

PAVEMENT HISTORY:

ORIGINAL PAVEMENT: 24 ft. wide, 8.5 in. PCC
PCC COARSE AGGREGATE SOURCE: GILMORE CITY CLASS: C
YEAR CONSTRUCTED: 1976
WIDEN: Eastbound 2001 & Westbound 2002, 6 in., 2 ft. wide HMA
RESURFACED: Eastbound 2001 & Westbound 2002, 4 in., 24 ft. wide HMA

DRAINAGE & SAFETY CONSIDERATIONS:

There are 2 large culverts with headwalls. They are:
Sta. 62+34 8 ft. x 8 ft. RCB
Sta. 101+01 8 ft. x 4 ft. RCB

These culverts will be extended in order to accommodate the additional outside lane. It appears that the extension may require additional right of way. The estimated cost to extend these structures is \$86,000.

During the five-year study period from January 1, 2007 through December 31, 2011, there were 170 crashes including 41 personal injury crashes and 129 property damage crashes. The crash rate is 154.5/HMVM which is slightly lower than the statewide Iowa Primary Highway average of 162/HMVM.

PROPOSED ALTERNATIVE:

This project extends from just south of SE 37th St. north to the southern ramps of the IA141/IA44 interchange. The intent of this project is to add capacity by constructing a third 12 ft. wide lane for both westbound and eastbound traffic on the outside of existing pavement. Additionally, right turn lanes will be constructed westbound at SE 37th St. and SE 19th St. and eastbound at SE 11th St. and SE 19th St. The existing right turn lanes lane can be used as part of the new third lane; however, the tapers should be removed to avoid conflicting joint lines. The existing westbound right turn lane at SE Park View Ave. and eastbound right turn lane at SE Grimes Blvd. will be removed in their entirety.

The additional third lane will be 12' wide, 10.5" thick pavement on 12" of modified subbase. A 2 ft. widening unit that was previously constructed will be removed before the new 12' lane is constructed to allow for the placement of subbase material and to increase the pavement thickness.

Outside shoulders will be 10 ft. wide (6 ft. paved and 4 ft. granular). The contractor will have the option of using 8" HMA or 7" PCC for the outside shoulders, placed on 6" of special backfill. Inside shoulders will be paved 6 ft. wide. The contractor will have the option of using 9" HMA or 8" PCC for the inside shoulders placed on 6" of special backfill. The increase in the inside shoulder pavement thickness is due to the need to accommodate traffic during construction.