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**June 20, 2012**

**Mr. David Hon  
Wisconsin Department of Natural Resources  
1300 W. Clairemont Avenue  
Eau Claire, WI 54701-6127**

**Subject: USH 12, Merrillan, Wisconsin  
Special Provisions  
WisDOT Project ID #7080-05-03**

**Dear Mr. Hon:**

The WisDOT is planning to reconstruct USH 12 from Old Highway 12 (south) to Merrill Street (north) in the Village of Merrillan, Wisconsin. The Plans, Specifications, and Estimates are due August 1, 2012. Construction is scheduled for 2013. We request the WDNR review the Special Provisions (Attachment 1) along with the Plans (Attachment 2) and Background Information (Attachment 3) and provide concurrence by July 13, 2012.

We anticipate encountering petroleum-contaminated soil during project excavations at the following sites:

1. Former Gosch's Shell Station – 305 S. USH 12
2. Double T Quik Stop – 302 N. USH 12
3. Thompson Motors – 305 N. USH 12
4. Former Dave's Gas Station – 405 N. USH 12
5. Former Standard Gas Station – Southeast corner of USH 12 and Merrill Street

We do not anticipate encountering petroleum-contaminated groundwater. If dewatering of petroleum-contaminated groundwater is required, it will be containerized and disposed off-site.

We estimate 900 tons of petroleum-contaminated soil will require off-site treatment and disposal.

Mr. David Hon  
Wisconsin Department of Natural Resources  
June 20, 2012  
Page 2

If you have any questions, please feel free to contact Dan Haak at 608-826-3628.

Sincerely,

TRC Environmental Corporation



Dennis Siewert  
Senior Designer



Daniel Haak  
Project Manager

- Attachments:
1. Special Provisions
  2. Plans
  3. Background Information

cc: Troy Stapelmann – WisDOT (hardcopy and pdf on CD)  
Shar TeBeest – WisDOT (hardcopy and pdf on CD)

**Attachment 1**

**Special Provisions**

**Special Provisions for the Excavation, Hauling, and Disposal of  
Petroleum Contaminated Soil  
Item 205.0501.S.**

**Project Design I.D. #7080-05-03  
USH 12  
Village of Merrillan, Jackson County, Wisconsin**

**Prepared by  
TRC Environmental Corporation  
Madison, Wisconsin**

**June 2012**

## **1. 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 with 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):

##### **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: [troy.stapelmann@dot.state.wi.us](mailto:troy.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](mailto:DHaak@trcsolutions.com)

Contact: Dennis Siewert  
Phone: 608-826-3659 (office)  
e-mail: [DSiewert@trcsolutions.com](mailto: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 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 off-site 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 subsection 107.1 of the standard specifications with the following:*

During excavation activities, expect to encounter soil contaminated with gasoline, diesel fuel, fuel oil, 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, which include as a minimum:

1. No smoking is allowed on-site.
2. Maximum speed limit of 15 mph on access roads and 5 mph while in active area
3. 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.
4. Minimum requirement for spacing is as follows:
  - a. A minimum 15 foot Safety Zone is required between landfill equipment and all personnel at all times.
  - b. Do not back up directly behind the compactor or dozer.
  - c. Trucks must yield the right-of-way to landfill equipment.
  - d. 15 feet required between trucks.
5. 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.
6. Tailgates of all vehicles may only be opened while in the active area and must be closed prior to exiting the active area.
7. Cleaning out vehicles must be done in designated area, not in the active area. Vehicles must be properly locked out / tagged out in accordance with OSHA during the clean out process.
8. No Scavenging is allowed.
9. 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 subsection 205.3 of the standard specification 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.

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 with 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 with 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.

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 with 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 berthing, 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 statutes, judiciary decisions, and regulations of the State of Wisconsin.

#### **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:

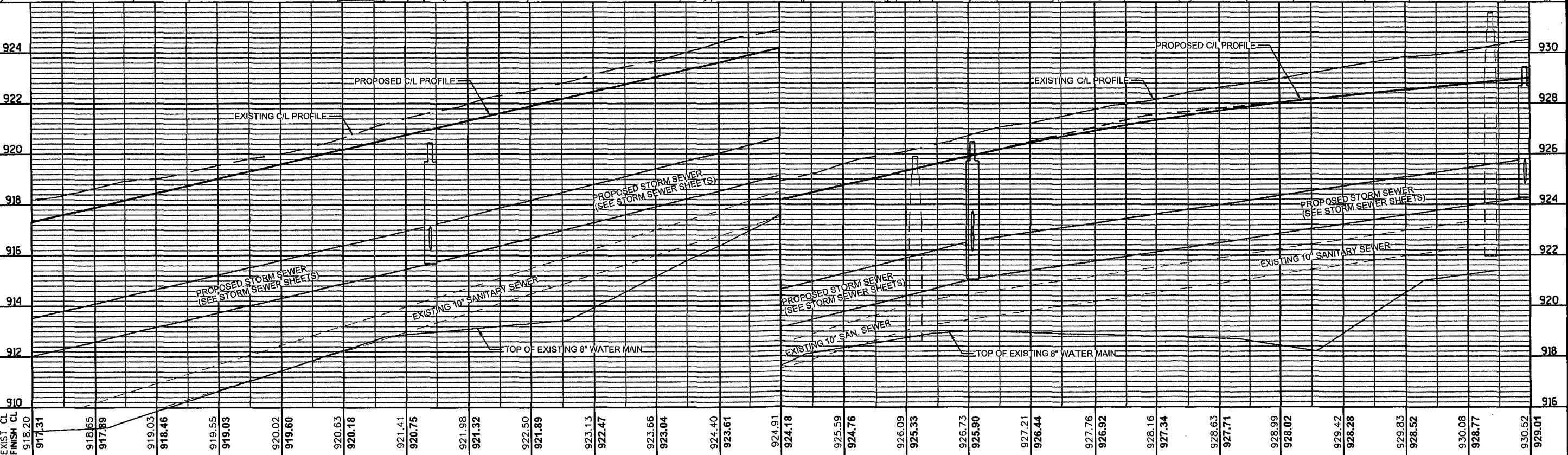
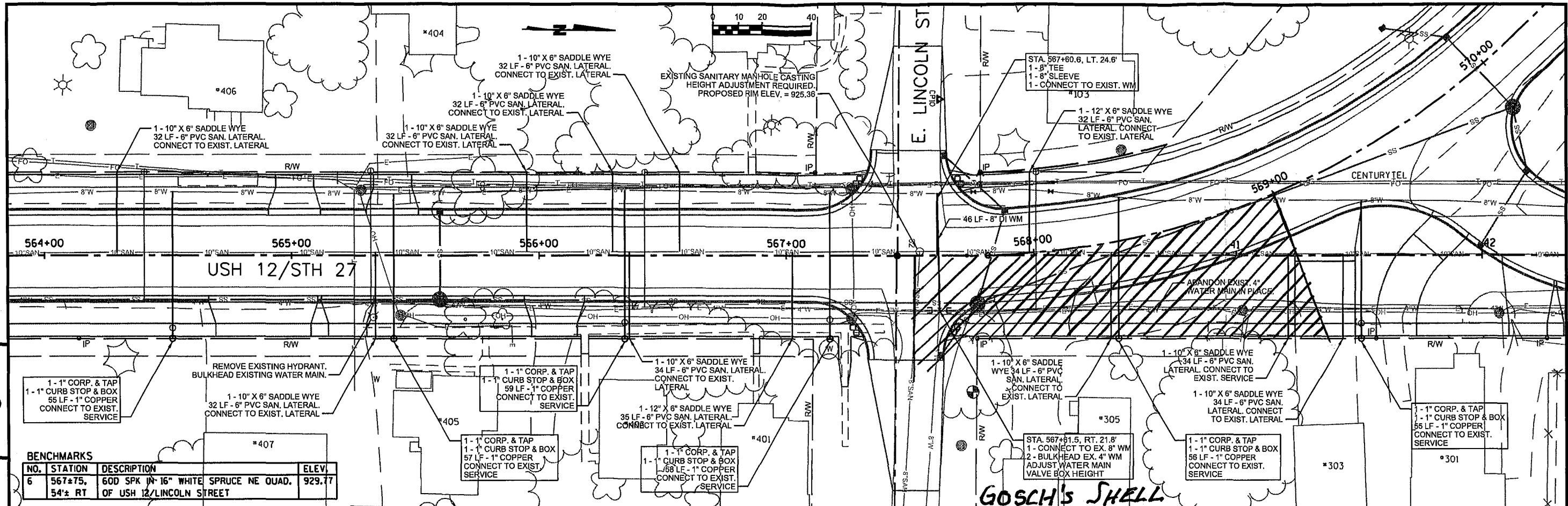
ITEM NUMBER	DESCRIPTION	UNIT
205.0501.S	Excavation, Hauling, and Disposal of Petroleum Contaminated Soil	Ton

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 of soils prior to transport, if necessary; and for furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

205-003 (20080902)

**Attachment 2**

**Plans**



PROJECT NUMBER: 7080-05-73

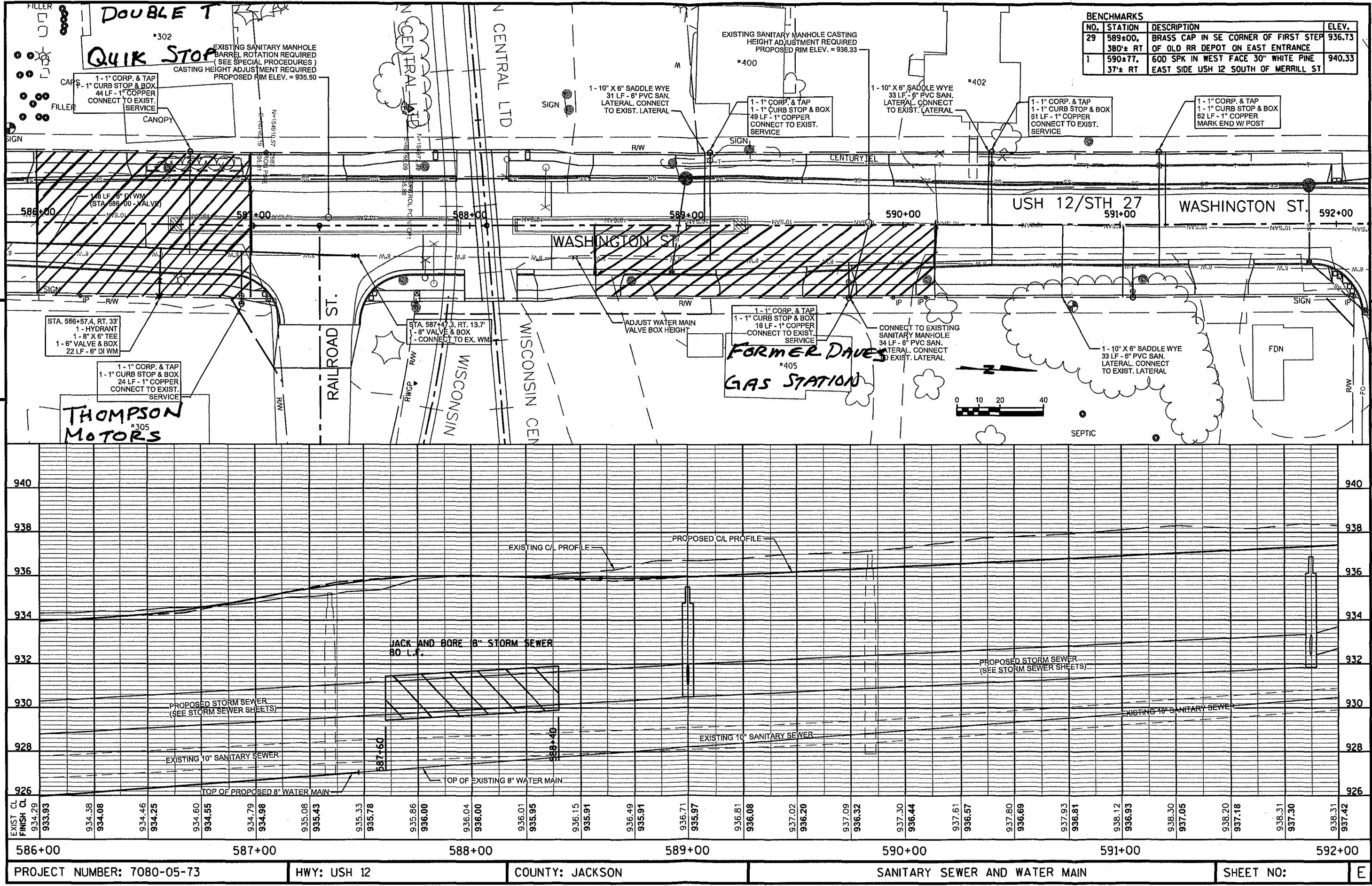
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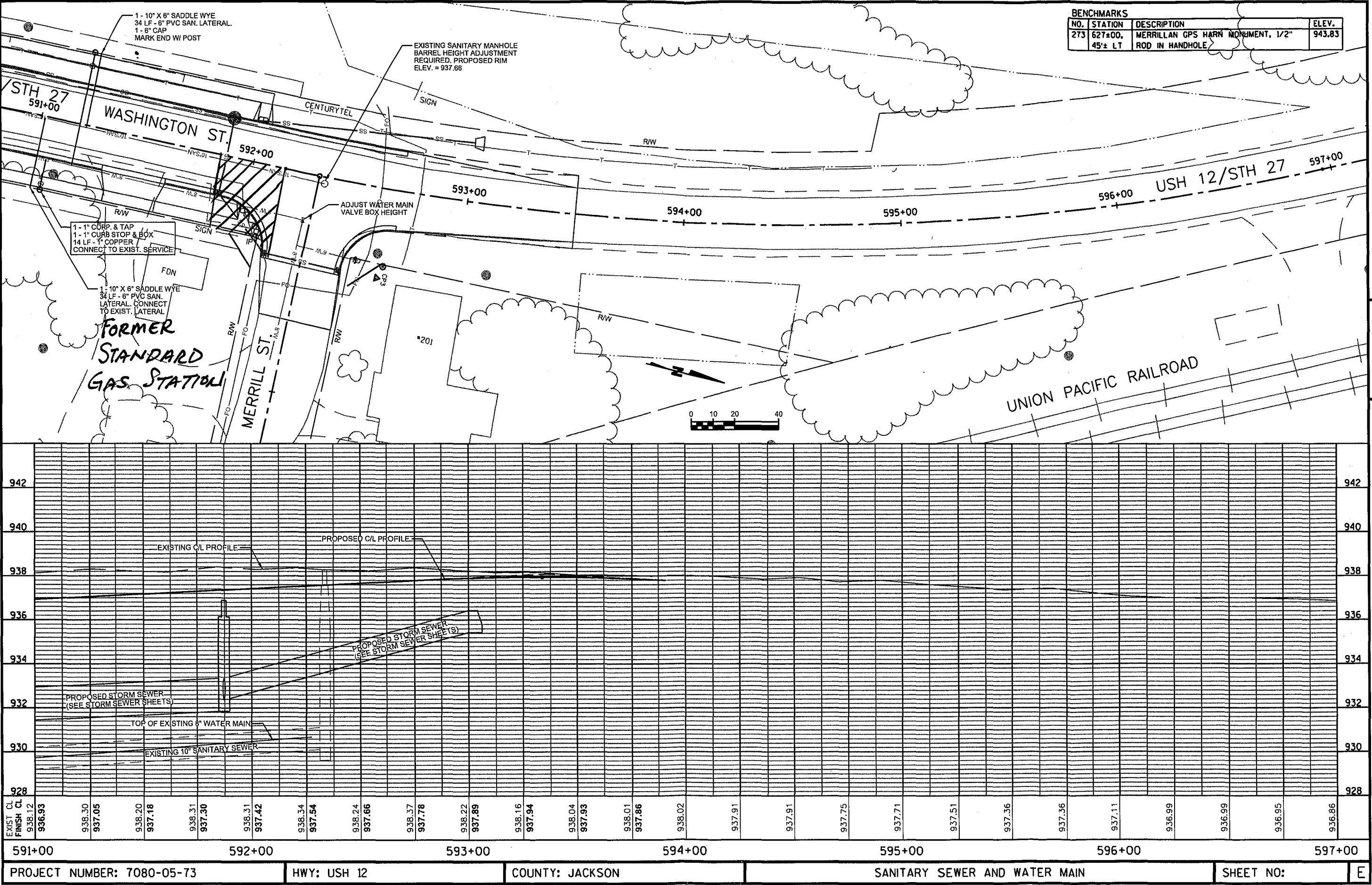
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## **SANITARY SEWER AND WATER MAIN**

SHEET NO:

F





## **Attachment 3**

### **Background Information**

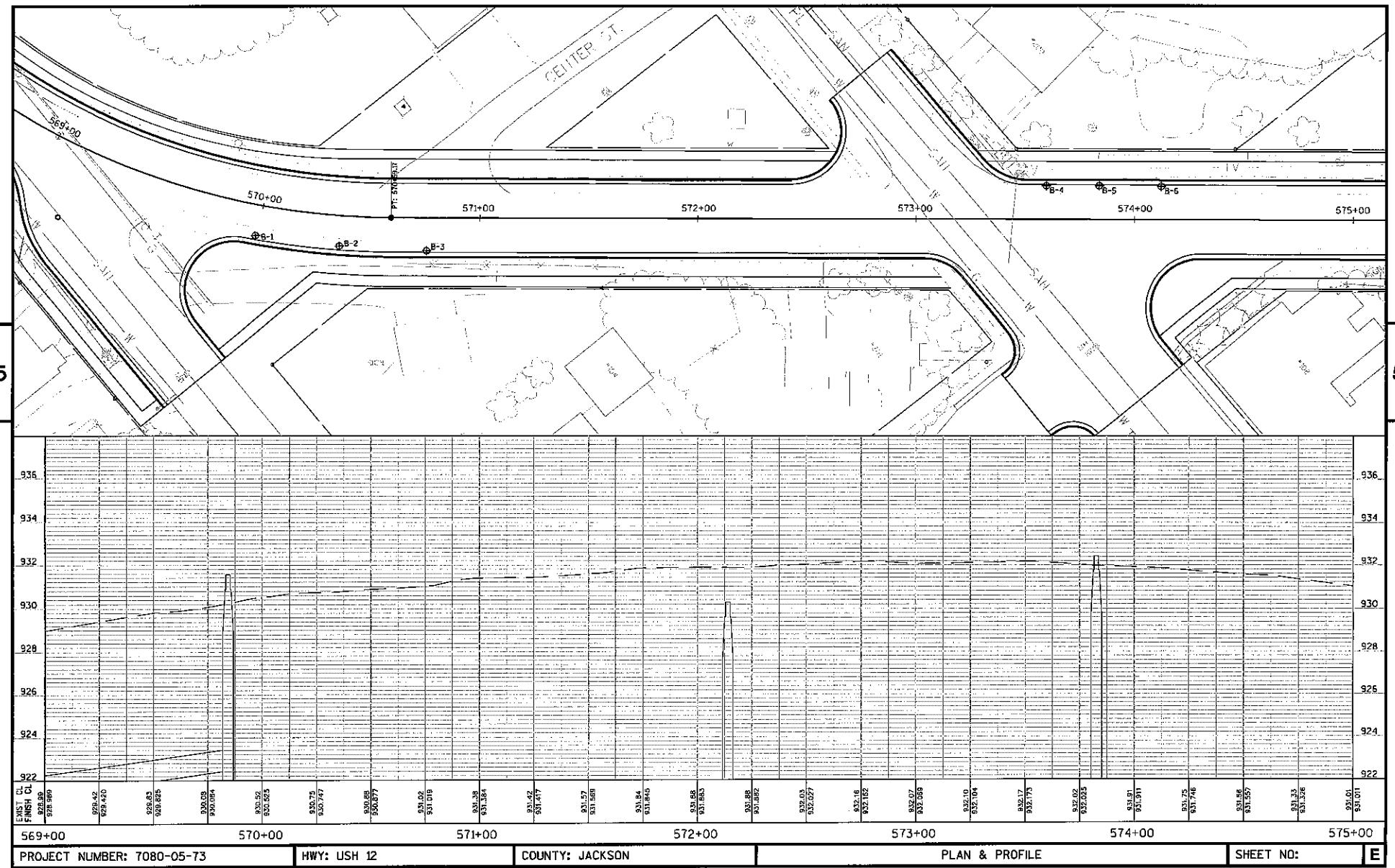
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- Former Gosch's Shell Station
- Double T Quik Stop
- Thompson Motors
- Former Dave's Gas Station

