

# GIS REGISTRY

## Cover Sheet

March, 2010  
(RR 5367)

### Source Property Information

BRRTS #:

ACTIVITY NAME:

PROPERTY ADDRESS:

MUNICIPALITY:

PARCEL ID #:

CLOSURE DATE:

FID #:

DATCP #:

COMM #:

#### \*WTM COORDINATES:

X:  Y:

*\* Coordinates are in  
WTM83, NAD83 (1991)*

#### WTM COORDINATES REPRESENT:

Approximate Center Of Contaminant Source

Approximate Source Parcel Center

Please check as appropriate: (BRRTS Action Code)

### Contaminated Media:

Groundwater Contamination > ES (236)

Contamination in ROW

Off-Source Contamination

*(note: for list of off-source properties  
see "Impacted Off-Source Property" form)*

Soil Contamination > \*RCL or \*\*SSRCL (232)

Contamination in ROW

Off-Source Contamination

*(note: for list of off-source properties  
see "Impacted Off-Source Property" form)*

### Land Use Controls:

N/A (Not Applicable)

Soil: maintain industrial zoning (220)

*(note: soil contamination concentrations  
between non-industrial and industrial levels)*

Structural Impediment (224)

Site Specific Condition (228)

Cover or Barrier (222)

*(note: maintenance plan for  
groundwater or direct contact)*

Vapor Mitigation (226)

Maintain Liability Exemption (230)

*(note: local government unit or economic  
development corporation was directed to  
take a response action)*

### Monitoring Wells:

Are all monitoring wells properly abandoned per NR 141? (234)

Yes  No  N/A

*\* Residual Contaminant Level*

*\*\*Site Specific Residual Contaminant Level*

This Adobe Fillable form is intended to provide a list of information that is required for evaluation for case closure. It is to be used in conjunction with Form 4400-202, Case Closure Request. The closure of a case means that the Department has determined that no further response is required at that time based on the information that has been submitted to the Department.

**NOTICE: Completion of this form is mandatory** for applications for case closure pursuant to ch. 292, Wis. Stats. and ch. NR 726, Wis. Adm. Code, including cases closed under ch. NR 746 and ch. NR 726. The Department will not consider, or act upon your application, unless all applicable sections are completed on this form and the closure fee and any other applicable fees, required under ch. NR 749, Wis. Adm. Code, Table 1 are included. It is not the Department's intention to use any personally identifiable information from this form for any purpose other than reviewing closure requests and determining the need for additional response action. The Department may provide this information to requesters as required by Wisconsin's Open Records law (ss. 19.31 - 19.39, Wis. Stats.).

BRRTS #: 02-41-115422

PARCEL ID #:

ACTIVITY NAME: WisDOT - West Allis Sign Shop

WTM COORDINATES: X: 683943 Y: 285193

**CLOSURE DOCUMENTS** (the Department adds these items to the final GIS packet for posting on the Registry)

- Closure Letter**
- Maintenance Plan** (if activity is closed with a land use limitation or condition (land use control) under s. 292.12, Wis. Stats.)
- Conditional Closure Letter**
- Certificate of Completion (COC)** for VPLE sites

**SOURCE LEGAL DOCUMENTS**

- Deed:** The most recent deed as well as legal descriptions, for the **Source Property** (where the contamination originated). Deeds for other, off-source (off-site) properties are located in the **Notification** section.  
*Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.*
- Certified Survey Map:** A copy of the certified survey map or the relevant section of the recorded plat map for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map. (lots on subdivided or platted property (e.g. lot 2 of xyz subdivision)).  
**Figure #:**                      **Title:**
- Signed Statement:** A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description accurately describes the correct contaminated property.

**MAPS** (meeting the visual aid requirements of s. NR 716.15(2)(h))

Maps must be no larger than 8.5 x 14 inches unless the map is submitted electronically.

- Location Map:** A map outlining all properties within the contaminated site boundaries on a U.S.G.S. topographic map or plat map in sufficient detail to permit easy location of all parcels. If groundwater standards are exceeded, include the location of all potable wells within 1200 feet of the site.  
*Note: Due to security reasons municipal wells are not identified on GIS Packet maps. However, the locations of these municipal wells must be identified on Case Closure Request maps.*  
**Figure #: 1                      Title: Site Locator Map**
- Detailed Site Map:** A map that shows all relevant features (buildings, roads, individual property boundaries, contaminant sources, utility lines, monitoring wells and potable wells) within the contaminated area. This map is to show the location of all contaminated public streets, and highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination exceeding a ch. NR 140 Enforcement Standard (ES), and/or in relation to the boundaries of soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Levels (SSRCL) as determined under s. NR 720.09, 720.11 and 720.19.  
**Figure #: 2                      Title: Site Map**
- Soil Contamination Contour Map:** For sites closing with residual soil contamination, this map is to show the location of all contaminated soil and a single contour showing the horizontal extent of each area of contiguous residual soil contamination that exceeds a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL) as determined under s. NR 720.09, 720.11 and 720.19.  
**Figure #: 2                      Title: Site Plan**

HI-1

BRRTS #: 02-41-115422

ACTIVITY NAME: WisDOT - West Allis Sign Shop

**MAPS (continued)**

**Geologic Cross-Section Map:** A map showing the source location and vertical extent of residual soil contamination exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL). If groundwater contamination exceeds a ch. NR 140 Enforcement Standard (ES) when closure is requested, show the source location and vertical extent, water table and piezometric elevations, and locations and elevations of geologic units, bedrock and confining units, if any.

Figure #: 3 Title: Site Plan

Figure #: 3 Title: Geologic Cross Section A-A'

**Groundwater Isoconcentration Map:** For sites closing with residual groundwater contamination, this map shows the horizontal extent of all groundwater contamination exceeding a ch. NR140 Preventive Action Limit (PAL) and an Enforcement Standard (ES). Indicate the direction and date of groundwater flow, based on the most recent sampling data.

*Note: This is intended to show the total area of contaminated groundwater.*

Figure #: 4 Title: Site Map

**Groundwater Flow Direction Map:** A map that represents groundwater movement at the site. If the flow direction varies by more than 20° over the history of the site, submit 2 groundwater flow maps showing the maximum variation in flow direction.

Figure #: 5 Title: Groundwater Flow Direction, September 2008

Figure #: Title:

**TABLES (meeting the requirements of s. NR 716.15(2)(h)(3))**

Tables must be no larger than 8.5 x 14 inches unless the table is submitted electronically. Tables must not contain shading and/or cross-hatching. The use of **BOLD** or *ITALICS* is acceptable.

**Soil Analytical Table:** A table showing remaining soil contamination with analytical results and collection dates.  
*Note:* This is one table of results for the contaminants of concern. Contaminants of concern are those that were found during the site investigation, that remain after remediation. It may be necessary to create a new table to meet this requirement.

Table #: 4 Title: Summary of Field-Screening and Laboratory Analysis Results of Soil Samples

**Groundwater Analytical Table:** Table(s) that show the most recent analytical results and collection dates, for all monitoring wells and any potable wells for which samples have been collected.

Table #: 2, 3 Title: Summary of Groundwater Laboratory Analysis Results

**Water Level Elevations:** Table(s) that show the previous four (at minimum) water level elevation measurements/dates from all monitoring wells. If present, free product is to be noted on the table.

Table #: 1 Title: Summary of Groundwater Elevations

**IMPROPERLY ABANDONED MONITORING WELLS**

For each monitoring well not properly abandoned according to requirements of s. NR 141.25 include the following documents.

*Note: If the site is being listed on the GIS Registry for only an improperly abandoned monitoring well you will only need to submit the documents in this section for the GIS Registry Packet.*

**Not Applicable**

**Site Location Map:** A map showing all surveyed monitoring wells with specific identification of the monitoring wells which have not been properly abandoned.

*Note: If the applicable monitoring wells are distinctly identified on the Detailed Site Map this Site Location Map is not needed.*

Figure #: A3 Title: Site Plan

**Well Construction Report:** Form 4440-113A for the applicable monitoring wells.

**Deed:** The most recent deed as well as legal descriptions for each property where a monitoring well was not properly abandoned.

**Notification Letter:** Copy of the notification letter to the affected property owner(s).

BRRTS #: 02-41-115422

ACTIVITY NAME: WisDOT - West Allis Sign Shop

## NOTIFICATIONS

### Source Property

- Letter To Current Source Property Owner:** If the source property is owned by someone other than the person who is applying for case closure, include a copy of the letter notifying the current owner of the source property that case closure has been requested.
- Return Receipt/Signature Confirmation:** Written proof of date on which confirmation was received for notifying current source property owner.

### Off-Source Property

Group the following information per individual property and label each group according to alphabetic listing on the "Impacted Off-Source Property" attachment.

- Letter To "Off-Source" Property Owners:** Copies of all letters sent by the Responsible Party (RP) to owners of properties with groundwater exceeding an Enforcement Standard (ES), and to owners of properties that will be affected by a land use control under s. 292.12, Wis. Stats.  
**Note:** Letters sent to off-source properties regarding residual contamination must contain standard provisions in Appendix A of ch. NR 726.  
**Number of "Off-Source" Letters:**
- Return Receipt/Signature Confirmation:** Written proof of date on which confirmation was received for notifying any off-source property owner.
- Deed of "Off-Source" Property:** The most recent deed(s) as well as legal descriptions, for all affected deeded **off-source property(ies)**. This does not apply to right-of-ways.  
**Note:** If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.
- Letter To "Governmental Unit/Right-Of-Way" Owners:** Copies of all letters sent by the Responsible Party (RP) to a city, village, municipality, state agency or any other entity responsible for maintenance of a public street, highway, or railroad right-of-way, within or partially within the contaminated area, for contamination exceeding a groundwater Enforcement Standard (ES) and/or soil exceeding a Residual Contaminant Level (RCL) or a Site Specific Residual Contaminant Level (SSRCL).  
**Number of "Governmental Unit/Right-Of-Way Owner" Letters:**



## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor  
Matthew J. Frank, Secretary  
Gloria L. McCutcheon, Regional Director

Southeast Region Headquarters  
2300 N. Dr. Martin Luther King, Jr. Drive  
PO Box 12436  
Milwaukee, Wisconsin 53212-0436  
Telephone 414-263-8500  
FAX 414-263-8716  
TTY 414-263-8713

November 10, 2010

Mr. Robert E. Pearson  
WisDOT BEES  
4802 Sheboygan Avenue 451  
Madison, WI 53952

Subject: Final Case Closure with Continuing Obligations  
WisDOT West Allis Sign Shop, 935 South 60th Street, West Allis, WI  
BRRTS#: 02-41-115422 (ERP) and 03-41-002838 (LUST); FID#: 241262120  
WisDOT#: 1009-03-50

Dear Mr. Wade:

On November 5, 2010, the Department of Natural Resources (the Department) reviewed your closure request for the Subject case. The Department reviews environmental remediation cases for compliance with state rules and statutes to maintain consistency in the closure of these cases. Conditional closure was granted on April 19, 2005 for the LUST site; and on October 20, 2009 for the ERP site.

Conditional closure of the LUST site required monitoring well abandonment and was contingent on closing the ERP case. Conditional closure of the ERP site was attained by completing additional subsurface investigation work and by delineating the soil and groundwater impacts on the southeast portion of the site. On July 22, 2010, the Department received documentation indicating that the requirements for final closure were met.

The Department reviewed the case closure request regarding the residual PAH and metals in soil and groundwater at this site. Based on the correspondence and data provided, it appears that your case meets the closure requirements in ch. NR 726, Wisconsin Administrative Code. The Department considers this case closed and no further investigation or remediation is required at this time. However, you and future property owners must comply with certain continuing obligations, as explained in this letter.

### GIS Registry

This site will be listed on the Remediation and Redevelopment Program's GIS Registry. The specific reasons are summarized below:

- Residual soil contamination exists that must be properly managed should it be excavated or removed.
- If a structural impediment that obstructed a complete site investigation or cleanup is removed or modified, additional environmental work must be completed.
- Pavement, an engineered cover or a soil barrier must be maintained over contaminated soil and the state must approve any changes to this barrier.
- Groundwater contamination is present above Chapter NR 140 enforcement standards.
- One or more monitoring wells were not located and must be properly abandoned if found.

This letter and information submitted with your closure request application will be included on the GIS Registry. To review the sites on the GIS Registry web page, visit the RR Sites Map page at <http://dnr.wi.gov/org/aw/rr/gis/index.htm>. If the property is listed on the GIS Registry because of remaining contamination and you intend to construct or reconstruct a well, you will need prior Department approval in accordance with s. NR 812.09(4)(w), Wis. Adm. Code. To obtain approval, Form 3300-254 needs to be completed and submitted to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line <http://dnr.wi.gov/org/water/dwg/3300254.pdf> or at the web address listed above for the GIS Registry.

