

2015 Year-End Report Public Works Department

This report is presented as an overview for each of the Public Works Department divisions and my perspective as Director. It contains data from the 2015 calendar year. Each foreman has provided a detailed summary of the past year highlighting the achievements and contributions of their respective divisions.

In the pages that follow, you will see many numbers pertaining to costs associated with all things Public Works. The cost information is pulled from the *PubWorks* software used by the Public Works Departments since 2011. The calculated labor cost uses actual employee wage rates (plus 35% for benefits) and materials cost consist of actual cost of materials tracked in inventory. The equipment cost is comprised of an hourly rate assigned to each piece of equipment using FEMA rates or equipment vendor rates compiled by the Public Works staff. While wages and materials have a specific line item within the City of Madison budgets the equipment cost is considered 'cost of doing business' and is not tracked by a specific line item.



Public Works Building

The Public Works Department continues to improve on our commitment of providing the residents of Madison the highest level of service possible with maximum accountability of revenue and resources. The Public Works Department consist of Streets, Parks, Water, Sewer, Solid Waste and Recycling and has 16 budgets to submit annually for funding and approval.

Public Works Administration-This part of Public Works consist of myself and Roxie Ebdrup, Administrative Assistant. I directly supervise four foremen, the city mechanic and an administrative assistant. I work directly with each of these staff as well as all other department supervisors, city commissioners, and the city mayor.



As the Administrative Assistant for Public Works, Roxie is the focal point for all tracking efforts and does an outstanding job. With numerous daily phone calls, scheduling appointments, addressing citizens' concerns, assisting with the budget processes, and keeping the department running smoothly on a daily basis, her days are extremely full.



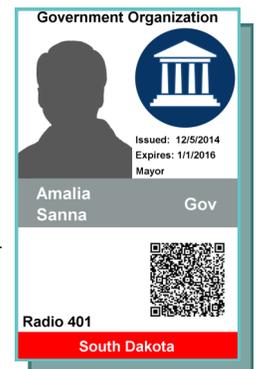
Roxie works diligently to keep citizens informed of city business. Her efforts to expand communication has proven quite effective. Currently the Public Works *Facebook* page reaches a total of 1,695 people, the texting system has 582 people who have signed up for alerts, and those that have opted to receive Public Works emails stands at 92 contacts,



other ways of communication are *Twitter*, at [MadisonSD-Pub Works](#), and the city website at [www.CityofMadisonSD.com](#). Roxie also works with the local media to ensure information is distributed in a timely manner.



Roxie worked as part of a team to provided city identification badges to all the full time city employees. This project was spearheaded by Doug Huntrods of the Lake County Emergency Management Department. In early 2015 Roxie and Tess Nelson, of the electric department, attended training on the purpose of issuing "Rapid Tags". The public works department obtained badges in early 2015 and by the end of 2015 all full time City staff and elected officials were issued ID badges. This will be helpful should there ever be a disaster where access to the City is limited. It will also be helpful to those staff members who regularly perform duties inside or on private property as they will be easily identified as a city employee.



Example of New ID Badges

Water Treatment/Wastewater Treatment Plants – Rick Nighbert and his staff have continued to provide Madison with quality drinking water and provided exceptional treatment and disposal of city wastewater. Being responsible for the drinking water and wastewater treatment here in Madison is no small task and these folks are doing an outstanding job. The water plant upgrade project has been finished and operations have begun to return to normal. The plant produces and distributed 245,141,000 million gallons of drinking water to the residents of Madison during 2015. Due to the tireless efforts of many, Madison will be receiving treated water from Big Sioux Community Water System in 2016. This will provide for a second source of water into Madison which had been lacking in past years. This additional source of drinking water also comes with the need for an additional treatment process. The operators will be adding ammonia to the water to create chloramines which is used for disinfection. The regulatory requirements for both plants keep the five person staff jumping.

The wastewater plant continues to provide a deficiency free process as proven by past state regulatory agency inspections. This reflects highly on the staffs’ dedication to providing the very best to the residents of Madison. In 2015 the plant treated an average daily flow of 808,274 gallons while maintaining a 92.0 percent removal rate.