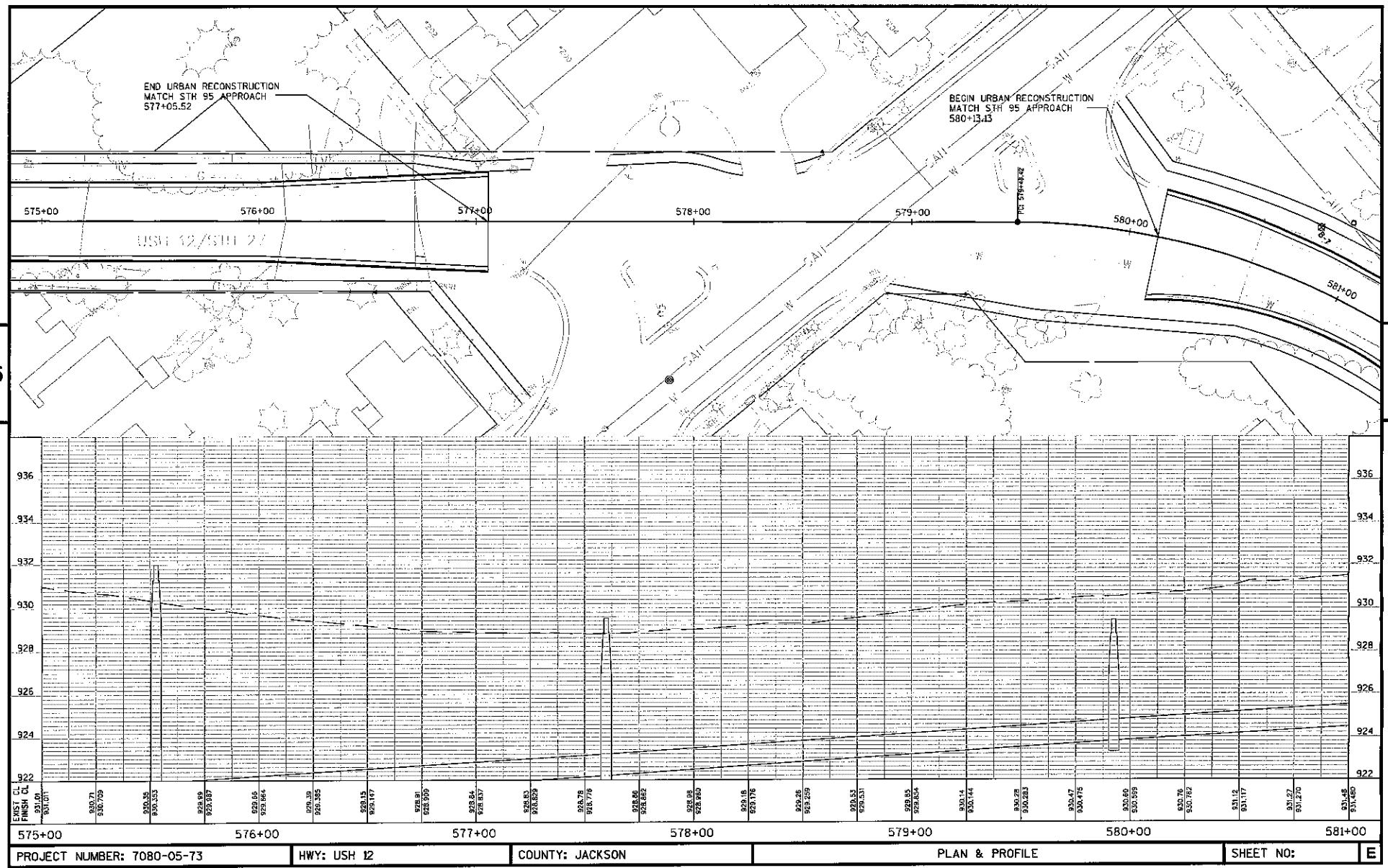
## **Phase 2**

**USH 12 - Merrillan**  
**7080-05-73**  
**Hammond, Diagonal, and Washington Street**  
**Jackson County**

**HAZARD MATERIALS PHASE 2 Borings**

Boring	Station	Offset	RT/LT	DTM Elevation
B-1	569+99	14.1	RT	930.600
B-2	570+36	14.0	RT	930.875
B-3	570+75	15.3	RT	931.297
B-4	573+60	15.5	LT	931.682
B-5	573+84	15.6	LT	931.535
B-6	574+12	15.3	LT	931.400
B-7	580+81	26.7	LT	931.504
B-10	582+82	14.2	RT	932.542
B-11	583+57	12.4	RT	933.174
B-12	584+24	13.0	RT	933.408
B-13	585+07	12.9	RT	933.637
B-14	585+47	11.8	RT	933.647
B-15	588+94	11.6	RT	936.435
B-16	589+37	11.6	RT	936.639
B-17	589+92	11.7	RT	937.079
B-18	591+36	11.6	RT	938.371
B-19	591+73	12.3	RT	938.497
B-20	591+97	12.6	RT	938.614
B-21	592+09	16.2	LT	937.549
B-22	589+52	17.2	LT	936.817





PROJECT NUMBER: 7080-05-73

HWY: USH 12

COUNTY: JACKSON

PLAN & PROFILE

SHEET NO:

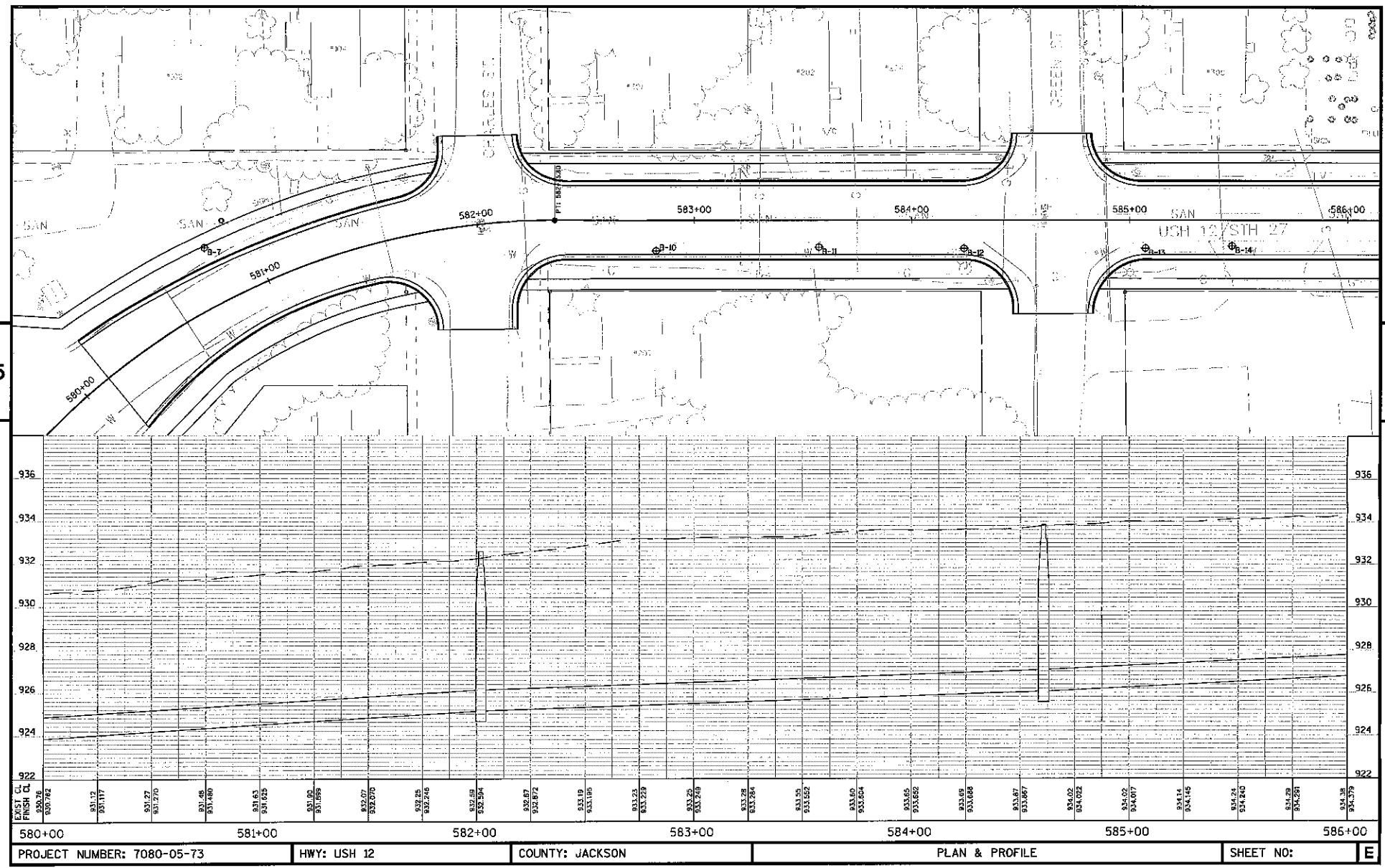
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PROJECT NUMBER: 7080-05-73

HWT: USH 12

COUNTY: JACKSON

PLAN & PROFILE

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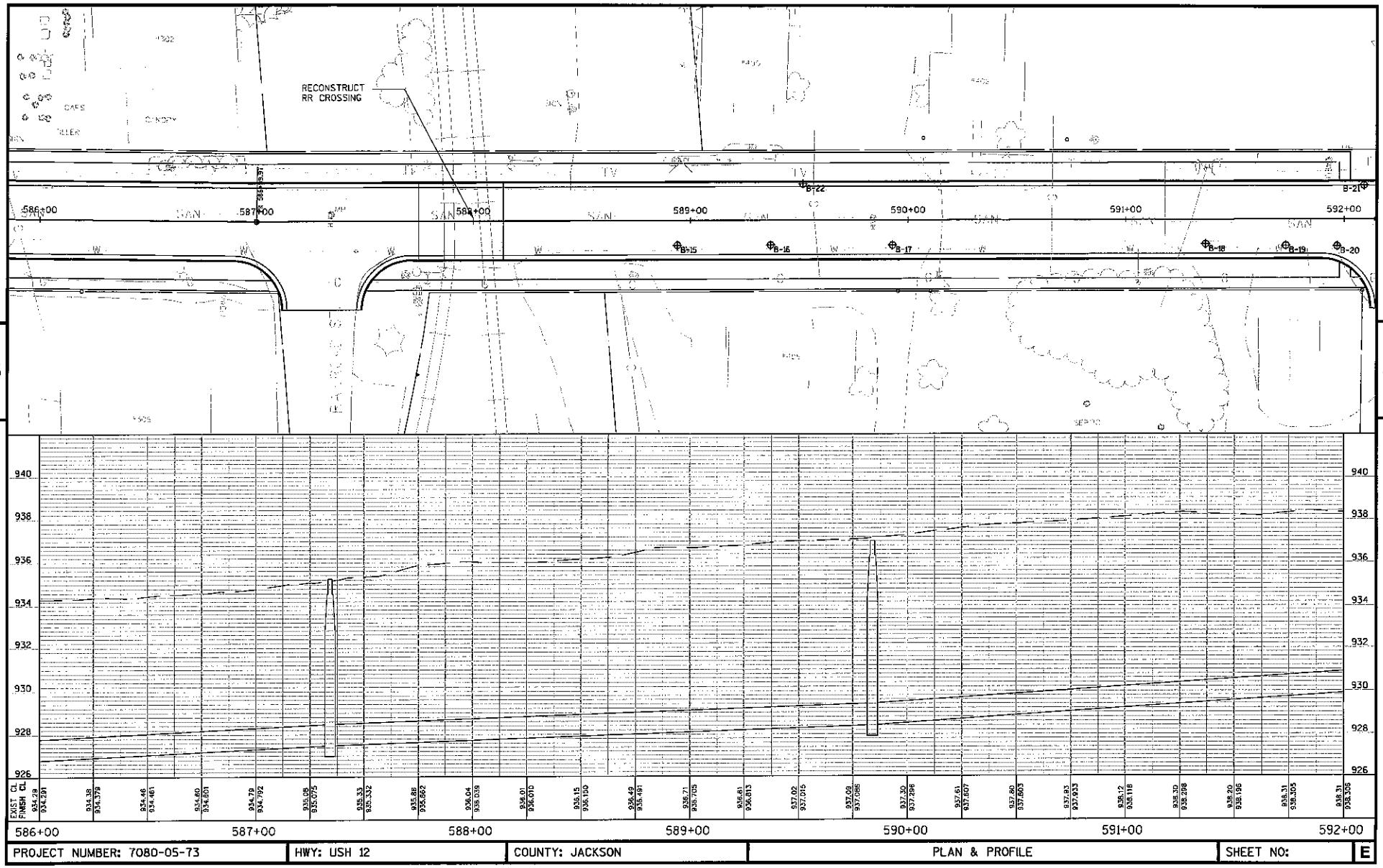
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PATRICK J. JACKSON, M.D., NEW REGIUM MERRILLAN, U.S.H.I.Z.E.A.CADE

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MINI-USB 12

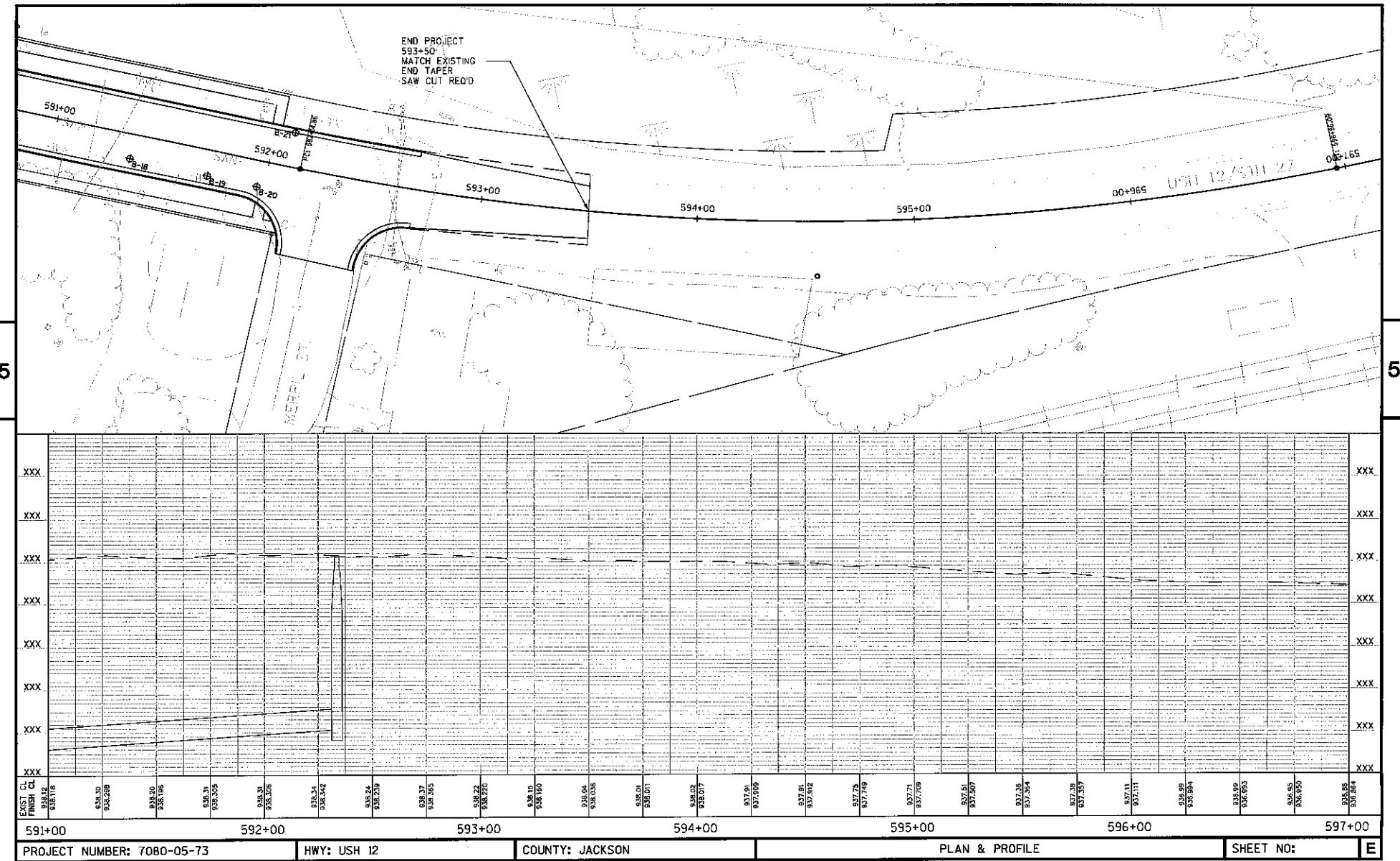
COUNTY: JACKSON

LEAN & PROFILE

STREET NO.

1

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HWY: USH 12

COUNTY: JACKSON

PLAN & PROFILE

SHEET NO:

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**TABLE 1**  
**ANALYTICAL RESULTS-SOIL**  
**FORMER RESTAURANT WITH GAS PUMP SITE**

USH 12 (DIAGONAL STREET), MERRILLAN, JACKSON COUNTY, WISCONSIN

APPROXIMATE STATION NUMBER 570 TO 571+50

WDOT PROJECT #: 7080-05-03, USH 12, MERRILLAN, JACKSON COUNTY, WISCONSIN

Sample Name	NR 720 GENERIC RCLs	COMM 46 Table 1 Values (Groundwater Protection)	COMM 46 Table 2 Values (Direct Contact - Top 4 Feet)	Samples			
				SB-1A	SB-2A	SB-3A	MEOH BLANK
Boring				B-1	B-2	B-3	Quality Control
Date				5/5/2011	5/5/2011	5/5/2011	5/5/2011
Depth (feet)				5-6	5-6	6-7	
PID Reading				0	0	0	
Lead (ppm)	50	NS	NS	0.53	0.63	1.8	
GROs (ppm)	100	NS	NS	< 2.8	< 2.7	< 2.9	< 2.5
PVOCs (ppb)							
Benzene	5.5	8,500	1,100	< 25	< 25	< 25	< 25
Ethylbenzene	2,900	4,600	NS	< 25	< 25	< 25	< 25
MTBE	NS	NS	NS	< 25	< 25	< 25	< 25
Naphthalene	400	2,700	NS	< 25	< 25	< 25	< 25
Toluene	1,500	38,000	NS	< 25	< 25	31.2	< 25
1,2,4 TMB	NS	83,000	NS	< 25	< 25	< 25	< 25
1,3,5 TMB	NS	11,000	NS	< 25	< 25	< 25	< 25
Total Xylenes	4,100	42,000	NS	< 50	< 50	< 50	< 50

NS = no standard has been established for this compound

RCLs = residual contaminant levels

Underlined values exceed the Generic RCL.

Bolding indicates concentrations above the Table 1 and/or Table 2 (direct contact, top 4 feet) values.

TMB = trimethylbenzene

MTBE = methyl-tert-butyl-ether

ND = not detected above the laboratory detection limit

**TABLE 1**  
**ANALYTICAL RESULTS-SOIL**  
**FORMER PHILLIPS 66 GAS STATION SITE**

200 OAKWOOD PLACE (USH 12), MERRILLAN, JACKSON COUNTY, WISCONSIN

APPROXIMATE STATION NUMBER 573+50 TO 575

WDOT PROJECT #: 7080-05-03, USH 12, MERRILLAN, JACKSON COUNTY, WISCONSIN

Sample Name	NR 720 GENERIC RCLs	COMM 46 Table 1 Values (Groundwater Protection)	COMM 46 Table 2 Values (Direct Contact - Top 4 Feet)	Samples			
				SB-4A	SB-5A	SB-6A	MEOH BLANK
Boring				B-4	B-5	B-6	Quality Control
Date				5/5/2011	5/5/2011	5/5/2011	5/5/2011
Depth (feet)				7-8	7-8	6-7	
PID Reading				0	0	0	
Lead (ppm)	50	NS	NS	0.15	6.0	2.1	
GROs (ppm)	100	NS	NS	< 2.7	< 2.7	< 2.6	< 2.5
PVOCs (ppb)							
Benzene	5.5	8,500	1,100	< 25	< 25	< 25	< 25
Ethylbenzene	2,900	4,600	NS	< 25	< 25	< 25	< 25
MTBE	NS	NS	NS	< 25	< 25	< 25	< 25
Naphthalene	400	2,700	NS	< 25	< 25	< 25	< 25
Toluene	1,500	38,000	NS	< 25	40.1	< 25	< 25
1,2,4 TMB	NS	83,000	NS	< 25	< 25	< 25	< 25
1,3,5 TMB	NS	11,000	NS	< 25	< 25	< 25	< 25
Total Xylenes	4,100	42,000	NS	< 50	< 50	< 50	< 50

NS = no standard has been established for this compound

RCLs = residual contaminant levels

Underlined values exceed the Generic RCL.