### Closure Conditions

Please be aware that pursuant to s. 292.12 Wisconsin Statutes, compliance with the requirements of this letter is a responsibility to which you and any subsequent property owners must adhere. You must pass on the information about these continuing obligations to the next property owner or owners. If these requirements are not followed or if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, welfare, or the environment, the Department may take enforcement action under s. 292.11 Wisconsin Statutes to ensure compliance with the specified requirements, limitations or other conditions related to the property or this case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code. The Department intends to conduct inspections in the future to ensure that the conditions included in this letter, including compliance with referenced maintenance plans are met. A site map is enclosed as Exhibit A.

### Structural Impediments

The structural impediment existing at the time of cleanup is the existing sign shop building, which made complete investigation of the soil contamination on this property impracticable. Pursuant to s. 292.12(2)(b), Wis. Stats., if the structural impediments on this property that are described above are to be removed, the property owner shall notify the Department of Natural Resources before removal and conduct an investigation of the degree and extent of soil and groundwater contamination. The site features are shown on the site map.

If contamination is found at that time, the contamination shall be properly remediated in accordance with applicable statutes and rules. If soil in the specific locations described above is excavated, the property owner at the time of excavation must sample and analyze the excavated soil to determine if residual contamination remains. If sampling confirms that contamination is present the property owner at the time of excavation will need to determine whether the material is considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable statutes and rules. In addition, all current and future owners and occupants of the property need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken during excavation activities to prevent a health threat to humans.

### Engineered Cap Required

Pursuant to s. 292.12(2)(a), Wis. Stats., the pavement, building foundation and soil cover that currently exist in the location shown on the attached map shall be maintained in compliance with the attached maintenance plan in order to minimize the infiltration of water to prevent additional groundwater contamination that would violate the groundwater quality standards in ch. NR 140, Wis. Adm. Code, and to prevent direct contact with residual soil contamination that might otherwise pose a threat to human health.

If soil in the specific locations described above is excavated in the future, the property owner at the time of excavation must sample and analyze the excavated soil to determine if residual contamination remains. If sampling confirms that contamination is present, the property owner at the time of excavation will need to determine whether the material is considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable statutes and rules.

In addition, all current and future owners and occupants of the property need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard, and as a result, special precautions may need to be taken during excavation activities to prevent a health threat to humans.

The attached maintenance plan and inspection log are to be kept up-to-date and on-site. Please submit the inspection log to the Department only upon request.

### Prohibited Activities

The following activities are prohibited on any portion of the property where pavement, a building foundation, soil cover, engineered cap or other barrier is required as shown on the attached map, unless prior written approval has been obtained from the Wisconsin Department of Natural Resources: 1) removal of the existing barrier; 2) replacement with another barrier; 3) excavating or grading of the land surface; 4) filling on capped or paved areas; 5) plowing for agricultural cultivation; 6) construction or placement of a building or other structure.

### Residual Groundwater Contamination

Groundwater impacted by PAH contamination greater than the enforcement standards set forth in ch. NR140, Wis. Adm. Code, is present on this contaminated property. For more detailed information regarding the locations where groundwater samples have been collected (i.e., monitoring well locations) and the associated contaminant concentrations, refer to the Remediation and Redevelopment Program's GIS Registry at the RR Sites Map page at <http://dnr.wi.gov/org/aw/rr/gis/index.htm>.

### Vapor Migration

In addition, depending on site-specific conditions, construction over contaminated materials may also result in vapor migration of contaminants into enclosed structures or migration along newly placed underground utility lines. The potential for vapor inhalation and means of mitigation should be evaluated when planning any future redevelopment, and measures should be taken to ensure the continued protection of public health, safety, welfare and the environment at the site.

### Monitoring Wells that could not be Properly Abandoned

On August 9, 1994, your consultant, RMT, Inc., notified the Department that monitoring well MW-5 (Exhibit A) could not be located due to asphalt resurfacing. RMT reported that every reasonable effort was made to locate this well and the well was not found. MW-5 was located near the former USTs at the northwest portion of the site and the well is believed to be lost during asphalt resurfacing. As a result, MW-5 was not properly abandoned.

You need to understand that in the future you may be held liable for any problems associated with monitoring well MW-5 if it creates a conduit for contaminants to enter groundwater. If in the future this groundwater monitoring wells is found, the then-current owner of the property on which the well is located will be required to notify the Department, properly abandon the wells in compliance with the requirements in ch. NR 141, Wis. Adm. Code, and submit the required abandonment documentation to the Department. Because this monitoring well was not properly abandoned, the site will be listed on the DNR Remediation and Redevelopment GIS Registry.

### Dewatering Permits

The Department's Watershed Management Program regulates point source discharges of contaminated water, including discharges to surface waters, storm sewers, pits or to the ground surface. This includes discharges from construction related dewatering activities, including utility and building construction.

Based on the concentrations of contaminants remaining in groundwater at this location, it appears likely that dewatering activities would require a permit from the Watershed Management Program. If you or any other person plan to conduct such activities, you or that person must contact that program, and if necessary, apply for the necessary discharge permit. Additional information regarding discharge permits is available at <http://www.dnr.state.wi.us/org/water/wm/ww/>.

### Post-Closure Notification Requirements

In accordance with ss. 292.12 and 292.13, Wis. Stats., you must notify the Department before making changes that affect or relate to the conditions of closure in this letter. For this case, examples of changed conditions requiring prior notification include, but are not limited to:

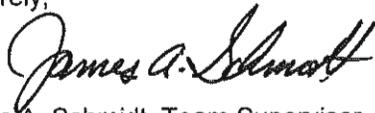
- Any activity or construction that results in the removal or modification of a structural impediment that obstructed a complete site investigation or cleanup.
- Disturbance, construction on, change or removal in whole or part of pavement, an engineered cover or a soil barrier that must be maintained over contaminated soil.
- One or more monitoring wells that were not located is found and properly abandoned.

Please send written notifications in accordance with the above requirements to Ms. Victoria Stovall, Wisconsin Department of Natural Resources, Southeast Region Office, 2300 North Martin Luther King Drive, Milwaukee, Wisconsin 53212.

The following DNR fact sheet, RR-819, "Continuing Obligations for Environmental Protection" has been included with this letter to help explain the property owner's responsibilities for continuing obligations on their property. If the fact sheet is lost, you may obtain a copy at <http://dnr.wi.gov/org/aw/rr/archives/pubs/RR819.pdf>.

The Department appreciates your efforts to restore the environment at this site. If you have any questions regarding this closure decision or anything outlined in this letter, please contact Jim Kasdorf at 414-263-8366

Sincerely,

A handwritten signature in black ink that reads "James A. Schmidt". The signature is written in a cursive style with a large initial "J".

James A. Schmidt, Team Supervisor  
Southeast Wisconsin Remediation & Redevelopment Program

Enclosure:

- Cap Maintenance Plan
- Exhibit A: Site Map
- RR 819

Cc:

- Mr. Dick Fish, RMT, Inc., 744 Heartland Trail, Madison, WI 53717
- Mr. Ken Wade, WisDOT, 141 NW Barstow Street, Waukesha, WI 53188
- WDNR SER Case File

## **SOIL AND PAVEMENT COVER AND BUILDING BARRIER MAINTENANCE PLAN**

May 6, 2009

Property Located at: 935 South 60<sup>th</sup> Street, West Allis, Wisconsin

WDNR BRRTS/Activity #:02-41-115422

Legal description: See attached

### ***Introduction***

This document is the Maintenance Plan for a pavement and soil cover and building barrier at the above-referenced property in accordance with the requirements of s. NR 724.13(2), Wisconsin Administrative Code. The maintenance activities relate to the existing slab-on-grade building and other paved and non-paved surfaces occupying the area over the contaminated soil on-site. The contaminated soil is impacted by polycyclic aromatic hydrocarbons (PAHs) and diesel range organics (DRO). The location of the paved and non-paved surfaces and building to be maintained in accordance with this Maintenance Plan, as well as the impacted soil are identified on the attached maps (contained in Exhibit A).

### ***Cover and Building Barrier Purpose***

The paved and non-paved surfaces and the building foundation over the contaminated soil serve as a barrier to prevent direct human contact with residual soil contamination that might otherwise pose a threat to human health. These paved and non-paved surfaces and building foundation also act as a partial infiltration barrier to minimize future soil-to-groundwater contamination migration that would violate the groundwater standards in ch. NR 140, Wisconsin Administrative Code. Based on the current and future use of the property, the barrier should function as intended unless disturbed.

### ***Annual Inspection***

The paved and non-paved surfaces and building foundation overlying the contaminated soil as depicted in Exhibit A will be inspected once a year, normally in the spring after all snow and ice is gone, for deterioration, cracks and other potential problems that can cause additional infiltration into or exposure to underlying soils. The inspections will be performed to evaluate damage due to settling, exposure to the weather, wear from traffic, increasing age and other factors. Any area where soils have become or are likely to become exposed will be documented.

A log of the inspections and any repairs will be maintained by the property owner and is included as Exhibit B, Cap Inspection Log. The log will include recommendations for necessary repair of any areas where underlying soils are exposed. Once repairs are completed, they will be documented in the inspection log. Copies of the inspection log will be available for review by the Wisconsin Department of Natural Resources ("WDNR").

### ***Maintenance Activities***

If problems are noted during the annual inspections or at any other time during the year, repairs will be scheduled as soon as practical. Repairs can include patching and filling

operations or they can include larger resurfacing or construction operations. In the event that necessary maintenance activities expose the underlying soil, the owner must inform maintenance workers of the direct contact exposure hazard and provide them with appropriate personal protection equipment ("PPE"). The owner must also sample any soil that is excavated from the site prior to disposal to ascertain if contamination remains. The soil must be treated, stored and disposed of by the owner in accordance with applicable local, state and federal law.

In the event the paved surfaces and/or the building overlying the contaminated soil are removed or replaced, the replacement barrier must be equally impervious. Any replacement barrier will be subject to the same maintenance and inspection guidelines as outlined in this Maintenance Plan unless indicated otherwise by the WDNR or its successor.

The property owner, in order to maintain the integrity of the paved surfaces and/or the building, will maintain a copy of this Maintenance Plan on-site and make it available to all interested parties (i.e. on-site employees, contractors, future property owners, etc.) for viewing.

#### ***Amendment or Withdrawal of Maintenance Plan***

This Maintenance Plan can be amended or withdrawn by the property owner and its successors with the written approval of WDNR.

