

October 30, 2017
 Mayor & City Council Members
 City of Waverly

EXECUTIVE SUMMARY OF THE
2016-17
PUBLIC WORKS DEPARTMENT
ANNUAL REPORT

Highlights of the 2016-17 fiscal year for the Public Works Department are summarized for quick review. The following 10 divisions represent the Public Works Department's primary areas of responsibility. This executive summary is not meant to be inclusive of all activities, but rather a snapshot of the highlights over the past year. Detailed information is provided in the attached annual report.

Division 1 – Public Works Administration

Public Works Administration is responsible for coordinating and overseeing public improvement projects. Over the past year many projects were either under construction or in the study phase. (Cost includes employee charges to project.) Projects include:

<u>Projects</u>	<u>Initiated</u>	<u>Finalized</u>	<u>Cost</u>
Airport Land Acquisition	June 2012	not final	-
Dry Run Creek Improvements 2014	July 2012	March 2017	\$ 8,720,978
Airport Runway Reconstruction 2014	May 2014	Oct. 2016	\$ 1,765,853
3 rd Street SE Bridge Repairs	Feb. 2016	dead project	-
3 rd Street SE Pedestrian Bridge 2017	July 2017	not final	-
16 th Street SW Reconstruction 2016	Aug. 2015	Feb. 2017	\$ 328,328
Bituminous Seal Coat 2016	Feb. 2016	Sept. 2016	\$ 134,455
Citywide Ped Ramp Reconstruction 2016	Feb. 2016	July 2016	\$ 96,925
IA Hwy 3 (Bremer Ave.) Reconstruction	April 2016	not final	-
WPCF – Nutrient Reduction Feasibility Report	April 2016	Dec. 2016	\$ 24,800
Citywide Sidewalk Repairs 2016	June 2016	Nov. 2016	\$ 92,491
Asphalt Patching – Fall 2016	Sept. 2016	Nov. 2016	\$ 10,987
Airport T-Hangar #8 Concrete Floor	Aug. 2016	Sept. 2016	\$ 5,558
4 th Street SW Sidewalk Construction 2016	July 2016	Nov. 2016	\$ 25,000
20 th Street NW Reconstruction - Design Concept	Jan. 2017	not final	-
Brookwood Park Riverbank Stabilization 2016	Dec. 2016	Dec. 2016	\$ 22,658
1 st Street SE Water Main Extension 2017	Dec. 2016	not final	-
Cedar River Parkway (East) 2018	Jan. 2018	not final	-
Bituminous Seal Coat Program 2017	March 2017	not final	-
Cedar Lane Reconstruction 2017	Aug. 2016	tabled project	-
39 th Street SE Slurry Sealing Project 2017	March 2017	Aug. 2017	\$ 36,323

Projects (Cont'd)	Initiated	Finalized	Cost
Sanitary Sewer Manhole Rehab 2017	March 2017	not final	-
Asphalt Patching – Spring 2017	March 2017	June 2017	\$ 14,890
SE Waverly Flood Protection 2017	June 2017	not final	-
Citywide Ped Ramp Construction 2017	March 2017	July 2017	\$ 95,501
City Hall Parking Lot Improvements 2017	March 2017	not final	-
Library Parking Lot Repair 2017	March 2017	not final	-
Downtown Alley Reconstruction 2017	March 2017	not final	-
Crack Cleaning and Filling Project 2017	March 2017	not final	-

Total value of work **finalized** between July 2016 thru June 2017 **\$ 11,374,657**

Subdivision w/ Public Infrastructure	Final Plat Approved	Public Improve. Accepted	Lots	Streets (Feet)
Highpoint 2 nd Addition	Oct. 2015	not complete	15	1,142
Cedar Point 1 st Addition (commercial)	June 2016	Dec. 2016	4	350
Prairie Park 2 nd Addition	Jan. 2016	Nov. 2016	7	584
OMNI Development – Phase 1	Feb. 2016	July 2016	27	874
OMNI Development – Phase 2 (private street)	Feb. 2016	July 2016	8	n/a
Total Completed for July 2016 thru June 2017			46	<u>1,808</u>
Newly Accepted Streets			=	0.34 mi

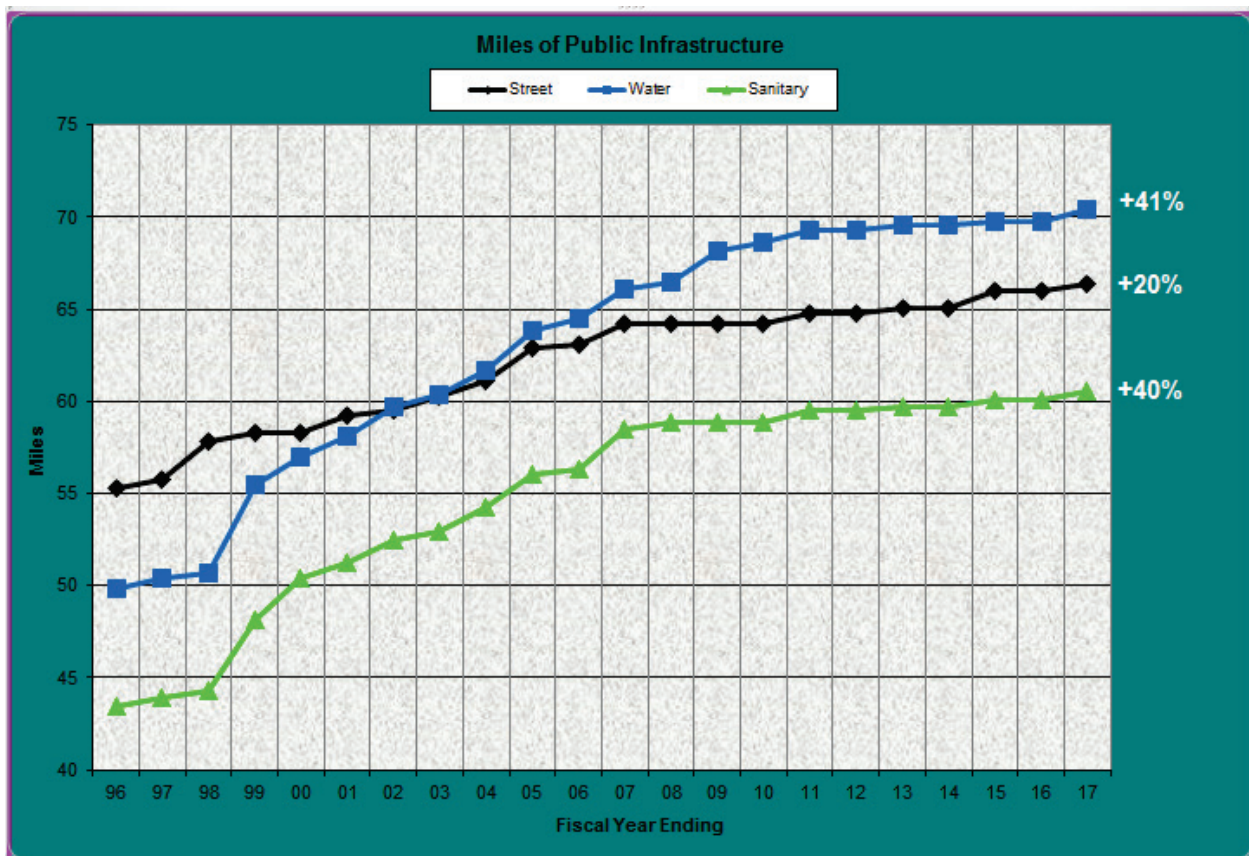
Public Works Administration is also responsible for coordinating and overseeing the general operations and budgets of 10 divisions. Division leaders are responsible for the daily operations and report to the Public Services Superintendent or the Director of Public Works. The 2015-16 actual and the 2016-17 budgeted division expenditures were:

Division	2015-16 Actual	2016-17 Budget
Public Works Administration	\$ 237,035	\$ 251,311
Engineering	255,188	309,760
General Infrastructure Maintenance	352,793	341,893
Equipment Services	293,544	293,249
Street RUT (+ Transfer)	907,868	1,408,250
Water (Service, Misc., Int.)	2,208,698	1,355,090
Water Pollution Control (Service, Misc., Int.)	2,302,950	1,359,311
Sanitary & Storm Sewer Maintenance	437,248	242,489
Solid Waste	1,310,531	1,332,403
Airport	84,557	101,740
	\$ 8,390,412	\$ 6,995,496

Due to the complexity of City budgeting and financing, the above table is intended to only be a snapshot. The timing of various equipment purchases or projects absorbed

into the annual operating budgets can distort year-to-year comparisons. Detailed information is available in the City's FY 2016-17 annual audit.

The increasing amount of public infrastructure has and will create maintenance challenges in coming years. The graph below shows how the total miles of streets, water mains and sanitary sewer mains have increased over the last 21 years. The maintenance needs of the new infrastructure will increase with age. To date the full-time staffing levels within these areas have remained unchanged for over three decades. A proactive equipment replacement schedule and technological advances are allowing the City to maintain excellent service. However, continued growth will inevitably require that additional staff is hired in order to maintain an acceptable and expected level of service to the community.



In an effort to increase public awareness a Public Works quarterly newsletter is mailed to every address within Waverly. The public response to the newsletter is very favorable. Articles highlight the services provided to the public and information on public works projects.

Division 2 – Engineering Division

The Engineering Division continues to prepare plans and specifications for smaller scale projects. Inspection and administration of projects are performed on all sizes and types

of work as the staffing schedule allows. The design or review of construction drawings are the responsibility of the City Engineer. Consultants continue to fulfill an important role and are utilized for large projects or to design work requiring specialized expertise.

Division 3 – General Infrastructure Maintenance

This division had previously been called “Streets General” with the name change occurring in FY 2016-17.

A primary responsibility of the General Infrastructure Maintenance Division is to finance and/or inspect the following infrastructure:

- Inspect and perform routine maintenance on the dam.
- Pay for traffic signal maintenance.
- Inspect trail bridges every four years.
- Finance the USGS Cedar River Gage on Adams Parkway Bridge.
- Finance communitywide street lighting, entrance signs and traffic signals.
- Finance uniforms and some training and conferences for employees in the Streets Division.

Additionally, the local property tax support of the Waverly Municipal Airport is shown as an expense and transfer of monies to the Airport Fund.

Division 4 – Equipment Services Division

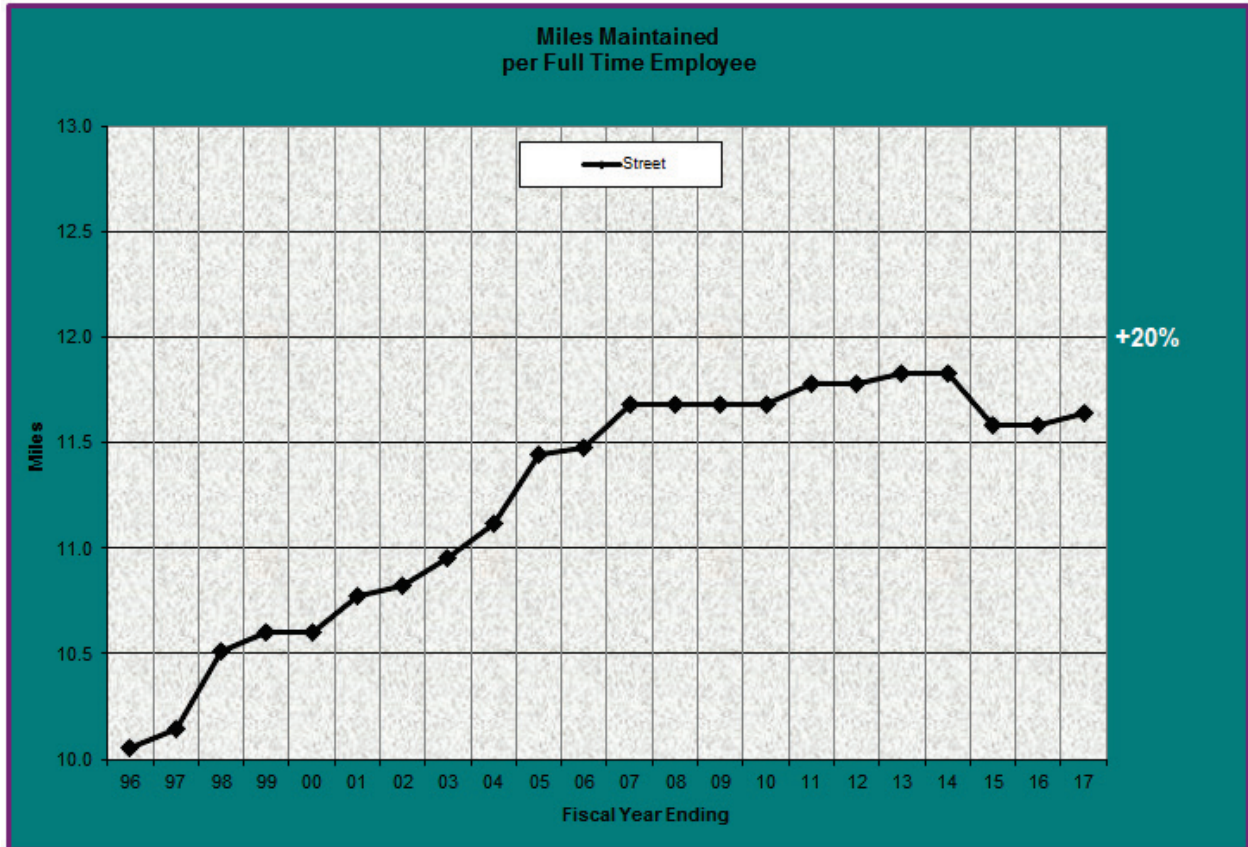
This division is responsible for the routine maintenance and repairs of City vehicles. A five-year equipment replacement schedule forecast is maintained allowing for the timely and economical replacement of vehicles and major items of equipment.

Looking to the Future

- Continuing education is important to staying knowledgeable on vehicle technology advances.

Division 5 – Street - RUT Division

The City owns 66.3 miles of roads, has 2.0 miles of joint jurisdiction (city/county roads) and there are 7.0 miles of state roads through Waverly. Of the 75.3 total miles, the City is responsible for maintaining 69.3 miles. In the fiscal year 2016-17 the City officially accepted 0.34 miles of new streets that developers built. The number of miles of city, county and state roadways was recalculated in September 2006. In the coming years, as time permits, we hope to develop and maintain a detailed breakdown of the number of miles of arterial, collector and residential streets and alleys. The detail would also show the number of miles that are paved or unpaved and curbed or ditched.



The graph above illustrates the community’s growth with new subdivisions increasing the average miles of streets per employee. While the new streets have a low initial maintenance cost, they do immediately impact street sweeping and snow removal efforts. In FY 2014-15 the Streets & Sanitation Foreman had his allocation of time revised from 50/50 to 70/30 to more accurately reflect where his time was spent. This resulted in an adjustment to the average miles of street maintained per full-time employee.

Again this year the City contracted the seal coating of an estimated 110 blocks in an effort to cover the entire City every 7 years which is the average life of a seal coat. City crews continue to asphalt surface patch in advance of the seal coating. In addition to seal coating streets, for the first time the City performed a slurry seal on 39th Street SE.

Maintenance efforts are directed to asphalt patching, seal coating, vegetation management, street sweeping, sign maintenance, and painting pavement markings. During the winter months the department is primarily responsible for snow removal, tree trimming and removal of ash trees from the public right-of-ways.

Looking to the Future

- Vegetation management of roadsides, detention basins, trees with the right-of-way, and open channel waterways is adversely impacting core services related to repairing and maintaining pavements, signage, etc.

Division 6 – Water Division

The Water Division continues to monitor water quality and perform routine maintenance on valves, hydrants and water main leaks. The Water Division performed 3,061 Iowa One-Call locates for water mains, sanitary sewer and storm sewers. This year the number of locates were nearly triple the average annual rate due to Waverly Utilities installing a citywide internet/cable/phone system.

On average 976,682 gallons of water per day were pumped with 82% of it accounted for through customer billing or known uses like hydrant flushing. The remaining 18% is likely lost through leaks. A leak detection program has helped reduce the unaccounted water by identifying targeted repair work. Our goal is to have over 80% accountability for the water pumped into the water distribution system.

In 2013 the City installed (ERTs) electronic remote transmitters on approximately 4,000 water meters.

Looking to the Future

- Replacement and installation of approximately two miles of water main along Bremer Avenue from 20th Street West to 8th Street East began in April 2017 and is expected to be completed in October 2018. Work is being performed as part of the Iowa DOT's Iowa Highway 3 Reconstruction project.
- Completion of the Public Services Center for Operations & Disaster Response final phase in 2020 remains a top priority and allows for the relocation of the Water and Line Maintenance Divisions.

Division 7 – Water Pollution Control

A consultant, WHKS & Co., was hired to perform the Iowa DNR required nutrient reduction strategy study. Work was completed and submitted to the Iowa DNR in December 2016.

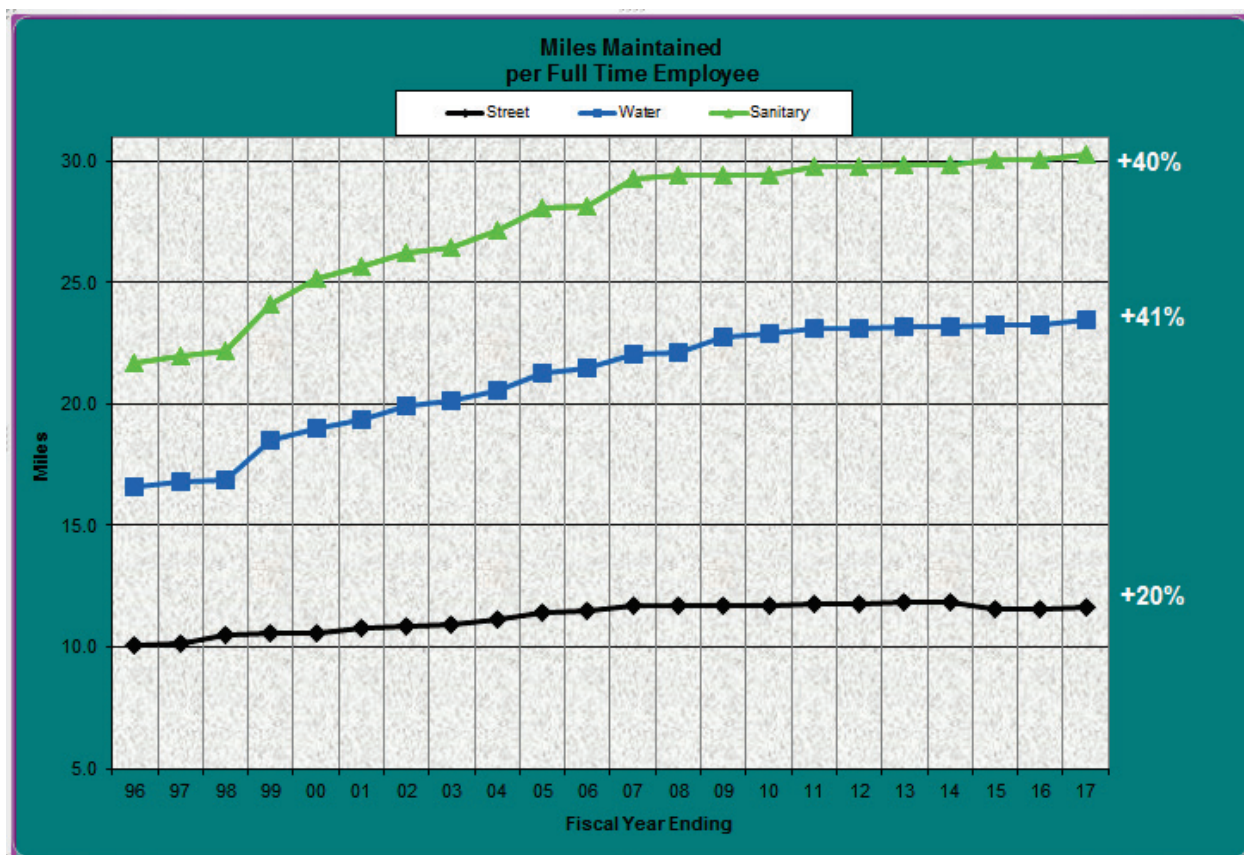
Looking to the Future

- In the fall of 2012 WHKS & Co. performed a “risk assessment” for the trickling filters to estimate the remaining life and determine the likelihood and consequence of a catastrophic failure of the plastic growth media. Replacement of the trickling filters is costly and necessary, but the Study showed that their replacement can be scheduled to maximize their useful life without jeopardizing operations. The trickling filter risk assessment and nutrient reduction strategy study are being used to develop the priorities for the next round of infrastructure repairs in 2020 at the WPC Facility.

Division 8 – Storm & Sanitary Sewer Line Maintenance Division

This division continued to primarily maintain, clean and televise sanitary and storm sewer lines. Starting in March 2012 the Water Division started performing the utility locates. Additional work included catch basin and manhole repair, sewer taps, and the repair of sewer mains.

The Sanitary Sewer Capacity Analysis was completed in 2012 and helps identify weaknesses within the existing system and the impact of future development on the system. The report determined that there are no “fatal flaws” within the existing system, but there are areas of concern identified for future upgrades.

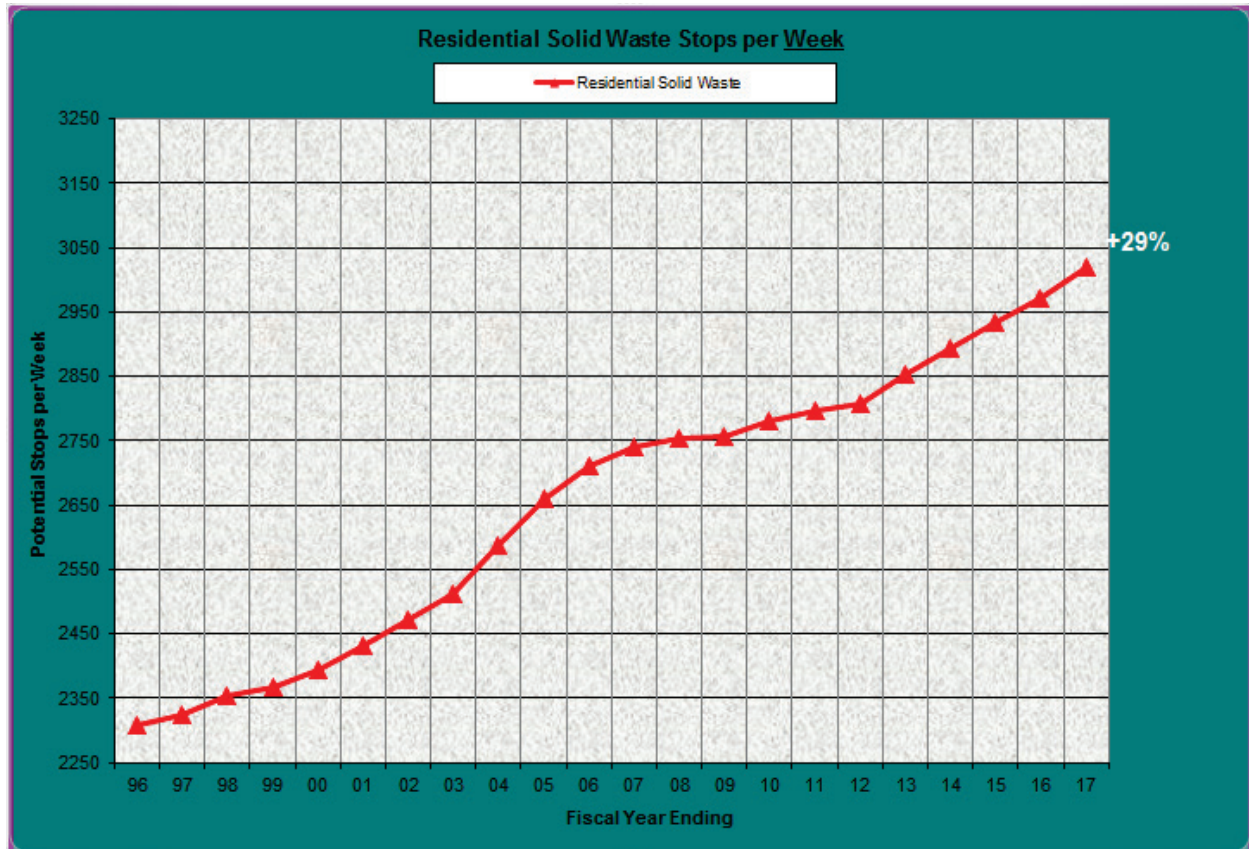


Looking to the Future

- Many communities in Iowa are creating a Storm Water Utility to finance the ongoing maintenance and construction of storm water infrastructure and control facilities. The City needs to consider the creation of a Storm Water Utility to address the growing financial requirements of maintaining and constructing storm water improvements.
- Maintaining an acceptable 7-year inspection, cleaning and televising have not been achieved for many years. Core duties and responsibilities are being reassessed to achieve the 7-year schedule. Manhole and storm

intake fixture adjustments are now a core function of the Streets Division along with maintaining ditches and detention basins.

