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February 10, 2014

Mr. David Hon Wisconsin Department of Natural Resources 1300 W Clairemont Ave Eau Claire, WI 54702-4001

Subject: Contaminated Soil Management Documentation Report

USH 12, Merrillan, Wisconsin WisDOT ID #7080-05-73

Dear Mr. Hon:

The attached report documents the contaminated soil management at sites along USH 12 in Merrillan, Wisconsin. The report includes a brief summary of the activities that occurred during the project.

The WisDOT has fulfilled their commitment to manage the contaminated soil during the USH 12 reconstruction in Merrillan, WI in accordance with the Special Provision for the project.

Feel free to call me at (608) 826-3659, or Dan Haak at (608) 826-3628, with any questions.

Sincerely,

TRC Environmental Corporation

Dennis Siewert

Senior Designer

Daniel Haak, P.E.

Project Manager

cc: Amy Adrihan – WisDOT (hard copy and pdf on CD)
Nick Schaff – WisDOT (hard copy and pdf on CD)
Shar TeBeest – WisDOT (hard copy and pdf on CD)

Jim Morse - TRC



Contaminated Soil Management Documentation Report

USH 12 Merrillan, Wisconsin

WisDOT Project ID #7080-05-73

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Project Manager

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Table of Contents

Com	ommonly Used Abbreviations and Acronymsii					
Execu	ıtive Summary	iii				
1.	Introduction	1				
	1.1 Background					
2.	Contaminated Soil Management	2				
3.	Conclusions & Recommendation					

List of Tables

Table 1 Summary of Soil Field-Screening Results

List of Figures

Figure 1 Site Location Map

List of Appendices

Appendix A Highway Construction Plans with Contaminated Soil Extents

i

Appendix B Special Provisions Appendix C Soil Disposal Records

Appendix D Photo Log

Commonly Used Abbreviations and Acronyms

AST aboveground storage tank bgs below ground surface

BRRTS Bureau for Remediation and Redevelopment Tracking System

CERCLA Comprehensive Environmental Response, Compensation and Liability Act

CTH County Trunk Highway

CY cubic yards

DATCP Department of Agriculture, Trade and Consumer Protection

DRO diesel range organics

FDM Facilities Development Manual EMP Excavation Management Plan ERP Environmental Repair Program

ES Enforcement Standards

ESA Environmental Site Assessment

FINDS Facility Index System/Facility Identification Initiative Program Summary Report
GIS Registry WDNR Geographic Information System (GIS) Registry of Closed Remediation Sites

GRO gasoline range organics

HAZWOPER Code of Federal Registry Chapter 29 (29 CFR) Part 1910.120 Hazardous Waste

Operations and Emergency Response

HMA Hazardous Materials Assessment

IH Interstate Highway LQG large quantity generator

LUST leaking underground storage tank

NPL National Priorities List

NR ### Wisconsin Administrative Code (WAC) Natural Resources (NR) Chapter ###

PAHs polynuclear aromatic hydrocarbons

PAL Preventive Action Limits
PCBs polychlorinated biphenyls

PCE perchloroethylene/tetrachloroethylene

PID photoionization detector

PVOCs petroleum volatile organic compounds RCLs Residual Contaminant Levels in NR 720 RCRA Resource Conservation and Recovery Act

RCRIS Resource Conservation and Recovery Information System

R/W or ROW right-of-way sf square feet

STH State Trunk Highway TCE trichloroethylene

TRIS Toxic Chemical Release Inventory System

USGS United States Geological Survey

USH United States Highway
UST underground storage tank
VOCs volatile organic compounds

WDNR Wisconsin Department of Natural Resources WisDOT Wisconsin Department of Transportation

WGNHS Wisconsin Geological and Natural History Survey WI ERP Wisconsin Environmental Repair Program database

TRC Environmental Corporation | Wisconsin Department

Executive Summary

The Wisconsin Department of Transportation (WisDOT) has completed the reconstruction of USH 12 from Sta. 545+10 (south of Castle Hill Road) to Sta. 593+50 (approximately 100' North of Merrill Street), WisDOT project ID #7080-05-73, in Merrillan, Wisconsin. The following 5 sites had been identified as locations where potentially petroleum-contaminated soils may exist within the ROW during utility excavation on this project.

- Former Gosch's Shell Station 305 S. USH 12 (BRRTS #03-27-203673)
- Double T Quick Stop 302 N. USH 12 (BRRTS #03-27-001255)
- Thompson Motors 305 N. USH 12 (BRRTS #03-27-000088)
- Former Dave's Gas Station 405 N. USH 12 (BRRTS #03-27-001459)
- Former Standard Gas Station Southeast corner of USH 12 and Merrill Street (BRRTS #03-27-560390)

The WisDOT retained TRC Environmental Corporation (TRC) to provide construction oversight management services for this project within excavations in potentially petroleum-contaminated soil at these 5 sites. TRC observed the excavation contractor, Gerke Excavating Company (Gerke), during grading and construction of underground utilities and to assist in the management of the contaminated soil.

TRC observed Gerke complete excavations for grading, new water main and laterals, sanitary laterals, and storm sewer within the limits of potentially petroleum-contaminated soil. TRC field-screened soil with a PID, observed for odors and visual evidence of soil staining. If previous investigations and/or field screening indicated significant petroleum-soil contamination, the soil was hauled to Advanced Disposal Cranberry Creek Landfill in Wisconsin Rapids for treatment and disposal. A total of 934.24 tons of petroleum-contaminated soil was taken to the landfill for treatment and disposal. Low-level petroleum-contaminated soil was re-used as backfill. Groundwater was not encountered at the identified sites.

The WisDOT has fulfilled their commitment to manage the contaminated soil during the USH 12 reconstruction in Merrillan, Wisconsin in accordance with the Special Provision for the project.

iii

1.1 Background

The WisDOT has completed the reconstruction of USH 12 from STA 545+10 (south of Castle Hill Road), to STA. 593+50 (approximately 100 feet north of Merrill Street), WisDOT Project ID 7080-05-73, in Merrillan, Wisconsin (see Appendix A for highway plans).

A Phase 1 HMA Report, previously completed by PEP Environmental Services, LLC (PEP) for Gremmer & Associates (Gremmer) in November 2010, identified potential hazardous materials sites along the USH 12 corridor. Based on the information acquired from the Phase 1 HMA, a Phase 2 Investigation was recommended for the six sites where little or no investigation work had previously been completed. A Phase 2 Environmental Subsurface Investigation Report was completed by PEP for Gremmer in June 2011. Of the six sites, this report identified two hazardous materials sites of potential concern along the USH 12 corridor.

- Former Dave's Gas Station (405 N. USH 12)
- Former Standard Gas Station (southeast corner of USH 12 and Merrill Street).

Special Provisions were prepared by TRC in June 2012 for the management of petroleum-contaminated soil, and identified at five locations within the construction corridor of the USH 12 reconstruction project. The Special Provisions were approved by the WDNR in July 2012, and incorporated into the WisDOT contract (Appendix B). These sites are:

- Former Gosch's Shell Station
- Double T Quik Stop
- Thompson Motors
- Former Dave's Gas Station
- Former Standard Gas Station

1.2 Purpose

The purpose of this report is to document the excavation of petroleum-contaminated soils within the limits of the USH 12 project corridor in Merrillan, Wisconsin.

This report summarizes the observations and activities performed by TRC during grading and utility excavation activities, and documents the treatment and disposal of petroleum-contaminated soils excavated during the reconstruction of USH 12 in Merrillan, Wisconsin.

Section 2 Contaminated Soil Management

TRC was on-site during excavation activities at sites with potentially petroleum-contaminated soils on various dates from May through September 2013.

During the utility installation near former Gosch's Shell Station, two monitoring wells (MW-7 & MW-8) were identified as being within the limits of construction, and were abandoned by Metco. These two monitoring wells, located on the west side of USH 12 (North & South of Lincoln Street), will be reinstalled during the spring of 2014 by the responsible party.

At sites with potentially petroleum-contaminated soil, TRC field-screened soil with a PID, observed for odors and visual evidence of soil staining. Soil field-identified with significant petroleum-contamination (based on previous investigations and field-screening, including PID >10 ppm), was hauled to the Advanced Disposal-Cranberry Creek Landfill in Wisconsin Rapids, Wisconsin. See Appendix C for landfill documentation of petroleum-contaminated soil treatment and disposal. If previous investigations and/or field screening (PID <10 ppm) indicated low-level petroleum contamination, the soil was re-used as backfill.

Petroleum-contaminated soil was encountered during underground utility construction at several locations within the project corridor. See Appendix A for locations where contaminated soil exists within the construction corridor.

During underground utility construction, the water and sanitary laterals were typically installed first, followed by the installation of the shallow storm sewer piping in nearby locations at a later date. The water and sanitary sewer laterals were installed at approximately 8 to 9-feet bgs, and the storm sewer piping was typically installed at approximately 4 to 5-feet bgs, depending on the location. On a few occasions, the construction contractor, Gerke, installed utilities without notifying TRC of their construction progress and schedule. In those situations, Gerke stockpiled potentially-contaminated soils for waste classification. Petroleum-contaminated soil was encountered during the installation of sanitary sewers and water mains during construction. Figure 4 in Appendix A shows petroleum-contaminated soil PID readings from an exploratory trench in search of an existing wastewater lateral (at 8-9' bgs), connected to Double T Quik Trip. The PID readings shown on Figure 4 are readings taken at 7-9' bgs. Petroleum-impacted soils from this trench were managed for landfill disposal. This trench was filled with clean overburden soils after the utility connections to Double T Quik Trip were completed, prior to the final installation of the new storm sewers in this location.

