



Iowa Department of Transportation

SPECIAL PROVISION FOR EMERGENCY ACTION PLAN

Pottawattamie County
IMN-080-1(366)4--0E-78

Effective Date
August 18, 2015

THE STANDARD SPECIFICATIONS, SERIES 2012, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

120319a.01 DESCRIPTION.

A. Levee Unit Name: Ag Levee L-624, Section 3 (Mosquito Creek Levee)
Missouri River - Council Bluffs Flood Protection

Local Sponsor: City of Council Bluffs, Iowa

River Miles: M0.00 to about M1.69

Levee Stations: 998+45 to 1100+00

Project Name: Council Bluffs Interstate System – Segment 3
Railroad Consolidation
Pottawattamie County, Iowa

B. The Iowa DOT is proceeding with the railroad consolidation as a part of the Council Bluffs Interstate System (CBIS) improvement program. The work for railroad consolidation involves the construction of new railroad embankments. The levee affected by this construction is the Agricultural Levee L-624, which is a part of the Council Bluffs Flood Protection System that was originally designed and constructed by the Omaha District of the U.S. Army Corps of Engineers (USACE) in the early 1950s. A large portion of the railroad consolidation 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.

The specific work covered by this Emergency Action Plan (EAP) addresses the earthen embankments for the new railroad tracks, excavated shallow ditches along the toes of the railroad embankments, a box culvert for a bike path underpass through the rail embankment near levee Station 1079+00R, and railroad embankment construction at the Mosquito Creek right bank levee tie-in located at the north end of the levee. The majority of this construction will take place within the levee critical area of the subject levee. The levee critical area is considered by the USACE to be the area from 300 feet riverward to 500 feet landward of the flood control project.

- C. The purpose of this Special Provision is to identify the submittals required by the Contractor for compliance with the Section 408 submittal to the 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.

120319a.02 CONSTRUCTION.

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 on either the Missouri River or the Mosquito Creek during construction. The EAP shall include emergency contact information, including cell phone and pager 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.

Any changes proposed by the Contractor for construction activities located in the levee critical area, such as: changes to staging, excavation depths, shoring, haul routes, or levee access; groundwater dewatering; or pumping water from the Mosquito Creek must be submitted to the Engineer for approval. Submittals will be reviewed by the Engineer, the City of Council Bluffs, and the USACE. Allow 9 weeks for review of these submittals. This time frame does not include review of resubmittals.

If any of these changes are anticipated, a description and location of the proposed changes, approximate time frame that the work will occur, any emergency action necessary, and a description of the proposed removal and restoration shall be included in the EAP submittal.

C. Construction Staging.

1. The Iowa DOT, City of Council Bluffs representatives, and the Engineer shall be notified 1 week prior to construction of the track embankment that ties into the levee section at the north end of the right bank of Mosquito Creek at the Iowa Interstate System railroad embankment (levee Station 985+45), and at the completion of construction operations.
2. Determination that the proposed work is considered substantially complete work will include review of:
 - a. The earthwork grading and
 - b. Satisfactory compaction test results.

D. Limitations.

1. The Contractor must ensure that the proposed construction will not involve any additional landward or riverward excavations in the critical area that may negatively impact the levee at any time during construction except as shown in the approved plans and specifications.
2. The Contractor must ensure that access to the levee crest and area within 15 feet of the levee toe is available to the City of Council Bluffs and USACE at all times. Any required restrictions will require prior approval of the Engineer and the City of Council Bluffs.

120319a.03 EMERGENCY ACTION PLAN.

A. Contents of Emergency Action Plan.

1. The contents of the 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:
 - Drainage District Right-of-Way (provided by the Engineer),
 - levee centerline with stationing (provided by the Engineer),
 - 500 foot landward critical area (provided by the Engineer),
 - Proposed haul routes,
 - Proposed construction within the levee critical area,
 - Stockpiles that will be available for emergency backfill along with dates that stockpiles will be in-place and type of materials, and
 - Proposed levee access locations.

The EAP shall include the schedule for activities within the levee critical area such as planned excavations.

The EAP shall be submitted at least 9 weeks prior to construction within the critical area.

