



***2015 Annual  
Report to  
Council***

Presented by Joe Kempe  
Public Works Director  
July 12, 2016

## **MISSION STATEMENT**

*The Mission of the Public Works Department is to provide the residents of Sharonville the best overall services for a better way of life. Through these services, the Public Works Department is committed to keeping the City of Sharonville clean, attractive and a desirable place to live and do business.*

## **INTRODUCTION**

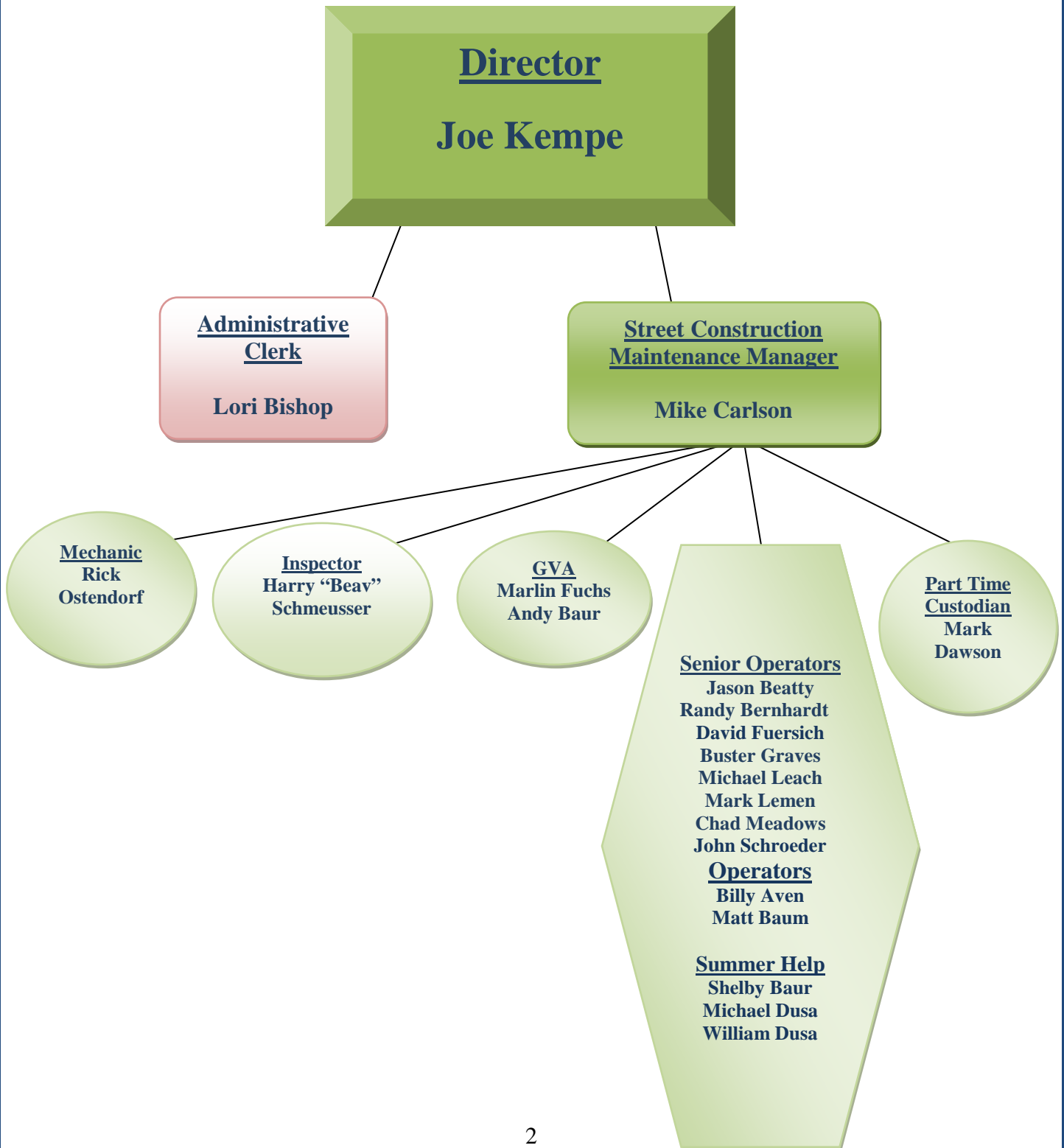
The Annual Public Works Department Year End Report is a breakdown of information summarizing what transpired over the past year.