#### Contact Information

May, 2009

#### Site Owner and Operator:

Wisconsin Department of Transportation

Contact: Mr. Ken Wade, Southeast Regional Hazardous Materials Engineer

141 NW Barstow Street

Waukesha, WI 53188

262-548-6733

#### Consultant:

Mr. Dan Haak, Engineer

744 Heartland Trl

Madison, WI 53717

608-831-4444

#### WDNR:

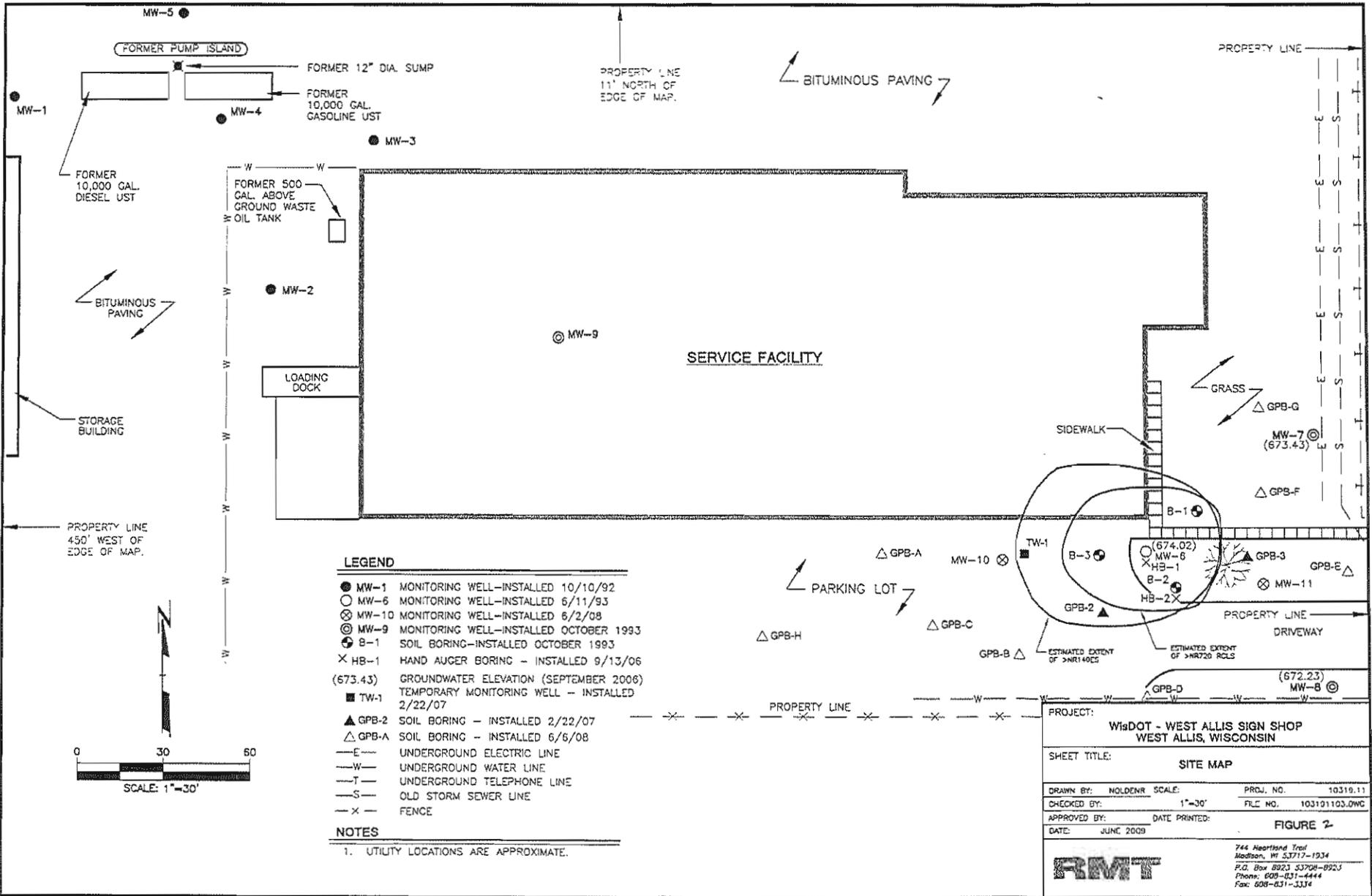
Ms. Victoria Stovall

2300 N. Martin Luther King Blvd

Milwaukee, WI 53212

414-263-8688

# Exhibit A



Z:\01\DATA  
 Drawing Name: 10319.11\10319.1103.dwg  
 Operator Name: nolder  
 Scale: 1"=30'

**Barrier INSPECTION LOG**

**WisDOT West Allis Sign Shop**  
**935 South 60<sup>th</sup> Street (southeast corner of building/site)**  
**West Allis, WI**  
**BRRTS #02-41-115422**

**Inspection Date:** \_\_\_\_\_  
**Inspector's Name:** \_\_\_\_\_  
**Inspector's Signature:** \_\_\_\_\_

<b>Condition of Cap</b>	
<b>Recommendation</b>	
<b>Have recommendations from previous inspection been implemented?</b>	



## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor  
Matthew J. Frank, Secretary  
Gloria L. McCutcheon, Regional Director

Southeast Region Headquarters  
2300 N. Dr. Martin Luther King, Jr. Drive  
PO Box 12436  
Milwaukee, Wisconsin 53212-0436  
Telephone 414-263-8500  
FAX 414-263-8716  
TTY 414-263-8713

October 20, 2009

Mr. Robert Pearson  
Wisconsin Department of Transportation  
4802 Sheboygan Avenue  
Madison, WI 53703

Subject: Conditional Closure, with requirements to achieve final closure, WisDOT West Allis Sign Shop, 935 South 60<sup>th</sup> Street West Allis, Wisconsin FID # 241, BRRTs # 02-41-115422

Dear Mr. Pearson:

On October 20, 2009 your request for closure of the case described above was reviewed by the Department of Natural Resources (Department). The Department reviews environmental remediation cases for compliance with state rules and statutes to maintain consistency in the closure of these cases. Information submitted to the Department for closure request include soil data with cap maintenance plan for GIS registry and groundwater data for ch. NR 140 Wis. Adm. Code – Preventive Action Limit exemption. After a careful review of the closure request, the department has determined that the various organic compounds, polycyclic aromatic hydrocarbons and metal contamination on the property resulting from previous site use appear to have been remediated to the extent practicable under site conditions. Your case will be closed under s. NR 726.05. Adm. Code if the following condition satisfied.

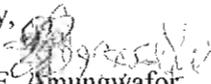
### MONITORING WELL ABANDONMENT

The monitoring wells at the site must be properly abandoned in compliance with ch. NR 141 Wis. Adm. Code. Documentation of well abandonment must be submitted to the Department on Form 3300-5B found at [www.dnr.state.wi.us/org/water/dwg/gw](http://www.dnr.state.wi.us/org/water/dwg/gw) or provided by the Department. When the indicated condition has been satisfied, please submit a letter to the program assistant about having met the condition and your case will be closed.

Your site will be listed on the DNR Remediation and Redevelopment GIS Registry of Closed Remediation Sites. Information that was submitted with your closure request application will be included on the registry. To review the sites on the GIS Registry Web page, visit <http://maps.dnr.state.wi.us/brrts>. Please be aware that the case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, or welfare or the environment.

We appreciate your efforts to restore the environment at this site to productive use. If you have any questions regarding this letter, please contact me at (414)263-8607.

Sincerely,

  
Binyoti F. Amungwafor  
Hydrogeologist

CC: Mr Dan Haak, RMT, Inc 744 Heartland Trail, Madison, WI 53708 - 5923  
Case File



## State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor  
Scott Hassett, Secretary  
Gloria L. McCutcheon, Regional Director

Southeast Region Headquarters  
2300 N. Dr. Martin Luther King, Jr. Drive  
Milwaukee, Wisconsin 53212-0436  
Telephone 414-263-8500  
FAX 414-263-8606  
TTY 711

April 19, 2005

Mr. Kevin J. Gehrman  
Wisconsin Department of Transportation  
4802 Sheboygan Avenue  
Madison, WI 53703

FID# 241262120  
BRRTS# 03-41-002838

Subject: Conditional Case Closure for West Allis Sign Shop, 935 South 60th Street, West Allis

Dear Mr. Gehrman:

On April 12, 2005, the Wisconsin Department of Natural Resources (Department) received your request for closure of the case described above. The Department reviews environmental remediation cases for compliance with state rules and statutes to maintain consistency in the closure of these cases. After careful review of the closure request, the Department has determined that the petroleum contamination on the site from the former underground storage tank (UST) system appears to have been investigated and remediated to the extent practicable under site conditions. Your case meets the screening criteria of s. NR 746.08, Wis. Adm. Code, and the requirements of ch. NR 726, Wis. Adm. Code and will be closed if the following conditions are satisfied:

- The monitoring wells at the site (MW-1 through MW-5) must be properly abandoned in compliance with ch. NR 141, Wis. Adm. Code. Documentation of well abandonment must be submitted to Ms. Victoria Stovall on Form 3300-5B found at [www.dnr.state.wi.us/org/water/dwg/gw/](http://www.dnr.state.wi.us/org/water/dwg/gw/) or provided by the Department of Natural Resources.
- Any remaining waste (soil piles, drilling spoil, and/or purge water) generated as part of site investigation or remediation activities must be removed from the site and disposed of or treated in accordance with Department of Natural Resources' rules. Please send a letter advising me that any remaining waste has been removed once that work is completed.

When the above conditions have been satisfied, please submit a letter to let me know that applicable conditions have been met, and your LUST case will be closed. Please note that the ERP case (02-41-115422) is not included in this conditional closure. That activity will be addressed in a separate correspondence.

If this is a PECFA site, section 101.143, Wis. Stats., requires that PECFA claimants seeking reimbursement of interest costs, for sites with petroleum contamination, submit a final reimbursement claim within 120 days after they receive a closure letter on their site. For claims not received by the PECFA Program within 120 days of the date of this letter, interest costs after 60 days of the date of this letter will not be eligible for PECFA reimbursement.

We appreciate your efforts to restore the environment at this site. If you have any questions regarding this letter, please contact me at (414) 263-8366.

Sincerely,

A handwritten signature in black ink, reading "Brenda H. Boyce". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Brenda H. Boyce, P.G.  
Hydrogeologist  
Bureau for Remediation & Redevelopment

c: Richard Fish – RMT, Inc.  
Ken Wade – WDOT – Dist. 2

SURVEY FOR  
DOT SERVICE FACILITY-MILWAUKEE  
STATE PROJECT 8202-18

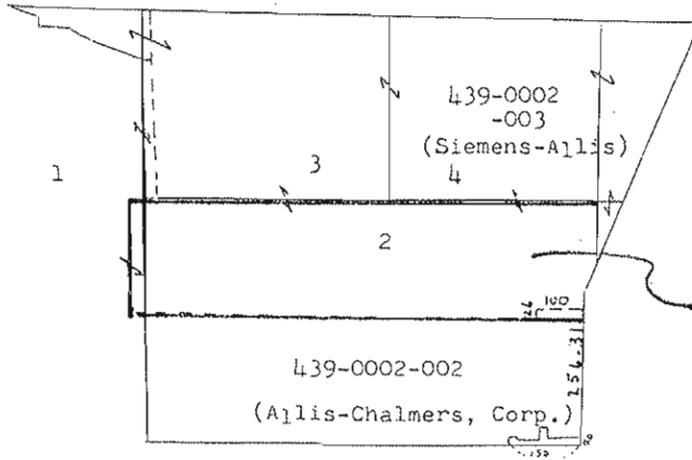
KNOW AS SOUTH 60TH STREET, IN CITY OF WEST ALLIS, WISCONSIN,  
THAT PART OF LOTS 1 AND 2 IN BLOCK 1 IN ASSESSOR'S PLAT NO. 270, BEING A  
SUBDIVISION OF A PART OF THE SW ¼, SE ¼ AND THE NE ¼ OF SECTION 34 AND A PART OF  
THE SW ¼ OF SECTION 35, T 7 N, R 21 E. IN THE CITY OF WEST ALLIS, MILWAUKEE  
COUNTY, WISCONSIN, WHICH IS BOUNDED AND DESCRIBED AS FOLLOWS  
BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT 2  
THENCE NORTH 00° 03' 20" WEST 236.41 FT. TO A POINT.  
THENCE SOUTH 89° 36' 00" WEST 950.18 FT. TO A POINT.  
THENCE SOUTH 00° 08' 33" WEST 256.41 FT. TO A POINT, SAID POINT BEING THE NORTHEAST  
CORNER OF LOT 1 IN BLOCK 8 IN SECOND CONTINUATION OF SOLDIER'S HOME HEIGHTS  
SUBDIVISION, BEING A SUBDIVISION OF A PART OF THE SE ¼ OF SECTION 14., T 7 N, R 21 E.  
IN THE CITY WEST ALLIS, MILWAUKEE COUNTY, WISCONSIN:  
THENCE NORTH 89° 36' 00" EAST ALONG THE NORTH LINE OF SECOND CONTINUATION OF  
SOLDIER'S HOME HEIGHTS SUBDIVISION 951.06 FT, TO THE POINT OF BEGINNING,  
CONTAINING 5.595 ACRES

MAY 11, 1980

SURVEY NO. 140754-5-2

ASSESSORS PLAT NO 270

Blk 1



Wisconsin Department of Transportation

EASEMENT... Subject to.....439-0002-003  
 ....Inclgd..... 0002-002



**Address:** 935 S 60 ST  
**Tax Key Number:** 439-0002-004  
**Property Type:** Exempt state  
**Neighborhood:** Six Points  
**Neighborhood Group:** Exempt  
**Zip Code:** 53214  
**Zoning:** M1: Manufacturing District  
**Water/Sewer Account(s):** 2275-2174  
**GeoWeb Property Map:** Map  
**Legal Description:** ASSESSORS PLAT NO 270 PT OF LOTS 1 & 2 BLK 1 COM AT SE COR SD LOT 2 TH N 256.41 FT W 950.18 FT S 256.41 FT TH E 951.06 FT TO BEG INCLDG EASEMENT & EXC PT FOR ST

UNOFFICIAL COPY

PLAT PAGE NO. 439 QUARTER SECTION TAXING UNIT City of West Allis R #1 K-78003 004 439 0002-002 439-0002

REEL	IMAGE	DOC. NO.	DOC.	DATE OF DEED	GRANTOR AND GRANTEE	DATE PROC.	BY
					<del>Allis Chalmers Manufacturing Co.</del>		
1519	588	5608214	W.D.	3/31/83	Allis-Chalmers Corp. to State of Wisconsin, Department of Transportation (1)	8/3/83	JSR
1611	169	5691876	Q.C.D.	1/4/84	the State of Wisconsin, Department of Transportation (for st purposes) to the City of West Allis (2)	4/3/84	JSR
1673	1493	5746535	Q.C.D.	7/26/84	State of Wisconsin Dept. of Transp. to City of West Allis (Only for public Street purposes)	9/17/84	BCD (3)
2047	1885	6025294	Easement	2/5/87	Wis. Dept. of Transp. to City of West Allis (20 ft easement)	4/24/87	BCD
1974	818	5973560	Easement	9/12/86	Wis. Dept. of Transportation to Wisconsin Electric Power Co. 11/21/86 BCD		
1719	605	5782075	Easement	10/22/84	Wis. Dept. of Transportation to & Wisconsin Bell, Inc. Wisconsin Electric Power Co.	2/12/85	BCD

For part conveyed for road see card attached.

