



**SPECIAL PROVISION
FOR
ENVIRONMENTAL PROTECTION**

Mills County

Project No.

**BRF-534-1(68)--38-65
NHSX-534-1(80)--3H-65
NHSX-534-1(81)--3H-65
NHSX-534-1(82)--3H-65
NHSX-534-1(83)--3H-65
NHSX-534-1(84)--3H-65
NHSX-534-1(85)--3H-65
NHSX-534-1(89)--3H-65
NHSX-534-1(90)--3H-65
NHSX-534-1(91)--3H-65
NHSX-534-1(94)--3H-65
NHSX-534-1(96)--3H-65**

Effective Date

August 17, 2010

THE STANDARD SPECIFICATIONS, SERIES 2009, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

090092.01 DESCRIPTION.

The work under this contract is located in an environmentally sensitive area. The Contractor's work area shall be restricted to the absolute minimum as defined in the contract documents to construct the project and to accomplish related work. Contractor shall make every reasonable effort to prosecute the construction in a manner so as to minimize any adverse impact of the construction or work on fish, wildlife, or natural environmental values.

The Contracting Authority is obligated to the preservation of the adjacent landscape and existing vegetation. Disruption or damage to existing vegetation including trees within the right-of-way and any adjacent properties shall be limited to the minimum necessary to construct the project.

Areas disturbed by excavation for construction of haul roads, permanent and/or temporary structures, shall be restored to original contours as noted in contract documents. Areas required for equipment movement, offices, stockpiling, service repairs, and storage shall be kept to a minimum and shall be restricted to the boundaries noted in the contract documents.

090092.02 WORK ZONE REQUIREMENTS.

The project area adjoins the Missouri River which is an environmentally sensitive resource. All construction activity in the Missouri River, along its riverbank, and within the area that drains into the Missouri River should be considered work in an environmentally sensitive area.

Any construction related conditions deemed to be potentially damaging to environmentally sensitive resources by the Engineer shall be rectified immediately or construction shall cease. At the discretion of the Engineer, construction activities may resume once provisions to rectify the situation are made. To construct the project, the Contractor shall confine equipment and operations to the project right-of-way shown in the contract documents. These designated construction zones shall be protected with temporary erosion control measures in accordance with the details in the contract documents. No work shall commence on this contract until all temporary erosion control measures have been erected.

No tributaries, oxbows or other backwater areas will be "cut off".

No more than half of the stream channel shall be blocked at any one time so as not to diminish the flow downstream of the project.

The use of machinery in the waterway will be kept to a minimum.

All erosion and sediment control practices shall be in place prior to any grading or filling operations and installation of proposed structures or utilities. They shall remain in place and maintained until construction is completed and the area is stabilized.

Temporary erosion control measures removed or damaged due to construction activities shall be replaced or repaired within 12 hours, or prior to anticipated precipitation and/or snowmelt events.

Turbidity controls in the form of silt curtains or similar type cloth material shall be installed downstream from the activity authorized herein and shall remain in place and maintained until construction is complete.

All earthwork operations on shore will be carried out in such a manner that sediment runoff and soil erosion to the river are controlled.

Concurrently with construction, silt curtains and other sediment control measures will be employed as needed to protect waters of the U.S. Upon completion of the project, uplands adjacent to wetland and channel crossings and relocated channels must be seeded with a native upland seed mixture by September 15. Reed Canary Grass (*Phalaris arundinacea*), Purple Loosestrife (*Lythrum salicaria*), and Smooth Brome (*Bromus inermis*) are NOT appropriate choices of vegetation. If this seeding cannot be accomplished by September 15, wood excelsior mat must then be placed on the disturbed slopes adjacent to wetland and channel crossings and relocated channels. The wood excelsior mat will remain in place until native upland vegetation is established. Disturbed areas adjacent to wetland and channel crossing areas are not to remain bare through the fall, winter and spring months.

All areas disturbed by construction activities and not covered with riprap shall be re-seeded with native grass mix according to Iowa DOT standard specifications. All re-vegetated areas shall be monitored to make certain they succeed.

The clearing of vegetation will be limited to that which is absolutely necessary for construction and operation of the project.

