

City of Findlay

Pete Sehnert, Mayor

ENGINEERING DEPARTMENT

Brian Hurt, P.E., City Engineer 318 Dorney Plaza, Room 304 • Findlay, OH 45840 Phone: 419-424-7121 • Fax: 419-424-7120 www.findlayohio.com

> Jim Barker Safety Director Bruce Hardy Service Director

January 25, 2010

Mr. Pete Sehnert Mayor, City of Findlay Findlay, OH 45840

RE: Engineering Department

Annual Report for Calendar Year 2010

Mr. Sehnert:

Throughout 2010, the City of Findlay Engineering Department has endeavored to provide citizens, developers, contractors, City Departments, and other interested parties with the best service possible in regard to all of the following functions:

- Civil Engineering
- Project Management
- Engineering records maintenance
- Infrastructure tracking
- Construction inspection
- Plan review
- Infrastructure planning
- Bonding, inspection, tracking of private development
- Contracting for City departments
- Utility/sidewalk permitting
- Address assignment
- GIS development

- Support for USACE Flood Feasibility Study
- Airport grant administration
- Inspection of City owned bridges
- Representation to numerous City Committees and Commissions
- Prevailing wage coordination for Capital Improvement projects
- Flood Hazard Mitigation
- City mapping

The varied knowledge base, expertise and dedication of the Engineering Department staff make the provision of these services possible. The knowledge of our staff is truly our greatest asset, essential to maintaining cost effective and efficient service. At the end of 2010, the Department maintained 10 full time employees, listed below.

Brian Hurt	Chief Engineer	Greg Craven	Eng. Technician (GIS)
Meghan Clement	Professional Engineer	Glen Springer	Engineering Tech (CAD)
Dave Jordan	Chief Construction Insp.	Donna Corbin	Finance/Contract Control
Robert Stimmel	Construction Inspector	David Ohl	Records Administrator
Mark Steward	Surveyor Intern	Nathan Hoy	Project Manager

In 2010, Meghan Clement became a Profession Civil Engineer for the State of Ohio. She is the second Professional Engineer that is employed by the City of Findlay. Ms. Clement is paid out of a combination of the Stormwater Fund (50%), Water Fund (25%) and Sewer fund (25%), rather than the General Fund. This funding method allows Ms. Clement to manage the OEPA mandated Stormwater Management Plan. This will also allow her to knowledge of the City's sewer and water systems in hopes to aid the Water and Wastewater departments with engineering issues.

The following pages contain the Annual Operations Summary for the Engineering Department, listing detailed statistical information. In addition, a short written description of the engineering department's involvement in the Sanitary Sewer Lining Project, WPC Storage Building Expansion, Zebra Mussel Control Facility, progress of maintenance on Geographic Information System, status of City-owned bridges and an update of USACE Flood Feasibility Study are included.

Please do not hesitate to contact me with any questions you may have regarding this information or department operations in general.

Respectfully Submitted,

Brian C. Hurt, P.E.

City Engineer

ARRA Funded Sanitary Sewer Lining

The Engineering Department managed a project that lined approximately 10,000 feet of sanitary sewer at more than 20 sites around the City. The liner was placed mostly in areas where sewers were crossing, or running adjacent to, streams or ditches. The liner is made up of a polymer material that provides structural support to a deteriorating sewer. The liner will also eliminate infiltration from groundwater sources located near the sewer. Half of the project funding was supplied by the American Reinvestment and Recovery Act. The remainder of the project was funded through the sewer fund. The final project cost was \$37,000 below the original budgeted amount.

ARRA Funded WPC Storage Building

The Engineering Department managed a project that involved the expansion of the current sewer maintenance building. The project consisted of a 3,000 square foot addition to an existing building. The addition houses sewer maintenance equipment. The project also provided sewer maintenance personnel with new offices and a break room. Half of the project funding was supplied by the American Reinvestment and Recovery Act. The remainder of the project was funded through the sewer fund. The final project cost was \$300 below the original budgeted amount.