Division 9 - Solid Waste/Recycling Division



The Bremer County Landfill officially closed October 1, 2007. The closure of the landfill resulted in the garbage being hauled to the Black Hawk County Landfill that is located off of Highway 21 south of Waterloo. The additional haul time and the increasing number of stops, resulting from new development, necessitated a change in the style of garbage truck used for residential collection.

In the spring of 2016 the two semi-automated side-loading trucks (purchased in 2007) were replaced with fully automated trucks for residential garbage collection. No additional staff was required for the change but the change did require all residents to use city supplied garbage containers.

The yard waste and recycling programs remain very successful. Usage of the Yard Waste Site and Recycling Center is stable without significant changes in vehicle count or volume. Beginning April 2010 the Recycling Center started opening every Saturday from 8:00 a.m. – 4:00 p.m. Previously it was open only the first Saturday morning of each month. During the week the Recycling Center is open from 7:00 a.m. – 5:30 p.m.

In April of 2014 the City began commingled curbside collection of recyclables.

Looking to the Future

- In the coming years, as the community continues to grow, the volume of commercial waste (dumpsters) may exceed the capacity of the existing resources. Options would include adding a commercial truck and additional personnel or allowing private haulers cover the additional accounts.
- The processing and accumulation of wood mulch remains a concern. The additional amount is likely the result from the removal of ash trees. This past summer wood mulch delivery was made available to rural residents near Waverly in an effort to draw down the stockpile.

Division 10 – Waverly Municipal Airport

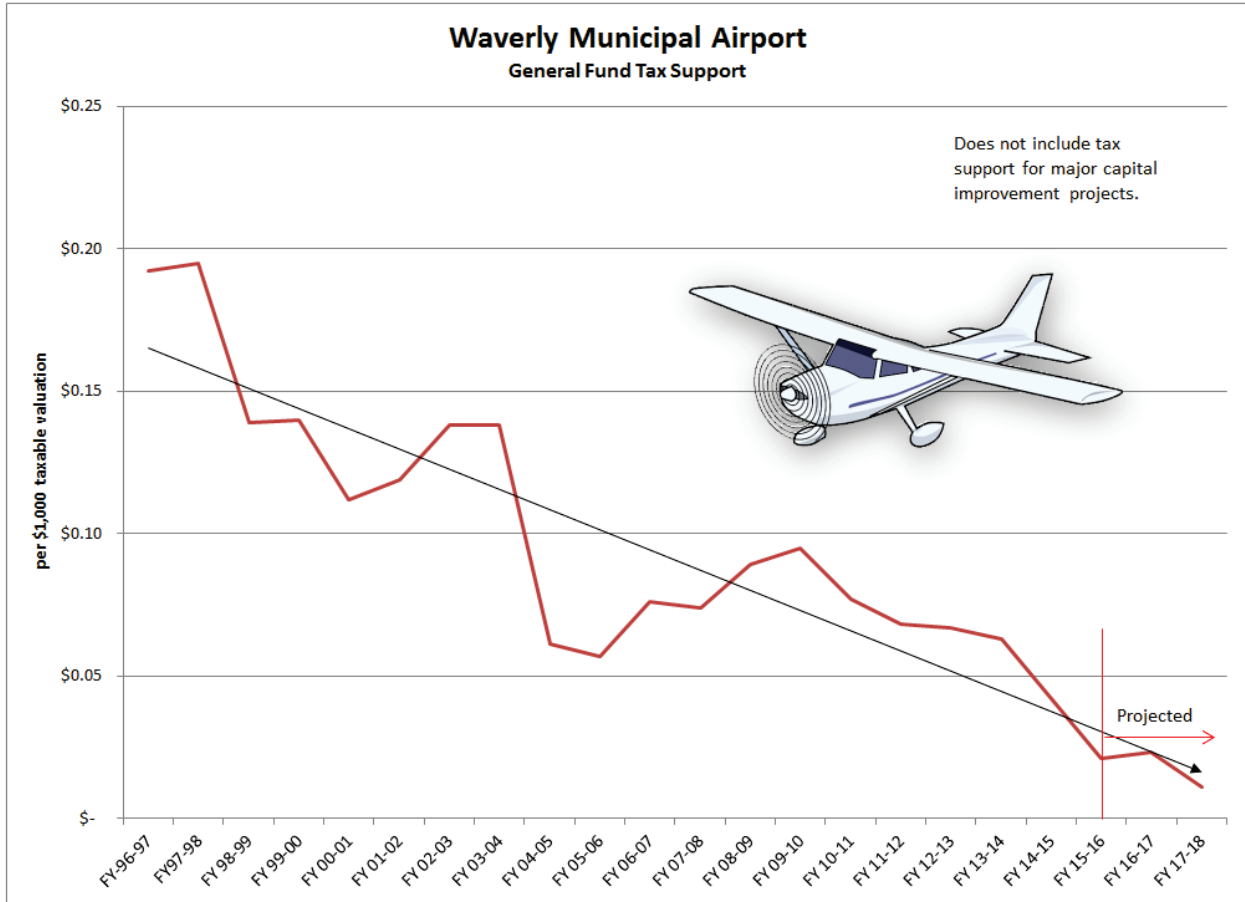
Cedar Valley Aviation is the fixed-based operator who manages the airport facility for the City. In recent years projects were completed to maintain and repair the runway apron area, construct a new entrance road and parking facilities. In the spring of 2016 the 11/29 Runway and lighting system was totally rebuilt.

Much discussion continues to take place regarding the expansion of the runway safety area and extension of the landing strip at the Waverly Municipal Airport. Work is on-going to acquire the last remaining parcel. Acquisition of the remaining parcel is necessary to allow for 2019 construction of the runway extension that is now under final design.

The annual property tax support for the Airport continues to decrease and by the year 2020 the routine operations and maintenance of the facility may be self-sufficient. Major capital projects would continue to need the City's financial support.

Looking to the Future

- Acquire the remaining parcel of land for FAA compliance with the runway safety area.
- Reface/replace insulation in bulk hangar.
- Renegotiate the FBO / Airport Manager contract that expires on October 31, 2018.
- Extend runway 400' to the east.
- Relocate airport entrance sign.
- Expand the apron (airplane parking lot) to the west.
- Allow for private hangar construction.



Conclusion

As a department we continue to strive for excellence in community service and efficiency of operations. In the coming years we hope to see the infrastructure and operational recommendations implemented to better serve the citizens of Waverly, our customers, and meet the needs of a growing community.

Respectfully submitted,

Michael J. Cherry, P.E.
Director Public Works & City Engineer

City of Waverly
Department of Public Works
FY 2016-17

ADMINISTRATION

The Administration consists of the Director and Office Coordinator. The major functions related to Administration are direction of present and future work programs, budget preparation and control, centralized record maintenance, inter/intra departmental coordination, billing and purchasing, and problem solving relevant to personnel and public relations. All of these areas relate to the ten Divisions of the Public Works Department (Administration, Engineering, General Infrastructure Maintenance, Equipment Services, Streets-RUT, Water, Water Pollution Control, Storm & Sanitary Sewer Line Maintenance, Solid Waste, & Airport).

We utilize the City's web site (www.waverlyia.com), Cable 82 TV announcements, newspaper articles and releases, radio announcements, Facebook, and personal communication to inform the citizens of Waverly pertaining to the work performed by our department, when and where the work is to be accomplished, and the priorities with which work will be performed.

City of Waverly
Department of Public Works
FY 2016-17

ENGINEERING

The Engineering Division oversees all public works improvements, which include designs, inspections, surveys, and final certification of projects.

Various types of work include the following:

Projects – Sewer, Water, Street, Subdivisions

Planning
Design
Inspection
Project Administration
Review

Mapping

Water
Storm Sewer
Sanitary Sewer
Streets
Subdivisions
Zoning

PUBLIC IMPROVEMENT PROJECTS

“Total Cost” includes all pay apps, invoices & employee charges.

Airport Land Acquisition

Initiated: June 2012
Location: 1710 35th Street NW
Description: This is a land acquisition project for the expansion of the runway safety zone and extension of the runway.
Engineer: McClure Engineering Co.
Cost: \$
Finalized: not final (one last property to purchase – Schmidt)

Dry Run Creek Improvements 2014

Initiated: July 2012
Location: 7th Avenue SW to 6th Avenue NW
Description: Reconstruction of Dry Run Creek to mitigate future flooding in northwest and southwest Waverly; reduce or eliminate flood insurance; revitalize and redevelop historical neighborhoods.
Engineer: WHKS & Co., Mason City, Iowa (design & construction admin.)
Contractor: Peterson Contractors, Inc., Reinbeck, Iowa
Total Cost: \$8,720,978 (Funded by IA State Tax Increment Financing \$5,647,004)
Finalized: March 6, 2017 (*See attached final agenda memo for more info.*)

Airport Runway Reconstruction 2014

Initiated: May 2014
Location: Waverly Municipal Airport
Description: Reconstruction of runway.
Engineer: McClure Engineering, Clive, Iowa
Contractor: Concrete Foundations, Inc., New Hampton, Iowa
Total Cost: \$1,765,853
Finalized: October 3, 2016 *(See attached final agenda memo for more info.)*

3rd Street SE Bridge Repairs 2016

Initiated: February 2016
Location: 3rd Street SE
Description: After the 2015 annual bridge inspection by WHKS & Co., the bridge was closed to vehicles & pedestrians. Bridge needs total replacement of the deck support system and significant work to the concrete piers and abutments, along with repainting of trusses. Council approved the repair option in lieu of a new bridge. Letting is scheduled for February 2017.
Engineer: WHKS & Co., Mason City, Iowa (VJ Eng. of Cedar Falls performed a review inspection of the bridge after it was closed.)
Contractor: None
Total Cost: Dead project. Moved on to 3rd Street SE Pedestrian Bridge
Finalized: On February 20, 2017, Council did not approve the low bid for bridge repairs from Minnowa, 3-4 vote.

3rd Street SE Pedestrian Bridge 2017

Initiated: July 2017
Location: 3rd Street SE
Description: After the Council did not approve the low bid from Minnowa to perform the bridge repairs on February 20, 2017, Council decided to construct a pedestrian bridge instead. On July 10, 2017, WHKS was hired to perform a Pedestrian Bridge Replacement Feasibility Study.
Engineer: WHKS & Co., Mason City, Iowa
Contractor:
Total Cost: \$
Finalized:

16th Street SW Reconstruction 2016

Initiated: August 2015
Location: Between 4th Avenue SW and Meadow View Lane
Description: Total reconstruction with some new intakes and curb & gutter repairs.
Engineer: WHKS & Co., Mason City, Iowa
Contractor: Heartland Asphalt, Mason City, Iowa
Total Cost: \$328,328
Finalized: February 20, 2017 *(See attached final agenda memo for more info.)*

Bituminous Seal Coat 2016

Initiated: February 2016
Location: NE Waverly, Murphy Add., Hinds Add., etc.
Description: Seal coating of approximately 100 City blocks.
Engineer: City
Contractor: Blacktop Services Co., Humbolt, Iowa
Total Cost: \$134,455
Finalized: September 12, 2016 *(See attached final agenda memo for more info.)*

Citywide Ped Ramp Reconstruction 2016

Initiated: February 2016
Location: Zone 6 (southeast Waverly, including a small portion of northeast)
Description: Reconstruction of pedestrian ramps in Zone 6 as part of the Sidewalk Repair Program.
Engineer: City
Contractor: Feldman Concrete, Dyersville, Iowa
Total Cost: \$96,925
Finalized: July 18, 2016 *(See attached final agenda memo for more info.)*

IA Highway 3 (Bremer Avenue) Reconstruction 2017 & 2018

Initiated: April 2016
Location: IA Highway 3 (Bremer Avenue) from 8th Street NE to 20th Street NW
Description: The Iowa DOT will reconstruct IA Highway 3 (Bremer Avenue) through Waverly in 2017 & 2018. The City of Waverly's expense will be for the installation of the new water main (100%) and the new storm sewer (50%).
Engineer: WHKS & Co, Mason City, Iowa (City's water main and streetscaping)
Contractor: Skyline Construction (IDOT's contractor)
Total Project Cost: \$
Total City Expense: \$
Finalized: not final

WPCF – Nutrient Reduction Feasibility Report

Initiated: April 2016
Location: Wastewater Facility
Description: IDNR is requiring communities with a major wastewater facility (includes Waverly) to comply with its Iowa Nutrient Reduction Strategy. WHKS will prepare a report detailing the potential changes to the City's facility in order to meet the proposed effluent limits of 10 mg/L total nitrogen and 1 mg/L total phosphorus.
Engineer: WHKS & Co., Mason City, Iowa
Total Cost: \$24,800
Finalized: December 19, 2016 *(See attached final agenda memo for more info.)*

Citywide Sidewalk Repairs 2016

Initiated: June 2016
Location: SE & NE Waverly
Description: Reconstruction of sidewalk in Zone 6 as part of the Sidewalk Repair Program.
Engineer: City
Contractor: Feldman Concrete, Dyersville, Iowa
Total Cost: \$92,491
Finalized: November 21, 2016 *(See attached final agenda memo for more info.)*

Asphalt Patching – Fall 2016

Initiated: September 2016
Location: Various locations in Waverly
Description: Permanent asphalt repair of utility cuts within City streets.
Engineer: City
Contractor: Kluesner Construction, Farley, Iowa
Total Cost: \$10,897
Finalized November 2016

Airport T-Hangar #8 Concrete Floor 2016

Initiated: August 2016
Location: Airport
Description: Replaced concrete floor in T-Hangar #8
Engineer: City
Contractor: Kenny Bloker Masonry, Clarksville, Iowa
Total Cost: \$5,558
Finalized September 2016

4th Street SW Sidewalk Construction 2016

Initiated: July 2016
Location: East side of 4th Street SW, in front of Norby's and Farmer's State Bank.
Description: The City constructed new sidewalk along Norby's property in exchange for additional right-of-way along 4th Street SW. The City also constructed new sidewalk along Farmer's State Bank property which they then reimbursed the City.
Engineer: City
Total Cost: \$25,000
Finalized November 7, 2016 *(See attached final agenda memo for more info.)*

20th Street NW Reconstruction 2018

Initiated: January 2017
Location: 20th Street NW from 5th Avenue NW and to just north of Eisenach Village.
Description: Reconstruction of the 20th Street NW from a rural to an urban roadway.
Engineer: McClure Engineering
Contractor:
Total Cost: \$
Finalized:

Brookwood Park Riverbank Stabilization 2016

Initiated: December 2016
Location: Riverbank that runs very close to the recreational trail in Brookwood Park (north of wooded area.)
Description: Repair of riverbank scour that damaged the revetment stone and threatened the asphalt recreational trail.
Engineer: City
Contractor: Lodge Construction, Clarksville, Iowa
Total Cost: \$22,658
Finalized: December 2016

1st Street SE Water Main Extension 2017

Initiated: December 2016
Location: 1st Street SE from East Bremer Ave. south to 2nd Avenue SE.
Description: Replacement of an old 4" water main with an 8" water main. This new water main was need for the old CUNA building that will be required to be sprinkled in the near future.
Engineer: Fehr-Graham, West Union, Iowa
Contractor: Denver Underground & Grading, Denver, Iowa
Total Cost: \$
Finalized:

Cedar River Parkway (East) Improvement 2018

Initiated: January 2017
Location: From the intersection of Cedar River Parkway and 8th Street SE eastward to East Bremer Avenue (Hwy. 3)
Description: Construction of new bridge and roadway. Currently under design.
Engineer: Stanley Consultants, Des Moines, Iowa
Contractor:
Total Cost: \$
Finalized:

Bituminous Seal Coat Program 2017

Initiated: March 2017
Location: SE Waverly, Bremer Road and all streets to the east of Bremer Road to the east City Limits (NE & SE Waverly).
Description: Seal Coating of about 100 City blocks.
Engineer: City
Contractor: Blacktop Services, Humbolt, Iowa
Total Cost: \$
Finalized:

Cedar Lane Reconstruction 2017

Initiated: August 2016
Location: Cedar Lane from 2nd Avenue NE to Brown Lane (Phase 1)
Description: Reconstruction of roadway with full-depth concrete pavement.
Engineer: VJ Engineering, Coralville, Iowa
Design Cost Today: \$75,500 (includes employee time)

On February 20, 2017, the City Council TABLED this Cedar Lane Reconstruction project for a couple of years.

39th Street SE Slurry Sealing Project 2017

Initiated: March 2017
Location: 39th Street SE
Description: In lieu of seal coating 39th Street SE, the City had 39th Street SE slurry sealed. This was the first slurry sealed street in Waverly.
Engineer: City
Contractor: Fort Dodge Asphalt Co., Fort Dodge, Iowa
Total Cost: \$36,323
Finalized: August 7, 2017 *(See attached final agenda memo for more info.)*

Sanitary Sewer Manhole Rehab 2017

Initiated: March 2017
Location: Various locations NE & SE Waverly
Description: Repairing and installing a protective liner inside sanitary sewer manholes that are deemed to be in poor condition or have storm water infiltration issues.
Engineer: City
Contractor: Visu-Sewer, Inc., Pewaukee, Wisconsin
Total Cost: \$
Finalized:

Asphalt Patching – Spring 2017

Initiated: March 2017
Location: Various locations in Waverly
Description: Permanent asphalt repair of utility cuts within City streets.
Engineer: City
Contractor: Lucas Asphalt Paving, Evansdale, Iowa
Total Cost: \$14,890
Finalized: June 2017

SE Wavery Flood Protection 2017

Initiated: June 2017
Location: Southeast Waverly
Description: This project consists of updating the 2011 Southeast Waverly Flood Protection Feasibility Study to include updated FEMA Flood Insurance Maps and recent aerial photography. Updated cost estimates for the options listed in this study will also be completed. In addition, the project will review the possibility of raising 7th Avenue SE to provide access during a 50-year flood event, and either raising 4th Street SE or construction of a levee along 4th Street SE to provide improved protection during flood events.
Engineer: AECOM, Waterloo, Iowa
Contractor:
Total Cost: \$
Finalized:

Citywide Ped Ramp Construction 2017

Initiated: March 2017
Location: Southwest Waverly
Description: Reconstruction of pedestrian ramps in Zone 7 as part of the Sidewalk Repair Program.
Engineer: City
Contractor: Midwest Concrete, Peosta, Iowa
Total Cost: \$95,501
Finalized: July 10, 2017 *(See attached final agenda memo for more info.)*

City Hall Parking Lot Improvements 2017

Initiated: March 2017
Location: Waverly City Hall, 200 1st Street NE
Description: Replacing bad sections of concrete at the north end of the parking lot and adding concrete/new parking stalls where the Burr Oak tree once lived.
Engineer: City
Contractor: Feldman Concrete, Dyersville, Iowa
Total Cost: \$
Finalized:

Library Parking Lot Repair 2017

Initiated: March 2017
Location: Waverly's Municipal Library, 1500 West Bremer Avenue
Description: Replacing the bad sections of concrete (very north end and the section east of front door)
Engineer: City
Contractor: Feldman Concrete, Dyersville, Iowa
Total Cost: \$
Finalized:

Downtown Alley Reconstruction 2017

Initiated: March 2017
Location: Alley in 100 block of East Bremer Avenue (between 1st Street NE and 2nd Street NE)
Description: Reconstruction of the alley with concrete.
Engineer: City
Contractor: Feldman Concrete, Dyersville, Iowa
Total Cost: \$
Finalized:

Crack Cleaning and Filling Project 2017

Initiated: March 2017
Location: 1st Street NW & Horton Road and 12th Street NW
Description: This project involves cleaning the cracks with compressed air and then sealing them with bituminous oil.
Engineer: City
Contractor: Fahrner Asphalt Sealers, Dubuque Iowa
Total Cost: \$
Finalized:

SUBDIVISIONS

Highpoint 2nd Addition

Approved: Construction docs approved October 2015
Location: Extension 2nd Avenue NE to 10th Street SE
Description: Project consists of the extension of street, water and sewer improvements.
Engineer: Design – Larry Buchholz, Cedar Falls, Iowa
Developer: Waverly Real Estate, LLC (Steve Darrah) of Waverly, Iowa
Accepted: Nearly complete. Hoping to finalize in October 2017.

Cedar Point 1st Addition (commercial)

Approved: Construction docs approved June 2016
Location: Extension of Pine Street
Description: Project consists of the extension of street, water and sewer improvements.
Engineer: Design – Larry Buchholz, Cedar Falls, Iowa
Developer: GLSW, LLC of Denver, Iowa
Accepted: November 2016 (*See attached final agenda memo for more info.*)

Prairie Park 2nd Addition

Approved: Construction docs approved June 2016
Location: Extension of Tumbleweed Trail
Description: Project consists of the extension of street, water and sewer improvements.
Engineer: Design – Fehr Graham, West Union, Iowa
Developer: BNKD, Inc., Waverly, Iowa
Accepted: November 2016 (*See attached final agenda memo for more info.*)

OMNI Development – Phase 1

Approved: Construction docs approved February 2016
Location: Extension of 1st Street SE
Description: Project consists of the extension of street, water and sewer improvements.
Engineer: Design – Helland Engineering & Surveying, Cedar Falls, Iowa
Developer: OMNI Development, LLC and Twin B, LLC, of Waterloo, Iowa
Accepted: July 2016 (*See attached final agenda memo for more info.*)

OMNI Development – Phase 2

Approved: Construction docs approved February 2016
Location: Extension off of 13th Avenue SW called Vista Circle (private street)
Description: Project consists of water and sewer improvements.
Engineer: Design – Helland Engineering & Surveying, Cedar Falls, Iowa
Developer: OMNI Development, LLC and Twin B, LLC, of Waterloo, Iowa
Accepted: July 2016 (*See attached final agenda memo for more info.*)

Final Agenda Memos from Public Improvement Projects



AGENDA MEMORANDUM
City Council Meeting
March 6, 2017

SUBJECT: Dry Run Creek Improvements 2014 – Finalize Construction Contract

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Approve Change Order No. 5 in the amount of a \$22,789.11 decrease.
- Accept the Dry Run Creek Improvements 2014 project as complete.
- Approve Pay Estimate No. 26 in the amount of \$301,775.41 as the final payment to Peterson Contractors, Inc. of Reinbeck, Iowa.

Summary Statement

Peterson Contractors, Inc. have completed the Dry Run Creek Improvements 2014 project in accordance with the contract documents. The total cost of the completed work is \$7,291,489.02. Change Order No. 5 is for a net decrease of \$22,789.11 to the contract sum to-date. This change order is to amend the contract to account for the various field adjustments made during the course of the project, liquidated damages, incentive pay and the replacement of unstable subgrade upstream and downstream of the Bremer Avenue box culvert.

Expenditure Required

Construction Cost – PCI’s Bid	\$ 6,990,000	
Change Order No. 1	34,018	
Change Order No. 2	-0-	
Change Order No. 3	152,452	
Change Order No. 4	137,808	
Change Order No. 5	(22,789)	
Property Acquisition as of January 2016.....	1,322,000	
Asbestos Testing & Abatement, Cardno (final).....	28,615	
Green Image, Special Landscaping.....	13,994	
FEMA LOMR, Stanley Consultants.....	14,500	
Design and Construction Administration, WHKS.....	1,450,000	Should have been \$1,425,000
Public Works Administration Updated Estimate.....	75,000	
Total Cost of the Project.....		\$ 10,195,598

Source of Funds

State Tax Increment Financing, State Bonds FY2015-16.....	\$ 4,616,968
City of Waverly – Bonds FY2015-16.....	3,106,908
City of Waverly – Bonds FY2014-15.....	1,225,080
City of Waverly – Bonds FY2015-16.....	503,354
4 th Street SW Reconstruction, Local TIF, Budgeted FY2013-14.....	250,000
20 th Street NW Box Culvert, Budgeted FY2014-15.....	150,000
LOST Transfer FY2013-14.....	100,000
Transfer TIF fund balance from Acct. #495 C.R. Parkway (west).....	250,000
Total Financing for the Project.....	\$ 10,202,310

Policy

The proposed Dry Run Creek Improvements are consistent with the following official planning documents:

- Waverly Dry Run Creek Improvements Study, January 2013
- City of Waverly Comprehensive Plan Update, October 2011
- City of Waverly Park and Open Space Master Plan, April 2011
- City of Waverly Smart Planning Workshop: Policy Options and Project Designs, October 2010
- Waverly Flood Mitigation Study, April 2009
- City of Waverly Hazard Mitigation Plan Update, June 2009
- City of Waverly Long-Term Community Recovery Strategy, December 2008

Project Concern

n/a

Alternative

n/a

Background Information

The City of Waverly submitted an application for financial assistance under the Flood Mitigation Program established by Iowa Code 418 and administered through the Iowa Homeland Security and Emergency Management Division. This application and supporting documentation showed how the proposed improvements to the Dry Run Creek channel will:

- mitigate future flooding that affects hundreds of residences and businesses,
- reduce or eliminate the cost and impact of flood insurance, and
- provide opportunity for revitalization and redevelopment of historically significant neighborhoods.

On December 4, 2013, the Iowa Flood Mitigation Board approved the City of Waverly's Dry Run Creek Improvements project.

