily.

Precipitation includes rain, sleet, hail and snow. Many people measure daily precipitation for fun but official recording stations are operated by the National Oceanic and Atmospheric Administration-National Weather Service and to a lesser extent, by other state and federal agencies.

Each day, at a specific time, the amount of precipitation is measured and recorded for the previous 24 hour period. Some stations measure hourly or even shorter periods of time.

Precipitation in Ohio varies greatly from area to area. The general trend is for precipitation to be greatest in the south and east, diminishing in amount toward the northwest. Locally, the average annual precipitation ranges from a high of nearly 44 inches near Chardon to less than 30 inches near Bass Islands. Snowfall ranges from greater than 100 inches in the Snow Belt east of Cleveland to less than 20 inches along the Ohio River. On average, 10 inches of melted snow equals 1 inch of rain...in case you were wondering.

In Ohio, spring and summer are typically the wettest months with June and July averaging 4 inches of precipitation each month. The fall and winter months are the driest with October and February averaging only about 2¼ inches of precipitation.

Before 2011, the wettest year on record was 1990 when 51.38 inches of precipitation was measured. The driest year on record is 1930 when 26.59 inches of precipitation was recorded.

Floods and droughts are natural periodic occurrences in Ohio. Floods, as we are all aware, can happen at any time. Floods usually last a few hours to a few days, while droughts generally last months or even years.

Whether you like or dislike the weather in NE Ohio, a recent study backed by recent activities, indicates that the annual precipitation in northern Ohio is on the rise and will be bolstered by heavy, high-impact storms.

In other words, now more than ever; when it rains, it pours!

“...annual precipitation in northern Ohio is on the rise and will be bolstered by heavy, high-impact storms.”



## Did you know?

- Every winter around one septillion snowflakes fall from the sky. That's a one with 24 zeros following it!
- Hilo, Hawaii is the wettest city in the United States with an average annual precipitation of 128 inches! To put that into perspective, one inch of rain falling over one acre of land is over 27,000 gallons of water or over 226,000 pounds of water.
- It takes approximately one million molecules of water to make one raindrop.
- The largest hail stone ever discovered was found in Nebraska and its circumference was that of a soccer ball!
- Hail causes about one billion dollars worth of damage per year to crops and property such as homes and cars.



# IT'S ONLY A BRIDGE, WHY IS IT TAKING SO LONG?

by Alan Exley



Over the last 17 years I have worked for the Lake County Engineer's Office, the requirements to design and build bridge replacement projects have changed every year. This is especially true when Federal funding is involved.

The traditional design, bid and build delivery system has had Design-Build and Just-Build options added. Design can be performed either in-house or by a Consultant depending on the complexity of the project. Consultants are now hired by Qualification Based Selection (QBS) both for Professional Engineering (PE) which used to be called Design and for Construction Engineering (CE) which used to be called Construction Services. The changes in complexity of surveying, property acquisition, hydraulics, flood plain mapping, utility coordination and GIS have been phenomenal.

Design for new bridges being built today provide for heavier loads, wider pavement, stronger guardrails and better signing among other things. The average age of bridges being replaced is about 50 years. The design life of a new typical County type bridge is about 75 years - I guess you'll have to take my word for it. Project plans for basic small bridge replacements have doubled in size and bid documents have gone from less than 50 pages to over 250 pages!

Designs provide for waterway openings that are less likely to produce impacts up or downstream of the new structures. These improvements often require the bridges to be higher and/or have longer spans. Environmental permitting and oversight has increased significantly. Federal funding programs, restrictions, and controls have continuously increased and changed, making a moving target for project programming and management.

Construction has changed as well. Post-construction Stormwater Best Management Practices (BMP's) designed into projects help to protect

water quality after construction. Stormwater Pollution Protection Plans (SWPPP) and Temporary Sediment and Erosion Control (TSEC) plans help to protect water quality during construction. Significant controls on construction activities requiring stream access have squeezed construction schedules.

During this time frame the aesthetics of smaller typical County type bridges has become more common. Refurbishing truss bridges, concrete form liners, colorizing concrete sealers and special efforts to protect trees have become common practice in Lake County.

As you might expect, all the changes come with volumes of rules and regulations. Keeping up with all the changes is time consuming and obtaining the permits and approvals takes longer. The enhanced requirements also increase project construction cost and schedules take more time.

However, I believe most people will agree that the effort does produce a better, safer, more esthetic and more environmentally-friendly product.