2. The proposed construction will be performed during flood and non-flood event periods. The potential does exist for the river or stream to rise to flood level during the proposed construction. The Contractor shall have the provisions described in this Special Provision 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 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 and precipitation in the Mosquito Creek drainage basin 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, if a heavy precipitation event occurs at any time of the day.
- b. The Engineer and the City of Council Bluffs shall be notified if flood waters in the Mosquito Creek come into contact with the levee or are near the top of the levee within the construction limits.

2. Monitoring Agencies.

- a. The river level shall be monitored through USGS and National Weather Service websites for River Gage - 06610000 Missouri River at Omaha, NE.
 - http://waterdata.usgs.gov/ne/nwis/uv/?site_no=06610000&
 - <http://www.riverwatch.noaa.gov/forecasts/OAXRDOAX.php>
- b. The Mosquito Creek basin precipitation forecast shall be monitored through the National Weather Service website.
 - <http://www.hpc.ncep.noaa.gov/qpf/qpf2.shtml>

3. Ceasing Operation.

- a. Construction operation involving excavations will cease in the event the river levels are within 5 feet of the published flood stage of 29 feet (Elevation 974.4 feet). The 100 year flood elevation at this location is 981.0 feet. The 500 year flood elevation is 983.0 feet.
- b. In the event greater than 1 inch of rainfall in a 24 hour period is forecasted for the Mosquito Creek drainage basin, coordinate the work planned on the levee or riverward of the levee with the Engineer and City of Council Bluffs and take actions to ensure that no material or equipment is located on the levee or riverward of the levee at the end of the shift.

- c. Construction operations on the levee or riverward of the levee will cease if an unforeseen precipitation event occurs and the water level in the Mosquito Creek begins to approach bank full of the minor channel. Material and equipment shall be removed from the levee and riverward of the levee within 4 hours of the unforeseen precipitation event.
- d. Coordinate with the Engineer, City of Council Bluffs, and USACE to determine timing and sequence of activities, as appropriate for returning to working following the receding of flood waters.

4. Construction Equipment.

Provide a list of all construction equipment that will be present throughout the duration of construction within the critical area and will be available for emergency flood fighting activities.

5. Emergency Backfilling.

- a. Emergency backfilling shall be commenced, if the river level reaches an elevation within 5 feet of the published flood stage of 29 feet (Elevation 974.4 feet). The rate of emergency backfilling shall exceed the rate of the rising river. Excavated soil shall be used as emergency backfill.
- b. Emergency backfilling shall commence, if the water level in the Mosquito Creek begins to approach bank full of the minor channel. The rate of emergency backfilling shall exceed the rate of the rising water. Excavated soils shall be used as emergency backfill.
- c. If excessive seepage is observed in any of the excavations, the City and Engineer shall be notified immediately to determine the appropriate course of action.

120319a.04 EMERGENCY CONTACT INFORMATION.

A. City of Council Bluffs.

Jeff Krist, P.E.
City of Council Bluffs, Public Works Dept.
290 Pearl Street
Council Bluffs, Iowa 51503
Phone: 712-328-4635 (office)
Email: jkrist@councilbluffs-ia.gov

Pat Miller, Operations Manager
Phone: 402-510-2700 (cell)

Jeremy Noel, Levee Superintendent
Phone: 402-968-7301 (cell)

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.

George Feazell, P.E.
2210 East 7th Street
Atlantic, Iowa 50022
Phone: 712-243-3355
Email: George.Feazell@dot.iowa.gov

D. Section 408 Engineer.

Patrick H. Poepsel, P.E.

HDR, Inc.
8404 Indian Hills Drive
Omaha, Nebraska 68114
Phone: 402-399-1368
Email: Patrick.Poepfel@hdrinc.com

E. USACE – Omaha District.

Ryan Buckley, P.E.
USACE – Readiness Branch
1616 Capitol Avenue, Suite 9000
Omaha, Nebraska 68102-4926
Phone: 402-995-2446
Email: Ryan.M.Buckley@usace.army.mil

F. Contractor.

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

120319a.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, pre- and post-construction surveys, 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.