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October 6, 2014

Mr. Tauren Beggs Wisconsin Department of Natural Resources 2984 Shawano Avenue Green Bay, WI 54313-6727

Subject: Contaminated Soil Management Documentation Report

STH 32, Pulaski, Wisconsin WisDOT ID #9190-13-71

Dear Mr. Beggs:

The attached report documents the contaminated soil management at sites along STH 32 in Pulaski, Wisconsin. The report includes a brief summary of the activities that occurred during the project.

The WisDOT retained TRC to provide construction oversight and services for contaminated soil management during 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 Sunert

Dennis Siewert

Senior Designer /6; |

Daniel Haak, P.E.

Project Manager

cc: Kathie VanPrice – WisDOT (hard copy and pdf on CD)

Shar TeBeest - WisDOT (hard copy and pdf on CD)

Jim Morse - TRC



Contaminated Soil Management Documentation Report

STH 32 Pulaski, Wisconsin

WisDOT ID #9190-13-71

October 2014



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Dennis Siewert Senior Designer

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Daniel Haak, P.E. Project Manager Tames E. Morse

Senior Client Service Manager

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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 WisDOT is completing the reconstruction of STH 32 (Wisconsin St. / Pulaski St. / St. Augustine St.) from the intersection of Green Bay St. and Wisconsin St., to the approximate intersection of Deer Dr. and St. Augustine St., including Pulaski St. from Wisconsin St. to St. Augustine St. (WisDOT Project ID #9190-13-71), in Pulaski, Wisconsin. The Special Provisions describe the management of potentially petroleum-contaminated soil at four sites (2, 3, 5, and 6) along the project corridor, the potential for lead-contaminated soil at one site (6), and the potential for USTs at three sites (3, 4, and 6) along the project corridor.

The WisDOT retained TRC Environmental Corporation (TRC) to provide construction oversight management services for this project during utility excavations within potentially petroleum-contaminated and low level lead contaminated soil. This report summarizes the observations and activities performed by TRC during this project.

TRC observed Peters Concrete Co. (Peters) complete excavations for the installation of new storm sewers, the removal of old storm sewers, and excavation beyond subgrade (EBS) within the limits of potentially petroleum-contaminated soil at 4 sites and low level lead at 1 site. Also, TRC observed Peters excavate nine test pits to approximately 6-feet bgs within areas which were previously identified as areas of potential USTs.

TRC field-screened soil with a PID, and also 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 the landfill under the contaminated soil waste profile for treatment and disposal at Advanced Disposal Hickory Meadows Landfill in Hilbert, Wisconsin. A total of 1289.39 tons of petroleum-contaminated soil was taken to the landfill for treatment and disposal. Low-level petroleum-contaminated soil was re-used as backfill in accordance with the Special Provisions. No evidence of a potential source of low-level lead contamination was observed in soils adjacent to Site 6. Groundwater was not encountered at the identified sites during utility construction, and no evidence of USTs were observed within the test pit investigation locations.

The WisDOT has fulfilled their commitment to manage the contaminated soil during the STH 32 reconstruction in Pulaski in accordance with the Special Provision for the project.

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On the basis of the results of the field observations, field-screening, and information included in the Special Provision, the WisDOT has properly managed the excavated soil for the new storm sewer line construction, old storm sewer removal, and EBS adjacent to the identified petroleum-contaminated sites on Pulaski Street/STH 32. TRC recommends that the WisDOT take no further action to investigate or remediate soil or groundwater impacts that may remain at these sites.

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1.1 Background

The WisDOT is completing the reconstruction of STH 32 (Wisconsin St. / Pulaski St. / St. Augustine St.) from the intersection of Green Bay St. and Wisconsin St. to the approximate intersection of Deer Dr. and St. Augustine St., including Pulaski St. from Wisconsin St. to St. Augustine St. (WisDOT Project ID #9190-13-71) in Pulaski, Wisconsin. Highway construction plans are presented in Appendix A, and Special Provisions are presented in Appendix B. The reconstruction included replacement of curb and gutter, sidewalk, and pavement, as well as the installation of new underground utilities (including storm sewer) along STH 32.

A Phase I HMA Report, previously completed by STS Consultants, Ltd. (STS) in June 2007, identified six potential hazardous materials sites along the STH 32 project corridor that were recommended for additional investigations. Based on the investigation and the latest WisDOT plans, TRC investigated the six sites.

On February 25, 2013, TRC completed a Phase 2/2.5 Investigation of the project corridor adjacent to the six sites. The results of the investigation, and the previous Phase 1 HMA along the project corridor, indicate that petroleum-contaminated and potentially low-level lead contaminated soil may exist within the limits of construction at the following four locations:

- **Site 2** Adjacent to 108 S. St. Augustine Street, from Station 498+75 to 500+00 from reference line to construction limits left and right, and from Station 35+25 to 36+00 (E. Pulaski Street) from reference line to construction limits on the left.
- **Site 3** Adjacent to 118 E. Pulaski Street, from Station 32+75 to 34+40, from reference line to the construction limits on the left.
- **Site 5** Adjacent to 113 S. Wisconsin Street, from Station 12+75 to 15+00, from reference line to the construction limits on the left.
- **Site 5 and 6** Adjacent to 113 S. Wisconsin Street and 104 S. Wisconsin Street, from Station 11+50 to 12+75, from reference line to the construction limits on the left and construction limits on the right.

Historical information collected prior to TRC's investigation, as well as a metal detector survey conducted during the investigation, indicate a potential for USTs to exist at the following locations:

- **Site 3** Station 32+75 to 33+00 and Station 34+00 to 34+50, from 20-feet left of reference line to limits of construction left.
- **Site 4** Station 30+50 to 31+25, from 20-feet left of reference line to limits of construction left.
- Site 6 Station 299+25 to 299+50, from 20-feet left of reference line to limits of construction left, and Station 12+25 to Station 12+50, from 20-feet right of reference line to limits of construction right.