The Public Works Department makes every effort to provide quality services for the residents of Sharonville. These services include: street, curb and sidewalk maintenance; storm water maintenance; street sweeping and snow removal; supervising trash and recycling collection; special brush & junk collection; facilities maintenance; and helping residents solve problems by offering suggestions or solutions.

The employees of the Public Works Department have always and will continue to be good team players by seeking ways to operate more efficiently and living within our budgetary boundaries. The members of this department take pride in their work and achievements and that commitment will continue into the future.

*Thank you Council and Administration for all the support you have demonstrated over the last year. We are all part of what makes Sharonville a great place to work and live.*

# ***PUBLIC WORKS DEPARTMENT***



# PERSONNEL

Name	Position	Hire Date	Years of Service
Andy Baur	Senior Operator Sr. Housing Maint. Mgr. – <b>eff. 7/1/2015</b>	12/4/2006	9.0
Jason Beatty	Senior Operator	10/22/2012	3.25
Randy Bernhardt	Senior Operator	7/1/1988	27.5
Lori Bishop	Administrative Clerk	5/20/1996	19.5
Mike Carlson	Street Construction Maintenance Manager	4/17/2000	15.75
Mark Dawson	Perm. Part-time Custodian	6/5/2006 <b>Resigned 9/9/2015</b>	9.5
Marlin Fuchs	Senior Housing Maintenance Manager	7/1/1987 <b>Retired 6/30/2015</b>	27.5
David Fuersich	Senior Operator	5/13/2013	2.5
Tom Graves	Senior Operator	3/1/1997	18.75
Joe Kempe	Public Works Director	9/5/2011	4.25
Michael Leach	Senior Operator	7/23/2007	8.5
Mark Lemen	Senior Operator	10/15/2012 <b>Resigned 9/4/2015</b>	3.25
Chad Meadows	Street Operations Specialist	7/10/2000	15.5
Rick Ostendorf	Mechanic	3/22/1999	16.75
Harry Schmeusser	Street Operations Specialist	12/1/2014	1.0
John Schroeder	Senior Operator	2/11/2013	2.75

**New Hires in 2015:  
Billy Aven (9/8/15) and Matt Baum (9/28/15)**

**Average years of Service as of 12/31/15**

**10.9 years**

# **ACKNOWLEDGEMENT**

*As Sharonville's Public Works Director, I want to thank and acknowledge all the Public Works Department employees for their dedication and hard work demonstrated throughout 2015. As mentioned earlier in this report, the department continues to be challenged to find ways to maintain the high level of services our residents have come to expect. I believe our Public Works employees met that challenge in 2015 and will continue on that course in the future. Our employees know and understand their responsibilities to the residents of Sharonville. We have a diverse, but very talented group of employees who have demonstrated the ability to tackle most any job that needs attention. I am very thankful for their commitment to this department and the residents of Sharonville.*

## **Perfect Attendance for 2015**

**Harry "Beav" Schmeusser**

## **Service Awards for 2015**

**15 years of service (2000 hire)**

**Mike Carlson**

**Chad Meadows**

# GARAGE OPERATION

## General Responsibilities:

Provide city wide operational support, repair and preventative maintenance for all equipment and vehicles. The City's highly qualified Master Certified Mechanic has 41 years' experience, with knowledge of both diesel and gasoline engines in a vast array of power ranges.

## Overview of maintenance:

- Oil changes and fluid levels
- Transmission maintenance and repairs
- Brakes maintained and repaired
- Tire rotation and repairs
- Detect vehicle mechanical operational problem, repair in-house or refer either to dealer, if still under warranty, or auto repair shop
- Qualified to perform major repair
- Continuous spot repair of seasonal equipment such as mowers, snowplows, salt spreaders and calcium chloride dispensers. Repairs include welding and replacement/repair of damaged parts due to normal operational use
- Application/removal of equipment & vehicle decals
- Electronically maintain vehicle records, maintenance schedules and repairs



Rick Ostendorf, the Master Mechanic, is the department's only full time mechanic. Rick is responsible for the maintenance of all vehicles in the Public Works Department, Police Department, Recreation Department and the ambulances for the Fire Department. Chad Meadows, Mike Leach and Jason Beatty can all fill in for Rick during his absence. All three have enough mechanical experience to cover most anything that comes up for repair of vehicles.