Clarifier at the Waste Water Plant

There are two major projects slated to begin in 2016 at the wastewater plant. The first is to take the final clarifier out of service and inspect the structure for any needed repairs. The second is to excavate three plug valves located up to 23 feet below ground and install a concrete structure around them to provide safe access to the valves for any needed repairs and to forego having to deal with expensive excavations in the future.

Maintenance Shop – The city maintenance shop continues to provide an exceptional service to the city this past year. Some of the activities include the servicing of 5 police vehicles, 45 pickups, 33 all-purpose trucks, and 37 pieces of heavy and light equipment. Our city mechanic, Tom Michelke, was also very busy outside his normal range of duties. He has assisted other departments with emergency repairs such as the repairing hydraulic lines on the electric departments bucket truck, or the installation of new valves on the fire truck, the fabrication of snow gates for the snow hauling trucks, and assisting with snow removal duties. The abilities of our mechanic are exceptional and have saved the city tens of thousands of dollars by not having outside vendors do such work.

Water Distribution/Sewer Collection – This division keeps things flowing in Madison. The 4 person staff, led by Foreman Kim Verhey, is highly trained and dedicated to providing professional service to all of our customers. The responsibilities of the staff include, but are not limited to; water sampling and analysis, water main flushing, hydrant maintenance & repair, sewer main jetting, valve exercising and repair, water main repair, meter installation, resolving customer complaints and issues, and utility locates.



New Hydrant being Installed

The installation of new radio read water meters are going well and we will continue this for the next 3 years. The new meters will provide more accurate measurement of water used by residents and also reduce the numbers of man hours needed to collect the monthly readings for billing purposes. To date, a total of 1,594 new meters have been installed out of a total of 2,614.

There were seven water main breaks and eight service line leaks with associated costs of \$47,267.97

This division also spent a total of 389 hours assisting other departments.

Street Division - This division is responsible for the maintenance & repair of all roadways, storm sewers, and creek and ditches in Madison. This past year kept our eight street staff, led by Superintendent Gary Gonyo, busy. Approximately 82 blocks of streets were prepped for chip sealing. This year we switched our aggregate to a quartz type rock using 1,100 tons and 142 ton of oil to keep it in place. This project also included routing and filling cracks, washing and sweeping the streets, the actual time to complete the chip seal, and then re-sweeping to remove excess material.

Painting crosswalks and parking areas kept crews busy prior to the start of school. Snow removal is always a part of life for street personnel here in Madison, South Dakota. The season started earlier than previous years and kept the crews busy clearing streets for safe travel. Total costs of snow removal and sanding for 2015 consisted of: \$44,889.45 in labor, \$140,688.75 in equipment usage, and \$11,198.10 in materials.



Snow Removal in Core Area

Solid Waste Division - Solid Waste is a sub-division of the Streets Department. This division consists of garbage collection, the Madison Recycling Center operations, the Restricted Use Site west of Junius, and the Yard Waste Site located north of the Waste Water Plant off of highway 34.

A staff of two is primarily responsible for garbage and recycling collections, and operation of the Madison Recycling Center. A total of 926.39 tons of household waste was taken to the Brookings Landfill and 965.93 tons of recyclable material passed through the center. The electronics collections in April and October produced approximately 35.8 tons of electronics.

Great job Madison, keep up the good work!

PARKS - Every year brings new improvements to our park division. With a very small staff they have produced great looking places for the residents of Madison to relax and play. The extension of the recreational trail from the HWY 34/Wash intersection to the new hospital has been completed this year. The 45 garden plot rental project continues to be a blooming success and demand for the coveted spots remains high. Park staff works very hard on the new Memorial skating park and it's use continues to grow. The new concession stand at Baughman-Belatti park is now finished and we look forward to it's contribution to the baseball/softball programs.



Maintaining Ball Diamonds



Mike McGillivray works at the City Armory

Madison was awarded Arbor Day Foundation Tree City USA status for the 34th consecutive year.

As you travel around our city, you will notice many colorful flower arrangements and well groomed park areas. Take some time and enjoy these areas as your use validates the outstanding job our Parks Division does. Additional trees have been planted and many old and diseased ones removed.

