

Narrative Project Description

The City of Des Moines is committed to providing emergency engine generators at existing storm and sanitary lift stations to provide a more redundant power supply for these stations during flood events. In the floods of 2008, the high water caused the utility to shut off the normal power feed to these stations. The back-up power feed was also compromised by the flood so many of the stations were not able to operate. Part of the flooding was due to these stations not being operated. This project is one of several to replace the second utility feed to the pump stations with a more reliable back-up system for emergency power.

The Phase 1 project consists of adding emergency engine generators to four existing storm water pumping stations and relocating the existing emergency engine generator for a fifth station. The new emergency engine generators will be diesel driven generators located near the pump stations in sound attenuating enclosures. The emergency engine generators will be connected to the electrical system at the pump station so that when utility connected fails, the engine generator automatically runs the entire pump station. A vinyl covered chain link fence will surround each engine generator installation for security.

The Pump Station Emergency Power Generation – Phase 1 project includes the following emergency engine generators:

- 2nd & Franklin Ave Pump Station – 1,250 KW
- SW 28th Street and Bell Pump Station – 600 KW
- SW 5th Street Pump Station – 600 KW
- SW 7th Street Pump Station – 600 KW
- Neola Ave Pump Station (relocate existing engine generator only)

The 2nd & Franklin Ave Pump Station is in the Central Place area. This area is generally surrounded by industrial/commercial properties. The SW 28th Street and Bell Pump Station is located just to the south of the Des Moines Water Works in more of a rural residential and small business area. The other three pump stations are located in office/commercial areas.

The schedule of these emergency engine generator projects is to have them ready to be used by early summer 2010. Generally, the work will be started in the late fall/early winter and proceed until completion in June of 2010. The Phase 1 project is funded through City of Des Moines stormwater utility funds.

The Opinion of Probable Construction Cost for this project is \$2,200,000. This work consists of preparation of each of the sites, furnishing and installing the engine generators, electrical work, site access and fencing at each installation. Each of the engine generator installations will include permitting for air quality.