Bolding indicates concentrations above the Table 1 and/or Table 2 (direct contact, top 4 feet) values.

TMB = trimethylbenzene

MTBE = methyl-tert-butyl-ether

ND = not detected above the laboratory detection limit

**TABLE 1**  
**ANALYTICAL RESULTS-SOIL**  
**FORMER TEXACO GAS STATION SITE**

102 NORTH USH 12 (N. WASHINGTON STREET), MERRILLAN, JACKSON COUNTY, WISCONSIN

APPROXIMATE STATION NUMBER 573+50 TO 575

WDOT PROJECT #: 7080-05-03, USH 12, MERRILLAN, JACKSON COUNTY, WISCONSIN

Sample Name	NR 720 GENERIC RCLs	COMM 46 Table 1 Values (Groundwater Protection)	COMM 46 Table 2 Values (Direct Contact - Top 4 Feet)	Samples	
				SB-7A	MEOH BLANK
Boring				B-7	Quality Control
Date				5/5/2011	5/5/2011
Depth (feet)				6-8	
PID Reading				0	
Lead (ppm)	50	NS	NS	5.2	
GROs (ppm)	100	NS	NS	< 3.1	< 2.5
PVOCs (ppb)					
Benzene	5.5	8,500	1,100	< 25	< 25
Ethylbenzene	2,900	4,600	NS	< 25	< 25
MTBE	NS	NS	NS	< 25	< 25
Naphthalene	400	2,700	NS	< 25	< 25
Toluene	1,500	38,000	NS	< 25	< 25
1,2,4 TMB	NS	83,000	NS	< 25	< 25
1,3,5 TMB	NS	11,000	NS	< 25	< 25
Total Xylenes	4,100	42,000	NS	< 50	< 50

NS = no standard has been established for this compound

RCLs = residual contaminant levels

Underlined values exceed the Generic RCL.

Bolding indicates concentrations above the Table 1 and/or Table 2 (direct contact, top 4 feet) values.

TMB = trimethylbenzene

MTBE = methyl-tert-butyl-ether

ND = not detected above the laboratory detection limit

**TABLE 1**  
**ANALYTICAL RESULTS-SOIL**  
**MERRILLAN GASOLINE CONTAMINATION IN USH 12**

USH 12, MERRILLAN, JACKSON COUNTY, WISCONSIN

APPROXIMATE STATION NUMBER 582 TO 586

WDOT PROJECT #: 7080-05-03, USH 12, MERRILLAN, JACKSON COUNTY, WISCONSIN

Sample Name	NR 720 GENERIC RCLs	COMM 46 Table 1 Values (Groundwater Protection)	COMM 46 Table 2 Values (Direct Contact - Top 4 Feet)	Samples				
				SB-10A	SB-11A	SB-12A	SB-13A	SB-14A
Boring				B-10	B-11	B-12	B-13	B-14
Date				5/5/2011	5/5/2011	5/5/2011	5/5/2011	5/5/2011
Depth (feet)				7-8	7-8	6-8	7-8	6-8
PID Reading				0	0	0	0	0
Lead (ppm)	50	NS	NS	6.3	1.6	1.8	1.9	1.6
GROs (ppm)	100	NS	NS	< 2.9	< 2.8	< 2.9	< 2.8	< 2.8
PVOCs (ppb)								
Benzene	5.5	8,500	1,100	< 25	< 25	< 25	< 25	< 25
Ethylbenzene	2,900	4,600	NS	< 25	< 25	< 25	< 25	< 25
MTBE	NS	NS	NS	< 25	< 25	< 25	< 25	< 25
Naphthalene	400	2,700	NS	< 25	< 25	< 25	< 25	< 25
Toluene	1,500	38,000	NS	< 25	< 25	< 25	< 25	39.8
1,2,4 TMB	NS	83,000	NS	< 25	< 25	< 25	< 25	< 25
1,3,5 TMB	NS	11,000	NS	< 25	< 25	< 25	< 25	< 25
Total Xylenes	4,100	42,000	NS	< 50	< 50	< 50	< 50	< 50

NS = no standard has been established for this compound

RCLs = residual contaminant levels

Underlined values exceed the Generic RCL.

Bolding indicates concentrations above the Table 1 and/or Table 2 (direct contact, top 4 feet) values.

TMB = trimethylbenzene

MTBE = methyl-tert-butyl-ether

ND = not detected above the laboratory detection limit

**TABLE 1**  
**ANALYTICAL RESULTS-SOIL**  
**FORMER DAVE'S GAS STATION SITE**

405 NORTH USH 12 (N. WASHINGTON STREET), MERRILLAN, JACKSON COUNTY, WISCONSIN

APPROXIMATE STATION NUMBER 589 TO 590

WDOT PROJECT #: 7080-05-03, USH 12, MERRILLAN, JACKSON COUNTY, WISCONSIN

Sample Name	NR 720 GENERIC RCLs	COMM 46 Table 1 Values (Groundwater Protection)	COMM 46 Table 2 Values (Direct Contact - Top 4 Feet)	Samples				
				SB-15A	SB-16A	SB-17A	SB-22A	MEOH BLANK
Boring				B-15	B-16	B-17	B-22	Quality Control
Date				5/5/2011	5/5/2011	5/5/2011	5/5/2011	5/5/2011
Depth (feet)				2-4	7-8	2-4	2-4	
PID Reading				8	560	568	7	
Flass Point (Degrees F)						77°		
Lead (ppm)	50	NS	NS	18.5	9.0	29.4	1.2	
GROs (ppm)	100	NS	NS	10.5	<u>708</u>	<u>5,760</u>	< 2.6	< 2.5
PVOCs (ppb)								
Benzene	5.5	8,500	1,100	<u>58.7</u>	<u>1,630</u>	<u>8,430</u>	< 25	< 25
Ethylbenzene	2,900	4,600	NS	182	<b>20,800</b>	<b>139,000</b>	< 25	< 25
MTBE	NS	NS	NS	< 25	< 312	< 5,000	< 25	< 25
Naphthalene	400	2,700	NS	< 25	<u>13,400</u>	<u>67,100</u>	< 25	< 25
Toluene	1,500	38,000	NS	33.2	<u>57,400</u>	<u>287,000</u>	< 25	< 25
1,2,4 TMB	NS	83,000	NS	307	47,300	<u>424,000</u>	45.7	< 25
1,3,5 TMB	NS	11,000	NS	< 25	<u>15,100</u>	<u>581,000</u>	< 25	< 25
Total Xylenes	4,100	42,000	NS	189.9	<u>111,200</u>	<u>806,000</u>	< 50	< 50

NS = no standard has been established for this compound

RCLs = residual contaminant levels

Underlined values exceed the Generic RCL.

Bolding indicates concentrations above the Table 1 and/or Table 2 (direct contact, top 4 feet) values.

TMB = trimethylbenzene

MTBE = methyl-tert-butyl-ether

ND = not detected above the laboratory detection limit

**TABLE 1**  
**ANALYTICAL RESULTS-SOIL**  
**FORMER STANDARD GAS STATION SITE**

SOUTHEAST CORNER OF USH 12 AND MERRILL STREET, MERRILLAN, JACKSON COUNTY, WISCONSIN

APPROXIMATE STATION NUMBER 591 TO 592

WDOT PROJECT #: 7080-05-03, USH 12, MERRILLAN, JACKSON COUNTY, WISCONSIN

Sample Name	NR 720 GENERIC RCLs	COMM 46 Table 1 Values (Groundwater Protection)	COMM 46 Table 2 Values (Direct Contact - Top 4 Feet)	Samples				
				SB-18A	SB-19A	SB-20A	SB-20B	SB-21A
Boring				B-18	B-19	B-20	B-20	B-21
Date				5/5/2011	5/5/2011	5/5/2011	5/5/2011	5/5/2011
Depth (feet)				6-8	6-8	2-4	7-8	6-8
PID Reading				0	0	26	506	0
Lead (ppm)	50	NS	NS	17.5	24.5	3.8	15.8	1.6
GROs (ppm)	100	NS	NS	< 2.8	< 2.7	9.6	<u>682</u>	< 2.8
PVOCs (ppb)								
Benzene	5.5	8,500	1,100	< 25	< 25	<u>45.3</u>	< 312	< 25
Ethylbenzene	2,900	4,600	NS	< 25	< 25	333	<u>5,690</u>	< 25
MTBE	NS	NS	NS	< 25	< 25	< 25	< 312	< 25
Naphthalene	400	2,700	NS	< 25	< 25	60.6	<u>4,110</u>	< 25
Toluene	1,500	38,000	NS	< 25	39.4	79.1	471	< 25
1,2,4 TMB	NS	83,000	NS	< 25	61.0	<u>542</u>	56,400	< 25
1,3,5 TMB	NS	11,000	NS	< 25	< 25	190	<u>19,100</u>	< 25
Total Xylenes	4,100	42,000	NS	< 50	70.5	508.1	<u>11,740</u>	< 50

NS = no standard has been established for this compound

RCLs = residual contaminant levels

Underlined values exceed the Generic RCL.

Bolding indicates concentrations above the Table 1 and/or Table 2 (direct contact, top 4 feet) values.

TMB = trimethylbenzene

MTBE = methyl-tert-butyl-ether

ND = not detected above the laboratory detection limit

**TABLE 2**  
**ANALYTICAL RESULTS - GROUNDWATER**  
**WDOT PROJECT #: 7080-05-03, USH 12, MERRILLAN, JACKSON COUNTY, WISCONSIN**

Sample Name	WB-2	WB-12	WB-14	WB-16	WATER TRIP BLANK	<i>NR 140 Remedial Action Limits</i>	
Sample Location	B-2	B-12	B-14	B-16	QA/QC		
Date	5/5/2011	5/5/2011	5/5/2011	5/5/2011	5/5/2011		
Dissolved Lead (ppb)	< 1.7	< 1.7	< 1.7	<b>15.6</b>	NA	15	1.5
VOCs (ppb)							
Benzene	< 0.41	< 0.41	< 0.41	<b>45.5</b>	0.41	5	0.5
Ethylbenzene	< 0.54	< 0.54	< 0.54	<b>1,210</b>	< 0.54	700	140
Isopropylbenzene	< 0.59	< 0.59	< 0.59	97.4	< 0.59	NS	NS
p-Isopropyltoluene	< 0.67	< 0.67	< 0.67	< 16.8	< 0.67	NS	NS
MTBE	< 0.61	< 0.61	< 0.61	< 15.2	< 0.61	60	12
Naphthalene	< 0.89	< 0.89	< 0.89	<b>293</b>	< 0.89	40	8
n-Propylbenzene	< 0.81	< 0.81	< 0.81	308	< 0.81	NS	NS
Toluene	< 0.67	< 0.67	< 0.67	<b>573</b>	< 0.67	1,000	200
1,2,4-Trimethylbenzene	< 0.97	< 0.97	< 0.97	<b>2,240</b>	< 0.97	480	96
1,3,5-Trimethylbenzene	< 0.83	< 0.83	< 0.83	<b>447</b>	< 0.83		
Xylene (total)	< 1.8	< 1.8	< 1.8	<b>5,420</b>	< 1.8	10,000	1,000

ND = not detected

NS = no standards

MTBE = methyl-tert-butyl-ether

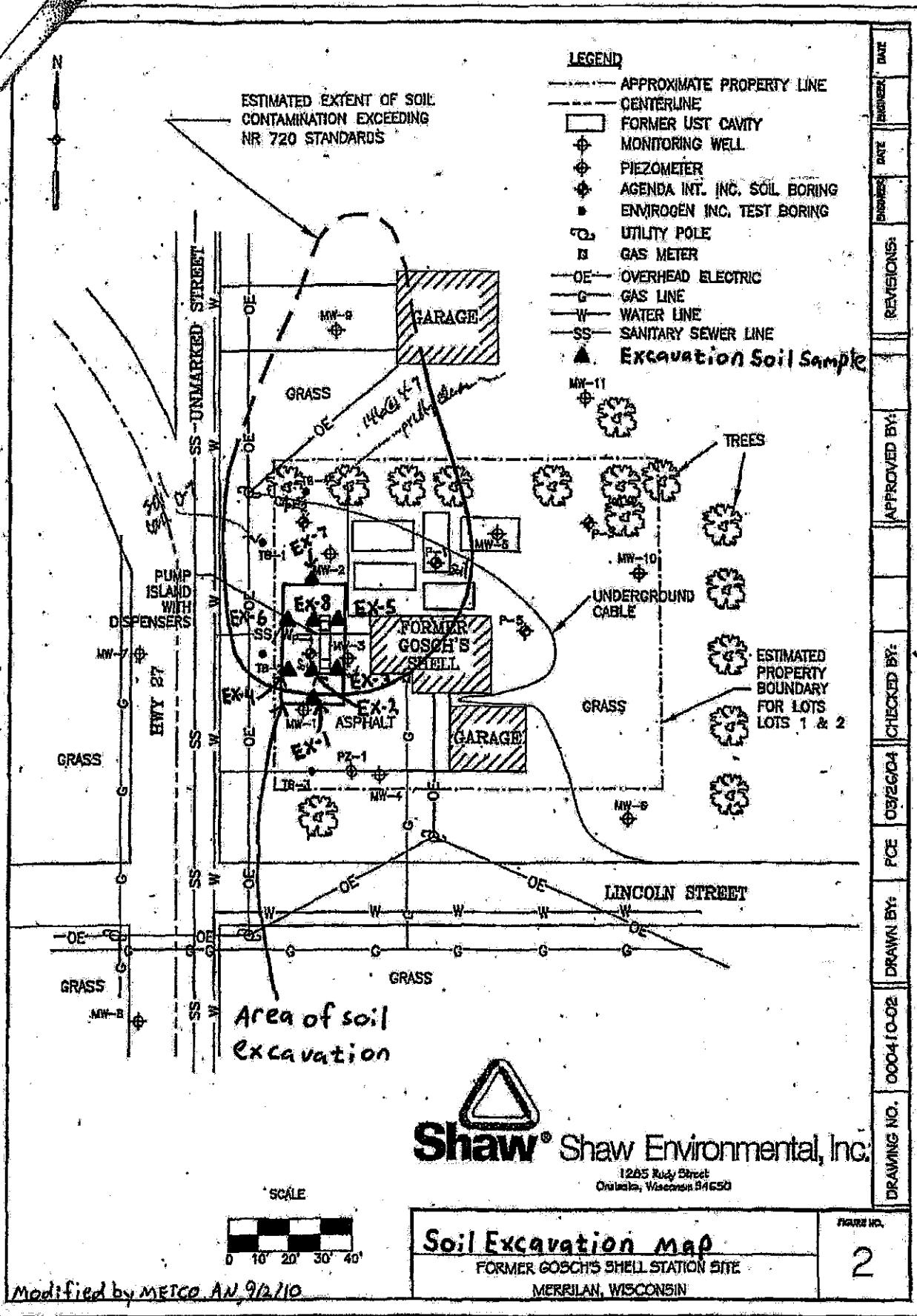
Bolded values indicate concentrations above ES.

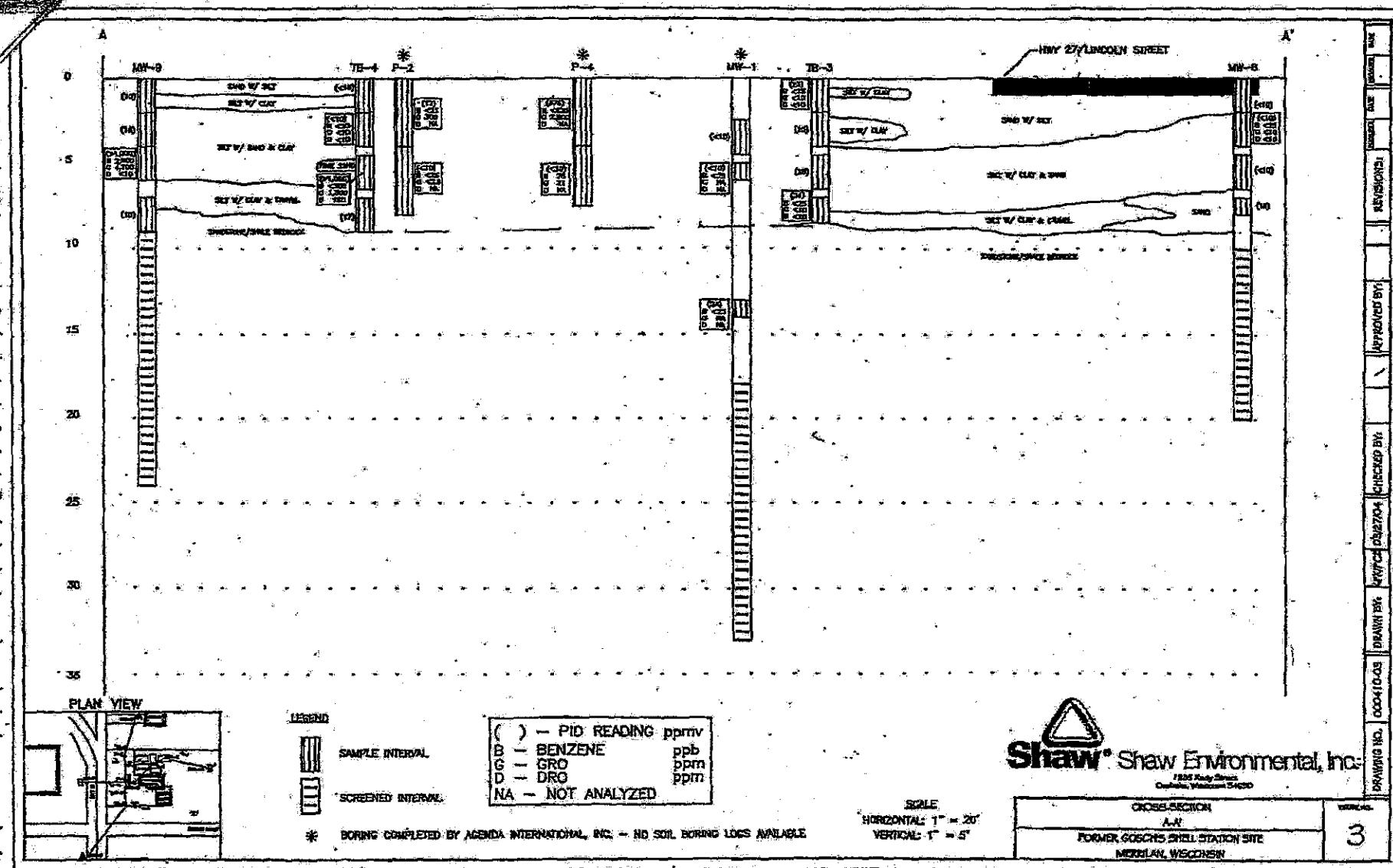
Underlined values indicate concentrations above PAL.