Over the last several years, the maintenance of the vehicles has been computerized with the purchase of maintenance software to better diagnose the problem(s) with the vehicle and what the proper procedure is to fix the problem(s). Also, upgraded diagnostic software has been installed to enhance the process of electronically maintaining vehicle records.

# PUBLIC WORKS EQUIPMENT INVENTORY

## HIGHWAY EQUIPMENT

<u>No.</u>	<u>Description</u>	<u>Service Date</u>	<u>Condition</u>
1	Ford Gas F250 Pickup, w/9' Snowplow, Crew Cab	2004	Good
2	International Diesel Dump Truck Model 7400 SFA 4x2 (SA 525), 8 CY	2013	Excellent
3	International Diesel Dump Truck Model 7400 DT466, 7.7 CY	2004	Fair
4	Ford Diesel Ford F550 Super Duty XLT Dump Truck, 4.3 CY	2012	Excellent
5	International Diesel Dump Truck Model 7400 Workstar, 8 CY	2008	Good
6	International Diesel Dump Truck Model 7400 SFA 4x2 (SA 525), 8 CY	2015	Excellent
7	Sterling Diesel Street Sweeper, Schwarze A7000	2006	Replace 2016
8	Ford Diesel F450 Super Duty Dump Truck	2006	Replace 2016
9	Ford Diesel F350 XLT Super Duty Pickup Truck	2001	Fair
11	Ford Gas Ranger XLT (GVA Vehicle)	1995	Fair
15	International Diesel Dump Truck Model 7400 DT466, 9.3 CY	2004	Good
16	Ford Diesel F350 Crew Cab 4WD Pickup Truck	2015	Excellent
18	Ford Gas F550-AT37 Utility Truck w/Aerial Boom	2013	Excellent
20	Ford Diesel F350 Diesel Pickup Truck w/snow equip.	2016	Excellent
21	Ford Expedition XLT (Street Maint. Manager)	2004	Good

## OFF ROAD EQUIPMENT

<u>No.</u>	<u>Description</u>	<u>Service Date</u>	<u>Condition</u>
10	Diesel Morbark Brush Chipper	2014	Excellent
12	CAT 259B3 Compact Track Loader-Skid Steer	2012	Excellent
13	Diesel Case Backhoe 580 Super M	2006	Good
14	Diesel Ford Model 4610 Tractor	1988	Good
19	Diesel Morbark Brush Chipper	2008	Fair
22	CAT 305E Mini Excavator with EX30-Mower	2014	Excellent
	Kubota RTV X1100CWL	2015	Excellent
	Stepp Hot Box SPH 1.5 (2 ton)	2012	Good

## MISCELLANEOUS EQUIPMENT

Six (6) Riding Mowers	Two (2) Walk Behind Mowers
Two (2) Push Mowers	Salt Piler (Shared with 3 municipalities)
Nine (9) Snow Plows	Two (2) Snow Blowers
Two (2) Generators	One (1) Concrete Grinder
One (1) Concrete Pressure Cleaner	One (1) Compactor Plate
One (1) Hydraulic Pump	One (1) Air Compressor
Sixteen (16) Weeders	Seven (7) Back Pack Blowers
Two (2) Hand Blowers	Four (4) Trimmers
Four (4) Edgers	Two (2) Concrete Saws
Eight (8) Chain Saws	One (1) Pole Saw



**NEW CAPITAL EQUIPMENT  
PURCHASES**

***KUBOTA RTV – XL100***

**\$22,395**



***FORD F350 XLT SUPER DUTY  
PICKUP TRUCK***

**\$47,373**





# SERVICES FROM THE DEPARTMENT

## Brush & Limb Chipping

In addition to the weekly scheduled brush and limb chipping in neighborhoods, the work crew has been trimming brush and trees in the right of way when we receive complaints pertaining to safe visibility. The department also trims tree limbs that hang too low over streets making it safer for school buses and large city vehicles to pass through the city streets without tree limbs hitting the windshields of those vehicles.



## Non-Conforming Material Collection

Any material, which is not picked up by our contract hauler, is collected by the Public Works Department: tree materials, such as tree roots, stumps, or pieces too large (over 8" in diameter) for the chipper to digest; rehab material from a kitchen, bath, or other construction activity. A total of 112 – 30 yard dumpsters were used in 2015. This is 16 more dumpsters than in 2014 costing the city \$46,251.24 which is \$7,933.13 more than in 2014.

