

# ENGINEERING DEPARTMENT

*2014 ANNUAL REPORT*



City Engineer: Dale Vandersommen, P.E.

1/30/2015

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### Department's Mission Statement:

The mission of the City of Lorain Engineering Department is to provide expedient technical engineering services and advice to all city departments, the administration, and the general public. Generally the technical support is related to design, inspection, and contract administration of public improvements and subdivisions, plan review, grading, draining and general construction information.

## ENGINEERING DEPARTMENT RESPONSIBILITIES

The Engineering Department is responsible for approximately 262 miles of public right-of-way, bridges, and culverts. The Engineering Department's responsibilities include design, construction management, permitting, and construction inspection of roadways, bridges, culverts, and sewer systems in the City of Lorain.

## CITIZEN INFORMATION

Citizens can request information from the COL Engineering Department. Including the grading of their property, drainage concerns, main sewer and lateral locations back up information, etc.

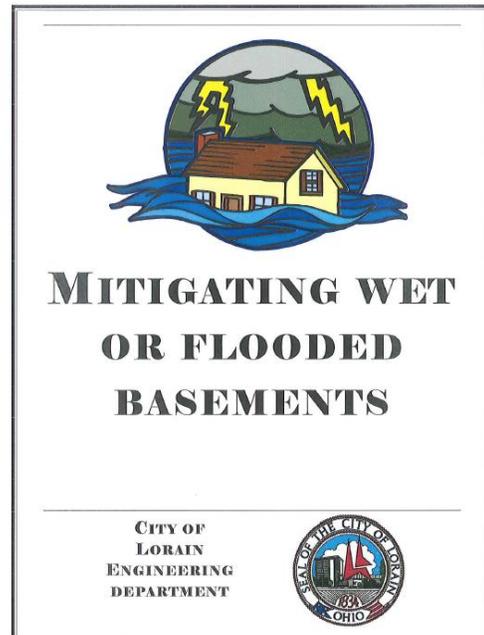
The Engineering Department created the Mitigating Wet or Flooded Basements pamphlet to inform citizens and answer frequently asked questions in response to basement flooding issues that arose in 2014. It is available on the COL website and in the COL Engineering Department.

## INVESTIGATIONS

Field investigations are carried out when the situation warrants it.

2014 Investigations include:

- 1622/1624 New Jersey, drainage complaint, grading



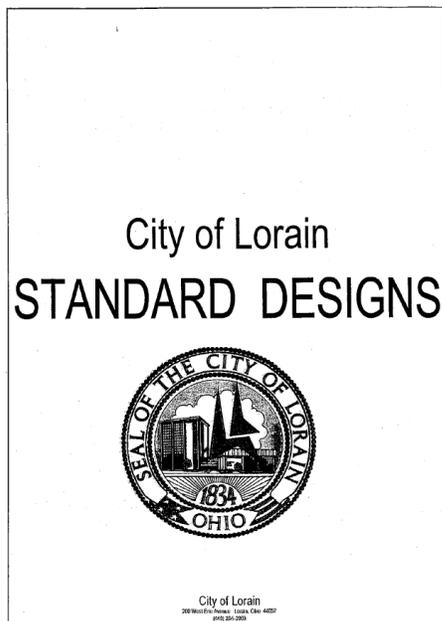
## INVESTIGATIONS (CONTINUED)

- 1711 Urban Circle, drainage complaint, roadway
- 4918 Washington Ave., drainage complaint, downspout/underdrain
- 6501 Buttercup, drainage complaint, grading
- Cherrywood, drainage complaint, storm/sanitary issues
- Revere Place, drainage complaint, storm issue

## ENGINEERING DEPARTMENT STAFF

The Engineering Department is comprised of Professional Engineers, Engineer Interns, Professional Surveyor, Engineering Aide, Contract and Grants Administrator, and a Technical Administrative Assistant.

- Georgene Gedling, Technical Administrative Assistant
- Doug Hasel, PS, Engineer III
- Kathryn Hoffman, Storm Water Manager
- Katie McGannon, Engineering Aide
- Veronica A Newsome, EI, Engineer II
- Jessica Potter, Engineering Aide III
- Daniel Rodriguez, PE, Deputy  
Director of Engineering
- Ryan Simon, PE, Engineer III
- Phil Turske, Contract Administrator
- Dale Vandersommen, PE, City  
Engineer



## STANDARD DESIGNS

The Engineering Department updated the City of Lorain Standard Designs and Specifications to provide guidance to developers, engineers, surveyors, contractors, public and private utilities, various city departments, and private

property owners. Design standards include sanitary, storm, pavement, and miscellaneous that those mentioned are expected to follow designs.