A total of 934.24 tons of petroleum-contaminated soil was taken to the Advanced Disposal – Cranberry Creek Landfill for treatment and disposal. Field screening PID results, including the location of field screening samples, are summarized in Table 1. A photo log during the installation of utilities within the project corridor is presented in Appendix D.

On August 19, 2013, TRC directed Gerke to over-excavate an area within the limits of construction in front of Former Dave's Gas Station, at approx. Station 589+20 to 590+20 on USH 12 from 20' left of reference line to 20' right of reference line, to an approximate depth of 10' bgs. This over-excavation scope was completed under contract with the WDNR, and removed contaminated soil beyond that to be excavated as part of the ongoing USH 12 WisDOT project.

The WDNR had requested confirmation soil samples be collected for laboratory analysis in open excavations at open BRRTS sites within the USH 12 highway reconstruction project. Of the open BRRTS sites, soil samples were collected at the Former Dave's site (BRRTS # 03-27-001459) which was during the over-excavation effort on August 19, 2013, as requested by the WDNR. In addition, 658 tons of petroleum-contaminated soil was excavated and removed for treatment and disposal at Cranberry Creek Landfill's bioremediation facility in Wisconsin Rapids, Wisconsin. The other two BRRTS sites, Former Gosch's Shell (03-27-203673) and Former Standard Gas Station (03-27-560390), were not sampled due to utility excavations taking place without prior notification to TRC. These sites did generate contaminated soil stockpiles for later classification, treatment, and disposal at Cranberry Creek Landfill. See Appendix A for contaminated soil extents.

TRC recommends that the WisDOT take no further action to investigate or remediate soil or groundwater impacts that may remain at these sites.

Section 3 Conclusions & Recommendation

TRC completed observation of the contractor's excavations and their management of contaminated soil for the WisDOT during the reconstruction of USH 12 in Merrillan, Wisconsin.

- TRC field-screened areas of potential petroleum-contaminated soil. Petroleum-contaminated soil was encountered during sanitary and water lateral excavations within the construction limits as identified in the Special Provisions.
- A total of 934.24 tons of petroleum-contaminated soil was excavated and hauled for treatment and disposal at Advanced Disposal Cranberry Creek Landfill.
- Groundwater was not encountered at the sites with potential petroleum contamination.

On the basis of the results of the field observations, field-screening, and information included in the Special Provisions, the WisDOT has fulfilled their commitment to properly manage the petroleum-contaminated soil excavated for the reconstruction project of USH 12 in Merrillan, Wisconsin. TRC recommends that the WisDOT take no further action to investigate or remediate soil or groundwater impacts that may remain at these sites.

Table 1

Summary of Soil Field-Screening Results USH 12 Reconstruction, Merrillan Wisconsin WisDOT Project ID #7080-05-73 May-September, 2013

		DEPTH				
DATE	LOCATION	(ft bgs)	PID	COMMENTS		
5/20/2013	Sta. 568+00 (From reference line to construction limits left) Water lateral piping installation.	7-9	ND	Brown uniform sandy soils, no petroleum odors		
5/20/2013	Sta. 568+30 (From reference line to 25' R of reference line) Sanitary and water lateral piping installation.	7-9	ND	Brown uniform sandy soils, no petroleum odors		
5/20/2013	Sta. 568+90 (From reference line to 40' R of reference line) Sanitary and water lateral piping installation.	7-9	ND	Brown uniform sandy soils, no petroleum odors		
5/20/2013	Sta. 568+90 (40' to 60' R of reference line) Sanitary and water lateral piping installation. Gerke stockpiled ~1 ton of soil.	7-9	158	small pocket of petroleum- contaminated soil at 40' R of reference line (dark brown stained soils with strong petroleum odors)		
5/29/2013	Sta. 568+30 (25-50' R of reference line) Sanitary and water lateral piping installation. 3 truckloads of petroleum-contaminated soil removed for treatment and disposal	7-9	160	readings from stockpile along open trench - dark brown clayey soil with strong petroleum odors		
5/29/2013	Sta. 569+40 (15-60' R of reference line) Sanitary and water lateral piping installation.	7-9	ND	Brown uniform sandy soils, no petroleum odors		
8/14/1013	590+03 (from reference line to 50' R of reference line) Sanitary and water lateral piping installation to bar/grill behind former Dave's gas station	7-9	785 / 770	petroleum-contaminated soil between 15' to 50' R of reference line @ 7' bgs (dark brown stained soils with strong petroleum odors)		
	589+80 (from reference line to 50' R of reference line) Sanitary lateral piping installation	7-9	690	dark brown stained soils with strong petroleum odors		
	589+70 (from 20' R of reference line to construction limits right) water lateral piping installation	7-9	785	dark brown stained soils with strong petroleum odors		
8/14/1013	Sta. 590+35 (20' R of reference line-PID=285 to 30' L of reference line-PID=189) Sanitary and water lateral piping installation to residence north of Merrillan Café.	7-9	285R /189L	entire utility trench consists of heavy petroleum-contaminated soils, brown/black staining, strong petroleum odors		
	Sta. 590+70 (from reference line to construction limits right) Sanitary lateral piping installation	7-9	ND	Brown uniform sandy soils, no petroleum odors		
	Sta. 591+00 (from reference line to construction limits right) Sanitary lateral piping installation	7-9	ND	Brown uniform sandy soils, no petroleum odors		
8/15/2013	Sta. 591+75 (from reference line to 25' R of reference line) Sanitary lateral piping installation.	7-9	58	readings from stockpile along open trench - dark brown clayey soil with mild petroleum odors		

Table 1

Summary of Soil Field-Screening Results USH 12 Reconstruction, Merrillan Wisconsin WisDOT Project ID #7080-05-73 May-September, 2013

DATE	LOCATION	DEPTH (ft bgs)	PID	COMMENTS
8/15/2013	Sta. 591+75 (From reference line to 20' L of reference line) Sanitary lateral piping installation.	7-9	ND	dark-brown clayey soils, no petroleum odors
	Sta. 591+20 (From 20' R of reference line to construction limits left) Sanitary and water lateral piping installation.	7-9	ND	dark-brown clayey soils, no petroleum odors
8/20/2013	Sta. 585+50 to 587+50, 15' R of reference line, new segment of 8" water line in front of Thompson Motors	7-9	ND	readings along entire water main trench were ND, no stained soils, no petroleum odors in soils
	Sta. 585+55 - 15' R of reference line to construction limits left - Water lateral piping installation.	7-9	ND	dark-brown clayey soils, no petroleum odors
	Sta. 586+60 - 15'-40' R of reference line. Water lateral piping installation.	7-9	ND	dark-brown clayey soils, no petroleum odors
	Sta. 586+85 - 15'-40' R of reference line. Water lateral and sanitary piping installation.	7-9	ND	dark-brown clayey soils, no petroleum odors
8/20/2013	Sta. 589+10 from 20' R of reference line (PID=900 ppm) to Ref. Line (PID=151 ppm) to 30' L of reference line (PID=189 ppm)	7-9		entire utility trench consists of heavy petroleum-contaminated soils, brown/black staining, strong petroleum odors
8/22/2013	Sta. 590+10 From reference line to construction limits left for sanitary lateral piping installation.	7-9	285	petroleum-contaminated soils, brown/black staining, strong petroleum odors
8/28/2013	Sta. 586+70 - (From reference line to 20' L of reference line) for sanitary and water lateral to Quik Trip)	7-9	325	Brown/Dark brown clayey soil, strong petroleum odor
8/29/2013	Sta. 586+10 - 30' L of reference line (trench for lost utility location to Quik Trip - North/South)	7-9	68	Brown/Dark brown clayey soil, strong petroleum odor
	Sta. 586+25 - 30' L of reference line (trench for lost utility location to Quik Trip - North/South)	7-9	300	Brown/Dark brown clayey soil, strong petroleum odor
	Sta. 586+40 - 30' L of reference line (trench for lost utility location to Quik Trip - North/South)	7-9	325	Brown/Dark brown clayey soil, strong petroleum odor
8/29/2013	Sta. 586+55 - 30' L of reference line (trench for lost utility location to Quik Trip - North/South)	7-9	295	Brown/Dark brown clayey soil, strong petroleum odor

Table 1

Summary of Soil Field-Screening Results USH 12 Reconstruction, Merrillan Wisconsin WisDOT Project ID #7080-05-73 May-September, 2013

DATE	LOCATION	DEPTH (ft bgs)	PID	COMMENTS		
8/29/2013	Sta. 586+70 - 30' L of reference line (trench for lost utility location to Quik Trip - North/South)	7-9	358	Brown/Dark brown clayey soil, strong petroleum odor		
8/29/2013	Sta. 586+85 - on reference line (trench for sanitary lateral to Quik Trip)	7-9	282	Brown/Dark brown clayey soil, stron petroleum odor		
9/3/2013	Sta. 586+00 to Sta. 586+60, 35'L of reference line - trench for storm sewer in front of Quik Trip (not shown on Figure 8 of Appendix A)	3-5	ND	Brown/Dark brown sandy soil, no petroleum odor		
9/11/2013	Sta. 586+60 to Sta. 587+20, 35'L of reference line - trench for storm sewer in front of Quik Trip (not shown on Figure 8 of Appendix A)	3-5	ND	Brown/Dark brown sandy soil, no petroleum odor		
Notes:	1			Created by: D. Siewert 1/15/2014		

See Appendix A figures for additional utility screening information.

ND = not detected.