Also during the summer months public health is a serious concern to our park staff. Mosquitos! Many hours of surveillance, public education and spraying of mosquitos takes place in an effort to keep the public safe from West Nile Virus.

This year I was approached by Rosie Jamison, Madison Chamber of Commerce Director, to discuss the idea of having a community Christmas tree to kick off the holiday season. After discussions with business owners, department supervisors, and elected officials, we proceeded with the implementation of our plan. Delon Mork provided space on his property for the tree located on NE 2nd Street and Egan Avenue. The Jim Thompson family provided the tree. East River Electric provided transportation and use of a crane to move the tree into place. The Water Distribution Department placed a concrete culvert to hold the tree. The Streets Department fabricated a cradle to hold the tree during transportation and provided man power to cut and move the tree. The electric department provided power to the location and Madison Lawn Care strung lights on the tree. The end result was beautiful and comments from citizens were all positive.



Before



During



After

As you read this year-end report you will be informed of the work that was done by the Public Works Department and the divisions within. Please keep in mind that this is only a snapshot of the work done and that the staff worked diligently all year to make sure that Madison is and remains a great place to reside.

I can't thank the staff of the Public Works Department enough for their hard work and dedication to their jobs. We look forward to next year and the scheduled and unscheduled projects it may bring.

Respectfully Submitted,

Fred Snoderly, Public Works Director

City of Madison Public Works

Complete Task for All Public Works Departments

Reporting Dates Year 2015

Task	Activities	Labor Hours	Labor Cost	Eqp Cost	Mat Cost	Con Cost	Total Cost
Admin	865	3,444.25	\$99,218.36	\$105.00	\$0.00	\$0.00	\$99,323.36
Alley/Gravel Street - Maintenance	108	430.25	\$11,632.54	\$36,264.75	\$745.50	\$0.00	\$48,642.79
Asphalt - Patching	285	1,171.00	\$30,407.83	\$72,497.50	\$20,355.94	\$0.00	\$123,261.27
Asphalt - Hauling	1	2.00	\$52.40	\$200.00	\$0.00	\$0.00	\$252.40
Assist Mechanic	103	360.25	\$9,797.96	\$1,625.00	\$0.00	\$0.00	\$11,422.96
Assist Other Departments	288	920.75	\$24,967.94	\$35,614.75	\$9,158.19	\$0.00	\$69,740.88
Ball Diamond Grooming	392	851.75	\$15,522.07	\$15,207.50	\$0.00	\$0.00	\$30,729.57
Base Stabilization	3	9.00	\$264.96	\$315.00	\$0.00	\$0.00	\$579.96
Body & Frame	80	313.50	\$9,967.91	\$0.00	\$1,155.34	\$0.00	\$11,123.25
Brakes	7	27.50	\$911.08	\$0.00	\$61.17	\$0.00	\$972.25
Building/Structure Repair	143	378.50	\$10,174.01	\$7,000.00	\$0.00	\$0.00	\$17,174.01
Catch Basin / Manhole - Cleaning	80	298.50	\$7,684.36	\$13,162.50	\$0.00	\$0.00	\$20,846.86
Chip Sealing	28	160.00	\$4,493.80	\$5,935.00	\$0.00	\$0.00	\$10,428.80
Code Enforcement	5	5.00	\$141.70	\$90.00	\$0.00	\$0.00	\$231.70
Collection - City Wide Clean Up	49	317.00	\$7,776.98	\$22,960.00	\$0.00	\$0.00	\$30,736.98