Contract work shall be governed by all provisions set forth in the State of Ohio Department of Transportation Construction and Material Specifications, current version, and any other supplemental specifications per individual project contract documents.

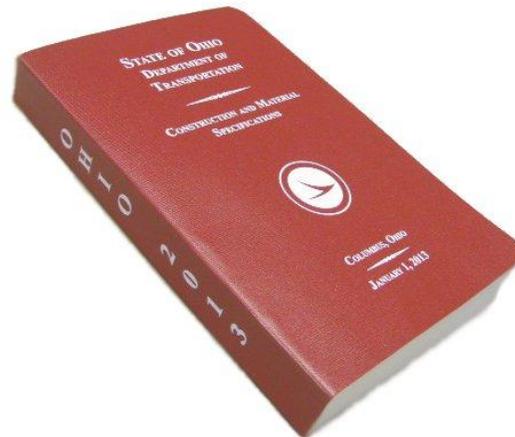
## PROJECTS

### STREET REPAIR LEVY (SRL)

In 2012, the Street Repair Levy was passed by the citizens of Lorain. The funds have had a tremendous impact on the rehabilitation and resurfacing of roadways in the City of Lorain. See Exhibit A for a list of roadways rehabilitated and reconstructed with Street Repair Levy funds in 2014.

### OHIO PUBLIC WORKS COMMISSION (OPWC)

The OPWC provides financing for local public infrastructure improvements through both the State Capital Improvement Program (SCIP) and the Local Transportation Improvement Program (LTIP). SCIP is a grant/loan program for roads, bridges, water supply, wastewater treatment, storm water collection, and solid waste disposal. LTIP is a grant program for roads and bridges only. See Exhibit B for a list of projects completed with OPWC funding in 2014.



### OHIO DEPARTMENT OF TRANSPORTATION (ODOT)

We are collaborative partners with ODOT who oversees Interstate, State and US routes. ODOT oversees the planning, engineering, and construction of many of the major roadways, bridges, and culverts on the state transportation system. In 2014 ODOT's Urban Paving program completed two projects in the City of Lorain. State Route 611 and State Route 57 were resurfaced as part of the Urban Paving Program in 2014.

### OHIO WATER DEVELOPMENT AUTHORITY (OWDA)

OWDA provides financial assistance for environmental infrastructure from the sale of municipal revenue bonds through loans to local governments in Ohio and from issuance of industrial revenue bonds for qualified projects in Ohio. See Exhibit C for a list of OWDA projects completed in 2014.

## MISCELLANEOUS PROJECTS

### MARTIN'S RUN STORM SEWER

The project involved the replacement of an existing corrugated metal pipe storm sewer extending from Cooper Foster Park Rd just east of Baldwin Blvd. extending in the northwest direction approximately 84'. The cost of the project was \$102,827.

### WEST ERIE SLOPE REPAIR

The project lies on West Erie Avenue, 1800 east of Oak Point Road and on West Erie Avenue 2700 west of Oak Point Road. The project encompassed arresting erosion issues at 2 slope sites. The slopes were reshaped and riprap installed. The project cost was \$43,590.



## SURVEY / RIGHT OF WAY



### SURVEYING

The Engineering Department performs construction, topographic, hydrographic, boundary, quantity, right of way, obstruction, and GPS surveys.

Surveying is required for all engineered plans and is the first step in a properly designed project. Surveys performed for the city have assisted in settling legal issues, clarified right of way, determined boundary limits for city owned properties, and have accelerated

the timeline of public works projects allowing both city employees and hired contractors to complete public works projects on time.

Larger surveys have been completed on several of the street repair levy improvements to begin construction in 2015. Surveys have also been done on active job sites that were constructed in 2014 to improve design and functionality of those jobs.