The WisDOT retained TRC to provide construction oversight and contaminated soil management services for this project.

1.2 Purpose

TRC observed the utility contractor, Peters, during utility construction within areas of potential soil contamination. This report summarizes the observations and activities performed by TRC during this project, and documents disposal of contaminated soil from the project corridor.

Section 2 Contaminated Soil Management

TRC was on-site periodically during excavation of the sites with potential contamination from April through August 2014.

At sites with potentially petroleum-contaminated soil, TRC field-screened soil with a PID, and also observed for odors and visual evidence of soil staining. Soil field-identified as significant petroleum-contaminated (based on previous investigations and field-screening, including PID >10 ppm), was hauled to the Advanced Disposal-Hickory Meadows Landfill for treatment and disposal. If previous investigations and/or field screening (PID <10 ppm) indicates low-level petroleum contamination, the soil was re-used as backfill.

Petroleum-contaminated soil was encountered during underground utility construction at the intersection of Wisconsin Street and Pulaski Street (Sites 5 and 6), Pulaski Street (Site 3), and at the intersection of Pulaski Street and St. Augustine Street (Site 2).

EBS on Pulaski Street (Site 3) took place between Stations 33+20 and 35+40 from reference line to construction limits left and contained contaminated soil. This soil was removed during construction activities. Following excavation of the contaminated EBS soils, field screening of soils collected from the base indicate that contaminated soil (>10 ppm) exists beneath the road base at this location.

A total of 1289.39 tons of petroleum-contaminated soil was taken to the landfill for treatment and disposal. Field screening PID results including the location of field screening samples are summarized in Table 1. Landfill documentation of petroleum-contaminated soil disposal is attached in Appendix C. Photographs from the project are included in Appendix D.

Section 3 Conclusions

TRC completed observation of the contractor's excavations and their management of petroleum-contaminated soil for the WisDOT during the reconstruction of STH 32 in Pulaski, Wisconsin.

TRC field-screened areas of potential petroleum-contaminated soil. Petroleum-contaminated soil was encountered during storm sewer excavations on Wisconsin Street (Site 6), between Stations 11+60 to 12+35, at the intersection of Wisconsin Street and Pulaski Street, on Pulaski Street (Site 3) between Stations 33+45 and 34+00, at the intersection of Pulaski Street and St. Augustine Street (Site 2) and in the EBS on Pulaski Street (Site 3) between Stations 33+20 and 35+40) as identified in the Special Provisions. Following excavation of the EBS soils, soil samples collected from the base indicate that contaminated soil (>10 ppm) exists beneath the road between Stations 33+20 to 35+40 from reference line to construction limits left. A total of 1289.39 tons of soil was taken for treatment and disposal at Advanced Disposal Hickory Meadows Landfill.

Groundwater was not encountered at the sites with potential petroleum contamination. No USTs were encountered during test-pit investigations at the identified locations at Sites 3, 4, and 6. Test pits excavations for the location of potential USTs are presented on Table 1. No evidence of low-level lead-contaminated soil adjacent to 104 S. Wisconsin Street (Site 6) was encountered during the test pit investigation.

The WisDOT has fulfilled their commitment to manage the contaminated soils during the STH 32 reconstruction in Pulaski in accordance with the Special Provision for the project.

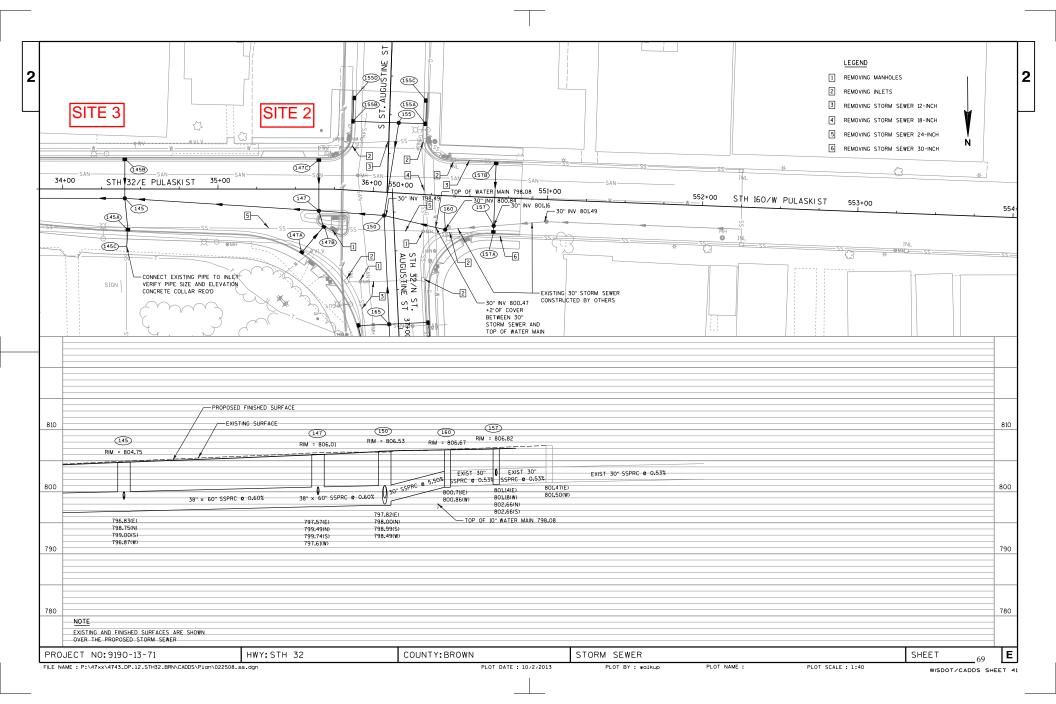
On the basis of the results of the field observations, field-screening, and information included in the Special Provision, the WisDOT has properly managed the excavated soil from the new storm sewer line construction and EBS adjacent to the identified petroleum-contaminated sites on STH 32. TRC recommends that the WisDOT take no further action to investigate or remediate soil or groundwater impacts that may remain at the investigated sites.

