

# GRAND AVENUE OVER SUGAR CREEK

WEST DES MOINES, IOWA



McClure provided roadway, drainage, bridge, and geotechnical design for a new crossing of Sugar Creek and a proposed trail system as part of the extension of Grand Avenue in West Des Moines, Iowa. The three-span Pretensioned Prestressed Concrete Beam bridge is on a horizontally curved alignment with integral abutments, single-row encased wall piers, and a shared use path with aesthetic railings. The prestressed beams are laid out on span-chords with horizontally curved deck edges and variable width exterior beam overhangs, such that Iowa DOT standard prestressed beams may be utilized. Preliminary design for a future dual structure was also provided.

## PROJECT HIGHLIGHTS:

- Services provided: roadway, drainage, bridge, and geotechnical design
- A trail system was proposed along with the extension
- Horizontally curved alignment and a three-span Pretensioned Prestressed Concrete Beam bridge

## REFERENCE

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