Removal and replacement of any revetment stone placed as part of the project should yield a structure with no significant change in gradation. Any damaged stone shall be replaced with new stone to ensure proper gradation.

Any barges used for construction activities, shall be inspected for the presence of zebra mussels prior to placing the barges into the Missouri River. Barges shall be completely out of the water for 10 days with all compartments opened that could potentially contain water and therefore harbor adult, larval or juvenile zebra mussel. This will ensure proper drying of the barge(s) and reduction of potential infestation. If the barge is obtained from a local source, United States Fish and Wildlife Service, Nebraska Game and Parks Commission and Iowa Department of Natural Resources staff must still be contacted to discuss previous locations at which the barge has been used.

Temporary construction in the Missouri River shall include an appropriate combination of barges, temporary slips, temporary supports (falsework), temporary work pads (located above the Ordinary High Water Mark), and temporary cofferdams. An elevated earthen/sand/rock work platform (causeway) shall not be used for temporary construction; fills in the Missouri River for temporary causeway structures are not permitted. The U.S. Army Corps of Engineers (USACE) shall be notified when the temporary work is constructed and removed from the river. If dredging is needed around the temporary slips to convey barges and the discharge will be placed back into the Missouri River, the USACE shall be notified of the location of dredging, amount to be dredged, and any required Section 401 water quality testing prior to any discharge of dredged material. All temporary construction required shall be removed from the Missouri River in its entirety once it is no longer needed for construction of the project.

The substantial girder lengths require the girders be constructed in segments; therefore, temporary supports may be required. These supports could essentially consist of temporary piers necessary to support girder segments prior to final assembly. These temporary supports shall be promptly removed from the Missouri River following final girder assembly.

A plan for all temporary construction needed shall be submitted to and approved by the USACE prior to installation. The plan must include but is not limited to the location identified on an aerial photo, the dimensions, construction methods and duration of use. The Contractor shall submit the plan for all temporary construction to the Engineer prior to commencing work. Once approved by the USACE, the Engineer will notify the Contractor of approval.

Prior to commencement of hydraulic dredging, the applicant shall perform a modified elutriate test procedure to predict the effluent quality or the total concentration of contaminants in the effluent. This test simulates the processes occurring during confined disposal and provides information on the dissolved and particulate contaminant concentrations. Results of the elutriate test shall be forwarded to the Iowa Department of Natural Resources when available. Should test results prove unsatisfactory, the Iowa Department of Natural Resources may amend this Certification to assure that effluent water quality requirements are met. Please note that if mechanical dredging is performed, the testing will not be required.

Should dredged or excavated material be deposited on the shore before being hauled away, a silt fence, staked bales of straw, or low berms shall be required to limit the reentry of sediments into the river. In addition, the materials shall be placed in a confined area, not classified as a wetland.

Native materials removed from cofferdams may be replaced in the cofferdam.

Other than replacing native materials, any fill materials introduced into the Missouri River must be clean (meaning less than 10% fines that would pass through a #200 sieve). If fill materials include dredged materials taken from the Missouri River, the dredged materials must be taken from inside the project limits and must be clean. Fill materials necessary for temporary slips in the river are permitted and must be clean.

The Contractor shall immediately remove debris during construction in order to prevent the accumulation of unsightly, deleterious, and /or potentially polluted materials, as directed by the Engineer.

No materials, including cleared and grubbed vegetation or construction debris, shall be disposed of in such a way that it could enter a wetland or waterway.

Measures will be employed to prevent wet concrete from entering the waterway or wetlands.

Concrete trucks will be washed at the site and in such a manner that wash water cannot enter the waterway or wetlands.

Steps will be taken to prevent materials spilled or stored on site from washing into the wetlands or waterway as a result of cleanup activities, natural runoff, or flooding, and that, during construction, any materials, which are accidentally spilled into these areas, will be retrieved.

Care will be taken to prevent any petroleum products, chemicals, or other deleterious materials from entering the water.

No fuels, lubricants, form oil, or similar products shall be stored in an unprotected area of the project area. All handling and storage of these materials must be done in such a manner as to protect all water bodies from accidental spills and leaks.

Spill protection material (i.e., spill kit) will be readily available at the project site to contain and absorb accidental spills of fluids from construction equipment. Personnel trained in the implementation of the spill kit will be readily available onsite to respond to accidental spills.