Findlay Reservoir Zebra Mussel Control Facility

The Engineering Department managed the design and construction of a Zebra Mussel control facility at the Findlay reservoir. The facility consisted of a small, fenced-in building that contains equipment to disperse sodium permanganate into the raw water outlet of the reservoir. The project also required the installation of chemical feed lines inside the outlet structure, which required the use of specialized divers. The final project cost was \$30,000 below the appropriated amount.

Geographic Information System (GIS)

The Engineering Department remains the primary developer of the City of Findlay's Geographic Information System (GIS). GIS has proven to be a valuable asset to the City of Findlay. In 2010, the City Engineering department continued to add a storm sewer layer to the GIS system. Planning and implementation of this layer will take a couple more years to complete. The priority for 2011 will be to continue to make more sections of the storm sewer system available for viewing.

Also in 2011, there will be continued efforts to link more scanned documents to the GIS system for viewing and to make the documents easier to find.

City-Owned Bridges

The City of Findlay continues to own and maintain four roadway bridges and two pedestrian bridges within the City. These bridges are:

- Blanchard Street Bridge over the Blanchard River
- Dr. Martin Luther King, Jr. Parkway Bridge over the Blanchard River and CSX
- Civitan Park Pedestrian Bridge over the Blanchard River
- East Trenton Avenue Bridge over Howard Run and CSX
- Emory Adams Pedestrian Bridge over Eagle Creek

Saratoga Drive Bridge over Rush Creek

Annual inspection of vehicular bridges by a certified bridge inspector is required by the Ohio Department of Transportation. Inspections show that the City's structures remain in fair to good condition.

Brian C. Hurt, P.E. is a certified bridge inspector through the State of Ohio. He is the only person on staff that is certified in this manner.

If the City chooses to accept responsibility for additional bridges within the corporation limits or considers construction of additional bridges, consideration should be given to maintenance personnel, equipment, and funding sources for maintenance and future rehabilitation or replacement projects on these important structures.

USACE Flood Feasibility Study

In response to the flooding events of 2006-2009, the City of Findlay has partnered with the US Army Corps of Engineers to undergo a Feasibility Study to find solutions to the flood problems in Findlay. In 2010, the engineering department along with USACE district office in Buffalo, NY and the Northwest Ohio Flood Mitigation Partnership was able to continue studies that will be incorporated in the Flood Reduction Study. Most of the studies were created to determine the existing conditions that are located in the watershed. The studies documented existing Environmental; Architectural; and Economic Damage conditions. In 2010, the City also negotiated with the Corps to use a consultant to finish the technical activities in the Feasibility Study so it can be bought to completion in a timelier manner.

OPERATIONS SUMMARY FOR THE YEAR OF 2010

The following information is provided as a report of operations in the Engineering Department for the year 2010. Corresponding years 2008 and 2009 are shown for comparison.

NEW STORM SEWER

MEW STORM BE						
	<u>2010</u>	<u>)</u>	<u>2009</u>		<u>2008</u>	
6"	0	LF	250	LF	919 LF	
8"	(240)	LF	490	LF	135 LF	
10"	0	LF	415	LF	35 LF	
12"	2,482	LF	3,058	LF	6,430 LF	
15"	1,007	LF	1,305	LF	2,004 LF	
18"	922	LF	705	LF	1,250 LF	
21"	825	LF	0	LF	681 LF	
24"	1,116	LF	1,630	LF	1,135 LF	
27"	560	LF	0	LF	896 LF	
30"	0	LF	875	LF	933 LF	
36"	1,760	LF	170	LF	268 LF	
42"	0	LF	0	LF	704 LF	
48"	2,740	LF	0	LF	0 LF	
54"	0	LF	0	LF	18 LF	
60"	0	LF	96	LF	0 LF	
84"	0	_LF		LF	0_LF	
,	TOTALS 11,172	LF	9,547	LF	15,408 LF	

STORM SEWER PERMITS ISSUED

	2010	2009	<u>2008</u>
Outside City	26	13	27
Outside City Inside City	39	46	70
TOTALS	65	59	97

STORM SEWER FEES COLLECTED

	<u>2010</u>	<u>2009</u>	<u>2008</u>
Impact Fees	\$5,285.00	\$4,375.00	\$7,735.00

OPERATIONS SUMMARY FOR THE YEAR OF 2010

The following information is provided as a report of operations in the Engineering Department for the year 2010. Corresponding years 2008 and 2009 are shown for comparison.

