

City of Green Bay Wisconsin



2013
DEPARTMENT OF
PUBLIC WORKS
ANNUAL REPORT



Public Works Department

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TO: The Mayor and
Common Council

FROM: Steven M. Grenier, P.E.
Director of Public Works

I am herewith submitting the 2013 Annual Report for the Department of Public Works. This report includes a detailed summary of the activities of the Department for 2013. This report is required by State Statute and summarizes the activities and the operations of the Department of Public Works.

The achievements and activities of the Department were made possible with the cooperation of the Mayor and Common Council and the support of the employees of this Department.



**CITY OF GREEN BAY
DEPARTMENT OF PUBLIC WORKS
2013 ANNUAL REPORT**

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2013 ANNUAL REPORT **DEPARTMENT OF PUBLIC WORKS**

The Department of Public Works functions under the Mayor and Common Council, and in particular, the following committees and commissions, which report to the Common Council. In 2013, the members of these committees and commissions were as follows:

1. Improvement and Service Committee

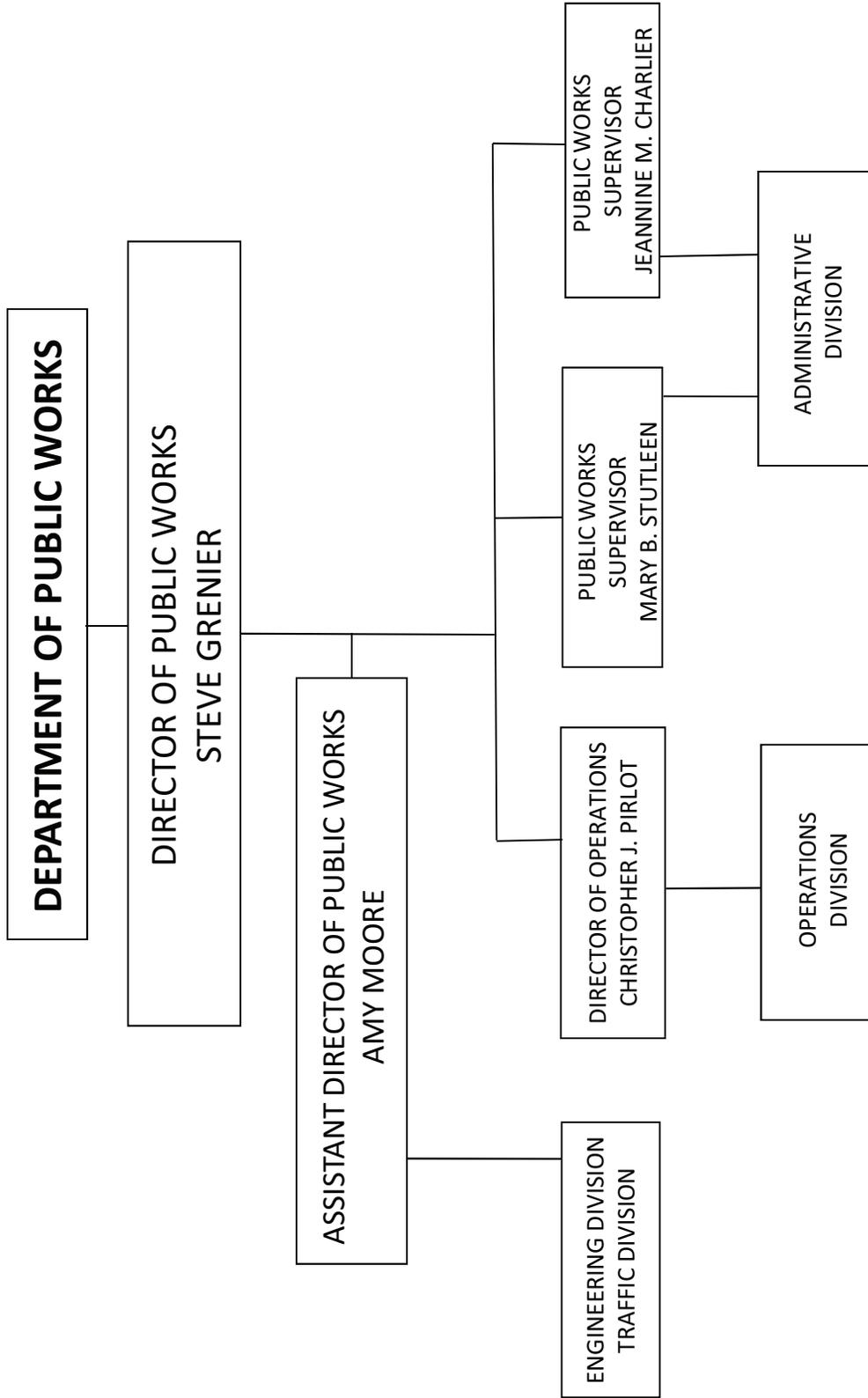
Members: Brian Danzinger, Chairperson
Joseph Moore
James Warner
Jerry Wiezbiskie

2. Traffic Commission

Members: Matt Kuepers, Chairperson
Bryan Lipke, Vice-Chairperson
Alderman Thomas Sladek
Charles Karow
Lieutenant Karl Ackermann
Dan Theno
Victoria Jones

Following the direction of the Mayor and Common Council, the Improvement and Service Committee, the Traffic Commission, the Director of Public Works, the Department of Public Works, consisting of 219 employees in its five divisions (Engineering, Traffic, Operations, Executive Support, and Parking System Division), provides the basic municipal services to the citizens of Green Bay.

To a large degree, the general safety, welfare and appearance of the community depends on the Department of Public Works carrying out its responsibilities in an expeditious manner through the design, construction and maintenance of street pavements, sewers, bridges, sidewalks, traffic control devices, street lighting, public parking facilities, the issuance of permits, the collection of solid waste, the control of snow and ice, and the control of noxious weeds on public and private property.



2013

DEPARTMENT OF PUBLIC WORKS STATISTICS

Area:	46.08 Square Miles	
Population:	104,300 (Estimate)	
Streets:	Connecting Highways	22.77 Miles
	County Trunk Highways	17.38 Miles
	Local Streets	<u>415.97 Miles</u>
	TOTAL STREETS:	456.12 Miles
Sewers:	Storm Sewers	407.30 Miles
	Sanitary Sewers	<u>464.12 Miles</u>
	TOTAL SEWERS:	872.05 Miles
Lift Stations:	22 Storm	
	13 Sanitary	
Street Lights:	8,223	
Traffic Signals:	101 Intersections	
Bridges:	30	

CONSTRUCTION SUMMARY

Sanitary Sewer Construction/Reconstruction	5.50 miles	\$1,671,945.39
Storm Sewer Construction/Reconstruction	1.90 miles	\$835,425.28
Pavement Construction/Reconstruction		\$991,710.92
Pavement Repair		\$1,256,492.13
Asphalt Resurfacing/Replacement	3.51 miles	\$1,712,082.32
Sidewalk Construction	1.15 miles	\$259,929.38
Spray Injection Patching		\$19,089.66
Mudjacking		\$27,588.58
Building Construction Repair		\$3,563,516.72
Water Main Construction	2.50 miles	\$1,700,000.00
Community Development Contracts		\$613,290.43
Storm Water Management		\$300,000.00
Park Improvements		\$704,942.01
Miscellaneous Contracts		\$528,077.64
	TOTAL	\$10,812,145.07

ENGINEERING DIVISION

The Engineering Division was responsible for the administration of the following public works contracts. References to the percentage of work completed relate to project status as of December 31, 2013.

I. BUILDING CONSTRUCTION AND REPAIR CONTRACTS

A. 133 S. MAPLE AVENUE REHABILITATION

This contract includes renovation of a single family home, including replacement of windows, replacement of vinyl siding, interior drywall and painting, refinishing of wood flooring, plumbing and electrical upgrades, insulation of walls and box-sills, replacement of runace, construction of a garage slab and garage, front and back porch repair, installation of concrete driveway and apron, remodeling of kitchen and bathroom including new fixtures, flooring and cabinets.

This project is complete: \$111,315.00

B. RAZING BUILDING AT 418 N. MONROE AVENUE

The work under this purchase order includes: the razing of the commercial building, the disposal of all material and debris; the removal and disposal of all site improvements, such as concrete or asphalt sidewalks; bulkheading sewer and water lines at the right-of-way and placing and grading compacted granular backfill in all crawl space areas, exposed basement areas, and any other voids/openings resulting from the removal processes.