## Truck Loan Program



The Public Works Department offers a Truck Loan Program from April through October. If a resident, church or business has a large amount of non-conforming material to dispose of, they can pay a nominal fee for the overnight use of a Public Works truck. During 2015, a total of 158 trucks were loaned out to residents and businesses compared to 148 trucks in 2014, 133 trucks in 2013, 148 trucks in 2012, 113 trucks in 2011 and 253 trucks in 2010 (no fee for use of truck that year). The total amount of revenue received for 2015 was \$8,900.

## Roadway Cleaning and Maintenance

The street sweeper is out most every day except in the cold winter months when freezing temperatures have an effect on the water lines and the spray that can create ice on the roadway. It does an excellent job keeping the streets clean and preventing debris from collecting at the opening of the catch basins. A form was developed to identify what streets have been swept, catch basins that need cleaning and/or repaired. This will help with efficiency of inspections and will prevent the same streets from being swept over and over as there are multiple drivers of the sweeper. The crew, on a daily basis, collects road kills, construction materials, vehicle parts, tires, and other road obstacles/materials that have fallen off trucks, trailers and vehicles.



## Storm Drainage and Culvert Cleaning



Culverts are constantly checked for obstructions, which are removed throughout the year, preventing the potential for flooding. The Creek Road Retention Dam is inspected at least once per quarter each year and always after a heavy rainfall. The inspection is focused primarily on the condition of the spillway (picture) that prevents large pieces of debris from clogging the inlet and outlet of the tail water channel. This retention dam is a vital means of flood control for

the entire downtown area of Sharonville, so it is critical that all essential maintenance measures are in place to make sure that all protective equipment is in good working condition. After every heavy rainfall, all culverts throughout the city are checked and cleaned to keep them free of debris.

## Grass Complaints

The Community Development Department received 117 complaints of high grass and weeds in 2015. Public Works had to cut 20 of these properties. When properties are cut and cleaned as a result of complaints, the property owners are charged a fee for the worked performed by the Public Works Department. A total of \$2,698.20 in charged fees were paid by the property owners in 2015. If the property owner fails to pay those fees, an assessment is placed on the property duplicate through the County Auditor's office.

## Overtime

Public Works employees are subject to call-in duty 24/7 for a variety of activities and maintenance responsibilities. The City does not shut down between the hours of 3:30 PM to 7:00 AM. For that reason, overtime is a mandated duty of this department. The following is a breakdown of the 2015 overtime hours and the cost associated with those hours:

- **Event Overtime** (i.e. Car Show, 4<sup>th</sup> of July Parade and Activities, etc.)
  - Overtime Hours 78.2 Hours
  - Overtime Cost **\$3,354.00**
  
- **General Overtime** (i.e. Call-ins for emergencies or maintenance, extra work)
  - Overtime Hours 323Hours
  - Overtime Cost **\$14,503.80**
  
- **Snow/Ice Removal** (Calendar year 2015)
  - Overtime Hours 631 Hours
  - Overtime Cost **\$29,702.00**
  
- **Golden View Acres** (i.e. call-ins for emergencies or maintenance)
  - Overtime Hours 51.25 Hours
  - Overtime Cost **\$2,473.20**

## **BUILDING, LAND & STREET MAINTENANCE REPAIRS & CAPITAL IMPROVEMENTS**

### **The following 2015 projects were performed in-house by the department:**

- ✓ Repaired a large sink hole in the entrance drive apron at Firehouse #88 on Fields Ertel Road
- ✓ Painted the Safety Service Director's conference room and installed two (2) large televisions on the walls for electronic demonstrations
- ✓ Painted the Employee Lounge and attached restrooms in the Municipal Building
- ✓ Repaired failing asphalt along the gutter plates on Kemper and Plainfield Roads at material costs of **\$8,500**
- ✓ Replaced six (6) old wood park benches with new maintenance free park benches in the downtown area at material costs of **\$5,400**
- ✓ Replaced old lighting fixtures in the Tax Department Building with LED fixtures at material costs of **\$3,200**
- ✓ Landscaped hillside at GVA behind Building A at material costs of **\$18,417**