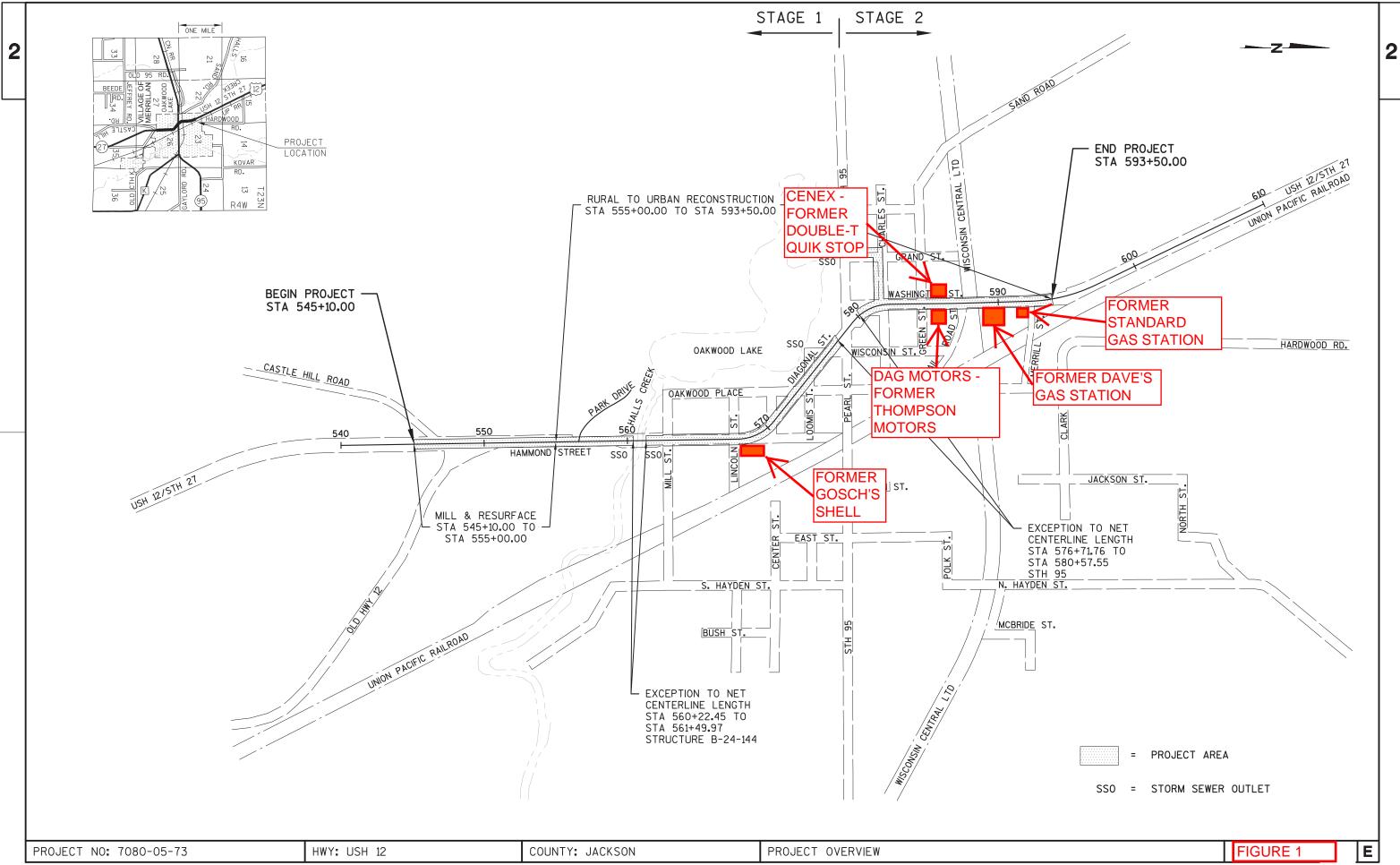
PID = photoionization detector.