~~TR-DESC: Assessors Plat No 270 Lots 2-3-& 4-Blk 1-exc-pt-for rd~~

Pt subs conveyed on Key No. 439 0002 001.

Pt separately assessed on Key No. 439 0001 003.

~~TR-DESC: Assessors Plat No 270 Lot 2 Blk 1 ex Doc No 5174761 Includg Easement~~

(#439.0001.003)

For PARKING LOT ACCESS EASEMENT...See #439-0002-003.

See EASEMENT SKETCH attached....

(1) That pt of Lots 1, 2, in Block 1, in Assessor's Plat No 270,...desc as follows: Beg. at the SE cor sd Lot 2; th N 00° 03' 20" W 256.41 ft; th S 89° 36' W 950.18 ft; th S 00° 08' 33" W 256.41 ft to a pt, sd pt being the NE cor of Lot 1 Blk 8 in Second Continuation of Soldier's Home Heights Subd.; th N 89° 36' E 951.06 ft to POB. ( Also has a desc of easement above see Key No. 439-0002-003)

~~1984 TR-DESC: Assessors Plat No 270 Pt of Lots 1 & 2 Blk 1 Com at SE cor sd Lot 2 th N 256.41 ft W 950.18 ft S 256.41 ft th E 951.06 ft to beg Includg Easement~~

( O V E R )

# WisDOT West Allis Sign Shop

439-0002-008  
 '08 Total Value \$10077700  
 Fair Market \$10620861  
 Total Net Tax \$239812.94

439-0002-007  
 '08 Total Value \$2804700  
 Fair Market \$2955866  
 Total Net Tax \$66717.71

439-0002-008  
 '08 Total Value \$10077700  
 Fair Market \$10620861  
 Total Net Tax \$239812.94

901

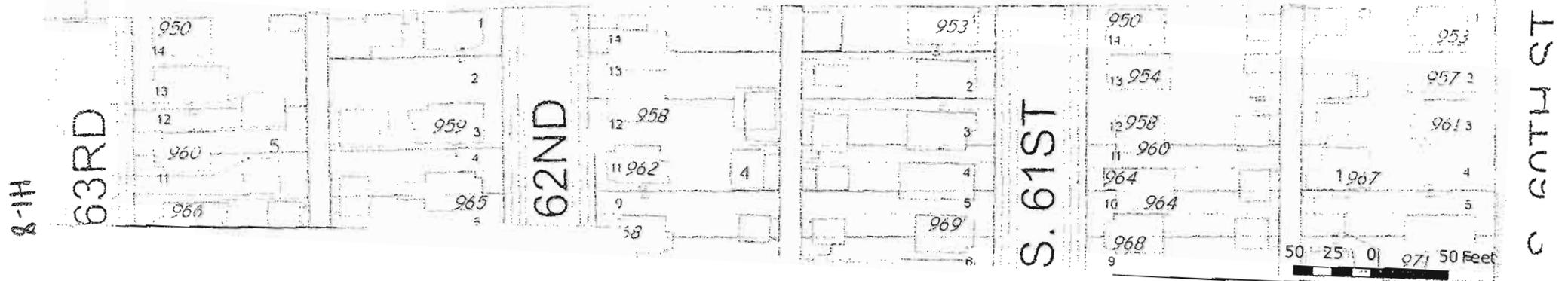
439-0002-004  
 '08 Total Value \$0  
 Fair Market \$  
 Total Net Tax \$

ASSESSORS PLAT NO. 270

439-0002-004  
 '08 Total Value \$0  
 Fair Market \$  
 Total Net Tax \$

LOT 2  
 935

SECOND CONTINUATION OF SOLDIERS  
 HOME HEIGHTS SUBD.



Exempt Property Information



**Address:** 935 S 60 ST  
**Tax Key Number:** 439-0002-004  
**Property Type:** Exempt state  
**Neighborhood:** Six Points  
**Neighborhood Group:** Exempt  
**Zip Code:** 53214  
**Zoning:** M1: Manufacturing District  
**Water/Sewer Account(s):** 2275-2174  
**GeoWeb Property Map:** Map  
**Legal Description:** ASSESSORS PLAT NO 270 PT OF LOTS 1 & 2 BLK 1 COM AT SE COR SD LOT 2 TH N 256.41 FT W 950.18 FT S 256.41 FT TH E 951.06 FT TO BEG INCLDG EASEMENT & EXC PT FOR ST  
**Lot Dimensions:** Irregular  
**Lot Acreage:** 5.551  
**TIF District:**  
**Census Tract:** 100200  
**Census Group:** 100200BG1  
**Census Block:** 1000  
**Section:** 34  
**Township:** 7  
**Range:** 21  
**Quarter Section:** 439  
**Longitude:** -87.9877875  
**Latitude:** 43.0219737  
**Northing:** 378966.2303150  
**Easting:** 2538063.3641732

## Certification Statement

As the designated representative for the Wisconsin Department of Transportation (WisDOT), and at the request of RMT, Inc., I am submitting this letter as written certification of the legal descriptions set forth in the GIS registry package.

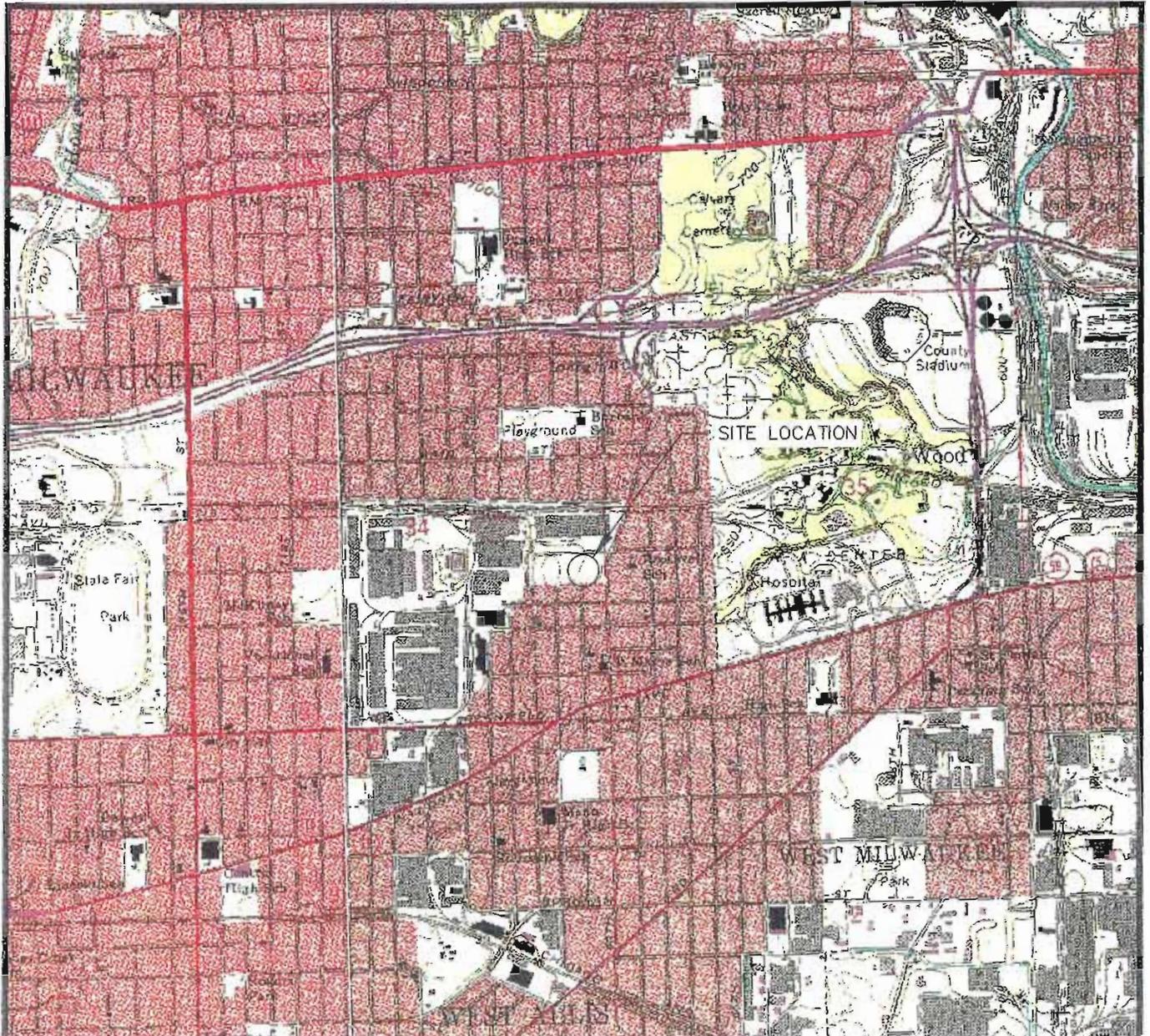
I certify that, to the best of my knowledge, the legal descriptions provided in the GIS package submitted by RMT, Inc., are complete and accurate with respect to the properties impacted by the release at the WisDOT West Allis Sign Shop.

Ken Wade

Ken Wade  
Wisconsin Department of Transportation

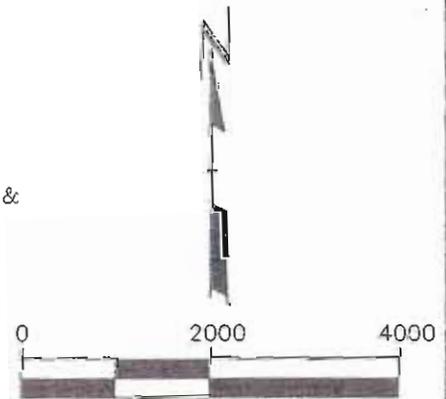
4/18/07

Date



**STATE LOCATION**

SOURCE: BASE MAP FROM WAUWATOSA & MILWAUKEE 7.5 MIN. USGS QUADRANGLE.



SCALE: 1" = 2000'

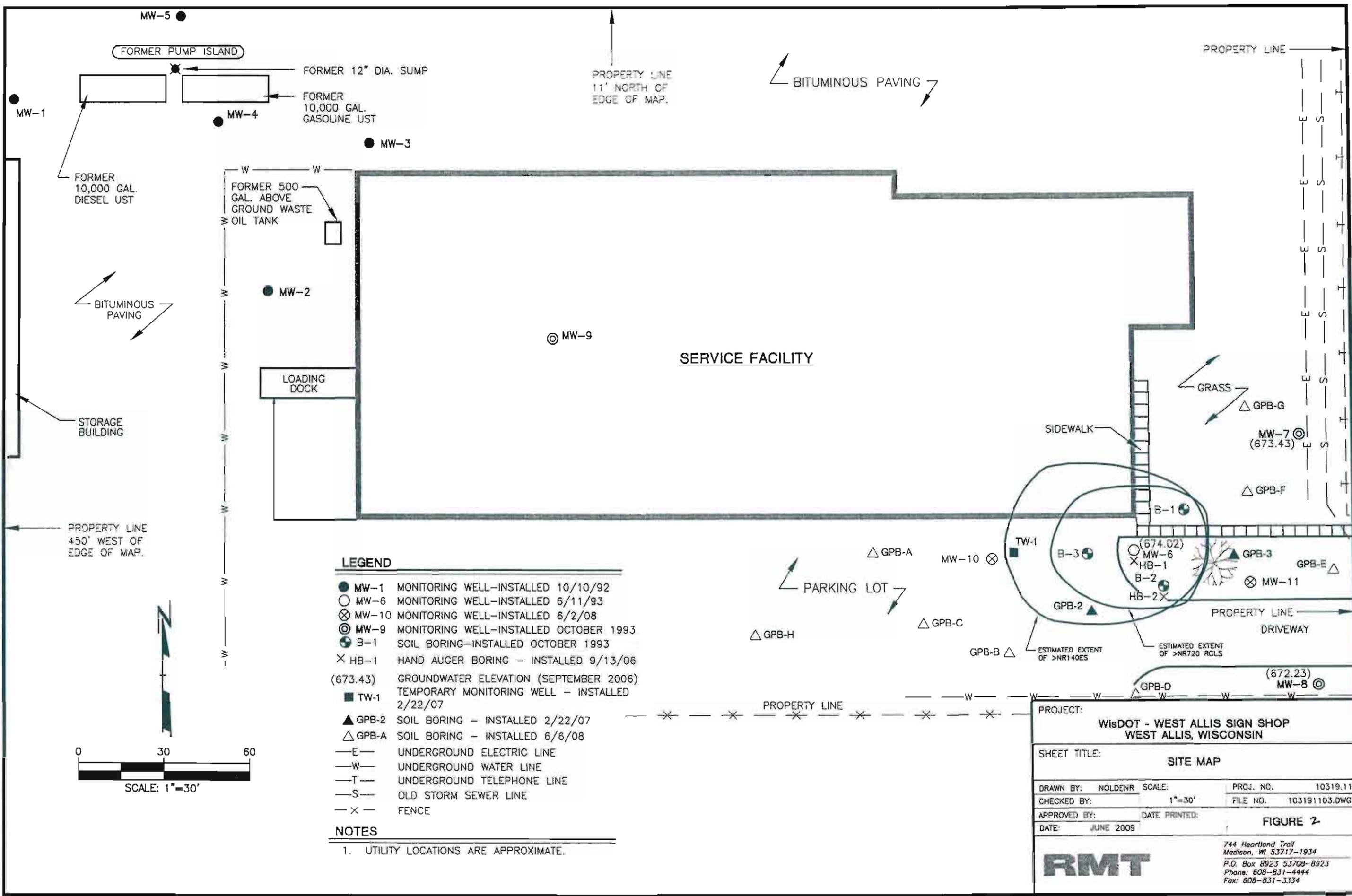


**WisDOT - WEST ALLIS SIGN SHOP**  
**WEST ALLIS, WISCONSIN**  
**SITE LOCATOR MAP**

DRAWN BY:	MITZA
APPROVED BY:	DH
PROJECT NO.	10319.38
FILE NO.	103190803.DWG
DATE:	OCTOBER 2006

**FIGURE 1**

PLOT DATA  
 Drawing Name: J:\10319\11\103191103.dwg  
 Operator Name: naldenr  
 Scale: 1"=30'



