



**SPECIAL PROVISIONS
FOR
EMERGENCY ACTION PLAN**

**Fremont County
NHSN-002-1(122)--2R-36
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**Effective Date
July 2, 2019**

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.

150547.01 DESCRIPTION.

- A. Levee Unit Name:** Missouri River Levee Unit L-575
Local Sponsor: Benton-Washington Levee District
River Miles: M0.00 to about M0.20
Levee Stations: 195+00 to 318+00
- B.** The Iowa Department of Transportation is proceeding with the construction of the Highway 2 Overflow Bridge and relocation of the Missouri River Levee Unit L-575 to the proposed setback alignment. All of the construction will take place within the "critical area" of the levee, which is defined by the USACE as the area within 300 feet riverward and 500 feet landward of the levee.
- C.** The levee affected by this construction is the Missouri River Levee Unit L-575 Setback Levee, which was originally designed and constructed by the Omaha District of the U.S. Army Corps of Engineers (USACE) following the 2011 Missouri River Flood.
- D.** The purpose of these Special Provisions is:
- To identify the submittals required by the Contractor for compliance with the Section 408 submittal to the United States Army Corps of Engineers (USACE),
 - State the Section 408 submittal limitations on work in the levee critical area,
 - Establish the minimum monitoring requirements,
 - Establish the emergency response in case of a flood event, and
 - Establish the restoration requirements for damage to the levee critical area.

A copy of the Section 408 submittal is available from the Engineer.

150547.02 CONSTRUCTION REQUIREMENTS.

A. Preparation of Emergency Action Plan.

The proposed construction will be performed during flood and non-flood event periods, and the work will most likely be completed during flood conditions both riverward and landward of the existing and proposed levee.

The Missouri River L-575 Levee System was breached during the March 2019 Missouri River Flood, resulting in flowing water behind the levee. River stage levels and the resulting water surface elevations behind the levee during construction will vary depending on regional precipitation and discharge rate from the upstream reservoir.

Prior to construction, the Contractor shall prepare and follow an Emergency Action Plan (EAP) which will address the requirements presented in these special provisions and the procedures for high-water conditions during construction. The EAP shall include emergency contact information, including cell phone numbers of the project manager, project superintendent and foreman. The numbers provided shall be monitored 24 hours a day, 7 days a week.

B. Submittals.

The following submittals are required:

- Emergency Action Plan,
- Pre-Construction Survey,
- Post-Construction Survey,
- Excavation Shoring Plan, and
- Dewatering Plan.

Submittals will be reviewed by the Engineer.

C. Survey.

Survey the existing levee crest, slopes, and area extending 25 feet landward and riverward of the levee slopes a minimum of 100 feet beyond the area that will be accessed by the Contractor. The survey shall be completed prior to construction activities, after restoration of the disturbed areas, and as requested by the Engineer to document observed distress. The survey results shall be provided to the Engineer as soon as they are available. The results of the post-construction survey shall be provided to the Engineer prior demobilization. Areas determined to be deficient by the Engineer shall be immediately repaired and confirmed by survey. Survey information shall be reported in a table format with levee stations and elevations presented along the levee centerline at 25-foot intervals and in graphical format in plan and profile view and cross-sections at 25-foot intervals. The plan view shall show the levee centerline, levee station, and 1-foot elevation contours. The profile view shall show the elevation at the levee centerline. The Engineer will provide the alignment and stationing of the levee.

D. Restoration.

The Engineer will complete a pre-construction and post-construction inspection of the levee to identify any observable signs of distress including: rutting, cracks, lack of sod cover, settlement, erosion, or stability issues on the levee or riverside stream bank areas. If the post-construction inspection identifies any observable sign of distress that was the result of the Contractor, the area shall be repaired to pre-construction conditions by the Contractor.

E. Modifications.

Any modifications to the pre-approved contract documents proposed by the Contractor for construction activities located in the levee critical area, such as: changes to staging, excavation depths, shoring, haul routes, levee access, or groundwater dewatering must be submitted to the Engineer for approval.

F. Limitations.

The Contractor shall ensure that the line-of-protection provided by the levee is maintained at all times during construction and that the proposed construction will not involve any additional

landward or riverward excavations in the critical area that may impact the levee at any time during construction except as shown in the approved contract documents.

