

Agenda Item: 10.

MEMORANDUM TO: Programs, Projects & Operations Subcommittee

SUBJECT: Application for Road Structure Cost Sharing Assistance

DATE: April 23, 2012

FROM: Dick Sklenar

An application has been received from the Washington County Highway Department (attached) for financial assistance under the District's Road Structure Program to replace an existing box culvert that was originally constructed prior to the 1930's. The replacement amounts installing a triple span 10' X 12' concrete culvert, which is also intended to remove five feet of grade from the existing channel. The location (see attached map) is about 3 miles southeast of Arlington, on a branch of Walnut Creek.

The District's program guidelines provide a level of financial assistance amounting to 75% of the total eligible construction cost not to exceed \$150,000 per project. Cost sharing by the District shall not include those costs incurred by the County for guard rails, roadway surfacing, traffic signals or signs, relocation of utilities, purchase of land rights, engineering, inspection, administrative costs, and work performed by County personnel.

The total estimated cost of this project is expected to be about \$306,990, of which \$235,450 are eligible costs. The request for financial assistance is \$150,000 (maximum allowable). The County expects to initiate construction of the project this year.

Management recommends that the Subcommittee recommend to the Board of Directors that the Washington County Highway Department application for financial assistance on a road structure project located on County Road 38 over Walnut Creek, about 2 miles southeast of Arlington, Nebraska, be approved for financial assistance, not to exceed \$150,000 subject to the Fiscal Year 2013 budget.

WASHINGTON COUNTY ROAD DEPARTMENT

P.O. BOX 130
BLAIR, NEBRASKA 68008-0130

(402) 426-6844

(402) 426-6845

April 24, 2012

Mr. Dick Sklenar
Papio Missouri River NRD
8901 South 154th Street
Omaha, NE 68138

RE: **Application for Road Structure Program**
Project No. C89(531)
Washington County, Nebraska

Dear Mr. Sklenar

Enclosed you will find the "Grant Application," for the replacement of a structure located on County Road 38 in Washington County.

I have, also, enclosed the drainage study information that was completed by Julie Ogden, from JEO Consulting Group in November of 2010. Ms. Ogden will be sending the plans for the new structure that she has designed by separate cover from her office.

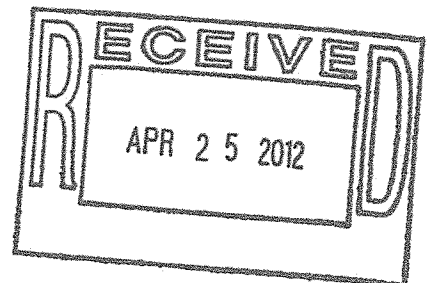
If you have any questions, please let me know by the above address. Thank you for your assistance.