July 17, 2012..... Hazard Mitigation & River Use Commission Reviewed Project and Consultant Selection
July 23, 2012..... Council Review of Project and Consultant Selection
Aug. 6, 2012..... Approve Professional Services Agreement
Aug.-Dec. 2012..... Project Development Activities
Sept. 11, 2012..... Public Open House #1
Nov. 1, 2012..... Public Open House #2
Dec. 3, 2012..... Approve Property Acquisition, Wayne & Alice Brown
Dec. 17, 2012..... Progress Report to Council & Public Open House #3
Jan. 28, 2013..... Review the Final Report for the Dry Run Creek Improvements Study
Feb. 2013..... Begin Seeking State and Federal Funding Assistance
March 18, 2013..... Approve Application for State Flood Mitigation Program Funding
Nov. 4, 2013..... Approve Official Application for State Flood Mitigation Program Funding
Nov. 8, 2013..... Deadline to submit Application for State Flood Mitigation Program Funding
Nov. 21, 2013..... Flood Mitigation Board Project Presentation
Dec. 4, 2013..... Flood Mitigation Board Awards Funding

Jan. 20, 2014..... Approve State Flood Mitigation Program Funding Agreement
Jan. 20, 2014..... Approve Supplemental Agreement No. 1 to the Professional Services Agreement
Jan. 20, 2014..... Set Public Hearing for Notice of Intent to Commence Project and Acquire Property
Jan. 28, 2014..... Neighborhood Project Meeting
March 3, 2014..... Hold Public Hearing for Notice of Intent to Commence Project and Acquire Property
CY 2014..... Design and Property Acquisition
June 26, 2014..... Neighborhood Project Meeting
July 7, 2014..... Project Status Report to Council
Oct. 6, 2014..... Approve Easement and Partial Acquisition Strategy and Policy
Dec. 15, 2014..... Approve Easement and Partial Acquisition Settlements
Jan. 5, 2015..... Set Public Hearing Date
Jan. 5, 2015..... Approve Asbestos Testing and Abatement Services
Jan. 22, 2015..... Publish Notice of Letting and Public Hearing
Feb. 2, 2015..... Hold Public Hearing
Feb. 2, 2015..... Approve Asbestos Abatement Addendum 1
Feb. 5, 2015..... Bid Opening
Feb. 16, 2015..... Award Contract
March 2, 2015..... Approve Construction Contract Documents
March 2, 2015..... Approve Construction Services Agreement with WHKS & Co.
January 18, 2016..... Approve Change Order No. 1 and Pay Application No. 12
January 18, 2016..... Review Staging vs. Detouring Bremer Avenue Traffic
February 8, 2016..... Approve Detouring Bremer Avenue Traffic (Change Order No. 2)
March 7, 2016..... 5th Ave NE - Wooden culvert extension fails
March 21, 2016..... 5th Ave NE - Staff provides damage assessment and update at Council meeting
April 18, 2016..... 5th Ave NE - Council approves option to replace box culvert
May 2, 2016..... 5th Ave NE - Approve the Construction of a New Box Culvert (Change Order No. 3)
January 19, 2017..... Approve Change Order No. 4 – Adjustment of Project Quantities
March 6, 2017..... Finalize Project
CY 2017..... Dry Run Creek FEMA LOMR

Respectfully submitted,

James Bronner
City Administrator

Attachments: Change Order No. 5
Statement of Project Completion - WHKS Memo
Pay Application No. 26 - Final



AGENDA MEMORANDUM
City Council Meeting
October 3, 2016

SUBJECT: Airport Runway Reconstruction – Finalize Project

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Accept the Airport Runway Reconstruction project as complete.
Approve Change Order No. 2 in the amount of a \$5,217.50 deduct.
Approve Pay Estimate No. 4 in the amount of \$13,870.00 as the sub-final payment to Concrete Foundations, Inc. of New Hampton, Iowa.
Approve Pay Estimate No. 5 in the amount of \$37,530.00 as the final payment to Concrete Foundations, Inc. of New Hampton, Iowa.

Summary Statement

Concrete Foundations, Inc. of New Hampton, Iowa, has completed the Airport Runway Reconstruction project in accordance with the contract documents. The total cost of the completed work is \$1,507,218.30.

Expenditure Required

Table with 2 columns: Description and Amount. Rows include Engineering Services, Construction Services, Material Testing, Administration and Miscellaneous Expenses, Construction (Bid = Base + Alt. No. 2 + Alt. No. 3), Change Order No. 1, Change Order No. 2, Project Administration, and Total Cost of the Project (\$1,789,534).

Source of Funds

Table with 2 columns: Description and Amount. Rows include Federal Grant (90%) Construction Activities (\$1,497,118), Federal Grant (90%) Engineering Design (106,977), Local Match FY2014-15 Bond Proceeds (189,897), and Total Financing for the Project (\$1,793,992).

Policy

The repair and renovations to airport facilities follows recommendations cited in the following documents for the maintenance and construction of infrastructure at the Waverly Municipal Airport:

- Waverly Strategic Planning Report – November 12, 2013
Waverly Comprehensive Plan Update – October 24, 2011
Airport Layout Plan Update – February 19, 2007

Alternative

None.

Background Information

Runway 11-29 is in need of major rehabilitation. A visual pavement inspection completed in October 2009 as part of the statewide Iowa DOT pavement inspections revealed a standardized pavement condition index value of only 50 out of 100. Although a runway crack sealing project was completed in 2010, complete removal and reconstruction is needed to remediate the full-depth longitudinal, transverse and reflective cracking.

May 8, 2014	Airport Commission Approves Amend. No. 9 to McClure Engineering's Agreement
May 19, 2014	Council Approves Amendment No. 9 to McClure Engineering's Agreement
July 7, 2014	Council Approves Application for Federal Assistance
September 8, 2014	Council Approves FAA Grant Agreement
Aug. 2014 – Mar. 2015	Design
April 6, 2015	Set Public Hearing Date - OLD
May 4, 2015	Set Public Hearing Date - NEW
May 14, 2015	Pre-bid Contractors Meeting
May 18, 2015	Hold Public Hearing
May 21, 2015	Bid Opening
June 1, 2015	City Council Awards Contract Contingent upon FAA Funding Project
June 15, 2015	Approve the FAA Application for Federal Assistance SF-424
July 6, 2015	Approve Construction Services Agreement with McClure Engineering Company
July 6, 2015	Approve Construction Testing & Insp. Services Agree. with TEAM Services
July 6, 2015	Approve Contract Documents with Allied Manatts Group
August 3, 2015	Approve FAA Grant Agreement (for Construction & Project Administration)
March 7, 2016	Approve the Reassignment of Contract Documents from Allied Manatts Group to Concrete Foundations, Inc.
Spring 2016	Construction
August 15, 2016	Approve Change Order No. 1 & Pay Application No. 3
October 3, 2016	Finalize Project

Respectfully submitted,

James Bronner
City Administrator

Attachments:

Statement of Completion
Change Order No. 2
Pay Application No. 4 Sub-Final
Pay Application No. 5 - FINAL

The Award of Contract to Minnowa was not approved by City Council. 3 Yes (Lampe, Reznicek & Gade) & 4 No.



AGENDA MEMORANDUM
 City Council Meeting
 February 20, 2017

SUBJECT: 3rd Street SE Bridge Repairs – Award Contract

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

Award contract for the 3rd Street SE Bridge Repairs project to Minnowa Construction, Inc. of Harmony, Minnesota for the bid amount of:

- Alternate A \$2,408,422.30 (Includes historic sidewalk formed around truss members and lattice fence on west side.)
- or,
- Alternate B \$2,381,442.30 (Includes historic sidewalk formed around truss members and chain link fence on west side.)
- or,
- Alternate C \$2,419,442.30 (Includes 5-ft straight sidewalk and chain link fence on both sides.)

Summary Statement

Four bids for the 3rd Street SE Bridge Repairs project were received and opened on Thursday, February 7, 2017. Bids received ranged from a low bid of \$2,381,442.30 for Alternate B to a high of \$4,099,507.90 for Alternate A.

Expenditure Required

Bridge Design & Construction Services – WHKS (N.T.E.)	\$ 198,156
Pier Design and Geotech – WHKS (N.T.E.)	42,130
Construction Observation Services – WHKS (N.T.E.)	251,000
Construction, Minnowa Construction	2,381,442
Project Administration – Public Works Admin., Estimate	20,000
Total Estimated Cost of the Project	\$ 2,892,728

Source of Funds

Local Funding (original cost estimate)	\$ 2,365,000
Additional Local Funding (additional pier const.)	500,000
Total Financing for the Project	\$ 2,865,000

Policy

The repair and maintenance of transportation structures and facilities follows recommendations cited in the following documents for the maintenance and construction of infrastructure:

- Waverly Strategic Planning Report – August 2014
- Waverly Comprehensive Plan Update – October 24, 2011
- City of Waverly Hazard Mitigation Plan Update – June 2009

Project Concern

The updated project cost estimate of \$2,893,000 to repair the 3rd Street SE Bridge exceeds the original cost estimate by about \$500,000. The additional cost is primarily associated with the need to replace bridge piers.

Alternative

Postpone the project, change the project or finance the addition project cost.

Background Information

Bridge inspections began in the later part of the last century and WHKS & Co. has inspected all City bridges since 1999. Per State guidelines, all road bridges are inspected every two years, or biennially. After biennial inspections of City bridges, it was deemed appropriate by WHKS & Co. in 2013 that the 3rd Street SE truss bridge should be inspected annually. In recent reports the inspection engineers showed corrosion and deterioration of the under structure of the bridge, and suggested the formation of a plan to replace the bridge over the next several years.

The bridge was inspected in 2014 with similar findings, and during the biennial 2015 inspection on February 13, 2015, the inspectors recommended the bridge be closed immediately to both vehicle and pedestrian traffic due to advanced deterioration of the structure. Staff was not anticipating a full closure at this time, and had tentatively programmed the repair/replacement process discussion for 2016-2017. In light of the closure, Staff researched options to obtain a feasibility report for bridge repair. On February 22, 2016, the City Council decided to proceed with significant repairs to the Bridge.

February 22, 2016	Council decides to repair the Bridge.
March 7, 2016	Council Reviews Consultant Selection and Project Bidding Process
April 4, 2016	Council Approves Engineering Design Agreement
May 23, 2016	Project Update
June 6, 2016	Approve Professional Services Agreement – Supplement No.1
August 15, 2016	Preliminary Plan Review & Project Update
November 21, 2016	Preliminary Plan Review & Project Update
January 9, 2017	Set Public Hearing Date
February 7, 2017	Bid Letting
February 20, 2017	Hold Public Hearing
February 20, 2017	Award Contract
February 20, 2017	Approve WHKS’s Construction Services Agreement
February 20, 2017	Approve TEAM Services Material Testing Agreement
March 20, 2017	Approve Contract Documents
May 2017 – June 2018	Construction

Respectfully submitted,

James Bronner
City Administrator

Attachments: Bid Tabulation



AGENDA MEMORANDUM
City Council Meeting
February 20, 2017

SUBJECT: 16th Street SW Reconstruction 2016 – Finalize Project (REVISED Resolution 16-83)

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Approve the REVISED Resolution 16-83 adding \$500.00 to the final construction cost of the 16th Street SW Reconstruction 2016 project, and
• Approve Payment No. 4 in the amount of \$500.00, as identified in Change Order No.1, as the final payment to Heartland Asphalt of Mason City, Iowa.

Summary Statement

Recently the Iowa DOT completed the project closeout audit for the 16th Street SW Reconstruction 2016 project and noted that the contract documents did not include a bid item for erosion control mobilization. This bid item is a newer Iowa DOT requirement and was unnoticed during the plan review and construction. The City, Iowa DOT and Heartland Asphalt have agreed upon the amount of \$500.00 for erosion control mobilization.

Expenditure Required

Table with 2 columns: Description and Amount. Rows include Design - WHKS, N.T.E., Final (\$ 20,784), Construction Cost - Heartland Asphalt, Final (287,538), Erosion Control Mobilization Change Order No.1-Heartland Asphalt (500), Restoration & Seeding - Wells Hollow, Final (2,000), Asphalt Plant Inspection - TEAM Services, Final (1,506), Project Administration & Inspection by City, Estimate (16,000), and Total Cost of the Project (\$ 328,328).

Source of Funds

Table with 2 columns: Description and Amount. Rows include LOST FY 2015-16 (\$ 35,000), LOST FY 2016-17 (205,000), Federal Aid FY 2016-17 (200,000), and Total Financing for the Project (\$ 440,000).

Policy

The proposed 2016 improvement project is consistent with one or more of the following planning documents:

- Waverly Strategic Planning Report - November 21, 2013
• City Council's Goal Setting - July 2013
• Waverly Comprehensive Plan Update - October 24, 2011

Project Concern

None noted to date.

Alternative

NA

Background Information

This 2016 asphalt project is part of the City’s five-year capital improvement plan for reconstruction of collector and high-traffic streets.

August 17, 2015..... Approve PSA for 2015 Improvement Projects
October 5, 2015..... Approve IDOT Agreement for Federal-Aid Funding
January 4, 2016..... Set Public Hearing
January 4, 2016..... Approve INRCOG STP Programming Agreement
January 18, 2016..... Hold Public Hearing
February 16, 2016..... IDOT Letting
March 7, 2016..... Award Contract
April 4, 2016..... Approve Contract Documents
June 13 to August 19, 2016..... Construction Window
October 17, 2016..... Finalize Project – no Council quorum
October 24, 2016..... Finalize Project
February 20, 2017..... Finalize Project – Revised Resolution 16-83

Respectfully submitted,

James Bronner
City Administrator

Attachments: Iowa DOT Change Order No. 1



AGENDA MEMORANDUM
City Council Meeting
September 12, 2016

SUBJECT: 2016 Bituminous Seal Coat Program
Finalize Project

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Approve Change Order No. 1 in the amount of a \$2,082.30 decrease.
- Accept the 2016 Bituminous Seal Coat Program as complete.
- Approve Pay Estimate No. 2 in the amount of \$6,447.76 as the final payment to Blacktop Services Co. of Humboldt, Iowa.

Summary Statement

Blacktop Services Co. has completed the 2016 Bituminous Seal Coat Program in accordance with the contract documents. The total cost of the completed work is \$128,955.20. Change Order No. 1 – Final Adjustment of Quantities is for a net decrease of \$2,082.30 to the contract sum.

This project involved the seal coating of approximately 100 City blocks.

Expenditure Required

Construction Cost – Blacktop Services.....	\$ 128,955	
Project Design, Adm. & Insp. Est.....	5,500	
Total Cost of the Project.....		\$ 134,455

Source of Funds

Road Use Tax Funding FY 2016-17.....	\$ 150,000	
Total Financing for the Project.....		\$ 150,000

Policy

The 2016 Bituminous Seal Coat Program follows recommendations cited in the following documents for the preservation of City streets and infrastructure:

- Waverly Strategic Planning Report – November 12, 2013
- Waverly Comprehensive Plan Update – October 24, 2011

Policy Concern

None noted to date.

Alternative

Not applicable.

Background Information:

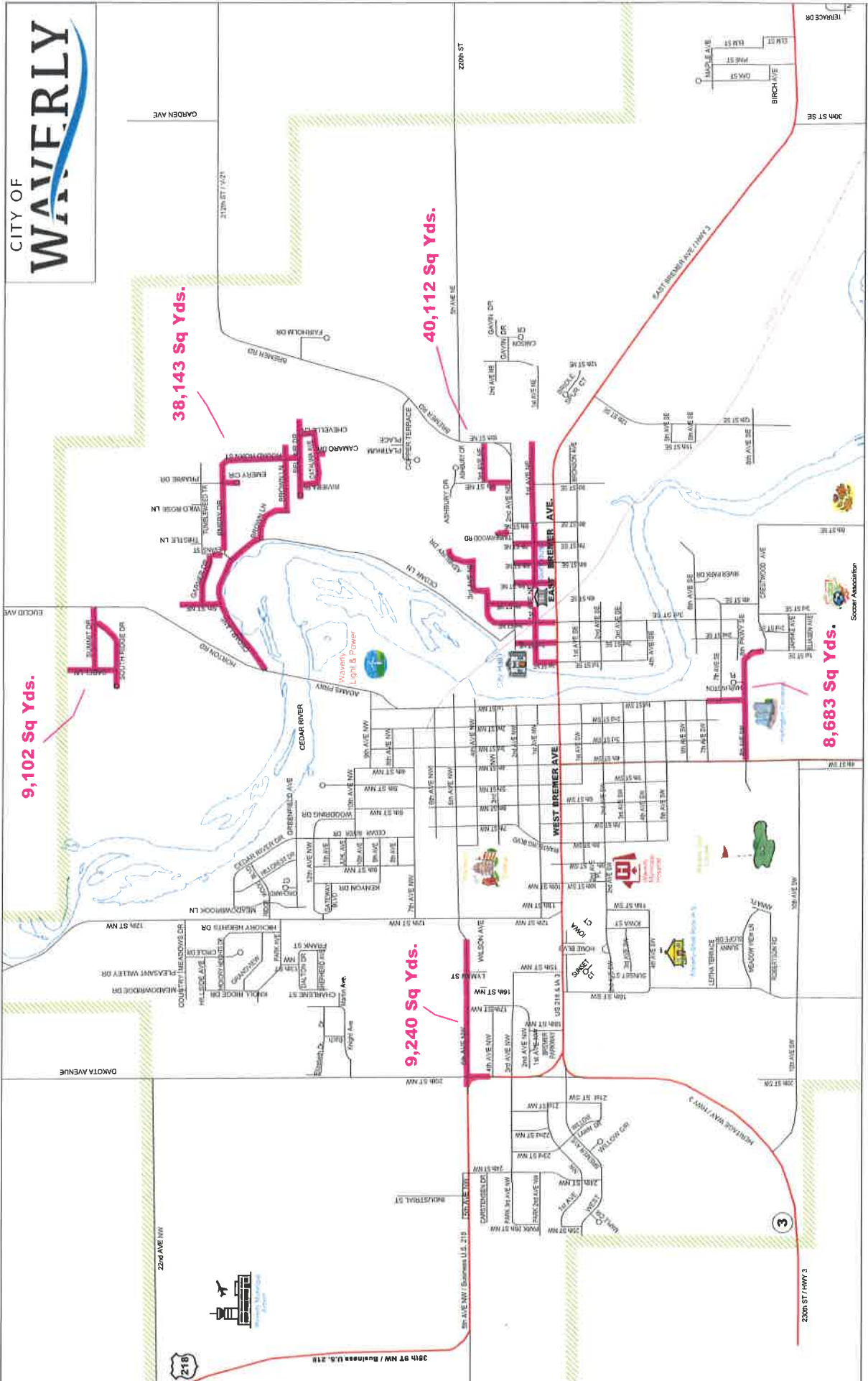
The Bituminous Seal Coat Program is part of the City’s annual improvement plan for maintaining the residential street system. City crews perform roadway repairs and patching prior to the hired contractor applying the bituminous seal coat. Seal coating is a thin surface treatment that helps to improve the longevity of an asphaltic pavement. This year’s project involves the seal coating of approximately 100 City blocks.

Feb. 15, 2016.....Set Public Hearing Date
March 7, 2016.....Hold Public Hearing
March 10, 2016.....Bid Letting
March 21, 2016.....Award Project
April 18, 2016.....Approve Contract, Bonds and Insurance
June 6 – Aug. 19, 2016.....Construction Window
September 12, 2016.....Finalize

Respectfully submitted,

James Bronner
City Administrator

Attachments: Change Order #1
Statement of Project Completion
Pay Estimate #2 - final





AGENDA MEMORANDUM
City Council Meeting
July 18, 2016

SUBJECT: Citywide Ped Ramp Construction 2016 – Finalize

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Approve Change Order No. 1 for the final adjust of quantities in the amount of a \$17,685.00 increase.
- Accept the Citywide Ped Ramp Construction 2016 project as complete.
- Approve Pay Estimate No. 4 in the amount of \$4,346.25 as the final payment to Feldman Concrete of Dyersville, Iowa.

Summary Statement

Feldman Concrete of Dyersville, Iowa, has completed the Citywide Ped Ramp Reconstruction 2016 project in accordance with the construction documents. The cost of the completed work is \$86,925.00 and Change Order No. 1 in the amount of a \$17,685.00 increase is for the final adjustment of contract quantities.

Expenditure Required

Pedestrian Ramp Construction – Feldman’s Bid.....	\$ 86,925	
Project Administration & Inspection Cost Estimate.....	<u>10,000</u>	
Total Estimated Cost of the Project.....		\$ 96,925

Source of Funds

CIP Acct. #330, Pedestrian Ramp Construction.....	\$ <u>100,000</u>	
Total Financing for the Project.....		\$ 100,000

Policy

The Citywide Ped Ramp Construction project is part of the ongoing citywide program to develop and maintain a pedestrian friendly community for all citizens with or without disabilities. The City’s efforts include inspecting and repairing sidewalks and the construction of pedestrian ramps and curbed street crossings. To ensure compliance, the City of Waverly follows recommendations and requirements cited in federal and state documents for the design and construction of pedestrian accommodations.

Project Concern

None noted to date.

Alternative

NA

Background Information

In 2011 the City implemented the citywide sidewalk repair program and citywide pedestrian ramp construction program. Waverly is divided into 7 districts for sidewalk repairs and pedestrian ramp construction and one district is completed each year. In 2016 inspections and work will be completed in District 6.

February 15, 2016.....	Set Public Hearing Date
March 7, 2016.....	Hold Public Hearing
March 10, 2016.....	Bid Letting
March 21, 2016.....	Award Project
April 18, 2016.....	Approve Contract, Bonds and Insurance
April 19 - June 2016.....	Construction Window
July 18, 2016.....	Finalize Project

Respectfully submitted,

James Bronner
City Administrator

Attachments: Statement of Project Completion
Change Order No. 1
Pay Application No. 4, Final



AGENDA MEMORANDUM
Council Study Session
December 19, 2016

SUBJECT: Water Pollution Control Facility - Nutrient Reduction Strategy
Approve Report

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

Approve the final document for Waverly's Water Pollution Control Facility (WPCF) – Nutrient Reduction Strategy report. The deadline to approve and submit the final report to the Iowa DNR is December 31, 2016.

Summary Statement

The Iowa Department of Natural Resources (IDNR) is requiring all communities with a 'major' wastewater facility (wastewater flow of greater than 1.0 million gallons per day) to comply with its Iowa Nutrient Reduction Strategy. The City of Waverly's wastewater facility is considered a 'major' facility.

The National Pollutant Discharge Elimination System (NPDES) permit for the Waverly WPCF was reissued in January 2015 by the IDNR. The new permit includes Nutrient Reduction Requirements in support of the Iowa Nutrient Reduction Strategy.

Nutrient reduction at the WPCF was initially discussed by WHKS & Co. during the 2013 WPCF Trickling Filter Evaluation and was presented to the City Council on August 26, 2013. Two primary long-term recommendations were made:

- 1) Prepare to replace the existing trickling filters within 5-7 years (2018-2020).
- 2) Develop a more detailed evaluation of conversion to a suspended growth treatment process within two (2) years of receiving a new NPDES permit.

Based on these requirements, the City is now prepared to submit a detailed report to the IDNR evaluating the WPCF's ability to remove nitrogen and phosphorus. The report lists potential changes to be made in order to meet the proposed effluent limits of 10 mg/L total nitrogen and 1 mg/L total phosphorus. The report needs to be submitted to the IDNR by the end of December 2016.

The evaluation of conversion to a suspended growth treatment process, as recommended in 2013, is included in the nutrient reduction report. The report also includes all of the scope items from the Nutrient Reduction Requirements on page 17 of the NPDES permit, including a tentative schedule for achieving nutrient removal at the WPCF. Based on initial testing, it is expected that a significant improvement at the WPCF is required to meet the Iowa Nutrient Reduction Strategy – likely the conversion to a suspended growth treatment process. The schedule for these improvements is to complete design by the fall of 2020 and to complete construction by the end of 2022.

Expenditure Required

WHKS & Co., Estimated Time & Materials..... \$ 25,000
Total Estimated Cost of the Project..... **\$ 25,000**

Source of Funds

Sewer Fund – Cash Reserves..... \$ 25,000
Total Financing for the Project..... **\$ 25,000**

Policy

The repair and maintenance of sanitary sewer infrastructure and facilities follows recommendations cited in the following documents for the maintenance and construction of infrastructure:

- Trickling Filter Assessment – August 13, 2013
- Water Pollution Control Facility Plan – 2010

Project Concern

None.

Alternative

None.

Background Information

Since 2013 the City has been planning for the replacement of the Trickling Filters and the renewal of the Iowa DNR NPDES permit. As Waverly continues to grow and EPA regulations change there will likely be a need to modify the treatment process used to remove nutrients from the wastewater. The anticipated project is to eliminate the trickling filters and replace them with an activated sludge system.

April 25, 2016..... Review Wastewater Treatment Facility Strategic Planning
May 16, 2016..... Approve Professional Services Agreement with WHKS & Co.
November 28, 2016..... Review Nutrient Reduction Study
December 19, 2016..... Approve Nutrient Reduction Study
December 31, 2016..... Deadline to submit Nutrient Reduction Study to the Iowa DNR

Respectfully submitted,

James Bronner
City Administrator

Attachments: Final Nutrient Reduction Strategy Report



AGENDA MEMORANDUM

City Council Meeting

November 21, 2016

SUBJECT: Citywide Sidewalk Repairs 2016 – Finalize Project

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Accept the Citywide Sidewalk Repairs 2016 project as complete.
- Approve Change Order No. 1 for an increase of \$2,966.05.
- Approve Pay Estimate No. 4 in the amount of \$4,844.01 as the final payment to Feldman Concrete of Dyersville, Iowa.

