

2015 Year End Report

Street Department

February 12, 2016

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 15 staff; Superintendent, Street Operations Supervisor, Shop Supervisor/Mechanic, two Heavy Equipment Operators, three Advanced Equipment Operators, one Office Manager, and six Street Maintenance Technicians.

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, 244.13 lane miles of paved concrete and asphalt streets, 9 miles of alleys, 76 cul-de-sacs, 33 eyebrows, 3 municipal parking lots, and the parking lots for 4 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 2015, 3,024 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, 988 ton of pea rock was recovered and was sold for surplus.

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 14,207 gallons of calcium chloride solution in 2015. 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.

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 1,480 gallons of paint.

Gravel Roads and Gravel Alleys:

There are approximately twelve (12) miles to keep graded, maintained, and resurfaced. In 2015 we completed an alley widening project in the "T" alleys near the SDSU campus. The

alleys have narrowed overtime proving an increasing challenge for snow removal and garbage operations. Our goal was to widen the alleys to a 16' minimum width. We also provided new gravel for the resurfacing of these alleys.



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 on July 28, 2015 from the State of South Dakota in the amount of \$5,945.00. This money was used to purchase chemicals for our mosquito control operation.

Storm Drainage:

The 831 water inlets were checked and cleaned after every major rain. Drainage silt and debris was also removed and disposed from various sites.



Veterans Memorial before and after



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. Specific projects include:

- Pump Course and Mountain Bike Course – Hauled 400+ tons of clay from the Swiftel Center’s hoop building location. Clay was used to construct the two bicycle courses.



- Swiftel Hoop Building – site preparation and grading was completed with street department manpower and equipment.



- Landscaping work around the City/County building – dirt work and erosion control.

Street Department Maintenance Facility:

2015 was a year of transition for the Street Department. We saw the demolition of our previous buildings in preparation for the construction of our new Maintenance Facility. For the interim, the department completely relocated to a rental site out on the Hwy 14 Bypass. Our new facility will be completed in the mid summer of 2016. We are extremely excited to move back to our previous location with the advantage of having a new state-of-the-art maintenance facility.



Miscellaneous:

- Spring Cleanup cost for the Street Department was \$70,917.30 (April 13-23; 8.25 days).
- Wind storm clean-up, asphalt work, and unloading culvert ends.
- 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.
- Matt Bartley began as new Street Superintendent January 20, 2015.
- Assisted various public events by providing barricades and signage for Brookings Summer Arts Festival, Brookings Marathon, Hobo Day, Taste of Brookings, Ride-Thru, Fire Department dance, etc. Provided equipment for display at the Library Big Wheels event.
- Assisted Brookings Public Schools with ordering, and installation of the Bobcat Way signs that had been damaged or stolen.
- Assisted South Dakota State University with designing, ordering, and installation of new street markers.