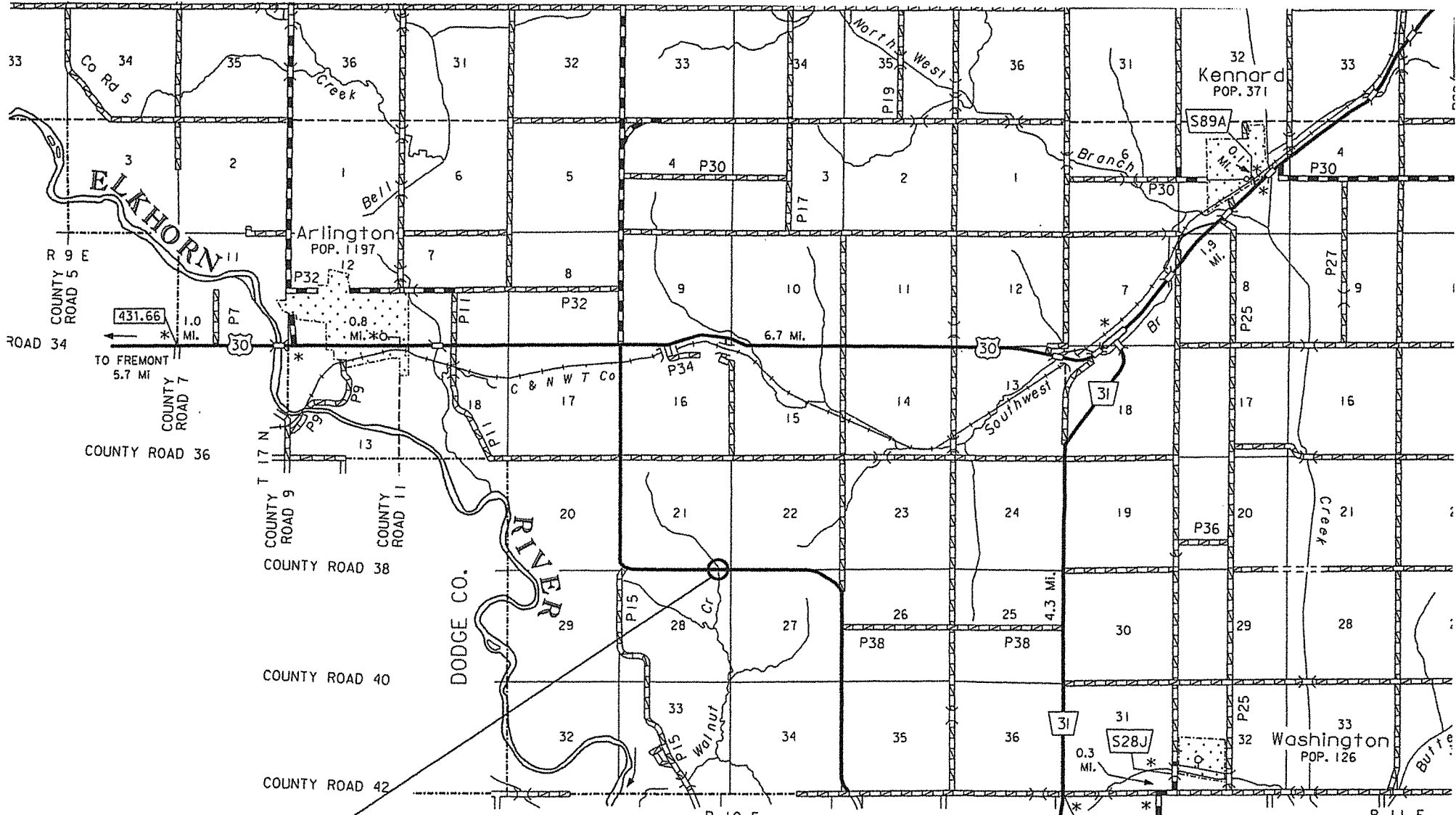
Sincerely,



Cheryl K. Parsons
Washington County
Highway Superintendent

Enclosures





PROJECT LOCATION
 COUNTY ROAD 38
 WASHINGTON CO., NEBRASKA

DOUGLAS CO.

COUNTY ROAD 13

COUNTY ROAD 15

COUNTY ROAD 17

COUNTY ROAD 19

COUNTY ROAD 21

COUNTY ROAD 23

COUNTY ROAD 25

COUNTY ROAD 27

COUNTY ROAD 29

**Papio-Missouri River Resources District
Application for Road Structure Program**

Applicant: Washington County Road Department

Date of Application: April 30, 2012

1. **Location of Problem Area:** The stream (Walnut Creek) crossing is on County Road 38 (also known as Marshall-Nursery Road) on the section line between sections 21 & 28, T17N, R10E.
2. **Description of the Problem:** After the 2009-2110 winter snows, a large snow pile developed on the roadway backslope and area over the culvert saturating the soils. Then with all of the rains in the spring, the back slope started to slide down and the existing retaining wall began to tilt towards the creek and away from the roadway. County staff performed an inspection of the site and the culvert when they noted a large crack along the top of the concrete arch that had opened up. The County estimates the original culvert was built prior to the 1930's due to the smooth bars used in the construction (deformed reinforcing steel was not used until the 1930's). The sheet pile retaining wall was added within the last 20 to 30 years (prior to paving of the roadway).
3. **Drainage Area upstream of propose project (in acres):** 1025 acres
4. **Approximate Number of Individual landowners directly affected:**
There will be between two (2) and four (4) landowners.
5. **Proposed Improvement (initial ideas):** The County hired JEO Consulting Group to perform a drainage study of the site to determine what the most cost effective solution for replacement of the existing culvert would be. The study (attached to this application) was completed in November 2010 and presented to the County Board. The selected alternative was to construct a triple span concrete box culvert with a preliminary size of 10' high and 12' wide. The total length of the box would be about 85 feet. It is anticipated that a rock stilling basin would be required at the outlet to reduce the velocity of the stream prior to it leaving the vicinity of the box culvert. Currently, there is approximately two feet of fall in the area of the box-culvert. The County has had preliminary conversation with the US Army Corps of Engineers (USACE) about the possibility of increasing the grade to 5 (five) feet to meet the requirements of this program.

With the culvert replacement, there will be removal of the existing structure, excavation, pavement removal and replacement, seeding, erosion control, rock placement for stilling basin and other incidental work. The County will also need to obtain additional road right-of-way or easements for the box-culvert.

6. Anticipated benefits of improvements outlined in #5 above:
This will provide for a stable and safe road crossing of Walnut Creek for the 2,000+ vehicles per-day that travel this roadway. Also, this project will enhance water quality and erosion control and habitat improvement.

7. Estimated total cost of improvements outline in Item #5 above:
\$306,990 (\$235,450.00 are eligible costs for reimbursement under this program).

8. Proposed Method of Financing (% by Federal, State, County, NRD):
 - a. Federal & State: 0%
 - b. County Share: 51% (of total project costs)
 - c. NRD Share: 49% (of total project costs)

9. Contact individual for sponsor:
 - a. Name: Cheryl K. Parsons, Highway Superintendent
 - b. Mailing: P.O. Box 130; Blair, NE 68008
 - c. Telephone: (402)426-6844
 - d. E-Mail: washcoroad@abbnebraska.com

Submit Completed Application with Plans to:

Dick Sklenar
Papio Missouri River NRD
8901 South 154th Street
Omaha, NE 68138