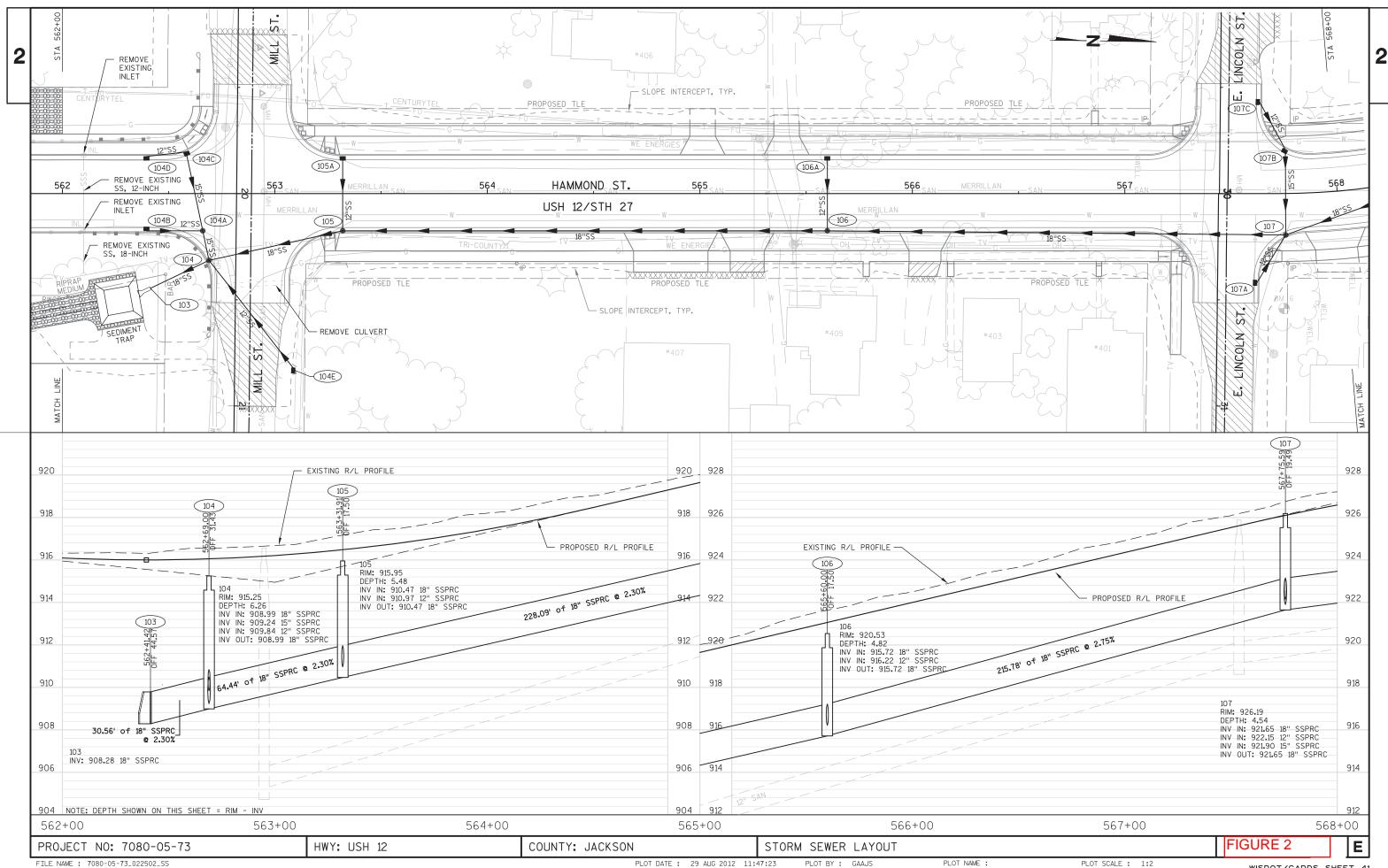
Page 3 of 3

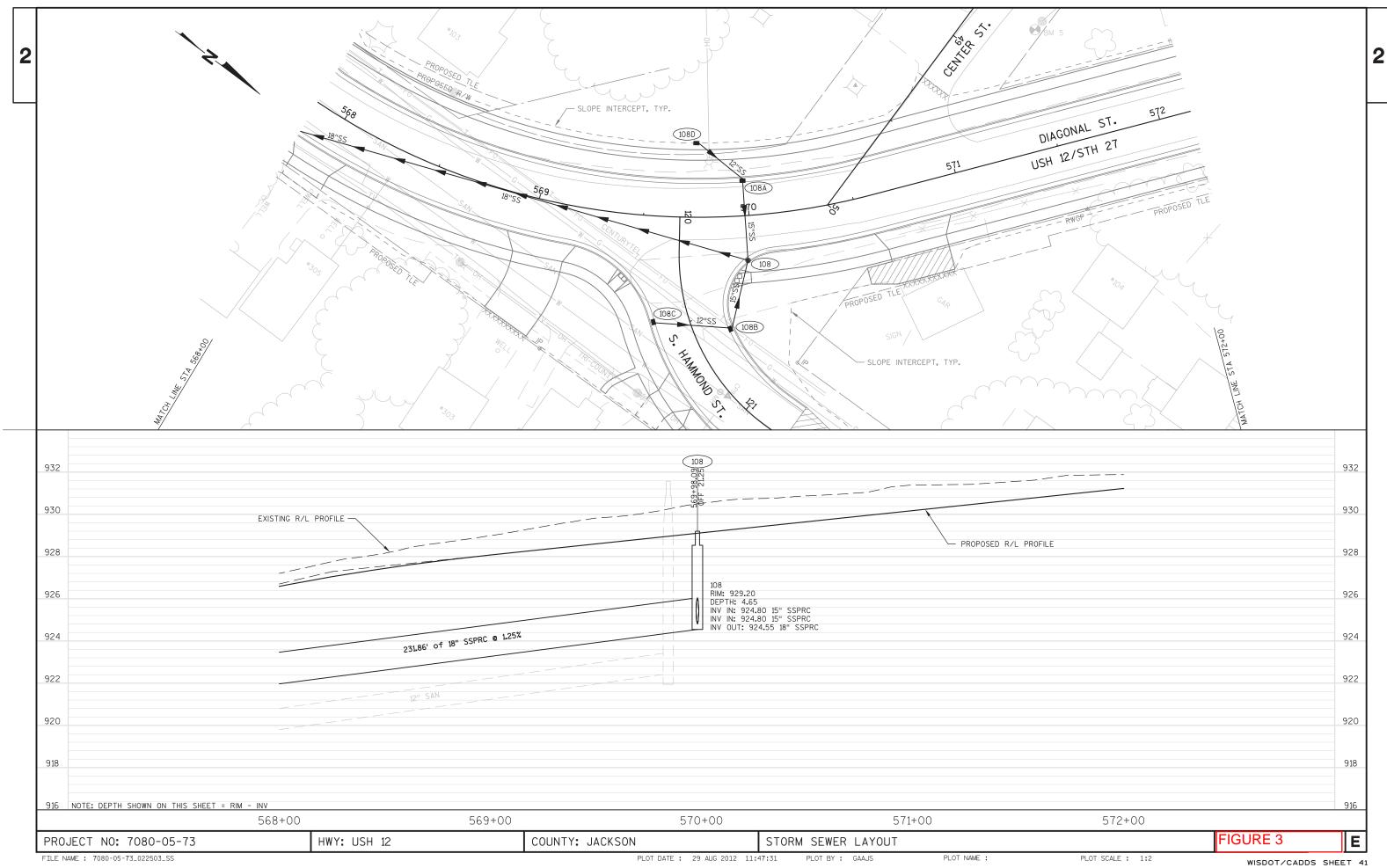
Checked by: N. Braun 1/15/2014

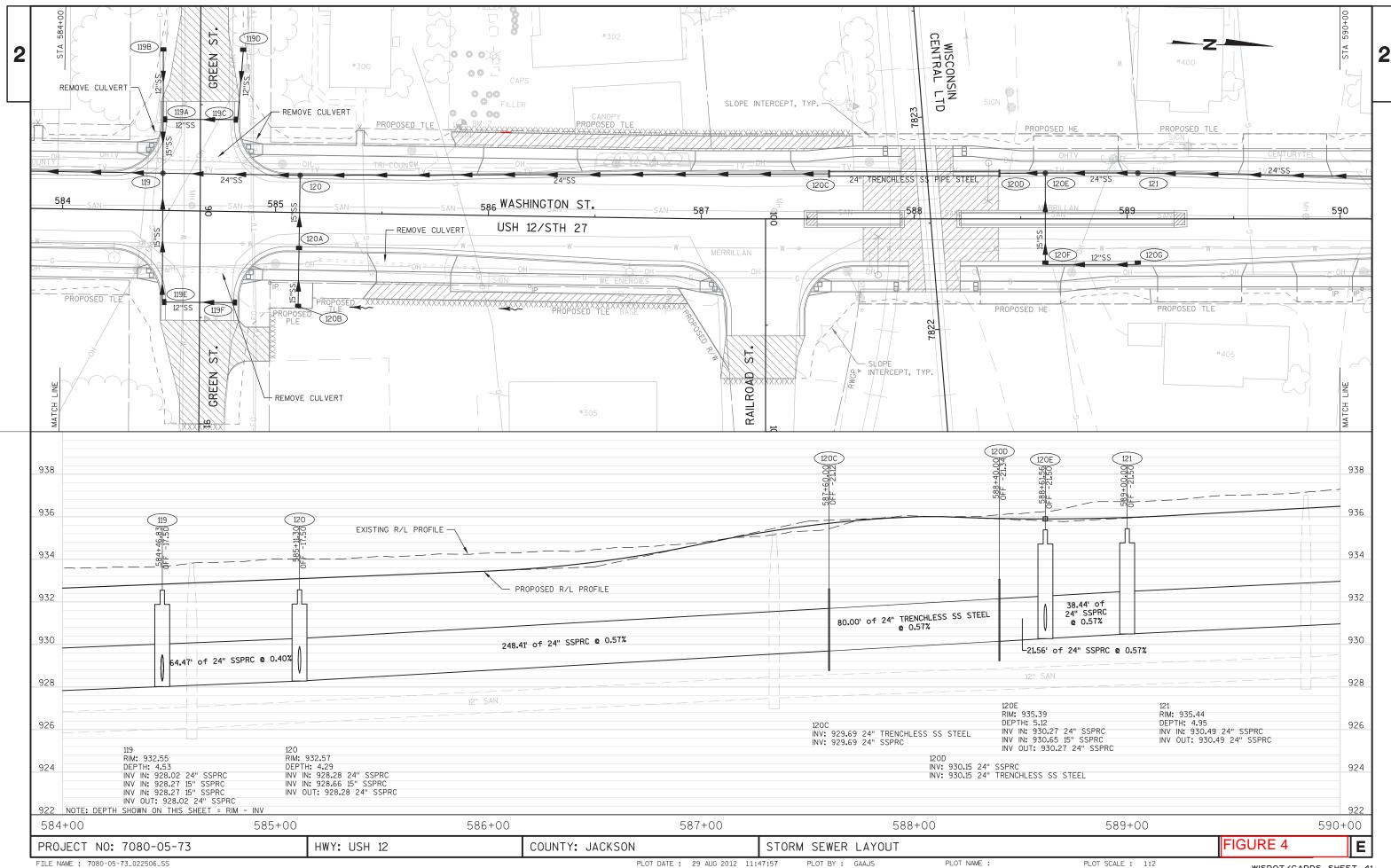
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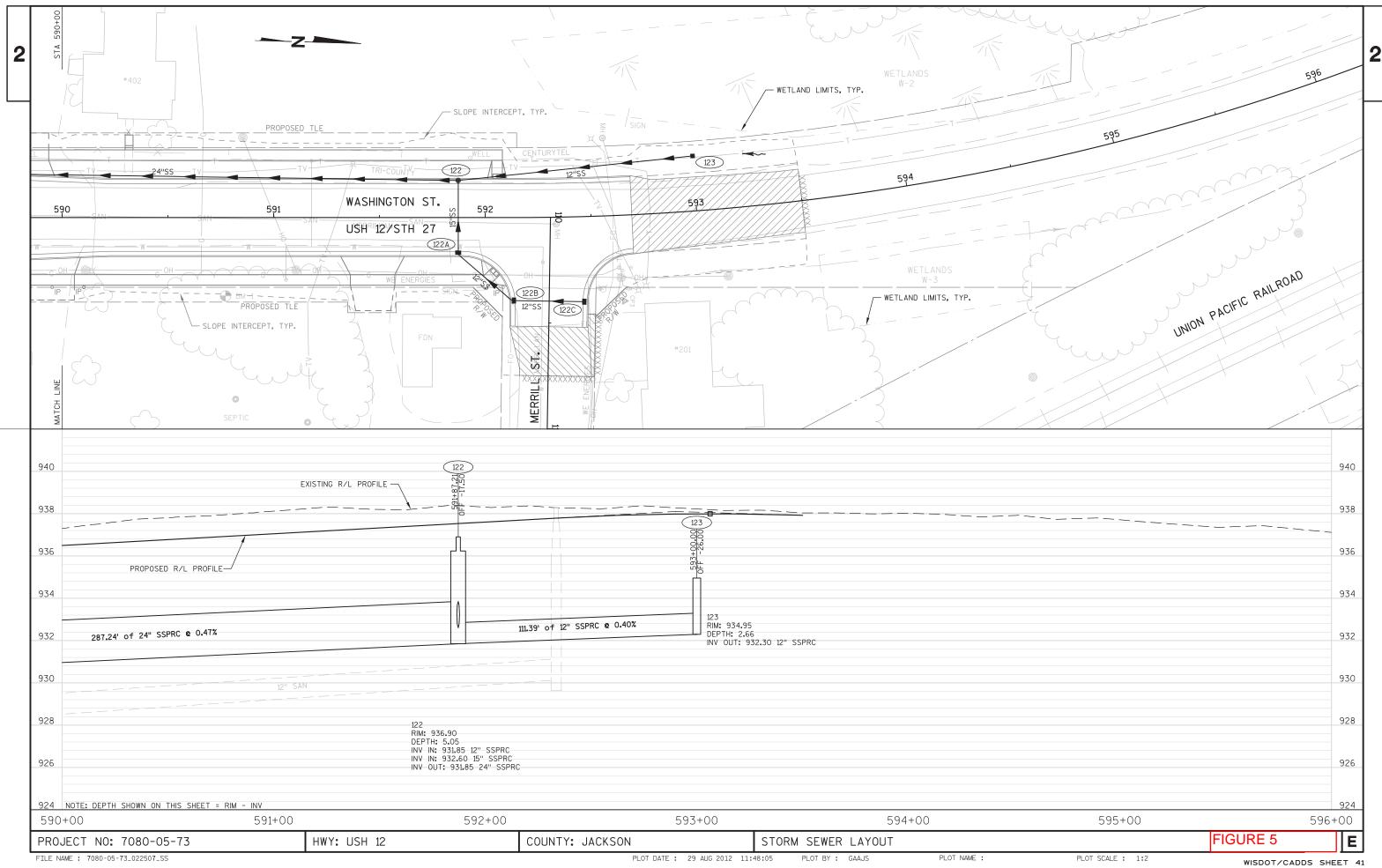
Appendix A Highway Construction Plans with Contaminated Soil Extents