This project is complete: \$13,600.00

C. CHERRY STREET PARKING RAMP ELEVATOR VENTILATION SYSTEM

This Contract includes all gas line piping and electrical feeders to furnish and install two complete elevator shaft gas-fired heating systems and two heating and cooling equipment room systems.

This project is complete: \$99,500.00

D. CITY HALL CHIMNEY REPAIRS

All labor, materials and equipment necessary to completely and satisfactorily furnish and install sheet metal flashing, trim and metal wall panels to surround the existing masonry chimney at City Hall.

This project is complete: \$7,280.00

E. MAIN AND PINE STREET PARKING RAMP RECLADDING

This contract includes fabrication of wall cladding systems for the south and east facade of the Main St. Ramp and the north façade of the Pine St. Ramp and general construction for installation of systems including railings and chain link fence work.

This project is 85% complete: \$1,026,000.00

F. TILLEMAN BRIDGE LIGHTPOLE REPLACEMENT

This contract includes the removal of existing 50 foot light poles and preparation of light pole bases to install 48 new owner purchased 30 foot light poles, including concrete repairs, welding and rewiring from pull boxes.

This project is completed: \$163,768.25

G. PARKING RAMP REPAIRS - 2013

This contract includes patching existing deteriorated concrete; routing and sealing existing cracks and joints; installing/replacing of control joints; repairing deteriorated concrete curb; and installing traffic bearing membrane.

This project is 60% complete: \$591,060.00

H. FIRE STATION NO. 6 MECHANICAL SYSTEM REPLACEMENT AND REROOFING

This contract includes installation of rooftop mechanical systems with appropriate duct/electrical service and reroofing of both ends of existing roof system.

This project is 50% complete: \$125,700.00

I. KI CONVENTION CENTER EXPANSION DEMOLITION AND UTILITIES PACKAGE - 2013

This contract includes demolition of building structures, site demolition, and utility relocation.

This project is 95% complete: \$454,324.05

J. KI CONVENTION CENTER EXPANSION FOUNDATION PACKAGE - 2013

This contract includes excavation of existing grades and removal of existing pavement, and construction of foundations only for the KI Convention Center Expansion.

This project is 95% complete: \$1,082,283.42

II. PAVEMENT CONTRACTS

A. MUDJACKING 2013

This contract includes mudjacking/raising 8,084 linear feet of curb and gutter, 260 square yards of concrete apron/ramp, and 58 square feet of concrete sidewalk, which had settled and was causing ponding and unsafe conditions. This work was completed by purchase order after quotations were received.

This project is complete: \$27,588.58

C. PAVEMENT 1-13 (5TH STREET)

This contracts includes construction of approximately 3,600 cubic yards of excavation, 1,500 cubic yards of 1 1/4" crushed aggregate base course, 800 cubic yards of Breaker Run, 1,000 tons of HMA Pavement, 3,600 lineal feet of 24" curb and gutter, and 1,000 square yards of concrete sidewalk and driveway, sod restoration, and surveying.

This project is complete: \$331,279.43

D. PAVEMENT 2-13 (HOWARD STREET)

This contracts includes construction of approximately 2,325 cubic yards of excavation, 1,155 cubic yards of 1 1/4" crushed aggregate base course, 660 cubic yards of breaker run, 775 tons of HMA Pavement, 2,980 lineal feet of 24" curb and gutter, and 5,980 square yards of concrete sidewalk and driveway, sod restoration, and surveying.

This project is complete: \$218,378.92

E. PAVEMENT 3-13

PART A (BART STARR DRIVE)

This contract includes approximately 310 linear feet of 8" to 10" water main, 365 linear feet of 10" sanitary sewer including 6" laterals, 820 linear feet of 12" to 19" x 30" storm sewer, including laterals; 2,100 cubic yards of excavation, 840 cubic yards of 1/4" crushed aggregate base course, 3,300 square yards of concrete pavement, and surveying.

This project is complete: \$342,377.75

PART B (PINE STREET)

This contract includes approximately 40 linear feet of 12” to 24” storm sewer; 990 square yards of concrete pavement removal; 360 cubic yards of excavation, 150 cubic yards of 1¼” crushed aggregate base course, 75 square yards of 8” colored and stamped concrete pavement, 540 square yards of 8” concrete pavement, 3,000 square feet of 4” concrete sidewalk and driveway, and electrical work for street lighting.

This project is complete: \$99,674.82

F. PAVEMENT 4-13

This contract includes approximately 2,600 square yards of 9” concrete pavement reconstruction, adjustment of 3 manholes/inlets at the West Side Garage.

This project is complete: \$151,262.22

G. PAVEMENT REPAIR - 2013

This contract includes 7,100 feet of concrete sidewalk and driveway reconstruction, 2,000 square yards of concrete pavement reconstruction, replacement of 17 units of inlets, replacement of 80 linear feet of inlet leads, and reconstruction of 1,700 linear feet of concrete curb and gutter at various locations throughout the City.

This project is complete: \$440,227.13

H. RESURFACING 1-13

PART A

This contract includes 8,528 square feet of concrete sidewalk and driveway reconstruction, 520 square feet of curb ramp detectable warning field cast iron, 6,999 linear feet of reconstruction of concrete curb and gutter, and 1,505 square yards of terrace restoration at various locations associated with asphalt streets resurfaced in 2013.

This project is complete: \$330,149.33

PART B

This contract includes resurfacing and patching 15,582 tons of asphalt pavement and 68,184 square yards of milling surface. The work includes 16,080 cubic yards of base excavation, 31,172 tons of crushed aggregate base course, and 33,087 square yards of geo-grid.

This project is complete: \$1,302,260.30

I. SIDEWALKS - 2013

This contract includes 31,000 square feet of concrete sidewalk construction and reconstruction, and 1,600 square yards of terrace restoration various locations throughout the City.

This project is 90% complete: \$259,929.38

J. SPRAY INJECTION PATCHING 2013

This contract includes spray injection patching to repair deteriorated pavement joints, cracks, and potholes on Humboldt Road from 300’ east of University Avenue to 885’ east of Bascom Way. This work was completed by purchase order after quotations were received.

This project is complete: \$19,089.66

III. SEWER CONTRACTS

A. MILLS STREET STORM WATER MANAGEMENT FACILITY

This contract includes approximately 104,900 cubic yards of excavation, 15,620 cubic yards of clay liner placement, 155 linear feet of 12" to 36" storm sewer, and other storm sewer appurtenances, topsoil placement and restoration.

This project is complete: \$1,332,846.59

B. SEWERS 3-12 (INCLUDING WATER MAIN) PART C

This contract includes approximately 9,515 linear feet of 8" to 15" sanitary sewer CIPP at various locations throughout the City.

This project is complete: \$312,247.25

C. SEWERS 5-12 (MINI-STORM SEWER)

This contract includes approximately 2,660 linear feet of 6" mini-storm sewer and 1,310 square yards of sod at various locations throughout the City.

This project is complete: \$192,986.05

D. SEWERS 1-13 (INCLUDING WATER MAIN)

PART A

This contract includes approximately 2,320 linear feet of 6" to 8" PVC water main, including ¾" to 1 ½" water service transfers and relays, 140 linear feet of relaid 12" and 15" sanitary sewer, sanitary manhole construction, replacements, and repairs, sanitary manhole rehabilitation, 160 linear feet of relaid 29" x 45" storm sewer including storm lateral reconnections, storm sewer spot repairs, storm manhole replacement, storm manhole rehabilitation, and storm inlet and inlet lead construction, repairs, and replacements.

This project is complete: \$419,643.08

PART B

This contract includes approximately 890 linear feet of 6" to 16" PVC water main including ¾" to 2" water service transfers and relays, 280 linear feet of 8" sanitary sewer relay, sanitary lateral reconnections and relays, sanitary sewer spot repairs, sanitary manhole construction replacement, and repairs, 515 linear feet of new or relaid 12" storm sewer, storm lateral reconnections, storm sewer spot repairs, storm manhole replacement and repairs, and storm inlet and inlet lead construction, repairs, and replacements.