The Iowa Department of Natural Resources regulates open burning and administers regulations that pertain to fugitive dust and opacity (visible emissions). In general "open burning" is prohibited except for the special exemptions listed in the state open burning rules. The open burning rules are contained in 567 IAC rule 23.2(455B). In addition there are a number of definitions in 567 Chapter 20 that are applicable to open burning. The IAC is available on-line at www.legis.state.ia.us/IAC.html. In general, owners or operators must take reasonable precautions to prevent fugitive dust from becoming airborne and crossing the property line. These regulations are contained in 567 IAC paragraph 23.3(2)"c", and can be found at the website above. In general, visible emissions in excess of 40 percent opacity are not allowed unless specifically exempted under rule. The rules for opacity are under paragraph 567 IAC 23.3(2)"d", and can be found at the website above.

090092.03 PROTECTED SPECIES.

In-stream work shall be timed to avoid the major fish spawning period of April 15 to June 1.

Activities occurring in the Missouri River (i.e., cofferdam installation/removal, pile-driving activities, dredging, driving/vibrating of barge anchor spuds) will not occur February 1 through June 30 to avoid impacts on the pallid sturgeon.

Attention is directed to the Migratory Bird Treaty Act (15 USC 703-711) 50 CFR Part 21 and 50 CFR Part 10 that protect migratory birds, their occupied nests, and their eggs from disturbance or destruction. Activities that are most likely to result in disturbance or destruction of migratory birds include but are not limited to clearing and grubbing, as well as structure cleaning, painting, demolition or reconstruction where bird nests are present. To protect migratory birds, do not conduct construction activities where active nests are present between the dates April 1 and July 15 inclusive or until the birds have fledged and left the structure. If evidence of migratory bird nesting is discovered after beginning work or in the event that migratory bird nests become established, immediately stop work and notify the Engineer.

Removal of trees for areas located in Iowa is prohibited between the dates of April 15 to September 15 inclusive to avoid Indiana Bat habitat.

Tree clearing will not occur from December 15 to February 20 to protect bald eagles.

Contractor is made aware that Contracting Authority is required to survey for bald eagle nests in the project area prior to construction activities planned between February 15 and July 15. If active nests are discovered, all construction activities are required to cease while the Contracting Authority consults with the regulatory agencies.

If during the course of construction, any surprise discoveries of protected plant or animals are made in the project area, the Contractor should notify the Engineer immediately.

090092.04 CLEAN WATER ACT COMPLIANCE.

A Clean Water Act Section 404 Permit (CEMVR-OD-P-20038-10140-WEH) has been obtained by the Contracting Authority that authorizes all construction-related activities affecting waters of the U.S. The 404 Permit contains numerous special conditions that have been included in this Special Provision. Failure to follow the provisions of this Special Provision may result in enforcement actions being initiated by the USACE. Enforcement actions may include an order to immediately cease all construction activity and/or fines.

It will be the Contractor's responsibility to ensure that the day-to-day operations of the project comply with this Special Provision. The Engineer will be available throughout the project to offer guidance to the Contractor regarding compliance with this Special Provision and the Clean Water Act.

Included with the Clean Water Act Section 404 Permit are Section 401 Water Quality Certifications from Iowa Department of Natural Resources and Nebraska Department of Environmental Quality, which contain numerous special conditions that have been included in this Special Provision.

It is the goal of Iowa's and Nebraska's Water Quality Standards that all uses of the Missouri River be maintained and protected. The dredging will cease if the water quality standards of either the State of Iowa or the State of Nebraska are violated.

The work is also governed by the provisions of Article 1105.14 of the Iowa DOT Standard Specifications.

090092.05 PAYMENT.

Except as specified below, no separate payment will be made for costs incurred due to compliance with this Special Provision.

If the Contractor's activities are restricted beyond the limits of this Special Provision due to issues associated with the pallid sturgeon or the Migratory Bird Treaty Act, the additional labor and equipment costs required to re-establish the Contractor's schedule due to the delay(s) will be paid in accordance with Article 1109.03, B of the Standard Specifications. No additional time will be provided to the contract unless approved in writing by the Engineer.