Summary Statement

Feldman Concrete of Dyersville, Iowa has completed the Citywide Sidewalk Repairs 2016 project in accordance with the contract documents. The total cost of the completed work is \$62,491.05. Change Order No. 1 is for a final adjustment of the contracted quantities.

The final restoration and a dormant seeding will be completed by another contractor in November when the weather is conducive.

Expenditure Required

Sidewalk Repair Cost, Feldman’s Bid	\$ 62,491
Final Restoration and Seeding, Estimate	2,000
Project Administration & Inspection Cost Estimate	<u>28,000</u>
Total Estimated Cost of the Project	\$ 92,491

Source of Funds

CIP Acct. #330, Sidewalk Repair Construction	\$ 61,296
Property Owner Payments, Estimate	<u>31,195</u>
Total Financing for the Project	\$ 92,491

Policy

The Citywide Sidewalk Repairs 2016 project is part of the ongoing citywide program to develop and maintain a pedestrian friendly community for all citizens with or without disabilities. The City’s efforts include inspecting and repairing sidewalks and the construction of pedestrian ramps at curbed street crossings. To ensure compliance, the City of Waverly follows recommendations and requirements cited in federal and state documents for the design and construction of sidewalks and pedestrian accommodations.

Project Concern

None noted to date.

Alternative

NA

Background Information

In 2011 the City implemented the Citywide Sidewalk Repair Program and the Citywide Pedestrian Ramp Construction Program. Waverly is divided into 7 districts for sidewalk repairs and pedestrian ramp construction and one district is completed each year. In 2016 inspections and work will be completed in District 6.

June 20, 2016	Set Public Hearing Date (No Quorum)
June 27, 2016	Set Public Hearing Date
July 7, 2016	Bid Letting
July 18, 2016	Hold Public Hearing
July 18, 2016	Award Project
August 15, 2016	Approve Contract, Bonds and Insurance
September - October 2016	Construction Window
November 21, 2016	Finalize Project

Respectfully submitted,

James Bronner
City Administrator

Attachments Statement of Project Completion
Change Order No. 1
Pay Application No. 4 (Final)



AGENDA MEMORANDUM
City Council Meeting
November 7, 2016

SUBJECT: 4th Street SW Sidewalk Construction 2016 – Finalize Project

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action:

- Accept the 4th Street SW Sidewalk Construction 2016 project as complete.
- Approve Pay Estimate No. 2 in the amount of \$1,154.51 as the final payment to Kenny Bloker Masonry of Clarksville, Iowa.

Summary Statement

On July 11, 2016, the City agreed to construct the sidewalk in exchange for Norbys deeding the additional right-of-way along 4th Street SW to the City. Additionally, Farmer’s State Bank has agreed to reimburse the City for the cost of constructing the sidewalk along their property.

The final restoration and a dormant seeding will be completed by another contractor in November when the weather is conducive.

Expenditure Required

Sidewalk Repair Cost, Final.....	\$ 23,090	
Final Restoration and Seeding, Estimate.....	910	
Project Administration & Inspection Cost Estimate.....	<u>1,000</u>	
Total Estimated Cost of the Project.....		\$ 25,000

Source of Funds

CIP Acct. #330, Sidewalk Repair Construction.....	\$ 19,000	
Farmer’s State Bank Portion (projected).....	<u>6,000</u>	
Total Financing for the Project.....		\$ 25,000

Policy

The 4th Street SW Sidewalk Construction 2016 project is part of the ongoing citywide program to develop and maintain a pedestrian friendly community for all citizens with or without disabilities. The City’s efforts include inspecting and repairing sidewalks and the construction of pedestrian ramps at curbed street crossings. To ensure compliance, the City of Waverly follows recommendations and requirements cited in federal and state documents for the design and construction of sidewalks and pedestrian accommodations.

Project Concern

None noted to date.

Alternative

NA

Background Information

Development continues on the east side of 4th Street SW justifying the need for pedestrian accommodations. In the past two years there have been multiple commercial retail projects and a 34-unit apartment complex built.

July 11, 2016..... Council Approves Acquisition of Norbys' 4th Street SW Right-of-Way
September 8, 2016..... Bid Letting
September 19, 2016..... Award Project
Sept. 20 – Oct. 28, 2016..... Construction Window
November 7, 2016..... Finalize Project

Respectfully submitted,

James Bronner
City Administrator

Attachments: Pay Application No. 2, Final
Statement of Completion



AGENDA MEMORANDUM

City Council Meeting

August 7, 2017

Subject: 39th Street SE Slurry Sealing Project 2017
Finalize Project

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Accept the 39th Street SE Slurry Sealing Project 2017 as complete.
- Approve Pay Estimate No. 2 in the amount of \$1,716.14 as the final payment to Fort Dodge Asphalt Co. of Fort Dodge, Iowa.

Summary Statement

Fort Dodge Asphalt Co. of Fort Dodge, Iowa, has completed the 39th Street SE Slurry Sealing Project 2017 in accordance with the construction documents. The cost of the completed work is \$34,322.72.

Expenditure Required

Seal Coating Construction Cost – Blacktop Services.....	\$ 158,629
Slurry Seal Construction Cost – Fort Dodge Asphalt.....	34,323
Pavement Markings – Estimate.....	2,000
Project Design, Adm. & Insp. Est.....	5,000
Total Cost of the Project.....	\$ 199,952

Source of Funds

Bituminous Seal Coating – CIP Fund #306.....	\$ 200,000
Total Financing for the Project.....	\$ 200,000

Policy Issues

None

Alternatives

n/a

Background Information

This project involved placing a thin asphaltic surface treatment similar the seal coating. However, rather than sprinkling aggregate chips on bituminous oil, the aggregate chips are pre-coated with oil prior to placing.

March 22, 2017..... Bid Letting
 April 3, 2017..... Award Project
 May 1 – Sept. 29, 2017..... Construction Window
August 7, 2017..... Finalize Project

Respectfully submitted,

James Bronner
City Administrator

Attachments: Statement of Project Completion
Pay Application No. 2, Final



AGENDA MEMORANDUM
City Council Meeting
July 10, 2017

SUBJECT: Citywide Ped Ramp Construction 2017 -- Finalize Project

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

- Approve Change Order No. 1 for the final adjustment of quantities in the amount of an \$8,568.80 increase.
• Accept the Citywide Ped Ramp Construction 2017 project as complete.
• Approve Pay Estimate No. 3 in the amount of \$7,326.04 as the final payment to Midwest Concrete, Inc. of Peosta, Iowa.

Summary Statement

Midwest Concrete of Peosta, Iowa, has completed the Citywide Ped Ramp Reconstruction 2017 project in accordance with the construction documents. The cost of the completed work is \$88,000.80 and Change Order No. 1 in the amount of an \$8,568.80 increase is for the final adjustment of contract quantities.

Expenditure Required

Table with 2 columns: Description and Amount. Rows include Pedestrian Ramp Const. - Midwest Concrete, Final (\$ 88,001), Project Administration & Inspection Cost Estimate (7,500), and Total Estimated Cost of the Project (\$ 95,501).

Source of Funds

Table with 2 columns: Description and Amount. Rows include CIP Acct. #330 304, Pedestrian Ramp Construction (\$ 100,000) and Total Financing for the Project (\$ 100,000).

Policy

The Citywide Ped Ramp Construction project is part of the ongoing citywide program to develop and maintain a pedestrian friendly community for all citizens with or without disabilities. The City's efforts include inspecting and repairing sidewalks and the construction of pedestrian ramps and curbed street crossings. To ensure compliance, the City of Waverly follows recommendations and requirements cited in federal and state documents for the design and construction of pedestrian accommodations.

Project Concern

None noted to date.

Alternative

NA

Background Information

In 2011 the City implemented the citywide sidewalk repair program and citywide pedestrian ramp construction program. Waverly is divided into 7 districts for sidewalk repairs and pedestrian ramp construction and one district is completed each year. In 2017 inspections and work will be completed in District 7.

March 6, 2017.....	Set Public Hearing Date
March 9, 2017.....	Bid Letting
March 20, 2017.....	Hold Public Hearing
March 20, 2017.....	Award Project
April 17, 2017.....	Approve Contract, Bonds and Insurance
May – June 2017.....	Construction Window
July 10, 2017.....	Finalize Project

Respectfully submitted,

James Bronner
City Administrator

Attachments: Statement of Project Completion
Change Order No. 1
Pay Application No. 3, Final



AGENDA MEMORANDUM
City Council Meeting
December 5, 2016

SUBJECT: Cedar Point 1st Addition

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

Accept Cedar Point 1st Addition public improvements as completed in accordance with the approved construction documents dated February 18, 2016.

Summary Statement

The Engineering Division has inspected the public improvements (water, sanitary and storm sewers, and streets) for Cedar Point 1st Addition and deemed them to have been completed in accordance with the original construction documents dated February 18, 2016, approved by the Council on June 6, 2016.

Acceptance of public improvements is for water main, sanitary sewer main, storm sewers and roadways that were constructed within reasonable conformance with the approved construction documents.

The Maintenance Guaranty is good for 4 years from the date when the Council accepts dedication of the public improvements. The developer, GLSW of Denver, Iowa, has supplied a Farmers State Bank of Waverly Standby Letter of Credit No. 400-600-619 to satisfy the maintenance guaranty.

Expenditure Required

None

Source of Funds:

NA

Policy Issue

None

Alternative

NA

Background Information

The Cedar Point Development is located in east Waverly along the south side of East Bremer Avenue just east of 30th Street SE.

August 6, 2015.....	P & Z Commission Approves Preliminary Plat
August 17, 2015.....	City Council Approves Preliminary Plat
March 3, 2016.....	P & Z Commission – No Quorum, to hold meeting March 10, 2016
March 10, 2016.....	P & Z Commission Approves Final Plat
June 6, 2016.....	City Council Approves Final Plat, Construction Documents and the Performance and Maintenance Guaranties
Spring 2016 to Fall 2016.....	Construction Window
December 5, 2016.....	City Council Accepts Dedication of Public Improvements
April 19, 2017.....	Expiration of Performance Guaranty
December , 2020.....	Expiration of Maintenance Guaranty

Respectfully submitted,

James Bronner
City Administrator

Attachments:

Statement of Project Completion
Maintenance Guaranty – Standby Letter of Credit No. 400-600-619



AGENDA MEMORANDUM
City Council Meeting
November 7, 2016

SUBJECT: Prairie Park 2nd Addition

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

Accept Prairie Park 2nd Addition public improvements as completed in accordance with the approved construction documents dated October 21, 2015.

Summary Statement

The Engineering Department has inspected the public improvements (water, sanitary and storm sewers, and streets) for Prairie Park 2nd Addition and deemed them to have been completed in accordance with the original construction documents dated October 21, 2015, approved by the Council on January 4, 2016.

Acceptance of public improvements is for water main, sanitary sewer main, storm sewers and roadways that were constructed within reasonable conformance with the approved construction documents.

The Maintenance Guarantee is good for 4 years from the date when the Council accepts dedication of the public improvements. The developer, BNKD, Inc. of Waverly, Iowa, has supplied a First National Bank of Waverly Standby Letter of Credit No.111257962 to satisfy performance and maintenance guarantees.

Expenditure Required

None

Source of Funds:

NA

Policy Issue

None

Alternative

NA

Background Information

The Prairie Park 2nd Addition is located in northeast Waverly north of Murphy Addition. Prairie Park 2nd Addition is a 7-lot subdivision and follows the preliminary plat of the Prairie Park Addition from 2003.

September 18, 2003	Leisure Services Commission Approves Proposed Development
September 3, 2015	P & Z Commission Approves Preliminary Plat 2 nd Addition
September 14, 2015	City Council Approves Preliminary Plat, 2 nd Addition
November 5, 2015	P & Z Commission Approves Final Plat, 2 nd Addition
January 4, 2016	City Council Approves Final Plat, Construction Documents and Guaranties
Spring to Fall 2016	Construction Window
November 7, 2016	City Council Accepts Dedication of Public Improvements
December 22, 2016	Expiration of Performance Guaranty
November 7, 2020	Expiration of Maintenance Guaranty

Respectfully submitted,

James Bronner
City Administrator

Attachments:

Statement of Project Completion
Performance/Maintenance Guaranty – Standby Letter of Credit No. 111257962



AGENDA MEMORANDUM
City Council Meeting
July 18, 2016

SUBJECT: OMNI Development 1st Addition and 2nd Addition
Accept Public Improvements

Prepared By: Mike Cherry, Director of Public Works & City Engineer

Recommended City Council Action

Accept the public infrastructure for OMNI Development 1st Addition (Vista Circle – private street) and OMNI Development 2nd Addition (1st Street SE) and approve the release of the performance guaranty as identified in the **Standby Letter of Credit No. 111261581**. The public improvements encompassed the installation of sanitary and storm sewer mains, street, water main, and a storm water detention basin.

City Council action is requested to approve the **Standby Letter of Credit No. 111265849** from First National Bank for OMNI Development, LLC and/or Twin B, LLC the developers of OMNI Development 1st Addition and 2nd Addition for the construction of the sidewalk/trail connection.

Summary Statement

OMNI Development, LLC and/or Twin B, LLC of Waterloo, Iowa, has completed the public infrastructure for OMNI Development 1st Addition (Vista Circle) and OMNI Development 2nd Addition (1st Street SE). Public improvements encompassed the installation of sanitary and storm sewer mains, street, water main, and a storm water detention basin. Relevant construction documents are the original plans dated October 18, 2015, and approved by the City Council on February 8, 2016. The City Engineer has reviewed the completed project and determined that work performed is within reasonable conformance with the approved construction documents.

The previously approved **Standby Letter of Credit No. 111261581** from First National Bank functions as a \$600,000 (100%) Performance Guaranty for the completion of the public improvements. The Letter of Credit also functions as the \$60,000 (10%) Maintenance Guaranty that will expire four years from the date the Council accepts dedication of the public improvements.

Expenditure Required

NA

Source of Funds:

NA

Policy Issue

None

Alternative

NA

Background Information

The OMNI Development is located in south/southeast Waverly. The First Addition is for 27 lots and extends 1st Street SE from the Cedar River Parkway south to the Stone Haven Subdivision. The Second Addition is for 8 lots and extends a shared private drive east/northeast from the intersection of 13th Avenue & 3rd Street SW.

September 3, 2015	P & Z Commission Approves Preliminary Plat
October 8, 2015	Leisure Services Commission Approves Proposed Development
September 14, 2015	City Council Approves Preliminary Plat
November 5, 2015	P & Z Commission Approves Final Plat
February 8, 2016	City Council Approves Final Plat, Construction Documents and Letter of Intent to Supply Performance & Maintenance Guaranties
March 28, 2016	City Council Approves Performance & Maintenance Guaranties
Spring 2016 to Fall 2016	Construction Window
July 18, 2016	City Council Accepts Dedication of Public Improvements
January 18, 2018	Expiration of Performance Guaranties
July 18, 2020	Expiration of Maintenance Guaranties

Respectfully submitted,

James Bronner
City Administrator

Attachment:

Standby Letter of Credit No. 111261581 from First National Bank – Maintenance
Standby Letter of Credit No. 111265849 from First National Bank – Sidewalk/Trail
Statement of Completion

City of Waverly
Department of Public Works
FY 2016-17

GENERAL INFRASTRUCTURE MAINTENANCE

This division had previously been called “Streets General”.

A primary responsibility of the General Infrastructure Maintenance Division is to finance and/or inspect the following infrastructure:

- Inspect and perform routine maintenance on the dam.
- Pay for traffic signal maintenance.
- Inspect trail bridges every four years.
- Finance the USGS Cedar River Gage on Adams Parkway Bridge.
- Finance communitywide street lighting, entrance signs and traffic signals.
- Finance uniforms, some training and conferences for employees in the Street Division.

Additionally, the local property tax support of the Waverly Municipal Airport is shown as an expense and transfer of monies to the Airport Fund.

City of Waverly
Department of Public Works
 FY 2016-17

EQUIPMENT SERVICES

The Equipment Services Division is responsible for routine maintenance and repairs for City vehicles; purchases parts utilized and inventoried for vehicles; and performs welding or fabrications that may be needed.

Equipment Services also prepares the specifications and bid documents for the purchasing of new equipment and vehicles and the sale of used equipment and vehicles.

Vehicle Repairs

	2012-13	2013-14	2014-15	2015-16	2016-17
Service Jobs	733	744	700	564	676
New Tires	83	72	101	86	94
Tire Repairs	53	44	76	33	49
Batteries	3	7	4	3	30
Antifreeze (Gals)	43	72	76	74	67
Oil Changes	194	197	192	194	198
Oil (Gals)	628	639	606	467	496
Total Parts (\$)	\$ 86,165	\$ 104,020	\$ 97,669	\$ 77,076	\$ 115,810
Total Labor Charged	\$ 40,437	\$ 48,512	\$ 48,664	\$ 38,487	\$ 52,308

Fuel Purchased

	2012-13	2013-14	2014-15	2015-16	2016-17
Unleaded Fuel (Gals)	25,881	26,798	24,824	24,415	22,988
Unleaded Fuel (\$)	\$ 90,230	\$ 90,460	\$ 77,494	\$ 53,826	\$ 47,099
Diesel Fuel (Gals)	32,983	38,579	37,224	44,284	45,910
Diesel Fuel (\$)	\$ 129,518	\$ 148,410	\$ 125,838	\$ 185,553	\$ 101,284

City of Waverly - Public Works
Equipment Services
Vehicles & Equipment Purchased
FY 2016-17

Department / Division	Vehicle or Equipment Purchased <u>and</u> Make / Model	Bid Date	Low Bidder	Low Bid \$	Trade-In \$	Net Bid \$	Trade-In	Date Received
Leisure Serv./ Parks	Truck Box for 1-Ton 4x4 Chevy Henderson Mark III	07/18/16	Don's Truck Fairbank, IA	\$17,810	n/a	\$17,810	none	Nov. 2016
Leisure Serv./ Parks, Cem. & Civic Center	Skid Loader, Rubber Tire Bobcat 650	08/15/16	Deike Impl. Waverly, IA	\$42,911	n/a	\$42,911	none	Nov. 2016
Public Works / Streets (RUT)	Asphalt Hauler Spaulding 4TLRMV	09/12/16	Spaulding Saginaw, MI	\$24,160	(\$1,500)	\$22,660	2006 SMCI Asphalt Hauler	Jan. 2017
Streets (RUT)	Brush Chipper Morbark M18R	01/09/17	Midwest Undgd Bondurant, IA	\$66,500	(\$14,500)	\$52,000	2000 Bandit 1890 Brush Chipper	March 2017
Streets (RUT)	Mid-Mount Snow Plow Wings Henderson	03/20/17	Don's Truck Fairbank, IA	\$38,770	n/a	\$38,770	none	July 2017
Streets (RUT)	Tractor Kubota M5-111	04/03/17	Deike Impl. Waverly, IA	\$57,680	(\$12,000)	\$45,680	1997 White 6065 Tractor	June 2017
Solid Waste	Compost Turner HCL CT12	04/17/17	HCL Machine Works Dos Palos, CA	\$31,900	n/a	\$31,900	none	May 2017
Streets (RUT)	Dump Truck Cab & Chassis 2018 Freightliner 108SD	03/20/17	Don's Truck Fairbank, IA	\$78,925	(\$24,000) (\$21,000)	\$33,925	2003 Sterling Dump Truck 2002 Sterling Dump Truck	Aug. 2017
Streets (RUT)	Dump Truck Box & Access. Beau-Roc	04/17/17	Tri-State Equip. Dubuque, IA	\$63,128	n/a	\$63,128	n/a	Fall 2017

City of Waverly - Public Works
Equipment Services
Sale of Used City Vehicles & Equipment
FY 2017-18

Division	Vehicles or Equipment Sold	Bid Date	Low Bidder	Low Bid \$
Streets (RUT)	Sign Cart #1	11/01/16	Pat Walsh	\$ 150.00
Streets (RUT)	Sign Cart #2	11/01/16	Pat Walsh	\$ 150.00
Streets (RUT)	Sand Blaster	11/01/16	Pat Walsh	\$ 300.00
Streets (RUT)	Summer Sander #1	11/01/16	James Stanbrough	\$ 11.00
Streets (RUT)	Summer Sander #2	11/01/16	James Stanbrough	\$ 11.00
Streets (RUT)	Summer Sander #3	11/01/16	James Stanbrough	\$ 11.00
Streets (RUT)	Summer Sander #4	11/01/16	James Stanbrough	\$ 11.00
Streets (RUT)	Winter Sander #1	11/01/16	James Stanbrough	\$ 11.00
Streets (RUT)	Winter Sander #2	11/01/16	James Stanbrough	\$ 11.00
Streets (RUT)	Winter Sander #3	11/01/16	James Stanbrough	\$ 11.00
Streets (RUT)	Running Gear	11/01/16	Marc Taylor	\$ 316.01
Water	Robin Tamper	11/01/16	Ryan Kargel	\$ 25.00
Parks	Fuel Transfer Tank	11/01/16	Mark Leisinger	\$ 118.00
Streets (RUT)	Torkheim Gas Pump	11/01/16	Mark Leisinger	\$ 158.00
Streets (RUT)	AD Smith Gas Pump	11/01/16	Mark Leisinger	\$ 86.00
Solid Waste	Rubbermaid Cart	11/01/16	Pat Walsh	\$ 29.00
Parks	Disc Mower	11/01/16	Pat Walsh	\$ 402.00
Equip Services	Air Jack	11/01/16	Pat Walsh	\$ 56.00
Fire Dept	Onan Generator	11/01/16	James Stanbrough	\$ 53.00
Water	Diaphragm Pump	11/01/16	Ryan Kargel	\$ 101.00
Parks	JD Snow Blow	11/01/16	Ryan Kargel	\$ 101.00
Streets (RUT)	Crack Sealer Trailer	11/01/16	Pat Walsh	\$ 25.00
Parks	2-Wheel Trailer	11/01/16	Darrell Hirsch	\$ 91.23
Streets (RUT)	Plate Tamper	11/01/16	Lance Golly	\$ 81.36
Streets (RUT)	Snow Blower	11/28/16	City of Clarksville	\$ 22,500.00
Solid Waste	46 1.5 cy dumpsters	08/03/16	Kluesner Sanit.	\$ 4,600.00
Water	2004 Ford F450 Flatbed	09/16/16	Sampson Fabric.	\$ 10,000.00
Total				\$ 39,419.60

City of Waverly
Department of Public Works
FY 2016-17

STREETS - RUT

The Street Division involves many diverse areas. These areas will be summarized individually to overview the annual events. The Street Division maintains approximately 75+ miles/ 1,162 blocks of primary streets, 10 miles of gravel roads and alleys, and numerous municipal-owned parking lots.

