

# 2021 MEDINA COUNTY ENGINEER'S ANNUAL REPORT

By: Andrew J. Conrad, P.E., P.S., Medina County Engineer

To the Board of Medina County Commissioners

It is my privilege to present the Annual Report for the Office of the Medina County Engineer. In accordance with the Ohio Revised Code, an annual report must be made to the Board of County Commissioners summarizing the activities and accomplishments of the County Engineer's office. It also provides a summary to the citizens of Medina County of an accounting of where dollars were spent in order to improve and maintain the County's 323.60 miles of roads and 285 bridges.

The employees of the Medina County Engineer's Office work everyday to provide you, the public, with a safe and well-maintained network of county roads and bridges. I want to recognize my employees for the work they performed in 2021. Thank you for your dedication and efforts.

## WINTER MAINTENANCE

Each winter season brings its own set of unique challenges. Winter operations for our highway department personnel consists primarily of snow and ice control and removal. The total cost of all snow and ice operations which includes plowing, spreading salt and abrasives, stacking/loading salt, brine making and application, and dispatch and supervision was \$583,464.83.

## TREE TRIMMING

As time permits and where needed, work crews were out in many locations performing tree trimming and removal. The work is made more difficult with the number of overhead utilities that occupy our road right-of-ways. Contractors are sometimes utilized when large trees are encountered. During 2021, the total cost of tree trimming and removal was \$425,509.03.

## VEGETATIVE CONTROL

Four rounds of roadside mowing were completed over the 323.60 centerline miles of County Roads. The first two rounds involved mowing mainly roadsides as well as intersection locations where sight distance was impacted. The third and fourth rounds also included backslopes in addition to roadsides and intersections. The cost to perform the roadside mowing and weed eat spot locations was \$198,552.15.

## PAVEMENT REPAIRS

County crews performed hand and machine patching and repair on various roads in 2021 where needed. We expended \$234,524.89 to perform this work. Also, a contract was let for more extensive repairs to miscellaneous roads at a cost of \$190,779.47

## CRACK SEAL

Crack sealing of various County Roads and 64 bridge decks was performed by County Forces in 2021. Material and labor cost for this work amounted to \$26,726.01. A crack seal contract for various concrete roadways was let for \$70,637.00.

## FORCE ACCOUNT CULVERT, DRAINAGE, AND SHOULDER WORK

The Highway Department was able to replace numerous road culverts, build and repair shoulders and berms on various roads, and address a large number of work order requests related to drainage concerns and ditching. This force account work was performed utilizing both County Highway equipment and personnel as well as outside contractors. During 2021, Medina County Highway forces replaced or extended 52 culverts of various sizes at a cost of \$509,199.35. The remaining ditching and drainage work cost \$467,975.51. Shoulder work and berming cost \$179,406.04.

## BRIDGE MAINTENANCE

County crews replaced three structures. Two of the replacements are now classified as culverts since they are single-cell, four-sided box culverts that are less than ten feet in span. Additional maintenance to our bridge inventory was at a cost of \$180,544.73.

We also found three bridges that were mistakenly on our inventory. They have now been accepted by the City of Wadsworth (2) and the Village of Lodi (1) and are no longer maintained by Medina County.

## MISCELLANEOUS TASKS

County crews performed miscellaneous tasks associated with the maintenance of the County road system at a cost of \$187,204.19.

## VEHICLE/EQUIPMENT ORDERED

\$30,264	Ford F-150 Pickup
\$477,000	Western Star Cab and Chassis (3 units)
\$37,196	Gledhill Snow Plow (2 units)
\$5,255	Lift Gate for truck (2 units)
\$145,364	John Deere Tractor with boom mower
\$93,696	John Deere Tractor with flail mower
\$88,547	Cat Track Loader with attachments
\$141,767	Cat 308 Excavator with attachments
\$2,946	Husqvarna Jumping Jack Compactor
\$35,885	22' Eager Beaver Trailer
\$3,519	Stihl Chainsaw (7 units)
\$6,769	Miscellaneous Shop Equipment and Tools

**\$1,068,208** Total for Vehicle and Equipment Ordered for the Highway Garage

Due to continued supply chain issues and material availability, a number of these items were ordered in 2021, but will not be delivered until 2022. The funds for these purchases have been encumbered, but will not actually be spent until the products have been delivered. Only \$503,029 of the \$1,068,208 ordered was delivered and paid for in 2021.

## 2021 Contract Expenditures

		Contract Amount	Funding Source	Contractor
<b>HOT MIX ASPHALT</b>				
CH 22, 47, & 70	3.48	\$488,348.95	OPWC	Karvo Paving
CH 13	2.00	\$507,403.75	Local	Perrin Asphalt Inc.
CH 136	2.98	\$633,895.65	OPWC	Melway Paving Company, Inc.
CH 123, 127, & 260	5.41	\$1,513,452.24	NOACA	Melway Paving Company, Inc.
	Miles - 13.87	\$3,143,100.59		
<b>MOTOR PAVING</b>				
Misc. Roads	Miles - 7.52	\$1,004,211.88	Local	Melway Paving Company, Inc.
<b>CHIP SEAL</b>				
MC 3000	21.28	\$560,132.45	Local	Melway Paving Company, Inc.
422	13.66	\$367,227.70	Local	Perk Company
	Miles - 34.94	\$927,360.15		
<b>PLANING &amp; PAVEMENT REPAIR</b>				
Misc. Roads		\$190,779.47	Local	Chagrin Valley Paving, Inc.
<b>BRIDGES &amp; CULVERTS</b>				
CH 46, Br 20		\$189,352.71	OPWC	N & N Construction
TH 27, Br 33		\$167,884.00	OPWC	Vasel Brothers, Inc.
CH 150, Br 15		\$209,135.00	OPWC	HSH Construction & Excavation
	Contract bids for 3 Structures	\$566,371.71		
<b>CRACK SEAL</b>				
Misc. Roads		\$70,637.00	Local	The Aero-Mark Company
<b>PAVEMENT MARKING</b>				
Misc. Roads	106 Miles	\$129,770.75	CEAO	American Roadway Logistics
<b>GRAND TOTAL OF CONTRACT WORK</b>		<b>\$6,032,231.55</b>		

## FINANCIAL SUMMARY

The maintenance, repair, and construction of roads and bridges on the County Highway System is funded primarily from portions of license plate fees collected for vehicles registered in Medina County and a share of the Ohio 38.5 cents/gallon fuel tax. No real estate or sales tax is used for highway purposes. Federal gas tax and State Issue 1 funds are utilized on specific projects when our office is successful in securing these funds.

Below are the general summaries of the Expenses and Revenues for 2021

2021 EXPENSES	
Salaries	\$2,856,944
Fringe Benefits	\$1,075,429
New Equipment	\$503,029
Travel/Training	\$6,316
Road/Bridge Contract Repairs	\$2,699,852
Contract Services	\$879,487
Materials/Fuel	\$1,135,098
Land & R/W Acquisition	\$1,001
Miscellaneous	\$44,070
Total	\$9,201,227

2021 REVENUES	
License Plate Fees	\$6,622,807
Gasoline Tax	\$3,739,694
Fees	\$188,515
Fines	\$25,704
Sales/Reimbursements	\$294,883
Investment Income	\$48,335
Other	\$145,636
Total	\$11,065,575

Our office was successful in securing numerous federal and state grants this year that were used to assist in a number of our contract projects. All grant money is not shown in the Financial Summary above. Additional encumbered funds do not show up as 2021 expenses.