### **The following projects were performed in 2015 by outside vendors:**

- **Street Maintenance & Repairs:** **Total: \$941,105**
  - ✓ Adleta Construction was the contractor for the City's 2015 Street Repair Program which included Willfleet Dr., Blue Stone Ct. Jeff Ln, Willard Dr. at a cost of **\$515,679**
  - ✓ Barrett Paving performed asphalt joint repair on three (3) lanes on Reed Hartman Highway as part of the 2015 Street Repair Program at a cost of **\$33,600**
  - ✓ Mt. Pleasant Blacktopping repaired two (2) failing asphalt sections on Oak Street between Cornell and Walnut Streets and the crosswalk section at Maple and Walnut Streets as part of the 2015 Street Repair Program at a cost of **\$20,208**
  - ✓ Adleta Construction was the contractor for the City's 2015 Curb, Sidewalks & Concrete Program at a cost of **\$140,027**
  - ✓ Ford Development was the contractor for the Chester Road Decorative Crosswalk Project at a cost of **\$145,240**
  - ✓ Strawser Construction was the contractor for the City's 2015 Crack Sealing Program at a cost of **\$43,736**
  - ✓ A & A Safety, Inc. was the contractor for the City's 2015 Street Painting Program at a cost of **\$42,615**
  - ✓ Reading Road Project resumed construction from 2014 and was completed by September 30, 2015 – this was an ODOT project and the City's share of the cost was paid in 2014
  
- **Street Capital Improvement Projects:** **Total: \$46,183**
  - ✓ Capital Electric replaced back up batteries for traffic controls at six (6) intersections at a cost of **\$8,592**
  - ✓ Ohio Painting Company stripped and painted eight (8) traffic mast arms at four (4) downtown intersections and four (4) street light poles on Sharon Road east of Reading Road at a cost of **\$37,591**

- **Storm Water Maintenance Repairs:** **Total: \$79,991**
  - ✓ Ford Development constructed a new catch basin at Malaer & Cornell Streets and repaired the curb & gutter at a cost of **\$15,700**
  - ✓ Ford Development repaired a 15 inch storm water pipe and reconstructed the catch basin on Chester Road just north of the Tax Department at a cost of **\$5,000**
  - ✓ Ford Development reconstructed a catch basin and replaced the curb and apron on Tramway at a cost of **\$5,000**
  - ✓ Ford Development raised two (2) manholes and repaired the asphalt around the manholes on E-Business Way at a cost of **\$5,000**
  - ✓ Ford Development performed an emergency repair to a collapsed storm drain under Creek Road and down the hillside to the outlet at a cost of **\$37,591**
  - ✓ Ford Development repaired a large sink hole on Crowne Pointe at a cost of **\$7,900**
  - ✓ Adleta replaced catch basin at Hawk & Mulligan Streets at a cost of **\$3,800**
  
- **Building & Lands Maintenance Repairs:** **Total: \$30,678**
  - ✓ Security Fence repaired guardrails on Reed Hartman Hwy and Sharon Road at a cost of **\$4,485**
  - ✓ Davey Tree Service removed two (2) large, dead maple trees on Main St. at a cost of **\$1,600**
  - ✓ Davey Tree Service removed fourteen (14) dead ash and maple trees in various locations on Fields Ertel Road at a cost of **\$6,215**
  - ✓ Davey Tree grinded stumps in 40 locations throughout the City at a cost of **\$5,980**
  - ✓ ESI and Cummins Bridgeway performed an emergency repair of the underground wiring from the Municipal Building to the main electrical breaker box and backup generator at a cost of **\$8,558** (City was reimbursed by the insurance company in the amount of **\$7,558**)
  - ✓ ESI replaced at GVA 11 post lamp fixtures and poles at a cost of **\$8,468**
  - ✓ Hartman Painting painted exterior and balcony doors at GVA at a cost of **\$1,400**
  - ✓ Security Fence repaired the guardrail at the end Willard Ave. at a cost of **\$1,530**
  
- **Capital Improvements to Municipal Building & Garage:** **Total: \$89,588**
  - ✓ Premier replaced the 2.5 ton roof condenser and air handler in Police Department Evidence & Supply Rooms at a cost of **\$7,125**
  - ✓ Premier replaced the main boiler loop pumps; replaced the motors in the air handlers in the Police Department; replaced the exhaust fan in the Police Department; upgraded two (2) air handling units motors to high efficiency motors in the Municipal Building at a total cost of **\$22,030**
  - ✓ Premier re-insulated the ductwork in the garage to stop the sweating causing mold in the main section of the garage at a cost of **\$2,350**
  - ✓ Ameridian replaced roof section #6 & repaired roof section #1 in the garage at a cost of **\$40,833**