Street Maintenance and Reconstruction

- Seal Coat Program
- Pothole Repair
- Crack Sealing

Snow Removal

Painting

- Line Striping
- Curb Painting
- School Crossing Signs
- Dry Run Walk Bridges

Special Collection Week (Furniture, Appliances, Tires, Yard Waste, & Brush)

Fall Leaf Pickup

Ditch Cleaning

Mowing

Street Sweeping

Road Grading

Alley Maintenance

Street Signs

- Maintenance
- Replacement

Emergency Response

- Flash Flooding
- Storm Damage Cleanup
- Other Manpower Needs

Parking Lot Maintenance

City of Waverly - Public Works
Streets - RUT
Work Hours Per Core Services
FY 2016-17

<u>Streets</u>	<u>Hours</u>	<u>Painting</u>	<u>Hours</u>
Shoulder Work	<u>482</u>	Line Striping, Curbs & X-Walks	<u>450</u>
Road Grading	<u>36</u>		
Alleys	<u>81</u>		
Cold Mix Patching / Durapatching	<u>821</u>	<u>Snow Removal</u>	
Street Sweeping	<u>990</u>	Sand Hauling	<u>62</u>
Weed Mowing / Tree Trimming	<u>1,541</u>	Snow Fence	<u>1</u>
Rock / Chips Hauling	<u>311</u>	Snow Plowing	<u>479</u>
		Snow Removal	<u>364</u>
		Sanding	<u>212</u>
 <u>Maintenance</u>		 <u>Signs</u>	
Catch Basins	<u>482</u>	Repair &/or Replace	<u>108</u>
Bridges	<u>0</u>	New Installations	<u>170</u>
Culverts	<u>4</u>		
Dry Run	<u>2</u>	<u>Special Projects</u>	
Manholes	<u>422</u>	Airport	<u>9</u>
Building Maintenance	<u>111</u>	Yard Waste	<u>172</u>
Equipment Maintenance	<u>670</u>	Spring Clean-up	<u>107</u>
		Fall & Winter Clean-up	<u>88</u>
		Mulch & Compost Deliveries	<u>92</u>
		Water Dept	<u>0</u>
		Solid Waste Dept	<u>211</u>
		Sewer Maintenance	<u>10</u>
		WPC Dept	<u>0</u>
		Recycling Center	<u>17</u>
		Cemetery Dept	<u>0</u>
		Golf Course Dept	<u>11</u>
		Equip Services	<u>0</u>
		Parks Dept	<u>11</u>
		Meetings / Training	<u>176</u>

City of Waverly - PublicWorks
Streets - RUT
Street Maintenance & Construction
FY 2016-17

MATERIAL COMPARISON REPORT

Fiscal Year	2012-13	2013-14	2014-15	2015-16	2016-17
Asphalt Patch					
Tons	154	80	136	152	145
Cost (\$)	14,787	8,542	14,935	16,723	15,918
Road Rock					
Tons	489	312	459	779	509
Cost (\$)	4,131	2,678	4,179	7,156	4,681
3/8" Chips					
Tons	307	540	253	56	92
Cost (\$)	3,388	6,054	3,012	665	1,116
CRS-2 Oil					
Gallons	9,848	10,978	10,370	2,714	1,480
Cost (\$)	19,204	21,407	20,222	4,750	2,591

STREET MAINTENANCE (BLOCKS)

Fiscal Year	2012-13	2013-14	2014-15	2015-16	2016-17
Single Seal Coat (Bid)	97	94	75	100	125
Double Seal Coat	0	2	2	0	1

STREET RECONSTRUCTION

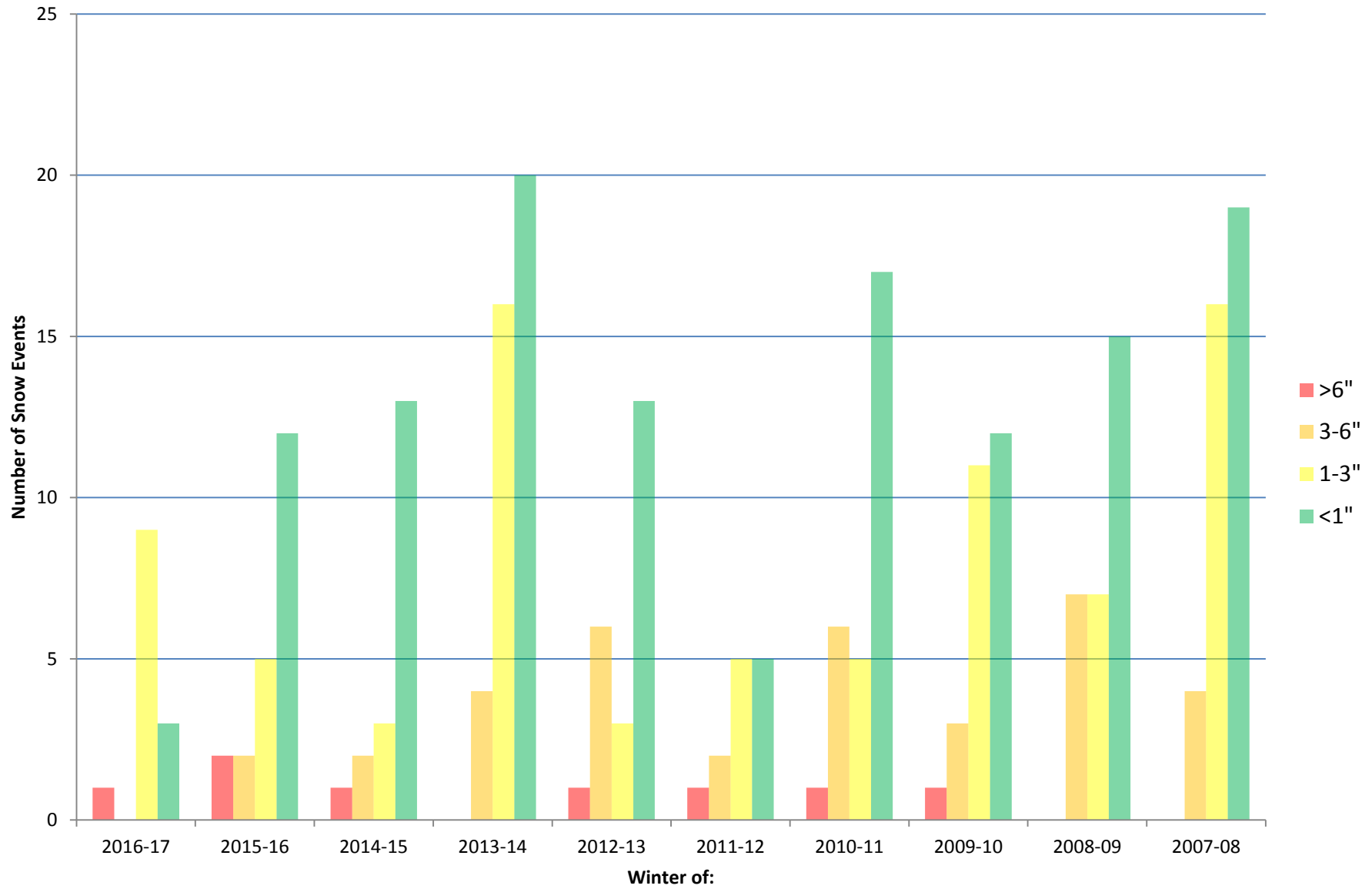
	Linear Feet	Miles
2012-13		
16th Street SW Reconst. (<i>W. Bremer to 4th St. SW</i>)	1,626	0.31
2013-14		
4th St NW Reconst. (<i>Bremer Ave. to 5th Ave. NW</i>) (<i>included 1st, 2nd, 3rd & 4th Aves between 4th & 5th Sts NW</i>)	3,013	0.57
2014-15		
2nd Avenue SW Reconst. (<i>10th Ave. SW to 4th St. SW</i>)	1,056	0.2
2nd Street NW Reconst. (<i>Bremer Ave. to 3rd Ave. NW</i>)	298	0.06
Cedar River Parkway Const. (<i>4th St. SW to 8th St. SE</i>)	4,456	0.84
2015-16		
16th Street SW (<i>4th Ave. SW to Meadow View</i>)	1,420	0.27
2016-17		
	0	0

SNOW REMOVAL MATERIAL COMPARISON

Fiscal Year	2012-13	2013-14	2014-15	2015-16	2016-17
Rock Salt					
Tons	509	986	630	661	989
Cost (\$)	36,915	70,476	53,949	54,360	79,073
Ice Sand					
Tons	17	42	23	0	321
Cost (\$)	133	328	175	0	1,900

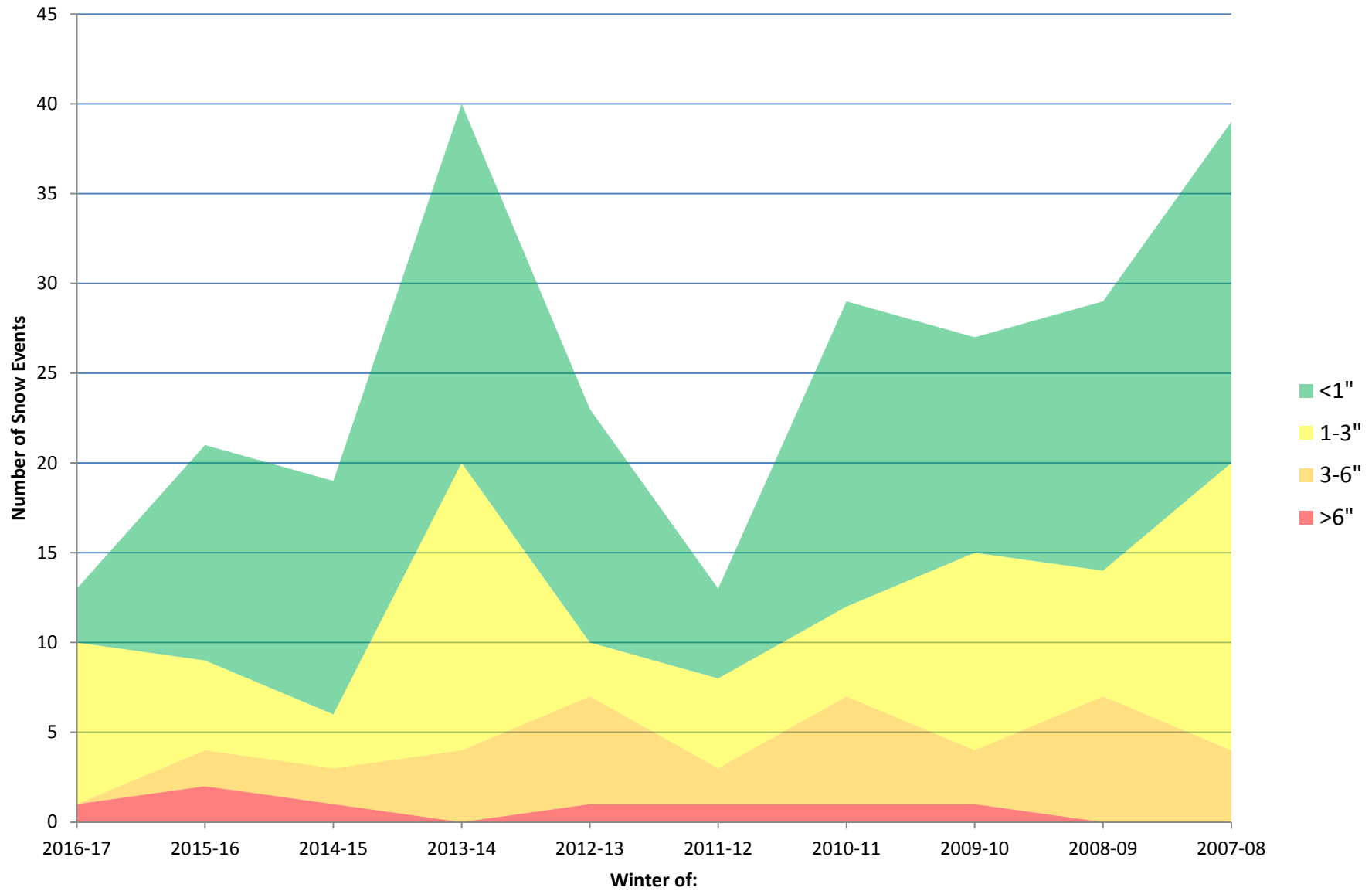
Measurable Snowfall Events

Waterloo, Iowa



Measurable Snowfall Events

Waterloo, Iowa



City of Waverly
Department of Public Works
FY 2015-16

WATER

The Water Division is responsible for the operation and maintenance of the total water system including wells, towers, piping, pumps, controls, hydrants, and other equipment within the City of Waverly. This division performs or provides programs as follows: replacement of older system valves and hydrants, valve box raising and replacement, valve turning, hydrant flushing and flow testing, water main repair, water main testing and installation, water quality testing, answers customer complaints on taste, smell, usage, or questions regarding water quality as per articles that appear in the newspapers

The Water Division supplies water to Waverly residents and industry utilizing four wells, three towers, and approximately 74 miles of water main. This includes 693 fire hydrants, 868 water main valves, over 513 hydrant valves, and 4,071 meters. The pumping capacity of the system is approximately 5,100 gallons per minute and total storage of 1,750,000 gallons elevated. The average daily pumpage for FY 2016-17 was 976,682 gallons per day.

During FY 2016-17, the Water Division continued to locate and correct water leaks. Our billing to pumpage accountability has been calculated at 82.3%.

FUTURE PROJECTS

1. Continue replacement of older system valves and hydrants.
2. Continue education on the ever changing regulations set forth by the IDNR and USEPA to insure a safe drinking water system
3. Continue with the Source Water Protection Plan to reduce or eliminate certain contaminants from entering our ground water source and to educate the public on the importance such a plan

City of Waverly
Water Department
Activity for Fiscal Year 2016-17

Water Meters	Totals
New Meter Installations	107
Meters Replaced	57
Seasonal In	35
Seasonal Out	56
ERTs	20
Meters Tested & Repaired	85
Hyd. Meters / Hose Bib Meter	35

Water Service Lines	Totals
Capped Services	4
Service Line Taps	20
Sound Detection	19

Water Mains	Totals
Repaired	12
Replaced	1
Sound Detection	22
Large Taps (4"-6"-8")	9

Water Valves	Totals
Valves Operated	219
Valves Installed	3
Valves Repaired	6
Valves Replaced	5

Water Valve Boxes	Totals
Boxes Repaired	13
Boxes Installed	5
Boxes Cleaned	6
Boxes Raised	7
Boxes Lowered	4

Number of Locates	Totals
Iowa One Call Tickets	3,061
Structures Located from IOC Tickets	5,301
Responses Entered	3,061

Hydrants	Totals
Flushed	682
Repaired	5
Replaced	1
Installed	1
Painted	120
Flagged	4

Water Towers	Visits
Interior	118
Exterior	134
Exterior Maintenance (hours)	28

Wells	Visits
Interior	1,050
Exterior	1,050
Exterior Maintenance (hours)	29

Other Projects	Total
Contractors	115
Other City Departments	54

Service Center	Hours
Record Keeping (# of Hours)	552
Equipment Maintenance (Hrs)	124
Building Maintenance (Hrs)	119
Customer Care	84
Call Outs (Law Center/SCADA Alarms)	77

Number of Samples Taken	Totals
Bacteria	150
Chlorine	1,740
Fluoride	1,350
Nitrate	32

Water Consumption	
Salesman Gallons	24,000
Salesman Revenue	\$120.00
City Consumption Gallons	46,184,000
Highest Pumping Day	1,449,000
Lowest Pumping Day	635,000
Average Pumping Day	976,682
Total Gallons Pumped	356,489,000

OPERATIONAL DATA FOR WATER SYSTEM REPAIRS

	2012-13	2013-14	2014-15	2015-16	2016-17
Main Lines	21	49	31	14	12
Service Lines	16	16	16	12	13
4" Valves Installed	n/a	2	2	2	1
6" Valves Installed	n/a	2	2	2	1
8" Valves Installed	n/a	1	3	1	1
12" Valves Installed	n/a	n/a	1	0	0
Service Lines Capped	7	14	14	8	4
3/4" Taps Made	0	4	14	3	5
1"-2" Taps Made	4	15	22	13	15
4" Taps Made	0	1	1	1	0
6" Taps Made	1	1	2	8	5
8" Taps Made	1	1	3	2	4

GALLONS PUMPED VERSUS GALLONS BILLED

	Gallons Pumped	Estimated Unmetered Gallons*	Gallons Billed	Percent Accountable
2016-17	356,489,000	46,187,000	247,064,000	82.3%
2015-16	352,702,000	46,184,000	254,403,000	85%
2014-15	375,445,000	59,502,000	260,622,000	85%
2013-14	386,675,000	59,198,000	270,427,000	85%
2012-13	445,886,000	116,944,000**	266,859,000	86%

* Estimated Unmetered Gallons are for hydrant flushing, watermain flushing, sewer jet machine, street sweeper, Fire Department, water leaks, etc.

**High unmetered gallons are due to the operations during the painting of the East Water Tower.

City of Waverly
Department of Public Works
FY 2016-17

WATER POLLUTION CONTROL

The Water Pollution Control Division operates and maintains the wastewater treatment facilities for the City. These facilities are the treatment plant, main lift station, and nine smaller lift stations. The testing and monitoring of industrial discharges plus disposal of biosolids are also the responsibility of the WPC Division. The efficient operation and maintenance of these facilities are required by permits and monitored by State and Federal agencies, DNR and EPA. The daily average treatment of wastewater for fiscal year 2016-17 was 1,588,904 gallons.

The WPC Facility and staff conducted several tours throughout the school year to elementary, high school, and Wartburg College classes. Staff has also made classroom or site presentations to different classes or interested groups.

This completes a brief overview of the past fiscal year. Although not a complete summary, it does not represent the knowledge and expertise needed to operate and maintain an efficient WPC Facility. It is our method of recycling the very precious resource of water. This is one reason that some cities are referring to their waste treatment facilities as Water Reclamation Facilities.

CURRENT PROJECTS

1. Nutrient Reduction Strategy

FUTURE PROJECTS

1. Eastgate Lift Station
2. Flow measurement at each outfall as well as influent.

PROBLEM AREAS OR AREAS OF CONCERN

1. Shortage of qualified and accessible land for biosolids application.
2. The need to upgrade process controls.
3. Budgets must continue to reflect the need to upgrade lift stations and aging equipment.

**City of Waverly
MONTHLY MONITORING REPORT**

Date: July, 2016

Facility Number 0990001

DISCHARGE SERIAL # 001 - # 002

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	GOLF COURSE FLOW	EFF. FLOW MGD	CBOD 5 DAY 20 °C		EFF. PHOS. MG/L	EFF. PHOS. LBS/DA Y	EFF. TOTAL N (as N) MG/L	EFF. TOTAL N (as N) LBS/DA Y	EFF. Cu MG/L	EFF. Cu LBS/DA Y	TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN		EFF. ph	EFF. TEMP.°F.	E. COLI #/100 ML
				EFF. MG/L	EFF. LBS/DAY							EFF. MG/L	EFF. LBS/DA Y	FINAL MG/L	FINAL LBS/DA Y			
1	Fri.		1.390	7	81							10	116	<0.50	0	8.2	64	
2	Sat.		1.310															
3	Sun.		1.190															
4	Mon.	0.279	1.071													8.0	64	
5	Tues.	0.279	1.101													8.1	64	
6	Wed.	0.279	1.091	8	73	2.52	22.93	23.00	209.28	0.0258	0.2348	11	100	<0.50	0	8.1	65	
7	Thurs.	0.279	1.061													7.9	65	
8	Fri.	0.279	1.021	10	85							11	94	<0.50	0	7.9	65	
9	Sat.		1.240															
10	Sun.		1.610															
11	Mon.		1.500													8.0	66	
12	Tues.		1.510													7.9	66	
13	Wed.		1.440	11	132	2.63	31.59	18.80	225.78	0.0243	0.2918	8	96	1.00	12	8.0	66	
14	Thurs.		1.440													8.0	66	
15	Fri.		1.330	8	89							7	78	1.00	11	8.0	66	
16	Sat.		1.300															
17	Sun.		1.580															
18	Mon.		1.800													7.9	67	
19	Tues.		2.420													8.0	67	
20	Wed.		1.980	12	198	2.12	35.01	16.90	279.07	0.0268	0.4426	13	215	1.00	17	8.1	67	
21	Thurs.		1.860													8.1	67	
22	Fri.		1.780	8	119							9	134	1.00	15	8.1	67	
23	Sat.		1.650															
24	Sun.		1.520															
25	Mon.		1.610													8.0	67	
26	Tues.		1.650													8.1	67	
27	Wed.		1.580	10	132	2.37	31.23	18.40	242.46	0.0314	0.4138	12	158	1.00	13	8.2	67	
28	Thurs.		1.510													8.2	67	
29	Fri.		1.410	8	94							7	82	1.00	12	8.1	67	
30	Sat.		1.310															
31	Sun.		1.300															

TOTAL AVERAGE	1.4	45.565	82.0	1003		120.75		956.59		1.3829		88.0	1072	6.0	79.4			0.0
MAX	0.3	1.470	9.1	111		30.19		239.15		0.3457		9.8	119	1.0	8.8			0.0
MIN	0.3	2.420	12.0	198		35.01		279.07		0.4426		13.0	215	1.0	16.5			0.0
	0.3	1.021	7.0	73		22.93		209.28		0.2348		7.0	78	1.0	0.0			0.0

7 DAY AVERAGE																		
WEEK 1	0.3	1.173	7.5	77		22.93		209.28		0.2348		10.5	108	0.0	0.0			0.0
WEEK 2	0.3	1.394	10.5	109		31.59		225.78		0.2918		9.5	95	1.0	6.0			0.0
WEEK 3	0.0	1.753	10.0	143		35.01		279.07		0.4426		10.0	146	1.0	13.8			0.0
WEEK 4	0.0	1.614	9.0	125		31.23		242.46		0.4138		10.5	146	1.0	14.0			0.0

**City of Waverly
MONTHLY MONITORING REPORT**

Date: August, 2016

Facility Number 0990001

DISCHARGE SERIAL # 001 - # 002

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	MGD	GOLF COURSE FLOW	EFF. FLOW MGD	CBOD 5 DAY 20 °C							TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN		EFF. pH	EFF. TEMP. °F.	E. COLI #/100 ML		
					EFF. MG/L	EFF. LBS/DAY	EFF. PHOS. MG/L	EFF. PHOS. LBS/DAY	EFF. TOTAL N (as N) MG/L	EFF. TOTAL N (as N) LBS/DAY	EFF. Cu MG/L	EFF. Cu LBS/DAY	EFF. MG/L	EFF. LBS/DAY	FINAL MG/L				FINAL LBS/DAY	
1	Mon.	0.3075	1.023													8.1	66			
2	Tues.	0.3075	1.013													8.1	66			
3	Wed.	0.3075	1.013		9	76	2.87	24.23	26.00	219.55	0.0282	0.2381	8	68	1.00	8	8.2	66		
4	Thurs.	0.3075	1.243															8.2	66	
5	Fri.	0.3075	1.023		10	85							10	85	1.00	9	8.1	66		
6	Sat.		1.200																	
7	Sun.		1.240																	
8	Mon.		1.230													7.9	66			
9	Tues.		1.250													7.9	66			
10	Wed.		1.260		47	494	3.22	33.84	22.10	232.24	0.0471	0.4949	75	788	<0.50	0	7.7	66		
11	Thurs.	0.2100	1.130															7.7	66	
12	Fri.	0.2100	1.020		11	94							13	111	1.00	9	7.8	66		
13	Sat.	0.2100	0.950																	
14	Sun.		1.160																	
15	Mon.		1.200													8.1	67			
16	Tues.	0.2831	0.887													8.0	67			
17	Wed.	0.2831	0.907		8	61	3.32	25.11	26.30	198.92	0.0374	0.2829	7	53	1.00	8	8.2	67		
18	Thurs.	0.2831	0.917													8.2	67			
19	Fri.	0.2831	1.057		8	71							9	79	<0.50	0	8.3	67		
20	Sat.		1.260																	
21	Sun.		1.190																	
22	Mon.		1.250													8.1	66			
23	Tues.		1.310													8.2	66			
24	Wed.		1.550		7	90	3.36	43.43	18.20	235.27	0.0273	0.3529	9	116	<0.50	0	8.1	66		
25	Thurs.		2.050													8.1	66			
26	Fri.		3.080		7	180							13	334	<0.50	0	8.1	66		
27	Sat.		2.520																	
28	Sun.		1.960																	
29	Mon.		1.680													8.1	66			
30	Tues.		1.570													8.1	66			
31	Wed.		1.460		5	61	2.61	31.78	2.02	24.60	0.0197	0.2399	7	85	<0.50	0	8.1	66		

TOTAL AVERAGE	3.3	41.600	112.0	1211		158.40		910.58		1.6087	151.0	1719	4.0	33.0					0.0
MAX	0.0	1.342	12.4	135		31.68		182.12		0.3217	16.8	191	1.0	3.7	8.1	66			0.0
MIN	0.2	0.887	5.0	61		24.23		24.60		0.2381	7.0	53	1.0	0.0	7.7	66			0.0

7 DAY AVERAGE																				
WEEK 1	0.0	1.108	9.5	81		24.23		219.55		0.2381	9.0	76	1.0	8.5	8.1	66			0.0	
WEEK 2	0.0	1.143	29.0	294		33.84		232.24		0.4949	44.0	449	1.0	4.3	7.8	66			0.0	
WEEK 3	0.0	1.060	8.0	66		25.11		198.92		0.2829	8.0	66	1.0	3.8	8.2	67			0.0	
WEEK 4	0.0	1.960	7.0	135		43.43		235.27		0.3529	11.0	225	0.0	0.0	8.1	66			0.0	