NA = Not Analyzed

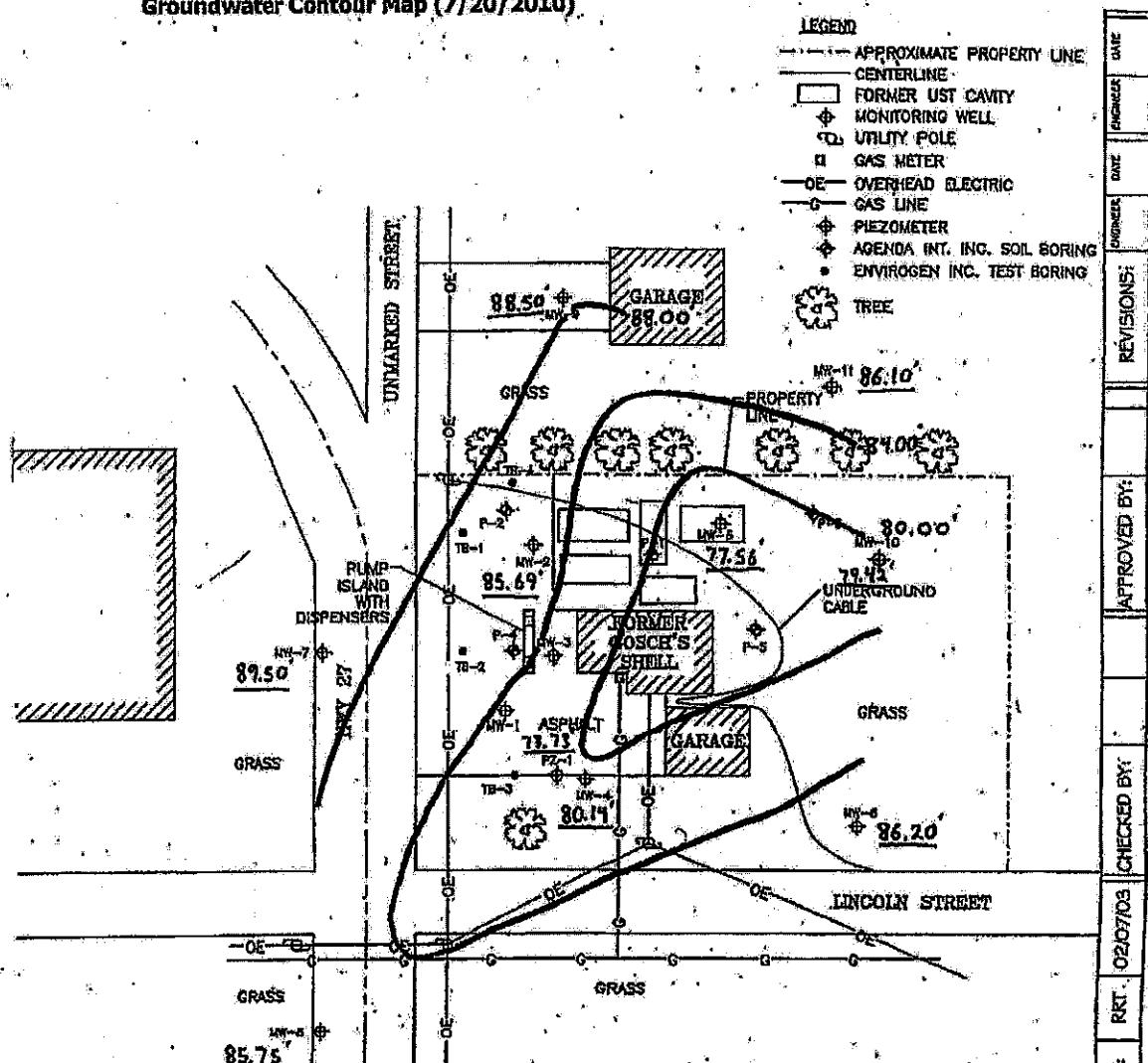
22006gw4

## **Former Gosch's Shell Station**





Groundwater Contour Map (7/20/2010)



**NOTE: ELEVATION DATA IS IN REFERENCE  
TO AN ON-SITE BENCH MARK ASSUMED  
ELEVATION = 100 FEET.**

**NOTE: MONITORING WELLS MW-1 AND MW-3 (FREE PRODUCT IN WELLS) WERE NOT USED.**



## ENVIROGEN

**BEST-EFFECTIVE LEADERSHIP FOR A CLEANER ENVIRONMENT**

1205 Rudy Street  
Oshkosh, Wisconsin 54650

Soil Boring, Monitoring Well, and Piezometer Locations		Project No.
FORMER GOSCH'S SHELL STATION SITE		1
MERRILAN, WISCONSIN		

Groundwater Analytical Results Summary  
Gosch's Shell BRRTS # 03-27-203673

Well MW-1  
PVC Elevation =

09/04/03 98.36  
(feet) (MSL)

Date	Water Elevation (In feet msl)	Depth to Water (In feet)	Benzene (ppb)	1,2-DCA (ppb)	EDB (1,2-dibromoethane) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
08/23/00	NM	NM	1160	<5.2	20	810	<5.0	130	1400	550	1640
10/16/00	NM	NM	760	NS	NS	470	<4.0	NS	910	330	1160
08/10/01	82.63	14.73	740	NS	NS	650	<0.2	NS	1200	600	1400
04/26/02	81.31	16.05	1300	NS	NS	650	<4.9	74	1600	630	2230
08/22/02	78.89	17.47	940	NS	NS	360	<10	130	810	430	1200
09/04/03	78.54	18.18	880	NS	NS	260	6.8	77	260	388	740
10/07/03	76.72	20.00	480	NS	NS	360	36	110	300	140	880
10/15/03	NM	NM	210	<36	0.4	310	<100	<340	172	340-340	650-656
04/20/10	78.84	17.88	262	<7.6	2.6	380	<5	90	274	286	707
07/20/10	78.50	18.22	240	<3.8	1.1	262	<2.5	76	74	297	438

Well MW-2

PVC Elevation =

08/10/01 98.40  
09/04/03 97.79  
(feet) (MSL)

Date	Water Elevation (In feet msl)	Depth to Water (In feet)	Benzene (ppb)	1,2-DCA (ppb)	EDB (1,2-dibromoethane) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
08/23/00	NM	NM	720	<2.1	<4.2	660	<2.0	210	640	1180	2030
08/10/01	83.67	14.73	620	NS	NS	820	<9.2	NS	1300	1380	2300
4/26/2002	84.14	18.65	360	NS	NS	360	<25	35	170	650	980
8/22/2002	82.93	16.48	380	NS	NS	160	<25	<70	220	520	600
9/4/2003	80.88	16.81	170	NS	NS	140	4	38	82	147	246
10/7/2003	80.37	17.42	180	NS	NS	230	28	68	120	336	386
10/15/03	84.49	13.30	263	<43	0.46	440	<50	<170	224	808	823
04/20/10	84.68	12.81	295	<7.6	2.8	320	<5	82	360	580	876
07/20/10	86.89	12.10	570	<3.6	3.3	850	<2.5	220	1280	1580	2840

Well MW-3

PVC Elevation =

08/10/01 98.13  
09/04/03 97.55  
(feet) (MSL)

Date	Water Elevation (In feet msl)	Depth to Water (In feet)	Benzene (ppb)	1,2-DCA (ppb)	EDB (1,2-dibromoethane) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
08/23/00	NM	NM	520	<2.1	9.2	260	<2.0	33	640	266	880
10/16/00	NM	NM	380	NS	NS	310	<2.0	NS	620	420	880
08/10/01	NM	NM	780	NS	NS	880	<0.2	NS	1000	1350	2600
04/26/02	78.64	18.49	2000	NS	NS	1500	<250	4100	3400	1940	7400
08/22/02	78.24	18.98	1200	NS	NS	570	<100	<280	930	980	17700
09/04/03	78.71	20.84	470	NS	NS	760	19	150	770	1360	2690
10/07/03	78.34	21.21	400	NS	NS	560	<6.1	79	600	1350	2090
10/16/03	77.97	19.58	410	<43	<0.0088	740	<50	<170	1000	913	2320
04/20/10	78.41	19.14	232	<7.6	2.9	1100	<5	320	780	2720	4180
07/20/10	78.68	17.87	263	<7.6	2.1	670	<5	181	590	777	2060

Well MW-4

PVC Elevation =

08/10/01 98.19  
09/04/03 97.09  
(feet) (MSL)

Date	Water Elevation (In feet msl)	Depth to Water (In feet)	Benzene (ppb)	1,2-DCA (ppb)	EDB (1,2-dibromoethane) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
08/23/00	NM	NM	670	<5.2	<10	170	<5.0	53	3000	208	1430
10/16/00	NM	NM	180	NS	NS	66	<0.50	NS	220	98	313
08/10/01	77.31	20.88	540	NS	NS	280	<4.8	NS	1400	259	940
04/26/02	80.07	18.12	1600	NS	NS	340	<4.9	28	3100	300	17740
08/22/02	78.83	18.88	2200	NS	NS	480	<25	130	2800	630	2300
09/04/03	78.25	20.84	490	NS	NS	130	<2.3	110	360	460	980
10/07/03	78.88	21.21	170	NS	NS	13	4.5	34	110	103	269
8/10/2008	78.16	21.98	148	NS	NS	16	<3.6	181	1880	478	1970
10/16/09	78.41	18.98	1460	<88	<0.0088	340	<100	<340	7900	720-1020	4830
04/20/10	78.18	17.91	880	<18	12	700	<12.5	280	6810	760	3670
07/20/10	80.14	16.95	810	<38	7.4	870	<25	330	5660	716	3230

Note: Bold type indicates an ES exceedance, Italics indicates a PAL exceedance, NS = not sampled, NM = Not Measured.

Q = Analyte detected above laboratory method detection limit but below practical quantification limit (ml). BDL = Below Detection

Groundwater Analytical Results Summary  
Gosch's Shell BRRTS# 03-27-203673

Well MW-5  
PVC Elevation = 08/10/01 98.89  
09/04/03 98.24 (feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	Benzene (ppb)	1,2-DCA (ppb)	EDB (1,2-dibromoethane) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
06/29/00	NM	NM	<0.29	<0.21	<0.42	<0.57	<0.20	<0.27	1.4	<0.63	<0.63
08/10/01	75.39	23.50	20	NS	NS	13	<0.48	NS	12	15.7	28
4/25/2002	77.41	21.48	100	NS	NS	52	<0.49	4	59	102	232
8/22/2002	NM	NM	180	NS	NS	79	<2.6	27	180	220	450
9/4/2003	74.79	23.45	59	NS	NS	5.3	0.7	7.2	11	22	41
10/7/2003	74.82	23.42	25	NS	NS	5.2	1.4	3.9	2.1	6.1	9.4
9/10/2008	73.66	24.69	7.9	NS	NS	<0.40	<0.36	<0.47	<0.36	<0.79	<1.1
10/15/09	76.62	21.72	<0.41	<0.43	<0.0068	<0.87	<0.6	<1.7	<0.51	<2.6	<2.13
04/20/10	76.68	21.66	<0.38	<0.38	0.02	<0.55	<0.26	<2.4	<0.72	<1.20	<1.62
07/20/10	77.66	20.66	5.5	0.72	0.13	<0.55	<0.26	<2.4	<0.72	2.32	4.94

Well MW-6  
PVC Elevation = 04/15/02 98.18  
09/04/03 97.52 (feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	Benzene (ppb)	1,2-DCA (ppb)	EDB (1,2-dibromoethane) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
4/26/2002	81.83	16.33	74	2	1.6	20	<0.07	4.1	80	16.3	78
8/22/2002	84.28	13.89	4.7	<0.54	<0.48	<0.49	<0.49	<1.4	<0.83	<1.14	1.1
9/4/2003	83.25	14.27	1.3	<0.36	<0.58	<0.54	<0.61	<0.74	<0.67	<1.80	<2.63
10/7/2003	80.20	17.32	160	NS	NS	8.9	0.90	6	36	6.6	32
9/10/2008	84.47	13.06	0.41	NS	NS	<0.40	<0.36	<0.47	<0.36	<0.79	<1.1
10/15/09	85.16	12.36	<0.41	<0.43	<0.0068	<0.87	<0.6	<1.7	<0.51	<2.6	<2.13
04/20/10	86.30	11.22	<0.38	<0.38	<0.0068	<0.55	<0.25	<2.4	<0.72	<1.20	<1.62
07/20/10	88.20	11.32	<0.38	<0.38	<0.0068	<0.55	<0.26	<2.4	<0.72	<1.20	<1.62

Well MW-7  
PVC Elevation = 04/15/02 98.76  
09/04/03 98.17 (feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	Benzene (ppb)	1,2-DCA (ppb)	EDB (1,2-dibromoethane) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
4/25/2002	84.18	12.58	1300	18	<10	880	<3.6	220	1200	750	1850
8/22/2002	83.66	13.12	1300	<27	<24	780	<26	180	1100	430	1930
9/4/2003	82.77	13.40	580	<3.6	<5.6	650	<6.1	180	470	331	940
10/7/2003	82.23	13.94	1100	NS	NS	780	<41	220	720	810	1290
9/10/2008	89.57	6.60	205	NS	NS	137	<0.36	32.0	15.1	26.8	62.2
10/15/09	89.48	6.89	3.8	<0.43	<0.0068	<0.87	<0.6	<1.7	<0.51	<2.6	<2.13
04/20/10	90.23	5.32	<0.38	<0.38	0.01	<0.55	<0.26	<2.4	<0.72	<1.20	<1.62
07/20/10	89.60	6.35	7.65	<0.38	0.01	<0.55	<0.26	<2.4	<0.72	<1.20	<1.62

Well MW-8  
PVC Elevation = 04/20/10 93.52  
09/04/03 93.7 (feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	Benzene (ppb)	1,2-DCA (ppb)	EDB (1,2-dibromoethane) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
4/26/2002	85.69	8.70	0.87	<0.12	<0.19	<0.08	<0.07	<0.1	<0.06	0.14	<0.034
8/22/2002	84.10	10.22	0.61	NS	NS	<0.49	<0.49	<1.4	<0.63	<1.14	<1.6
9/4/2003	82.76	10.85	3.8	NS	NS	<0.60	<0.58	<0.68	<0.58	<1.18	<1.84
10/7/2003	82.37	11.33	12	NS	NS	<0.60	<0.68	<0.68	<0.68	<1.18	<1.84
9/10/2008	83.46	10.24	<0.23	NS	NS	<0.40	<0.36	<0.47	<0.38	<0.79	<1.1
10/15/09	84.29	9.41	<0.41	<0.43	<0.0068	<0.87	<0.6	<1.7	<0.51	<2.6	<2.13
04/20/10	84.99	8.53	<0.38	<0.38	<0.0068	<0.55	<0.25	<2.4	<0.72	<1.20	<1.62
07/20/10	86.76	7.77	<0.38	<0.38	<0.0068	<0.55	<0.25	<2.4	<0.72	<1.20	<1.62

Note: Bold type indicates an ES exceedance, #/s/s indicates a PAL exceedance. NS = not sampled, NM = Not Measured  
Q = Analyte detected above laboratory method detection limit but below practical quantitation limit, BDL = Below Detection

Groundwater Analytical Results Summary  
Gosch's Shell BRRTS# 03-27-203673

Well MW-9  
PVC Elevation =

04/15/02  
09/04/03 100.01  
89.48 100.04 06/24/02  
(feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	Benzene (ppb)	1,2-DCA (ppb)	EDB (1,2-dibromoethane) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylenes (Total) (ppb)
4/25/2002	84.02	16.99	48	<6	<10	680	<3.5	150	860	680	2010
8/22/2002	83.24	16.80	48	<11	<10	510	<10	210	890	2210	1740
9/4/2003	81.16	18.27	31	<3.6	<5.5	200	<6.1	54	100	410	543
10/7/2003	NM	NM	28	NS	NS	160	31	63	78	390	610
10/15/03											
04/20/10											
07/20/10											

COULD NOT LOCATE  
FREE PRODUCT  
NOT SAMPLED - THICK SHEEN

Well MW-10  
PVC Elevation =

98.16 (feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	Benzene (ppb)	1,2-DCA (ppb)	EDB (1,2-dibromoethane) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylenes (Total) (ppb)
9/4/2003	74.65	23.51	170	<0.72	5.1	6.0	<1.2	71	14	33.7	101
10/7/2003	74.85	23.31	17	NS	3.1	4.5	<0.61	3.5	17	35	88
9/10/2008	75.08	23.08	101	NS	NS	<0.40	<0.38	5.8	1.5	7.34	29.9
10/15/03	77.28	20.88	197	14	<0.0068	<0.87	<0.5	10.6	3.5	19.31	87.5
04/20/10	78.30	20.08	194	<3.8	3	<5.5	<2.6	<24	<7.2	12.17.6	48.4
07/20/10	78.42	18.74	280	21.6	2.8	<0.65	<0.26	19.7	4.7	14.42	58.3

Well MW-11  
PVC Elevation =

99.01 (feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	Benzene (ppb)	1,2-DCA (ppb)	EDB (1,2-dibromoethane) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylenes (Total) (ppb)
9/4/2003	74.72	24.29	26	<0.38	<0.68	1.1	<0.61	2.4	17	11	20.7
10/7/2003	74.89	24.02	3.6	NS	NS	0.83	10	<0.68	3.0	<1.18	0.80
9/10/2008	81.82	17.09	<0.23	NS	NS	<0.40	<0.38	<0.47	<0.86	<0.79	<1.1
10/15/03	84.25	14.78	<0.41	<0.43	<0.0068	<0.87	<0.6	<1.7	<0.51	<2.8	<2.13
04/20/10	86.02	12.99	<0.38	<0.38	<0.0068	<0.55	<0.28	<2.4	<0.72	<1.20	<1.82
07/20/10	86.10	12.91	<0.38	<0.38	<0.0068	<0.56	<0.28	<2.4	<0.72	<1.20	<1.82

Well PZ-1  
PVC Elevation =

04/18/02  
09/04/03 97.72  
97.08 97.73 06/24/02  
(feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	Benzene (ppb)	1,2-DCA (ppb)	EDB (1,2-dibromoethane) (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylenes (Total) (ppb)
4/26/2002	74.80	23.22	0.11	<0.12	<0.19	<0.08	<0.07	<0.1	<0.68	1.09	<0.34
8/22/2002	73.56	24.17	<0.43	NS	NS	<0.49	<0.49	<1.4	<0.83	<1.14	<1.5
9/4/2003	72.29	24.79	<0.30	NS	NS	<0.60	<0.58	<0.58	<0.59	<1.18	<1.84
10/7/2003	72.86	24.22	<0.30	NS	NS	<0.60	<0.68	<0.68	<0.58	<1.18	<1.84
9/10/2008	72.25	24.83	<0.23	NS	NS	<0.40	<0.38	<0.47	<0.38	<0.79	<1.1
10/15/03	73.77	23.31	<0.41	<0.43	<0.0068	<0.87	<0.6	<1.7	<0.61	<2.6	<2.13
04/20/10	73.89	23.49	<0.38	<0.38	<0.0068	<0.55	<0.28	<2.4	<0.72	<1.20	<1.62
07/20/10	73.73	23.36	<0.38	<0.38	<0.0068	<0.55	<0.28	<2.4	<0.72	<1.20	<1.62

Note: Bold type indicates an ES exceedance, / indicates a PAL exceedance. NS = not sampled, NM = Not Measured  
Q = Analyte detected above laboratory method detection limit but below practical quantitation limit. BDL = Below Detection

**Summary of Free Product Levels & Recovery  
Gosch's Shell (Former) BRRTS#03-27-203673**

DATE		MW-1	MW-2	MW-3	MW-9	GALS REC./PERIOD	TOT GALS RECOVERED
10/15/09	Inches of FP	0.25	0	0	3	0.16	0.16
	Gals Recovered	0.01	0	0	0.15		
	Inches of Sock Saturated	No Sock	No Sock	No Sock	No Sock		
04/20/10	Inches of FP	0	0	0	1	0.03	0.19
	Gals Recovered	0	0	0	0.03		
	Inches of Sock Saturated	No Sock	No Sock	No Sock	No Sock		
07/20/10	Inches of FP	0.25	0	0.25	0	0.02	0.21
	Gals Recovered	0.01	0	0.01	0		
	Inches of Sock Saturated	No Sock	No Sock	No Sock	No Sock		