- ✓ Carpetland replaced flooring on Garage breakroom, office and bathrooms at a cost of **\$4,950**
- ✓ ESI replaced the electrical breaker boxes in garage at a cost of **\$9,000**
- ✓ ESI replaced electrical line to calcium chloride tanks - place underground at a cost of **\$3,300**

## **SAFETY MEETINGS**

Safety is the Public Works Department's first priority. The Public Works Department endeavors to conduct a Safety Meeting at least once per quarter. The following is a listing of Safety Meetings for 2015:

- ✓ 2/25/15: Power Equipment Training
- ✓ 3/10/15: Stihl Equipment Training
- ✓ 5/19/15: Morbark Chipper Training
- ✓ 6/17/15: Traffic Signal Installation Training
- ✓ 8/17/15: Hamilton County Snow Plow Roadeo
- ✓ 9/18/15: Hamilton County Storm water Pollution Prevention Training
- ✓ 11/5/15: CAT Loader Operation Safety Training

# 2015 - 2016 SNOW REMOVAL

The Public Works Department takes a lot of pride in the city's snow removal process. The department works very diligently preparing the trucks and other equipment for the snow removal process. The routes are reviewed yearly to make sure all streets are covered in the most efficient manner possible. The Administration and Council have always provided the tools and funds necessary to provide snow removal for its residents and businesses in the City of Sharonville.

The winter season of 2015-2016 was rather mild in comparison to the last three years. In terms of salt used, labor costs, miles driven and fuel used, the numbers were about half of the average for the last six years and about half of the 2014-2015 winter season.

## Materials:

Salt purchased	2,022 tons at \$70.41/ton (average)	\$142,369.02
Salt usage (including Princeton)	1,150 tons	
(Princeton School District purchased	156 tons of salt)	
Calcium Chloride purchased	3,500 gallons at 1.16 cents/gal	\$ 4,074.19
Calcium Chloride usage	3,253 gallons	

## Vehicle Usage:

Total Miles Driven	4,535 miles	
Diesel Fuel Usage in gallons	985 gal at \$1.51 (aver. cost)	\$ 1,487.35
Total Maintenance costs for January, February, March 2016 only		\$ 3,555.00
(No cost consideration has been included for machine usage, mileage or depreciation)		

## Man Hours

Straight Time	189 Hours	\$ 5,319.88
Overtime	132 Hours	\$ 5,576.47
Double Overtime	132 Hours	\$ 7,591.61

**Total Snow Removal Cost for 2015-16 Season                    \$169,973.52**

Total Amount of Snow = 14 inches  
Total Snow/Ice Events = 10

First Ice Event – January 10, 2016  
Last Snow Event – April 9, 2016



# WASTE COLLECTION / RECYCLING

*2015 was the first full year of contracted, curbside recycling throughout the city.* Sharonville residents as a whole recycled 732.27 tons of metal, glass, plastic, and paper in 2015. That is an increase of 44.55 tons of recycled material over 2014 – an increase of 6.48%. On average, each household in Sharonville recycled 236 pounds in 2015 which represents 15.88% of all the total waste generated by residents. The City received a total of \$20,619.62 in 2015 versus \$17,225.35 in 2014 which is a 19.7% increase for Residential Recycling Income from the Hamilton County Solid Waste District.

The City of Sharonville is committed to recycling by offering this service FREE to its residents. Residents who recycle save natural resources, conserve energy, and reduce pollution. Recycling also boosts our economy by creating 169,000 jobs (4.3% of all jobs) and \$6 billion in annual wages just in the State of Ohio.

## The 2015 recycling efforts in Sharonville:

- ✓ *Conserved enough energy to power every home in Sharonville for 6 days!*
- ✓ *Reduced more air pollution than if every household in Sharonville rode a bicycle to work for 5 weeks!*
- ✓ *Saved 6,291 trees from being harvested!*



(Source of information from Hamilton County Solid Waste & Recycling)

## Acceptable household items for recycling:

**PLASTIC:** Any bottle or jug – make sure the bottle or jug has a mouth smaller than the rest of the container. The plastic lid **MUST** be attached to the empty bottle or jug. Other plastic containers (i.e. margarine or hinged containers) are **NOT** acceptable.