This project is complete: \$346,545.73

PART C

This contract includes approximately 470 linear feet of 6" to 12" PVC water main including ¾" to 1" water service transfers and relays, 1,950 linear feet of 8" to 18" sanitary sewer and construction and relay, sanitary lateral reconnections, sanitary sewer spot repairs, sanitary manhole construction, replacement, and repairs, 970 linear feet of new or relaid 15" to 21" storm sewer, storm sewer spot repairs, storm manhole replacement and repairs, and storm inlet and inlet lead construction, repairs, and replacements.

This project is complete: \$526,139.20

PART D

This contract includes approximately 3,215 linear feet of 8" to 12" CIPP sanitary sewer and 240 linear feet of 12" CIPP storm sewer.

This project is complete: \$77,018.00

E. SEWERS 2-13 (INCLUDING WATER MAIN)

This contract includes approximately 2,700 Linear Feet of 6” and 8” water main including service relays; 570 Linear Feet of 8” sanitary relay and construction including sanitary lateral relays, 2,900 Linear Feet of 10” to 12” CIPP sanitary sewer, sanitary manhole construction; 2,100 Linear Feet of 12” to 21” storm relay and construction including storm sewer lateral relay and construction, 460 Linear Feet of 10” to 12” CIPP Storm Sewer; storm manhole construction, replacement, and rehabilitation; and construction staking.

This project is complete: \$490,878.55

F. SEWERS 3-13 (INCLUDING WATER MAIN)

This contract includes approximately 1,400 Linear Feet of 6” and 8” water main including service relays; 2,170 Linear Feet of 8” to 12” sanitary relay and construction including sanitary lateral relays, 1,100 Linear Feet of 8” to 12” CIPP sanitary sewer, sanitary manhole construction and replacement; 1,080 Linear Feet of 15” to 27” storm relay and construction including storm sewer lateral relay and construction, 360 Linear Feet of 18” CIPP Storm Sewer; storm manhole construction, replacement, and rehabilitation; and construction staking.

This project is complete: \$733,796.35

G. SEWERS 4-13 (INCLUDING WATER MAIN)

PART A

This contract includes approximately 5,000 Linear Feet of 6” and 8” water main including service relays; 1,300 Linear Feet of 8” to 10” sanitary relay and construction including sanitary lateral relays, sanitary manhole construction; 675 Linear Feet of 12” storm relay, storm manhole replacement, and construction staking.

This project is complete: \$1,048,126.88

PART B

This contract includes approximately 15,000 Linear Feet of 8” to 12” CIPP sanitary sewer.

This project is complete: \$425,755.58

H. SEWERS 5-13

This contract includes approximately 2,900 linear feet of 6” mini-storm sewer, inlets, inlet leads, and other storm sewer appurtenances, 4,000 square feet of 6” concrete sidewalk and driveways, 1,400 square feet of 4” concrete sidewalk, curb and gutter, pavement replacement, and terrace restoration.

This project is complete: \$191,491.27

IV. PARK IMPROVEMENTS

A. ARNIE WOLFF SOCCER FIELDS – PHASE II

This contract includes the construction of soccer fields with 16,271 cubic yards of excavation, and 26,043 square yards of topsoiling and site restoration.

This project is complete: \$211,564.65

B. PARKS 1-12

This contract includes approximately 600 cubic yards of excavation, 750 cubic yards of crushed aggregate base course, 220 tons of HMA Pavement, 60 square feet of concrete sidewalk and driveway, and sod restoration to resurface the asphalt trail at East River Park and Anne Sullivan Park.

This project is complete: \$84,119.29

C. PARKS PROJECT 1-13 SEA DRAGON

This contract includes construction of approximately 3,700 square yards of stripping topsoil, 2,150 cubic yards of borrow, 320 cubic yards of 1 ¼" crushed aggregate base course, 105 tons of HMA Pavement, 1,610 square feet of 6" concrete, 288 square yards of 11" cast-in-place concrete slab, retaining walls, restoration, and surveying.

This project is complete: \$212,034.56

D. PARKS PROJECT 2-13

This contract includes approximately 260 cubic yards of excavation, 230 cubic yards of 1¼" crushed aggregate base course, 60 square feet of concrete pavement, 80 tons of asphaltic pavement, and 960 linear feet of fencing at Beaver Dam Park and East River Trail.

This project is complete: \$63,931.44

E. WILDLIFE SANCTUARY BRIDGE REPLACEMENT

This contract includes the removal of an existing single span steel and concrete bridge structure, the installation of approximately 45 linear feet of precast concrete modular bridge units, 235 cubic yards of excavation, 269 cubic yards of fill, 265 cubic yards of crushed aggregate base course 1 ¼", 283 linear feet of curb and gutter, 125 tons of asphalt pavement, and 2,134 square feet of concrete sidewalk.

This project is 95% complete: \$357,884.70

V. COMMUNITY DEVELOPMENT BLOCK GRANT CONTRACTS

A. CD 13-01 WEST SIDE RAILROAD CORRIDOR TRAIL

This contract consists of the installation of an asphalt paved trail. This includes approximately 810 CY of excavation, 950 CY of crushed aggregate base course, 6,620 SY of asphaltic pavement, and site restoration.

This project is 94% complete: \$283,125.87

B. CD 13-03 RAZING BUILDINGS – NAVARINO PARK

This project includes asbestos abatement, site clearance and razing of buildings at the following:

- 823 Stuart St.
- 221 S. Jackson St.
- 223 S. Jackson St.
- 227 S. Jackson St.
- 220 S Van Buren St.
- 307 S. Jackson St.

This project is complete: \$92,737.05

C. CD 13-04 WALNUT STREET/BAIRD STREET INTERSECTION IMPROVEMENTS

This contract consists of approximately 820 square yards of 4" to 8" concrete pavement, 110 linear feet of curb and gutter, 120 linear feet of reconstruct curb, 1800 linear feet of pavement marking, the installation of 15 Type 1, 2 and 3 traffic signal bases, 500 linear feet of 2" to 3" conduit, 925 linear feet of boring 2" and dual 3" conduit, and a sanitary sewer spot repair.

This project is complete: \$157,745.82

D. CD 13-05 EMMET STREET RESURFACING

This contract includes 4,041 square yards of pulverized pavement surface, 1,343 tons of crushed aggregate base course, 718 tons of HMA pavement, and 2,880 linear feet of shaping shoulders for the resurfacing of Emmet Street from Lincoln Street to Columbia Avenue.

This project is complete: \$79,679.69

VI. MISCELLANEOUS CONTRACTS

A. GREEN BAY WATER UTILITY: HOBART STANDPIPE REPAINTING

This contract includes surface preparation, exterior and interior painting, minor repairs and addition of a submersible mixing system for the 2,000,000 gallon Hobart Standpipe.

This project is complete: \$455,125.00

B. GREEN BAY WATER UTILITY: DREDGING OF SLUDGE LAGOON NO. 2

This contract includes dredging sludge from Lagoon No. 2, transporting and land applying the sludge, and the necessary field permits and reports.

This project is complete: \$72,952.64

Engineering Division personnel prepared two requests for quotations for the televising of sewers to determine the conditions of the sewers and the nature of repairs or replacement that was required. The first televising contract was for the sanitary and storm sewers for all streets that were scheduled for reconstruction or resurfacing. The second televising contract was for all the sanitary sewers located within a specific drainage basin. This has proven to be invaluable in determining the condition of sewers at these locations. Some new sewer installations are televised in areas where questionable load bearing soils are encountered. An analysis of the videotape can determine if any failure has occurred to the sewer. Between the two contracts, a total of 493,468.6 linear feet (93.5 miles) of sewer was televised in 2013 at a cost of \$440,308.71.

The Division also updates the City maps annually; maintains records of the location of sewer laterals; maintains “as-built” plans of street and sewer systems; and other records required for a Public Works Department to function effectively. Personnel scans the construction plans to make them more readily available to all DPW staff.