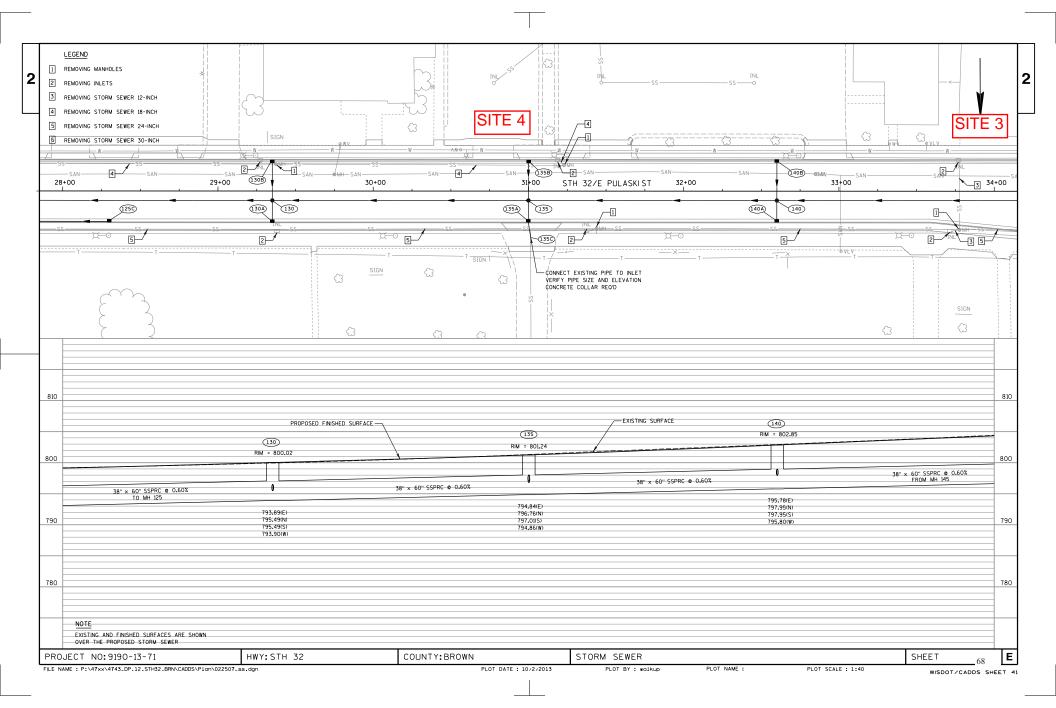
Table 1 Summary of Soil Field-Screening Results STH 32, Pulaski, Wisconsin WisDOT Project ID #9190-13-71