NEW SANITARY SEWER

		2010	2009	2008
8" Force Main		0 LF	2091 LF	0 LF
4" Force Main		0 LF	1,684 LF	0 LF
6"		0 LF	360 LF	575 LF
8"		1,556 LF	8,373 LF	10,896 LF
10"		2,114 LF	2,091 LF	332 LF
12"		2,672 LF	293 LF	475 LF
15"		0 LF	969 LF	893 LF
18"		0 LF	0 LF	0 LF
21"		0 LF	0 LF	0 LF
24"		0 LF	0 LF	0 LF
30"		0 LF	0 LF	0 LF
34"		0 LF	0 LF	0 LF
36"		0 LF	0 LF	0 LF
42"		0 LF	0 LF	0 LF
	TOTALS	6,342 LF	15,861 LF	13,171 LF

SANITARY SEWER PERMITS ISSUED

		2010	2009	<u>2008</u>
Outside City		37	15	27
Outside City Inside City		51	61	70
	TOTALS	88	76	97

SANITARY SEWER FEES COLLECTED

	2010	2009	<u>2008</u>	
Tap/Inspection Fees	\$7,000.00	\$21,155.00	\$8,680.00	
Capacity Fees	\$21,296.00	\$21,054.00	\$23,958.00	
Rotary Fees	\$6,705.82	\$9,556.96	\$15,846.00	
Impact Fees	\$38,875.00	\$42,572.70	\$44,644.00	
•	\$73,876.82	\$94,338.66	\$93,128.00	

OPERATIONS SUMMARY FOR THE YEAR OF 2010

The following information is provided as a report of operations in the Engineering Department for the year 2010. Corresponding years 2008 and 2009 are shown for comparison.

NEW WATERLINE

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		<u>2010</u>		<u>2009</u>		<u>2008</u>	
4"		0	LF	0	LF	0	LF
6"		447	LF	1,141	LF	1,653	LF
8"		1,832	LF	16,008	LF	14,069	LF
10"		7,727	LF	0	LF	2,506	LF
12"		0	LF	4,184	LF	698	LF
16"		0	LF	0	LF	0	LF
20"		0	LF	0	LF	756	LF
24"		0	LF	0	LF	0	LF
30"		0	LF	0	LF	0	LF
36"		0	LF	. 0	LF	0	_LF
	TOTALS	10,006	LF	21,333	LF	19,682	LF

WATER SERVICE PERMITS ISSUED

	<u>2010</u>	<u>2009</u>	<u>2008</u>
Outside City	41	17	37
Outside City Inside City	50	44	64
TOTALS	91	61	101

WATER FEES COLLECTED

WITTERTED		2010	2009	2008
Tap/Meter Fees		\$89,575.00	\$53,725.00	\$82,275.00
Rotary Fees		\$12,870.00	\$4,400.00	\$33,030.80
, - 	TOTALS	\$102,445.00	\$58,125.00	\$115,305.80

Impact Fees

OPERATIONS SUMMARY FOR THE YEAR OF 2010

The following information is provided as a report of operations in the Engineering Department for the year 2009. Corresponding years 2008 and 2009 are shown for comparison.

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NEW PAVEMENT (HARD SURFACE WITH CURB)								
	<u> 2010</u>	<u>2009</u>	<u>2008</u>					
Total(construction and annexations)	0.24 Miles	0.00 Miles	1.30 Miles					
STREET RESURFACING								
	<u>2010</u>	<u>2009</u>	<u>2008</u>					
Total Increase	4,222 LF	0 LF	24,046 LF					
	0.80 Miles	0.00 Miles	4.60 Miles					
CURB CUT PERMITS								
	<u>2010</u>	<u>2009</u>	<u>2008</u>					
Permits Issued	48	63	35					
Fees Collected	\$1,125.00	\$1,550.00	\$825.00					
SIDEWALK PERMITS								
	<u>2010</u>	<u>2009</u>	<u>2008</u>					
Total Repaired	5835 LF	3284 LF						
Total Constructed	3735 LF	6082 LF	4201 LF					
Permits Issued	167	161	195					
ANNEXATIONS								
	<u>2010</u>	<u>2009</u>	<u>2008</u>					
Total Increase	0.822 Acres	72.435 Acres	14.812 Acres					
	0.001 Sq Mi.	0.113 Sq Mi.	0.023 Sq Mi.					