The following are some additional surveys:

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### UTILITIES

- Water transmission line right of way South of Cooper Foster park
- Water transmission line right of way State Route 2
- Water transmission line right of way west of State Route 58
- Water transmission line right of way east of Baumhart Road
- Survey and design culvert on Borman's farm
- Survey and design culvert on south right of way of Cooper Foster west of North Ridge
- Survey and design utilities parking lot for additional storm tile and concrete replacement
- Survey vertical tie in for sanitary tile on Reid and Washington Avenue

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### STREET DEPARTMENT

- Survey right of way W. 30th St. for paving
- Survey right of way W. 11th St. east of Osborne for tree removal
- Survey right of way North Ridge at Washington for tree removal

## SURVEYING (CONTINUED)

- Survey right of way W. 9th St. east of Oberlin Avenue for tree removal
- Survey Idaho alley right of way and design profile for drainage
- Survey and stake right of way for tree removal W. 22nd St. alley
- Survey right of way of Broadway alley north of W. 13th St. for a tree issue.



## GRADING APPROVALS

### Preliminary

Grade review for drainage. Certified Grade review for occupancy.

- Preliminary Grade Approvals: 81
- Certified Grade Approvals: 54

## PLAT REVIEW

The following plat reviews were performed by our Professional Surveyor:

- Deerfield Estates Phase 5
- Martin's Run Village at Morningside Phase 3

## INSPECTIONS

Inspection services validate that the work performed complies with the scope detailed in the permit description. The types of inspections vary depending on the nature of the project. Before a permit can be completed and closed, all required inspections must be approved.

In 2014 the Engineering Department performed the following inspections:

## CONCRETE - INSPECTION

- Sidewalk – 181
- Apron - 176
- Handicap Ramps – 12
- Curb And Gutter – 11
- Sidewalk Evaluations – 4
- Open Pavement – 67

## STORM SEWER AND SANITARY SEWER - INSPECTION

- Sanitary – 63
- Storm – 86
- Inlet – 3

## SUBDIVISIONS - INSPECTION

- Deerfield 5
- The Gardens,  
The Villas,  
The Manors  
of Martin's  
Run



## PROJECTS - INSPECTION

- Clifton Avenue
- Euclid Avenue
- Washington Avenue
- Contract A - 2014 SRL
- Contract B - 2014 SRL
- OPWC 26
- OPWC 27
- Martin's Run Storm Sewer Replacement

## PAVEMENT MANAGEMENT RATINGS

Pavement ratings are constantly being updated in an effort to have the most current information. Information obtained from these ratings is used in the assessment of current roadway conditions, the determination of needed maintenance, repairs, and/or reconstruction. Pavement ratings are used as a tool to aid in the process of prioritizing roadway work within the City of Lorain.

## CONCRETE TESTING

Concrete testing is carried performed on all capital projects. Testing is done in accordance with applicable American Society for Testing and Materials (ASTM) standards by an American Concrete Institute (ACI), Certified Concrete Field Technician. A sample is obtained in the field, then allowed to cure, then compression tested.

Concrete samples are obtained in the field during paving operations as well as other operations where a substantial volume of concrete is being used. Samples are cured for at least 7 days before first compression test is performed. Multiple samples are taken so that compression testing can also be performed at 28 days.

Concrete is said to be fully cured and have developed the majority of its strength at 28 days.

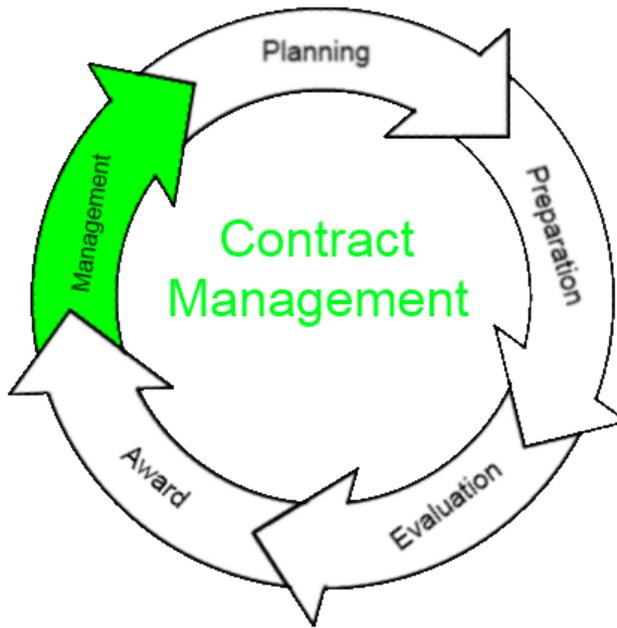
Testing is performed to make sure that what is being specified in plans and specifications is what is being constructed in the field.