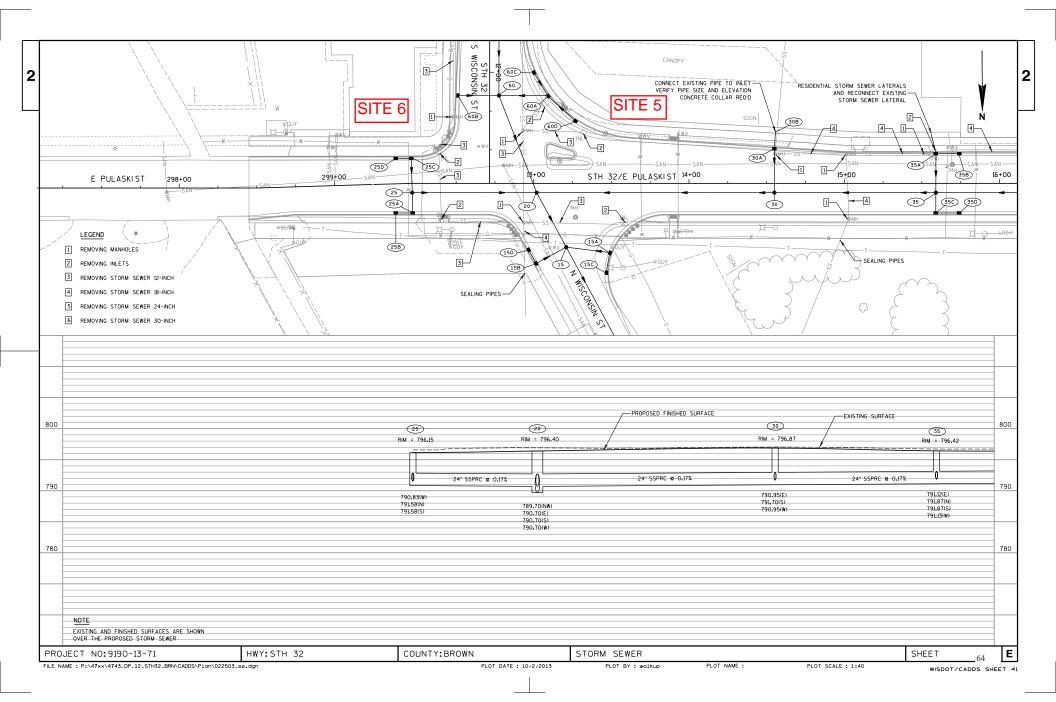
DATE	Site #	LOCATION	DEPTH (ft bgs)	PID (ppm)	COMMENTS
4/10/2014	3	E. Pulaski St. Station 33+45, 6' R of reference line. Stormsewer trench.	3-5'	45	Brown silty clay, strong gasoline odor
4/10/2014	3	E. Pulaski St. Station 33+60, 6' R of reference line. Stormsewer trench.	3-5'	21	Brown silty clay, strong gasoline odor
4/10/2014	3	E. Pulaski St. Station 33+80, 6' R of reference line. Stormsewer trench.	3-5'	75	Brown silty clay, strong gasoline odor
4/10/2014	3	E. Pulaski St. Station 34+00, 6' R of reference line. Stormsewer trench.	3-5'	170	Brown silty clay, strong gasoline odor
4/15/2014	3	E. Pulaski St. Station 34+25, 6' R of reference line. Stormsewer trench.	3-5'	10	Brown silty clay, mild gasoline odor
4/15/2014	3	E. Pulaski St. Station 34+40, 6' R of reference line. Stormsewer trench.	3-5'	7.5	Brown silty clay, mild gasoline odor
4/15/2014	3	E. Pulaski St. Station 34+50, 6' R of reference line. Stormsewer trench.	3-5'	7	Brown silty clay, mild gasoline odor
4/15/2014	3	E. Pulaski St. Station 34+65, 6' R of reference line. Stormsewer trench.	3-5'	0	Brown silty clay, no odor
4/15/2014	2	E. Pulaski St. Station 34+80, 6' R of reference line. Stormsewer trench.	3-5'	0	Brown silty clay, no odor
4/15/2014	2	E. Pulaski St. Station 34+95, 6' R of reference line. Stormsewer trench.	3-5'	0	Brown silty clay, no odor
4/15/2014	2	E. Pulaski St. Station 35+15, 6' R of reference line. Stormsewer trench.	3-5'	0	Brown silty clay, no odor
4/15/2014	2	E. Pulaski St. Station 35+30, 6' R of reference line. Stormsewer trench.	3-5'	0	Brown silty clay, no odor
4/15/2014	2	E. Pulaski St. Station 35+50, 6' R of reference line. Stormsewer trench.	3-5'	0	Brown silty clay, no odor
4/16/2014	5	E. Pulaski St. Station 14+53 from 5' R of reference line to construction limits left. Installation of MH-30, and Inlet connections 30A/B and connecting stormsewer trench.	8' / 5'	0/0	Brown sandy / silty soil, no odor
4/16/2014	6	E. Pulaski Street - Station 299+50, at construction limits left (installation of Inlet basins 25C & 25D).	8	3	Brown silty clay, mild gasoline odor
4/21/2014	6	E. Pulaski Street - Station 299+50, installation of MH 25 and stormsewer from MH 25 to inlet basin 25C.	8' / 5'	1.1 / 3.0	Brown silty clay, no odor
4/21/2014	5	S. Wisconsin Street - Stormsewer trench between Stations 12+20 to 12+70 between 6' to 20' Left of reference line.	3-5'	58	Brown silty clay, strong gasoline odor
4/21/2014	5	S. Wisconsin Street - North/South Stormsewer trench between Inlet Basins 60D and 60A, Stations 12+20 to 12+38 at construction limits left.	3-5'	128	Brown silty clay, strong gasoline odor
4/22/2014	3	E. Pulaski St. Station 34+40, Construction limits left for Inlet Basin 145B	6'	40	Brown silty clay, strong gasoline odor
4/23/2014	5	Intersection of Wisconsin Street and Pulaski Street - North/South Stormsewer trench between Inlet Structure 60A and 60C, Stations 12+00 to 12+20 at construction limits left.	3-5'	585	Brown silty clay, strong gasoline odor
4/23/2014	5	Intersection of Wisconsin Street and Pulaski Street -Stormsewer trench between Inlet Basin 60A and MH60, Station 12+15 from 5' Left of reference line to construction limits left.	3-5'	276	Brown silty clay, strong gasoline odor
4/23/2014	6	S. Wisconsin St. Station 12+15 between MH 60 to Inlet Basin 60B.	3' / 5'	55 / 158	Brown silty clay, strong gasoline odor
4/23/2014	5	S. Wisconsin St abandonment of existing stormsewer trench from approximate STA 12+00 to 12+38 - 20' left of reference line.	3-5'	510	Brown silty clay, strong gasoline odor