OPERATIONS SUMMARY FOR THE YEAR OF 2009

WATERLINES

Total through 2009		310.16 Miles
Constructed 2010		1.89 Miles
Removed 2010		0.00 Miles
TOTAL through 2010		312.05 Miles
	SANITARY SEWERS	
Total through 2009		293.64 Miles
Constructed 2010		1.20 Miles
Removed 2010		0.00 Miles
TOTAL through 2010		294.84 Miles
	RIGHT-OF-WAY AND PA	VEMENT
Hard surface with curb through 2	2009	129.73 Miles
Hard surface without curb through		63.87 Miles
TOTAL pavement through 2009		193.60 Miles
TOTAL Right-of-Way through 2	.009	193.43 Miles
Vacated - 2010		
Hard surface with curb		0.00 Miles
Hard surface without curb		0.00 Miles
Right-of-way		0.00 Miles
Constructed - 2010		
Hard surface with curb		1.04 Miles
Hard surface without curb		-0.80 Miles
Dedicated - 2010		
Right-of-way		0.24 Miles
Annexed - 2010		
Hard surface with curb		0.00 Miles
Hard surface without curb		0.00 Miles
Right-of-way		0.00 Miles
TOTAL Hard Surface with curb		130.77 Miles
TOTAL Hard Surface without c	urb	63.07 Miles
TOTAL Pavement through 2009)	193.84 Miles
TOTAL Right-of-way through 2	009	193.67 Miles
	ANNEXATIONS	
Total through 2009		19.6153 Sq. Miles
Annexations 2010	0.822 Acres	0.0010 Sq. Miles
TOTAL through 2010		19.6163 Sq. Miles