**City of Waverly
MONTHLY MONITORING REPORT**

Date: September, 2016

Facility Number 0990001

DISCHARGE SERIAL # 001 - # 002

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	GOLF COURSE FLOW	EFF. FLOW MGD	CBOD 5 DAY 20 °C		EFF. PHOS. MGL	EFF. PHOS. LBS/DAY	EFF. TOTAL N (as N) MGL	EFF. TOTAL N (as N) LBS/DAY	EFF. Cu MGL	EFF. Cu LBS/DAY	TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN		EFF. pH	EFF. TEMP. °F.	E. COLI #/100 ML
				EFF. MGL	EFF. LBS/DAY							EFF. MGL	EFF. LBS/DAY	FINAL MGL	FINAL LBS/DAY			
1	Thurs.	0.2975	1.153		0		0.00		0.00		0.0000		0		0	8.1	68	4.10
2	Fri.	0.2975	1.023	4	34		0.00		0.00		0.0000	5	43	<0.50	0	8.2	68	
3	Sat.	0.2975	0.903		0		0.00		0.00		0.0000		0		0			
4	Sun.	0.2975	0.843		0		0.00		0.00		0.0000		0		0			
5	Mon.	0.2975	1.053		0		0.00		0.00		0.0000		0		0	8.2	69	
6	Tues.	0.2975	1.053		0		0.00		0.00		0.0000		0		0	8.1	69	
7	Wed.		1.310	5	55	2.98	32.56	25.60	279.69	0.0256	0.2797	8	87	<0.50	0	8.1	68	7.50
8	Thurs.		1.470		0		0.00		0.00		0.0000		0		0	8.1	68	
9	Fri.		2.400	6	120		0.00		0.00		0.0000	7	140	<0.50	0	8.1	68	
10	Sat.		2.200		0		0.00		0.00		0.0000		0		0			
11	Sun.		2.220		0		0.00		0.00		0.0000		0		0			
12	Mon.	0.2400	1.830		0		0.00		0.00		0.0000		0		0	8.3	64	
13	Tues.	0.2400	1.620		0		0.00		0.00		0.0000		0		0	8.1	64	
14	Wed.	0.2400	1.540	7	90	2.33	29.93	23.60	303.11	0.0256	0.3288	11	141	<0.50	0	8.3	64	28.80
15	Thurs.		2.070		0		0.00		0.00		0.0000		0		0	8.2	64	
16	Fri.		1.970	8	131		0.00		0.00		0.0000	12	197	<0.50	0	8.4	64	
17	Sat.		1.990		0		0.00		0.00		0.0000		0		0			
18	Sun.		2.080		0		0.00		0.00		0.0000		0		0			
19	Mon.		2.000		0		0.00		0.00		0.0000		0		0	8.3	65	
20	Tues.	0.2475	1.693		0		0.00		0.00		0.0000		0		0	8.3	65	
21	Wed.	0.2475	1.783	6	89	2.10	31.22	15.90	236.37	0.0238	0.3538	10	149	<0.50	0	8.3	65	20.10
22	Thurs.	0.2475	8.923		0		0.00		0.00		0.0000		0		0	8.3	65	
23	Fri.		9.170	11	841		0.00		0.00		0.0000	24	1835	1.00	76	8.1	65	
24	Sat.		9.170		0		0.00		0.00		0.0000		0		0			
25	Sun.		9.170		0		0.00		0.00		0.0000		0		0			
26	Mon.		8.390		0		0.00		0.00		0.0000		0		0	8.2	65	
27	Tues.		5.000		0		0.00		0.00		0.0000		0		0	8.1	65	
28	Wed.		3.700	9	288	1.31	40.42	11.70	361.04	0.0204	0.6295	21	657	<0.50	0	8.1	64	727.00
29	Thurs.		3.210		0		0.00		0.00		0.0000		0		0	8.2	64	
30	Fri.		2.820	7	175		0.00		0.00		0.0000	17	400	<0.50	0	8.1	64	
31			0.000		0		0.00		0.00		0.0000		0		0			

TOTAL AVERAGE	3.2	93.753	63.8	1823		134.13		1180.21		1.5918	115.3	3650	1.0	76.5				787.5
MAX	0.0	3.024	7.1	59		4.33		38.07		0.0513	12.8	118	1.0	2.5	8.2	66	157.5	
MIN	0.2	0.000	4.0	0		0.00		0.00		0.0000	5.0	0	1.0	0.0	8.1	64	4.1	

7 DAY AVERAGE																		
WEEK 1	0.0	1.048	4.5	13		4.65		39.96		0.0400	6.5	19	0.0	0.0	8.1	68	5.8	
WEEK 2	0.0	1.897	6.5	30		4.28		43.30		0.0470	9.0	40	0.0	0.0	8.2	66	28.8	
WEEK 3	0.0	1.941	7.0	32		4.46		33.77		0.0505	11.0	49	0.0	0.0	8.3	65	20.1	
WEEK 4	0.0	7.646	10.2	161		5.77		51.58		0.0899	22.7	356	1.0	10.9	8.2	65	727.0	

City of Waverly

MONTHLY MONITORING REPORT

Date: October, 2016

DISCHARGE SERIAL # 001 - # 002

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	DIGESTER CONTENTS					TRICKLING FILTER RECIRC. FLOW MGD	BOD 5 DAY 20 °C								TOTAL SUSPENDED SOLIDS		RAW ph	RAW TEMP. ° F.
		FLOW MGD	TEMP °F	ph	VOL. ACID MG/L	ALKALIN. MG/L		INF. MG/L	INF. LBS/DA Y	INF. PHOS. MG/L	INF. PHOS. LBS/DA Y	INF. TOTAL N (as N) MG/L	INF. TOTAL N (as N) LBS/DA Y	INF. TKN (as N) MG/L	INF. TKN (as N) LBS/DAY	INF. MG/L	INF. LBS/DA Y		
1	Sat.	2.580					-0.42												
2	Sun.	2.470					-0.31												
3	Mon.	2.390	96	7.01	308	2600	-0.23											7.4	62
4	Tues.	2.180	97	7.01			-0.02											7.5	62
5	Wed.	2.140	96	6.97			0.02	62	1099	2.87	51.22	18.60	331.97	12.00	214.17	136	2427	7.3	62
6	Thurs.	2.050	94	6.98			0.11											7.3	62
7	Fri.	1.850	97	7.02	293	2570	0.31	60	926							113	1743	7.2	63
8	Sat.	1.750					0.41												
9	Sun.	1.810					0.35												
10	Mon.	1.750	97	6.98	293	2610	0.41											7.3	63
11	Tues.	1.730	97	6.95			0.43											7.3	63
12	Wed.	1.630	97	6.95			0.53	75	1020	3.33	45.27	23.80	323.54	17.10	232.46	105	1427	7.5	64
13	Thurs.	1.660	97	6.97			0.50											7.5	64
14	Fri.	1.620	97	6.93	285	2640	0.54	66	892							127	1716	7.3	64
15	Sat.	1.560					0.60												
16	Sun.	1.560					0.60												
17	Mon.	1.600	97	7.01	293	2610	0.56											7.5	65
18	Tues.	1.470	97	7.00			0.69											7.4	64
19	Wed.	1.410	97	7.00			0.75	122	1435	3.40	39.98	19.30	226.96	14.50	170.51	180	2117	7.5	64
20	Thurs.	1.420	97	7.02			0.74											7.5	64
21	Fri.	1.340	97	7.03	338	2730	0.82	95	1062							123	1375	7.4	63
22	Sat.	1.170					0.99												
23	Sun.	1.420					0.74												
24	Mon.	1.320	97	7.03	330	2700	0.84											7.5	61
25	Tues.	1.460	97	7.04			0.70	117	1425							132	1607	7.5	61
26	Wed.	1.640	97	7.03			0.52			3.39	46.37	24.30	332.37	17.80	243.46			7.4	61
27	Thurs.	1.740	97	7.05	345	2790	0.42	73	1059							105	1524	7.4	61
28	Fri.	2.250	97	7.05			-0.09											7.4	60
29	Sat.	2.150					0.01												
30	Sun.	1.960					0.20												
31	Mon.	1.810	97	7.04	345	2750	0.35											7.5	59

TOTAL AVERAGE	54.890						12.070	669.6	8917		182.84		1214.83		860.60	1021.0	13936		
MAX	2.580	96.8	7.0				0.389	83.7	1115		45.71		303.71		215.15	127.6	1742	7.4	62.5
MIN	1.170	94.0	6.9				0.990	122.0	1435		51.22		332.37		243.46	180.0	2427	7.5	65.0
							-0.420	60.0	892		39.98		226.96		170.51	105.0	1375	7.2	59.0

7 DAY AVERAGE																			
WEEK 1	2.237						-0.077	60.8	1013		51.22		331.97		214.17	124.5	2085	7.3	62.2
WEEK 2	1.707						0.453	70.5	956		45.27		323.54		232.46	116.0	1572	7.4	62.2
WEEK 3	1.480						0.680	108.5	1248		39.98		226.96		170.51	151.5	1746	7.5	62.2
WEEK 4	1.571						0.589	95.0	1242		45.37		332.37		243.46	118.5	1566	7.4	60.8

Signature: _____
 Certification Number: **3989**

**City of Waverly
MONTHLY MONITORING REPORT**

Date: November, 2016

Facility Number 0990001

DISCHARGE SERIAL # 001 - # 002

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	MGD	GOLF COURSE FLOW	EFF. FLOW MGD	CBOD 5 DAY 20 °C		EFF. PHOS. MG/L	EFF. PHOS. LBS/DA Y	EFF. TOTAL N (as N) MG/L	EFF. TOTAL N (as N) LBS/DA Y	EFF. Cu MG/L	EFF. Cu LBS/DA Y	TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN		EFF. ph	EFF. TEMP. °F.	E. COLI #/100 ML
					EFF. MG/L	EFF. LBS/DAY							EFF. MG/L	EFF. LBS/DA Y	FINAL MG/L	FINAL LBS/DA Y			
1	Tues.			1.760													8.2	61	
2	Wed.			1.620	8	108	2.85	38.51	10.40	140.51	0.0303	0.4094	10	135	<0.50	0	8.2	61	
3	Thurs.			1.610													8.2	61	
4	Fri.			1.570	8	105							14	183	1.00	13	8.2	61	
5	Sat.			1.480															
6	Sun.			1.530															
7	Mon.			1.360													8.2	60	
8	Tues.			1.600													8.3	60	
9	Wed.			1.100	6	55	3.48	31.93	23.70	217.42	0.0324	0.2972	10	92	1.00	9	8.3	59	
10	Thurs.			1.400													8.3	59	
11	Fri.			1.280	6	64							12	128	<0.50	0	8.3	59	
12	Sat.			1.220															
13	Sun.			1.280															
14	Mon.			1.200													8.3	58	
15	Tues.			1.250	7	73							12	125	1.00	10	8.2	58	
16	Wed.			1.210			3.89	39.26	27.00	272.47	0.0315	0.3179					8.2	58	
17	Thurs.			1.310													8.2	58	
18	Fri.			1.180	7	69							10	98	1.00	10	8.2	57	
19	Sat.			1.010															
20	Sun.			1.180															
21	Mon.			1.150	18	173							18	173	6.00	58	8.1	56	
22	Tues.			1.200													8.1	56	
23	Wed.			1.240	11	114	4.32	44.68	30.10	311.28	0.0362	0.3744	18	186	1.00	10	8.0	56	
24	Thurs.			0.980													8.0	56	
25	Fri.			1.180													8.0	56	
26	Sat.			1.040															
27	Sun.			1.310															
28	Mon.			1.220													8.1	57	
29	Tues.			1.250													8.0	57	
30	Wed.			1.210	8	81	3.65	36.83	19.60	197.79	0.0330	0.3330	14	141	1.00	10	8.2	58	

TOTAL AVERAGE	0.0	38.930	79.0	841		191.20		1139.48		1.7319	118.0	1262	12.0	120.5			8.2	58	0.0
MAX	0.0	1.298	8.8	93		38.24		227.90		0.3464	13.1	140	1.7	13.4			8.3	58	0.0
MIN	0.0	1.760	18.0	173		44.68		311.28		0.4094	18.0	186	6.0	57.5			8.3	61	0.0
	0.0	0.980	6.0	55		31.93		140.51		0.2972	10.0	92	1.0	0.0			8.0	56	0.0

7 DAY AVERAGE																			
WEEK 1	0.0	1.561	8.0	106		38.51		140.51		0.4094	12.0	159	1.0	6.5			8.2	61	0.0
WEEK 2	0.0	1.297	6.0	60		31.93		217.42		0.2972	11.0	110	1.0	4.6			8.3	59	0.0
WEEK 3	0.0	1.184	10.7	105		39.26		272.47		0.3179	13.3	132	2.7	25.9			8.2	57	0.0
WEEK 4	0.0	1.167	11.0	114		44.68		311.28		0.3744	18.0	186	1.0	10.3			8.0	56	0.0

**City of Waverly
MONTHLY MONITORING REPORT**

Date: December, 2016

Facility Number 0990001

DISCHARGE SERIAL # 001 - # 002

Note: 0.0 = <MDL of 0.5

		MGD	CBOD 5 DAY 20 °C								TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN					
DAY OF MONTH	DAY OF WEEK	GOLF COURSE FLOW	EFF. FLOW MGD	EFF. MG/L	EFF. LBS/DAY	EFF. PHOS. MG/L	EFF. PHOS. LBS/DAY	EFF. TOTAL N (as N) MG/L	EFF. TOTAL N (as N) LBS/DAY	EFF. Cu MG/L	EFF. Cu LBS/DAY	EFF. MG/L	EFF. LBS/DAY	FINAL MG/L	FINAL LBS/DAY	EFF. pH	EFF. TEMP. °F	E. COLI #/100 ML
1	Thurs.		1.300													8.2	54	
2	Fri.		1.200	9	90							13	130	1.00	10	8.2	54	
3	Sat.		1.180															
4	Sun.		1.310															
5	Mon.		1.270													8.2	52	
6	Tues.		1.190													8.1	52	
7	Wed.		1.210	10	101	3.74	37.74	22.70	229.07	0.0320	0.3229	13	131	<0.50	0	8.1	51	
8	Thurs.		1.220													8.1	51	
9	Fri.		1.170	7	68							10	98	<0.50	0	8.2	51	
10	Sat.		1.100															
11	Sun.		1.070															
12	Mon.		1.080													8.2	50	
13	Tues.		1.070													8.2	49	
14	Wed.		1.130	7	66	3.28	30.91	26.70	251.63	0.0417	0.3930	13	123	<0.50	0	8.2	49	
15	Thurs.		1.130													8.2	48	
16	Fri.		1.150	8	77							11	106	<0.50	0	8.2	48	
17	Sat.		0.930															
18	Sun.		1.010															
19	Mon.		1.120													8.2	48	
20	Tues.		1.150	11	106							13	125	<0.50	0	8.2	49	
21	Wed.		1.170			3.46	33.76	22.80	222.48	0.0784	0.7650					8.2	49	
22	Thurs.		1.130	7	66							15	141	<0.50	0	8.1	49	
23	Fri.		1.050													8.1	49	
24	Sat.		1.040															
25	Sun.		1.330															
26	Mon.		1.280													8.1	49	
27	Tues.		1.280													8.2	49	
28	Wed.		1.120	9	84	2.63	24.57	25.90	241.93	0.0314	0.2933	14	131	<0.50	0	8.1	50	
29	Thurs.		1.170													8.1	50	
30	Fri.		1.190	7	69							12	119	<0.50	0	8.1	50	
31	Sat.		1.090															

TOTAL AVERAGE	0.0	35.840	75.0	727		126.98		945.11		1.7742		114.0	1103	1.0	10.0			0.0
MAX	0.0	1.156	8.3	81		31.75		236.28		0.4436		12.7	123	1.0	1.1	8.2	50	0.0
MIN	0.0	0.930	7.0	66		24.57		222.48		0.2933		10.0	98	1.0	0.0	8.1	48	0.0

7 DAY AVERAGE																		
WEEK 1	0.0	1.237	9.5	95		37.74		229.07		0.3229		13.0	131	1.0	5.0	8.2	53	0.0
WEEK 2	0.0	1.120	7.0	67		30.91		251.63		0.3930		11.5	110	0.0	0.0	8.2	50	0.0
WEEK 3	0.0	1.094	9.5	91		33.76		222.48		0.7650		12.0	115	0.0	0.0	8.2	48	0.0
WEEK 4	0.0	1.176	8.0	75		24.57		241.93		0.2933		14.5	136	0.0	0.0	8.1	49	0.0

**City of Waverly
MONTHLY MONITORING REPORT**

Date: January, 2017

Facility Number 0990001

DISCHARGE SERIAL # 001 - # 002

Note: 0.0 = <MDL of 0.5

		MGD		CBOD 5 DAY 20 °C								TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN				
DAY OF MONTH	DAY OF WEEK	GOLF COURSE FLOW	EFF. FLOW MGD	EFF. MG/L	EFF. LBS/DAY	EFF. PHOS. MG/L	EFF. PHOS. LBS/DA Y	EFF. TOTAL N (as N) MG/L	EFF. TOTAL N (as N) LBS/DA Y	EFF. Cu MG/L	EFF. Cu LBS/DA Y	EFF. MG/L	EFF. LBS/DA Y	FINAL MG/L	FINAL LBS/DA Y	EFF. ph	EFF. TEMP.°F.	E. COLI #/100 ML
1	Sun.		1.070															
2	Mon.		1.190													8.1	49	
3	Tuies		1.130													8.1	49	
4	Wed.		1.080	7	63	2.65	23.87	26.90	242.29	0.0322	0.2900	12	108	<0.50	0	8.2	48	
5	Thurs.		1.100													8.2	48	
6	Fri.		1.050	8	70							14	123	1.00	9	8.5	47	
7	Sat.		1.000															
8	Sun.		1.130															
9	Mon.		1.210													8.3	48	
10	Tuies		1.400													8.3	48	
11	Wed.		1.170	8	78	3.07	29.96	29.80	290.78	0.0402	0.3923	8	78	1.00	10	8.2	48	
12	Thurs.		1.170													8.2	48	
13	Fri.		1.080	9	81							12	108	1.00	9	8.4	49	
14	Sat.		1.020															
15	Sun.		1.140															
16	Mon.		1.320													8.1	50	
17	Tuies		1.200													8.0	50	
18	Wed.		1.210	9	91	3.27	33.00	24.90	251.28	0.0399	0.4026	16	161	1.00	10	8.0	50	
19	Thurs.		1.620													8.0	50	
20	Fri.		1.660	11	152							12	166	1.00	14	8.0	50	
21	Sat.		1.540															
22	Sun.		1.390															
23	Mon.		1.420													8.1	51	
24	Tuies		1.630													8.2	51	
25	Wed.		1.430	7	83	3.14	37.45	21.00	250.45	0.0274	0.3268	12	143	1.00	12	8.1	51	
26	Thurs.		1.570													8.1	51	
27	Fri.		1.370	14	160							11	126	2.00	23	8.2	50	
28	Sat.		1.330															
29	Sun.		1.300															
30	Mon.		1.420													8.2	49	
31	Tuies		1.430													8.2	49	

TOTAL	0.0	39.780	73.0	779		124.27		1034.80		1.4117	97.0	1013	8.0	86.2				0.0
AVERAGE	0.0	1.283	0.0	97		31.07		258.70		0.3529	0.0	127	0.0	10.8		8.2	49	0.0
MAX	0.0	1.660	14.0	160		37.45		290.78		0.4026	16.0	166	2.0	22.9		8.5	51	0.0
MIN	0.0	1.000	7.0	63		23.87		242.29		0.2900	8.0	78	1.0	0.0		8.0	47	0.0

7 DAY AVERAGE																		
WEEK 1	0.0	1.089	7.5	67		23.87		242.29		0.2900	13.0	115	1.0	4.4		8.2	48	0.0
WEEK 2	0.0	1.169	8.5	80		29.96		290.78		0.3923	10.0	93	1.0	9.4		8.3	48	0.0
WEEK 3	0.0	1.384	10.0	122		33.00		251.28		0.4026	14.0	164	1.0	12.0		8.0	50	0.0
WEEK 4	0.0	1.449	10.5	122		37.45		250.45		0.3268	11.5	134	1.5	17.4		8.1	51	0.0

**City of Waverly
MONTHLY MONITORING REPORT**

Date: February, 2017

Facility Number 0990001

DISCHARGE SERIAL # 001 - # 002

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	MGD	GOLF COURSE FLOW	EFF. FLOW MGD	CBOD 5 DAY 20 °C		EFF. PHOS. MG/L	EFF. PHOS. LBS/DA Y	EFF. TOTAL N (as N) MG/L	EFF. TOTAL N (as N) LBS/DA Y	EFF. Cu MG/L	EFF. Cu LBS/DA Y	TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN		EFF. pH	EFF. TEMP. °F	E. COLI #/100 ML
					EFF. MG/L	EFF. LBS/DAY							EFF. MG/L	EFF. LBS/DA Y	FINAL MG/L	FINAL LBS/DA Y			
1	Wed.			1.260	6	63	3.43	36.04	24.00	252.20	0.0255	0.2680	10	105	1.00	11	8.1	49	
2	Thurs.			1.290													8.1	49	
3	Fri.			1.210	7	71							8	81	1.00	10	8.1	48	
4	Sat.			1.170															
5	Sun.			1.180															
6	Mon.			1.310													8.1	48	
7	Tues.			1.220													8.1	48	
8	Wed.			1.160	6	58	3.22	31.15	25.20	243.79	0.0426	0.4121	14	135	<0.50	0	8.1	48	
9	Thurs.			1.180													8.1	48	
10	Fri.			1.180	8	79							13	128	<0.50	0	8.2	49	
11	Sat.			1.190															
12	Sun.			1.220															
13	Mon.			1.260													8.2	50	
14	Tues.			1.240													8.1	51	
15	Wed.			1.300	9	98	3.52	38.16	29.40	318.75	0.0317	0.3437	13	141	<0.50	0	8.2	51	
16	Thurs.			1.320													8.2	51	
17	Fri.			1.340	8	89							17	190	<0.50	0	8.1	52	
18	Sat.			1.340															
19	Sun.			1.430															
20	Mon.			1.870													8.1	53	
21	Tues.			1.970													8.1	53	
22	Wed.			2.300	8	153	3.77	72.32	26.20	502.57	0.0220	0.4220	12	230	<0.50	0	8.1	52	
23	Thurs.			2.460													8.1	52	
24	Fri.			2.290	8	153							17	325	<0.50	0	8.1	52	
25	Sat.			1.990															
26	Sun.			1.710															
27	Mon.			1.770													8.0	49	
28	Tues.			1.700													8.1	49	
				0.000															
				0.000															
				0.000															

TOTAL AVERAGE	0.0	41.860	60.0	764		177.68		1317.32		1.4458	104.0	1335	2.0	20.6					0.0
MAX	0.0	1.350	7.5	95		44.42		329.33		0.3614	13.0	167	1.0	2.6			8.1	50	0.0
MIN	0.0	2.460	9.0	153		72.32		502.57		0.4220	17.0	325	1.0	10.5			8.2	53	0.0
	0.0	0.000	6.0	58		31.15		243.79		0.2680	8.0	81	1.0	0.0			8.0	48	0.0

7 DAY AVERAGE																			
WEEK 1	0.0	1.234	6.5	67		36.04		252.20		0.2680	9.0	93	1.0	10.3			8.1	48	0.0
WEEK 2	0.0	1.204	7.0	68		31.15		243.79		0.4121	13.5	132	0.0	0.0			8.1	49	0.0
WEEK 3	0.0	1.510	8.5	93		38.16		318.75		0.3437	15.0	165	0.0	0.0			8.1	52	0.0
WEEK 4	0.0	2.031	8.0	153		72.32		502.57		0.4220	14.5	277	0.0	0.0			8.1	51	0.0

City of Waverly
MONTHLY MONITORING REPORT

Date: March, 2017

Facility Number 0990001

DISCHARGE SERIAL # 001 - # 002

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	MGD	GOLF COURSE FLOW	EFF. FLOW MGD	CBOD 5 DAY 20 °C		EFF. PHOS. MG/L	EFF. PHOS. LBS/DA Y	EFF. TOTAL N (as N) MG/L	EFF. TOTAL N (as N) LBS/DA Y	EFF. Cu MG/L	EFF. Cu LBS/DA Y	TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN		EFF. ph	EFF. TEMP.°F.	E. COLI #/100 ML
					EFF. MG/L	EFF. LBS/DAY							EFF. MG/L	EFF. LBS/DA Y	FINAL MG/L	FINAL LBS/DA Y			
1	Wed.			1,710	9	128	2.70	38.51	17.40	248.15	0.0334	0.4763	18	257	<0.50	0	8.1	49	
2	Thurs.			1,680													8.1	49	
3	Fri.			1,650	8	110							17	234	<0.50	0	8.2	50	
4	Sat.			1,550															
5	Sun.			1,570															
6	Mon.			1,700													8.2	52	
7	Tues.			1,770													8.1	52	
8	Wed.			1,970	7	115	3.95	64.90	19.50	320.38	0.0325	0.5340	15	246	<0.50	0	8.2	51	
9	Thurs.			2,050													8.2	50	
10	Fri.			1,830	5	76							14	214	<0.50	0	8.2	50	
11	Sat.			1,640															
12	Sun.			1,680															
13	Mon.			1,530													8.2	49	
14	Tues.			1,550	8	103							15	194	<0.50	0	8.2	49	
15	Wed.			1,470													8.2	50	
16	Thurs.			1,540													8.2	50	
17	Fri.			1,490	8	99	2.51	31.19	25.10	311.91	0.0265	0.3293	12	149	1.00	12	8.2	51	
18	Sat.			1,490															
19	Sun.			1,520															
20	Mon.			1,440													8.2	52	
21	Tues.			1,460													8.2	52	
22	Wed.			1,410	6	71	3.10	36.45	25.70	302.22	0.0309	0.3634	10	118	1.00	12	8.2	51	
23	Thurs.			1,430													8.2	52	
24	Fri.			1,410	7	82							11	129	<0.50	0	8.2	52	
25	Sat.			1,460															
26	Sun.			1,510															
27	Mon.			1,520													8.2	52	
28	Tues.			1,540													8.2	52	
29	Wed.			1,710	6	86	3.67	52.34	22.70	323.73	0.0281	0.4007	11	157	<0.50	0	8.1	52	
30	Thurs.			1,760													8.1	52	
31	Fri.			1,610	5	67							11	148	<0.50	0	8.1	52	

TOTAL AVERAGE MAX MIN	49.650	69.0	938	223.39	1506.39	2.1037	134.0	1845	<0.50	24.2			
	1.602	6.9	94	44.68	301.28	0.4207	13.4	185	<0.50	2.4	8.2	51	
	2.050	9.0	128	64.90	323.73	0.5340	18.0	257	1.0	12.4	8.2	52	
	1.410	5.0	67	31.19	248.15	0.3293	10.0	118	1.0	0.0	8.1	49	

