

SANITARY PROJECTS

JEFFERSON INTERCHANGE STUDY

Project Description

Project Overview

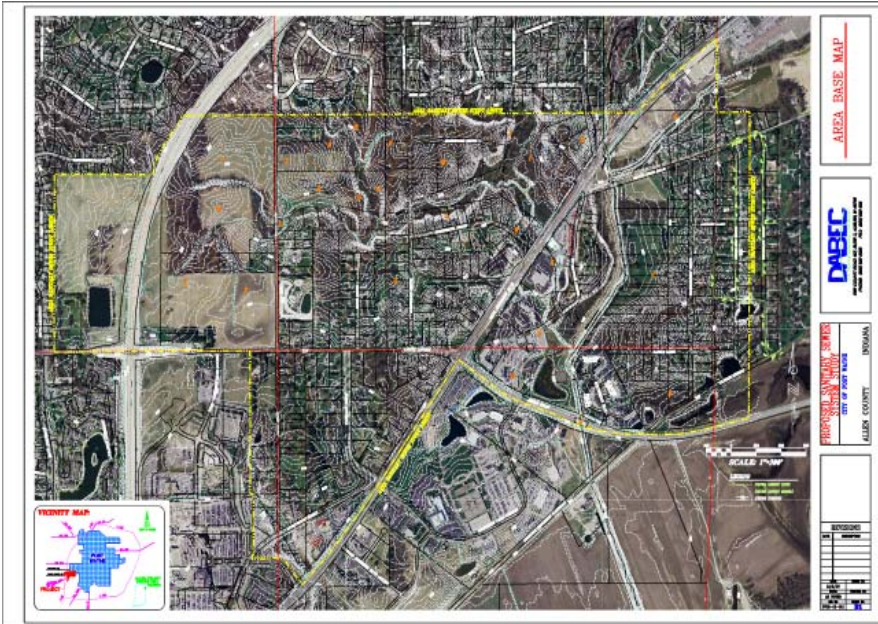
Watershed analysis, development planning study, route planning, collection system alternative study, cost estimates and preliminary plan-views of proposed construction for a sanitary sewer collection system proposed to eliminate failing septic fields and promote development along the Jefferson Blvd corridor on the west side of Fort Wayne, IN.

Construction Cost Estimates and Study Cost

The estimated cost for the varying collection system alternatives ranged from \$750,000 to \$2,000,000. The Area Study to prepare the documents and cost estimates was approximately \$24,000.

Engineering Analysis Completed

Utilizing aerial photographs, two-foot contour maps, utility plans, road information, and other sources of information we chose potential routes for the proposed pipe--evaluated the potential routes and selected the lowest cost alternative for each collection system type based upon the total estimated construction cost, availability of property, reduction in



existing infrastructure, and access to the proposed development areas. The final proposed routes reflect the lowest capital investment estimates along with the largest service area for each pipe/element segment.

Preliminary Route Plans Developed

We calculated approximate design grades for the proposed gravity pipe segments and approximate size requirements for the pressure pipes shown in the different alternatives. Once the pipe sizes and approximate depths were determined, preliminary plan-view sheets were produced with the aeriels and two-foot contours--including the approximate pipe sizes and depths determined previously.

Deliverables

Finally, the preliminary system plan-view sheets with a cost estimate and discussion of probable total cost to the existing 315 homes within the study area were delivered to the City of Fort Wayne for their review and comment. A meeting was held to discuss the alternatives and provide insight into the various choices for Sanitary Sewer Service to this area.



Partial Preliminary Plan View-Gravity Service Alternative



Partial Preliminary Plan View-Low Pressure Force Main Alternative

Client Reference

Craig Berndt, City of Fort Wayne

City County Building
One East Main St., Room 480
Fort Wayne, IN 46802-1804
260-427-2684 (phone)
260-427-1353 (fax)
paul.powers@ci.ft-wayne.in.us