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“Regulator Valves at Woodland Park and Regional Center”

When City of Norfolk officials agreed in 1986 to handle the wastewater from the Woodland Park Sanitary Improvement District (SID), they knew the sewage flowing into the Water Pollution Control Plant would increase but not by as much as what they ended up receiving.



Prior to the wastewater agreement with Norfolk, the Woodland Park SID had been treating its own sewage but more stringent regulations induced them to contract out its wastewater treatment.

According to the agreement, Woodland Park is allowed to send a maximum of 500 gallons of sewage per minute to the Norfolk wastewater treatment plant.

“Woodland Park’s average expected flow of sewage has been calculated at 77 gallons per minute. A rain event should cause no more than 280 gallons per minute of sewage. As the sewage contractor, the City of Norfolk is generously allowing Woodland Park’s sewage flow to reach more than 500 gallons per minute,” said Todd Boling, City of Norfolk Wastewater Superintendent.

Boling said Woodland Park has been regularly sending about 125 gallons per minute which doesn’t cause any problems. A lift station downstream receives the sewage from Woodland Park and all of the area east of the flood control including the Norfolk Regional Center, Eastern Heights, Walters Addition, Meadow Ridge, Northeast Community College, Suburban Acres and those homes in the area along Benjamin Avenue and Highway 35. The lift station has two pumps that can each handle up to 1,000 gallons per minute. One pump is actually a backup pump in the event that the first fails.

The problem, Boling said, is that in a torrential rainstorm, the sewage from Woodland Park alone has amounted at times to over 878 gallons per minute, stretching the capacity of the lift station. The result? Flooded homes. Homeowners near the lift station have had to clean up sewage in their basements twice in the last four years because of an overload.

To help stop sewage from going inside people’s homes and to protect the intricate equipment that handles that sewage, the City of Norfolk is in the process of installing a regulator valve on the Woodland Park sewer system and also one on the Norfolk Regional Center sewer system. The Woodland Park valve will be set so that no more than 500 gallons of sewage per minute will be allowed to flow to the lift station. The Norfolk Regional Center valve will be set to allow a maximum of 125 gallons per minute.

The Nebraska Department of Environmental Quality has approved construction for the installation of the valves stating that “compliance with wastewater design standards and regulations was the primary consideration in the review of this project.”

Since the first torrential rain event in June 2008, Boling said the City of Norfolk has asked on numerous occasions that Woodland Park work to reduce the storm water that enters the city’s sewer system. In March 2010 Woodland Park officials indicated they had purchased and installed 17 manhole bladders that block rainwater from entering the sewage system.

Then, on August 2, 2010, another torrential rainstorm occurred resulting in homes located near the lift station to be flooded again. Boling said that is when the flow rate from Woodland Park peaked at 878 gallons per minute with the Norfolk Regional Center peaking in excess of 300 gallons per minute.

The Norfolk Regional Center has since invested over \$250,000 to bring their sewer system into compliance so that storm water no longer enters their waste stream.

City of Norfolk officials have asked Woodland Park for copies of inspections and corrective actions they have taken since 2008 to improve their sewer collection system. In late 2010 Woodland Park officials indicated that they would install 26 additional manhole bladders. In 2011 JEO Engineering Consultants of Norfolk was contracted to evaluate the storm sewer and sanitary sewer systems at Woodland Park. Officials at Woodland Park have since indicated that they will purchase and install a portable area-velocity flow meter on the sewer system.

“Excess storm water should not be coming into the sewage stream as it wears on our equipment and it’s costly to process through the sewage treatment plant,” said Boling.