Collection - Electronics Drop Off	13	44.00	\$1,102.10	\$750.00	\$0.00	\$0.00	\$1,852.10
Collection - Recycling	59	351.00	\$8,252.94	\$9,540.00	\$0.00	\$0.00	\$17,792.94
Collection - Trash	343	2,470.75	\$59,189.33	\$96,956.25	\$0.00	\$0.00	\$156,145.58
Complaint Investigation	11	15.50	\$559.42	\$345.00	\$0.00	\$0.00	\$904.42
Crack Sealing	61	350.50	\$8,596.95	\$8,097.50	\$4,587.00	\$0.00	\$21,281.45
Creek Maintenance	38	137.00	\$3,524.64	\$10,489.50	\$0.00	\$0.00	\$14,014.14
Crushing/Mixing Materials	3	8.00	\$206.03	\$625.00	\$0.00	\$0.00	\$831.03
Curb stop on/off	79	73.25	\$2,201.12	\$1,762.50	\$23.40	\$0.00	\$3,987.02
Curb/Gutter Repair	68	282.00	\$7,421.17	\$9,757.50	\$1,150.04	\$0.00	\$18,328.71
Drive Line & Axles	26	145.50	\$4,772.21	\$0.00	\$0.00	\$0.00	\$4,772.21
Engine	45	124.50	\$4,108.21	\$0.00	\$1,656.50	\$0.00	\$5,764.71
Equipment Maintenance/Repair	374	1,039.25	\$29,352.15	\$5,100.00	\$10.30	\$0.00	\$34,462.45
Exercise Valves - Mainline	49	224.00	\$6,538.19	\$5,460.00	\$0.00	\$0.00	\$11,998.19
Facility Improvements	98	300.25	\$7,041.26	\$4,135.00	\$3.50	\$0.00	\$11,179.76
Flower Care	290	640.25	\$9,429.09	\$11,785.00	\$0.00	\$0.00	\$21,214.09
Forestry Calls/Street Trees	92	146.50	\$3,964.76	\$4,110.00	\$0.00	\$0.00	\$8,074.76
Garbage Collection	115	207.00	\$3,121.54	\$3,465.00	\$0.00	\$0.00	\$6,586.54
Gutter - Cleaning	4	13.00	\$353.22	\$360.00	\$0.00	\$0.00	\$713.22
Haul Materials	44	262.00	\$6,533.48	\$25,990.00	\$71.37	\$0.00	\$32,594.85
Holiday Decorations	117	353.50	\$7,391.95	\$6,317.50	\$0.00	\$0.00	\$13,709.45
Hydrant - Drain To Prevent Freezing	7	26.75	\$772.67	\$537.50	\$0.00	\$0.00	\$1,310.17
Hydrant - Flushing	30	166.50	\$4,737.45	\$4,485.00	\$0.00	\$0.00	\$9,222.45
Hydrant - Install New	13	53.75	\$1,685.83	\$2,891.25	\$3,676.61	\$0.00	\$8,253.69
Hydrant - Repair/Service	31	130.00	\$3,753.98	\$3,367.50	\$0.00	\$0.00	\$7,121.48
Hydrant - Replacement	6	29.25	\$867.81	\$2,797.50	\$562.68	\$0.00	\$4,227.99
Hydraulics	27	110.50	\$3,632.79	\$0.00	\$377.59	\$0.00	\$4,010.38
Ice Rinks	154	208.50	\$5,499.51	\$5,595.00	\$0.00	\$0.00	\$11,094.51
Insect Control	141	350.00	\$7,953.45	\$5,490.00	\$1,528.64	\$0.00	\$14,972.08
Inspections/Contractor	152	288.50	\$9,820.84	\$7,725.00	\$0.00	\$0.00	\$17,545.84
Install New Service	31	44.75	\$1,287.47	\$502.50	\$4,431.36	\$0.00	\$6,221.33
Install New Water Main	67	269.75	\$8,294.40	\$4,370.00	\$43.84	\$0.00	\$12,708.24
Irrigation	60	124.50	\$3,187.51	\$2,740.00	\$0.00	\$0.00	\$5,927.51
Janitorial	530	794.00	\$18,690.20	\$10,595.00	\$0.00	\$0.00	\$29,285.20
Lab Testing	507	819.50	\$26,140.53	\$987.50	\$0.00	\$0.00	\$27,128.03
Leak Detection	25	54.00	\$1,758.97	\$1,342.50	\$0.00	\$0.00	\$3,101.47
Leak Repair	5	21.00	\$666.50	\$1,286.25	\$833.74	\$0.00	\$2,786.49
Leave	1,193	6,747.75	\$175,380.85	\$0.00	\$0.00	\$0.00	\$175,380.85
Locates	296	873.75	\$28,083.67	\$23,752.50	\$0.00	\$0.00	\$51,836.17
Manhole - Inspections	2	4.50	\$129.46	\$183.75	\$0.00	\$0.00	\$313.21
Manhole - Raising	2	4.50	\$132.48	\$135.00	\$0.00	\$0.00	\$267.48
Manhole - Replacement	22	62.00	\$1,793.34	\$1,222.50	\$72.66	\$0.00	\$3,088.50
Manhole Adjustments	3	14.00	\$347.20	\$655.00	\$0.00	\$0.00	\$1,002.20