7 DAY AVERAGE													
WEEK 1	1.661	8.5	119	38.51	248.15	0.4763	17.5	245	<0.50	0.0	8.1	50	
WEEK 2	1.750	6.7	98	64.90	320.38	0.5340	14.7	218	<0.50	0.0	8.2	50	
WEEK 3	1.487	8.0	99	31.19	311.91	0.3293	12.0	149	1.0	12.4	8.2	51	
WEEK 4	1.469	6.5	76	36.45	302.22	0.3634	10.5	123	1.0	5.9	8.2	52	

City of Waverly

MONTHLY MONITORING REPORT

Date: April, 2017

DISCHARGE SERIAL # 001 - # 002

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	DIGESTER CONTENTS					TRICKLING FILTER RECIRC. FLOW MGD	BOD 5 DAY 20 °C								TOTAL SUSPENDED SOLIDS		RAW ph	RAW TEMP. ° F.	
		FLOW MGD	TEMP °F	ph	VOL. ACID MG/L	ALKALIN. MG/L		INF. MG/L	INF. LBS/DA Y	INF. PHOS. MG/L	INF. PHOS. LBS/DA Y	INF. TOTAL N (as N) MG/L	INF. TOTAL N (as N) LBS/DA Y	INF. TKN (as N) MG/L	INF. TKN (as N) LBS/DAY	INF. MG/L	INF. LBS/DA Y			
1	Sat.	1.610					0.55													
2	Sun.	1.620					0.54													
3	Mon.	2.320	98	6.88	308	2140	-0.16												7.5	51
4	Tues.	2.120	97	6.89			0.04												7.5	51
5	Wed.	1.970	98	6.87			0.19	97	1594	4.00	65.72	21.30	349.95	13.10	215.23	171	2809	7.5	51	
6	Thurs.	1.900	98	6.89			0.26												7.4	51
7	Fri.	1.860	97	6.91	278	1830	0.30	116	1799							187	2901	7.4	51	
8	Sat.	1.730					0.43													
9	Sun.	1.790					0.37													
10	Mon.	1.740	97	6.88	293	1890	0.42												7.4	52
11	Tues.	1.630	98	6.87			0.53	102	1387	5.44	73.95	24.30	330.34	13.50	183.52	187	2542	7.5	52	
12	Wed.	1.650	97	6.87			0.51												7.5	52
13	Thurs.	1.700	97	6.86	285	1870	0.46									180	2552	7.4	52	
14	Fri.	1.710	97	6.90			0.45	119	1697										7.4	52
15	Sat.	1.670					0.49													
16	Sun.	1.690					0.47													
17	Mon.	1.700	97	6.89	300	1900	0.46												7.5	52
18	Tues.	1.720	97	6.90			0.44												7.5	52
19	Wed.	1.830	97	6.90			0.33	83	1267	4.13	63.03	23.40	357.14	15.30	233.51	173	2640	7.5	52	
20	Thurs.	2.010	97	6.89			0.15												7.5	52
21	Fri.	1.930	97	6.87	293	1880	0.23	100	1610							175	2817	7.5	52	
22	Sat.	1.580					0.58													
23	Sun.	1.900					0.26													
24	Mon.	1.840	97	6.88	308	2000	0.32												7.5	53
25	Tues.	1.820	97	6.90			0.34												7.5	53
26	Wed.	1.610	97	6.87			0.55	94	1262	5.02	67.41	21.20	284.66	13.40	179.93	167	2242	7.5	53	
27	Thurs.	1.470	97	6.88			0.69												7.5	52
28	Fri.	1.790	97	6.87	293	1700	0.37	90	1344							149	2224	7.5	52	
29	Sat.	1.530					0.63													
30	Sun.	1.810					0.35													

TOTAL AVERAGE	53.250						11.550	801.0	11959		270.11		1322.09		812.19	1389.0	20728		
MAX	1.775	97.2	6.9				0.385	100.1	1495		67.53		330.52		203.05	173.6	2591	7.5	51.9
MIN	2.320	98.0	6.9				0.690	119.0	1799		73.95		357.14		233.51	187.0	2901	7.5	53.0
	1.470	97.0	6.9				-0.160	83.0	1262		63.03		284.66		179.93	149.0	2224	7.4	51.0

7 DAY AVERAGE																				
WEEK 1	1.914						0.246	106.5	1697		65.72		349.95		215.23	179.0	2855	7.5	51.0	
WEEK 2	1.707						0.453	110.5	1542		73.95		330.34		183.52	183.5	2547	7.4	51.0	
WEEK 3	1.793						0.367	91.5	1438		63.03		357.14		233.51	174.0	2729	7.5	51.0	
WEEK 4	1.716						0.444	92.0	1303		67.41		284.66		179.93	158.0	2233	7.5	52.6	

Signature: _____

Certification Number: 3989

City of Waverly
MONTHLY MONITORING REPORT
DISCHARGE SERIAL # 001 - # 002

Date: May, 2017

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	MGD	GOLF COURSE FLOW	EFF. FLOW MGD	CBOD 5 DAY 20 °C		EFF. PHOS. MGL	EFF. PHOS. LBS/DA Y	EFF. TOTAL N (as N) MGL	EFF. TOTAL N (as N) LBS/DA Y	EFF. Cu MGL	EFF. Cu LBS/DA Y	TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN		EFF. ph	EFF. TEMP.°F.	E. COLI #/100 ML
					EFF. MGL	EFF. LBS/DAY							EFF. MGL	EFF. LBS/DA Y	FINAL MGL	FINAL LBS/DA Y			
1	Mon.			1.940													8.2	53	
2	Tues.			1.770													8.3	53	
3	Wed.			1.850	4	62	3.10	47.83	15.40	237.61	0.0225	0.3472	10	154	<0.50	0	8.2	54	2.00
4	Thurs.			1.760													8.2	54	
5	Fri.			1.820	4	61							3	46	<0.50	0	8.2	55	
6	Sat.			1.610															
7	Sun.			1.670															
8	Mon.			1.570													8.2	56	
9	Tues.			1.620													8.3	56	
10	Wed.			1.640	3	41	4.23	57.86	15.20	207.90	0.0213	0.2913	16	219	<0.50	0	8.2	56	<1.00
11	Thurs.			1.520													8.2	57	
12	Fri.			1.470	3	37							7	86	<0.50	0	8.2	57	
13	Sat.			1.380															
14	Sun.			1.410															
15	Mon.			1.540													8.2	58	
16	Tues.			1.510													8.2	58	
17	Wed.			1.600	3	40	4.22	56.31	21.50	286.90	0.0216	0.2882	7	93	<0.50	0	8.2	58	<1.00
18	Thurs.			1.640													8.2	58	
19	Fri.			1.720	3	43							6	86	<0.50	0	8.3	57	
20	Sat.	0.3600		1.310															
21	Sun.	0.3600		1.370															
22	Mon.	0.3600		1.380															
23	Tues.	0.3600		1.470	4	49							8	98	<0.50	0	8.3	56	
24	Wed.	0.3600		1.430			3.49	41.62	18.50	220.63	0.0198	0.2361					8.3	56	3.10
25	Thurs.	0.3600		1.380	4	46							8	92	<0.50	0	8.2	57	
26	Fri.	0.3600		1.340													8.2	57	
27	Sat.	0.3600		1.280															
28	Sun.	0.3600		1.050															
29	Mon.	0.3600		1.220													8.3	58	
30	Tues.	0.3600		1.140													8.3	58	
31	Wed.	0.3600		1.110	4	37	3.60	33.33	20.00	185.15	0.0213	0.1972	9	83	<0.50	0	7.0	58	1.00

TOTAL AVERAGE	4.3	46.520	32.0	415		236.95		1138.18		1.3600	74.0	957	0.0	0.0			8.2	56	6.1
MAX	0.0	1.501	3.6	46		47.39		227.64		0.2720	8.2	106	0.0	0.0			8.2	56	2.0
MIN	0.4	1.940	4.0	62		57.86		286.90		0.3472	16.0	219	0.0	0.0			8.3	58	3.1
	0.4	1.050	3.0	37		33.33		185.15		0.1972	3.0	46	0.0	0.0			7.0	53	1.0

7 DAY AVERAGE																			
WEEK 1	0.0	1.774	4.0	61		47.83		237.61		0.3472	6.5	100	0.0	0.0			8.2	54	2.0
WEEK 2	0.0	1.516	3.0	39		57.86		207.90		0.2913	11.5	152	0.0	0.0			8.2	56	<1.0
WEEK 3	0.4	1.527	3.0	42		56.31		286.90		0.2882	6.5	90	0.0	0.0			8.2	58	<1.0
WEEK 4	0.4	1.333	4.0	48		41.62		220.63		0.2361	8.0	95	0.0	0.0			8.3	56	3.1

City of Waverly
MONTHLY MONITORING REPORT
DISCHARGE SERIAL # 001 - # 002

Date: June, 2017

Facility Number 0990001

Note: 0.0 = <MDL of 0.5

DAY OF MONTH	DAY OF WEEK	MGD	GOLF COURSE FLOW	EFF. FLOW MGD	CBOD 5 DAY 20 °C		EFF. PHOS. MG/L	EFF. PHOS. LBS/DA Y	EFF. TOTAL N (as N) MG/L	EFF. TOTAL N (as N) LBS/DA Y	EFF. Cu MG/L	EFF. Cu LBS/DA Y	TOTAL SUSPENDED SOLIDS		AMMONIA NITROGEN		EFF. ph	EFF. TEMP.°F.	E. COLI #/100 ML
					EFF. MG/L	EFF. LBS/DAY							EFF. MG/L	EFF. LBS/DA Y	FINAL MG/L	FINAL LBS/DA Y			
1	Thurs.			1.500													8.3	58	
2	Fri.			1.340	4	45							8	89	<0.50	0	8.2	58	
3	Sat.			1.290															
4	Sun.			1.350															
5	Mon.			1.340													8.2	60	
6	Tues.			1.310													8.3	60	
7	Wed.			1.290	3	32	4.81	51.75	19.90	214.10	0.0277	0.2980	10	108	<0.50	0	8.3	61	
8	Thurs.			1.320													8.3	62	
9	Fri.			1.270	4	42							11	117	<0.50	0	8.2	63	
10	Sat.			1.160															
11	Sun.			1.260															
12	Mon.			1.380													8.3	65	
13	Tues.	0.2618		1.098													8.3	65	
14	Wed.	0.2596		0.990	3	25	4.55	37.58	21.40	176.76	0.0218	0.1801	9	74	<0.50	0	8.2	65	
15	Thurs.	0.2700		1.100													8.2	65	
16	Fri.	0.3665		1.100	4	30							7	52	<0.50	0	8.2	64	
17	Sat.			1.180															
18	Sun.			1.170															
19	Mon.			1.250													8.2	62	
20	Tues.			1.190													8.2	63	
21	Wed.			1.270	4	42	3.60	38.13	24.80	262.68	0.0134	0.1419	7	74	<0.50	0	8.1	63	
22	Thurs.			1.680													8.1	63	
23	Fri.			1.390	7	81							10	116	<0.50	0	8.1	62	
24	Sat.			1.230															
25	Sun.			1.250															
26	Mon.			1.230													8.1	61	
27	Tues.			1.270													8.2	61	
28	Wed.			1.360	7	79	2.63	29.83	18.80	213.24	0.0254	0.2881	7	79	1.00	11	8.1	62	
29	Thurs.			1.570													8.1	62	
30	Fri.			1.380	7	81							6	69	1.00	12	8.2	62	

TOTAL AVERAGE	1.2	38.312	43.0	457			157.29			866.77		0.9081	75.0	779	2.0	22.9			0.0
MAX	0.3	1.277	4.8	51			39.32			216.69		0.2270	8.3	87	1.0	2.5	8.2	62	0.0
MIN	0.4	1.680	7.0	81			51.75			262.68		0.2980	11.0	117	1.0	11.5	8.3	65	0.0
	0.3	0.894	3.0	25			29.83			176.76		0.1419	6.0	52	1.0	0.0	8.1	58	0.0

7 DAY AVERAGE																			
WEEK 1	0.0	1.346	3.5	38			51.75			214.10		0.2980	9.0	98	0.0	0.0	8.3	59	0.0
WEEK 2	0.3	1.211	3.5	34			37.58			176.76		0.1801	10.0	95	0.0	0.0	8.3	64	0.0
WEEK 3	0.3	1.151	4.0	36			38.13			262.68		0.1419	7.0	63	0.0	0.0	8.2	63	0.0
WEEK 4	0.0	1.344	7.0	80			29.83			213.24		0.2881	8.5	98	1.0	5.7	8.1	62	0.0

City of Waverly
Department of Public Works
FY 2016-17

STORM AND SANITARY SEWER LINE MAINTENANCE

The Storm/Sanitary Sewer Maintenance Division was established in FY 1990-91. Its function is to maintain the sewer systems and assist the Street, WPC, and Water Divisions as needed with major projects. Its purpose is two-fold: to establish an effective annual maintenance program to control long-term upkeep costs and to establish a more efficient operation of our sewer systems. This will utilize the budgeted money more efficiently, reduce waste water treatment costs, and upgrade instead of maintain our storm/sanitary sewers.

The following is a brief overview of some projects during FY 2016-17. This is not a total summary, but does give an idea of the versatility of this division and the expertise required. Several hundred feet of sanitary sewers were televised. Several problem areas are being scheduled for repair or replacement as time and funds become available.

FUTURE PROJECTS

1. Complete an inventory and inspection report of all sanitary and storm sewer structures and place into a computerized Storm/Sanitary Sewer Maintenance program.
2. Continue upgrade of existing sanitary manholes to decrease infiltration problems.
3. Continue work on storm sewer intakes and catch basins and replace old brick structures with poured concrete structures.
4. Continue televising of sewer lines to locate problem areas.
5. Continue cleaning and maintaining storm and sanitary sewer lines.

AREA OF CONCERN

1. Infiltration and inflow problems must continue to be addressed with some major financing.
2. Tree roots in sanitary sewer lines.
3. Undersized storm water collection system.

Storm and Sanitary Sewer Line Maintenance

Fiscal Year 2016-17

	<u>2015-16*</u>	<u>2016-17</u>	<u>2017-18</u>	<u>2018-19</u>	<u>2019-20</u>
<u>Sanitary Sewer Maintenance</u>					
Lines Flushed	25,182	97,579			Feet
Manholes Cleaned		217			Each
<u>Storm Sewer Maintenance</u>					
Lines Flushed		384			Feet
Intakes & MH Cleaned		28			Each
<u>Televising Lines</u>					
Sanitary Sewer	2,405	8,707			Feet
Storm Sewer		33			Feet
<u>Jetting Sewer Mains</u>					
Water Used	26,500	260,937			Gallons
<u>Lines Repaired</u>					
Sanitary Sewer		1			Each
Storm Sewer		3			Each
<u>Intakes Repaired</u>					
		0			Each
<u>Manholes Repaired</u>					
		2			Each
<u>Sewer Call-Outs</u>					
<i>During & after hours</i>		27			Each
<u>IA One Call Locates</u>					
	3,575	3,093			Each
<u>Other Division Work</u>					
Streets - Snow Plowing		69.8			Hours
Water - Leak Repairs		126.7			Hours
WPC - Lift Stations		19.6			Hours
Leisure Serv. - Cem. Graves	8	1			Each
Leisure Serv. - Golf Course		0			Hours
Engineering - Inspections		1			Hours

Miscellaneous:

Cleaned Dry Run at Bowling Alley. Readied pumps for flood situation on 9/24/16.

Sink holes repaired on Cedar River Drive & Bike Trail. Televised Eastgate Force Main.

Vacuumed pits & cleaned drains at: Pool, Ambulance garage, Law Center, WPC,

Water Dept. & Public Services bldg.

**For 2015-16 the Line Maintenance crew did not keep good records; hence the many blanks.*

City of Waverly
Department of Public Works
FY 2016-17

SOLID WASTE

Recycling

Voluntary Drop-Off Program
Curbside Collection Program

Refuse Collection

Residential
Commercial
Yard Waste – Drop-Off Site

Refuse Container (Dumpster)

Repair

Special Collections

Waverly Horse Sale – Fall & Spring
Chamber – Agriculture Appreciation Day
Bremer County Fair
Special Collection Weeks – Spring
Other Special Events

The Solid Waste Division collects refuse once a week from residential customers and up to five days per week from commercial. Garbage to be pickup in the City of Waverly needs to be in a City-owned garbage container or dumpster. Residential customers are able to rent a 35- or 65-gallon City-owned garbage container. Commercial customers can use either a City dumpster or a city-owned garbage container. Curbside recycling runs every other week. The average stops per day is 243. It is a one-man operation, which one refuse collector runs each month. Consideration needs to be given to weekly curbside recycling.

The Recycling Center is open Monday through Friday from 7:00 a.m. to 5:30 p.m. and from 8:00 a.m. to 4:00 p.m. on Saturdays. Local civil volunteer groups, when available, continue to work during Recycling Saturdays as a community service.

Two part-time employees operate the Recycling Center each day, each working half a day, including each Saturday. There is a total of four part-time employees who work in the center. The average number of cars through the center each day is 125.

Yard Waste Site

Along with the Recycling Center, the City also operates a Yard Waste Site from April through November. Four part-time employees also operate the Yard Waste Site. Leaves, grass clippings, garden waste, trees, and branches are accepted at no charge. Appliances, furniture, tires, and carpeting are also collected here for a fee while it is open.

City of Waverly – Public Works
Solid Waste Division
Recycling Statistics
FY 2016-17

Recycling Center Car Count

Total: 37,984 Daily Average: 125

Recycling Saturday Car Count

Total: 8,858 Monthly Average: 738

Curbside Recycling Stops

Total: 31,606 Monthly Average: 2,634

Total Weight of the Recycled Products from the Recycling Center and Curbside Recycling Route: 1,032 tons

Total Weight of the Recycled Products from the Curbside Recycling Route:
728,840 pounds (364 tons)

Revenue from the recycled products plus used oil: \$35,492.14

Estimated cost for recycling program:

1. \$55,000 in wages for part-time employees at the Recycling Center and the Yard Waste Site, full-time employees doing the curbside route and hauling product to Republic Services (north of Cedar Falls)
2. \$15,000 to \$20,000 in utilities, building maintenance, equipment, fuel, and contracted work.

Other items or material recycled by the City of Waverly:

- 5-10 tons of steel, old sewer castings, signs, poles, plow blades, and miscellaneous pieces
- 39 tires
- 524 appliances
- 2,725 gallons of oil
- 444 electronics (computers, televisions, monitors, and printers)

Yard Waste Site car count:

(July - Nov 2016 and March – June 2017): 25,010

Monthly average: 2,501

Busiest months were October and November 2016

422 tons of yard waste were turned into compost.

2,857 tons of brush and trees were ground up to make wood mulch.

City of Waverly - Public Works
Solid Waste Division
Employee Hours

FY 2016-17

<u>Refuse Collections</u>	<u>Hours</u>
Residential	<u>2,741</u>
Commercial	<u>2,582</u>
Black Hawk Co. Landfill	<u>738</u>
Temporary Dumpsters	<u>359</u>
Corrugated Collection	<u>368</u>
Curbside Recycling Pick-up	<u>983</u>
Recycle Center Duties	<u>307</u>
Building/Vehicle/Dumpster Maintenance	<u>463</u>
Misc. Activity (training, etc)	<u>18</u>
<u>Other Divisions</u>	
Street Division	
Snow Plowing & Removal	<u>179</u>
Other (Patching, Mowing, Tree Trimming, Etc)	<u>129</u>
Water Division Projects	<u>0</u>
Sewer Maintenance Projects	<u>0</u>
Leisure Service Depts Projects	<u>46</u>

City of Waverly - Public Works
Solid Waste Division

Car Counts
Recycling Center & Yard Waste Site
FY 2016-17

Recycling Center

Month	# of Days	Mornings			Afternoons		Monthly Total	Daily Average
		7a-12:30p	Saturdays	% of Total	12:30-5:30p	% of Total		
July '16	25	1,186	711	61%	1,212	39%	3,109	124
Aug '16	27	1,143	619	58%	1,252	42%	3,014	112
Sep '16	26	1,045	579	58%	1,169	42%	2,793	107
Oct '16	26	966	776	56%	1,350	44%	3,092	119
Nov '16	26	1,161	811	61%	1,268	39%	3,240	125
Dec '16	24	1,304	669	58%	1,418	42%	3,391	141
Jan '17	24	1,069	736	62%	1,106	38%	2,911	121
Feb '17	24	961	795	61%	1,106	39%	2,862	119
Mar '17	27	1,056	693	59%	1,208	41%	2,957	110
Apr '17	24	994	963	63%	1,169	37%	3,126	130
May '17	26	1,414	776	59%	1,524	41%	3,714	143
Jun '17	26	1,513	730	59%	1,532	41%	3,775	145
Total							37,984	1,497
Average								125

Recycling Center - Car Count History

Fiscal Year	2012-13	2013-14	2014-15	2015-16	2016-17
Weekdays	21,044	25,449	23,953	27,733	29,126
Saturdays	7,171	8,110	7,968	8,479	8,858
Totals	28,215	33,559	31,921	36,212	37,984

Yard Waste Site - Car Count History

Fiscal Year	2012-13	2013-14	2014-15	2015-16	2016-17
Totals	18,362	21,663	22,521	23,400	25,010

City of Waverly - Public Works

Solid Waste Division

Curbside Recycling

Number of Residential/Commercial Stops

FY 2016-17

<u>Week Beginning</u>	<u>Mon</u>	<u>Tues</u>	<u>Wed</u>	<u>Thurs</u>	<u>Fri</u>	<u>Weekly Totals</u>	<u>Total</u>
07/04/16	264	198	261	296	218	1,237	
07/25/16	275	200	276	285	211	1,247	2,484
08/01/16	220	239	300	348	254	1,361	
08/15/16	323	237	281	360	281	1,482	
08/29/16	336	253	304	320	237	1,450	4,293
09/12/16	283	232	294	344	223	1,376	
09/26/16	299	231	301	341	264	1,436	2,812
10/10/16	306	239	207	305	238	1,295	
10/24/16	291	266	286	293	269	1,405	2,700
11/07/16	172	139	222	317	215	1,065	
11/21/16	324	221	276	276	245	1,342	2,407
12/06/16	295	234	278	308	219	1,334	
12/19/16	283	230	263	279	210	1,265	2,599
01/03/17	194	308	262	344	263	1,371	
01/17/17	327	215	258	266	210	1,276	
01/30/17	256	216	281	317	228	1,298	3,945
02/13/17	295	260	291	328	240	1,414	
02/27/17	262	204	242	271	180	1,159	2,573
03/13/17	179	141	252	335	246	1,153	
03/27/17	289	242	279	271	210	1,291	2,444
04/10/17	227	226	264	334	245	1,296	
04/24/17	251	228	254	298	220	1,251	2,547
05/08/17	257	274	262	334	245	1,372	
05/22/17	247	308	271	257	205	1,288	2,660
06/05/17	288	253	255	271	245	1,312	
06/19/17	247	300	278	279	210	1,314	2,626

Total for the FY 2016-17 **31,606**

Average Daily Stops 243

City of Waverly - Public Works
Solid Waste Division
Recycling Quantities
FY 2016-17

Sorted Recycling Collected at Recycling Center

		July	Aug	Sept	Oct	Nov	Dec*	Jan	Feb	March	April	May	June	TOTAL
Paper, Bond	lbs.	5,240	9,100	2,660	4,280	3,440	3,280	8,280	3,800	5,500	4,300	4,580	4,180	58,640
Slick Paper / Magazines	lbs.	8,480	16,640	7,200	5,840	5,640	5,660	14,140	4,560	5,520	7,540	8,580	10,940	100,740
Newsprint	lbs.	11,940	11,280	5,040	12,280	19,240	12,920	10,120	7,240	11,080	8,940	9,020	10,260	129,360
Corrugation/Chipboard	lbs.	71,180	79,180	76,940	72,360	80,700	72,940	72,220	65,560	73,580	73,200	80,940	76,260	895,060
#3, 4, 5, 6, 7 Plastics	lbs.	10,760	4,660	10,040	7,040	4,560	2,460	9,740	4,020	3,200	5,640	10,000	5,220	77,340
Steel / Alum	lbs.	2,620	1,540	1,100	1,320	2,600	2,460	3,180	1,500	220	80	180	100	16,900
Clear Glass	lbs.	5,000	4,420	5,280	4,840	8,420	4,360	4,560	4,600	3,960	3,540	4,240	4,740	57,960
Totals - Sorted Recycling		115,220	126,820	108,260	107,960	124,600	104,080	122,240	91,280	103,060	103,240	117,540	111,700	1,336,000
<i>*City started getting charged by Republic Services for taking glass; City now takes to City of Cedar Falls and they recycle at no cost to us.</i>													Total Tons	668

Commingled Recycling Picked up Curbside

		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	TOTAL
Totals - Commingled Recycling	lbs.	51,180	69,640	57,000	57,900	64,240	45,680	67,760	52,060	60,320	57,120	73,080	72,860	728,840
<i>Aluminum, Cardboard, Slick Paper, Newspapers, Bond Paper, Plastics & Metal Cans</i>													Total Tons	364

TOTAL RECYCLING

		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	TOTAL
TOTALS - Sorted & Commingled Recycling	lbs.	166,400	196,460	165,260	165,860	188,840	149,760	190,000	143,340	163,380	160,360	190,620	184,560	2,064,840
													Total Tons	1,032

Motor Oil Collected at Recycling Center

		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	TOTAL
Motor Oil	gal.	175	325	150	50	250	150	100	550	450	225	100	200	2,725

Styrofoam Collected at Recycling Center

		July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	TOTAL
Styrofoam	<i>Records were not kept, but Brian Sullivan thinks about 8 cy of Styrofoam is taken to Cedar Falls about every 2 weeks. Will start keeping records.</i>													-

In August 2015 the City of Cedar Falls agreed to accept white Styrofoam from Waverly. Cedar Falls has the capability to density Styrofoam.