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## ASTM TESTING PERFORMED

- ASTM C172 - Sampling
- ASTM C143 - Slump
- ASTM C438 - Density
- ASTM C231 - Air Content
- ASTM C31 - Cylinders



## CONTRACT MANAGEMENT

### GRANTS

#### 2014 LORAIN COUNTY SOLID WASTE GRANT

- Picnic tables made from recycled plastic were supplied to various City of Lorain parks with this grant funding.
- Grant Amount: \$5,267.24

### CONTRACTS

- Residential Solid Waste

#### Collection Contract

- Purchase of Chemicals for Utilities 2014 \*
- Purchase of Materials for Public Properties 2014\*
- Purchase of Distribution Materials 2014 \*
- Tall Grass Cutting Contract North
- Tall Grass Cutting Contract South
- Community Development Grass Cutting Contract
- OPWC Round 27 6Wb
- 2014 Street Repair Levy
  - Contract A
  - Contract B
  - Contract C
  - Contract E
  - Contract F
  - Euclid Avenue
  - Clifton Avenue
  - Washington Avenue: Tower to 37th
- Martin's Run Storm Sewer
- PQM Wastewater Treatment Plant Primary Clarifiers Collection Mechanisms Replacement
- PQM Wastewater Treatment Plant Odor Control System Upgrade
- Lower Black River Heron Rookery Restoration \*
- Street Patching Within the City of Lorain (2 Years)

## CONTRACTS (CONTINUED)

- OPWC Round 28 Contract A
- City of Lorain Removal and Disposal of Old Filter Media Supply and Installation of New Filter Media
- City of Lorain West Erie Avenue Slope Repair
- Recycling and Reclamation activities for the City of Lorain Black River Facility
- Purchase of Chemicals for City of Lorain Utilities 2015 \*
- Purchase of Distribution Materials 2015 \*
- Purchase of Distribution Materials 2015 \*
- Sale of City Parcels (1)
- Sale of City Parcels (2)

## AGREEMENTS

- Installation of the Southern Portion of the City of Lorain South Lakeview Park Safe Walkway
- Traffic Signal Warrant Study Phase II
- Crack Sealing for the City of Lorain
- Administered an additional 33 agreements for various departments of the City of Lorain for the 2014 Calendar Year

## PLAN REVIEW

The Engineering Department is responsible for plan reviews. Plans related to any of the following areas must be submitted and reviewed, depending on the nature of the project:

- Residential and Commercial Development
- Sanitary and Storm Sewers
- Street Construction



## PLAN REVIEW (CONTINUED)

- Storm Water Management
- Waterline replacements

## RESIDENTIAL AND COMMERCIAL

- Beaver Creek Marina Outbuilding - West Erie Avenue
- Carnegie Building - W. 11th Street
- Dollar General - Grove Avenue
- Gen Fed - Oberlin Avenue
- Lake Point Health Center - Kolbe Road
- Lorain High School - Ashland Avenue
- Second Harvest - Baumhart Road
- Taco Bell - Oberlin Avenue
- US Steel - E. 28th Street
- Willow Hardware - Oberlin Avenue

## SUBDIVISION

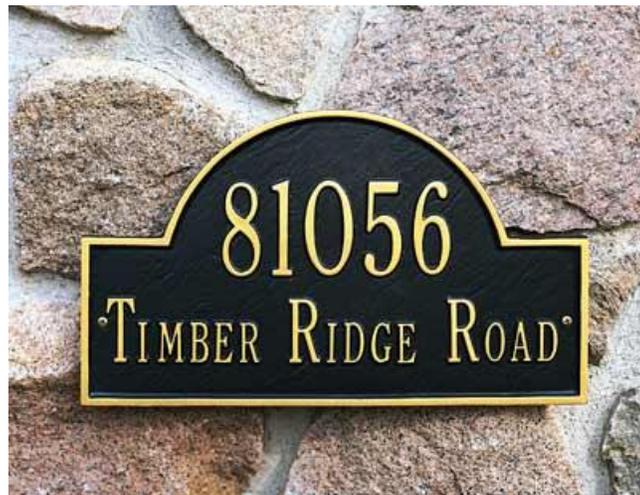
- Gardens at Morningside Subdivision No. 2 and No. 3
- Manors at Morningside Subdivision No. 2
- Villas at Morningside
- Deerfield 5