Mapping Line Changes	11	49.50	\$1,437.21	\$682.50	\$0.00	\$0.00	\$2,119.71
Material Prep Water	124	247.75	\$7,385.15	\$3,430.00	\$430.88	\$0.00	\$11,246.03
Meetings/Conferences	204	662.00	\$19,203.55	\$6,683.75	\$0.00	\$0.00	\$25,887.30
Meter Changeouts	328	380.50	\$11,156.21	\$10,957.50	\$64,696.40	\$0.00	\$86,810.11
Meter Reading - Govt' Reads	8	4.25	\$124.18	\$97.50	\$0.00	\$0.00	\$221.68
Meter Repairs	33	32.25	\$960.15	\$885.00	\$642.00	\$0.00	\$2,487.15
Milling	14	56.00	\$1,464.94	\$4,170.00	\$10.50	\$0.00	\$5,645.44
Misc	141	322.50	\$9,577.81	\$3,062.50	\$388.49	\$0.00	\$13,028.80
Mowing/Ground Maintenance	752	2,446.25	\$41,779.91	\$34,022.50	\$0.00	\$0.00	\$75,802.41
New Installation	2	2.00	\$66.26	\$0.00	\$69.00	\$0.00	\$135.26
Painting	39	135.00	\$2,879.48	\$705.00	\$0.00	\$0.00	\$3,584.48
Painting/Striping	48	284.50	\$7,127.54	\$11,755.00	\$3,506.81	\$0.00	\$22,389.35
Patching For Overlay	1	3.50	\$80.22	\$350.00	\$0.00	\$0.00	\$430.22
Paving	2	5.00	\$131.00	\$375.00	\$0.00	\$0.00	\$506.00
Plant Operations	1,405	6,172.25	\$191,917.65	\$6,710.00	\$0.00	\$0.00	\$198,627.65
Playground	112	155.50	\$4,065.01	\$7,075.00	\$0.00	\$0.00	\$11,140.01
Plumbing	59	115.00	\$3,070.82	\$2,730.00	\$52.44	\$0.00	\$5,853.26
Pothole Repairs	68	275.00	\$7,024.34	\$9,202.50	\$13,131.18	\$0.00	\$29,358.02
Public Service	77	102.00	\$2,925.94	\$2,057.50	\$253.55	\$0.00	\$5,236.99
Pubworks	625	160.25	\$4,640.51	\$0.00	\$0.00	\$0.00	\$4,640.51
Recurring Scheduled Maintenance	280	873.50	\$25,471.36	\$5,570.00	\$0.00	\$0.00	\$31,041.36
Recycling Center - General Labor	524	1,746.00	\$40,301.46	\$170,140.00	\$0.00	\$0.00	\$210,441.46
Repair/Replace Outlet Pipe	1	1.00	\$29.44	\$30.00	\$0.00	\$0.00	\$59.44
Right Of Way	1	3.00	\$78.60	\$90.00	\$0.00	\$0.00	\$168.60
Rus - General Labor	302	994.00	\$16,730.44	\$81,307.50	\$0.00	\$0.00	\$98,037.94
Sanding (ice)	46	182.25	\$4,719.78	\$16,517.50	\$9,926.70	\$0.00	\$31,163.98
Saw Cut Asphalt/Concrete	7	18.50	\$468.64	\$1,035.00	\$0.00	\$0.00	\$1,503.64
Scada Maintenance	12	9.00	\$305.24	\$0.00	\$0.00	\$0.00	\$305.24
Service	307	485.02	\$15,482.31	\$0.00	\$41,170.19	\$810.29	\$56,652.50
Sewer Line - Cleaning	207	1,001.25	\$28,938.73	\$73,117.50	\$0.00	\$0.00	\$102,056.23
Sewer Lines - Jet	5	7.75	\$225.41	\$157.50	\$0.00	\$0.00	\$382.91
Sign Repair/Maintenance	118	353.00	\$9,185.82	\$10,567.50	\$3,629.75	\$0.00	\$23,383.07