**City of Waverly - Public Works
Solid Waste Division
Solid Waste and Recycling Revenues
FY 2016-17**

Date	Solid Waste				Recyclables Collected at Recycling Center					TOTAL SOLID WASTE & RECYCLABLE REVENUE
	Utility Billing	Sticker Sales	Temp. Dumpsters & Misc.	Total Solid Waste Revenue	Paper Products	Steel & Aluminum	Plastic	Used Oil	Total Recyclable Revenue	
Jul-16	110,203.35	975.00	242.58	111,420.93	1,676.42	25.50	188.30		1,890.22	113,311.15
Aug-16	109,596.74	4,881.00	145.00	114,622.74	2,255.99	35.70	34.95		2,326.64	116,949.38
Sep-16	111,191.34	0.00	466.20	111,657.54	2,050.90	0.00	75.30		2,126.20	113,783.74
Oct-16	112,573.17	2,051.50	325.00	114,949.67	2,133.95	16.00	52.80		2,202.75	117,152.42
Nov-16	111,521.13	209.00	950.00	112,680.13	2,688.44	10.00	-11.40		2,687.04	115,367.17
Dec-16	111,288.20	1,176.00	125.00	112,589.20	2,382.31	0.00	-59.75		2,322.56	114,911.76
Jan-17	109,363.47	2,149.00	100.00	111,612.47	2,498.96	66.00	-97.40		2,467.56	114,080.03
Feb-17	109,156.39	1,190.00	100.00	110,446.39	2,883.25	0.00	-15.07		2,868.18	113,314.57
Mar-17	109,872.01	975.00	176.34	111,023.35	4,656.21	22.00	-24.00		4,654.21	115,677.56
Apr-17	110,257.17	146.25	750.00	111,153.42	4,374.33	8.00	-42.30		4,340.03	115,493.45
May-17	111,903.87	2,354.00	279.20	114,537.07	3,880.27	18.00	-125.00		3,773.27	118,310.34
Jun-17	110,208.26	1,116.50	252.84	111,577.60	3,888.73	10.00	-65.25		3,833.48	115,411.08
TOTALS	1,327,135.10	17,223.25	3,912.16	\$ 1,348,270.51	35,369.76	211.20	-88.82	0.00	35,492.14	\$ 1,383,762.65
Received from Black Hawk County Landfill to assist with funding of recycling & waste reduction										\$ 3,466.64
TOTAL REVENUES										\$ 1,387,229.29

In March 2014 the City of Waverly began to accept commingled recyclables from the curb. The City entered into an agreement with Rite Environment to accept our commingled recyclables at \$17.50/ton. (Landfill charge is \$33.25/ton.) Rite Environmental's rate increased to \$112.50/ton in early 2016. The City then entered into an agreement with Cedar Valley Recycling on March 21, 2016, at \$12/ton. The revenues collected for recycling are only from the sorted material that is collected at the Recycling Center.

City of Waverly - Public Works

Solid Waste Division

Landfill Disposal Quantities

FY 2016-17

		2012-13	2013-14	2014-15	2015-16	2016-17
		Tons	Tons	Tons	Tons	Tons
July	<i>Residential:</i>	124.12	102.49	158.17	163.76	140.32
	<i>Commercial:</i>	186.55	197.63	199.22	204.42	182.66
		310.7	300.1	357.4	368.2	323.0
August	<i>Residential:</i>	127.4	144.43	111.16	146.22	168.91
	<i>Commercial:</i>	183.58	226.89	186.66	198.73	250.92
		311.0	371.3	297.8	345.0	419.8
September	<i>Residential:</i>	107.27	136.37	128.83	135.54	160.31
	<i>Commercial:</i>	191.05	173.7	155.88	222.66	268.05
		298.3	310.1	284.7	358.2	428.4
October	<i>Residential:</i>	122.7	114.26	130.03	152.11	139.67
	<i>Commercial:</i>	212.43	224.65	246.25	216.92	232.5
		335.1	338.9	376.3	369.0	372.2
November	<i>Residential:</i>	112.57	137.75	132.54	146.87	148.88
	<i>Commercial:</i>	194.81	192.28	178.65	208.55	224.95
		307.4	330.0	311.2	355.4	373.8
December	<i>Residential:</i>	103.44	119.01	155.2	140.09	145.38
	<i>Commercial:</i>	140.49	185.39	204.38	213.52	204.83
		243.9	304.4	359.6	353.6	350.2
January	<i>Residential:</i>	140.4	152.42	146.17	124.32	144.19
	<i>Commercial:</i>	88.79	145.97	180.99	170.93	204.74
		229.2	298.4	327.2	295.3	348.9
February	<i>Residential:</i>	92.34	100.5	114.4	125.26	123.59
	<i>Commercial:</i>	131.21	177.45	166.41	202.23	189.45
		223.6	278.0	280.8	327.5	313.0
March	<i>Residential:</i>	115.31	112.61	185.93	121.91	152.79
	<i>Commercial:</i>	188.59	196.4	188.14	210.67	217.11
		303.9	309.0	374.1	332.6	369.9
April	<i>Residential:</i>	128.3	128.2	125.3	138.18	133.45
	<i>Commercial:</i>	221.8	253.56	211.46	223.63	221.03
		350.1	381.8	336.8	361.8	354.5
May	<i>Residential:</i>	121.1	150.96	127.76	134.23	166.26
	<i>Commercial:</i>	276.48	249.33	193.09	246.73	252.42
		397.6	400.3	320.9	381.0	418.7
June	<i>Residential:</i>	122.12	95.89	147.24	154.59	162.94
	<i>Commercial:</i>	217.48	191.57	221.27	236.56	228.16
		339.6	287.5	368.5	391.2	391.1
TOTAL		3,650.3	3,909.7	3,995.1	4,238.6	4,463.5

City of Waverly - Public Works
Solid Waste Division
Bulky Items Collection

FY 2016-17

	2016						2017						Total	
	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Special Collection Week	May		June
Appliances w/Freon						<i>*Yard Waste Site Closed</i>								
Refrigerators	10	5	2	10	7	1	1	1	2	8	3	10	5	65
Freezers	3	1	8	1	0	0	1	1	0	3	2	0	6	26
Air Conditioners	2	1	1	0	0	0	0	0	0	1	1	0	2	8
Dehumidifiers	17	6	6	9	5	4	0	1	0	6	1	4	12	71
Appliances w/out Freon														
Water Heater/Furnace	2	1	2	1	0	0	0	0	0	1		1	1	9
Water Softener	0	1	2	0	0	1	0	0	0	4	3	0	1	12
Stove	6	2	2	4	0	0	0	2	1	3	2	2	3	27
Washer	10	3	5	3	5	2	0	0	1	2		4	4	39
Dryer	7	2	3	5	1	0	3	1	0	3		4	4	33
Dishwasher	5	2	2	3	2	0	1	2	0	8	2	4	5	36
Humidifier	1	1	1	0	0	1	0	0	0	0		1	1	6
Gas Grill	10	4	2	0	2	0	0	0	0	22	21	14	7	82
Microwave	7	6	11	7	4	3	7	11	4	18	7	13	12	110
Electronics														
Televisions	36	41	39	44	37	33	23	17	10	58	24	31	34	427
Monitors	0	0	0	0	0	0	0	0	0	1		0	0	1
Printers	2	0	1	0	0	4	2	0	0	2		0	0	11
Computers	0	0	0	0	0	0	3	0	0	1		0	1	5
Tires														
Car	11	8	0	1	4	2	2	1	0	1		4	4	38
Truck	0	0	0	0	0	0	0	0	0	0		1	0	1
Tractor	0	0	0	0	0	0	0	0	0	0		0	0	0
TOTAL	129	84	87	88	67	51	43	37	18	142	66	93	102	1007

**Bulky Items are collected at the Public Services site during the winters months that the Yard Waste Site is closed.*

City of Waverly
Department of Public Works
FY 2016-17

AIRPORT

Airport Commission Members (Since)

Mitch Bond (January 2008)	Inactive (passed away September 2016)
Von Blunt (May 2017)	Active
Kris Glaser (December 2014)	Active
Dennis Hansen (May 2006)	Active
Richard Lindell (May 2012)	Inactive (as of May 2017)
Jane Wollenzien (May 2014)	Active

Dale Guimond, Cedar Valley Aviation – FBO (January 2015)
Tim Kangas, Council Liaison (March 2015)
Mike Cherry, City Engineer (April 1997)

Highlights for July 2016 - June 2017

Land Acquisition

The Airport Land Acquisition 2012 project requires acquisition of real property and easements in order to expand the safety zone and also lengthen the runway 400 feet. The following parcels have been purchased or an easement (E) has been obtained (see attached drawing):

Parcels #2, 4 & 7 – William Lowe - \$570,000
Parcels #3 & 10 – James & Sandra Janssen - \$155,500
Parcels #6 & 6E – Glen & Kathy Burkle - \$150,000
Parcel #8E – Mueller Farms - \$6,965
Parcels 1 & 9 – Eugene & Jolene Miller (Clan Properties, LLC) - \$393,856

The following parcel has not yet been obtained:

Parcel 5E – Marvin & Margene Schmidt

Runway Reconstruction

The reconstruction of the Waverly runway was started April 4, 2016, and finalized on October 3, 2016. The project replaced the 2,800 feet long runway and widened the strip by 10 feet to 60 feet wide.

The reconstruction was approved by the FAA and the cost will be funded 90% by the Federal Aviation Trust Fund and funded 10% locally through the city's urban renewal authority.

Looking to the Future:

- The completion of the land acquisition for the runway safety area and the 400-foot eastward extension of the runway remain high priorities for the Waverly Airport Commission. On August 7, 2017, Council approved an engineering contract with McClure Engineering for the design and bidding of this runway extension project.

- McClure Engineering Company's 5-year on-call contract with the City has effectively expired. The City needs to complete the FAA approved procurement process for on-call services in order to avoid repeating the procurement process for each individual FAA funded project over the next 5 years.

- The FBO / Airport Manager contract will expire on October 31, 2018.

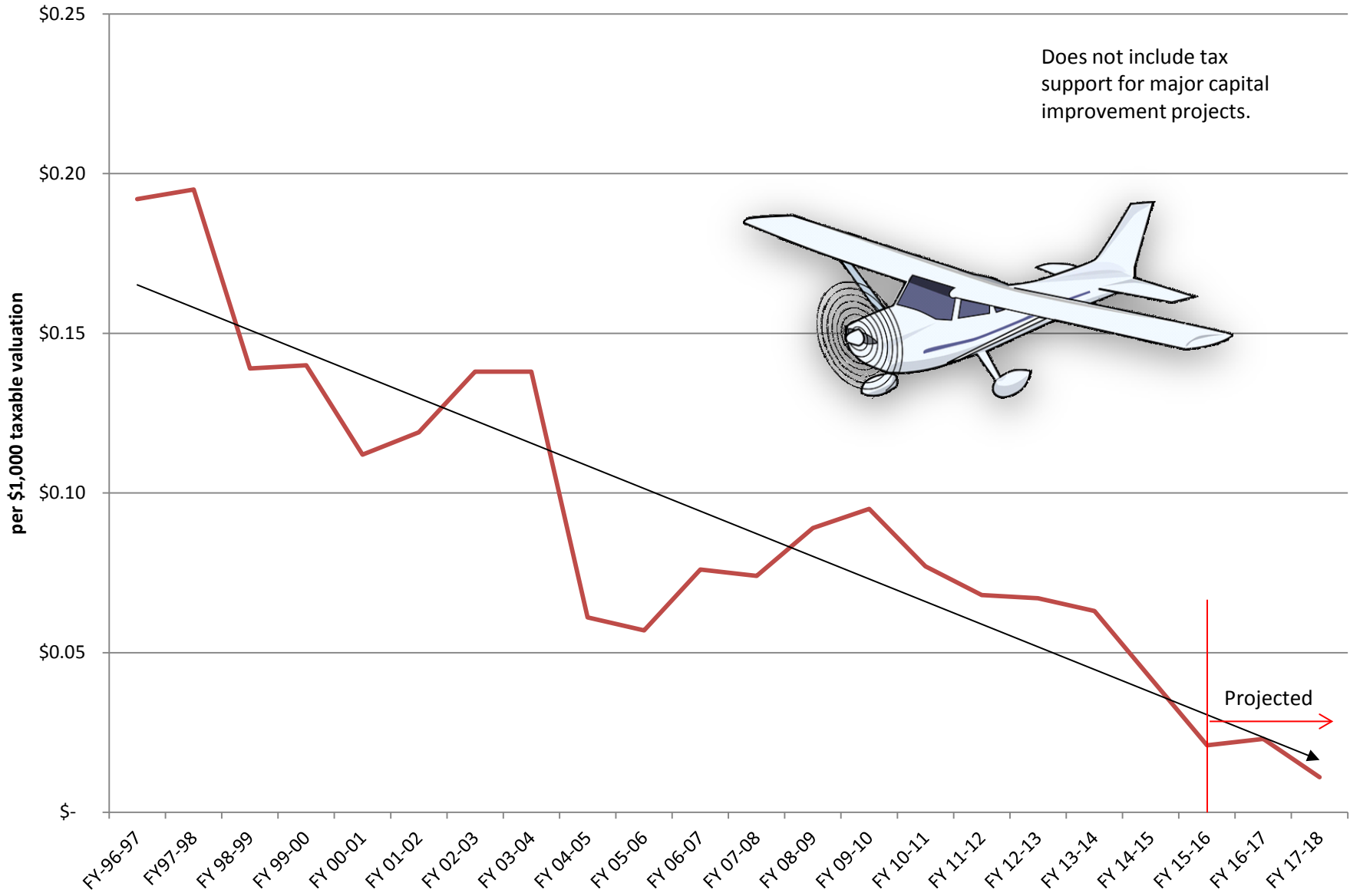
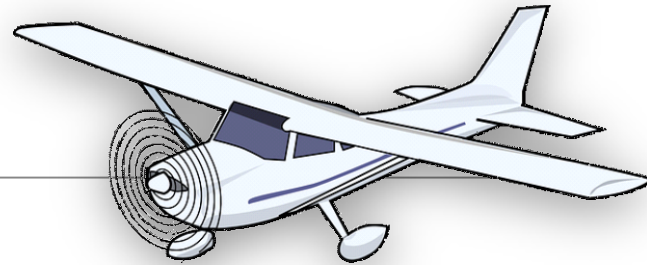
Report Summary:

The Waverly Airport continues providing valued services to the community and the surrounding region. The Airport Commission is proud of the advancements that have been made and appreciate the City's support and help in those efforts. Waverly is a steadily growing community and the Airport continues to provide a significant economic benefit at minimal cost to the City's tax payers.

Waverly Municipal Airport

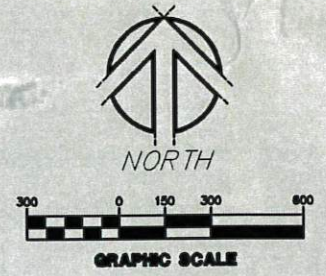
General Fund Tax Support

Does not include tax support for major capital improvement projects.

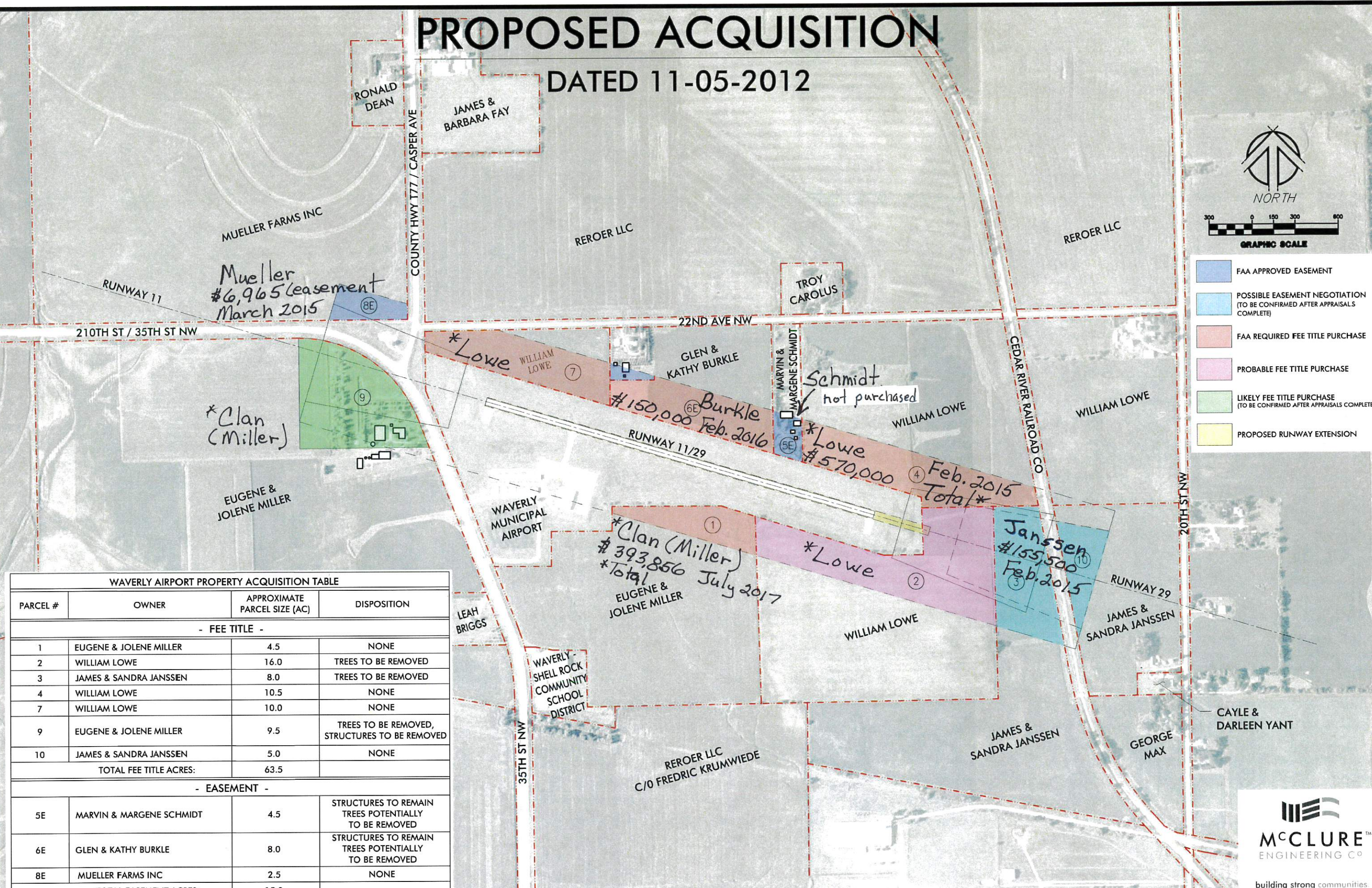


PROPOSED ACQUISITION

DATED 11-05-2012

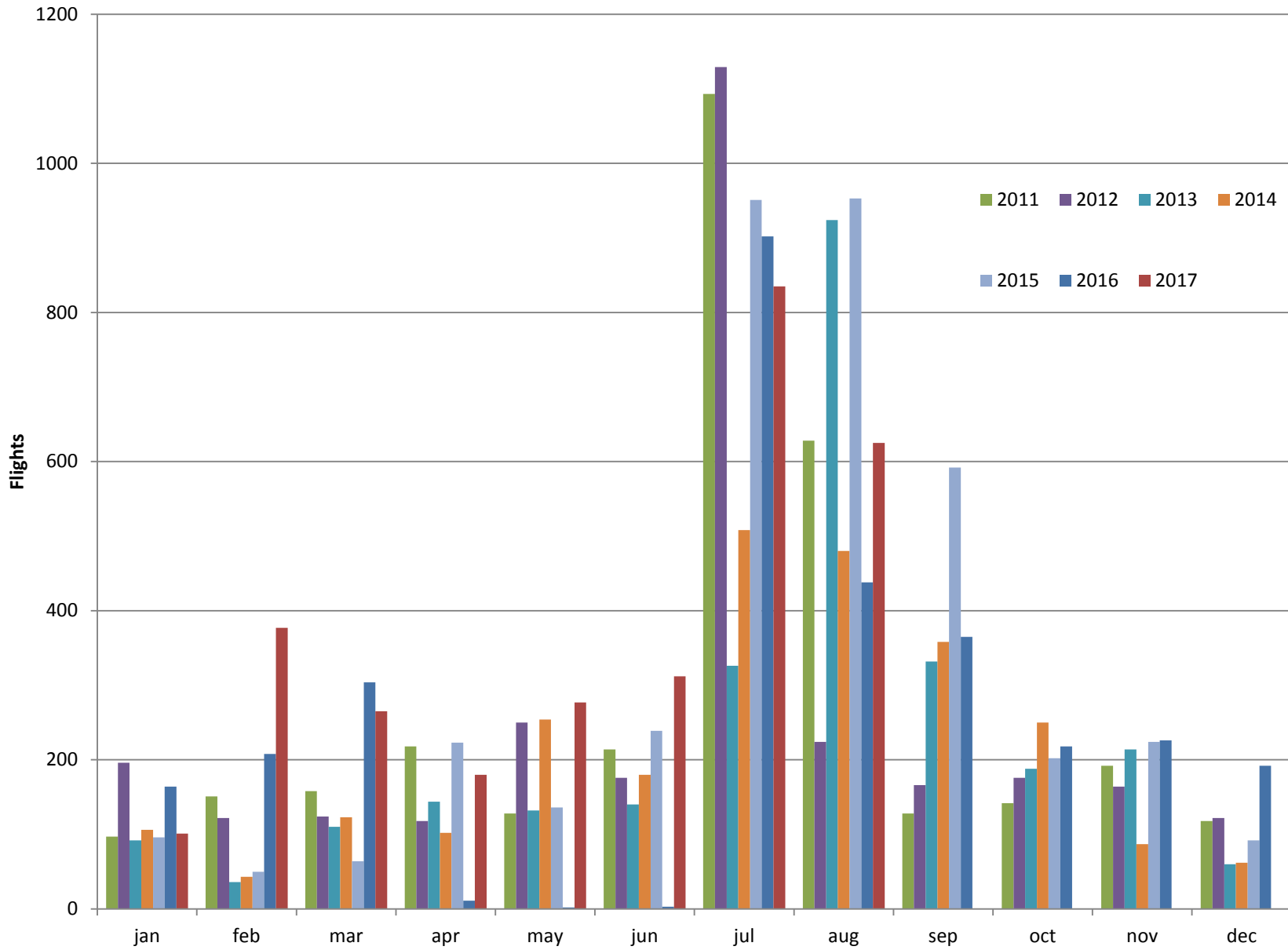


- FAA APPROVED EASEMENT
- POSSIBLE EASEMENT NEGOTIATION (TO BE CONFIRMED AFTER APPRAISALS COMPLETE)
- FAA REQUIRED FEE TITLE PURCHASE
- PROBABLE FEE TITLE PURCHASE
- LIKELY FEE TITLE PURCHASE (TO BE CONFIRMED AFTER APPRAISALS COMPLETE)
- PROPOSED RUNWAY EXTENSION



WAVERLY AIRPORT PROPERTY ACQUISITION TABLE			
PARCEL #	OWNER	APPROXIMATE PARCEL SIZE (AC)	DISPOSITION
- FEE TITLE -			
1	EUGENE & JOLENE MILLER	4.5	NONE
2	WILLIAM LOWE	16.0	TREES TO BE REMOVED
3	JAMES & SANDRA JANSSEN	8.0	TREES TO BE REMOVED
4	WILLIAM LOWE	10.5	NONE
7	WILLIAM LOWE	10.0	NONE
9	EUGENE & JOLENE MILLER	9.5	TREES TO BE REMOVED, STRUCTURES TO BE REMOVED
10	JAMES & SANDRA JANSSEN	5.0	NONE
TOTAL FEE TITLE ACRES:		63.5	
- EASEMENT -			
5E	MARVIN & MARGENE SCHMIDT	4.5	STRUCTURES TO REMAIN TREES POTENTIALLY TO BE REMOVED
6E	GLEN & KATHY BURKLE	8.0	STRUCTURES TO REMAIN TREES POTENTIALLY TO BE REMOVED
8E	MUELLER FARMS INC	2.5	NONE
TOTAL EASEMENT ACRES:		15.0	

Flight Report



Total Flights Per Year