The storm water program continues to make progress towards meeting the Wisconsin Department of Natural Resources’ permit requirements. Design continued on major storm water pond projects, and the Mill Street Pond went into operation in 2013. Engineering personnel continue to investigate the causes of various reported high water instances on City streets and private property. Some of the causes are easy to identify and resolve, while other areas continue to be investigated and require substantial resources to fully resolve. Engineering personnel continue to investigate reports of illegal dumping of substances into the storm sewer system, also known as illicit discharges. This includes working with the responsible party to contain and clean up the discharges prior to it reaching waters of the State, and educating these parties about the impact of these events. In 2013, the City contracted with Kurt Schroeder to remove muskrats from 16 of the City’s storm water facilities. Storm water personnel also continue to monitor the City’s storm water facilities and storm sewer outfalls to prevent deterioration of the facilities. Storm water personnel have been working with multiple schools and neighborhood associations to encourage public participation and education relative to good storm water management behaviors. The “WDNR MS4 2013 Annual Report” is a listing of storm water activities undertaken and reported by the City to the WDNR for permit compliance.

In the summer of 2013, the City received an EPA administrative order for our sanitary sewer system. The order is requiring the City to prepare and implement a capacity, management, operation, and maintenance (CMOM) program by late summer of 2014. The City has contracted with a consultant, Brown and Caldwell, to assist in completing this task.

Engineering Division personnel are responsible for the administration of the Sewer Service Charge Ordinance. The ordinance addresses two types of users: non-monitored and monitored. The non-monitored users are billed directly by the Water Utility. Non-monitored customers’ bills are computed using their water usage and pre-determined values for the strength of the sewage discharge. The non-monitored residential customers’ quarterly water usage is based on the winter quarter water usage and adjusted yearly. The majority of the time spent on the administration of the Ordinance can be attributed to the monitored customers. Studies are conducted to determine which industries

require monitoring, approve monitoring frequency and equipment, compile data for the computer billings, record and analyze all billing information, and meet regularly with customers. Personnel contract with a consultant to collect samples and make laboratory analysis of sewage discharge for monitored customers.

Engineering Division personnel are also responsible for the review of site plans for new buildings and parking lots, issuance of excavation permits for sand and gravel pits, permits for the installation of utility transmission facilities (gas, electric, water, telephone, cable TV, etc.) in City-owned right-of-way, street excavation permits, street obstruction permits, newspaper vending machine permits, and the issuance of permits for the movement of oversize and overweight loads on all streets in the City.

TRAFFIC DIVISION

The Traffic Division of the Department of Public Works (DPW) is responsible for the study, engineering, design, installation and maintenance of all City-owned traffic control systems and devices. In addition, the Traffic Division is responsible for all traffic-related studies for the Department. The above tasks are divided among 3 sections: 1) Engineering Section, 2) Signs & Markings Section, and 3) Electrical Section. The Traffic Division is also the custodian for all signing, marking, traffic control signals, and street lighting functions. Both the Signs & Markings Section and the Electrical Section are part of the Operations Division. Their activities are reported in the Operations Division section of this report.

The Engineering Section consists of one Traffic Engineer, one Traffic Technician, and two seasonal employees (May through August) who work under the direction of the Assistant Director of Public Works.

The Traffic Engineer oversees the day-to-day operation of the City's traffic signal systems including timings; determines appropriate intersection control; prepares and reviews engineering drawings and specifications for construction projects; conducts traffic studies (crash, speed zone, pedestrian, parking, street lighting, school zone, work zone, etc.); responds to complaints/suggestions from the public, parking staff, and City Council members; represents DPW at City Traffic Commission meetings; assists the Green Bay Police Department in road user education and enforcement efforts; trains internal/external staff on the proper temporary work zone traffic control practices; reviews and authorizes oversize and overweight vehicle permits (single trip permits); assists in the coordination of daily activities of the Electrical Section and Signs & Marking Section; and oversees the maintenance of the official City ordinance indexes related to traffic and parking regulations.

The Traffic Technician performs duties similar to the Traffic Engineer, but spends more hands-on time with data collection, management of fieldwork assignments, problem solving, CADD design and traffic mapping. The Traffic Technician plans and coordinates DPW work activities for special events, i.e., Cellcom Marathon, Holiday Parade, Packers Home Games, 4th of July 4, etc.; trains and supervises traffic engineering seasonal employees; designs and administers both in-house pavement marking and contracted traffic signal repair programs; maintains traffic maps and related records; designs stall placement and space needs for public parking lots and on-street parking; functions in the capacity of Traffic Engineer during his/her absence; and assists in the coordination of daily activities of the Electrical Section and Signs & Marking Section.

The two seasonal employees primarily conduct intersection turning movement traffic counts at signalized intersections, assist in the maintenance of the city's street sign inventory system, assist in maintaining the official City traffic and parking ordinance indexes, and inspect the condition of city-owned street light poles.

I. TRAFFIC CONTRACTS

A. TRAFFIC SIGNAL AND STREET LIGHT REPAIR (PURCHASE ORDER)

This contract includes the removal and replacement of 1 traffic signal base (University Ave at Humboldt Rd) and 3 street light bases (Velp Ave at Wilson St; Voyager Dr at Kepler Dr; Voyager Dr at Culvers Driveway).

This project is complete: \$3,725.00

B. TILLEMAN BRIDGE STREET LIGHT REPLACEMENT

See Special Project Section for description and cost. This project is complete.

Specific tasks completed by the Traffic Division during 2013 include:

- Assisted WisDOT with the design or construction of the following projects:
 - US 41
 - Ninth Street underpass
 - WIS 29 interchange tub girder installation
 - Monroe Avenue (WIS 54 & WIS 57, Cass Street to Main Street)
- Assisted Engineering Division with the design or construction of the following projects:
 - Pavement 3-13, Bart Starr Drive (signing, street lighting, and geometric design)
 - Resurfacing 1-13, Wood Lane (temporary traffic control)
 - CD 13-04, Walnut St and Baird St (temporary traffic control; permanent traffic signal installation)
 - West Side Railroad Corridor Trail (midblock pedestrian treatments)
 - Multiple sanitary sewer repair projects (temporary traffic control)
- Completed annual intersection turning movement count program: 32 signalized intersections; 4 multi-way stop intersections
- Completed sign inventory and asset management program using ArcGIS and ArcMobile
- Performed condition assessment of all city-owned steel street light poles
- Prepared Ornamental Pole Condition Report (Downtown, I-43 Business Park, Monroe Ave (Cass St to S City Limits))
- Conducted work zone traffic control and safety training for DPW Operations, Forestry, and Water Utility field employees
- Assisted Green Bay Water Utility in the design of many temporary traffic control work zones for water main repair projects
- Attended 11 Traffic Commission meetings, including preparation of meeting minutes and Council Reports
- Managed the Village of Bellevue annual pavement marking program
- Conducted numerous studies as follows:
 - Signing
 - Sidewalk
 - School zone
 - Parking
 - Signal Timings
 - Street Lighting
 - Lot B
 - Traffic Signal / STOP / YIELD Warrants
 - Traffic Impact Analysis
 - Traffic and Intersection Safety
 - Neighborhood traffic calming
 - Pedestrian
 - Mason/Hartung upgrades and enforcement sting
 - Design of West Side Railroad Corridor Trail midblock crossing of Shawano Ave
 - Speed
- Coordinated installation of multiple Neighborhood Association identity signs
- Continued development of Citywide streetlight database
- Evaluated and revised the nighttime flash schedule of all downtown traffic signals

OPERATIONS DIVISION

The Operations Division of the Department of Public Works (DPW) is responsible for 1) maintenance of all City streets, alleys and associated traffic control devices, 2) maintenance of flood control dikes, storm water and sanitary sewer systems, 3) operation of the City's lift bridges, 4) collection and transportation of trash and residential recyclable material, 5) acquisition, disposal, maintenance and repair of all DPW equipment and vehicles. The Operations Division consists of the Street Section, Sanitation Section, Sewer and Bridge Section, Motor Equipment Section, and Administrative Section. The Operations Director leads activities of the Operations Division. Coordination of daily assignments is managed by four (4) Superintendents.

SANITATION SECTION

DPW Operations Division Sanitation Section is responsible for collection and transportation of most residential and some commercial solid waste generated within the corporate limits of Green Bay. Sanitation Section operates five (5) trash collection routes per day on the east side and five (5) trash collection routes per day on the west side of the Fox River, providing weekly collection service to all participants. An average of 422 tons of trash was collected by DPW and delivered to the Brown County Transfer Station each week during 2013. During 2013, 21,949 tons of trash was collected. The tipping fee (the fee paid to landfill waste material) on January 1 of 2013 was \$41.20 per ton.