SOIL EXCAVATION DATA TABLE FOR GOSCH'S SHELL BRRT SITE 03-27-203873  
BY METCO

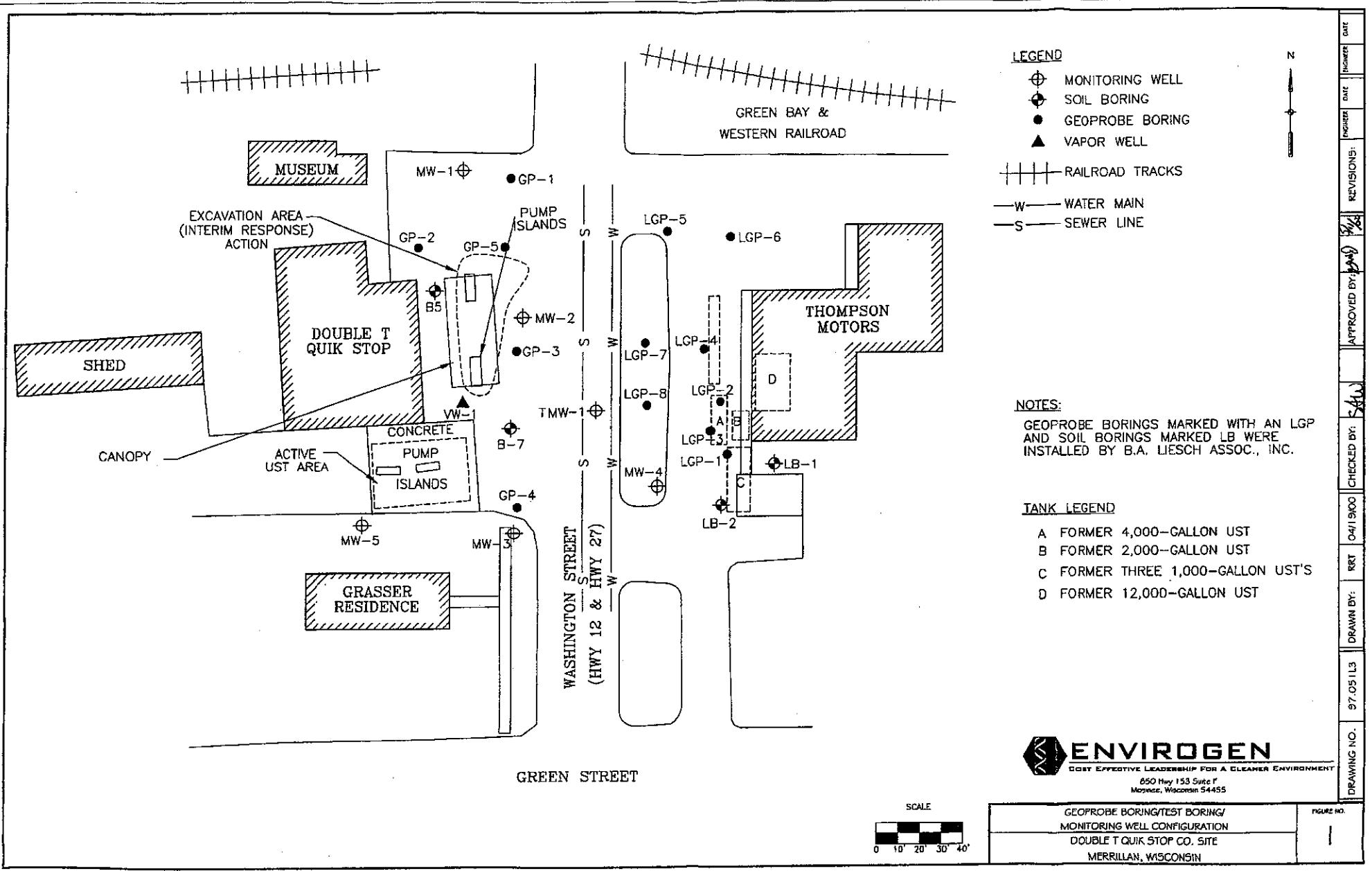
EXCAVATION & SAMPLING CONDUCTED ON OCTOBER 16, 2009

SOIL SAMPLES

Sample Location Number	EX-1 3.6	EX-2 7-8	EX-3 3.6	EX-4 3.6	EX-5 3.6	EX-6 3.6	EX-7 3.6	EX-8 7-8	METH BLANK
Sample Depth Below Ground Surface in feet									
Soil Type	WEATHERED SAND	WEATHERED SANDSTONE	CLAY/SILT	SAND	SILT/CLAY	SILT/CLAY	SILT/CLAY	WEATHERED SANDSTONE	
Petroleum Odors:	NO	YES	NO	YES	YES	YES	YES	YES	
Petroleum Staining	NO	YES	NO	NO	NO	NO	NO	NO	
Percent Solids/%	92.4	92.5	82.8	83	85.2	85.4	85.2	85.9	ns
Benzene/ppb	<20	<200	<20	<200	<20	<200	<20	<200	<20
Bromobenzene/ppb	<34	<340	<34	<340	<34	<340	<34	<340	<34
Bromo(chloromethane)/ppb	<16	<160	<16	<160	<16	<160	<16	<160	<16
Bromoform/ppb	<23	<230	<23	<230	<23	<230	<23	<230	<23
tert-Butylbenzene/ppb	<23	<230	<23	<230	<23	<230	<23	<230	<23
sec-Butylbenzene/ppb	<25	380 "J"	<25	3120	<25	2410	<25	840	<25
n-Butylbenzene/ppb	<35	1610	<35	11800	<35	12800	<35	8000	<35
Carbon Tetrachloride/ppb	<21	<210	<21	<210	<21	<210	<21	<210	<21
Chlorobenzene/ppb	<16	<160	<16	<160	<16	<160	<16	<160	<16
Chloroethane/ppb	<23	<230	<23	<230	<23	<230	<23	<230	<23
Chloroform/ppb	<50	<500	<50	<500	<50	<500	<50	<500	<50
Chloromethane/ppb	<43	<430	<43	<430	<43	<430	<43	<430	<43
2-Chlorotoluene/ppb	<31	<310	<31	<310	<31	<310	<31	<310	<31
4-Chlorotoluene/ppb	<24	<240	<24	<240	<24	<240	<24	<240	<24
1,2-Dibromo-3-chloropropane/ppb	<37	<370	<37	<370	<37	<370	<37	<370	<37
Dibromochloromethane/ppb	<21	<210	<21	<210	<21	<210	<21	<210	<21
1,4-Dichlorobenzene/ppb	<42	<420	<42	<420	<42	<420	<42	<420	<42
1,3-Dichlorobenzene/ppb	<41	<410	<41	<410	<41	<410	<41	<410	<41
1,2-Dichlorobenzene/ppb	<32	<320	<32	<320	<32	<320	<32	<320	<32
Dichlorodifluoromethane/ppb	<33	<330	<33	<330	<33	<330	<33	<330	<33
1,2-Dichloroethane/ppb	<24	<240	<24	<240	<24	<240	<24	<240	<24
1,1-Dichloroethane/ppb	<22	<220	<22	<220	<22	<220	<22	<220	<22
1,1-Dichloroethene/ppb	<27	<270	<27	<270	<27	<270	<27	<270	<27
cis-1,2-Dichloroethene/ppb	<24	<240	<24	<240	<24	<240	<24	<240	<24
trans-1,2-Dichloroethene/ppb	<29	<290	<29	<290	<29	<290	<29	<290	<29
1,2-Dichloropropane/ppb	<19	<190	<19	<190	<19	<190	<19	<190	<19
2,2-Dichloropropane/ppb	<15	<1150	<115	<1150	<115	<1150	<115	<1150	<115
1,3-Dichloropropane/ppb	<21	<210	<21	<210	<21	<210	<21	<210	<21
Di-isopropyl ether/ppb	<15	<150	<15	<150	<15	<150	<15	<150	<15
EDB (1,2-Dibromoethane)/ppb	<21	<210	<21	<210	<21	<210	<21	<210	<21
Ethylbenzene/ppb	<16	3800	<16	48000	<16	28200	<16	8700	<16
Hexachlorobutadiene/ppb	<50	<500	<50	<500	<50	<500	<50	<500	<50
Isopropylbenzene/ppb	<30	880 "J"	<30	6800	<30	6200	<30	2016	<30
p-Isopropyltoluene/ppb	<30	<300	<30	2370	<30	3400	<30	1210	<30
Methyl chloride/ppb	<44	<440	<44	<440	<44	<440	<44	<440	<44
Methyl tert-butyl ether (MTBE)/ppb	<23	<230	<23	<230	<23	<230	<23	<230	<23
Naphthalene/ppb	<117	2180 "J"	<117	13760	<117	23200	<117	8000	<117
n-Propylbenzene/ppb	<29	3480	<29	19300	<29	20800	<29	6300	<29
1,1,2,2-Tetrachloroethane/ppb	<25	<250	<25	<250	<25	<250	<25	<250	<25
1,1,1,2-Tetrachloroethane/ppb	<27	<270	<27	<270	<27	<270	<27	<270	<27
Tetrachloroethene/ppb	<18	<180	<18	<180	<18	<180	<18	<180	<18
Toluene/ppb	<23	1880	<23	21600	<23	8000	<23	1490	<23
1,2,4-Trichlorobenzene/ppb	<53	<530	<53	<530	<53	<530	<53	<530	<53
1,2,3-Trichlorobenzene/ppb	<87	<870	<87	<870	<87	<870	<87	<870	<87
1,1,1-Trichloroethane/ppb	<27	<270	<27	<270	<27	<270	<27	<270	<27
1,1,2-Trichloroethane/ppb	<30	<300	<30	<300	<30	<300	<30	<300	<30
Trichloroethene (TCE)/ppb	<20	<200	<20	<200	<20	<200	<20	<200	<20
Trichloroethylene/pcbb	<16	<160	<16	<160	<16	<160	<16	<160	<16
1,2,4-Trimethylbenzene/ppb	<20	25000	<20	117000	<20	144000	<20	39000	<20
1,3,5-Trimethylbenzene/ppb	<24	6700	<24	34000	<24	42000	<24	12100	<24
Vinyl Chloride/ppb	<17	<170	<17	<170	<17	<170	<17	<170	<17
m,p-Xylene/ppb	<33	20800	<33	170000	<33	184000	<33	46000	<33
o-Xylene/ppb	<15	7200	<15	67000	<15	57000	<15	14700	<15

NOTE: Bold = detects NS = NOT SAMPLED  
J Flag: Analyte detected between LOD and LOQ

## **Double T Quik Stop**



**TABLE 1**  
**Postremedial Groundwater Sample Laboratory Analytical Results**  
**Double T Quik Stop site**  
**Merrillan, Wisconsin**  
**TMW-1**

Sample Date	Parameters						
	Benzene	Ethylbenzene	Toluene	Xylenes	TMBs	MTBE	GRO
10/13/00	71.7	81.3	<25.0	110	45.0	<25.0	631
NR 140 ES	5.0	700	1,000	10,000	480	60	NS
NR 140 PAL	0.5	140	200	1,000	96	12	NS

(Continued)

Notes:

All results are reported in ppb.

Shading indicates value equals or exceeds the NR 140 preventive action limit

GRO: Gasoline range organics  
 MTBE: Methyl t-butyl ether  
 TMBs: Trimethylbenzenes  
 ES: Enforcement standard  
 PAL: Preventive action limit  
 NS: No standard

Checked by: DCK  
 Approved by: VLC

TABLE 1 (Continued)

**Postremedial Groundwater Sample Laboratory Analytical Results**  
**Double T Quik Stop site**  
**Merrillan, Wisconsin**  
**MW-2**

Sample Date	Days Operating	Parameters								
		Benzene	Ethylbenzene	Toluene	Xylenes	MTBE	Naphthalene	DRO (ppm)	GRO	
6/22/95	422	10	31	120	120	19	<1.0	NA	NA	500
7/9/96	805	306	1,363	4,059	5,710	1,138	<250	275	NA	2,900
7/23/96	819	NS	NS	NS	NS	NS	NS	NS	NS	NS
5/21/98	1486	320	1,900	3,600	6,500	1,690	<20	340	4.5	19,000
8/25/98	1582	180	1,900	2,700	6,500	1,870	<33	280	5.7	12,000
11/30/98	1679	120	1,400	2,100	5,000	1,380	40	240	3.5	17,000
2/23/99	1764	79	2,000	2,200	6,900	1,980	<12	369	3.6	26,000
8/24/99	1946	370	1,600	3,000	5,250	1,520	52	390	NA	23,000
11/17/99	2030	100	1,500	2,300	5,200	1,660	51	390	NA	19,000
NR 140 ES		5.0	700	1,000	10,000	480	60	40	NS	NS
NR 140 PAL		0.5	140	200	1,000	96	12	8	NS	NS

(Continued)

Notes:

All results are reported in ppb unless otherwise noted.

Cross hatching indicates value equals or exceeds the NR 140 preventive action limit

Shading indicates value equals or exceeds the NR 140 enforcement standard

GRO: Gasoline range organics NS: No standard/not sampled

DRO: Diesel range organics NA: Not analyzed

MTBE: Methyl t-butyl ether PAL: Preventive action limit

TMBs: Trimethylbenzenes ES: Enforcement standard

Checked by: DRLApproved by: VK

TABLE 1 (Continued)

**Postremedial Groundwater Sample Laboratory Analytical Results**  
**Double T Quik Stop site**  
**Merrillan, Wisconsin**  
**MW-4**

Sample Date	Days Operating	Parameters									GRO
		Benzene	Ethylbenzene	Toluene	Xylenes	TMBs	MTBE	Naphthalene	DRO (ppm)		
6/22/95	422	190	180	81	610	196	1.0	NA	NA	2,300	
7/9/96	805	NS	NS	NS	NS	NS	NS	NS	NS	NS	
7/23/96	819	244	278	137	710	6,175	<5.0	63.4	NA	2,690	
5/21/98	1486	160	220	62	550	289	<0.82	44	0.47	2,800	
8/25/98	1582	320	370	130	1,200	402	<6.6	64	1.9	1,800	
11/30/98	1679	570	630	380	2,400	770	13	190	3.4	8,200	
2/23/99	1764	280	290	49	680	258	<1.6	67	1.2	2,900	
8/24/99	1946	350	400	150	1,390	430	1.7	100	NA	5,400	
11/17/99	2030	400	480	130	1,460	510	9.7	120	NA	5,100	
NR 140 ES		5.0	700	343	620	480	60	40	NS	NS	
NR 140 PAL		0.5	140	68.6	124	96	12	8	NS	NS	

Notes:

All results are reported in ppb unless otherwise noted.

X Cross hatching indicates value equals or exceeds the NR 140 preventive action limit

Shading indicates value equals or exceeds the NR 140 enforcement standard

GRO: Gasoline range organics NS: No standard/not sampled

DRO: Diesel range organics NA: Not analyzed

MTBE: Methyl t-butyl ether PAL: Preventive action limit

TMBs: Trimethylbenzenes ES: Enforcement standard

Checked by: D.L.Approved by: V.W.

**TABLE 2**  
**Preremedial Soil Sample Laboratory Analytical Results**  
**Double T Quik Stop Site**  
**Merrillan, Wisconsin**

Sample Location	Sample Depth (ft)	Sample Date	Preliminary Results						DRO (ppm)	GRO (ppm)
			Benzene	o,p-dibenzene	MTBE	TMBs	Xylenes	Toluene		
Stockpile 1	4/26/94	0.0012	0.0102	<0.0009	0.0342	0.0404	0.0112	0.0112	304	304
Stockpile 2		<0.0002	<0.0005	<0.0009	<0.001	<0.001	<0.0009	<5.0	<5.0	<5.0
GP-1	6 to 8	6/28/94	<0.078	<0.16	<0.31	<0.32	<0.32	<0.31	<5.0	<5.0
	10 to 12		<0.1	<0.2	<0.4	<0.4	<0.4	<0.4	<5.0	<5.0
GP-2	6 to 8		<0.07	<0.14	<0.28	<0.28	<0.28	<0.28	<5.0	<5.0
	10 to 12		<0.077	<0.15	<0.31	<0.46	<0.30	<0.31	<5.0	<5.0
GP-3	6 to 8		<0.07	<0.14	<0.28	<0.28	<0.28	<0.28	<5.0	<5.0
	10 to 12		0.099	<0.16	<0.31	<0.32	0.253	0.485	<5.0	<5.0
GP-4	6 to 8		<0.075	<0.15	<0.30	<0.30	<0.30	<0.30	<5.0	<5.0
	10 to 12		<0.078	<0.15	<0.31	<0.30	<0.30	<0.31	<5.0	<5.0
GP-5	6 to 8		<0.077	<0.15	<0.31	<0.30	<0.30	<0.31	<5.0	<5.0
	10 to 12		<0.084	<0.17	<0.34	<0.34	<0.34	<0.34	<5.0	<5.0
MW-1	4 to 6	6/14/95 and 6/15/95	<5.0	<5.0	<5.0	<5.0	<15	<5.0	NA	<10
	6.5 to 8.5		<5.0	<5.0	<5.0	<5.0	<15	<5.0	NA	<10
MW-2	2.5 to 4.5		<1,300	2,400	<1,300	17,000	9,300	1,400	NA	750
	5 to 7		1,500	16,000	<5.0	18,000	14,000	10,000	NA	1600
MW-3	2.5 to 4.5		<5.0	<5.0	<5.0	<5.0	<15	<5.0	NA	<10
	5 to 7		<5.0	<5.0	<5.0	<5.0	<15	<5.0	NA	<10
	10 to 12		<5.0	<5.0	<5.0	<5.0	<15	<5.0	NA	<10
MW-4	2.5 to 4.5		<5.0	7.0	<5.0	6.0	28	7.0	NA	<25
	5 to 7		<5.0	<5.0	<5.0	<5.0	<15	<5.0	NA	<10
	7.5 to 9.5		<5.0	<5.0	<5.0	<5.0	<15	<5.0	NA	<10
NR 720 Generic Soil Standards			5.5	2,900	NS	NS	4,100	1,500	100	100

Notes:

All results are reported in ppb unless otherwise noted.

Shading indicates value equals or exceeds the NR 720 generic soil standard

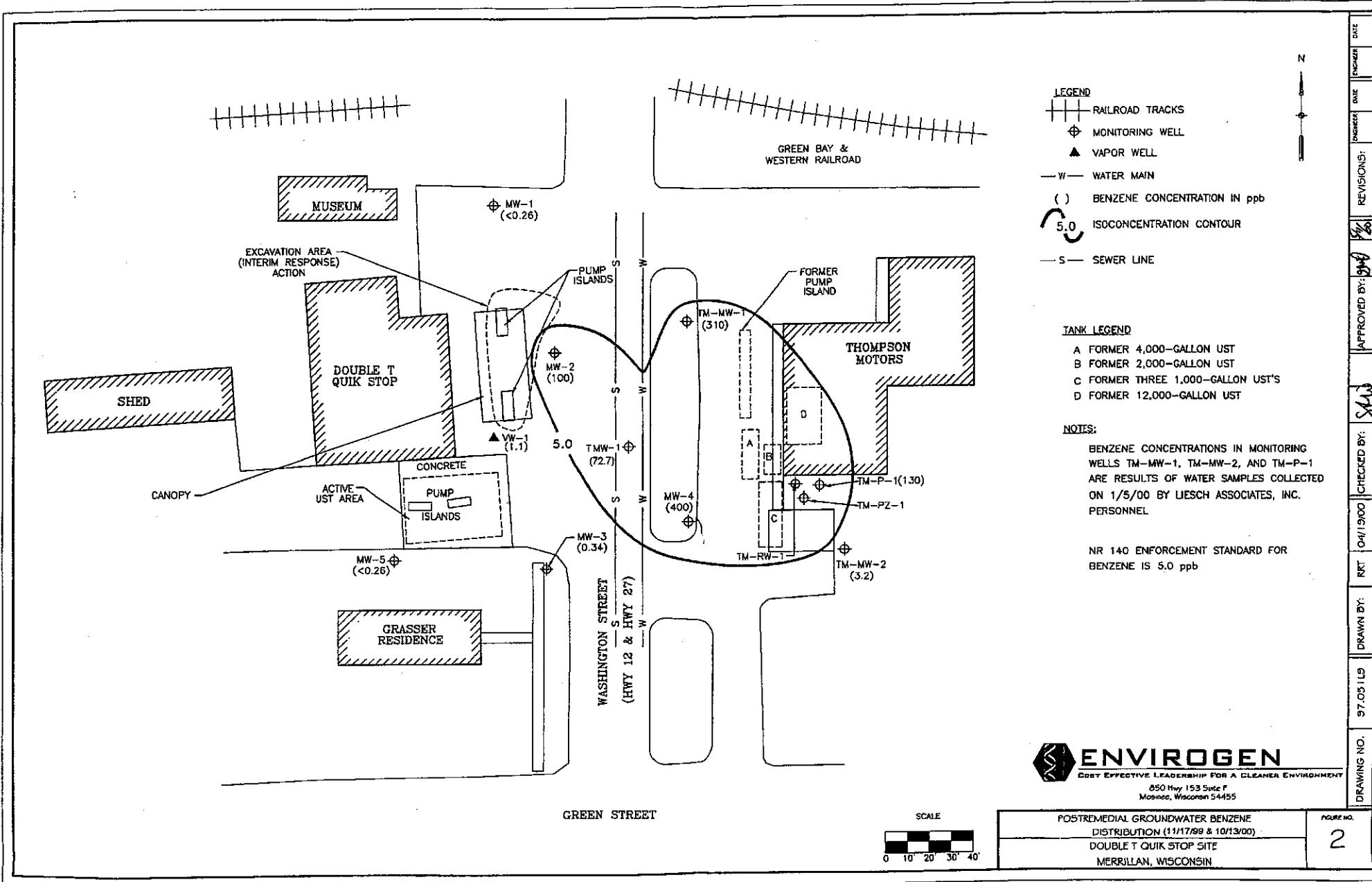
GRO: Gasoline range organics DRO: Diesel range organics