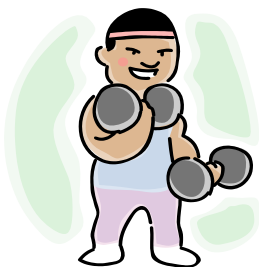
***"The changes in complexity of surveying, property acquisition, hydraulics, flood plain mapping, utility coordination and GIS have been phenomenal."***

Above photos:  
Tibbetts Road Bridge Kirtland, OH

## Kick Start the New Year for LESS

Lake County employees, spouses, and dependents that are enrolled in Anthem Healthcare coverage are invited to take advantage of Lake Health Studio Classes at the Lake Health employee rates.

Kick start the New Year and participate in a Yoga, Zumba, Cardio Kickboxing, Cardio Express, Pilates or 20/20/20 class.



To register, simply call the Best of Health Line at (440) 953-6000 and let them know you are a Lake County Employee!

Visit [www.lakehealth.org](http://www.lakehealth.org) to view the Studio Class Schedule.

## 2012 Weight Loss Challenge

The Lake County Wellness Program is sponsoring "The Biggest Loser" program again this year.

Employees will participate as an individual or as a team, consisting of 3-8 members for the duration of the challenge.

Prizes will be awarded to the top male, top female, & to the top team with the highest percentage of weight loss for monthly weigh-ins. Prizes will also be awarded to the top male and top female that has the highest percentage of weight loss at the end of the program.

Gift cards will be awarded to each individual of the top team that has the highest percentage of weight loss at the end of the program.



Monthly weigh-ins will be held:

January 3, 2012

February 7, 2012

March 6, 2012

April 3, 2012

Thanks to Peggy Gall for handling the weigh-ins here at the Engineer's Office.

GOOD LUCK TO ALL PARTICIPANTS!!!

**James R. Gills, P.E., P.S.**  
**LAKE COUNTY ENGINEER**



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**WE'RE ON THE WEB!**

Visit our website...  
[www.lakecountyohio.gov/engineer](http://www.lakecountyohio.gov/engineer)

Find us on...



Lake County, Ohio Engineer's Office

**LAKE COUNTY ENGINEER**  
**MAILBOX REPLACEMENT POLICY**



Mailboxes damaged by DIRECT contact with a vehicle or its plow blade while performing County maintenance operations will be repaired or replaced with a 4x4 treated wooden post and a standard mailbox approved by the US Postal Service. Damage by thrown or pushed snow does not warrant replacement.

In the event that the mailbox is of a specialty or exotic type of construction, the County's liability per occurrence is limited to a mailbox unit as described above or a cash settlement not to exceed \$35.00. An inspection of the damaged mailbox by the Lake County Engineer's Department along with a signed release form is required prior to payment.

The following mailbox "rules for residents" are intended to minimize mailbox and damage claims. Non-compliance with these rules may negate County responsibility for subsequent damages.

**Mailbox Rules for Residents:**

- 1) Keep the mailbox as far from the white/edge line as practical.
- 2) Snow removed from your driveway should not be placed on the roadway or in a location that requires a plow to throw it at the mailbox.
- 3) Mailbox posts must break away and cannot be mounted on anything bigger than a 4x4 wood post or 2" diameter standard strength steel pipe.
- 4) The expensive plastic style mailboxes will NOT be replaced.

## Special Collections 2012

**Scrap Tire Collection**

Saturday, April 21<sup>st</sup> 8am – 1pm  
Lake County Fairgrounds

**Computer Collection**

Saturday, May 5<sup>th</sup> 9am – 1pm  
Lake County Fairgrounds - Commercial Building

**Household Hazardous Waste Collection**

Saturday, June 9<sup>th</sup> 9am – 3pm  
Lake County Fairgrounds  
&  
Saturday, September 29<sup>th</sup> 9am – 3pm  
Lake County Fairgrounds

For more information and instructions on limitations, contact  
**The Lake County Solid Waste District at 440.350.2644**

## OPERS offers help to identify your transition group

The Ohio Public Employees Retirement System (OPERS) Board has proposed a three-tier plan to phase in its proposed benefit changes for current system members. Do you know which transition group you are in?

OPERS has developed a tool to help you determine which transition group you would be in should pension legislation be enacted as suggested.

Your transition group would be based on when you first become eligible to receive an age and service retirement benefit under the current eligibility requirements (referred to as Groups A, B, and C). Visit [www.opers.org/estimator](http://www.opers.org/estimator) to find out your transition group.