**PLEASE - NO PLASTIC GROCERY BAGS** – plastic bags get into the machinery parts at the Rumpke Recycling Plant and cause severe equipment failure, causing Rumpke to shut the line down to rid the parts of the plastic bags

**GLASS:** Any color or size as long as it is a bottle or jar. Remove the metal lid and place the lid in the recyclable bin. Drinking glasses, broken glass or light bulbs (of any kind) are **NOT** acceptable.

**METAL:** All food related metal cans and aluminum drink cans. Please rinse out food cans! **NO** paint cans, coat hangers or scrap metal!

**PAPER:** If you can tear it, all paper (even glossy) is recyclable. All paperboard, paper cartons (no caps) and cardboard (free of food and grease) is recyclable. For shredded paper, place in a paper bag and place in the recycling bin.



# **GOLDEN VIEW ACRES**

## **Maintenance and Projects**

### **Safety**

The annual fire inspection was conducted on February 7, 2015 and no violations were noted. All batteries were replaced in the smoke detectors.

### **Resident Turnover**

6 new residents with 5 apartments being newly filled during the 2015 year  
Other occupants: 5 cats and 2 dogs

During the 2015 year several resident changes happened from within the complex. Some residents moved out due to health issues and new people moved in. One couple changed apartments moving downstairs. These changes and new move-ins helped increase revenue. This increase helps defray costs and reduce the loan owed on the property.

### **On-going Maintenance**

As an apartment becomes vacant, it is evaluated for repairs and/or renovations. Any major renovations are focused on the kitchen and bathrooms. Due to the age of the buildings, most apartments will be renovated over the next several years.

Due to the steep grade and erosion of the hillside behind Building A and along Greensfelder Lane, the Public Works Department re-graded and landscaped the hill for better drainage and beautification of the entrance way to GVA.

### **Capital Improvements**

Replaced eleven (11) lamp poles and fixtures at a cost of \$8,468

With the retirement of Marlin Fuchs,  
Council dedicated the small park as  
***MARLIN FUCHS PARK***

Landscaping of the hillside behind  
Building A along Greensfelder Lane  
**Cost \$18,417**



## **CHALLENGES AND GOALS FOR 2016**

Curbside recycling was incorporated into the five (5) year contract with Rumpke starting on June 1, 2014. The City has experienced a tremendous effort on the part of its residents to recycle. The City recycled 732.27 tons at a rate of 15.88% of all waste collected in 2015. However, there are still residents who are not recycling at all. It will be a tremendous challenge to achieve 100% participation in Sharonville's recycling program. I will continue to emphasize the need for recycling in the Sharonville Newsletters and on the City's website.

Fields Ertel Road from just east of Bennington (corporation limit with West Chester) to Route 42 is in desperate need of repair. The Public Works Department receives more complaints regarding potholes and the condition of this section of Fields Ertel Road than any other street in the city. In September, 2015, the City applied to the Ohio Public Works Commission (OPWC) for 60% funding for major improvements for this project, which included new storm water drainage system, curbs, sidewalks on the north side of the road, widening of the travel lanes and new pavement. Unfortunately, the Commission did not rate the City's project high enough to receive any funding for this project. As a result, the Administration will have to strategize to determine how this project will be funded in order to be completed in the year 2017, as originally planned.

Along with the above mentioned Fields Ertel Road Phase 2 Project funding challenge is the continuing challenge to find additional funding for the street improvements of the streets that have asphalt overlaid into the gutter plates throughout the city. The majority of those streets are the residential neighborhood streets that run off of Thornview Drive, Creek Road and Sharondale Drive. Other streets in this condition are located in the Cottingham subdivision, the residential downtown streets and several of the streets that run off of Valdosta Drive and Circlefield Drive in the east side of the city.

The Public Works Department has been researching and experimenting with better, more efficient ways to utilize liquid chemicals that are added to the salt when coming off the dump trucks onto the streets. In 2015, the department purchased a mixture of salt brine and a liquid called Ice B'gone (80/20% mixture) that when sprayed onto the rock salt helps the salt work even more efficiently than Calcium Chloride in very cold temperatures (below 20 degrees). At the same time, this mixture should adhere to the pavement as the salt melts the snow and ice so that as new snow falls it melts without throwing additional salt. The challenge for 2016 will be more experimentation with this liquid mixture and to eventually equip all our snow vehicles so that this chemical can be used on all the trucks and to start pre-treating the streets. The expectation and long term goal is to utilize more chemicals and less rock salt with the same "high standard" results in the snow/ice removal process. Since the chemicals cost so much less than using rock salt, the city should experience significant savings.