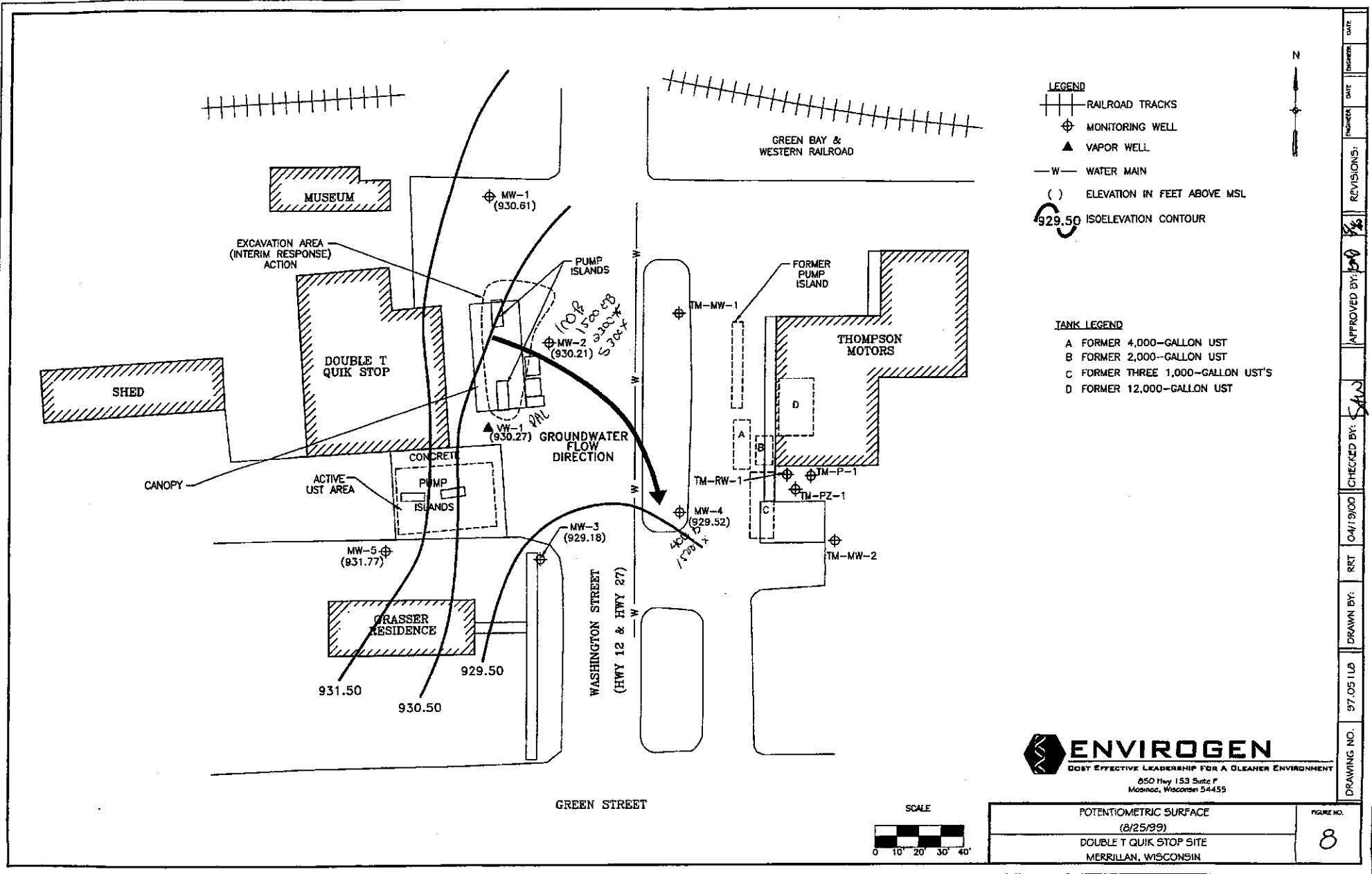
TMBs: Trimethylbenzenes NA: Not analyzed

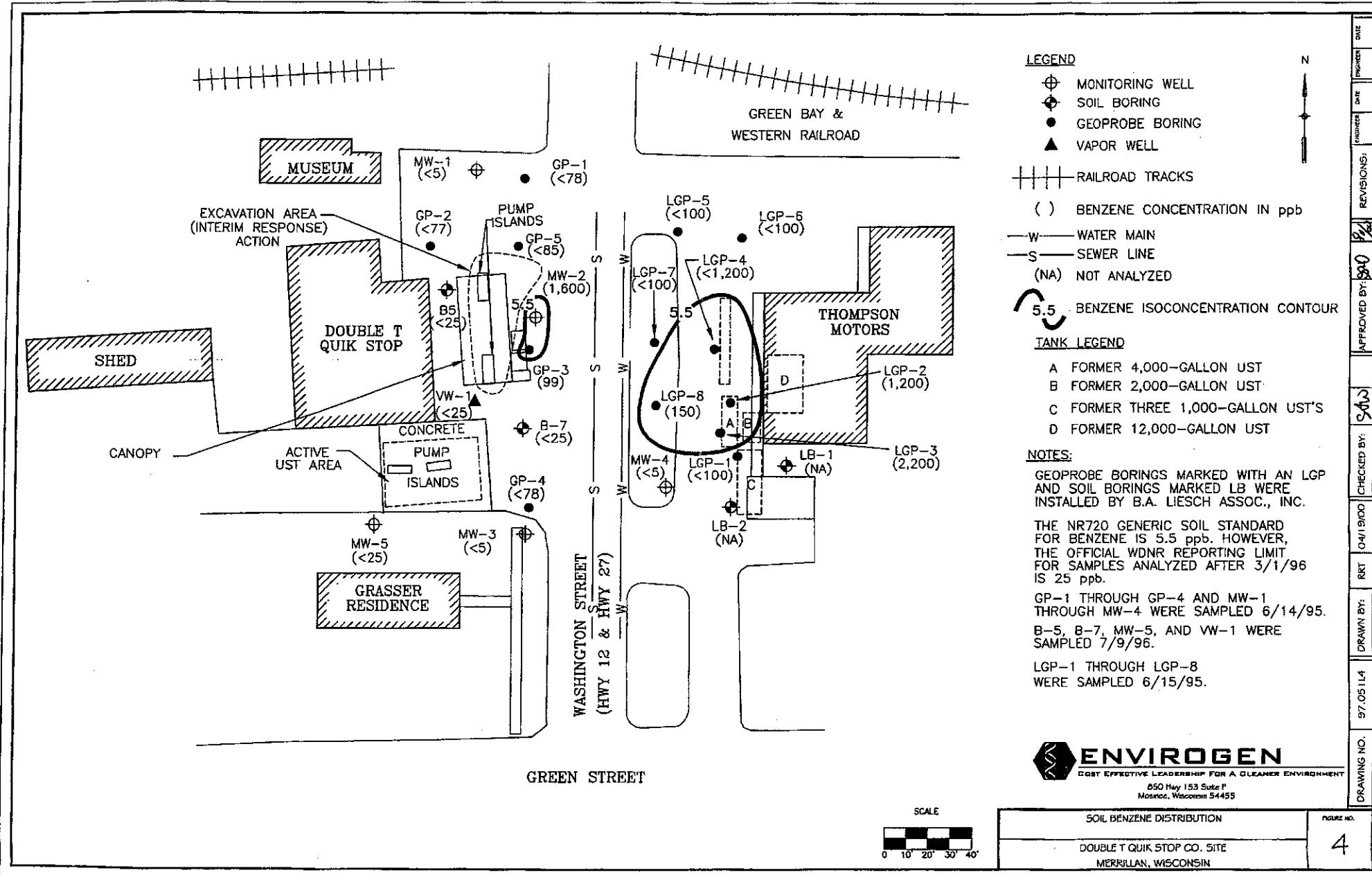
MTBE: Methyl t-butyl ether NS: No standard

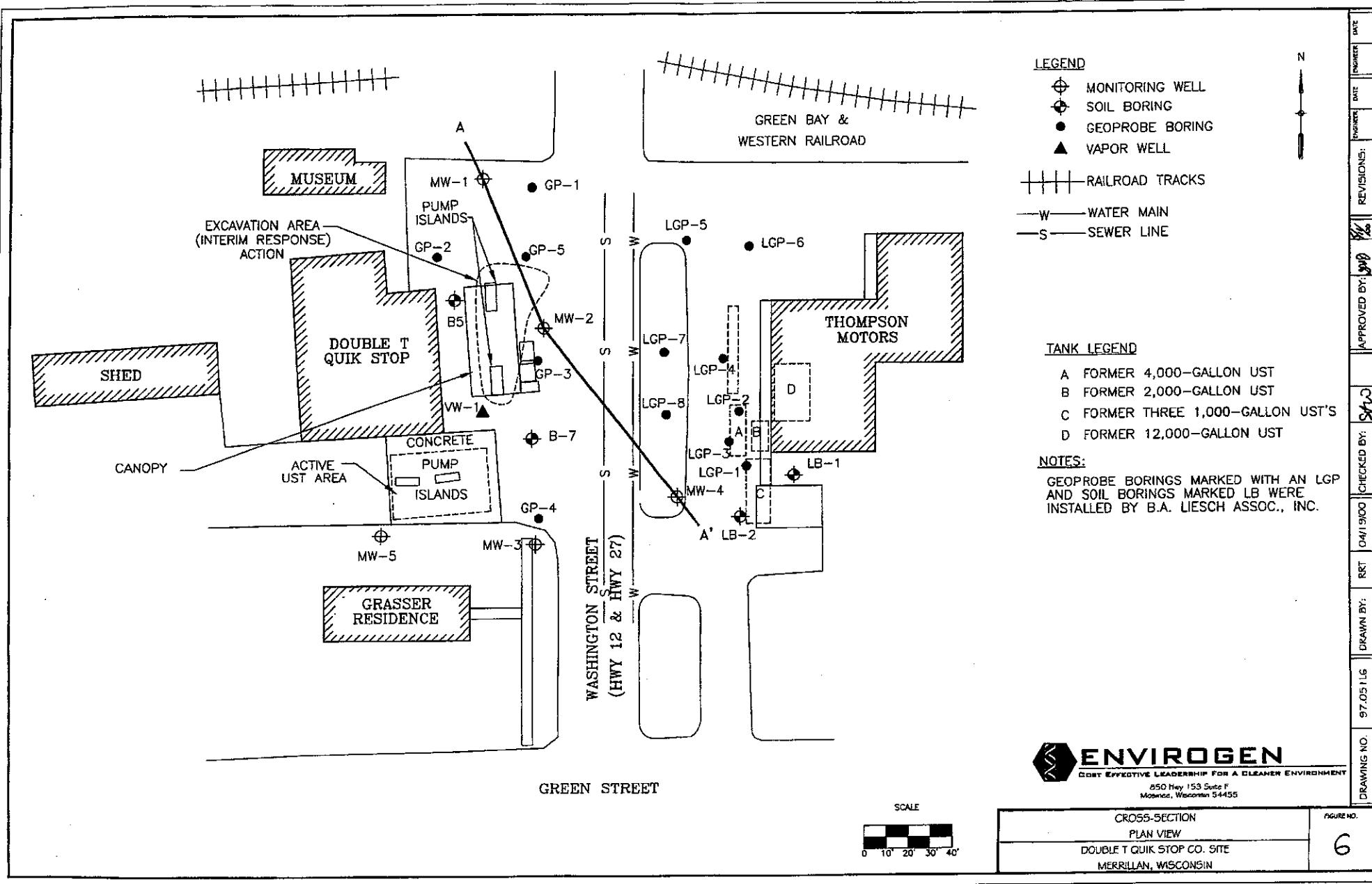
Checked by: Sher

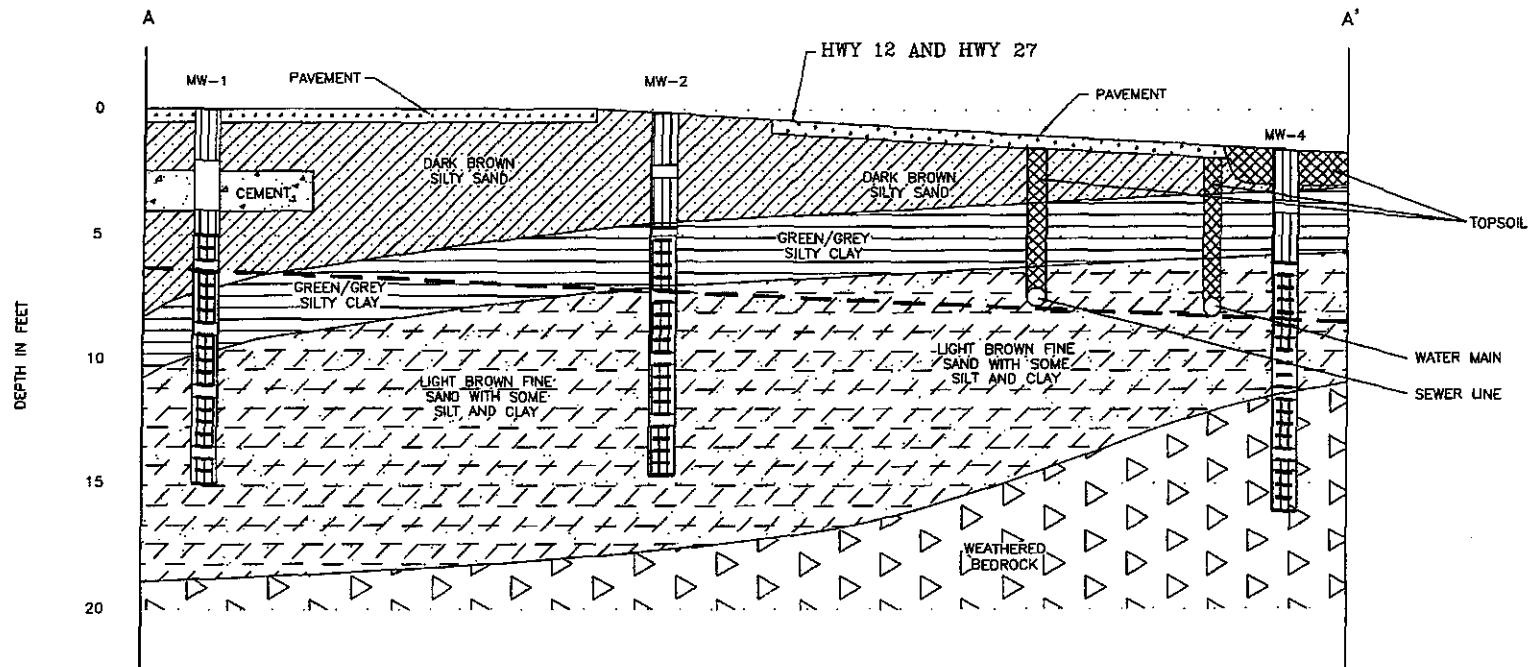
Approved by: 904P



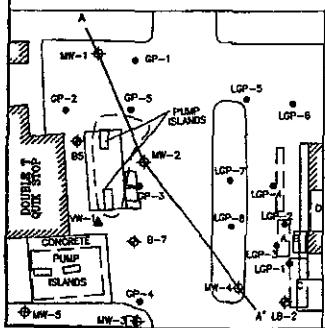








### PLAN VIEW



**LEGEND**

- SAMPLE INTERVAL
- SCREENED INTERVAL
- - GROUNDWATER TABLE

**SCALE**  
HORIZONTAL: 1" = 20'  
VERTICAL: 1" = 5'

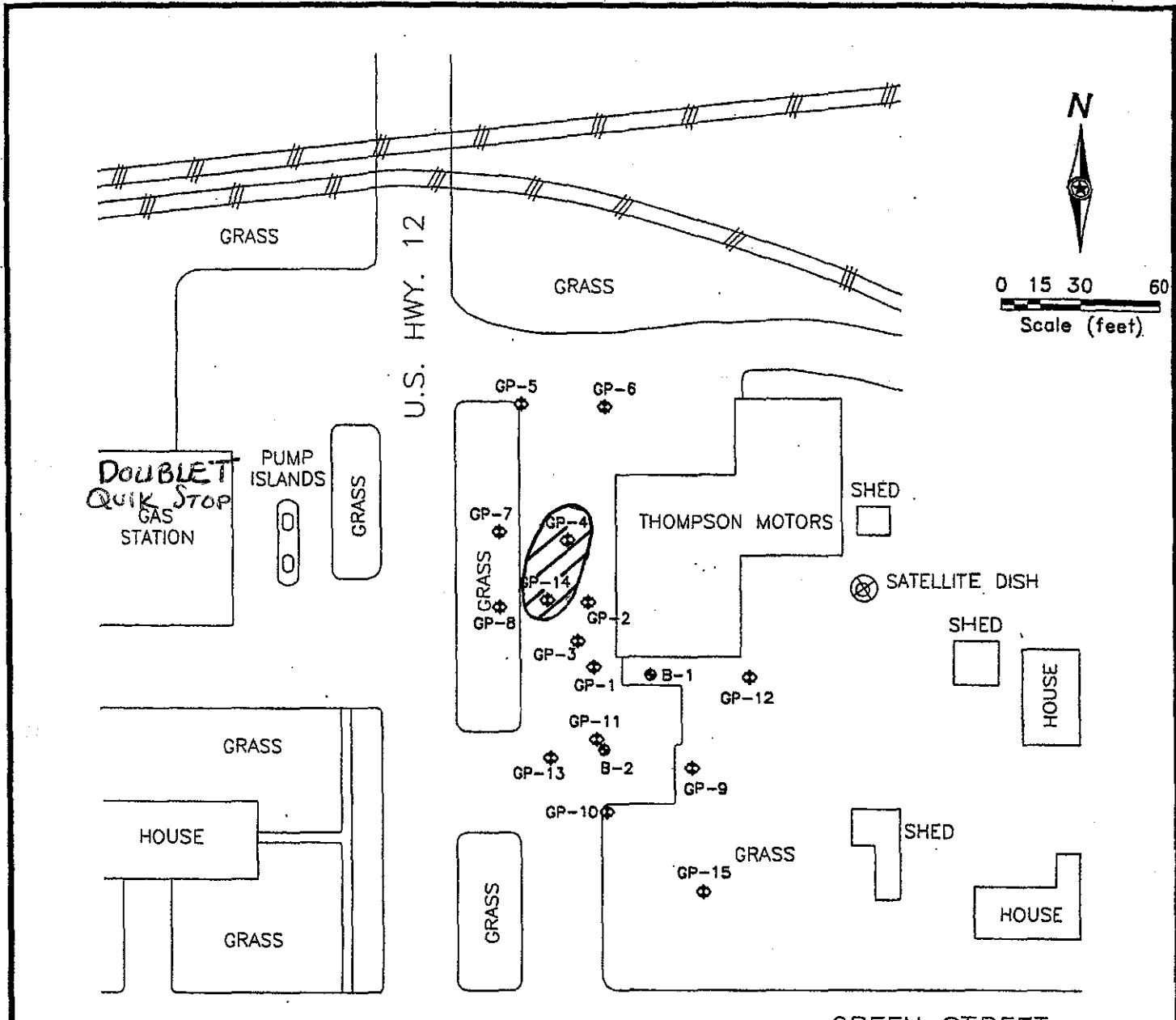
**ENVIROGEN**  
COST-EFFECTIVE LEADERSHIP FOR A CLEANER ENVIRONMENT  
850 Hwy 153 Satz P  
Mequon, Wisconsin 54455

FIGURE NO.	7
GEOLOGIC CROSS-SECTION A-A'	FIGURE NO.