150547.03 CONTRACTOR'S EMERGENCY ACTION PLAN.

A. Contents of EAP.

1. The contents of the Contractor's EAP shall present a detailed staging plan and all provisions in the Contract Documents so that the integrity of the levee system and its ability to provide flood protection will be maintained throughout the entire duration of construction. A site map shall be provided in the EAP that identifies the location of:
 - Levee centerline with stationing (provided by the Engineer),
 - 500-foot landward and 300-foot riverward critical area (provided by the Engineer),
 - Proposed haul routes, and
 - Proposed construction within the levee critical area.
 - Proposed locations for the storage of equipment and materials within the levee critical area.

B. Procedures.

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

1. Daily Monitoring.

The water level in the Missouri River shall be monitored on a daily basis by the Contractor and recorded in the daily construction log. The extended forecast of future river levels shall also be monitored and recorded in the daily construction log. The Contractor shall be able to react quickly to the required actions described in this Special Provision.

2. Monitoring Agencies.

The river level shall be monitored through USGS and National Weather Service websites for River Gage - 0680700 Missouri River at Nebraska City, NE.

- https://waterdata.usgs.gov/ia/nwis/uv/?site_no=06807000
- <http://www.riverwatch.noaa.gov/forecasts/OAXRDOAX.php>

3. Ceasing Operation.

Construction operations near the levee shall cease in the event that additional flooding is imminent, as per the following:

- The excavation on the riverward side of the levee shall cease and the excavation shall be emergency filled.
- The excavation on the landward side of the levee shall cease and shall be continuously observed for seepage, sloughing and other distress to the levee and foundation soils. The Contractor may continue to work if the excavation on the landward side of the levee is complete and there are no indications of distress as determined by the Engineer and the USACE.
- If dewatering is being performed with dewatering wells, then the wells shall be continuously pumped unless the excavation is backfilled or as directed by the Engineer and the USACE.
- If water is observed to enter the excavation resulting in sloughing or excessive seepage, then all work shall cease within the excavation and the excavation shall be backfilled.
- If floodwater exceeds elevation ____ feet at the site, or if excessive seepage or sand boils are observed on the landward side of the temporary berms, then all work shall cease and the Engineer shall be notified.

Coordinate with the Engineer and USACE to determine timing and sequence of activities, as appropriate for returning to working following the receding of flood waters. When the flood

waters recede and if repairs are needed, complete repairs, as directed by the Engineer. Remove debris that has been deposited in the work areas.

4. Construction Equipment.

The Contractor shall provide a list of all construction equipment and material stockpiles that will be stored on the riverward and landward side of the levee. All equipment, construction materials and stockpiled soils on the riverward side of the levee will be removed in the event the river levels reach the published Action Level of 17 feet.

5. Emergency Backfilling.

The rate of emergency backfilling shall exceed the rate of the rising river. Excavated or imported soil shall be used as emergency backfill. The Contractor shall maintain construction equipment on-site that will be available for emergency backfilling of excavations.

150547X.04 EMERGENCY CONTACT INFORMATION.

A. Benton-Washington Levee District.

Patrick Sheldon
Phone: 712-370-0481
Email: palesheldon@gmail.com

B. Iowa DOT Resident Construction Engineer.

David Dorsett, P.E.
3538 S. Expressway
Council Bluffs, Iowa 51501
Phone: 712-366-0568
Email: David.Dorsett@dot.iowa.gov

C. Iowa DOT District 4 Construction Engineer.

Dan Redmond, P.E.
2210 East 7th Street
Atlantic, Iowa 50022
Phone: 712-243-7628
Email: Daniel.Redmond@dot.iowa.gov

D. Section 408 Engineer.

Patrick H. Poepfel, P.E.
HDR, Inc.
1917 S. 67th Street
Omaha, NE 68106
Phone: 402-399-1368
Email: Patrick.Poepfel@hdrinc.com

E. USACE – Omaha District.

24-Hour Emergency Contact
Phone: (402) 995-2448
Email: cenwo-eoc@usace.army.mil

FRRP Section 408 Coordinator
Jennifer Gitt
USACE – Readiness Branch
1616 Capitol Avenue, Suite 9000
Omaha, Nebraska 68102-4926
Phone: 402-995-2443
Email: Jennifer.L.Gitt@usace.army.mil

F. Contractor.

Provide primary and secondary contact information for project manager, project superintendent, and foreman.

150547X.05 METHOD OF MEASUREMENT AND BASIS OF PAYMENT.

All costs for complying with this special provision including the preparation of the EAP, inclusion of submittals with the EAP, project coordination, monitoring, emergency actions, and any other item associated with implementation of the EAP shall be considered incidental to the project. No separate payment will be made.