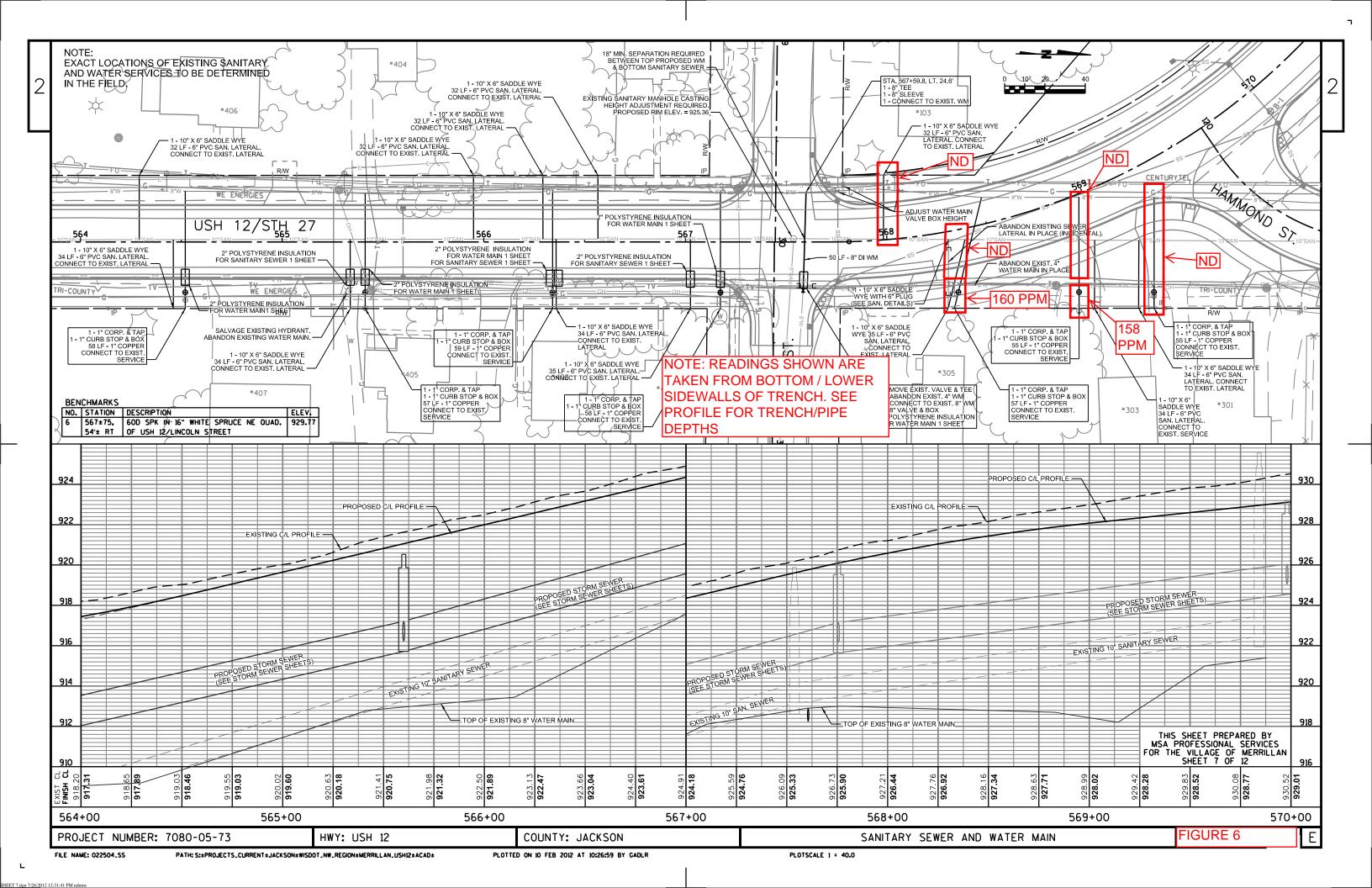


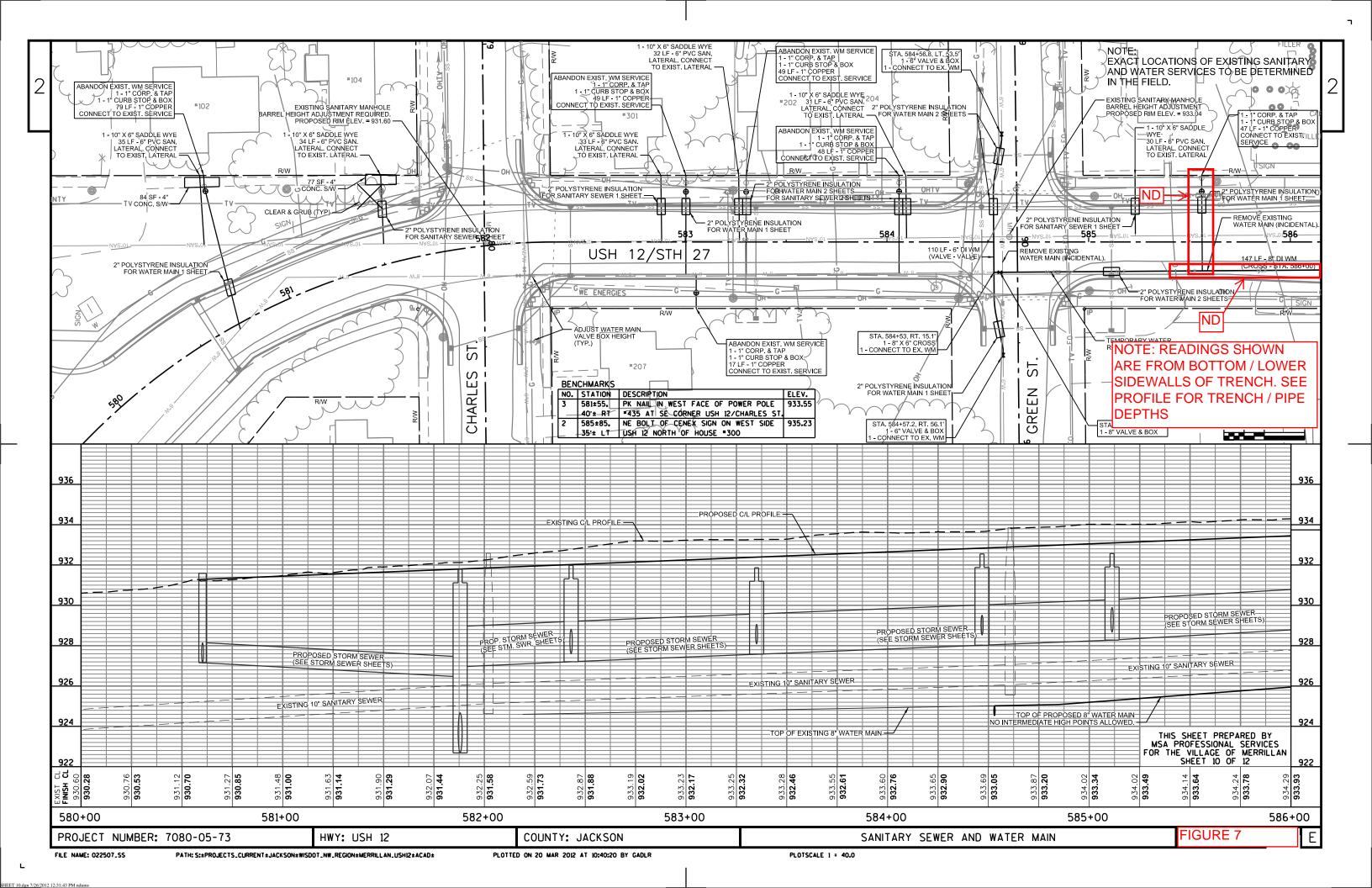


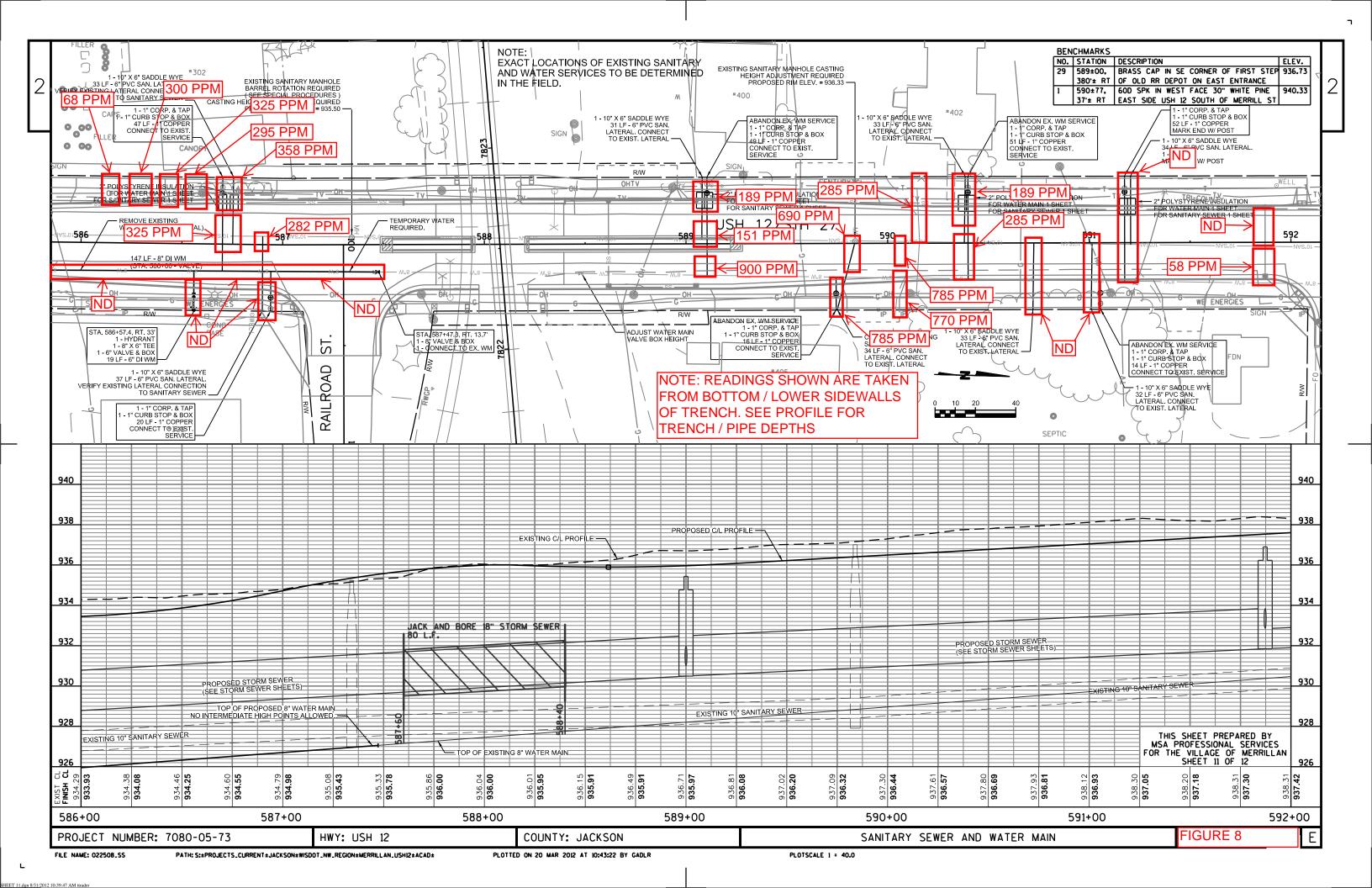












Appendix B Special Provisions

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
1300 W. Clairemont Ave.
P.O. Box 4001
Eau Claire, WI 54702-4001