## WATERLINE REPLACEMENT

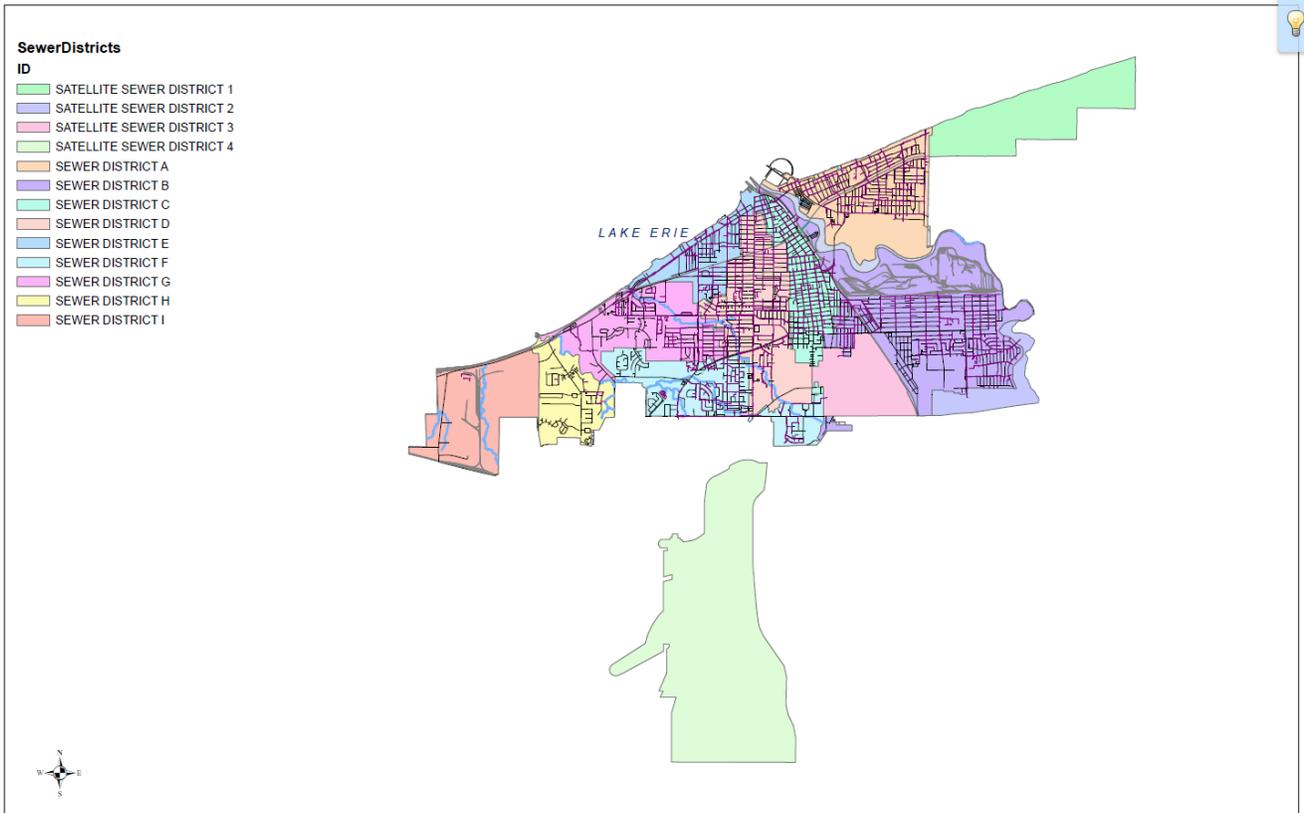
- New Mexico Waterline
- West Erie and Pueblo Waterline

## ASSIGN ADDRESSES

### DEERFIELD - PHASE 5



## MAPPING



NOT TO SCALE

Mapping is also a function of the Engineering Department. Maps are requested by citizens, other city departments, and the Administration. Listed below are maps that were provided to various city departments in 2014:

- City Cemetery map updates
- Pavement Condition Rating maps
- Maps showing roads rehabbed according to program (OPWC, Street Repair Levy, ODOT, etc.)
- Wards/Precincts
- Sex offender address check maps
- Location maps for contracts
- Location maps for OPWC applications
- Location maps for NOACA applications
- Location maps for SIB applications
- Snowplow zone maps
- Maps showing easements
- Maps showing city septic systems
- Maps for other city entities; walking tour maps for the Community Reinvestment Area maps for Community Development