DATE	Site #	LOCATION	DEPTH (ft bgs)	PID (ppm)	COMMENTS
4/23/2014	5	S. Wisconsin St abandonment of existing stormsewer trench from approximate STA 12+38 to 12+75 - 20' left of reference line.	3-5'	4	Brown silty clay, mild gasoline odor
4/23/2014	5	E. Pulaski Street - Stormsewer trench between MH 60 and MH20, Station 12+50 to 13+00.	3-5'	0	Brown sandy silty clay, no odor
4/23/2014	5	E. Pulaski St. Station 15+55 between construction limits Left and Right. (Installation of MH-35 and Inlet Basins 35A, 35B, 35C, and 35D.	8' / 5'	0/0	Brown sandy silty clay, no odor
5/13/2014	2	E. Pulaski St. Station 35+65, construction limits Left, (Installation of Inlet Basin 147C).	8'	286	Brown silty clay, strong gasoline odor
5/13/2014	2	St. Augustine St. Station 549+40 - 55, construction limits right (installation of inlet basins 155B and 155D.	8'	1340	Brown silty clay, strong gasoline odor
5/13/2014	2	St. Augustine St. Station 549+40 - 55, construction limits left (installation of inlet basins 155A and 155C.	8'	0	Brown sandy silty clay, gasoline odor
5/14/2014	3	E. Pulaski St. between Stations 33+20 and 35+40 from reference line to construction limits Left, Excavation Beyond Subgrade (EBS).	2' EBS	22 - 280	Brown silty clay, strong gasoline odor
8/6/2014	5/6	S. Wisconsin St installation of new storm sewer between STA 11+30 to 11+50 - 8' left of reference line.	3-6'	0	Brown sandy silty clay, no odor
8/6/2014	5/6	S. Wisconsin St installation of new storm sewer between STA 11+60 - 8' left of reference line.	3-6'	10	Brown sandy silty clay, mild gasoline odor
8/6/2014	5/6	S. Wisconsin St installation of new storm sewer between STA 11+70 - 8' left of reference line.	3-6'	7	Brown sandy silty clay, mild gasoline odor
8/6/2014	5/6	S. Wisconsin St installation of new storm sewer between STA 11+85 - 8' left of reference line.	3-6'	34	Brown sandy silty clay, mild gasoline odor
8/18/2014	5/6	S. Wisconsin St Station 12+15 at construction limits right - Installation of inlet basin 60B	3'/5'/8'	0/39/1584	Brown silty sand, strong gasoline odor
		Test Pits for Potenti	ial UST Se	arch	
4/22/2014	6	Test Pit for UST search - E. Pulaski St Station 299+70 - Construction limits left	2'/4'/6'	0/31/40	No UST encountered
4/22/2014	6	Test Pit for UST search - E. Pulaski St Station 299+50 - Construction limits left	2'/4'/6'	0/30/40	No UST encountered
4/22/2014	6	1 Test Pit for UST search - E. Pulaski St Station 299+30 - Construction limits left	2'/5'/6'	0/104/85	No UST encountered
4/22/2014	4	1 Test Pit for UST search - E. Pulaski St Station 30+50 - Construction limits left	3'/5.5'	0/0	No UST encountered
4/22/2014	4	1 Test Pit for UST search - E. Pulaski St Station 30+75 - Construction limits left	3'/5.5'	0/0	No UST encountered
4/22/2014	4	1 Test Pit for UST search - E. Pulaski St Station 31+15 - Construction limits left	2.5'/5.5'	4/0	No UST encountered
4/22/2014	3	1 Test Pit for UST search - E. Pulaski St Station 32+80 - Construction limits left	2'/4'/6'	0/0/0	No UST encountered
4/22/2014	3	1 Test Pit for UST search - E. Pulaski St Station 34+20 - Construction limits left	2'/6'	4/40	No UST encountered
4/22/2014	3	1 Test Pit for UST search - E. Pulaski St Station 34+40 - Construction limits left	6'	59	No UST encountered
Notes:				Created By: D. S	ewert - 8/80/14
PID=Photoionizatio	n Detector			Checked By: N. E	3raun 9/4/14

Appendix A Highway Construction Plans







Appendix B Special Provisions

Haak, Daniel

From:

Taddy, Vickie J - DNR < Vickie. Taddy@wisconsin.gov>

Sent:

Tuesday, April 16, 2013 4:42 PM

To:

Sellwood, Alyssa

Subject:

FW: Concurrence with Special Provisions for STH 32 Pulaski Project WI DOT Project ID #

9190-13-00

Sorry-guess the first email went to an old address

From: Taddy, Vickie J - DNR

Sent: Tuesday, April 16, 2013 4:35 PM

To: Sellwood, Alyssa; kathie.vanprice@dot.state.wi.us

Subject: Concurrence with Special Provisions for STH 32 Pulaski Project WI DOT Project ID #9190-13-00

Kathie and Alyssa:

I have reviewed the Phase 2/2.5 Site Investigation Report and Special Provisions Plan submitted by TRC, and I concur with the Excavation Management Plan (EMP) for the STH 32 project in Pulaski, Wisconsin, WisDot Project ID #9190-13-00.

Vickie

Vickie Taddy Hydrogeologist Remediation and Redevelopment Program Wisconsin Department of Natural Resources 2984 Shawano Ave., Green Bay, WI 54307

phone:

(920) 662-5178

e-mail:

vickie.taddy@wisconsin.gov

This email has been scanned by the Symantec Email Security.cloud service. For more information please visit http://www.symanteccloud.com

B Materials

Provide cellular concrete meeting the following specifications: 1 part cement, 1 part fly ash, 8 parts sand, or an approved equal, and water. Provide cement meeting the requirements of standard spec 501.2.1 for Type 1 Portland Cement. Provide sand meeting the requirements of standard spec 501.2.5.3 Provide water meeting the requirements of standard spec 501.2.4.

C Construction

Fill the abandoned sewer pipe with cellular concrete as directed by the engineer. In the event that the sewer cannot be completely filled from existing manholes, tap the sewer where necessary and fill from these locations.

D Measurement

The department will measure Abandoning Sewer in volume by the cubic yard according to standard spec 109.1.3.

E Payment

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

ITEM NUMBERDESCRIPTIONUNIT204.0291.SAbandoning SewerCY

Payment is full compensation for furnishing all materials and excavating and backfilling where necessary.

204-050 (20080902)

22. 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 and management of lead-contaminated soil. Petroleum-contaminated soil shall be disposed of at a Wisconsin Department of Natural Resources (WDNR)-approved bioremediation facility. Lead-contamination soil shall be reused within the limits of construction. The closest bioremediation facilities are:

Waste Management – Ridgeview RDF 6207 Hempton Lake Road Whitelaw, Wisconsin 54247 (920) 732-4473 Ext. 228

Veolia – Hickory Meadows Landfill W3105 Schneider Road Hilbert, Wisconsin 54129 (920) 853-8553

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Perform this work in accordance to standard spec 205 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 petroleum- and lead-contaminated soil.

A.2 Notice to the Contractor

The department completed testing for soil contamination for locations within this project where excavation is required. Testing indicated that petroleum-contaminated soil is present at the following locations:

- Site 2: Station 498+75 to 500+00 and from Station 35+25 to 36+00, from reference line to the construction limits on the left
- Site 3: Station 32+75 to 34+40, from reference line to the construction limits on the left.
- Site 5: Station 12+75 to 15+00, from reference line to the construction limits on the left
- Site 5 and 6: Station 11+50 to 12+75, from reference line to the construction limits on the left and construction limits on the right

Testing indicated that lead-contaminated soil is present at the following locations:

• Site 6: Station 10+75 to 11+25 from reference line to the construction limits on the right.