Snow Removal	298	1,430.50	\$40,169.67	\$124,171.25	\$1,271.40	\$0.00	\$165,612.32
Spraying/Fertilizing	28	72.50	\$1,899.40	\$915.00	\$0.00	\$0.00	\$2,814.40
Steering	1	5.00	\$165.65	\$0.00	\$0.00	\$0.00	\$165.65
Storm Clean-Up	53	286.50	\$7,812.11	\$17,426.25	\$0.00	\$0.00	\$25,238.36
Storm Drain Maintenance	2	2.00	\$71.68	\$60.00	\$0.00	\$0.00	\$131.68
Storm Sewer Lines	28	117.50	\$3,241.05	\$5,152.50	\$0.00	\$0.00	\$8,393.55
Street Inspections	108	199.50	\$6,365.84	\$5,325.00	\$0.00	\$0.00	\$11,690.84
Street Sweeping	133	882.00	\$22,158.74	\$82,617.50	\$0.00	\$0.00	\$104,776.24
Suspension	1	6.00	\$198.78	\$0.00	\$0.00	\$0.00	\$198.78
Testing - Cdl/Drug/Alcohol	2	6.00	\$169.90	\$60.00	\$0.00	\$0.00	\$229.90
Tiling	21	37.00	\$717.50	\$1,305.00	\$0.00	\$0.00	\$2,022.50
Tours	6	14.00	\$458.01	\$60.00	\$0.00	\$0.00	\$518.01
Training	98	173.00	\$4,774.93	\$1,216.25	\$0.00	\$0.00	\$5,991.18
Transmission	4	27.00	\$894.51	\$0.00	\$11.30	\$0.00	\$905.81
Trees Trim/Remove/Planting	447	1,690.50	\$35,247.32	\$77,021.50	\$0.00	\$0.00	\$112,268.82
Trim/Mow Hedges	229	301.00	\$4,040.96	\$4,315.00	\$0.00	\$0.00	\$8,355.96
Tv Inspection	4	11.00	\$322.74	\$468.75	\$0.00	\$0.00	\$791.49
Valve Box- Repair/Maintance/Adjust	25	65.25	\$1,884.94	\$1,657.50	\$93.16	\$0.00	\$3,635.60
Vehicle Electrical Systems	32	92.00	\$2,990.28	\$0.00	\$0.00	\$0.00	\$2,990.28
Vehicle Inspections	2	3.00	\$91.15	\$0.00	\$0.00	\$0.00	\$91.15
Vehicle Interior	2	9.00	\$298.17	\$0.00	\$0.00	\$0.00	\$298.17
Water Main Line - Repair	72	347.00	\$11,634.52	\$17,388.75	\$7,594.99	\$0.00	\$36,618.26
Water Main Valve - Replace	28	120.75	\$3,759.12	\$4,922.50	\$5,241.13	\$0.00	\$13,922.75
Water Main-Tap Service Line	4	4.50	\$130.28	\$75.00	\$443.46	\$0.00	\$648.74
Water Sampling	54	146.75	\$4,685.71	\$2,565.00	\$0.00	\$0.00	\$7,250.71
Water Service Line - Repair	12	25.00	\$829.76	\$472.50	\$0.00	\$0.00	\$1,302.26
Water Service Line - Replace	20	96.25	\$2,847.30	\$3,322.50	\$60.84	\$0.00	\$6,230.64
Weed Spraying	30	84.50	\$2,033.58	\$1,820.00	\$0.00	\$0.00	\$3,853.58
Welding & Fabrication	33	149.50	\$4,925.33	\$0.00	\$160.34	\$22.00	\$5,085.67
Yardwaste Site-General Labor	56	171.75	\$4,512.95	\$12,956.25	\$0.00	\$0.00	\$17,469.20
Tasks:	15,366	50,936	\$ 1,339,577.34	\$ 1,325,461.75	\$203,289.88	\$832.29	\$ 2,868,328.97