

SPECIAL PROVISIONS FOR EMERGENCY ACTION PLAN

Woodbury County
IM-NHS-029-7(34)148--03-97
IM-NHS-029-7(35)149--03-97
IM-NHS-029-7(46)149--03-97
IM-NHS-029-7(49)149--03-97

Effective Date December 15, 2015

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

150029.01 **DESCRIPTION.**

This special provision identifies the Contractor's responsibility for preparing and following an Emergency Action Plan (EAP) and presents the requirements and the procedures for high water conditions during construction.

A. Flood Risk Reduction Project (FRRP): Perry Creek Flood Risk Reduction Project Sioux City, Iowa

Local Sponsor: City of Sioux City, Iowa

FRRP Station: approximately 7+47 and 8+61

Project Name: Northbound I-29 and Wesley Pkwy Exit Ramp Over Perry Creek Conduit

Sioux City, Iowa

- **B.** The conduit is a buried concrete structure carrying Perry Creek stream flows from the entrance structure immediately upstream of 6th Street to the outlet structure (chute and stilling basin) at the Missouri River. The inside of the conduit is 50 feet wide. The floor slopes toward the center so that the inside of the conduit's height is 18.5 feet at the center and 16.5 feet at the walls. The conduit roof was installed in 1950 and 1956. The roof consists of both cast-in-place and precast, prestressed roof beams bearing on cast-in-place concrete walls. The concrete floor slab bears on auger-placed grout piles and timber piles.
- **C.** The lowa DOT is proceeding with the construction of a portion of northbound I-29 and the northbound exit ramp to Wesley Parkway over Perry Creek Conduit as a part of the Sioux City I-29 Reconstruction Project. The work over Perry Creek Conduit involves the construction of

roadway embankments and two bridge structures. A large portion of the construction will take place above and on each side of the conduit. The "critical area" of the FRRP is not defined by the United States Army Corps of Engineers (USACE); however the Perry Creek FRRP Operation and Maintenance Manual stipulates weight restrictions within 25 feet of the conduit.

D. Earthwork for the roadway construction will take place directly above and on both the sides of the conduit.

150029.02 CONSTRUCTION REQUIREMENTS.

A. Preparation of Emergency Action Plan.

Prior to construction, the Contractor shall prepare and follow an EAP which will address the requirements presented in this document and the procedures for high water conditions during construction. The EAP shall include emergency contact information, including cell phone and pager numbers of the project manager, project superintendant, and foreman. The numbers provided shall be monitored 24 hours a day, 7 days a week.

B. Geotechnical Information.

Geotechnical information for the project is available in the documents prepared by Terracon Consultants, Inc., dated October 9, 2015:

Final S4 Soils Submittal I-29 Segment 2: I-29 Northbound Bridge over Perry Creek Woodbury County, Iowa IDOT No. IM-NHS-029-7(34)148--03-97 Terracon Project No. C1085008-39

Final S4 Soils Submittal
I-29 Segment 2: Wesley Parkway Ramp B over Perry Creek
Woodbury County, Iowa
IDOT Nos. IM-NHS-029-7(35)149—03-97
Terracon Project No. C1085008-40

These documents are available upon request from the Iowa DOT Resident Construction Engineer.

C. As-Built Drawings.

As-built plans for the Perry Creek Flood Protection Project, Phase 1, Contract No. DACW45-97-C-0006, 2001 are available upon request from the Iowa DOT Resident Construction Engineer.

150029.03 CONTRACTOR'S EMERGENCY ACTION PLAN.

A. Contents of Emergency Action Plan.

- 1. The contents of the Contractor's EAP will present a detailed staging plan and all provisions in the Contract Documents so that the integrity of the FRRP and its ability to provide flood protection will be maintained throughout the entire duration of construction. The Contractor's EAP shall be submitted at least 21 days prior to construction.
- 2. The proposed construction will be performed during flood and non-flood event periods, including the work overhead and on both sides of the existing conduit. The potential does exist for the conduit to experience flood levels during the proposed construction and provisions will be in place to address this potential.
- **3.** The proposed construction has the potential to cause damage to the conduit structure due to excessive vibration and provisions will be in place to address this potential.

4. The proposed construction has the potential to cause damage to the conduit structure due to excavation activities and overhead bridge construction activities and provisions will be in place to address this potential.

B. Procedures.

The following procedures shall be in place to address an emergency situation:

1. Daily Monitoring.

- a. The water level in the Perry Creek Conduit shall be monitored on a daily basis by the Contractor and the Iowa DOT. The extended forecast of future conduit levels shall also be monitored.
- b. Vibrations and crack behavior shall be monitored by the Contractor as directed in the Special Provisions for Vibration Monitoring. This special provision requires monitoring all elements of the conduit within 300 feet of the centerline of I-29 and 300 feet of the baseline of Wesley Ramp B.

2. Monitoring Agencies.

The river level shall be monitored through USGS and National Weather Service websites for River Gage - 06600000 Perry Creek at 38th Street at Sioux City, IA.

- http://waterdata.usgs.gov/ia/nwis/uv?site no=06600000
- http://www.riverwatch.noaa.gov/forecasts/OAXRDOAX.php

3. Ceasing Operation.

- **a.** The post-construction 100 year floodway is Perry Creek channel from top-of-channel bank to top-of-channel bank, or levee crest to levee crest as applicable, from the conduit entrance to the Stone Park Boulevard bridge. Construction operations will cease in the event the conduit levels are within 4 feet of the published flood of 24 stage feet (Action at 20 stage feet, elevation 1132.0 feet).
- **b.** In addition, construction operations will cease in the event the vibrations from construction operations exceed a predetermined threshold as outlined in the Special Provisions for Vibration Monitoring.
- **c.** Construction operations will cease within 25 feet of the conduit in the event damage occurs to the Perry Creek conduit structure.

4. Notification of Ceased Construction.

The City of Sioux City and USACE representatives will be notified when the decision has been made to cease construction operations. The City of Sioux City and the USACE representatives will be notified prior to resumption of construction.

150029.04 EMERGENCY CONTACT INFORMATION.

A. City of Sioux City.

Rick Mach Sioux City Public Works Dept., Interim PW Director 405 6th Street, Room 409 Sioux City, Iowa 51102

Phone: 712-224-5010 Email: rmach@sioux-city.org

Glen Ellis, P.E.

City of Sioux City, City Engineer

Phone: 712-279-6330 Email: gellis@sioux-city.org

B. Iowa DOT Resident Construction Engineer.

Dean Herbst, P.E.

Sioux City Resident Construction Engineer

4611 US 75 North Sioux City, Iowa 51108 Phone: 712-239-1367

Cell Phone: 515-571-7073

Email: dean.herbst@dot.iowa.gov

C. Iowa DOT District 3 Construction Engineer.

Darwin Bishop, P.E. 2800 Gordon Drive

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Sioux City, Iowa 51102-0987

Phone: 712-274-5826

Email: darwin.bishop@dot.iowa.gov

D. Designer Contact.

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HDR, Inc.

8404 Indian Hills Drive Omaha, Nebraska 68114 Phone: 402-399-1362

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E. USACE - Omaha District.

Jennifer Gitt

USACE, Omaha District

CENWO-OD-E

1616 Capitol Avenue

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Email: Jennifer.L.Gitt@usace.army.mil

150029.05 METHOD OF MEASUREMENT AND BASIS OF PAYMENT.

All costs for complying with this special provision shall be considered incidental to the project. No separate payment will be made.