## MAPPING (CONTINUED)

- Fire Station radius maps
- Maps for various petitions (paving, assessment, vacations)
- Outfall Maps
- Unimproved Street Maps
- Maps of vacated streets/alleys
- Watershed maps
- Police District maps
- Zoning maps

## STORM WATER MANAGEMENT

- Performed follow-up outfall screening on 17 outfalls of concern as identified in the 2014 screening. Dry-weather flows were apparent at 5 of these outfalls, with analytic results showing no sources of pollution likely.
- Performed outfall screening on portions of Beaver Creek and Beaver Creek North Fork.
- Began development of a GIS database cataloging imperviousness of parcels within the City in order to identify alternative billing structures for the Storm Sewer Fund. Included in the analysis was the identification of average imperviousness of residential parcels and the imperviousness of all business and commercial parcels in the City.
- Performed 696 storm water inspections within the City.
- Performed annual site inspections of the following City properties: Black River Wastewater Treatment Plant, Water Purification Plant, Street Department Complex, and Sewer Department Complexes.
- Provided storm water training to employees in the following departments/divisions: Sewer, Landscaping, Water Distribution, Garage, and Street.
- Administered the Long Term Operation and Maintenance standards for all existing post-construction BMPs. Land owners are required to submit certified inspection reports annually by May 1.
- Continued communication with City departments and facilities to ensure all facilities within the City are brought into compliance with minimum storm water standards.
- Performed two city-wide mailings (via water billing) to educate residents on aspects of storm water management.
- Hosted the 2014 Kayak-a-Thon to raise awareness on water quality work being performed by the City.

## STORM WATER MANAGEMENT (CONTINUED)

- Began implementation of the Martin's Run Drainage Improvement Plan Phase I Project, to improve water conveyance within Martin's Run. The program includes the expansion of the flowpath/creation of floodplain at Willow Park and channel cleaning at culverts from W.35th upstream to Ashland.

## ENVIRONMENTAL RESTORATION PROGRAM

- Through competitive grant submission processes, received award of the following programs:
  - Black River Landing and Heron Rookery Restoration Project - Awarded \$1,347,644 to stabilize portions of stream bank and restore in-stream habitat at the Heron Rookery and Black River Landing. (NOAA funding)
  - Lower Black River Heron Rookery Restoration Phase II Assessment - Awarded \$175,000 to determine the presence and extent of subsurface contamination at the "BOP Pond", an area adjacent to the Heron Rookery, and to establish recommendations for restoration of the six-acre riverside area. (NOAA funding)
  - Near-shore Re-vegetation in the Lower Black River AOC - Awarded \$88,000 for the planting of approximately 4,000 willows along the Black River in order to filter storm water runoff, reduce turbidity, stabilize substrates, and provide habitat for fish, wildlife, and macroinvertebrates. (US Forest Service funding)
  - Drum Removal and Restoration Project: Assessment and Design Phase - Awarded \$284,500 to delineate and assess a drum disposal area location within the floodplain of the Black River and prepare remedial and restoration designs. (US Fish and Wildlife funding)
  - Lakeview Beach Green Infrastructure Project - Awarded \$250,000 to design and install a green infrastructure/storm water treatment system for the removal of bacteria at Lakeview Beach. (EPA funding)

## ENVIRONMENTAL RESTORATION PROGRAM (CONTINUED)

- Lakeview Beach Gull Control Pilot Program - In order to better understand water quality concerns at Lakeview Beach, the City of Lorain, Lorain County Metro Parks, and Lorain County General Health District received funding from Ohio EPA to study the water quality effects bird control affords at Lakeview Beach. The study is intended for implementation in summer 2015 and includes the utilization of border collies (dogs) to control the gull population. (Ohio EPA funding)
- Reached substantial completion on the Lower Black River Heron Rookery Restoration program which included the removal of approximately 102,330 cubic yards of steel manufacturing waste material from the Black River floodplain. The 3.5 acre project area was subsequently restored via the planting of native grasses, as well as the planting of 500 trees and 1000 shrubs. (Ohio Department of Natural Resources funding)
- Through the management of a \$250,000.00 grant from Ohio EPA, completed assessment and design of a water treatment system required to remediate an oil seep at the Black River Reclamation Facility.

## LORAIN BLACK RIVER RECLAMATION FACILITY

- Developed and advertised a Request for Proposal to secure a Facility Manager for the City's reclamation operation. Through a thorough negotiation process, a contract was awarded. Material sales at the property are estimated to provide the City with \$1,000,000.00 in revenue in 2015.