DOUBLE T QUIK STOP CO. SITE  
MERRILLAN, WISCONSIN

DRAWING NO. 97-05-117 DRAWN BY: RRT DATE 04/19/00 CHECKED BY: SAD APPROVED BY: SAD DATE 04/19/00 ENGINEER DATE 04/19/00 INSPECTOR DATE 04/19/00 REVISIONS: %

**Thompson Motors**



GREEN STREET

### LEGEND

- ♦ GeoProbe boring
- ◆ Soil boring



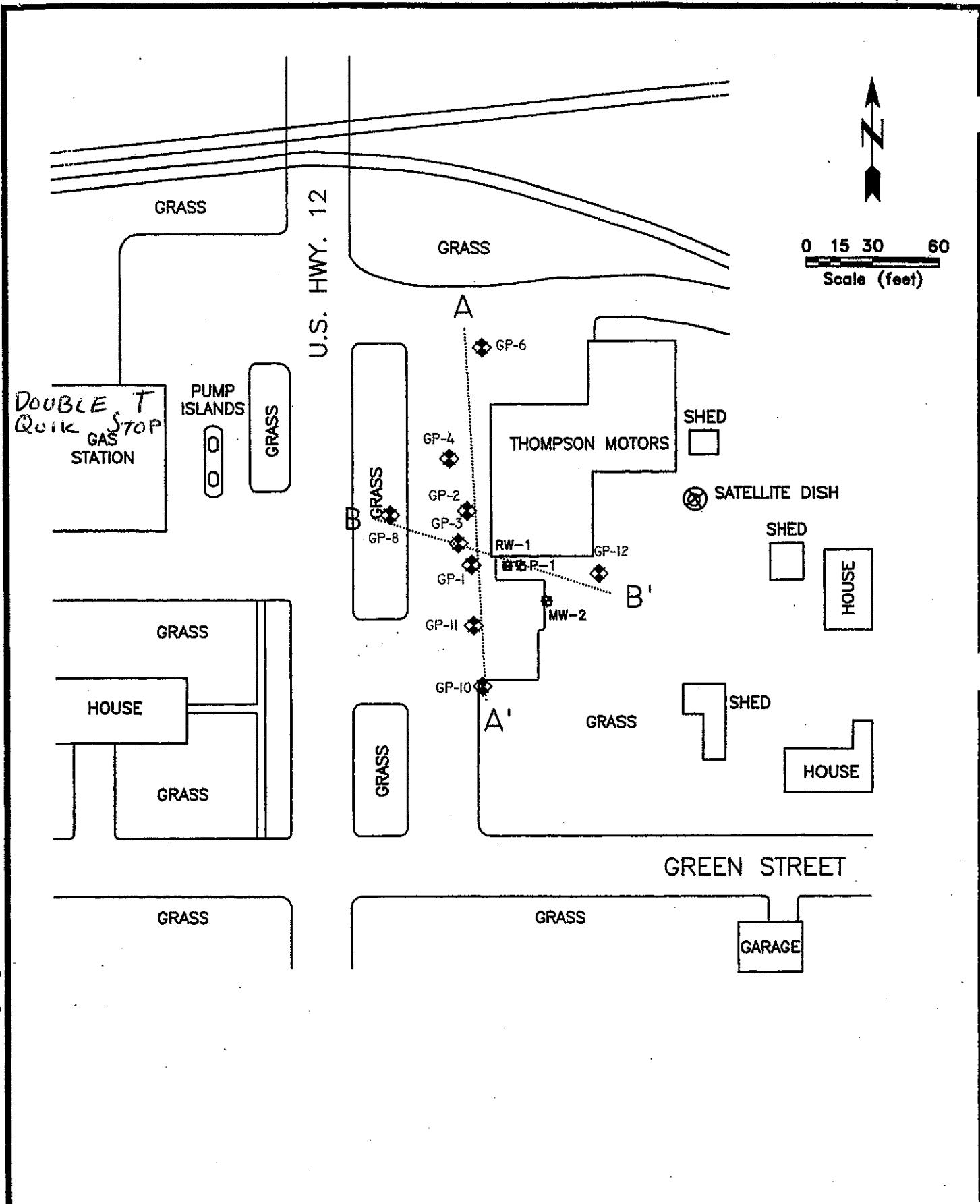
Estimated extent of vadose zone soil contamination above generic NR 720 RCLs



B. A. LIESCH ASSOCIATES, INC.  
HYDROGEOLOGISTS, ENGINEERS, ENVIRONMENTAL SCIENTISTS

Federation Co-op / Merrillan, WI

Aug 97



ts65124cadSScph.dwg

05-03-1999



Hydrogeologists • Engineers • Environmental Scientists

6000 Gibolt Dr., Suite 203  
Madison, WI 53713  
(608) 223-1532

13400 15th Avenue N  
Minneapolis, MN 55441  
(612) 339-1421

2700 N Central Ave., Suite 890  
Phoenix, AZ 85004  
(602) 650-2815

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05-1999

Cross Section  
Location Map

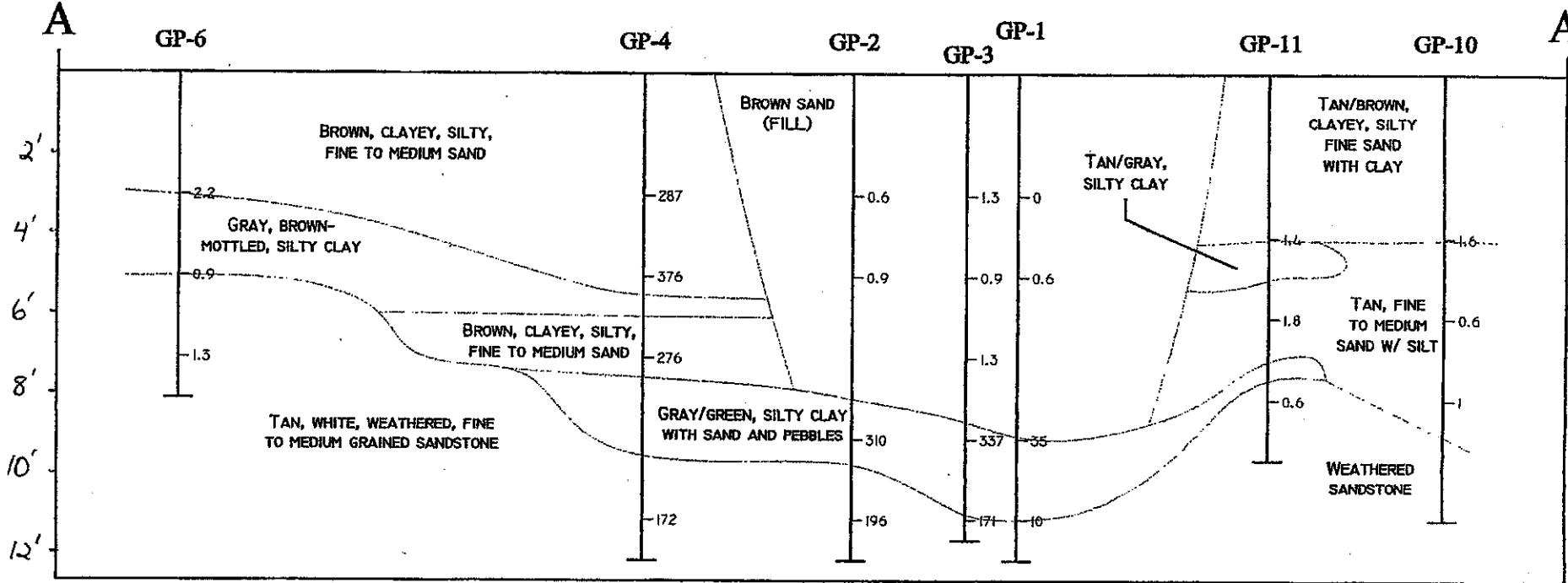
Figure  
7a

North

South

A

A'



20 feet  
4 feet  
5x vertical  
exaggeration



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6000 Gibolt Dr., Suite 203  
Madison, WI 53713  
(608) 223-1532

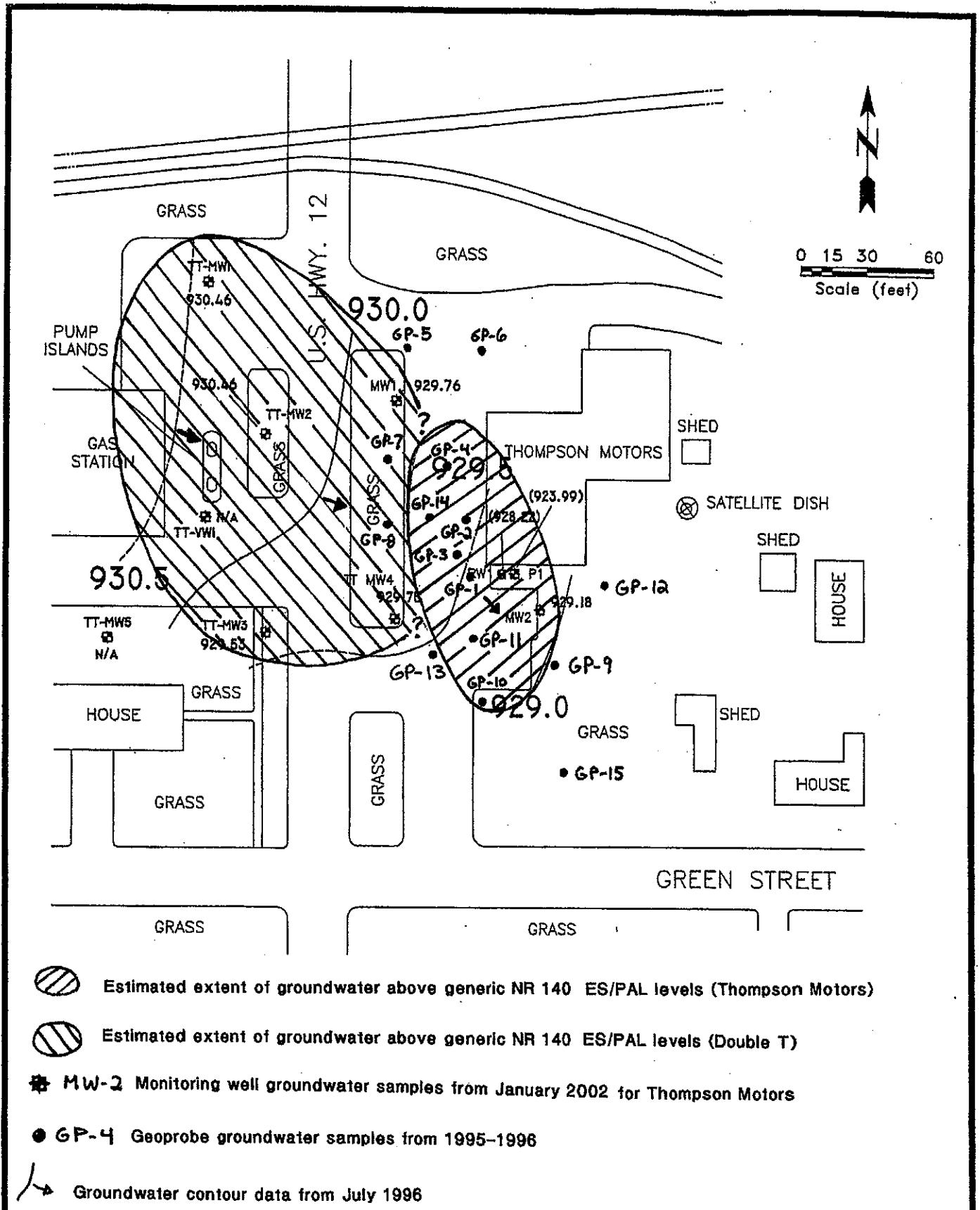
13400 15th Avenue N  
Minneapolis, MN 55441  
(612) 539-1423

2700 N Central Ave., Suite 250  
Phoenix, AZ 85004  
(602) 630-2815

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05-1999

Hydrogeologic Cross  
Section A-A'Figure  
7b



165124/acad/Sitrepin.dwg

012-08-2002



Hydrogeologists • Engineers • Environmental Scientists

6000 Glaholt Dr., Suite 203  
Madison, WI 53713  
(608) 231-1532

13400 15th Avenue N  
Minneapolis, MN 55441  
(612) 539-1423

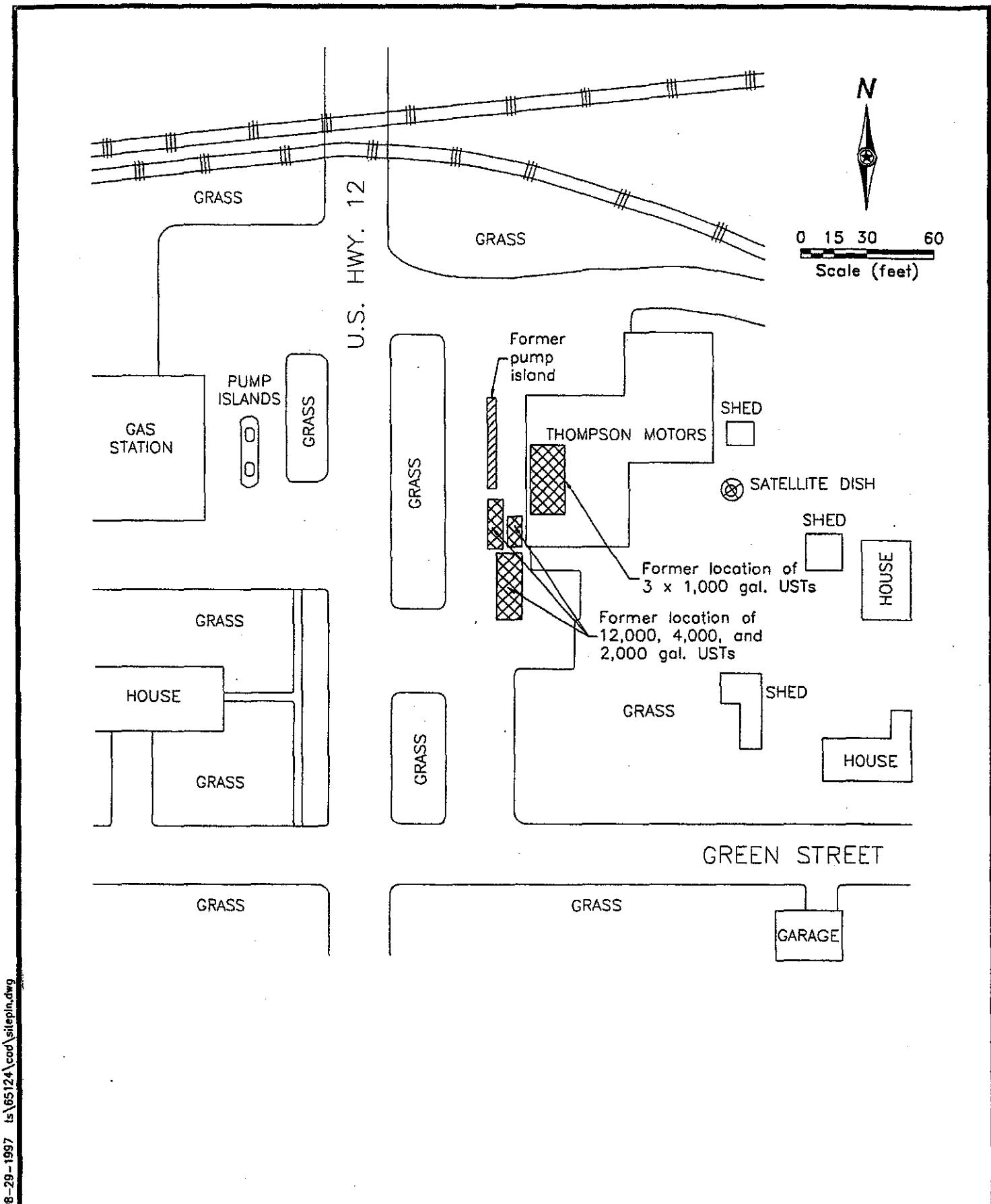
10 N Central Ave., Suite 190  
Phoenix, AZ 85004  
(602) 643-2815

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02-2002

## Figure F

## Aerial Extent of Groundwater Contamination



08-29-1997 ls\65124\cod\siteplan.dwg



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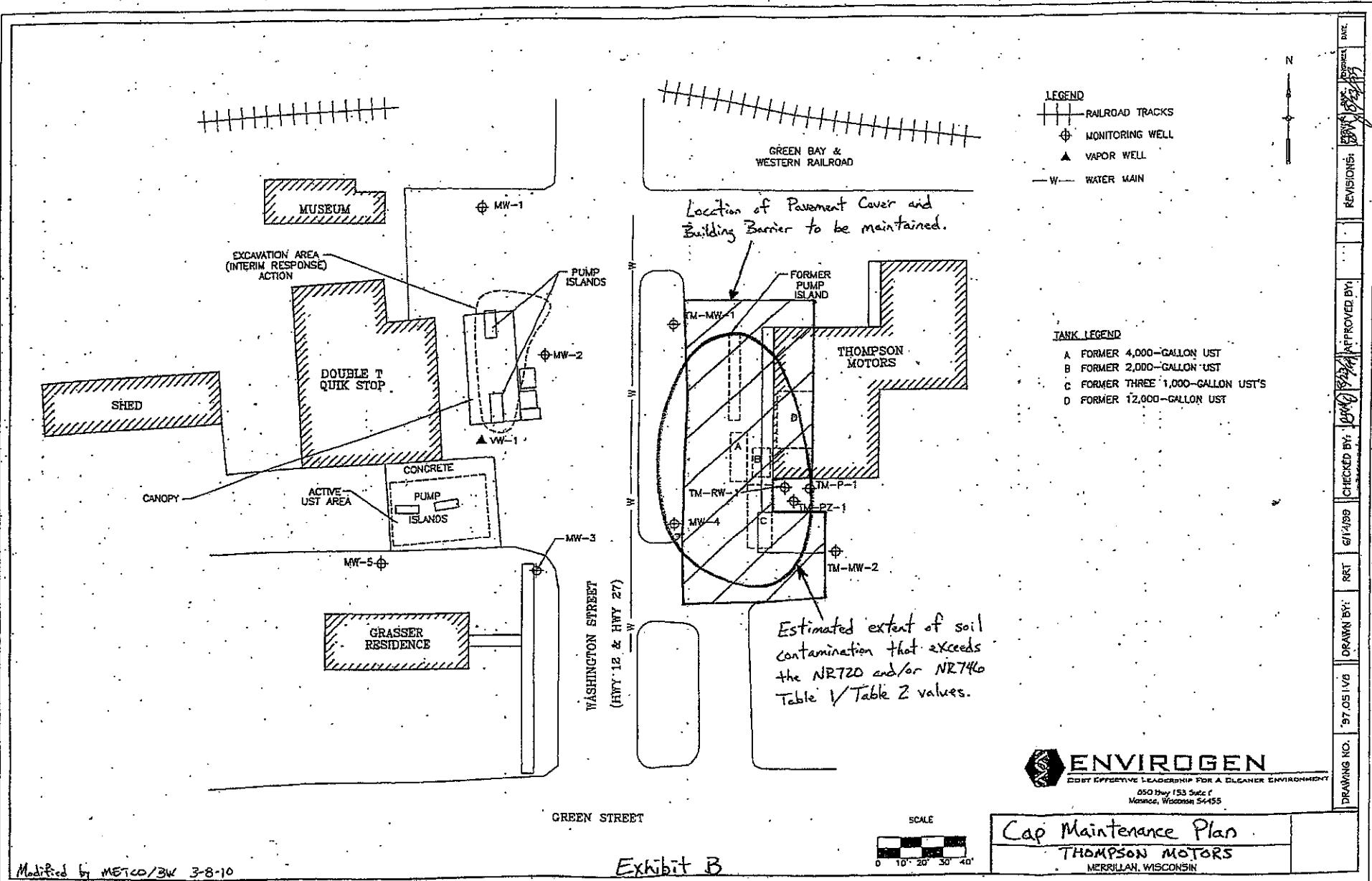
13400 15th Ave. N. Minneapolis, MN 55441 (612) 559-1423  
Minneapolis, MN • Madison, WI • Phoenix, AZ