City of Green Bay ordinance does not allow refuse and recycling materials to be set out earlier than twelve (12) hours prior to the beginning of the scheduled day of collection. DPW enforces the early setout ordinance. When violations are identified, property owners are invoiced for DPW's actual cost of collection. Habitual violators can receive citations. During 2013, 541 early setouts were enforced with approximately \$31,000 billed to property owners. This volume is down approximately 66% from what was recorded in 2011.

Sanitation Section also removes white goods (refrigerators, stoves, washer, dryers, etc.) for a fee. During 2013, 32 appliances were removed at the request of residents. Prior to 2011, the City removed non-Freon-containing appliances at no charge. Beginning in 2011, a collection fee was instituted similar to that in other communities. As a result, DPW saw a marked decrease in appliances set to the road for collection. The volume of appliances set out for City collection continued to decline in 2013.

The year 2013 marked the last year that Sanitation Section collected residential (bulk/special) waste material at no charge. Bulk/special waste is material that is too large for a person to handle or too large to fit in a garbage truck, so it needs to be collected using a dump truck and loader. This material includes, but is not limited to, concrete, roofing and other construction debris, and bulk household items such as mattresses and furniture. As of May 20, 2013, DPW no longer collects construction/demolition debris at no additional charge to property owners. Construction/demolition waste collected by DPW is now invoiced to property owners at a rate of \$45.00/cubic yard. Special bulk waste, also referred to as move-in/move-out, was invoiced to property owners using the following rate schedule: \$70.00 for 0 to 3 cubic yards; \$140.00 for 3 to 10 cubic yards; \$210.00 for more than 10 cubic yards. These rate structures were introduced to help cover the cost of these special collections, which are beyond the standard scope of sanitation services offered to City residents. During 2013, 5,612 stops were made to collect construction and bulk household waste totaling 863 tons with \$39,710 billed to property owners. In addition, 120 waste concrete piles were removed at curbside and diverted from the landfill to a recycler.

Residential recycling of paper, cardboard, plastic, glass, tin and aluminum is mandatory in the State of Wisconsin. Every resident is required to separate recyclable material from other solid waste and place it in a City-approved recycling container for collection and proper processing. Sanitation Section operates six (6) recycling routes on the east side and six (6) recycling routes on the west side of the Fox River to provide weekly service to residents. Recycling collection alternates on each side of the Fox River, using a bi-weekly collection process. The automated single-stream recycling process was first offered in July of 2010. At that time, residents were offered the option of continuing to use their manual recycling collection bin, or acquiring a recycling cart for use with the automated recycling collection process. Mandatory use of automated recycling collection carts became effective in July of 2013.

Prior to the introduction of recycling carts, 20.3% of solid waste collected by DPW was recycling. In 2010 when recycling carts were introduced, 21.5% of solid waste collected by DPW was recycling. During 2013, DPW collected 6,906 tons of recycling through its curbside collection program, which equates to 23.9% of total solid waste tonnage. Revenue from recyclables collected during 2013 varied between \$15 and \$25 per ton with an average of \$17.50 per ton. Recycling revenue rates fluctuate with market values for various commodities. During 2013, domestic market rates for recyclable material were down significantly from previous years due to lower domestic demand for recyclable material. At the present time, a significant amount of recyclable material is going overseas. This increases shipping costs and reduces sale cost to recycling collectors like the City of Green Bay.

Interestingly, total tonnage of solid waste collected (total of both trash and recyclables) reduced each year between 2003 and 2012, and leveling out in 2013. However, the percentage of recyclable material collected has steadily increased. DPW speculates that this is due to increased concern for the environment and economy. Less packaging material is now used for consumer products, more packaging material is recyclable, and more consumers are recycling, selling or donating their used-but-nice items instead of throwing them out.

Sanitation Section also collects brush on a routine basis. Brush crews are not scheduled unless a full day's work is available. Approximately 11,500 brush stops were made in 2013. The brush is chipped and hauled to one of two (2) City-operated yard waste centers for processing and re-use.

During 2013, the City of Green Bay continued its yard waste-recycling program. This is a very popular program that includes maintaining and operating two (2) yard waste collection and composting facilities. One facility is located on the west side of the City at 1470 Hurlbut Street. The other facility is located on the east side of the City at 2530 East Shore Drive. Both sites are open to the public daily from April to December from 8:00 a.m. to sunset; and during the winter months on Saturdays from 8:00 a.m. to sunset. Yard and garden waste, and brush that cannot be recycled can be delivered to the sites by residents, and composted by DPW. The final product is made available at no charge to Green Bay residents. The product is also sold to vendors for use as ground cover, boiler fuel and lawn/garden nutrient manufacturing.

Two waste oil recycling centers are also maintained by DPW for public use. One is located at the West Side Municipal Garage (519 South Oneida Street) and the other is located at the East Side Municipal Garage (1820 Mills Street). Both locations are available to the public 24 hours per day, every day of the year. These sites are provided for Green Bay residents to drop off waste engine oil, transmission fluid, power steering fluid, hydraulic oil, gear oil and other lubricants. Gasoline, fuel oil and brake fluid are not allowed.

SEWER AND BRIDGE SECTION

DPW Operations Division Sewer and Bridge Section is responsible for operation of all 3 lift bridges over the Fox River. The 3 lift bridges are staffed on a continuous basis from April 1 to December 1 of each year. The section is also responsible for maintenance of 1 lift span bridge, 23 fixed span bridges and 4 pedestrian bridges. During 2013, DPW completed the following number of bridge lifts over the Fox River:

Mason Street (Donald A. Tilleman) Bridge – 171 total lifts
Walnut Street Bridge – 635 total lifts
Main Street (Ray Nitschke) Bridge – 638 total lifts

In addition to the above, the Sewer and Bridge Section is responsible for maintenance of 464.75 miles of sanitary sewer, 407.3 miles of storm sewer, 33 sewer lift stations, 25 storm water sedimentation ponds and 16 storm water sedimentation units. Sewer Section maintenance responsibilities include but are not limited to:

1. Steaming and flushing culvert pipes
2. Recording flow levels at 17 sewage metering stations
3. Cleaning sewer lift stations
4. Flushing dead-end sewers
5. Cleaning sanitary sewers
6. Cleaning storm sewer catch basins
7. Repairing manhole and sewer inlet structures
8. Cleaning and maintaining the Lambeau Field sanitary surge tank and sanitary sewer system
9. Maintenance and cleaning of the recreational vehicle sanitary center
10. Installation, removal, repair, and maintenance of City-owned boat docks at the City marina downtown and Metro boat landing at the mouth of the Fox River
11. Assisting with the City's snow plowing functions as necessary
12. Assisting with the City's curbside lawn and garden waste collection program during the spring and fall of each year

During 2013, the Sewers and Bridges Section jet-cleaned 603,211 feet of sanitary sewer, cleaned 57,634 feet of sanitary sewer pipe on the special grease/trouble spot list, recorded 190 sewage meter readings, responded to 313 sewer trouble calls, cleaned 2,903 storm sewer inlets, repaired 454 storm sewer inlets and storm manholes, repaired 362 sanitary sewer manholes, flushed 201 dead-end sewers and located 8,991 City-owned sewers for excavation activities conducted by utility companies and contractors.

During 2013, the City's sanitary sewer preventive maintenance program continued to be evaluated and adjusted for continued improvement. DPW maintains a current goal to completely clean the City's sanitary sewer system at four (4) year intervals. The 2013 sewer cleaning program rate was equivalent to a 4.03 year cleaning interval. DPW is working toward a goal of a 4-year City-wide sewer cleaning rotation on a regular/annual basis, and began an intensive study in 2013 of the City sewer systems and associated maintenance program. The goal of this process is to identify improvements and efficiencies that can be made in order to 1) reduce sewer blockages, 2) reduce overtime associated with addressing blockages, 3) reduce sewer system cleaning cycle time, and 4) improve cleaning processes.