## PERMITTING

A permit authorizes a homeowner or contractor to begin the work described on the permit. The Engineering Department issues permits for aprons, sidewalks, open pavement, and sanitary and storm sewers. The following number of permits were issued in 2014:

- Apron – 160
- Sidewalk – 186
- Sanitary – 271
- Storm – 154
- Open Pavement - 35

## FINANCES

### Engineering Department Collections

2014	
Sewer Permits	\$20,480.00
Miscellaneous Sales	\$190.00
Parkland Trust Fund	\$46,575.00
Sewer License Fees	\$1,770.00
Deposit Held Trust Fund	\$77,612.00
Reimburse Engineering Services	\$27,466.00
Inspection Fees Allotment Improvement Fund	\$40,833.80
Contract Trust	\$6,645.00
Storm Sewer Deposit	\$98,240.00
Storm Sewer Mgmt Fee	\$27,000.00
End of Year Total - 2014	\$346,811.80

# EXHIBIT A

2014 Street Levy Projects									
Contract #	Street	From	To	Scope	Street Rating	Funding Source	Estimated Cost	Ward	
A	W11th St	Oberlin Ave	Hillisdale Ave	Overlay, Pvmt Repair, casting Adj, Curb Ramps	64	Issue 13	\$ 727,411.85	7	
A	Industrial Parkway Drive	Baumhart Road	Phase I Terminus	Concrete Slab Repairs	51	Issue 13	\$ 118,864.35	7	
A	Hogan Circle	W21st St	S. Hogan Dr	MII/Fill, Pvmt repair, casting Adj, Curb Ramps	50/52	Issue 13	\$ 340,580.35	7	
A	Reeves Ave	W29th St	W24th St	MII/Fill asph, Pvmt repair, Casting Adj, Curb Ramps	67	Issue 13	\$ 241,979.10	7	
A	Cambridge Ave	E. Skyline Dr	South Terminus	MII/Fill, Pvmt repair, casting Adj, Curb Ramps	62	Issue 13	\$ 246,937.08	8	
A	W40th St	Cambridge Ave	Leavitt Rd	MII/Fill, Pvmt repair, casting Adj, Curb Ramps	67	Issue 13	\$ 135,389.10	8	
B	E31st St	Grove Ave	Clinton Ave	MII/Fill, Pavement repair, Casting Adj, Curb Ramps	62	Issue 13	\$ 549,018.25	6	
B	E34th St	Globe Ave	Fulton Rd	Overlay, Pavement Repair, Casting Adj, Curb Ramps	40	Issue 13	\$ 219,362.55	5	
B	Globe Ave	E32nd St	E28th St	MII/Fill asph, Pvmt repair, Casting Adj, Curb Ramps	56	Issue 13	\$ 398,695.00	5	
E	Seneca Ave	E37th St	E42nd St Terminus	Concrete Replacement	63	Issue 13	\$ 784,612.40	6	
E	Seneca Ave	E28th St	E33rd St	Concrete Replacement	62	Issue 13	\$ 856,462.75	5/6	
E	Harvard Dr	Homewood Dr	E39th St	Concrete Replacement	61	Issue 13	\$ 142,221.20	6	
E	Palm Ave	E34th St	E35th St	Concrete Replacement	63	Issue 13	\$ 131,308.65	6	
E	Carrie Drive	Clinton Ave	Oakwood Ave	Concrete Slab Repairs	52	Issue 13	\$ 102,001.90	6	
E	Oakwood Ave	Homewood Dr	E42nd St	Concrete Slab Repairs	66	Issue 13	\$ 203,071.00	6	
E	E41st St	Yale Dr	E42nd St	Concrete Slab Repairs	53	Issue 13	\$ 122,274.35	6	
E	Yale Dr	E39th St	E41st St	Concrete Slab Repairs	72	Issue 13	\$ 77,292.05	6	
E	E39th St	Yale Dr	Harvard Dr	Concrete Slab Repairs	59	Issue 13	\$ 95,608.15	6	
F	Seneca Ave	E33rd St	E36th St	Asphalt Resurfacing	62	Issue 13	\$ 92,590.85	5/6	
F	E42nd St	Seneca Ave	Clinton Ave	Asphalt Resurfacing	49	Issue 13	\$ 280,559.40	5	
F	Gary Ave	E41st St	E42nd St	Asphalt Resurfacing	40	Issue 13	\$ 89,383.25	6	
F	Meadow Lane	E41st St	South Terminus	Asphalt Resurfacing	51	Issue 13	\$ 131,505.55	6	
F	Palm Ave	Packard Dr	Homewood Dr	Asphalt Resurfacing	60	Issue 13	\$ 386,158.30	6	
F	Palm Ave	E28th St	E33th St	Asphalt Resurfacing	59	Issue 13	\$ 174,934.65	6	
						TOTAL	\$ 6,648,222.08		

