Directs Contractor to specific land spread site. Does not allow optional locations.

1. Off-Site Treatment or Disposal, Item SPV.0195.##; Off-Site Stockpiling at Land Spreading Site, Item SPV.0195.##

A Description

A.1 General

Conform to standard spec 205 and standard spec 206; to parts of the Wisconsin Administrative Code, Chapters NR 700-736 Environmental Investigation and Remediation of Environmental Contamination; Wisconsin Administration Code, Chapters NR 500-538, Solid Waste; and as the plans show and in this special provision.

A.2 Petroleum-Contaminated Material

Petroleum-contaminated material has been identified within the limits of construction as the plans show and at the following locations:

1. Station 91+10 to Station 92+50 from 8 feet left of the reference line to the limits of construction right – contaminated soil and fill from below the existing pavement and base coarse to a depth below the water table. Contaminated groundwater exists in the same general area.

2. Station 9+92 F to Station 11+50 F from the limits of construction left to the limits of construction right – contaminated soil and fill from below the existing pavement and base coarse to a depth below the water table. Contaminated groundwater exists in the same general area.

3. Station 98+00 to Station 98+50 from the limits of construction left to 15 feet right of reference line – contaminated soil and fill exists below 4 feet. Contaminated groundwater exists in the same general area.

4. Station 9+08 R to Station 10+00 R from the limits of construction left to 5 feet left of the reference line - contaminated soil and fill exists below 4 feet. Contaminated groundwater exists in the same general area.

5. Station 98+50 to Station 99+70 from the limits of construction left to 25 feet right of reference line – contaminated soil and fill exists below 4 feet. Contaminated groundwater exists in the same general area.

6. Station 99+70 to Station 101+10 from the limits of construction left to 32 feet right of reference line – contaminated soil and fill exists below 4 feet. Contaminated groundwater exists in the same general area.

7. Station 101+10 to Station 101+68 from the limits of construction left to 25 feet right of reference line – contaminated soil and fill exists below 4 feet. Contaminated groundwater exists in the same general area.

8. Station 9+65M to Station 10+60M from the limits of construction left to the limits of construction right – contaminated soil and fill exists below 4 feet. Contaminated groundwater exists in the same general area.

Control construction operations at these locations to ensure that they do not extend beyond the excavation limits indicated in the plans. Use trench boxes when installing utility lines within these contaminated areas.

This work includes managing Petroleum-Contaminated Material. Management of Petroleum-Contaminated Material consists of excavating, dewatering (if needed), segregating, temporary stockpiling on the project (if needed), loading, hauling, and off-site stockpiling at the project’s DNR-approved land spreading site or off-site treatment or disposal at a DNR-approved landfill or biopile site.

A.3 Contaminated River Material

Contaminated sediment has been identified near the limits of bridge pier construction at the following location:

1. River sediment within the West Twin, approximately 200 feet downstream of the existing bridge. Testing was completed at this location and it is assumed that these testing results are representative of sediment quality in this area of the West Twin River.

Control construction operations in the river sediment to ensure that they do not extend beyond the excavation limits indicated in the plans. All excavated river sediment shall be classified as Contaminated River Material.

This work includes managing Contaminated River Material. Management of Contaminated River Material consists of excavating, dewatering (if needed), segregating, temporary stockpiling on the project (if needed), loading, hauling, and off-site stockpiling at the project’s DNR-approved land spreading site.

A.4 DNR Approved Landspreading Site and Stockpile Locations

The DNR-approved land spreading site is a 10-acre agricultural site owned by the City of Two Rivers. The site is located at approximately 900 feet north of the intersection of STH 310 and Woodland Drive, in the City of Two Rivers. A nearby DNR-approved treatment/disposal facility is:

The Waste Management Ridgeview Landfill

6207 Hempton Lake Road

Whitelaw, WI 54247

(920) 732-4473

At least 30 days before construction in the contaminated areas or at the preconstruction meeting, whichever comes first, provide information to the environmental consultant and engineer identifying the DNR-approved treatment or disposal facility that will be used. The environmental consultant will be responsible for obtaining the necessary off-site disposal facility approvals and DNR approvals for treatment and disposal. Do not transport contaminated material or regulated solid waste off-site without obtaining the approval of the engineer and environmental consultant and notifying the disposal facility.

The environmental consultant and the City of Two Rivers will be responsible for obtaining the necessary approvals for placement of waste at the project’s land spreading site. Contractor shall not transport Petroleum-Contaminated Material or Contaminated River Material to the land spreading site without obtaining the approval of the environmental consultant and the engineer.