Scott Walker, Governor Cathy Stepp, Secretary

Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



July 2, 2012

Mr. Troy Stapelmann WisDOT, North Western Region 718 W. Clairemont Avenue Eau Claire, WI 54701-5108

Subject:

USH 12, Merrillan, WI

Special Provisions

WisDOT ID # 7080-05-03

Dear Mr. Stapelmann:

On June 26th, 2012 we received the report, "USH 12, Merrilan, WI; Special Provisions; WisDOT Project ID 7080-05-03" dated June 20th, 2012 and prepared and submitted on your behalf by your environmental consultant, TRC Environmental Corporation. Based on our review the Wisconsin DNR Remediation and Redevelopment Program (The Department) conditionally approve the Special Provisions of this report listed below.

- 1. Excavation, hauling and disposal of petroleum-contaminated soil to the closest DNR approved bioremediation and landfill facility, which is Veolia Cranberry Creek Landfill.
- 2. Coordinating work with the environmental consultant, TRC Environmental Corporation.
- 3. Protection or adjustment of existing groundwater monitoring wells.
- 4. Following the excavation management plan developed in cooperation with the WDNR.
- 5. Following health and safety requirements for workers remediating contamination, as provided in 29 CFR 1910.120 and preparing a site specific health and safety plan.
- 6. Temporary stockpiling of contaminated soils.
- 7. Appropriately loading and transporting contaminated materials in a licensed vehicle.
- 8. Perform all work necessary to control, handle and dispose of groundwater and surface water and all other water that may be encountered within contaminated areas, as required for performance of remediation work.
- 9. Pump, containerize and properly dispose of contaminated groundwater (if dewatering is necessary).
- 10. Perform above said work in accordance with Section 205 of the standard specifications and with pertinent parts of the Wisconsin Administrative Code.
- 11. Measure excavated, hauled, and disposed of petroleum contaminated soils.
- 12. Payment for excavation, segregation, loading, hauling, and treatment of contaminated soils and other activities required to dispose of contaminated soils.

In addition, the Department also requests a Special Provision for dealing with hazardous conditions.

• In Table 1, Analytical Soil Results and Analytical Groundwater Results indicate at Dave's Gas Station Former that there is significant contamination present near the property, specifically to the north of the site (B-16, B-17, and WB-16). At sample B-17, the flashpoint was indicated at 77 degrees Fahrenheit. When excavation is necessary at this location, we recommend using extreme caution to avoid any consequences due to this ignitability hazard.



The Department appreciates the actions that you are taking to restore the environment at this site. If you have any questions regarding this letter, please contact me at 715.839.3750.

Sincerely,

David Hon Hydrogeologist Bureau of Remediation and Redevelopment

C: Daniel Haak, TRC Environmental Corp., 708 Heartland Trail, Suite 3000, Madison, WI 53717

9. Construction Over or Adjacent to Navigable Waters.

Supplement standard spec 107.19 with the following:

The Halls Creek waterway is classified as a navigable waterway. 107-060 (20040415)

10. Coordination with Businesses.

The contractor shall arrange and conduct a meeting between the contractor, the department, local officials and business people to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the first meeting prior to the start of work under this contract and hold another meeting prior to the start of the Stage 2 work. Hold additional meetings as necessary throughout the project duration. 108-060 (20030820)

11. Excavation, Hauling, and Disposal of Petroleum Contaminated Soil Item 205.0501.S.

A Description

A.1 General

This special provision describes excavating, loading, hauling, and disposing of petroleum contaminated soil at a DNR approved bioremediation facility. The closest DNR approved bioremediation facilities are the Veolia ES – Cranberry Creek Landfill, 2510 Engel Road, Wisconsin Rapids, Wisconsin 54495, Veolia ES – Seven Mile Creek Landfill, 8001 Olson Dr, Eau Claire, Wisconsin 54703, and La Crosse County Landfill – 6500 State Road 16, La Crosse, Wisconsin 54601.

Perform this work in accordance to section 205 of the standard specifications and with pertinent parts of Chapters NR 700-754 of the Wisconsin Administrative Code, as supplemented herein. Per NR 718.07, a solid waste collection and transportation service-operating license is required under NR 502.06 for each vehicle used to transport contaminated soil.

A.2 Notice to the Contractor - Contaminated Soil and Groundwater Location(s)

The department and others completed testing for soil and groundwater contamination at locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil and/or groundwater is present at the following location(s):

7080-05-73 12 of 50

Former Gosch's Shell Station (305 S. USH 12)

• Station 567+50 to Station 569+00 from reference line right

Double T Quik Stop (302 N. USH 12) and Thompson Motors (305 N. USH 12)

• Station 586+00 to 587+00 from construction limits left to construction limits right

Former Dave's Gas Station (405 N. USH 12)

• Station 588+50 to Station 590+25 from reference line right

Former Standard Gas Station (Southeast corner of USH 12 and Merrill St)

• Station 591+80 to Station 592+20 from reference line right

Contact the engineer and environmental consultant if dewatering is required at these locations.

Contaminated soils and/or groundwater and/or underground storage tanks (USTs) may be encountered at other locations within the construction limits. If contaminated soils and/or groundwater and/or USTs are encountered elsewhere on the project, terminate excavation activities in the area and notify the engineer. Contaminated soil and/or groundwater at other locations shall be managed by the contractor under this contract. USTs will be removed by others.

For further information regarding previous investigation and remediation activities at these sites contact:

Name:

Troy Stapelmann

Wisconsin DOT, Northwest Region

Address:

718 W. Clairmont

Eau Claire, WI 54701

Phone:

(715) 836-3911

Fax:

(715) 836-2807

E-mail:

trov.stapelmann@dot.state.wi.us

A.3 Coordination

Coordinate work under this contract with the environmental consultant retained by the department:

Consultant:

TRC Environmental Corporation

Address:

708 Heartland Trail, Suite 3000, Madison, WI 53717

Fax:

(608) 826-3941

Contact:

Dan Haak

Phone:

(608) 826-3628 (office), (608) 886-7423 (mobile)

E-mail:

DHaak@trcsolutions.com

Contact:

Dennis Siewert

Phone:

(608) 826-3659 (office)

E-mail:

DSiewert@trcsolutions.com

The role of the environmental consultant will be limited to:

- 1. Determining the location and limits of contaminated soil to be excavated based on soil analytical results from previous investigations, visual observations, and field screening of soil that is excavated;
- 2. Identifying contaminated soils to be hauled to the bioremediation facility;
- 3. Documenting that activities associated with management of contaminated soil are in conformance with the contaminated soil management methods for this project as specified herein; and
- 4. Obtaining the necessary approvals for disposal of contaminated soil from the bioremediation facility.
- 5. Identifying contaminated groundwater to be hauled for treatment and disposal (if dewatering is necessary). Coordinating temporary storage containers, groundwater characterization, and location of disposal of contaminated water.

Provide at least a 14-calendar day notice of the preconstruction conference date to the environmental consultant. At the preconstruction conference, provide a schedule for all excavation activities in the areas of contamination to the environmental consultant. Also notify the environmental consultant at least three calendar days prior to commencement of excavation activities in each of the contaminated areas.

Identify the DNR approved bioremediation facility that will be used for disposal of contaminated soils, and provide this information to the environmental consultant no later than 30 calendar days prior to commencement of excavation activities in the contaminated areas or at the preconstruction conference, whichever comes first. The environmental consultant will be responsible for obtaining the necessary approvals for disposal of contaminated soils from the bioremediation facility.

Coordinate with the environmental consultant to ensure that the environmental consultant is present during excavation activities in the contaminated areas. Perform excavation work in each of the contaminated areas on a continuous basis until excavation work is completed. Do not transport contaminated soil offsite without prior approval from the environmental consultant.

A.4 Protection of Groundwater Monitoring Wells

Groundwater monitoring wells may be present within the construction limits. Protect all groundwater monitoring wells to maintain their integrity. Adjust wells that do not conflict with utilities, structures, curb and gutter, etc. to be flush with the final grade. For wells that conflict with the previously mentioned items, notify the environmental consultant, and coordinate with the environmental consultant the abandonment or adjustment of the

7080-05-73 14 of 50

wells by others. The environmental consultant will provide maps indicating the locations of all known monitoring wells, if requested by the contractor.

A.5 Excavation Management Plan Approval

The excavation management plan for this project has been designed to minimize the offsite disposal of contaminated material. The excavation management plan, including these special provisions, has been developed in cooperation with the WDNR. The WDNR's concurrence letter is on file at the Wisconsin Department of Transportation. For further information regarding the investigations, including waste characterization within the project limits, contact Troy Stapelmann with the department, at (715) 836-3911.