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Aug 97

Scaled Site Map

Figure 2



Modified by METCO/BWK 3-8-10

Exhibit B

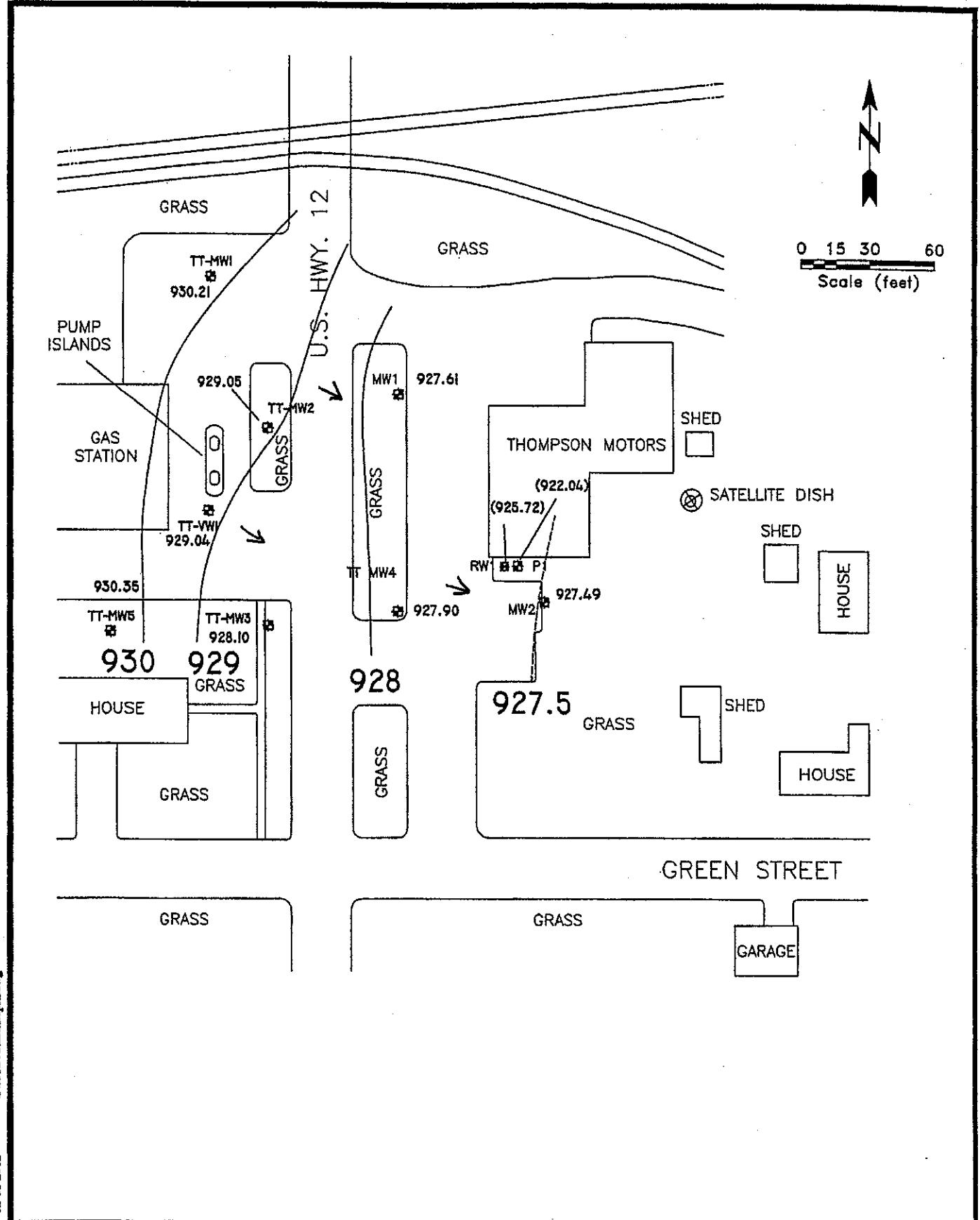


Table 2

## Summary of Geoprobe Soil Analytical Results

Sample identifier	GP-1	GP-2	GP-3	GP-4	GP-5	GP-6	GP-7	GP-8	Methanol Blank
Depth to top of sample	8	8	8	4	4	4	6	8	n/a
Depth to bottom of sample	10	10	10	6	6	6	8	10	n/a
Sample date	06/15/95	06/15/95	06/15/95	06/15/95	06/15/95	06/15/95	06/15/95	06/15/95	06/15/95
Compound	Units	*	*	*			*	*	
Moisture content	percent	14.2%	14.2%	11.0%	14.8%	14.9%	10.9%	16.7%	14.6% NA
Benzene	mg/kg	< 0.1	1.2	2.2	4.2	< 0.1	< 0.1	< 0.1	0.15 < 0.1
Toluene	mg/kg	0.11	16	13	110	< 0.1	< 0.1	0.14	< 0.1 < 0.1
Ethylbenzene	mg/kg	0.18	19	29	36	< 0.1	< 0.1	< 0.1	0.13 < 0.1
Xylenes	mg/kg	0.24	99	150	250	< 0.2	< 0.2	< 0.2	< 0.2 < 0.2
1,3,5-TMB	mg/kg	< 0.1	17	33	40	< 0.1	< 0.1	< 0.1	< 0.1 < 0.1
1,2,4-TMB	mg/kg	< 0.1	52	100	130	< 0.1	< 0.1	< 0.1	< 0.1 < 0.1
MTBE	mg/kg	< 0.4	< 2	< 4	< 8	< 0.4	< 0.4	< 0.4	< 0.4 < 0.4
GRO	mg/kg	5.8	830	1,500	2,200	< 5	< 5	< 5	< 5 < 5
DRO	mg/kg	< 10	650	280	510	< 10	< 10	< 10	< 10 NA

Notes:

TMB - trimethyl benzene

n/a - not applicable

MTBE - methyl tert butyl ether

NA - sample not analyzed for this compound

GRO - gasoline range organics

mg/kg - milligrams per kilogram

DRO - diesel range organics

\*

All depths expressed in feet below grade.

GRO results which the lab flagged as containing high boiling-point compounds are presented in italics.

DRO results which the lab flagged as containing low boiling-point compounds are presented in italics.

*\* below water table*

**Table 2**  
**Summary of Geoprobe Soil Analytical Results**

Sample identifier	GP-9	GP-10	GP-11	GP-12	GP-13	GP-14	Methane
Depth to top of sample	5	5	5	5	5	5	n/a
Depth to bottom of sample	7	7	7	7	7	7	n/a
Sample date	01/09/96	01/09/96	01/09/96	01/09/96	01/09/96	01/09/96	01/09/96
Compound	Units						
Moisture content	percent	14.5%	10.0%	10.1%	13.4%	12.7%	13.4%
Benzene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
1,3,5-TMB	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-TMB	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
MTBE	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
GRO	mg/kg	< 5	< 5	< 5	< 5	< 5	510
DRO	mg/kg	< 10	< 10	< 10	< 10	< 10	240

**GROUNDWATER SAMPLING DATA TABLE FOR THOMPSON MOTORS BRRTS# 03-27-000088**  
**BY METCO**

**WELL SAMPLING CONDUCTED ON DECEMBER 29, 2009**

Well Name	MW-1	MW-2	TT-MW-4	RW-1	P-1	TRIP BLANK
PVC Casing Elevation in Feet (MSL)	934.45	935.93	933.77	936.21	936.69	==
Watertable Elevation in Feet (MSL)	927.86	928.36	COULD	926.33	922.77	==
Depth to Groundwater in Feet	6.59	7.57	NOT	9.88	13.92	==
Amount Purged in Gallons	3	3	LOCATE	==	8	==
Time to Purge in Minutes	5	5	==	==	20	==
Purged Dry?	NO	NO	==	==	NO	==
Color	GRAY	BROWN	==	==	CLEAR	==
Petroleum Odors	YES	NO	==	==	NO	==
Petroleum Sheens	NO	NO	==	==	NO	==
Turbidity (high, medium, low, clear)	MEDIUM	HIGH	==	==	LOW	==
Benzene/ppb	56	< 0.45	ns	ns	1.39 "J"	< 0.45
Ethylbenzene/ppb	440	< 0.76	ns	ns	5.7	< 0.76
Methyl tert-butyl ether (MTBE)/ppb	< 10.5	< 0.42	ns	ns	< 0.42	< 0.42
Naphthalene/ppb	115	< 1.4	ns	ns	1.53 "J"	< 1.4
Toluene/ppb	79	< 0.53	ns	ns	< 0.53	< 0.53
1,2,4-Trimethylbenzene/ppb	460	< 0.52	ns	ns	< 0.52	< 0.52
1,3,5-Trimethylbenzene/ppb	181	< 0.61	ns	ns	< 0.61	< 0.61
m&p-Xylene/ppb	970	< 0.84	ns	ns	< 0.84	< 0.84
o-Xylene/ppb	284	< 0.74	ns	ns	< 0.74	< 0.74

**NOTE: Bold = detects      NS = NOT SAMPLED**  
**J Flag: Analyte detected between LOD and LOQ**

Groundwater Analytical Results Summary  
Thompson Motors BRRTS# 0327-000088

Well MW-1  
PVC Elevation = 934.45 (feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	GRO (ppb)	Benzene (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
1996-09	929.76	4.69	20000	1900	1200	<400	480	5100	1120	4700
1998-11	927.61	6.84	5600	390	450	<1.6	NS	830	399	1300
2002-01	927.92	6.53	7100	270	560	<5.2	NS	500	520	1500
12/29/09	927.86	6.59	NS	56	440	<10.5	115	79	641	1254

Well MW-2  
PVC Elevation = 935.93 (feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	GRO (ppb)	Benzene (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
06/22/95	NM	NM	500	10	31	<1.0	NS	120	19	120
07/09/96	929.18	6.75	2900	306	1363	<250	275	4059	113B	5710
7/23/1996 NM NM NOT SAMPLED										
1996-09	NM	NM	<50	9.3	<0.5	3.4	<2	<0.5	<2	<1
1998-11	NM	NM	<50	19	2.6	2.9	NS	1.2	1.1-1.39	2.7
5/21/1998	NM	NM	19000	320	1900	<20	340	3600	1690	6500
8/25/1998	NM	NM	12000	180	1900	<33	280	2700	1870	6500
11/30/1998	927.49	8.44	17000	120	1400	40	240	2300	1380	5000
2/23/1999	NM	NM	26000	79	2000	<12	360	2200	1980	6900
8/24/1999	NM	NM	23000	370	1600	6.2	300	3000	1520	5250
11/17/99	NM	NM	19000	100	1500	51	300	2300	1660	5200
2002-01	928.02	7.91	<50	0.2	<0.22	<0.16	NS	<0.2	<0.51	<0.23
12/29/09	928.36	7.57	NS	<0.45	<0.76	<0.42	<1.4	<0.53	<1.13	<1.58

Well TT-MW-4  
PVC Elevation = 933.77 (feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	GRO (ppb)	Benzene (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
06/22/95	NM	NM	2300	190	180	1	NS	81	196	610
07/09/96	929.71	4.06					NOT SAMPLED			
7/23/1996 NM NM NOT SAMPLED										
1996-09	NM	NM	8100	750	620	<40	200	360	790	2300
1998-11	NM	NM					NOT SAMPLED			
5/21/1998	NM	NM	2800	160	220	<0.82	44	62	289	550
8/25/1998	NM	NM	1800	320	370	<6.6	64	130	402	1200
11/30/1998	927.61	6.16	8200	570	630	13	190	380	770	2400
2/23/1999	NM	NM	2900	280	290	<1.6	67	49	258	680
8/24/1999	NM	NM	5400	350	400	1.7	100	150	430	1390
11/17/99	NM	NM	5100	400	480	9.7	120	130	510	1460
2002-01	928.00	5.77	2400	140	250	<1.65	NS	54	264	620
12/29/09						COULD NOT LOCATE				

Note: Bold type indicates an ES exceedance, *italics* indicates a PAL exceedance, NS = not sampled, NM = Not Measured

Q = Analyte detected above laboratory method detection limit but below practical quantitation limit.

Groundwater Analytical Results Summary  
Thompson Motors BRRTS# 0327-000088

Well RW-1

PVC Elevation = 936.21 (feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	GRO (ppb)	Benzene (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
12/29/09	926.33	9.88					NOT SAMPLED			

Well P-1

PVC Elevation = 936.69 (feet) (MSL)

Date	Water Elevation (in feet msl)	Depth to Water (in feet)	GRO (ppb)	Benzene (ppb)	Ethyl Benzene (ppb)	MTBE (ppb)	Naphthalene (ppb)	Toluene (ppb)	Trimethylbenzenes (ppb)	Xylene (Total) (ppb)
1996-09	NM	NM	<50	7	5.2	5.1	2.4	4.1	3.8	11
1998-11	NM	NM	270	62	49	<1.2	NS	0.46	16.9	20
2002-01	922.99	13.70	83	20	19	<0.34	NS	<0.2	1.38	0.23
12/29/09	922.77	13.92	NS	1.39	5.7	<0.42	1.53	<0.53	<1.13	<1.58

Note: Bold type indicates an ES exceedance, *italics* Indicates a PAL exceedance. NS = not sampled, NM = Not Measured.

Q = Analyte detected above laboratory method detection limit but below practical quantitation limit.

**Watertable Elevations Table**  
**Thompson Motors BRRTS# 0327-000088**  
**Merrillan, Wisconsin**

<i>pvc top (ft)</i>	MW-1	MW-2	TT-MW-4	RW-1	P-1
	934.45	935.93	933.77	936.21	936.69

**Date**

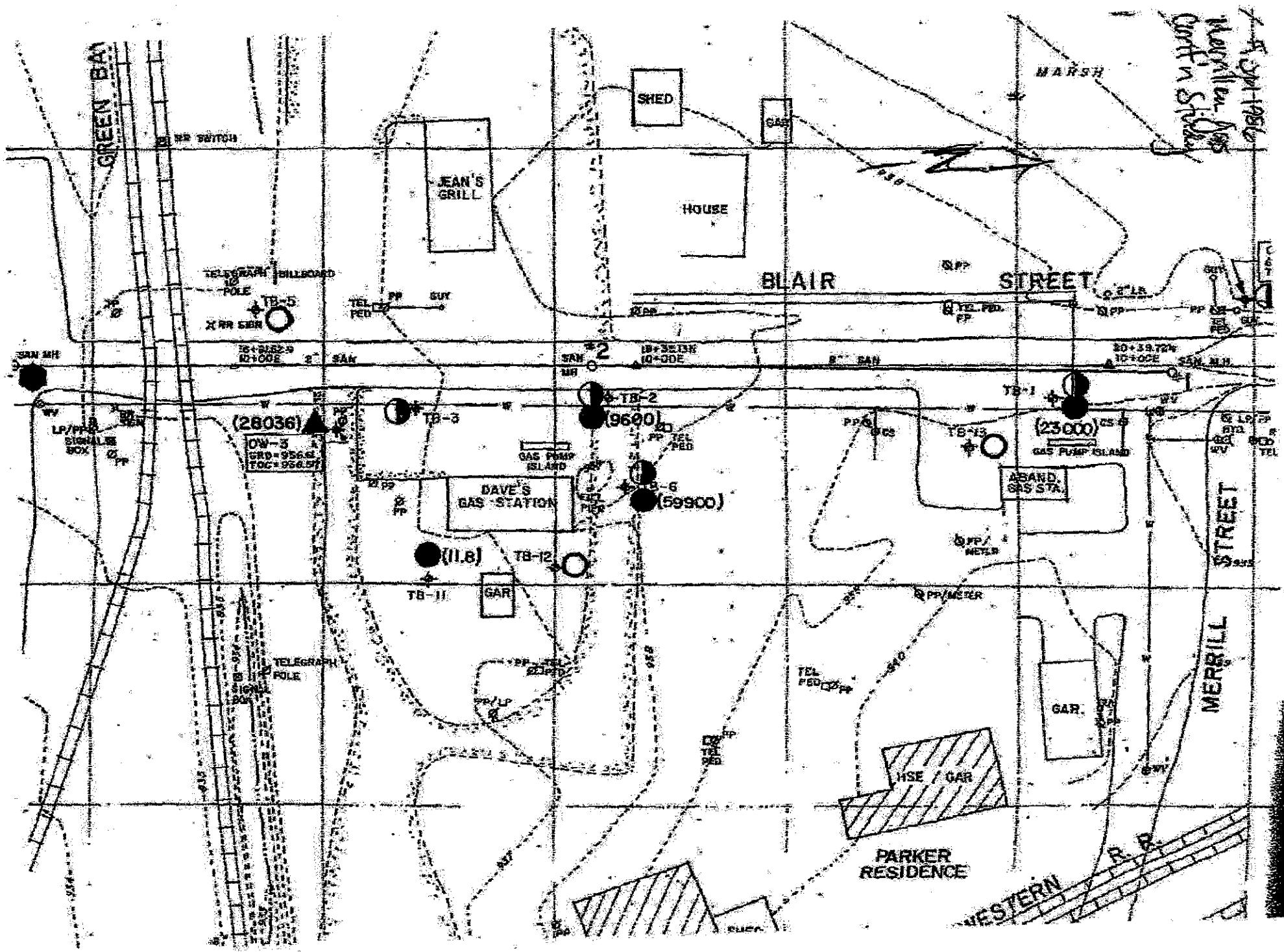
Date	MW-1	MW-2	TT-MW-4	RW-1	P-1
07/08/96	929.76	929.18	929.71	928.22	923.99
09/19/96	927.41	926.41	927.61	925.78	922.02
11/30/98	927.61	927.49	NM	925.72	922.04
06/22/99	928.64	928.92	928.91	NM	923.47
09/22/99	927.84	927.46	927.82	926.25	922.58
01/05/00	926.39	926.40	NM	924.55	921.16
05/03/00	927.97	928.39	928.22	926.14	922.24
7/26/2000	928.38	929.27	928.84	927.43	923.60
10/25/2000	926.94	926.74	927.17	925.21	921.77
4/3/2001	927.95	928.63	928.33	926.03	921.87
6/19/2001	928.31	929.56	929.11	927.39	923.40
10/16/2001	928.10	928.92	928.85	926.94	923.17
1/8/2002	927.92	928.02	928.00	926.42	922.99
12/29/2009	927.86	928.36	CNL	926.33	922.77

Note: Elevations are presented in feet mean sea level (msl).

CNL = Could Not Locate

NM = Not Measured

## **Former Dave's Gas Station**



03-27-001459

Dave's Gas Station (Former)

March 11, 2008

Underground tanks were removed in late 80s. Groundwater is encountered at about 4' below ground surface. Perched.  
Fall of 1984 gasoline contamination in Merrillan during utilities work. DNR hired Ayres to do a study. Soil samples near Dave's were contaminated. Shallow perched groundwater was found to be contaminated. Village water supply wells are east of contaminated area and not considered to be threatened.

Groundwater in OW-3 (perched) exceeded ES (located immediately south of Dave's )

Gas station was owned by William Gjerseth who is deceased. Now owned by Fred Lechner who has an unpublished phone number.



Table 3  
Ayres Associates  
VOC Analysis (ug/g)

	Detection Limit	78-1 AA-3	78-2 AA-4	78-3 AA-5	78-4 AA-5	78-7 AA-10
Benzene	0.4	X	X	X	X	X
Bromoform	1.0	X	X	X	X	X
Bromomethane	2.0	X	X	X	X	X
Carbon Tetrachloride	0.2	X	X	X	X	X
Chlorobenzene	0.2	X	X	X	X	X
Chloroethane	2.0	X	X	X	X	X
2-Chloroethylvinyl Ether	4.0	X	X	X	X	X
Chloroform	0.4	X	X	X	X	X
Chloromethane	12.0	X	X	X	X	X
Dibromochloromethane	0.2	X	X	X	X	X
1,2-Dichlorobenzene	0.6	X	X	X	X	X
1,3-Dichlorobenzene	0.6	X	X	X	X	X
1,4-Dichlorobenzene	0.6	X	X	X	X	X
Dichlorobromomethane	0.2	X	X	X	X	X
1,1-Dichloroethane	0.2	X	X	X	X	X
1,2-Dichloroethane	1.0	X	X	X	X	X
1,1-Dichloroethylene	2.0	X	X	X	X	X
1,2-Dichloroethylene	0.6	X	X	X	X	X
Dichloromethane	0.8	X	X	X	X	X
1,2-Dichloropropane	1.0	X	X	X	X	X
cis-1,3-Dichloropropene	0.6	X	X	X	X	X
trans-1,3-Dichloropropene	2.0	X	X	X	X	X
Ethylbenzene	0.4	Intf.	Intf.	X	1.5	X
1,1,2,2-Tetrachloroethane	0.2	X	X	X	X	X
Tetrachloroethylene	0.2	X	X	X	X	X
Toluene	0.2	1.0	0.4	3.2	4.9	1.6
1,1,1-Trichloroethane	0.2	X	X	X	X	X
1,1,2-Trichloroethane	0.2	X	X	X	X	X
Trichloroethylene	0.2	X	X	X	X	X
Vinyl Chloride	4.0	X	X	X	X	X
Trichlorofluoromethane	0.4	X	X	X	X	X
Dichlorodifluoromethane	4.0	X	X	X	X	X

Zimpro Analytical No.

17882      17883      17884      17885      17889

X = Analyzed but not detected

Intf. = Interference

**TABLE 4**  
**WELL OW-3 CONTAMINATION AND**  
**GROUND WATER QUALITY STANDARDS**

CONSTITUENTS DETECTED (Detection Limit, ug/l)	PREVENTIVE ACTION LIMIT (ug/l)	ENFORCEMENT STANDARD (ug/l)	WELL OW -3 CONCENTRATIONS (ug/l)	
			Apr. 25	May 29
Benzene (0.2)	0.067	0.67	680	Intf. <sup>1</sup>
Ethylbenzene (0.2)	Not Established		28.2	ND <sup>2</sup>
Toluene (0.1)	68.6	343	2090	0.6
1,2-Dichloroethane (0.3)	0.05	0.5	5.1	ND
Trichloroethylene (0.1)	0.18	1.8	0.1	ND
Tetrachloroethylene (0.1)	0.10	1.0	0.2	ND

Notes: 1. Interference prevented quantitation  
 2. ND = Not Detected