MOTOR EQUIPMENT SECTION

DPW Operations Division Motor Equipment Section is responsible for specification, acquisition, maintenance, repair and disposal of all DPW equipment. Preventive maintenance and repair is performed on a wide variety of vehicles and equipment consisting of road graders, front end loaders, dump trucks, garbage compactor units, recycling trucks, excavators, leaf vacuums, tub grinder, tractors, street sweepers, brush chippers, pickup trucks, vans, automobiles, and small equipment such as chain saws, lawn mowers, weed eaters, etc. Repairs are also made to equipment from other governmental units on a cost accounting basis. Nine (9) Mechanics, three (3) Shop Helpers, one (1) Welder/Fabricator, and two (2) Parts Clerks are involved with the equipment repair and maintenance process. The Motor Equipment Section is also responsible for seasonal change-over of equipment for snow and ice control, leaf collection, street cleaning and other projects completed by DPW.

In addition to the Preventive Maintenance Program, a tracking system is employed to record parts and labor expended on each piece of equipment, identify mechanical problems and determine when equipment should be replaced. Motor Equipment Section is in the final process of implementing a computerized asset management system to improve its record-keeping and inventory for fleet activities. An in-house engine oil consumption program is also in place, including an oil-sampling program at prescribed maintenance intervals.

During 2013, DPW vehicles traveled in excess of 1,000,000 miles. To accomplish this task, 193,041 gallons of diesel fuel; 23,788 gallons of unleaded gasoline; 2,256 gallons of motor oil; 1,140 gallons of hydraulic fluid; 51

gallons of transmission fluid; 191 gallons of antifreeze; 548 pounds of grease; and 22 gallons of gear oil were dispensed during the vehicle maintenance process.

Motor Equipment Section is also responsible for preparing specifications for the purchase of new and replacement equipment each year. After new equipment is received, it is checked to verify that it meets all bid specifications. The 2013 DPW equipment replacement program involved specification, build coordination, acquisition and inspection of the following equipment and vehicles:

- 2 – Tandem axle dump trucks with plows, patrol wings and tarp systems
- 1 – Single axle dump truck with plow, patrol wing and tarp system
- 1 – Single axle utility trailer
- 1 – Tandem axle enclosed emergency response trailer
- 1 – Snow blower for utility tractor
- 1 – 1-ton pickup with plow and salt spreader
- 2 – ¾ ton pickups
- 1 – All-terrain brush/weed trimmer
- 1 – 1-ton pickup with flatbed
- 1 – Sewer inspection camera system
- 1 – Rubber tired tractor with loader bucket
- 1 – 4 cubic yard dump body with power lift gate
- 3 – 31 cubic yard automated recycling collection trucks
- 3 – 34 cubic yard automated trash collection trucks
- 5 – 34 cubic yard automated trash collection bodies (mounted on existing chassis)

DPW purchased less equipment in 2013, compared to 2012. The downward trend in equipment replacement is associated with reduced funding available for equipment replacement, and increasing cost of large commercial vehicles due to increasing emissions equipment and steel prices. It is also associated with an increasing service life of modern equipment. But DPW continues to work under a restrained equipment replacement budget. Repairs continue to be made to older equipment until it is economically impractical or unsafe to maintain that equipment.

During 2013, the Motor Equipment Section was also instrumental in recovery of \$41,833 for repair refunds, parts credits, warranty repairs and reimbursements from equipment vendors, original equipment manufacturers and insurance recoveries.

The Fleet Manager also serves as DPW's Buildings and Grounds Superintendent. As such, responsibility for maintenance and repair of all DPW buildings and grounds falls under this Section's leadership. Buildings and Grounds Section includes a staff of four (4) Custodians, with assistance from other DPW Sections as necessary to complete projects. Custodians work rotating shifts that provide 24/7/365 coverage for emergency response and proper care and maintenance of DPW facilities. This program provides quick first responder assistance for after-hours emergencies such as sewer back-ups, snow/ice issues, and assistance to Water Utility, Fire and Police Departments.

STREET SECTION

DPW Operations Division Street Section is responsible for maintenance of 456 miles of street, 21 miles of alley, 4 miles of flood-control dike, and 2 yard waste centers. Maintenance responsibilities include but are not limited to snow plowing, snow removal, ice control, street sweeping, dust control, leaf collection, pavement repair, street amenity maintenance and repair, joint sealing, ditch cleaning, greenway clearing, grass/weed cutting. The Street Section is also responsible for daily supervision of the Traffic Signing and Marking Section, which conducts work as assigned by for Traffic Division.

During 2013, Operations Division Street Section completed numerous projects. Following is a list of the most significant Street Section accomplishments:

1. Completed 18 snow plow operations (12 more operations than 2012.)
2. Conducted 39 ice control operations (16 more operations than 2012.)
3. Collected over 100,000 cubic yards of curbside yard and garden waste, and processed it into compost at the City's two yard waste sites. Completed 4 collection rotations in the spring and 4 rotations in the fall. Made over 2,500 leaf bales.
4. Applied 45,742 pounds of rubberized joint/crack filling sealant to asphalt and concrete roadways. The crack sealing process extends the life of roadways. Open cracks allow water to get under pavement which causes more cracking and potholes.
5. Repaired 232 utility cuts related to sewer and water repairs, and maintained numerous utility cuts caused by private entities. Used 1,175 tons of hot mix asphalt.
6. Repaired 85 mailboxes damaged during winter operations.
7. Cleaned branches, garbage and debris 10 times from 53 greenway sites and 74 culvert locations.
8. Filled 15,075 potholes. The number significantly decreased from previous years due to 1) reconstruction of Military and Velp Avenues, 2) spray asphalt patching of Humboldt Road and Monroe Avenue, and 3) use of reclaimed hot mix asphalt (in lieu of cold mix asphalt) for pothole patching.
9. Swept the equivalent of 18,226 lane miles of street. The City was swept completely 12 times, totaling 2,709 hopper loads of debris. Street sweeping is completed per State and Federal Rule to remove small sediment particles on roadways, preventing those particles from reaching streams, rivers and lakes. Small particles remain suspended in water and do not settle out.
10. Maintained shoulders on the rural roads in the city with salvaged asphalt millings. The shoulders are graded with graders to protect the edge of the asphalt pavement. By building a strong sturdy shoulder, the edges of the pavement are better supported and do not crumble or alligator crack. The integrity of the pavement remains intact.
11. Filled approximately 500 sandbags. Fresh sandbags are kept in stock for high water and/or flooding issues per the City's incident response plan. Sandbags are also used to weigh down barricades and other items in strong winds.
12. Installed and maintained 1,900 feet of snow fence at 9 locations to prevent drifting on adjacent roadways.
13. Installed and maintained sandboxes at 11 locations to assist motorists with winter traction on adjacent hills.
14. Set up, stored and maintained voting machines for the City and County during all elections.
15. Trimmed and removed tree branches and brush in overgrown alleys, to accommodate safe and efficient traffic flow and maintenance activities.
16. Repaired numerous residential terraces due to leaf collection and/or snow plow damage.
17. Hosted the APWA Wisconsin Chapter Snow Plow Rodeo.
18. Organized and managed a weed control contract for select pavement joints and medians.
19. Completed hundreds of employee hours of training on subject matter including, but not limited to, winter maintenance activities, tractor operation, backhoe operation and spreaders.
20. Completed 6 rounds of grass cutting on all City property managed by DPW.
21. Tagged 633 properties for long grass or weed violations, generating \$39,048.50 in revenue. Per ordinance, if DPW is made aware of a property with grass or weeds over nine (9) inches in height, that property is in violation and DPW is obligated to address it at the owner's expense.

22. Tagged 428 properties for sidewalk snow/ice violations, generating \$29,262.96 in revenue. Per ordinance, if DPW is made aware of a property with ice or snow on sidewalks more than 24 hours after any winter event, that property is in violation and DPW is obligated to address it at the owner's expense.
23. Provided traffic control for twelve (12) Green Bay Packer football home games (3 pre-season, 8 regular season, and 1 post season event.)
24. Shoveled all intersection crosswalks staffed by City crossing guards to assure safety for students.
25. Assisted with set-up and removal of July 4th festival and Holiday Parade.
26. Completed 2 seasonal changeovers for Christmas decorations and July 4th celebrations.
27. Installed, maintained and removed 180 banners, 86 flags, and 80 Christmas decorations.
28. Installed 2,000 pounds of Poly Patch joint seal rubber to evaluate effectiveness of maintenance option for concrete pavement joints.
29. Fabricated 1,910 official traffic control signs, installed 1,091 signs, and repaired 720 existing signs.