Contractor shall be responsible for stockpiling material at the land spreading site conforming to the requirements of NR 718.05(2)(c) and (d). Place the stockpile material on an impermeable surface such as asphalt or 20 mil plastic sheeting. The temporary stockpile must be covered at the end of each day and during rainfall events. The cover shall consist of 10 mil minimum plastic sheeting anchored with rope and ballast of sand bags, or similar material. Dike the stockpile to prevent runoff.

Obtain approval from the engineer for the stockpile location. Construct the stockpile in an orderly fashion and compact to minimize the surface area of the cover. Subsequent land application of materials at the land spreading site will be by others.

The City of Two Rivers will be the generator of all contaminated material and regulated solid waste from this construction project.

B (Vacant)

C Construction

*Add to standard spec 205.3 with the following:*

This work includes managing Petroleum-Contaminated Material and Contaminated River Material. Management of these materials includes excavating, dewatering (if needed), segregating, temporary stockpiling on the project (if needed), loading, and hauling off-site for stockpiling at the project’s DNR-approved land spreading site or disposed off-site at a DNR-approved landfill. Per NR 718.07 a solid waste collection and transportation service operating license is required under NR 502.06 whenever excavated contaminated materials are transported over roadways that are open to the public.

Petroleum-Contaminated Material

Depending on the level of contamination, Stockpile Petroleum-Contaminated Material at the project’s DNR-approved land spreading site or dispose of it at a DNR-approved treatment and disposal facility (landfill).

Contaminated River Material

Stockpile Contaminated River Material at the project’s DNR-approved land spreading site.

The environmental consultant will periodically examine excavated material during excavations in the areas of known petroleum contamination and during river sediment excavation within the construction limits. Assist the environmental consultant in collecting samples using excavation equipment. The environmental consultant will collect samples from the excavations. The sampling frequency will be a maximum of one sample for every 20 cubic yards excavated.

The environmental consultant will classify material during excavations in the area of known petroleum contamination and in other potentially contaminated areas encountered during excavations. On the basis of existing analytical data, site observations, and the results of such field-screening during construction, the materials encountered on this project will be designated for disposal as:

- Excavation Common - Clean soil and construction and demolition fill (such as boulders, concrete, reinforced concrete, bituminous pavement, bricks, building stone, and unpainted or untreated wood). This material, under NR 500.08, is exempt from licensing and requirements of Wisconsin Administrative Code NR 500–538 of the solid waste regulations. Dispose of all such material at contractor expense at a site(s) outside the construction limits or on-site at the discretion of the engineer. The contractor’s disposal site(s) will conform to the location requirements of NR 504.04(3)(c) and (4)(a) to (f). Obtain written permits for disposal from the owner of the property upon which the material is placed. Furnish copies of permits to the engineer and environmental consultant before such disposal.

- Petroleum-Contaminated Material for Off-Site Treatment or Disposal, Item SPV.0195.01. Petroleum-contaminated material that is not suitable for reuse on the project because of elevated contamination levels will be classified as Petroleum-Contaminated Material for Off-Site Treatment or Disposal. Transport this material off site for disposal at the DNR-approved treatment and disposal facility (landfill) identified by the contractor. This material is not suitable for reuse on the project in the utility trenches from which it was excavated or under the roadway pavement in the area from which it was excavated because of the petroleum contamination levels in the material. The environmental consultant will guide the contractor in segregating this material from others. It is expected that approximately 400 CY of this material will be encountered from within the limits of construction at the following location:

1. Station 100+56 to Station 101+40 from the limits of construction left to 12 feet right of the reference line – contaminated soil and fill below 4 feet.

- **Low-Level Petroleum-Contaminated Material** for Stockpiling at Land Spreading Site, Item SPV.0195.02. Petroleum-contaminated material with low levels of contamination that cannot be reused on the project due to geotechnical limitations or limited reuse capacity will be classified as Low-Level Petroleum-Contaminated Material for Off-Site Stockpiling at Land Spreading Site. Transport this material to the DNR-approved land spreading site and stockpile at this site. This material is not suitable for reuse on the project in the utility trenches from which it was excavated or under the roadway pavement in the area from which it was excavated because of the material’s geotechnical limitations or due to limited reuse capacity in trenches or under the pavement in the area. It is expected that approximately 2050 CY of this material will be generated from within the limits of construction at the following locations:

1. Station 91+10 to Station 92+50 from 8 feet left of the reference line to the limits of construction right – contaminated soil and fill from below the existing pavement and base coarse to a depth below the water table.

2. Station 9+92 F to Station 11+50 F from the limits of construction left to the limits of construction right – contaminated soil and fill from below the existing pavement and base coarse to a depth below the water table.

3. Station 98+00 to Station 98+50 from the limits of construction left to 15 feet right of reference line – contaminated soil and fill exists below 4 feet.