A.6 Health and Safety Requirements for Workers Remediating Contamination Supplement standard spec 107.1 with the following:

During excavation activities, expect to encounter soil contaminated with gasoline, diesel fuel, fuel oil, or other petroleum related products. Additional precaution shall be taken near the former Dave's Gas Station (405 N USH 12) where the soil flash point was 77° F in the soil. Site workers taking part in activities that will result in the reasonable probability of exposure to safety and health hazards associated with hazardous materials shall have completed health and safety training that meets the Occupational Safety and Health Administration (OSHA) requirements for Hazardous Waste Operations and Emergency Response (HAZWOPER), as provided in 29 CFR 1910.120.

Prepare a site-specific Health and Safety Plan, and develop, delineate and enforce the health and safety exclusion zones for each contaminated site location as required by 29 CFR 1910.120. Submit the site-specific health and safety plan and written documentation of up-to-date OSHA training to the engineer prior to the start of work.

Disposal of petroleum-contaminated soil at the bioremediation facility is subject to the facility's safety policies, which include as a minimum:

- No smoking is allowed on-site.
- Maximum speed limit of 15 mph on access roads and 5 mph while in active area.
- All persons entering the active area must wear the following personal protective equipment: hard hats, high visibility clothing, steel toed work boots, safety glasses, and seat belts.
- Minimum requirement for spacing is as follows:
 - A minimum 15 foot Safety Zone is required between landfill equipment and all personnel at all times.
 - Do not back up directly behind the compactor or dozer.
 - Trucks must yield the right-of-way to landfill equipment.
 - 15 feet required between trucks.

7080-05-73 15 of 50

- Only the driver can exit the truck and must stay within 4 feet of the truck. Use of Spotter is prohibited. Helper (if any), must remain in vehicle while unloading.
- Tailgates of all vehicles may only be opened while in the active area and must be closed prior to exiting the active area.
- Cleaning out vehicles must be done in designated area, not in the active area.
 Vehicles must be properly locked out / tagged out in accordance to OSHA during the clean out process.
- No scavenging is allowed.
- Horseplay is prohibited.

Violation of the landfill's safety policy will result a verbal or written warning explaining this policy and may result in the loss of dumping privileges.

Immediately report all accidents and injuries at the bioremediation facility to landfill management.

B (Vacant)

C Construction

Supplement standard spec 205.3 with the following:

Control operations in the contaminated areas to minimize the quantity of contaminated soil excavated.

Assist the environmental consultant in determining the extent of contaminated soil (if any), by performing a backhoe pit investigation, as directed by the environmental consultant, in the following areas:

Former Gosch's Shell Station (305 S. USH 12)

• Station 567+50 to Station 569+00 from reference line right

Double T Quik Stop (302 N. USH 12) and Thompson Motors (305 N. USH 12)

• Station 586+00 to 587+00 from construction limits left to construction limits right

Former Dave's Gas Station (405 N. USH 12)

• Station 588+50 to Station 590+25 from reference line right

Perform the backhoe pit investigation as soon as practical after structures, sidewalks, curb and gutter, and pavement are removed and prior to significant excavations (if any) beginning in those areas. The backhoe pit investigations shall include up to 3 test pits per location, to a maximum depth of 6 feet bgs. The test pit investigations shall be incidental to this pay item.

7080-05-73 16 of 50

The environmental consultant will periodically evaluate soil excavated from the contaminated areas to determine if the soil will require offsite bioremediation. The environmental consultant will evaluate excavated soil based on field screening results, visual observations, and soil analytical results from previous environmental investigations. Assist the environmental consultant in collecting soil samples for evaluation using excavation equipment. The sampling frequency shall be a maximum of one sample for every 20 cubic yards excavated.

On the basis of the results of such field-screening, the material will be designated for disposal as follows:

- Excavation Common consisting of clean soil and/or clean construction and demolition fill (such as clean soil, boulders, concrete, reinforced concrete, bituminous pavement, bricks, building stone, and unpainted or untreated wood), which under NR 500.08 are exempt materials, or
- Low-level contaminated material for reuse as fill within the construction limits, or
- Contaminated soil for offsite treatment and disposal at the WDNR-licensed bioremediation facility, or
- Potentially contaminated for temporary stockpiling and additional characterization prior to disposal

Some material may require additional characterization prior to disposal. Provide for the temporary stockpiling of up to 250 cubic yards of contaminated soil on-site that require additional characterization. Construct and maintain a temporary stockpile of the material in accordance to NR 718.05(3), including, but not limited to, placement of the contaminated soil/fill material on an impervious surface and covering the stockpile with impervious material to prevent infiltration of precipitation. The department's environmental consultant will collect representative samples of the stockpiled material, laboratory-analyze the samples, and advise the contractor, within 10 business days of the construction of the stockpile, of disposal requirements. The stockpiled material shall be disposed either at the WDNR-licensed disposal facility by the contractor or, if characterized as hazardous waste, by the department. As an alternative to temporarily stockpiling contaminated soil/fill material that requires additional characterization, the contractor has the option of suspending excavation in those areas where such soil is encountered until such time as characterization is completed.

Directly load and haul soils designated by the environmental consultant for offsite bioremediation to the DNR-approved bioremediation facility. Verify that vehicles used to transport contaminated material are licensed for such activity in accordance to applicable state and federal regulations. Use loading and hauling practices that are appropriate to prevent any spills or releases of petroleum-contaminated soils or residues. Prior to transport, sufficiently dewater soils designated for off-site bioremediation so as not to contain free liquids.

7080-05-73 17 of 50

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

Groundwater may be present within the construction limits. Water generated during dewatering operations (if necessary) is expected to be permitted to discharge to the surface except in the contaminated areas.

Water generated from dewatering activities within the contaminated groundwater may exceed the surface water discharge limits for petroleum compounds specified in the DNR's "General Permit to Discharge under the Wisconsin Pollutant Discharge Elimination System" for "Contaminated Groundwater from Remedial Action Operations" (WPDES Permit No. WI-0046566-5), Table 3.1.

Pump contaminated water that exceeds surface water discharge limits, as determined by environmental consultant, into temporary holding tanks provided by others, as necessary to complete construction. Allow contaminated water encountered, but not requiring removal as a standard course of construction, to remain in-place and do not manage in accordance to this special provision.

Employ construction methods and techniques in a manner that will minimize the need for dewatering, and if dewatering is required, minimize the volume of water generated. Take measures to limit groundwater, surface water, and precipitation from entering and exiting excavations in the areas of contamination. Such measures, which may include berming, ditching, or other means, shall be maintained until construction of utilities in the areas of contamination are complete.

The environmental consultant will coordinate holding tank mobilizations, waste characterization sampling of accumulated water, and transportation/disposal of contaminated water.

The cost for holding tank mobilization, transportation, and contaminated water disposal will be paid by others.

Ensure continuous dewatering and excavation safety at all times. Provide, operate, and maintain adequate pumping equipment and drainage and disposal facilities. Notify the engineer of any dewatering activities, and obtain any permits necessary to discharge water. Provide copies of such permits to the engineer. Meet any requirements and pay any costs for obtaining and complying with such permit use. Follow all applicable legislative statues, judiciary decisions, and regulations of the State of Wisconsin.

7080-05-73 18 of 50

D Measurement

The department will measure Excavation, Hauling, and Disposal of Petroleum Contaminated Soil in tons of contaminated soil accepted by the bioremediation facility as documented by weight tickets generated by the bioremediation facility. Load tickets must be delivered to the engineer within 10 business days of the date on which the soil was accepted by the bioremediation facility.

E Payment

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

ITEM NUMBER

DESCRIPTION

UNIT

205.0501.S

Excavation, Hauling, and Disposal of Petroleum

Ton

Contaminated Soil

Payment is full compensation for excavating, segregating, loading, hauling, and treatment via bioremediation of contaminated soil; tipping fees including any applicable taxes and surcharges, obtaining solid waste collection and transportation service operating licenses; assisting in the collection soil samples for field evaluation including test pits; and for dewatering of soils prior to transport, if necessary. 205-003 (20080902)

12. QMP Base Aggregate.

A Description

A.1 General

- (1) This special provision describes contractor quality control (QC) sampling and testing for base aggregates, documenting those test results, and documenting related production and placement process changes. This special provision also describes department quality verification (QV), independent assurance (IA), and dispute resolution.
- (2) Conform to standard spec 301, standard spec 305, and standard spec 310 as modified here in this special provision. Apply this special provision to material placed under all of the Base Aggregate Dense and Base Aggregate Open Graded bid items, except do not apply this special provision to material classified as reclaimed asphaltic pavement placed under the Base Aggregate Dense bid items.
- (3) Do not apply this special provision to material placed under the Aggregate Detours, Salvaged Asphaltic Pavement Base, Breaker Run, Select Crushed, Pit Run, Subbase, or Riprap bid items.
- (4) Provide and maintain a quality control program, defined as all activities related to and documentation of the following:
 - 1. Production and placement control and inspection.
 - 2. Material sampling and testing.