In addition to day-to-day responsibilities and special projects noted above, the Street Section completed the following major projects in cooperation with other City departments and organizations:

1. Secured numerous properties for the Redevelopment Authority, Police Department and Planning Department Inspection Division
2. Assisted other City departments with specialized equipment or operators

SIGNING AND PAVEMENT MARKING SECTION

Signing and Pavement Marking Section is a sub-section of DPW-Operations Division Street Section consisting of five (5) full-time employees and three seasonal/summer employees. This section is responsible for installation and maintenance of all official traffic control signing and pavement marking in the City. It is also responsible for installing and maintaining work zone traffic control devices for DPW activities. Pavement marking and signing work orders are generated by Traffic Division. Other work orders are generated by Operations Division. All work assigned by Traffic Division is completed by Operations Division Signing and Pavement Marking Section.

In addition to responsibilities noted above, the Signing and Pavement Marking Section is also responsible for maintenance of pavement markings in De Pere and Bellevue. The City of De Pere and Village of Bellevue, through inter-governmental agreement, reimburse the City of Green Bay for material and labor required to complete pavement marking work. The City of DePere began its inter-governmental pavement marking agreement with the City in 1989. The Village of Bellevue began its inter-governmental pavement marking agreement with the City in 2010.

During 2013, the Signing and Pavement Marking Section applied approximately 2,750 gallons of traffic paint and 36,000 pounds of reflective glass beads. These materials were used to mark 58 miles of De Pere streets, 15 miles of Bellevue streets; and 315 miles of Green Bay streets including 310 intersections with crosswalks, 96 school legends, 98 intersections with stop bars, 210 directional arrows, and 24 bicycle symbols. This section also fabricated nearly 3,000 signs to address sign installation and replacement requests, traffic crash repairs, and vandalism repairs.

The Signing and Pavement Marking Section continues to use the highest visibility retro-reflectivity sign sheeting material for all new and replacement sign projects. This material provides supreme visibility of signs during both daytime and nighttime hours, which improves motorist guidance. Name-of-street identification signs continue to be enlarged along arterial streets. During 2013, name-of-street signs at seventeen (17) signalized intersections were replaced with larger signs.

Since 2009, the technique of relief grinding concrete pavement prior to painting was employed in critical areas. Although more time consuming than just re-painting work lines, this process allows less wear from vehicle tires and snow plows by recessing pavement markings slightly below the surface which translates into longer pavement marking life. The use of thermoplastic (hot-applied) pavement markings is employed at high traffic locations as budget allows. Thermoplastic material has a high resistance to wear and abrasion, and provides a long service life. During 2013, 400 feet of thermoplastic pavement markings were added to City streets.

For many years, traffic signs have been installed using a V-loc system. This installation process allows sign posts to break off at ground level upon vehicle impact. The V-loc system causes less vehicle damage, makes sign post replacement easier and is more cost efficient for the City. When hit, signs can be replaced quickly and at a lower cost because the part of the V-loc in the ground typically sustains no damage. All traffic signs that have a higher probability of being hit by errant vehicles (like KEEP RIGHT signs in medians) are installed using the V-loc system.

In addition to the above activities, the Signs and Marking Section completed numerous traffic counts and 200 barricading projects during 2011. Signs and Marking Section installs and maintains barricades and traffic control devices for all Green Bay Packers home games, as well as street closures for Artstreet, July 4th, Holiday Parade, weekly farmer's markets during summer months, other community events, and DPW maintenance activities that occur within public street right-of-way. Signs and Marking Section also assisted Planning Department by installing multiple Neighborhood Association identification signs.

ELECTRICAL SECTION

DPW Traffic Division Electrical Section consists of six (6) full-time Electricians and part-time assistance from one (1) seasonal employee during the summer months. This section is responsible for the maintenance and repair of City-owned traffic signal equipment at 103 intersections and 27 flashing beacon installations. The Electrical Section is also responsible for the maintenance of electrical equipment in all City-owned buildings, parks, parking ramps, 27 sewer lift stations, The CityDeck, and the Ray Nitschke Bridge over the Fox River. The other two lift bridges over the Fox River are owned and maintained by the State of Wisconsin. In addition, the Electrical Section installs and maintains the network of City-owned data transmission cable for I.T. Department.

The Electrical Section is instrumental in reducing City costs by performing services for all City departments, ranging from design and installation to maintenance and repair of City-owned electrical systems. Items maintained by the Electrical Section include traffic signals, streetlights, parking access and revenue control equipment, lighting controls, electrical and data cabling, sewer lift stations, project planning and project reviews. Following is a list of significant accomplishments of the Electrical Section during 2013:

DPW Projects

1. Completed traffic signal controller inspections and tests for all traffic signal installations per Federal rule
2. Designed the street lighting electrical system, and fiber-optic traffic signal communications system for Monroe Avenue
3. Designed and installed electrical system for downtown Green Bay Packer Heritage Trail monument
4. Installed remote monitor system for former H & R Landfill groundwater system
5. Designed and installed pump control and alarm monitoring system at Parkwood Drive sewer lift station
6. Ordered and installed traffic signal and streetlight equipment at the intersection of Walnut and Baird Streets
7. Developed plans and acquired hardware for traffic signal replacement projects at the Main Street/Auto Plaza Way, and Main Street/Manitowoc Road intersections
8. Installed an elevator shaft temperature monitoring and control system for Cherry Street Ramp
9. Logging location and other data for City-owned streetlight hardware
10. Designed and installed electrical service and distribution system for Harvey Street sewer lift station

11. Assisted with repair of pump for Quincy Street sewer lift station
12. Replaced motor starters for Lake Largo sewer lift station
13. Designed and installed electric service, lighting control and LED lighting system in one parking lot
14. Installed safety disconnect switches and surge protectors in 26 parking system access and revenue control devices
15. Repaired 79 traffic signals
16. Replaced 43 streetlight poles/fixtures
17. Repaired 32 traffic signal controllers
18. Reviewed and/or marked 8953 Digger's Hotline utility locate requests
19. Reprogrammed numerous traffic signal controllers and pedestrian beacon installations, to accommodate special event, road construction, school and other traffic needs
20. Responded to numerous traffic signal repair requests for Brown County Highway Department
21. Installed temporary power for numerous festival events

Projects for other City departments

1. Replaced motor and variable-speed drive system for rollercoaster at Bay Beach
2. Replaced motors and eliminated transformers for 6 rides at Bay Beach
3. Designed and installed electrical service and distribution for Sea Dragon ride at Bay Beach
4. Installed approximately 20,000 feet of data network cable
5. Replaced tow rope electrical motor at Triangle Hill
6. Controlled and monitored sanitary sewer surge tank pump-out processes for Lambeau Field
7. Coordinated and assisted with surge tank equipment maintenance at Lambeau Field
8. Installed power and lighting for Neighborhood Association signs
9. Installed power and data systems for Park Department remodeling project
10. Installed wireless Ethernet bridge and security camera at Leicht Park
11. Installed Wi-Fi access for The CityDeck
12. Assisted with electrical design for bridge at Wildlife Sanctuary
13. Installed electrical system for bus wash equipment at Transit
14. Installed power and data systems for Finance Department renovation
15. Installed power and data systems for TV Studio at City Hall
16. Installed power and data systems for kitchen at Bay Beach

COMMUNICATIONS AND ELECTRONICS SECTION

The Communications and Electronics Section consists of one (1) Communications and Electronics Technician. This section is managed by Operations Division and funded by Traffic Division. Communications and Electronics Section is responsible for the specification, installation, maintenance and repair of all City-owned two-way radio equipment, public address systems, and closed circuit video systems. Equipment responsibilities include that in all City departments, Water Utility, and Brown County Drug Task Force staffed with City employees. Some Police Department radio equipment is installed and serviced under contract from outside vendors. Communications and Electronics Section services the balance of Police Department equipment. Two-way radio equipment includes four (4) repeater systems, forty-one (41) control bases, twenty-two (22) mobile data terminals, eighty-six (86) radio remote units, (534) mobile radios, (484) portable radios, associated antennas, cabling and transmission lines. The Communications and Electronics Section also works with the I.T. Department on telecommunications system and data transfer issues as requested.

During 2013, the Communications and Electronics Section responded to approximately 280 service requests in addition to miscellaneous repairs that occur every business day. Service request volume has increased (250 in 2011; 267 in 2012) due to the age of portable radio equipment. Repair requests are handled in-house. Warranty issues and some repairs go to outside vendors due to limited time or resources of this one-person section.