- LEGEND**
- MW-1 MONITORING WELL—INSTALLED 10/10/92
  - MW-6 MONITORING WELL—INSTALLED 6/11/93
  - ⊗ MW-10 MONITORING WELL—INSTALLED 6/2/08
  - ⊙ MW-9 MONITORING WELL—INSTALLED OCTOBER 1993
  - ⊕ B-1 SOIL BORING—INSTALLED OCTOBER 1993
  - × HB-1 HAND AUGER BORING — INSTALLED 9/13/06
  - (673.43) GROUNDWATER ELEVATION (SEPTEMBER 2006)
  - TW-1 TEMPORARY MONITORING WELL — INSTALLED 2/22/07
  - ▲ GPB-2 SOIL BORING — INSTALLED 2/22/07
  - △ GPB-A SOIL BORING — INSTALLED 6/6/08
  - E— UNDERGROUND ELECTRIC LINE
  - W— UNDERGROUND WATER LINE
  - T— UNDERGROUND TELEPHONE LINE
  - S— OLD STORM SEWER LINE
  - X— FENCE

**NOTES**

- UTILITY LOCATIONS ARE APPROXIMATE.

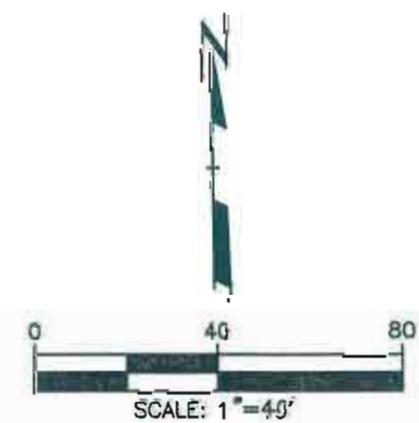
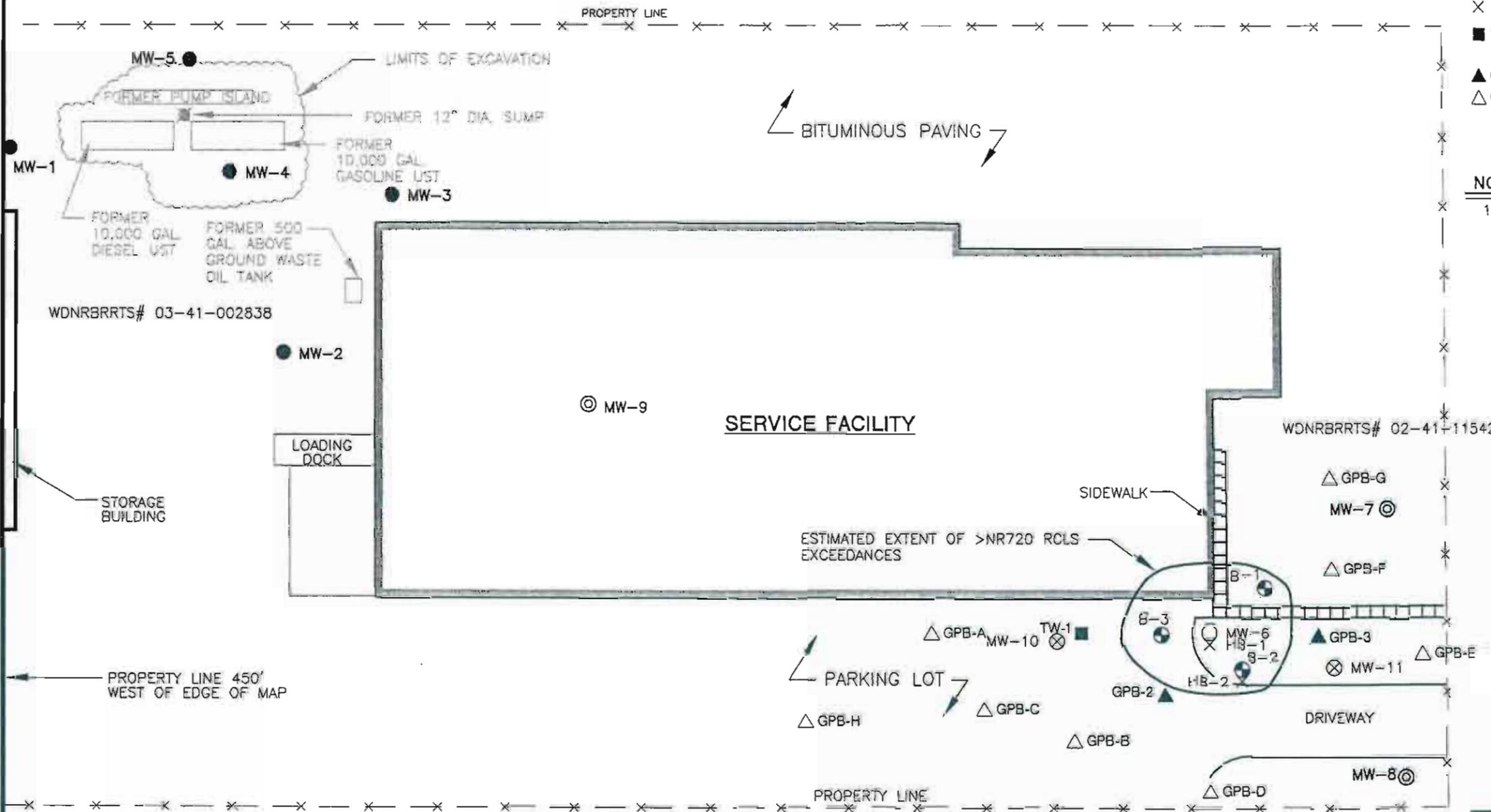
PROJECT:		WisDOT - WEST ALLIS SIGN SHOP WEST ALLIS, WISCONSIN	
SHEET TITLE:		SITE MAP	
DRAWN BY:	NOLDENR	SCALE:	1"=30'
CHECKED BY:		PROJ. NO.:	10319.11
APPROVED BY:		FILE NO.:	103191103.DWG
DATE:	JUNE 2009	DATE PRINTED:	FIGURE 2
<b>RMT</b>		744 Heartland Trail Madison, WI 53717-1934	
		P.O. Box 8923 53708-8923 Phone: 608-831-4444 Fax: 608-831-3334	

**LEGEND**

- MW-1 MONITORING WELL—INSTALLED 10/10/92
- MW-6 MONITORING WELL—INSTALLED 6/11/93
- ⊗ MW-10 MONITORING WELL—INSTALLED 6/2/08
- ⊙ MW-9 MONITORING WELL—INSTALLED OCTOBER 1993
- ⊕ B-1 SOIL BORING—INSTALLED OCTOBER 1993
- x- FENCE
- x HB-1 HAND AUGER BORING - INSTALLED 9/13/06
- TW-1 TEMPORARY MONITORING WELL - INSTALLED 2/22/07
- ▲ GPB-2 SOIL BORING - INSTALLED 2/22/07
- △ GPB-A SOIL BORING - INSTALLED 6/6/08

**NOTES**

1. UTILITY LOCATIONS ARE APPROXIMATE.



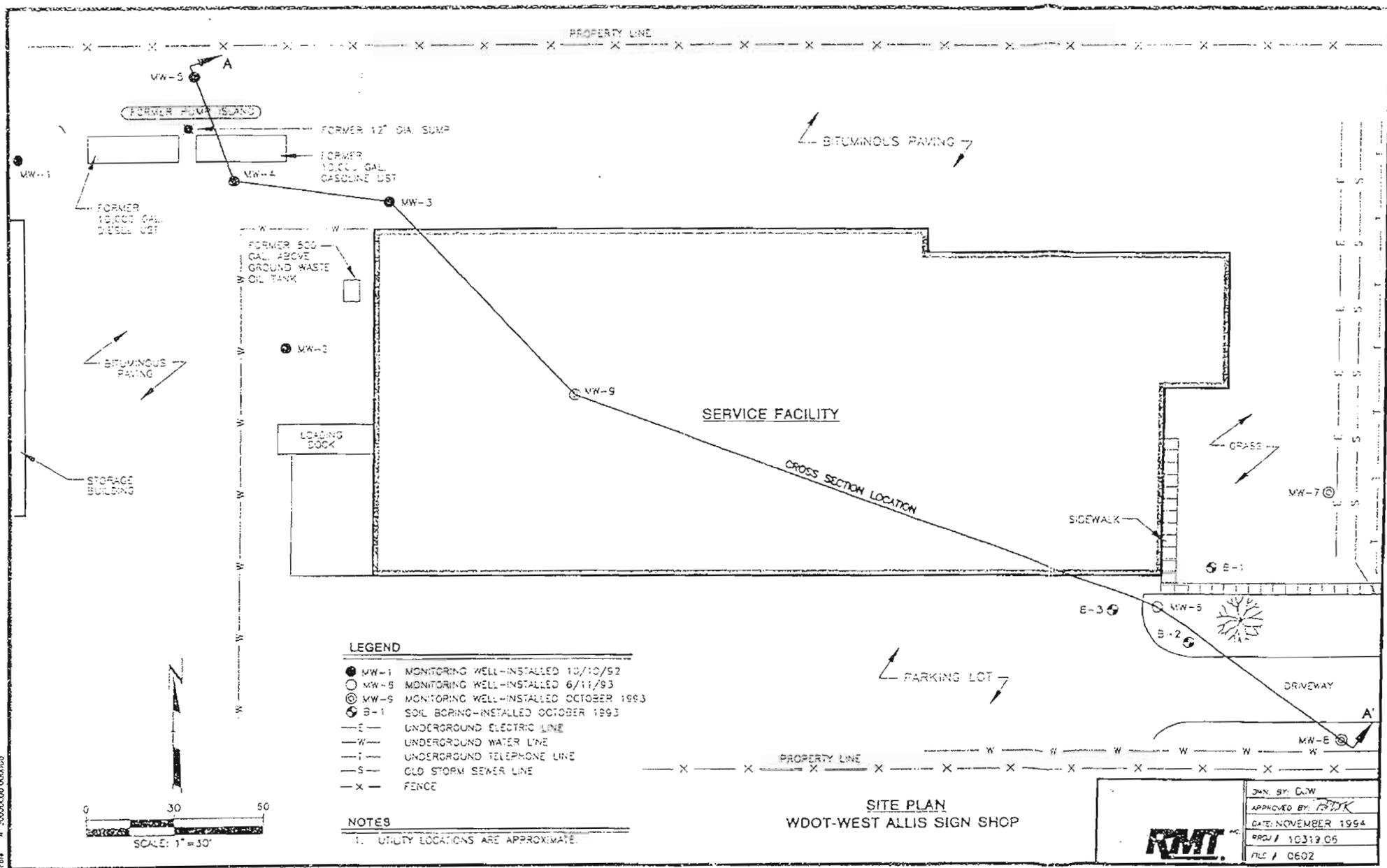
PROJECT: WisDOT - WEST ALLIS SIGN SHOP	
WEST ALLIS, WISCONSIN	
SHEET TITLE: SITE PLAN	
DRAWN BY: NOLDENR	SCALE: 1"=40'
CHECKED BY:	FILE NO. 103191102.DWG
APPROVED BY:	DATE PRINTED:
DATE: JUNE 2009	FIGURE 2-
744 Heartland Trail Madison, WI 53717-1935 P.O. Box 8923 53708-8923 Phone: 608-831-4444 Fax: 608-831-3334	