4. Station 9+08 R to Station 10+00 R from the limits of construction left to 5 feet left of the reference line - contaminated soil and fill exists below 4 feet.

5. Station 98+50 to Station 99+70 from the limits of construction left to 25 feet right of reference line – contaminated soil and fill exists below 4 feet.

6. Station 99+70 to Station 101+10 from the limits of construction left to 32 feet right of reference line – contaminated soil and fill exists below 4 feet.

7. Station 101+10 to Station 101+68 from the limits of construction left to 25 feet right of reference line – contaminated soil and fill exists below 4 feet.

8. Station 9+65M to Station 10+60M from the limits of construction left to the limits of construction right – contaminated soil and fill exists below 4 feet.

- **Contaminated River Material** for Stockpiling at Land Spreading Site, Item SPV.0195.02. River material with low levels of contamination will be classified as Contaminated River Material for Stockpiling at Land Spreading Site. Transport this material to the DNR-approved land spreading site and stockpile at this site. This material is not suitable for reuse on the project in the utility trenches or under the roadway pavement because of the material’s geotechnical limitations. It is expected that approximately 400 CY of this material will be generated from within the limits of construction at the following location:

1. All sediment excavated from the West Twin River for bridge pier construction.

River material is generally the non-vegetated soil materials beneath the ordinary water elevation of the West Twin River. Stockpile river material excavated for bridge pier construction at the DNR-approved land spreading site. Do not place spoils, excavated material, and material to be dewatered in wetlands at any time. Due to the high moisture content of the river material, anticipate the potential need for dewatering river material and liners in the trucks used to transport the river material. Construct and maintain an on-shore management facility to dewater sediment until no free liquids are present, as required for transportation of material and as required before temporary stockpiling of river material on the project and before stockpiling of river material at the DNR-approved land spreading site. Stabilize the river material without adding dry solids (i.e., concrete, bentonite, lime). Include as part of the Erosion Control Implementation Plan (ECIP) the proposed location of river material staging and dewatering activities, and the means and methods for containment of river material and management of water generated during the dewatering of river material. Place proper erosion control measures before beginning river material staging, dewatering, and loading and transportation operations.

When material is encountered outside the previously-identified limits of known contamination that exhibits characteristics of industrial-type wastes, such as fly ash, foundry sand, and cinders, or if underground storage tanks or soil/fill material that appear to have been impacted with petroleum or chemical products, or other obvious potentially contaminated materials are encountered, suspend excavation in that area and notify the engineer.

During excavations in the area of known contamination, segregate larger chunks of clean concrete (~2 cubic feet) and bricks, if encountered, from soils and other fill to the extent practical and manage as common excavation. Under NR 500.08 this material is exempt from licensing and requirements of Wisconsin Administrative Code NR 500-538 of the solid waste regulations; dispose of this material off-site at the contractor’s disposal site(s) or, at the engineer's discretion reuse on-site as designated by the engineer as fill on the project.

Verify that the vehicles used to transport material are licensed for such activity conforming to applicable state and federal regulations.

To reduce the volume of waste generated, use trench boxes when installing utility lines within the defined contaminated areas. Reuse contaminated material as backfill in the utility line trenches to the extent possible.

Petroleum-Contaminated Material and Contaminated River Material may be stockpiled temporarily on the project as necessary for up to 10 working days. Construct and maintain the stockpile conforming to NR 718.05(3). Place the stockpile material on an impermeable surface such as asphalt or 20 mil plastic sheeting. Cover the temporary stockpile at the end of each day and during rainfall events. The cover shall consist of 10 mil minimum plastic sheeting anchored with ballast of tires, sand bags, or similar material. Dike the stockpile to prevent runoff. Obtain prior approval from the engineer for the stockpile location.

D Measurement

The department will measure Off-Site Treatment or Disposal by the ton of contaminated material accepted by the DNR-approved treatment and disposal facility and as documented by load tickets. The weight of the material is estimated to be 1.3 tons per CY.

The department will measure Off-Site Stockpiling at Land Spreading Site by the ton of material stockpiled at the project’s DNR-approved land spreading site as measured by contractor and verified by engineer. The weight of the material is estimated to be 1.3 tons per CY.

E Payment

The department will pay for measured quantities at the contract unit price under the following items:

ITEM NUMBER DESCRIPTION UNIT

SPV.0195.## Off-Site Treatment or Disposal TON

SPV.0195.## Off-Site Stockpiling at Land Spreading Site TON

This payment is full compensation for excavating, dewatering, segregating, temporary stockpiling (if needed), loading, transporting, and for stockpiling at the land spreading site or treatment/disposal at a DNR-approved facility.

ner-107-105 (20180212)