During 2013, all Brown County protective services departments switched from an 800 MHz to a 700 MHz digital radio system. Communications and Electronics Section worked closely with Brown County Public Safety Department to install and integrate this new system. In addition to this major project and daily work activities, Communications and Electronics Section also completed the following projects:

1. Completed work on Federally-mandated narrow-banding conversion of all VHF radio equipment
2. Continued upgrade of DPW base station radio system
3. Modified communication equipment to accommodate the incorporation of Allouez Fire Department into the Green Bay Metropolitan Fire Department system
4. Replaced all mobile data modem radio equipment for Green Bay Metro Fire Department
5. Provided technical assistance for Brown County Public Safety Communications and their vendor regarding the new narrow-banding and 700 MHz radio systems.
6. Provided radio repair and programming service for Brown County Drug Task Force
7. Consulted with Electrical Section and vendor to develop improvements for sewer lift station SCADA monitoring and alarm system
8. Replaced all radio equipment for Green Bay Metro Transit voice radio system
9. Replaced base antennas and transmission cables at all Green Bay Metro Fire Department Stations
10. Repaired hundreds of radios for all City departments
11. Reconditioned hundreds of portable radio batteries to extend battery life and save replacement costs
12. Re-tuned approximately 200 Green Bay Police Department portable and mobile radios so they would work properly with the 700 MHz radio system

PARKING SYSTEM DIVISION

The Green Bay Parking System Division operates three parking ramps, containing a total of 3,325 stalls, and one off-street parking facility containing 122 stalls in the core of the downtown area. In addition, Parking Division owns and/or operates 16 parking lots with a total of 811 stalls and 671 metered stalls in and adjacent to the downtown area.

The City's parking system activities are directed by a Parking Manager who develops and oversees the budget, policies and general functions of the division. An Operations Division Supervisor oversees and coordinates daily field activities including maintenance, enforcement and cashier staff. The Executive Support Division Supervisor oversees office staff, coordinates processing of revenues and citations, and manages rental and lease accounts. The Parking Division consists of 23 regular and 3 seasonal employees divided among supervision, clerical, maintenance, enforcement, cashiering and custodial duties. These people are responsible for the operation and maintenance of all City-owned off-street parking facilities and on-street meters. In 2013, the Parking Division collected revenue in the following amounts:

Parking ramps	\$1,327,879
Parking lots	213,283
Parking meters	201,994
Parking citations	644,664
Green Bay Gold Program parking tokens	1,569
Interest	1,494
Miscellaneous	21,363
TOTAL:	<u>\$2,412,246</u>

During 2013, Parking Division continued a strong working relationship with Downtown Green Bay, Inc. (DGBI), Olde Main Street, Inc. (OMSI), and On Broadway, Inc. (OBI) to maintain positive communication with business operators and patron parking needs. Due to ongoing development and business retention activities in the downtown area, it is important to maintain cooperative efforts for the betterment of the City. Due to its location, Parking Division has agreed to maintain 39 planters in the downtown area on behalf of Park and Recreation Department. These planters make downtown more attractive to pedestrians, motorists and potential developers. Parking Division cannot commit to continuous care and maintenance of the planters because this service is outside of the core services provided by any parking operation. However, assistance will continue to be provided as long as Parking Division operations are not adversely affected.

Parking Division also maintains no-charge parking (since August of 1999) at all facilities on weekends and after 6:00 p.m. on weekdays. The Green Bay Gold parking program is also offered for use by businesses to retain patrons (since November of 2001). These programs benefit downtown visitors and allow Parking Division to streamline its operations.

Associated with its commitment to provide clean and safe parking facilities, Parking Division expended \$348,868 in 2013 for parking ramp surface structural repair, and a stair tower step repairs. Repairs to deteriorated concrete surfaces and installation of traffic wear coatings over repaired areas minimize future deterioration, and improve traction for vehicles and pedestrians. In addition to surface repairs, Parking Division continued an aggressive effort of maintaining parking facilities by high pressure power washing, painting, litter control, and landscape maintenance.

During 2013, Parking Division also sanctioned a downtown parking study during 2013 to identify functions that can be improved, and document trends and needs for future parking needs in the downtown area. The report on that

study was approved in late 2013. An action plan will be drafted in 2014 to effectuate recommendations of the study. In addition to the above, Parking Division was also involved in the following 2013 projects:

1. Painted all pavement markings in 3 ramps (3100+ stalls) and 3 surface lots (386 stalls)
2. Painted 3 stair towers (all surfaces/all levels) and pedestrian walkway at Pine Ramp
3. Painted 2 cashier booths at Main Street Ramp
4. Installed 2 furnaces to heat elevator shafts at Cherry Street Ramp
5. Planted and maintained perennials in downtown area for Park Department
6. Re-lamped light fixtures in Pine Street Ramp (672 fixtures/2,016 total bulbs) and the Main Street Ramp (440 fixtures/1,320 total bulbs) then boxed and recycled all used lamps
7. Continued building safety culture by updating MSDS program, adding high visibility work clothing, training, etcetera
8. Replaced defective drain pipes at Main and Pine Street Ramps
9. Prepared and re-painted 600 parking meter housings
10. Trained Planning Department Community Service Interns on parking ordinances and proper issuance of parking citations
11. Maintained Main Street pedestrian skywalk
12. Issued in 29,090 parking citations as follows:
 - a. 9,414 violations (\$10 rate)
 - b. 17,310 violations (\$20 rate)
 - c. 2,138 violations (\$30 rate)
 - d. 3 violations (\$60 rate)
 - e. 225 violations (\$100 rate)
13. Served 837,955 parking patrons in attendant (cashiered) facilities, documented by vehicle counting equipment
14. Completed 57 snow removal operations (18 operations over 3" in accumulation). A snow removal operation includes clearing snow from parking lots, sidewalks, handicap ramps, parking ramp roofs and interiors. It also includes application of non-corrosive ice-melting agents and sand as needed, and maintaining pathways between the street and parking meters
15. Completed annual parking ramp power washing program to remove corrosive materials
16. Continued aggressive cleaning program at Cherry Ramp to deal with roosting pigeons, nesting debris, and bird dung. A program is developed for 2014 to permanently address this issue.

ADMINISTRATIVE DIVISION

Under the direction of the Director of Public Works, the Administrative Division provides necessary budget management, payroll, parking citation and rental management, and clerical support services for the Department of Public Works. The employees in this division track finances, and complete administrative and clerical tasks requested by members of the City's largest department. In some instances, staff members generate and prepare their own daily assignments within prescribed policies and procedures of the department. Duties performed by the division include:

1. Tracking general and specialized accounts from 3 revenue-generated budgets, a tax-generated budget, and from Federal and State grants;
2. Administering bi-weekly payrolls from prescribed labor union agreements, workers compensation, and from tax-based budget and 3 revenue-generated budgets for departmental employees;
3. Generating, organizing, processing, distributing and maintaining a variety of written departmental materials;
4. Selling solid waste/recycling containers;
5. Distributing contractual bidding documents and collecting fees of same;
6. Processing and distributing meeting agendas and minutes for alderpersons and citizen member committees and commissions supervising the department;
7. Directing incoming callers and persons to appropriate staff;
8. Issuing permits for a variety of street and property work;
9. Issuing invoices, collecting monies owed;
10. Processing documents for the purchase and payment of equipment, materials, tools and supplies;
11. Keeping records of various monthly fees paid;
12. Tracking various records using databases and spreadsheets;
13. Generating and maintaining public notices and newsworthy items on the department's website and official newspaper; and
14. Collecting of parking citations and monthly fees.

2013 PUBLIC WORKS BUDGET

<u>ACCOUNT</u>	<u>SECTION</u>	<u>AMOUNT</u>
101 50 500	Engineering	\$ 1,142,190.00
101 50 503	Operations	\$13,519,750.00
101 50 504	Traffic	<u>\$ 3,473,570.00</u>
	TOTAL:	\$18,135,510.00
201 50 520	Sanitary Sewer District Budget	\$18,623,220.00
202 50 505	Parking Division	\$ 2,658,250.00
205 50 525	Storm Water Utility	\$ 5,700,090.00