PLOT DATA  
 Drawing Name: j:\10319\11\103191102.dwg  
 Operator Name: noldenr  
 Scale: 1"=40'

41-13

Drawing Title - E:\10319\_06\01  
 Plot File - P:\0602.dwg  
 Scale - 1/8"=1'-0"

11-11

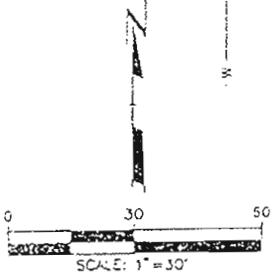


**LEGEND**

- MW-1 MONITORING WELL—INSTALLED 10/10/92
- MW-5 MONITORING WELL—INSTALLED 6/11/93
- ⊙ MW-9 MONITORING WELL—INSTALLED OCTOBER 1993
- ⊕ B-1 SOIL BORING—INSTALLED OCTOBER 1993
- E— UNDERGROUND ELECTRIC LINE
- W— UNDERGROUND WATER LINE
- T— UNDERGROUND TELEPHONE LINE
- S— OLD STORM SEWER LINE
- X— FENCE

**NOTES**

1. UTILITY LOCATIONS ARE APPROXIMATE.

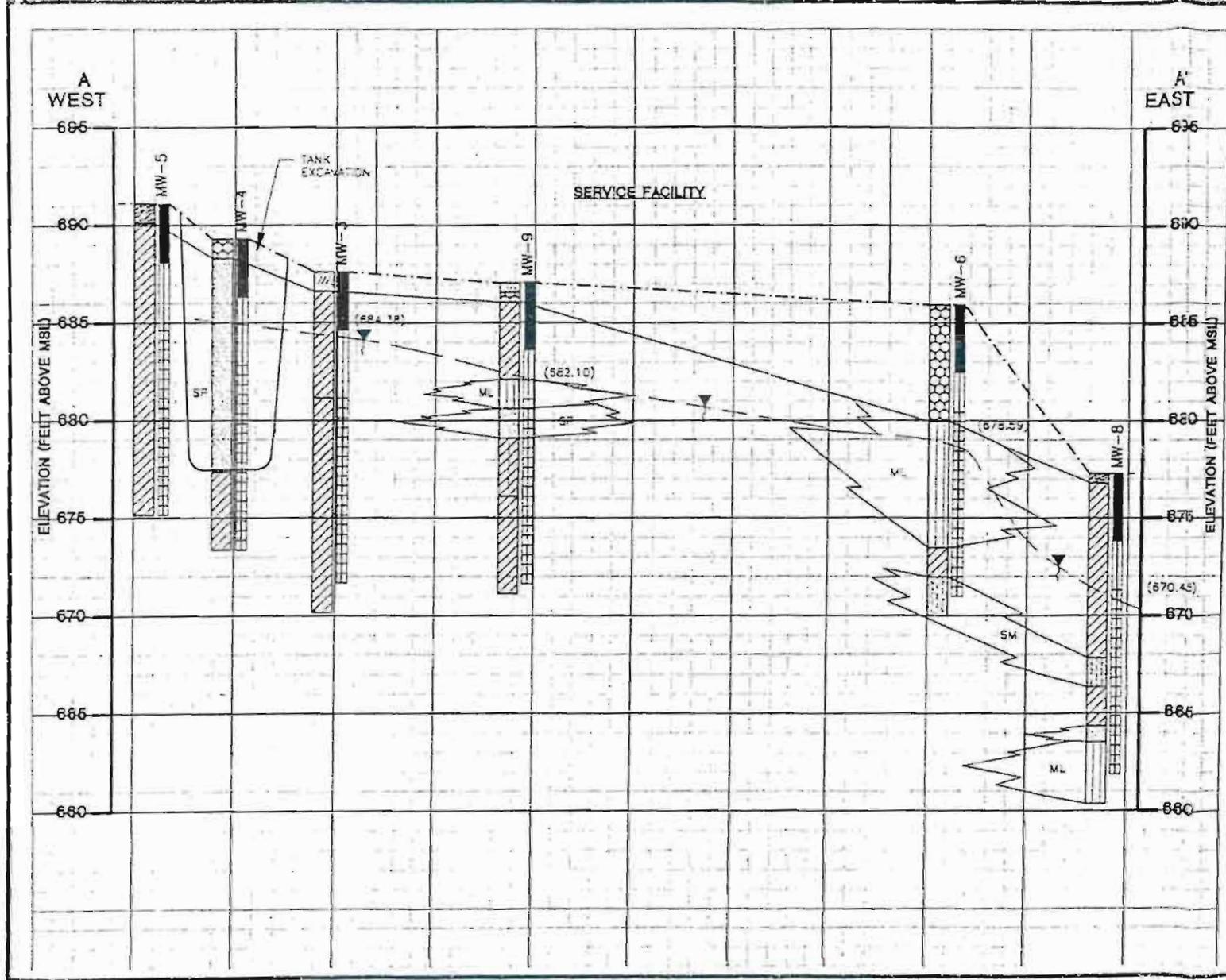


**SITE PLAN**  
**WDOT-WEST ALLIS SIGN SHOP**

<b>RMT</b>	DRN. BY: C.W.
	APPROVED BY: <i>ADK</i>
	DATE: NOVEMBER 1994
	PROJ / 10319 05
FILE / 0602	

FIGURE 3

DATE: 10/19/54  
 DRAWN BY: DJW  
 CHECKED BY: GVK  
 SCALE: 1"=50'  
 SHEET: 0500000



**LEGEND**

- - - - - EXISTING GROUND SURFACE  
 - - - - - STRATIGRAPHIC BOUNDARY, DASHED WHERE INFERRED  
 - - - - - WATER TABLE ELEVATION  
 - - - - - PIEZOMETRIC SURFACE

**WELL CONSTRUCTION**

[Symbol] WELL STICK-UP  
 [Symbol] WELL SEAL  
 [Symbol] (675.59) WATER LEVEL ELEVATION  
 [Symbol] SCREENED INTERVAL

**LITHOLOGIC UNITS**

[Symbol] CLAY (CL)  
 [Symbol] SILT (ML)  
 [Symbol] SILTY CLAY (CL/ML)  
 [Symbol] SILTY SAND (SM)  
 [Symbol] SAND (SP)  
 [Symbol] GRAVEL (GW)  
 [Symbol] FILL (F)  
 [Symbol] TOPSOIL (T)  
 [Symbol] CONCRETE, ASPHALT (CA)

- NOTES**
- ELEVATION REFERENCED TO USGS MEAN SEA LEVEL DATUM, 1929.
  - FOR DETAILED LITHOLOGIC DESCRIPTIONS, SEE BORING LOGS, APPENDIX A. FOR WELL CONSTRUCTION DETAILS, SEE APPENDIX A.
  - WATER TABLE MEASURED AUGUST 6, 1954.
  - SEE FIGURE 2 FOR LOCATION OF CROSS SECTION.
- HORIZONTAL SCALE: 1"=50'  
 VERTICAL SCALE: 1"=5'