Appendix C Soil Disposal Records



Advanced Disposal Cranberry Creek Landfill, LLC 2510 Engel Road Wisconsin Rapids, WI 54495 (715)421-3966

CERTIFICATE OF BIOREMEDIATION

This document certifies that (934.24) tons of petroleum impacted soils from (WIS DOT #7080-05-73 USH 12 MERRILLIAN WI) have been satisfactorily bio remediated at Advanced Disposal Cranberry Creek Landfill, LLC's bioremediation facility in the Town of Seneca, Wisconsin. This soil was accepted and approved for bioremediation under Advanced Disposal Special Waste Profile number (13017B) and will be utilized as an alternate daily cover at Advanced Disposal Cranberry Creek Landfill, LLC-DNR License #02967. Copies of all records documenting Advanced Disposal Cranberry Creek Landfill LLC's receipt and handling of these soils is available to generators and their authorized representatives by written request to:

Landfill Manager-Richard Presser Advanced Disposal Cranberry Creek Landfill, LLC 2510 Engel Road Wisconsin Rapids, WI 54495

Signature of Representative of Advanced Disposal Cranberry Creek Landfill, LLC

RICHARD PRESSER
Printed Name

LANDFILL MANAGER
Title

December 11, 2013
Date

TicketDate	,			Material	ContractRateRate		Quantit	MinimumQua		
I .	D1		000175		C-Soil 33B@Pet LubeGS-ADC-EXT			20.71		0.00
I	D1		000175		C-Soil 33B@Pet LubeGS-ADC-EXT			20.27		0.00
I	D1		000175		C-Soil 33B@Pet LubeGS-ADC-EXT			16.08		0.00
I	D1			GERKE36	C-Soil 33B@Pet LubeGS-ADC-EXT			19.17		0.00
I	D1			GERKE33	C-Soil 33B@Pet LubeGS-ADC-EXT	F		23.55		0.00
I	D1			GERKE36	C-Soil 33B@Pet LubeGS-ADC-EXT			22.93		0.00
I	D1			GERKE33	C-Soil 33B@Pet LubeGS-ADC-EXT	F		22.25		0.00
I	D1	412557	000175	GERKE36	C-Soil 33B@Pet LubeGS-ADC-EXT	F		24.46	TN	0.00
I	D1	412559	000175	GERKE33	C-Soil 33B@Pet LubeGS-ADC-EXT	F		27.01	TN	0.00
I	D1	412560	000175	GERKE17	C-Soil 33B@Pet LubeGS-ADC-EXT	F		31.27	TN	0.00
1	D1	412562	000175	GERKE6	C-Soil 33B@Pet LubeGS-ADC-EXT	F		27.62	TN	0.00
I	D1	412564	000175	GERKE23	C-Soil 33B@Pet LubeGS-ADC-EXT	F		26.39	TN	0.00
1	D1	412582	000175	GERKE36	C-Soil 33B@Pet LubeGS-ADC-EXT	F		23.39	TN	0.00
1	D1	412583	000175	GERKE17	C-Soil 33B@Pet LubeGS-ADC-EXT	F		21.41	TN	0.00
1	D1	412584	000175	GERKE6	C-Soil 33B@Pet LubeGS-ADC-EXT	F		21.35	TN	0.00
1	D1	412586	000175	GERKE33	C-Soil 33B@Pet LubeGS-ADC-EXT	F		20.88	TN	0.00
1	D1	412591	000175	GERKE23	C-Soil 33B@Pet LubeGS-ADC-EXT	F		24.90	TN	0.00
1	D1	412621	000175	GERKE36	C-Soil 33B@Pet LubeGS-ADC-EXT			25.89	TN	0.00
1	D1	412623	000175	GERKE6	C-Soil 33B@Pet LubeGS-ADC-EXT	F		22.94	TN	0.00
1	D1			GERKE17	C-Soil 33B@Pet LubeGS-ADC-EXT			20.74		0.00
i	D1			GERKE36	C-Soil 33B@Pet LubeGS-ADC-EXT			22.39		0.00
i	D1			GERKE2	C-Soil 33B@Pet LubeGS-ADC-EXT			24.83		0.00
i	D1			GERKE24	C-Soil 33B@Pet LubeGS-ADC-EXT			22.87		0.00
i	D1			GERKE8	C-Soil 33B@Pet LubeGS-ADC-EXT			19.98		0.00
i	D1			GERKE36	C-Soil 33B@Pet LubeGS-ADC-EXT			21.93		0.00
i	D1			GERKE10	C-Soil 33B@Pet LubeGS-ADC-EXT			21.88		0.00
i	D1			GERKE24	C-Soil 33B@Pet LubeGS-ADC-EXT			21.59		0.00
- 1	D1			GERKE8	C-Soil 33B@Pet LubeGS-ADC-EXT			20.23		0.00
-	D1			GERKE36	C-Soil 33B@Pet LubeGS-ADC-EXT			23.36		0.00
-	D1							17.95		
	D1			GERKE37	C-Soil 33B@Pet LubeGS-ADC-EXT					0.00
-				GERKE36	C-Soil 33B@Pet LubeGS-ADC-EXT			20.62		0.00
!	D1			GERKE37	C-Soil 33B@Pet LubeGS-ADC-EXT			21.29		0.00
!	D1			GERKE36	C-Soil 33B@Pet LubeGS-ADC-EXT			20.72		0.00
!	D1			GERKE37	C-Soil 33B@Pet LubeGS-ADC-EXT			20.92		0.00
l	D1			GERKE36	C-Soil 33B@Pet LubeGS-ADC-EXT			22.66		0.00
!	D1			GERKE17	C-Soil 33B@Pet LubeGS-ADC-EXT			24.63		0.00
1	D1			GERKE10	C-Soil 33B@Pet LubeGS-ADC-EXT			23.48		0.00
I	D1			GERKE36	C-Soil 33B@Pet LubeGS-ADC-EXT			22.53		0.00
I	D1			GERKE10	C-Soil 33B@Pet LubeGS-ADC-EXT			26.19		0.00
I	D1			GERKE17	C-Soil 33B@Pet LubeGS-ADC-EXT	F		28.49		0.00
I	D1			GERKE36	C-Soil 33B@Pet LubeGS-ADC-EXT	F		22.49	TN	0.00
	41 Items R	41	Contrac	t Totals:						
Weight	Volume Cou	unt	BillingQ	MaterialTotal		Inbound		Outbound	Inbound	Outbound
	934.24 0.00 TN		0.00	0.00	YD		0.00		934.24	TN
			Invoice '	Totals:		Tickets R	eporte	41	Items Rep	41
Weight	Volume Cou 934.24 0.00 TN	unt	BillingQ	MaterialTotal 0.00		Inbound	0.00	Outbound	Inbound 934.24	Outbound TN
Total Ti-l-		ما ۱۸/۵: ما ۱۸				TNI		Out		
Total Tick	lets. 41 lot	al Weight:	934.24	LIN	In	TN		Out		

Appendix D Photo Log



Client Name: Wisconsin Department of Transportation (WisDOT) Site Location: USH 12 Merrillan, WI **Project No.:** WisDOT: 7080-05-73 TRC: 200155.0000

Photo No. Date 1 5/29/2013

Description

View of water lateral installation near Former Gosch's Shell at approximate Sta. 568+50. Stained/petroleum-contaminated soil along right side of trench at 4' bgs.



Photo No. Date 2 5/29/2013

Description

View of water lateral installation near Former Gosch's Shell at approximate Sta. 568+50. Stained/petroleum-contaminated soil in stockpile and along right side of trench at 4' bgs.





Client Name: Wisconsin Department of Transportation (WisDOT) Site Location: USH 12 Merrillan, WI **Project No.:** WisDOT: 7080-05-73 TRC: 200155.0000.0000

Photo No. Date 3 8/14/2013

Description

View of water and sanitary lateral installation at approximate STA. 591+15. No stained/petroleum-contaminated soils in trench. View looking West.



Photo No.	Date
4	8/15/2013

Description

View of water and sanitary lateral installation at approximate STA. 589+80. Stained/petroleum-contaminated soils throughout entire trench at 3-9-feet bgs.





Client Name: Wisconsin Department of Transportation (WisDOT) Site Location: USH 12 Merrillan, WI **Project No.:**WisDOT: 7080-05-73
TRC: 200155.0000.0000

 Photo No.
 Date

 5
 8/15/2013

Description

View of water and sanitary lateral installation at approximate STA. 589+05. Stained/petroleum-contaminated soils on east end of trench at 3-8-feet bgs. View looking east.



Photo No.	Date
6	8/28/2013

Description

View of water lateral installation at approximate STA. 586+60. Stained/petroleum-contaminated soils in trench at 4-8-feet bgs.





Client Name: Wisconsin Department of Transportation (WisDOT) Site Location: USH 12 Merrillan, WI **Project No.:** WisDOT: 7080-05-73 TRC: 200155.0000.0000

 Photo No.
 Date

 7
 8/29/2013

Description

View of water lateral installation at approximate STA. 586+65. Stained/petroleum-contaminated soils in trench at 4-8-feet bgs.

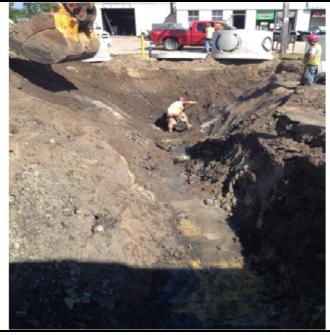


Photo No.	Date
8	August 28, 2013

Description

View of water and sanitary lateral installation at approximate STA. 586+65. Stained/petroleum-contaminated soils in trench at 4-8-feet bgs in front of Double T Quik Trip. View looking east. Thompson Motors in background.





Client Name: Wisconsin Department of Transportation (WisDOT)

Site Location: USH 12 Merrillan, WI

Project No.: WisDOT: 7080-05-73 TRC: 200155.0000

Photo No. Date August 15, 2013

Description

View of water and sanitary installation at approximate STA. 589+05 (in front of Merrillan Café). Stained/petroleumcontaminated soils throughout entire trench. Low PID readings on west end of trench and high PID readings on east end of trench.



Photo No.	Date
10	August 14, 2013
Description	•

View of sanitary installation at

approximate STA. 591+75 (south of USH 12 and Merrill Street intersection). Stained/petroleumcontaminated soils at 8' bgs at approx. 25-feet R of reference line. View looking west.