No underground storage tanks (USTs) were encountered during the testing; however, historical data and metal detector survey indicate USTs may exist at the following locations:

- Site 3: Station 32+75 to 33+00 and Station 34+00 to 34+50, from 20-feet left of reference line to limits of construction left.
- Site 4: Station 30+50 to 31+25, from 20-feet left of reference line to limits of construction left.
- Site 6: Station 299+25 to 299+50, from 20-feet left of reference line to limits of construction left, and Station 12+25 to Station 12+50, from 20-feet right of reference line to limits of construction right.

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

For further information regarding previous investigation at these sites contact:

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Name: Kathie VanPrice

Wisconsin DOT, Northeast Region

Address: 944 Vanderperren Way

Green Bay, WI 54304

Phone: (920) 492-7175 Fax: (920) 492-0144

e-mail: kathie.vanprice@dot.state.wi.us

A.3 Coordination

Coordinate work under this contract with the environment consultant:

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: <u>DHaak@trcsolutions.com</u>

Contact: Alyssa Sellwood

Phone: (608) 826-3658 office, (608) 234-8001 mobile

e-mail: <u>ASellwood@trcsolutions.com</u>

The role of the environmental consultant will be limited to:

- 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;
- Identifying petroleum-contaminated soils to be hauled to the bioremediation facility;
- Documenting that activities associated with management of petroleum- and leadcontaminated soil are in conformance with the contaminated soil management methods for this project as specified herein;
- Obtaining the necessary approvals for disposal of petroleum-contaminated soil from the bioremediation facility,
- Characterizing and obtaining necessary approvals for disposal of contaminated material not previously identified during testing.

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 WDNR-approved bioremediation facility that will be used for disposal of petroleum-contaminated soils and provide this information to the environmental consultant no later than 30 calendar days prior to commencement of excavation activities in the

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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 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 Kathie VanPrice with the department, at (920) 492-7175.

A.5 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 lead, gasoline, diesel fuel, or other petroleum related products. 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.

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 Contaminated soils are expected to be beyond the excavation limits necessary to complete the work under this project. Control construction operations at these locations

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to ensure that they do not extend beyond the minimum required to construct utilities and highway improvements unless expressly directed to do so by the engineer.

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:

- Site 3: Station 32+75 to 33+00 and Station 34+00 to 34+50, from 20-feet left of reference line to limits of construction left.
- Site 4: Station 30+50 to 31+25, from 20-feet left of reference line to limits of construction left.
- Site 6: Station 299+25 to 299+50, from 20-feet left of reference line to limits of construction left, and Station 12+25 to Station 12+50, from 20-feet right of reference line to limits of construction 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 items.

The environmental consultant will periodically evaluate soil excavated from the contaminated areas to determine if the soil will require offsite disposal. 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 managed 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 Petroleum-contaminated Material: PID readings less than 10 ppm and no observation of staining or petroleum odor for reuse as fill within the construction limits, or
- Petroleum-contaminated Soil: Significant petroleum odor, staining, and/or PID readings greater than 10 ppm for off-site treatment and disposal at the WDNR-licensed bioremediation facility, or
- Lead-contaminated Soil: Soil removed from Station 10+75 to 11+25 from reference line to the construction limits on the right for reuse as fill within the construction limits, or
- Potentially Contaminated: Contaminated material from areas other than listed above for temporary stockpiling and additional characterization prior to disposal.

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If contaminated soils and/or USTs are encountered outside the limits of known contamination on the project, terminate excavation activities in the area and notify the engineer. Environmental consultant will screen the potentially-contaminated material and some material may require additional characterization prior to disposal. Provide for the temporary stockpiling of up to 100 cubic yards of potentially-contaminated soil on-site for 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 disposal to the WDNR 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 contaminated soils or residues. Prior to transport, sufficiently dewater soils designated for off-site bioremediation and/or disposal so as not to contain free liquids.

D Measurement

The department will measure Excavation, Hauling, and Disposal of -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; dewatering

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of soils prior to transport, if necessary; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work. 205-003 (20080902)

23. 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.
- (5) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required sampling and testing procedures. The contractor may obtain the CMM from the department's web site at:

http://roadwaystandards.dot.wi.gov/standards/cmm/index.htm

A.2 Contractor Testing for Small Quantities

- (1) The department defines a small quantity, for each individual Base Aggregate bid item, as a plan quantity of 9000 tons or less of material as shown in the schedule of items under that bid item.
- (2) The requirements under this special provision apply equally to a small quantity for an individual bid item except as follows:
 - 1. The contractor need not submit a full quality control plan but shall provide an organizational chart to the engineer including names, telephone numbers, and current certifications of all persons involved in the quality control program for material under affected bid items.

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Appendix C Soil Disposal Records



CERTIFICATE OF RECEIPT FOR BIOREMEDIATION

Advanced Disposal Services Hickory Meadows Landfill, LLC certifies that the following petroleum contaminated soil has been received and placed into our "Bio Pile" area for treatment as permitted by the Wisconsin DNR, license #4291.