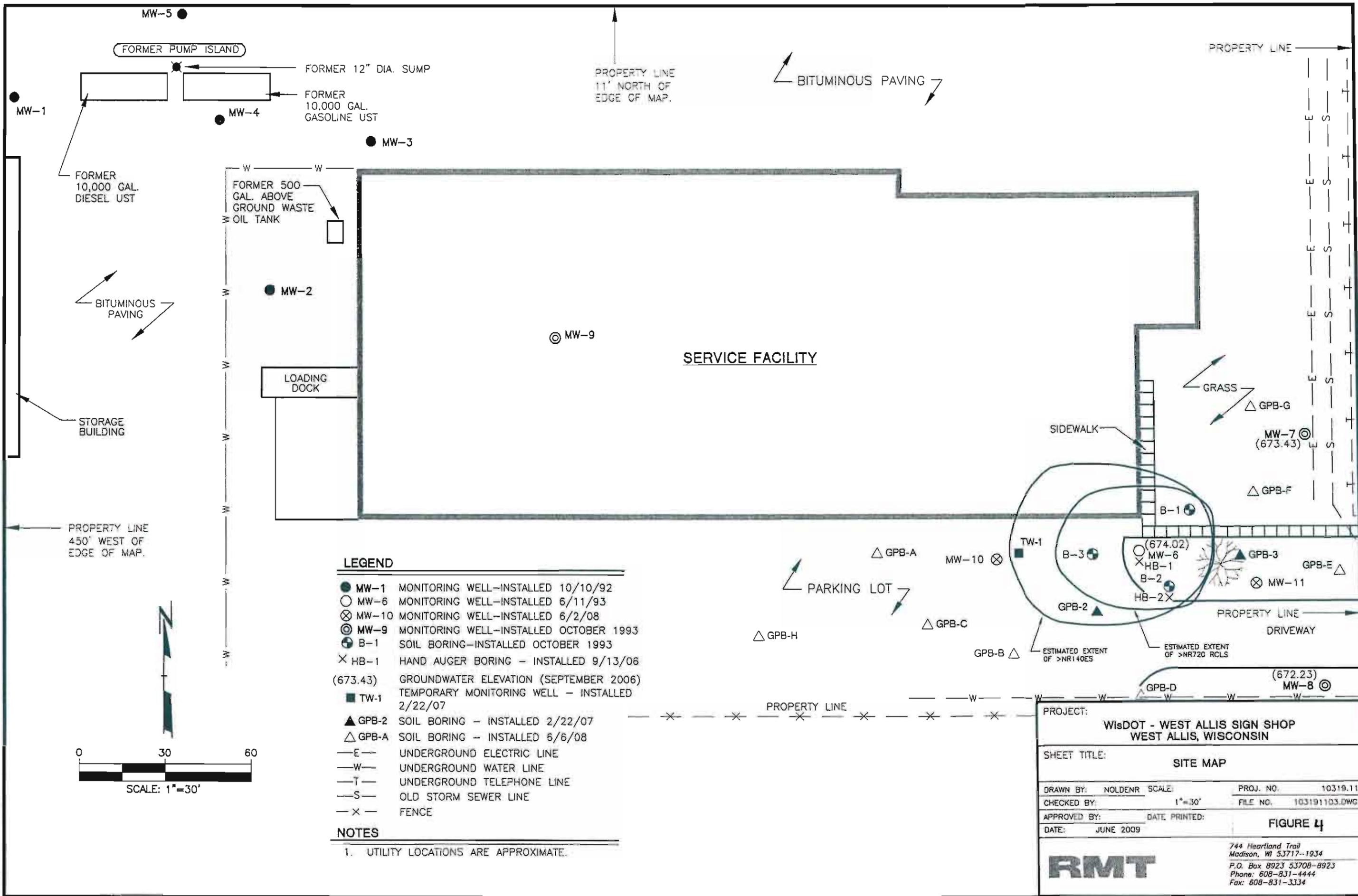
**GEOLOGIC CROSS SECTION A-A'**  
**WDOT-WEST ALLIS SIGN SHOP**


 DRAWN BY: DJW  
 APPROVED BY: GVK  
 DATE: NOVEMBER 1954  
 SCALE: 10/19/54  
 FILE: 0605

Figure 3

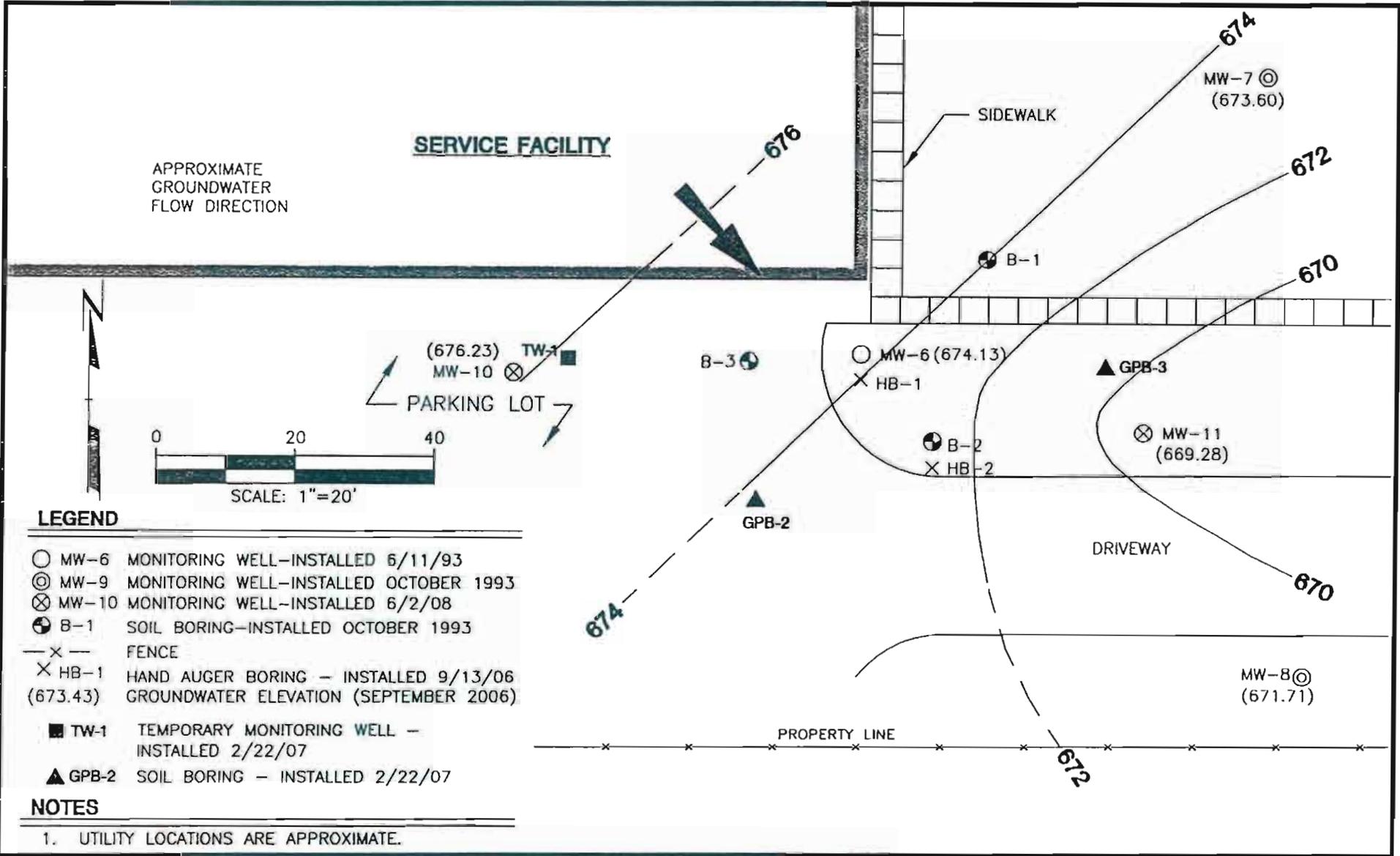
51-11

PLOT DATA  
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 Operator Name: noldenr  
 Scale: 1"=30'



**PLOT DATA**

Drawing Name: J:\10319\10\103191002.dwg  
 Operator Name: METZA  
 Scale: 1"=20'



J:\10319\10\103191002.dwg Wednesday May 06, 2009 04:15 PM METZA



**WisDOT - WEST ALLIS SIGN SHOP**  
**WEST ALLIS, WISCONSIN**

**GROUNDWATER FLOW DIRECTION, SEPTEMBER 2008**

DRAWN BY:	METZA
APPROVED BY:	
PROJECT NO.	10319.10
FILE NO.	103191002.DWG
DATE:	MAY 2009

**FIGURE 5**

Table 4  
Summary of Field-Screening and Laboratory Analysis Results of Soil Samples  
WisDOT West Allis Sign Shop

Sample I.D.	Sample Depth	PID Reading <sup>(1)</sup>	DRO (mg/kg)	Total PVOCs (mg/kg)
B-1,2	3.5 - 5.5	5	310 <sup>(2)</sup>	0.012
B-1,3	6 - 8	< 2	72 <sup>(2)</sup>	ND
B-2,1	1 - 3	3	600 <sup>(2)</sup>	0.004
B-2,2	3.5 - 5.5	< 2	55 <sup>(2)</sup>	ND
B-3,2	3.5 - 5.5	2	4,300 <sup>(2)</sup>	ND
B-3,4	8.5 - 10.5	< 2	< 4.6	ND
MW-6(2) <sup>(3)</sup>	3.5 - 5.5	--	2,200 <sup>(2)</sup>	0.014
MW-6(3) <sup>(3)</sup>	6 - 8	--	430 <sup>(2)</sup>	0.009
MW-7,1	1 - 3		< 4.5	0.002
MW-7,2	3.5 - 5.5	< 2	< 4.3	ND
MW-8,1	1 - 3	< 2	< 5.0	ND
MW-8,2	3.5 - 5.5	< 2	< 4.7	ND
MW-9,1	1 - 3	< 2	9.0	0.001
MW-9,2	3.5 - 5.5	< 2	< 4.2	ND
HB-1,2 <sup>(4)</sup>	1 - 2	< 1	51 <sup>(5)</sup>	ND
HB-2,2 <sup>(4)</sup>	1 - 2	< 1	77 <sup>(5)</sup>	ND

Notes:

- <sup>(1)</sup> Headspace analysis was conducted with a portable PID during field screening. Units are in instrument units (parts per million by volume), based on isobutylene calibration.
- <sup>(2)</sup> Review of DRO chromatographs reveals that there is no diesel fuel in the DRO. Sample B-1,2 contained 96 mg/kg total PAHs.
- <sup>(3)</sup> Soil samples from MW-6 contained no detectable concentrations of GRO, and samples MW-6(2) and MW-6(3) contained 36 mg/kg and 82 mg/kg lead, respectively.
- <sup>(4)</sup> Samples were collected on 9/13/06.
- <sup>(5)</sup> Sample received in container not appropriate for test method.
- Not analyzed.  
ND = Not detected.

Summary of Soil Laboratory Analysis Results  
 WisDOT West Allis Sign Shop  
 June 6, 2008

PARAMETER	UNITS	NR 720 DIRECT CONTACT RCL - INDUSTRIAL	GROUNDWATER PATHWAY RCL <sup>(1)</sup>	DIRECT CONTACT PATHWAY RCL - INDUSTRIAL <sup>(1)</sup>	MW-10 ASPHALT	MW-10	MW-11	GPB-A	GPB-B	GPB-C	GPB-D	GPB-E	GPB-F	GPB-F	GPB-G	GPB-G	GPB-H	GPB-H
					0 - 1.5	1.6 - 1.5	5.5 - 6.0	1.0 - 1.5	3.0 - 3.5	2.0 - 3.0	1.2 - 2.5	2.0	0.5 - 1.0	3.5 - 4.0	2.0 - 3.0	6.0	1.5 - 2.0	4.0 - 5.0
<i>Metals</i>																		
Arsenic	mg/kg	1.6	n/a	n/a	4.5	7.4	5.1	12.7	10	8	7.7	8.2	18.1	5.3	7	5.3	8.5	5
Barium	mg/kg	NE	n/a	n/a	31.9	83.3	89.1	54.9	54.2	52.5	63.8	93	60.6	41.6	66.3	86.5	76.7	62.6
Cadmium	mg/kg	510	n/a	n/a	0.083 J	0.27 J	0.21 J	<0.0084	0.059 J	0.19 J	0.23 J	0.15 J	0.33	0.10 J	0.10 J	<0.0077	0.17 J	0.042 J
Chromium	mg/kg	200	n/a	n/a	11.4	19.3	22.6	8.4	11.3	14.8	19.3	25.8	16.1	12.2	19.4	29.8	23	22.5
Lead	mg/kg	500	n/a	n/a	13.4	72.8	29.2	188	157	57	52.4	46.1	87.1	20.6	29.4	11.6	27.7	9.4
Mercury	mg/kg	NE	n/a	n/a	0.051	0.056	0.056	0.081	0.055	0.19	0.075	0.046	0.064	0.055	0.098	0.049	0.067	0.039
Selenium	mg/kg	NE	n/a	n/a	0.097 J	0.29 J	0.38 J	0.60 J	0.61 J	0.53 J	0.26 J	0.12 J	0.21 J	0.18 J	0.22 J	<0.069	0.38 J	<0.088
Silver	mg/kg	NE	n/a	n/a	0.013 J	0.12 J	0.065 J	0.063 J	0.14 J	0.11 J	0.095 J	0.10 J	0.16 J	0.070 J	0.077 J	<0.014	0.13 J	0.050 J
<i>PAHs</i>																		
1-Methylnaphthalene	mg/kg	n/a	23	7,000	9.2 J	0.47 J	0.0179 J	0.435 J	<1.7	3.21 J	<0.43	0.0204	0.690 J	<0.574	2.68 J	<0.0017	1.26 J	0.005 J
2-Methylnaphthalene	mg/kg	n/a	20	40,000	5.44 J	0.411 J	0.0252 J	0.599	<1.78	0.454	<0.45	0.0234	0.721 J	<0.600	3.14 J	<0.0017	1.94	0.0086 J
Acenaphthene	mg/kg	n/a	38	60,000	50.2	3.79 J	0.0911 J	0.0906 J	<1.94	0.254 J	0.591 J	0.0087 J	7.66	3.990 J	26.1	0.0036 J	0.807 J	<0.0019
Acenaphthylene	mg/kg	n/a	0.7	360	<3.77	2.34 J	<0.011	1.03	22.2	0.874	7.91	0.0179 J	3.43 J	1.170 J	2.03 J	<0.0021	10.5	0.0147 J
Anthracene	mg/kg	n/a	3,000	300,000	152	20.2	0.375	1.2	68.4	2.63	29.2	0.0513	46.7	23.4	111	0.0169 J	20.8	0.0241
Benzo(a)anthracene	mg/kg	n/a	17	3.9	154	31.9	0.53	3.36	116	4.46	45.1	0.19	73	40.9	90	0.0408	48.7	0.0509
Benzo(a)pyrene	mg/kg	n/a	48	0.39	139	28.6	0.491	3.35	102	4.15	38.5	0.19	65.6	38.3	82	0.0428	38.1	0.0492
Benzo(b)fluoranthene	mg/kg	n/a	360	3.9	101	24.4	0.448	3.29	80.9	4.02	31.8	0.176	56.8	29.6	57	0.0307	40.4	0.0413
Benzo(ghi)perylene	mg/kg	n/a	6,800	39	73.7	15.3	0.284	1.66	49.3	2.39	17.7	0.0937	36.1	20.9	41.2	0.0284	13.1	0.021
Benzo(k)fluoranthene	mg/kg	n/a	870	39	154	28.4	0.474	3.17	106	4.06	39.2	0.201	68.4	41.8	88.8	0.0165	36.3	0.0595
Chrysene	mg/kg	n/a	37	390	152	32	0.534	3.39	119	4.71	46.3	0.216	75.4	43	93.7	0.0402	40.9	0.0541
Dibenz(a,h)anthracene	mg/kg	n/a	38	0.39	23.8 J	4.58	0.0947 J	0.559	13.4 J	0.733	5.69	0.0355	12	6.41 J	12.9 J	0.0096 J	4.98	0.0063 J
Fluoranthene	mg/kg	n/a	500	40,000	422	84.6	1.42	5.41	266	9.49	111	0.403	190	107	266	0.0904	88	0.0985
Fluorene	mg/kg	n/a	100	40,000	65.3	5.9	0.121	0.133 J	8.26 J	0.44	3.13 J	0.0086 J	10.4	5.330 J	36.1	0.0048 J	1.27 J	<0.002
Indeno(1,2,3-cd)pyrene	mg/kg	n/a	680	3.9	61.9	13.7	0.25	1.58	44.4	2.21	16.7	0.0897	32.9	18.8	34.3	0.023	13.4	0.0198 J
Naphthalene	mg/kg	n/a	0.4	110	18.6 J	1.26 J	0.521 J	0.626	5.92 J	0.59	1.12 J	0.0212	1.05 J	0.616 J	3.78 J	<0.0014	4.49	0.010 J
Phenanthrene	mg/kg	n/a	1.8	390	341	33.7	0.908	1.17	74.1	3.37	47.6	0.176	98.4	47	228	0.0335	13.7	0.0202
Pyrene	mg/kg	n/a	30,000	110	361	75.2	1.29	4.43	217	8.11	90.7	0.382	170	93.5	219	0.0862	69.3	0.0802

Notes:

- J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
- (1) = Soil cleanup levels for PAHs Interim Guidance suggested generic RCLs
- Bold** = detected concentrations exceed the direct contact standard
- Italics* = detected concentrations exceed the groundwater pathway standard

aged by KJK 1/15/09

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**Table 2**  
**Summary of Groundwater Laboratory Analysis Results**  
**WisDOT West Allis Sign Shop**