		SANITA	RY SEWE	R TABULATI	ONS	FOR 2010				
Project Name	Project #	Original Year	Cost	Private(TBR)	City	Assessed	Length	Cos	t e de la	Remarks
Lakeview Park Estates 8th Add	311423		_	X			143	\$	6,550	
Helms/Lima Ave San. Sewer Extension	311011		-	Х			128	\$	1,939	
Sheridan Ave. San. Sewer Extension	311020		_	Х			49	\$	4,850	
Mahogany Trail San. Sewer Extension	311032		-	Х			128	\$	15,628	
Southridge Estates (Carlee Ln)	311516		-	Х			690	\$	34,835	
Ohio Orthopaedic	311854		-	Х			410	\$	18,750	
Home Depot Distribution - Van Buren	311935		-	X			4401	\$	482,606	
E. Melrose Improvements (ODOT P.I.D. 78111)	328446		?		X		393	\$	28,171	
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						TOTAL	6342	\$	593,329	
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		STORM S	SEWEF	R TABULATIO	NS F	OR 2010				
Project Name	Project #			Private(TBR)		Assessed	Length	Cos		Remarks
Lakeview Park Estates 8th Add	311423		-	X			682	\$	14,050	
Southridge Estates (Carlee Ln)	311516		-	X			630	\$	39,192	
Hunters Creek Storm Sewer	325845		-		Χ		4660	\$	450,000	(240 LF~8" removed)
E. Melrose Improvements (ODOT P.I.D. 78111)	328446		-		Х		5200	\$	379,975	No previous storm sewer on Melros
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						TOTAL	11,172	\$	883,217	
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Project Name	Project #	Original Year	Cost	Private(TBR)	City	Assessed	Length	Cost	Remarks
Lakeview Park Estates 8th Add	311423		_	X			744	\$ 15,150	
Arby's Waterline	311017		-	Х			223	\$ 13,937	
Southridge Estates (Carlee Ln)	311516		_	Х			670	\$ 28,940	
Legacy Corner - Lot 1 Waterline	311655		-	Х			120	\$ 12,602	
Ohio Orthopaedic	311854	-	_	X			100	7,675	
Home Depot Distribution - Van Buren	.311935	-	_	Х			3585	353,969	
Candlewick Bridge Waterline	357006	-	-		Х		116	30,000	Ord 2010-008
E. Melrose Improvements (ODOT P.I.D. 78111)	328446		\$6,921		X		4,448	\$ 246,123	1958 WL only 621 LF
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						TOTAL	10,006	\$ 708,396	
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		STI	REET PAV	NG TAB	ULATIONS F	OR 2010		·
New Pavement Projects	Project #	Original Year	Cost	TBR	City	Assessed	Length	Cost
E. Melrose Improvements (ODOT P.I.D. 78111)	328446	1960's	?		X		4222	\$ 757,399
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	<u> </u>					TOTAL	0.7996	
							MILES	
Resurfacing	Project #	Original Year	Cost	Length	Cost			
NONE							<u> </u>	
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Street Dept. Resurfacing	Project#	Original Year	Cost	Length	Cost			
NONE								
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		С	ENTER	LINE TABU	LATIONS FOR 2010	
Project Name	Project #		CURB	NO CURB	Remarks	
Lakeview Park Estates 8th Add	311423					 <u> </u>
Southridge Estates (Carlee Ln)	311516					
E. Melrose Improvements (ODOT P.I.D.	328446	0	4222	-4222		
TOTAL		1250				
		0.2367	1.0364	-0.7996	Miles	
ANNEXED	,	0	0	0		
VACATED	0 LF	0	0	0		
TOTAL		1250			LF	
	****** ******************************	0.2367	0.2367	0.0000	Miles	
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PROJECT NAME	PROJECT#	6"	8"	10"	12"	15"	18"	21"	24"	27"	30"	36"	48"	84"		REMOVED	
akeview Park Estates 8th Add	311423				536		146								682		
Southridge Estates (Carlee Ln)	311516				630										630		
Hunters Creek Storm Sewer	325845		-240		160		240					1760	2740		4660		
E. Melrose Improvements (ODOT P.I.D. 78111)	328446				1156	1007	536	825	1116	560					5200		
												-			***		
TOTAL			240		2482	1007	922	825	1116	560		1760	2740		11172		LF
VILES														YORKON (SEU	2.1159		MILES
																	
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		201	0 SANITARY SE	WER	LINES BY	/ SIZE						
PROJECT NAME	PROJECT#	4" FORCE MAIN	8" FORCE MAIN	6"	8"	10"	12"	15"	18"	24"	TOTAL	REMOVED
Lakeview Park Estates 8th Add	311423				143						143	W14-W
Helms/Lima Ave San. Sewer Extension	311011				128						128	
Sheridan Ave. San. Sewer Extension	311020				49						49	
Mahogany Trail San. Sewer Extension	311032				128						128	
Southridge Estates (Carlee Ln)	311516				690						690	
Ohio Orthopaedic	311854				410						410	
Home Depot Distribution - Van Buren	311935					1729			<u> </u>		4401	
E. Melrose Improvements (ODOT P.I.D. 78111)	328446				8	385					393	***·
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TOTAL					1556	2114	2672			67/89/10/10	6342	
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	2010 V	VATER	LINES I	3Y SIZE						
PROJECT NAME	PROJECT#	4"	6"	8"	10"	12"	20"	TOTAL	REMOVED	
Lakeview Park Estates 8th Add	311423			744				744		
Arby's Waterline	311017			223				223		
Southridge Estates (Carlee Ln)	311516			670				670		
Legacy Corner - Lot 1 Waterline	311655			120				120		
Ohio Orthopaedic	311854		100					100		
Home Depot Distribution - Van Buren	311935				3585			3585		
Candlewick Bridge Waterline	357006		116					116		
E. Melrose Improvements (ODOT P.I.D. 78111)	328446		231	75	4142			4448		
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TOTAL			447	1832	7727			10006		
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