## EXHIBIT A (CONT.)

Street	From	To	Scope	Funding Source	Cost
Washington Avenue	W. 33rd Street	W. 1st Street	Mill/Fill asph, Pvmt repair, Casting Adj, Curb Ramps	OPWC/SIB	\$ 1,580,242.25
Reid Ave	W22nd St	W. 5th Street	Mill/Fill asph, Pvmt repair, Casting Adj, Curb Ramps	OPWC/SIB	\$ 1,043,760.92
W. 5th Street	Oberlin Avenue	Broadway	Mill/Fill, Pvmt repair, casting Adj, Curb Ramps	OPWC/SRL	\$ 995,150.75
W. 6th Street	Oberlin Avenue	Reid Avenue	Mill/Fill, Pvmt repair, Casting Adj, Curb Ramps	OPWC/SRL	
Wickens Place	W. 4th Street	W. Erie Avenue	Mill/Fill, Pvmt repair, casting Adj, Curb Ramps	OPWC/SRL	

## EXHIBIT B

Contract #	Street	From	To	Scope	Cost
OPWC RD 28	West 10th St.	Hamilton Ave.	Washington Ave.	Mill/Fill asph,Pvmt repair, Casting Adj, Curb Ramps	\$ 80,870.90
OPWC RD 28	West 9th St	Broadway	Parkview	Mill/Fill asph,Pvmt repair, Casting Adj, Curb Ramps	\$ 612,442.33
OPWC RD 28	West 8th St.	Broadway	Oberlin Ave.	Mill/Fill,Pvmt repair, casting Adj, Curb Ramps	\$ 328,406.93
OPWC RD 28	West 7th St.	Broadway	Reid Ave.	Mill/Fill, Pvmt repair, Casting Adj, Curb Ramps	\$ 75,037.88
OPWC RD 28	East 30th St.	Palm	Seneca Ave.	Mill/Fill, Pvmt repair, casting Adj, Curb Ramps	\$ 758,330.10
OPWC RD 28	West 45th Place	Queen Anne Ave	Washington Ave.	Concrete, Pvmt repair, casting Adj, Curb Ramps	\$ 232,901.35
OPWC RD 28	Hickory Hill Ave.	W. 45th Place	Kingsway Dr.	Concrete, Pvmt repair, casting Adj, Curb Ramps	\$ 195,789.55
				<b>TOTAL</b>	<b>\$ 2,283,779.04</b>

**EXHIBIT C**

CITY OF LORAIN, OHIO						
WATER LINE REPLACEMENT EVALUATION SUMMARY						
1/28/2015						
Road	Limits	Lengths (ft.)				Cost
		Orig. Eval. Scope	Proposed Replacement			
			Phase 1	Phase 2	Phase 3	
Euclid Avenue	Colorado Avenue to E. Erie Avenue	5900+/-	5900+/-			\$ 1,337,058.98
Seneca Ave.	28th to 42nd	7,565	7,565			
Clinton Ave.	28th to 42nd	4,840			4,840	
Carrie Dr.	39th to 41st	630	630			
Oakwood Ave.	37th to 42nd	1,650	1,650			
Yale Dr.	39th to 41st	610	610			
Harvard Dr.	Homewood to 39th	330	330			
Denison Ave.	41st to 42nd	330	330			
Gary Ave.	41st to 42nd	620	620			
Meadow Ln.	41st to Goble	1,440	1,440			
Palm Ave.	28th to 36th	2,800	2,800			
Palm Ave.	41st to 42nd		430			
Palm Ave.	42nd to Packard	2,650	2,650			
39th St.	Clinton to Carrie	410	410			
39th St.	Yale to Harvard	760	760			
40th St.	Yale to Grove	920	920			
41st St.	Carrie to Oakwood	380	380			
41st St.	Yale to Denison	780	780			
42nd St.	Mohawk to Clinton	1,020	1,020			\$ 4,250,000.00