Generator Name:

WisDOT #9190-13-71

Generator Address:

STH 32

Pulaski, WI

Waste Description:

Petroleum Impacted Soil

Waste Category:

33b

Profile Number:

HML14-015

Tonnage Received:

1289.39

Date of Receipt:

April 10, 2014 - August 19, 2014

Landfill Representative

911212014

Date

January 01, 2014 to September 12, 2014

Specific Contract: HML14-015

History and Waiting

* - Confirmed Qty Applied to Billing

HML14-015

111/211/013											
Ticket Date		ility & Ticket	Customor	Truck	Material		C	ontract Rate	Billing Quantity		Minimum Quantity
		Number	Customer				2250 5 5 11 /				• ,
04/10/2014	I	B5		- PETERS CONCRETE C		99DEN	33B@ C-Soil / 33B@ C-Soil /				2.60 tn 2.97 TN
04/10/2014	I	B5		- PETERS CONCRETE C		547PE	33B@ C-Soil /		` ,		
04/10/2014	I	B5		- PETERS CONCRETE C		700PI	_ ,	-			2.16 tn
04/10/2014	I	B5		- PETERS CONCRETE C		542P	33B@ C-Soil /				!6.78 tn
04/10/2014	I	B5		- PETERS CONCRETE C		546PE	33B@ C-Soil /		. ,		19.39 tn
04/10/2014	I	B5		- PETERS CONCRETE C		22TMA	33B@ C-Soil /	-			2.61 tn
04/10/2014	I	B5		- PETERS CONCRETE O		962S	33B@ C-Soil / 33B@ C-Soil /		. ,		22.30 tn
04/11/2014	I	B5		- PETERS CONCRETE C		546PE			. ,		2.70 tn 24.34 tn
04/11/2014	I I	B5		 PETERS CONCRETE C PETERS CONCRETE C 		547PE 542P	33B@ C-Soil / 33B@ C-Soil /				26.90 tn
04/11/2014	I	B5					33B@ C-Soil /				21.34 tn
04/11/2014	I	85 85		 PETERS CONCRETE OF PETERS CONCRETE OF PETERS 		544PE 962S	33B@ C-Soil /				11.34 un 14.86 tn
04/15/2014	I			- PETERS CONCRETE (9025 99DEN	33B@ C-Soil /				23.88 tn
04/15/2014	I	B5				15DU	338@ C-Soil /				23.18 tn
04/15/2014	I	85 85		- PETERS CONCRETE (22TMA	33B@ C-Soil /	•			22.53 TN
04/15/2014	I	B5		- PETERS CONCRETE O			33B@ C-Soil /				20.75 tn
04/15/2014	I	B5		 PETERS CONCRETE (PETERS CONCRETE (17MTA 402J	33B@ C-Soil /				23.92 tn
04/15/2014	I	B5		- PETERS CONCRETE (22TMA	33B@ C-Soil /				19.28 TN
04/16/2014	I	B5				320RL	33B@ C-Soil /				22.23 tn
04/16/2014	I	B5		 PETERS CONCRETE (PETERS CONCRETE (07DU	33B@ C-Soil /				18.71 tn
04/16/2014 04/16/2014	I	B5		- PETERS CONCRETE (66OR	33B@ C-Soil /				19.01 tn
	I	B5		- PETERS CONCRETE (700PI	33B@ C-Soil /		. ,		19.01 th
04/16/2014 04/16/2014	I	B5		- PETERS CONCRETE (17MTA	33B@ C-Soil /				18.72 TN
04/16/2014	I	B5		- PETERS CONCRETE (962S	33B@ C-Soil /				23.29 TN
04/16/2014	I	B5		- PETERS CONCRETE (15DU	33B@ C-Soil /				20.65 TN
04/16/2014	I	B5		- PETERS CONCRETE (99DEN	33B@ C-Soil /				21.94 TN
04/16/2014	I	B5		- PETERS CONCRETE (16AIM	33B@ C-Soil /				21.65 tn
04/16/2014	I	B5		- PETERS CONCRETE (78CA	33B@ C-Soil /		. ,		21.36 tn
04/16/2014	I	B5		- PETERS CONCRETE (15DU	33B@ C-Soil /				18.77 TN
04/16/2014	Ī	B5		- PETERS CONCRETE (22TMA	33B@ C-Soil /	-			21.04 TN
04/21/2014	I	B5		- PETERS CONCRETE (32ORL	33B@ C-Soil				33.31 TN
04/22/2014	Ī	B5		- PETERS CONCRETE (962S	33B@ C-Soil /				10.93 tn
04/24/2014	I	B5		- PETERS CONCRETE (22TMA	33B@ C-Soil				26.47 tn
04/24/2014	I	B5		- PETERS CONCRETE (32ORL	33B@ C-Soil				21.81 TN
04/24/2014	I	B5		- PETERS CONCRETE (66OR	33B@ C-Soil		, ,		17.75 tn
04/24/2014	I	B5		- PETERS CONCRETE (554CE	33B@ C-Soil		. ,		19.10 tn
05/13/2014	I	B5		- PETERS CONCRETE (22TMA	33B@ C-Soil				21.19 tn
05/13/2014	I	B5		- PETERS CONCRETE (32ORL	33B@ C-Soil		•		22.58 TN
05/13/2014	I	B5		- PETERS CONCRETE (GEN_PUBLIC	33B@ C-Soil				20.55 tn
05/13/2014	I	B5		- PETERS CONCRETE (9213	33B@ C-Soil	/ Unteaded /	UST (Ext)	3	24.32 tn
05/14/2014	I	B5		- PETERS CONCRETE (240RL	33B@ C-Soil				25.52 tn
05/14/2014	I	B5		- PETERS CONCRETE (66OR	33B@ C-Soil				20.80 tn
05/14/2014	I	B5		- PETERS CONCRETE O		99DEN	33B@ C-Soil				21,77 tn
05/14/2014	I	B5		- PETERS CONCRETE (17BO	33B@ C-Soil				21.87 tn
05/14/2014	I	B5		- PETERS CONCRETE (22TMA	33B@ C-Soil				22.60 tn
05/14/2014	I	B5		- PETERS CONCRETE (402J	33B@ C-Soil				22.43 tn
05/14/2014	I	B5		- PETERS CONCRETE (01JLA	33B@ C-Soil				18.81 tn
05/14/2014	I	B5		- PETERS CONCRETE (17MTA	33B@ C-Soil				20.90 tn
05/14/2014	I	B5		- PETERS CONCRETE (92]]	33B@ C-Soil				20.62 tn
05/14/2014	I	B5		- PETERS CONCRETE (77CA	33B@ C-Soil	/ Unleaded /	UST (Ext)		20.64 tn
05/14/2014	I	B5		- PETERS CONCRETE (542P	33B@ C-Soil				24.46 TN
05/14/2014	I	B5		- PETERS CONCRETE (66OR	33B@ C-Soil	/ Unleaded /	UST (Ext)		20.37 TN
05/14/2014	I	B5		- PETERS CONCRETE (99DEN	33B@ C-Soil	/ Unleaded /	UST (Ext)		24.32 TN
05/14/2014	I	B5		- PETERS CONCRETE (24ORL	33B@ C-Soil				23.27 TN
05/14/2014	I	B5		- PETERS CONCRETE O		17BO	33B@ C-Soil	/ Unleaded ,	UST (Ext)		19.40 TN
08/06/2014	I	B5	472608 000664	- PETERS CONCRETE (COMPANY	542P	33B@ C-Soil	/ Unleaded ,	UST (Ext)		25.07 tn
08/06/2014	I	B5		- PETERS CONCRETE (547PE	33B@ C-Soil				20.32 tn
08/18/2014	I	B5		- PETERS CONCRETE O		24ORL	33B@ C-Soil				14.35 tn
08/19/2014	I	B5		- PETERS CONCRETE (32ORL	33B@ C-Soil				15.84 TN
										4 200	20 Tone

