

IOWA DEPARTMENT OF TRANSPORTATION

To Office: District 3

Date: December 19, 2017

Attention: Shane Tymkowicz

Ref No.: Crawford County

From: Mark Wright

NHSN-059-5(54)--2R-24

NHSN-059-5(55)--2R-24 (ROW)

Office: District 3 Design

PIN: 18-24-059-010

NHSN-059-5(56)--2R-24

NHSN-059-5(57)--2R-24 (ROW)

Subject: FINAL Concept (D00) Culverts

PIN: 18-24-059-020

STPN-141-3(71)--2J-24

STPN-141-3(72)--2J-24 (ROW)

PIN: 18-24-141-010

These projects involve the repair of roadway culverts in Crawford County under US 59 south of Denison between Mile Posts 96.50 and 99.30 and under IA 141 east of the S. Jct.US 59 near Mile Post 67.62.

Reacting to a box culvert failure on IA 141 in Crawford County, roadway culverts of similar age were inspected. The following culverts had distress similar to the failed culvert (interior wall spalling, exposed and rusted reinforcing steel and leaking construction joints) and repair was deemed warranted. The Office of Bridges and Structures furnished culvert replacement size, repair method and cost. Trenchless construction cost includes pipe installation and two aprons. Permanent right of way and temporary easement for construction will be required.

Route	Milepost	Station	Existing RCB	Construction Type Cost x 1000	Grading & Misc. Cost x 1000	Total Site Cost (excl. ROW)
IA 141	67.62	260+55	5' x 5'	Trenchless / \$190	\$5	\$195,000
US 59	96.50	257+79	4' x 3'	Trenchless / \$54	\$20	\$74,000
US 59	97.76	328+54	8' x 8'	New RCB / \$190	\$100	\$290,000
US 59	98.30	356+89	6' x 6'	Trenchless / \$145	\$30	\$175,000
US 59	98.51	368+00	3' x 3'	Trenchless / \$74	\$40	\$114,000
US 59	98.70	378+32	6' x 6'	Trenchless / \$71	\$20	\$91,000
US 59	99.33	409+26	5' x 6'	Trenchless / \$65	\$20	\$85,000

These sites are grouped by route and construction type for project programming purposes:

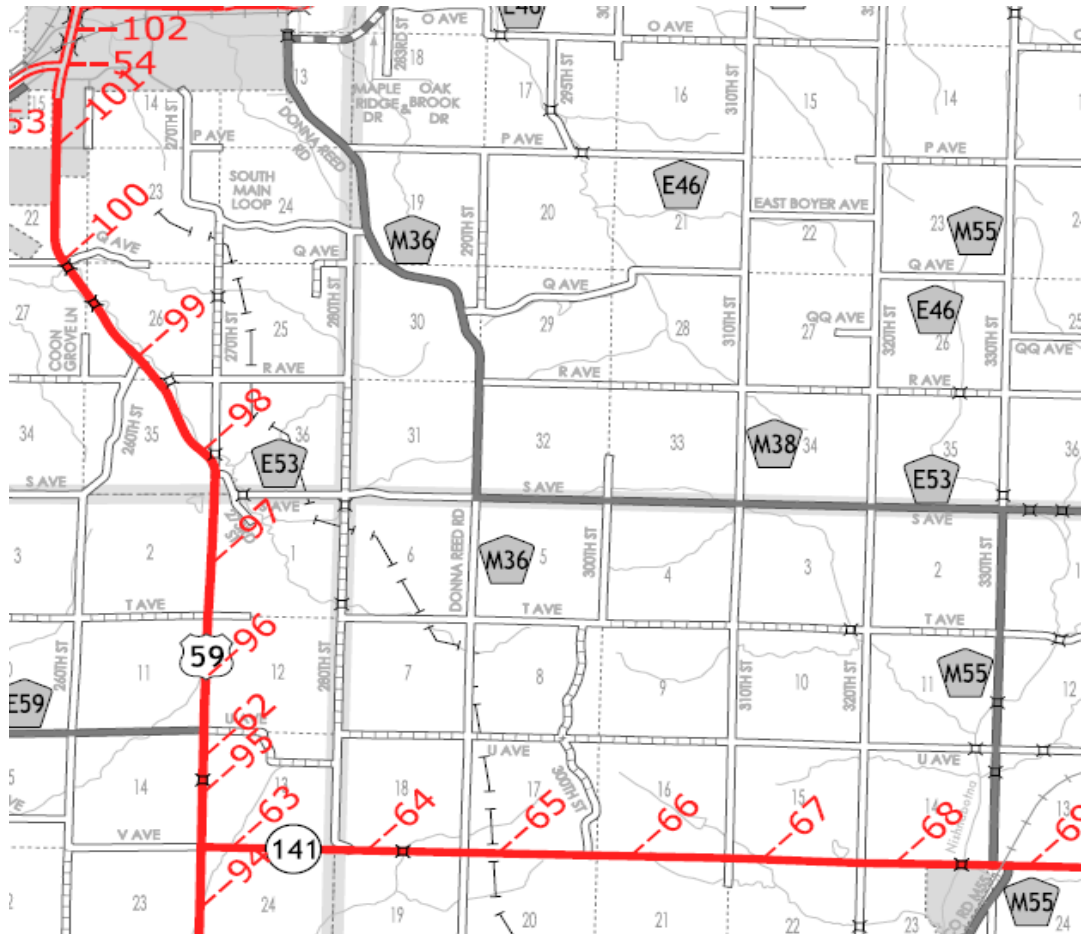
<u>PROJECT No.</u>		<u>Project Cost</u>	<u>ROW cost</u>
STPN-141-3(71)--2J-24	Trenchless	\$195,000	\$1,000
NHSN-059-5(54)--2R-24	Trenchless	\$539,000	\$7,000
NHSN-059-5(56)--2R-24	New RCB	\$290,000	\$3,000

Traffic will be maintained on US 59 and IA 141 during construction for the sites with trenchless construction. Shoulder closures will be required and single lane closures may be required during the project at these sites. The culvert at Station 328+54 will require replacement and an off-site detour for US 59 will be required.

No plan sheets are included with this submittal; however, some site pictures and as-builts are available on the network at:

<W:\Highway\District3\Design\Engineering\StaffEngineerA\MiscellaneousWork\2016\Culverts US 59 Ia 141 south of Denison\Concept images>

Project area:



All three projects have been placed in the November 16, 2021 letting.

Preliminary survey has not been completed on these projects.

District 3 will request plan preparation by the Office of Design with help from the Office of Bridges and Structures on these projects.

cc:

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