

2017 Year End Report

Street Department

February 15, 2018

PURPOSE:

Mission Statement: “It is the mission of the City of Brookings Street Department to fund equipment, materials, and personnel in order to provide a safe network of streets, avenues, and alleys throughout the City. We intend to do this by responding promptly and courteously to citizen’s requests and concerns.”

PERSONNEL:

The Street Department is comprised of 16 staff; Superintendent, Street Operations Supervisor, Shop Supervisor/Mechanic, two Heavy Equipment Operators, three Advanced Equipment Operators, one Part-time Receptionist, and seven Street Maintenance Technicians. This year we had the ability to add an additional Street Maintenance Tech to the crew. Martin Wagner was hired November to fill the role. There was also a change in our office personnel. Deb Groon, our Office Manager, retired at the end of October. Michelle Grayson was hired in November as a Part-time Receptionist.

Snow Removal:

Each winter storm has unique characteristics. Climatological factors such as storm intensity and duration, wind, temperature, and moisture content affect the total amount of snow and/or ice accumulation, and influence the methods used to combat the resulting snow and/or ice related conditions. Depth alone can be a deceptive yardstick. For instance, a small storm during a week day rush hour can cause havoc, while an equivalent storm on the weekend or late at night may go unnoticed. Snow and strong winds may cause continual drifting and low visibility conditions that slows down or stops snow removal operations or ties up equipment on certain routes where heavy drifting occurs. Heavy wet snow is hard to push and repeated passes are needed to clear a roadway curb to curb. Ice-packed or snow-packed roadways (caused by heavy traffic driving on wet snow) present a great challenge also. Removal of such is time-consuming and, at times, nearly impossible to achieve bare pavement. The downtown core area presents another challenge, not only to the Street Department, but to every motorist that has to drive through heavy snow. Snow from the downtown core area must be hauled out; therefore, the area cannot be cleaned until after parking is restricted (2:00 a.m. – 5:30 a.m.). Past experience has shown that snow removal is not the place to cut corners. We remain flexible and adapt to each storm. We do not economize during a snow storm. We expend every available piece of equipment and personnel. We endeavor to maintain adequate road conditions for vehicles properly equipped for winter driving. This does not mean dry pavement should be expected after each snowfall or ice storm, and it does not mean that streets will be free of ice and snow.

The City of Brookings Street Department maintains dead-end roads, 247.25 lane miles of paved concrete and asphalt streets, 9 miles of alleys, 83 cul-de-sacs, 33 eyebrows, 3 municipal parking lots, and the parking lots for 5 fire stations, the Library, Activity Center, and Public Safety building. We usually average 5 to 8 significant snow events per year.



Street Maintenance:

Area-specific maintenance operations such as seal coat and overlays are on a 7-year rotation basis to provide the motoring public with pothole-free, traffic-friendly roads. Street Department personnel repair all streets and avenues by means of dig-outs, milling and backfilling, leveling, and crack sealing in preparation for the seal coat.





Street Sweeping:

Regular street sweeping reflects greatly upon the cleanliness of the city. It also helps to remove pollutants from the streets in order to keep ground water pollution to a minimum. In 2016, 2,004 tons of sweepings were trucked to the Brookings Regional Landfill to be used as cover material. Street sweepers are in operation from April through November. The downtown was swept once weekly while arterials and school zones were swept 8 times. The residential areas were swept approximately 3 to 4 times. After the seal coat project, 1521 tons of pea rock was recovered and was sold for surplus.

Traffic Control:

Ten percent (10%) of approximately 3,000 signs are replaced to assure an adequate level of legibility and reflectivity to safely guide motorists. All yellow curbs, stop bars, lane dividers, and parking stalls were also repainted using approximately 1,340 gallons of paint. Initiated last year, our sign management program is performing as expected. We are still in the inventory process, but that task will soon be completed. This program will allow us to simplify our inventory, warranty and damaged sign processes.

Gravel Roads and Gravel Alleys:

There are approximately twelve (12) miles to keep graded, maintained, and resurfaced.

Dust Control:

Annual dust control treatments on high-traffic gravel roads help to preserve our air quality. The Street Department performed the grading, mixing, watering, and rolling while the contractor provided the material. The project used 10,980 gallons of calcium chloride solution in 2017. This year we decided to spray the calcium chloride solution in two passes in lieu of one. This allowed the material time to soak into the gravel without running off before absorption. Using this two pass technique provided a longer lasting, better quality surface all season long.

Mosquito Control:

We have two (2) staff dedicated to this program full-time from March until freeze-up. Through cooperative efforts of personnel at the SDSU Plant Science, Biology and Microbiology Departments assisting with mosquito counts, trap placement, and special tracking of mosquito populations, our mosquito control program provides results that are long-term, cost-effective, and environmentally responsible. Larviciding operations were performed daily. Adulticiding operations, including barrier treatments, were performed as per threshold (mosquito counts in traps) before all community events and places of gatherings in the parks (Arts Festival, Community Band Concerts), Swiftel Center outdoor events, sports tournaments, recreational trails, etc. Weed control was performed on all city owned sidewalks, drainage ditches, and gutter lines.

A grant was received in 2017 from the State of South Dakota in the amount of \$6,837.00. This money was used to purchase chemicals for our mosquito control operation.

Storm Drainage:

The 842 water inlets were checked and cleaned after every major rain and snow melt event. Drainage silt and debris was also removed and disposed from various drainage field sites.

Departmental Assistance:

The Street Department assisted other city general departments with equipment and personnel on a variety of different projects such as dirt hauling, gravel hauling, grading, backfilling. We value being a key member of the overall success for the City of Brookings. Working as a team with other departments is an essential benefit for the citizens of Brookings.

Specific projects include:

- Haul dirt in and out for events held at Swiftel Center
- Painting of parking lots
 - Parks Dept. - Hillcrest Tennis Court Lot
 - City/County building lot.

Service Requests:

This year we received 149 service requests from the citizens of Brookings. These requests range from sign repairs to mosquito control. We value when service requests are called in as they allow us the ability to fix and repair quickly and correctly.

2017 Total	CODE	Type of Request
26	1	Sign Repairs
16	2	Street Clean
19	3	Street Patching
5	4	Gravel Blading
14	5	Snow Removal
2	6	Salt Sand
	7	Intersection Snow
4	8	Mailbox Damaged
5	9	Mosquito Control
23	10	Storm Sewer/Water Dept.
16	11	Street Lights
19	12	MISC.
149		TOTAL

Miscellaneous:

- Spring Cleanup cost for the Street Department was \$51,707.97 (April 10-14, 17-18; 6 days).
- Held regular monthly department safety training to ensure that all tasks are performed within the proper safety requirements and on-the-job accidents are kept to a minimum.
- On-going in-house training was done to provide employees the opportunity to learn the operation of and become proficient on all our equipment. This training also assists with the process of succession planning.
- Assisted various public events by providing barricades and signage for Brookings Summer Arts Festival, Brookings Marathon, Hobo Day, Ride-Thru, Fire Department dance, etc.
- Provided equipment for display at the Library Big Wheels event.