1,289.39 Tons

All Facilities



Special Waste Profile Sheet Contaminated Soil

	Designated Facil	lity: Advanced Disposal Services Hickory Mo	endows Landfill, LLC	Pecfa	🔀 Bio Pile	
	Sales Represent	ntivo: Kari A. Rabideau	Non-Pecfa	☐ Landfill		
	A. Generator Name Site Address City, State, Zip Contact Phone Fax E-mail	WisDOT (WisDOT # 9190-13-71) STH 32 Pulaski, Brown/Shawano/Oconto Counties, WI Sharlene TeBeest (608) 266-1476 Sharlene TeBeest@dot.wi.gov	B. Billing Name Address City, State Contact Phone Pax	Peters Concrete, Inc		
	Source of Contar	ed With: Unleaded Gasolinc Leaded Gasonination: LUST AST	Spill Oth	el Oil Waste Oil Other er	·	
	D. Other Wast	te Data or Comments				
	Laboratory Nar F. Generator Ce I. This waste is in 2. This waste doe 3. This waste doe	nitted with profile	13Iministrative Code NR			
	waste. Any equivalent sa has been disc	my knowledge, all the information in this and a sample submitted is representative as defined impling method. All relevant information regardlosed.	n 40 CFR 261 - App ding known or suspec \$ Title	endix 1 and was obtained by us	sing this or an f the generator	
_	Print Name		Date	/31/14		
	G. Landfill App My approval is ba	proval ased upon the laboratory analysis of a represental	tive sample and/or ma	terlal safety data sheet submitted	by the generator.	
	Landfill Signature)	Date			
	Approvals Signate	ure	Date			
	Waste Category	Analytical Protocol	Disposal Operation	Recert. Date		
	VÕC Concentration	on				

Appendix D Photo Log



Client Name: Wisconsin Department of Transportation (WisDOT) **Site Location:** STH 32 Pulaski, WI **Project No.:** TRC: 213159.0000.0000 WisDOT: 9190-13-71

Photo No. Date
1 04/08/2014

Description

Lateral excavation for connection to MH30, Pulaski Street: STA. 14+55 (Site 5).



Photo No. Date
2 04/08/2014

Description

Main storm sewer and lateral connection to MH 30 – Pulaski Street: STA. 14+55 (Site 5).





Client Name:
Wisconsin Department of Transportation
(WisDOT)

Site Location: STH 32 Pulaski, WI **Project No.:** TRC: 213159.0000.0000 WisDOT: 9190-13-71

Photo No. Date 3 05/02/2014

Description

Grade excavation at intersection of Wisconsin Street and Pulaski Street.



Photo No. Date
4 04/10/2014

Description

Main storm sewer installation in Pulaski Street (Sites 3&4).





Client Name: Wisconsin Department of Transportation (WisDOT) **Site Location:** STH 32 Pulaski, WI **Project No.:** TRC: 213159.0000.0000 WisDOT: 9190-13-71

 Photo No.
 Date

 5
 04/16/2014

DescriptionExcavation fo

Excavation for manhole near intersection of Wisconsin St. and Pulaski St.



Photo No. Date
6 04/16/2014

Description

Inlet basins 60A & 60D installation at intersection of Wisconsin & Pulaski St. (Site 5).





Client Name: Wisconsin Department of Transportation (WisDOT) **Site Location:** STH 32 Pulaski, WI **Project No.:** TRC: 213159.0000.0000 WisDOT: 9190-13-71

Photo No. Date
7 05/13/2014

DescriptionExcavation below subgrade
(EBS) on Pulaski Street (Sites 2&3).



Photo No. Date 8 05/13/2014

Description

Excavation below subgrade (EBS) on Pulaski Street (Sites 2&3).





Client Name: Wisconsin Department of Transportation (WisDOT) **Site Location:** STH 32 Pulaski, WI **Project No.:** TRC: 213159.0000.0000 WisDOT: 9190-13-71

 Photo No.
 Date

 9
 05/13/2014

Description EBS mat and base rock on

Pulaski Street (Sites 2&3).



Photo No. Date
10 08/06/2014

Description

Storm sewer installation on Wisconsin Street (Sites 5&6).





Client Name: S
Wisconsin Department of Transportation
(WisDOT)

Site Location: STH 32 Pulaski, WI **Project No.:** TRC: 213159.0000.0000 WisDOT: 9190-13-71

Photo No. Date
11 08/18/2014

Description

Excavation for inlet basin 60 B with contaminated soil.



Photo No. Date
12 08/18/2014

Description

Excavation for inlet basin 60 B. Close-up view of contaminated soil.