Well I.D.	Sample Date	Parameter (µg/L)				
		DRO	GRO	VOCs <sup>(1)</sup>	Lead <sup>(2)</sup>	PAH <sup>(3)</sup>
MW-1	10/20/1992	ND	ND	ND	12	--
	7/6/1993	ND	ND	ND	< 3.0	--
	8/9/1994	ND	ND	1.8	--	--
MW-2	10/20/1992	ND	ND	ND	8	--
	7/6/1993	ND	ND	ND	< 3.0	--
	8/9/1994	ND	ND	1.3	--	--
MW-3	10/20/1992	180	ND	ND	10	--
	7/6/1993	ND	ND	3.6	< 3.0	--
	8/9/1994	ND	ND	3.6	--	--
MW-4	10/20/1992	330	ND	ND	1.0	--
	7/6/1993	1,200	ND	3.4	< 3.0	--
	8/9/1994	WELL ABANDONED				
MW-5	10/20/1992	ND	ND	ND	8	--
	7/6/1993	ND	ND	ND	< 3.0	--
	8/9/1994	WELL NOT ACCESSIBLE				
MW-6	7/6/1993	630	ND	1.2	< 3.0	--
	10/20/1993	600	--	ND	--	85 <sup>(4)</sup>
	8/9/1994	1,200	ND	1.8	--	35 <sup>(4)</sup>
	9/13/2006	--	--	ND	--	95.7 <sup>(5)</sup>
MW-7	10/20/1993	ND	--	ND	--	--
	8/9/1994	ND	ND	1.0	--	0.34 <sup>(4)</sup>
	9/13/2006	--	--	ND	--	0.474 <sup>(6)</sup>
MW-8	10/20/1993	ND	--	2.1	--	--
	8/9/1994	ND	ND	1.1	--	ND
	9/13/2006	--	--	ND	--	0.020
MW-9	10/20/1993	ND	--	1.5	--	--
	8/9/1994	ND	ND	ND	--	--
TW-1	2/22/2007	--	--	2	--	151.1 <sup>(7)</sup>

Notes:

- <sup>(1)</sup> October 20, 1992, VOC analysis was conducted using EPA Method 8021. July 6, 1993, October 20, 1993, and August 9, 1994, groundwater VOC analyses were done using EPA Method 8020 (Wisconsin LUST PVOC List). Only PVOCs were analyzed during the September 13, 2006 sampling.
- <sup>(2)</sup> Due to equipment malfunction, dissolved lead analysis was not conducted on August 9, 1994 samples.
- <sup>(3)</sup> Total PAHs using Method SW-846.
- <sup>(4)</sup> ES exceedence for benzo(a)pyrene.
- <sup>(5)</sup> ES exceedence for benzo(a)pyrene, benzo(b)fluoranthene, and chrysene.
- <sup>(6)</sup> PAL exceedence for benzo(a)pyrene, benzo(b)fluoranthene, and chrysene.
- <sup>(7)</sup> ES exceedences for benzo(a)pyrene, benzo(b)fluoranthene, and chrysene in temporary well TW-1.
- Not analyzed.

Table 3  
Summary of Groundwater Laboratory Analysis Results  
WisDOT West Allis Sign Shop

PARAMETER	UNITS	PAL	ES	MW-6							MW-7					
				7/6/1993	10/20/1993	8/9/1994	9/13/2006	6/3/2008	9/19/2008	3/6/2009	10/20/1993	8/9/1994	9/13/2006	6/3/2008	9/19/2008	3/6/2009
<b>VOCs</b>																
1,2,4-Trimethylbenzene	µg/L	96	480	ND	< 1.0	< 1.0	< 0.39	NA	NA	NA	< 1.0	< 1.0	< 0.39	NA	NA	NA
1,3,5-Trimethylbenzene	µg/L	96	480	ND	< 1.0	< 1.0	< 0.40	NA	NA	NA	< 1.0	< 1.0	< 0.40	NA	NA	NA
Benzene	µg/L	0.5	5	ND	< 1.0	< 1.0	< 0.14	NA	NA	NA	< 1.0	< 1.0	< 0.14	NA	NA	NA
Ethylbenzene	µg/L	140	700	ND	< 1.0	< 1.0	< 0.40	NA	NA	NA	< 1.0	< 1.0	< 0.40	NA	NA	NA
Methyl-tert-butyl-ether	µg/L	12	60	ND	< 1.0	1.8	< 0.36	NA	NA	NA	< 1.0	1.0	< 0.36	NA	NA	NA
Toluene	µg/L	200	1,000	1.2	< 1.0	< 1.0	< 0.36	NA	NA	NA	< 1.0	< 1.0	< 0.36	NA	NA	NA
Total Xylenes	µg/L	1,000	10,000	ND	< 3.0	< 3.0	< 1.10	NA	NA	NA	< 3.0	< 3.0	< 1.10	NA	NA	NA
<b>Metals</b>																
Arsenic	µg/L	1	10	NA	NA	NA	NA	3.2 J	< 1.2	4.2 J	NA	NA	NA	3.7 J	1.2 J	< 1.2
Barium	µg/L	400	2,000	NA	NA	NA	NA	195	150	270	NA	NA	NA	31.3	39.6	26.1
Cadmium	µg/L	0.5	5	NA	NA	NA	NA	0.23 J	0.27 J	0.59 J	NA	NA	NA	< 0.10	0.19 J	< 0.10
Chromium	µg/L	10	100	NA	NA	NA	NA	< 0.57	< 1.1	< 0.57	NA	NA	NA	< 0.57	< 1.1	< 0.57
Lead	µg/L	1.5	15	NA	NA	NA	NA	2.0 J	< 1.4	1.2 J	NA	NA	NA	1.8 J	< 1.4	1.8 J
Mercury	µg/L	0.2	2	NA	NA	NA	NA	< 0.10	< 0.10	< 0.10	NA	NA	NA	< 0.10	< 0.10	< 0.10
Selenium	µg/L	10	50	NA	NA	NA	NA	< 1.7	1.6 J	< 1.7	NA	NA	NA	2.1 J	3.3 J	2.6 J
Silver	µg/L	10	50	NA	NA	NA	NA	< 0.45	0.50 J	< 0.45	NA	NA	NA	< 0.45	< 0.34	< 0.45
<b>PAHs</b>																
1-Methylnaphthalene	µg/L	NE	NE	NA	NA	ND	< 0.21	0.12	< 0.0095	< 0.010	NA	ND	< 0.012	0.011 J	< 0.0095	< 0.0095
2-Methylnaphthalene	µg/L	NE	NE	NA	NA	ND	< 0.23	0.10	0.014 J	< 0.011	NA	ND	< 0.013	< 0.011	< 0.011	< 0.011
Acenaphthene	µg/L	NE	NE	NA	NA	ND	0.39 Q	0.34	0.019 J	0.047 J	NA	ND	0.012 Q	< 0.0084	< 0.0078	< 0.0078
Acenaphthylene	µg/L	NE	NE	NA	NA	ND	0.3 Q	0.013 J	0.039 J	0.075	NA	ND	< 0.0093	< 0.0053	< 0.0050	< 0.0050
Anthracene	µg/L	600	3,000	NA	2	0.82	3.0	0.13	0.22	0.40	NA	ND	0.017 Q	< 0.0070	0.0069 J	< 0.0065
Benzo(a)anthracene	µg/L	NE	NE	NA	8	3.30	4.7 Q	0.13	0.64	2.3	NA	0.04	0.038 Q	< 0.0037	0.022 J	< 0.0035
Benzo(a)pyrene	µg/L	0.02	0.2	NA	8	2.81	7	0.10	0.85	2.6	NA	0.03	0.045 Q	< 0.0058	0.025	< 0.0054
Benzo(b)fluoranthene	µg/L	0.02	0.2	NA	8	3.07	14	0.096	0.68	2.3	NA	0.04	0.035 Q	< 0.0055	0.023 J	< 0.0051
Benzo(ghi)perylene	µg/L	NE	NE	NA	6	2.66	8.5	0.06	0.53	1.7	NA	0.08	0.028 Q	< 0.0067	0.017 J	< 0.0062
Benzo(k)fluoranthene	µg/L	NE	NE	NA	8	1.74	10	0.085	0.78	2.2	NA	ND	0.040 Q	< 0.0083	0.025 J	< 0.0078
Chrysene	µg/L	0.02	0.2	NA	8	3.14	7.4	0.10	0.65	2.5	NA	0.04	0.042 Q	< 0.0075	0.022 J	< 0.0070
Dibenz(a,h)anthracene	µg/L	NE	NE	NA	NA	0.64	2.3	0.015 J	0.15	0.52	NA	ND	< 0.022	< 0.0046	0.0043 J	< 0.0043
Fluoranthene	µg/L	80	400	NA	16	6.52	15	0.29	1.6	4.3	NA	0.07	0.10	< 0.0057	0.053	0.0053 J
Fluorene	µg/L	80	400	NA	NA	ND	0.41 Q	0.24	0.024 J	0.054	NA	ND	< 0.010	< 0.0067	< 0.0063	< 0.0063
Indeno(1,2,3-cd)pyrene	µg/L	NE	NE	NA	5	4.56	7.3	0.049 J	0.47	1.5	NA	0.04	< 0.022	< 0.0039	0.014 J	< 0.0036
Naphthalene	µg/L	8	40	ND	NA	ND	< 0.25	0.32	0.019 J	< 0.017	NA	ND	0.018	< 0.018	< 0.016	< 0.016
Phenanthrene	µg/L	NE	NE	NA	3	ND	4.4	0.36	0.22	0.46	NA	ND	0.028 Q	< 0.0080	0.014 J	< 0.0075
Pyrene	µg/L	50	250	NA	13	5.26	11	0.27	1.2	3.6	NA	ND	0.071 Q	< 0.0072	0.036 J	< 0.0068

Notes:

<sup>(1)</sup> July 6, 1993, October 20, 1993, and August 9, 1994, groundwater VOC analyses were done using EPA Method 8020 (Wisconsin LUST PVOC List). Only PVOCs were analyzed.

<sup>(2)</sup> Total PAHs using Method SW-846.

NA = Not analyzed

ND = None detected.

NE = None established.

Bold indicates PAL exceedences.

Shading indicates ES exceedences.

Q = Analyte detected between the limit of detection and the limit of quantitation.

Z = This compound was separated in the check standard but it did not meet the resolution criteria as set forth in SW846.

J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

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Table 3 (continued)  
 Summary of Groundwater Laboratory Analysis Results  
 WisDOT West Allis Sign Shop

PARAMETER	UNITS	PAL	ES	MW-8						MW-9		TW-1	MW-10			MW-11		
				10/20/1993	8/9/1994	9/13/2006	6/3/2008	9/19/2008	3/6/2009	10/20/1993	8/9/1994	2/22/2007	6/3/2008	9/19/2008	3/6/2009	6/3/2008	9/19/2008	3/6/2009
<b>VOCs</b>																		
1,2,4-Trimethylbenzene	µg/L	96	480	< 1.0	< 1.0	< 0.39	NA	NA	NA	< 1.0	< 1.0	< 0.97	NA	NA	NA	NA	NA	NA
1,3,5-Trimethylbenzene	µg/L	96	480	< 1.0	< 1.0	< 0.40	NA	NA	NA	< 1.0	< 1.0	< 0.83	NA	NA	NA	NA	NA	NA
Benzene	µg/L	0.5	5	< 1.0	< 1.0	< 0.14	NA	NA	NA	< 1.0	< 1.0	< 0.41	NA	NA	NA	NA	NA	NA
Ethylbenzene	µg/L	140	700	< 1.0	< 1.0	< 0.40	NA	NA	NA	< 1.0	< 1.0	< 0.54	NA	NA	NA	NA	NA	NA
Methyl-tert-butyl-ether	µg/L	12	60	< 1.0	1.1	< 0.36	NA	NA	NA	< 1.0	< 1.0	< 0.61	NA	NA	NA	NA	NA	NA
Toluene	µg/L	200	1,000	2.1	< 1.0	< 0.36	NA	NA	NA	1.5	< 1.0	< 0.67	NA	NA	NA	NA	NA	NA
Total Xylenes	µg/L	1,000	10,000	< 3.0	< 3.0	< 1.10	NA	NA	NA	< 3.0	< 3.0	< 2.63	NA	NA	NA	NA	NA	NA
<b>Metals</b>																		
Arsenic	µg/L	1	10	NA	NA	NA	5.9 J	1.9 J	4.5 J	NA	NA	NA	4.9 J	1.7 J	3.8 J	4.9 J	11.8 J	10.8 J
Barium	µg/L	400	2,000	NA	NA	NA	233	225	381	NA	NA	NA	750	517	433	750	209	164
Cadmium	µg/L	0.5	5	NA	NA	NA	0.43	0.55	0.39 J	NA	NA	NA	< 0.10	0.39 J	< 0.10	< 0.10	0.31 J	< 0.10
Chromium	µg/L	10	100	NA	NA	NA	< 0.57	< 1.1	< 0.57	NA	NA	NA	< 0.57	1.1 J	< 0.57	< 0.57	< 1.1	< 0.57
Lead	µg/L	1.5	15	NA	NA	NA	1.5 J	< 1.4	2.5 J	NA	NA	NA	< 0.98	< 1.4	2.1 J	< 0.98	1.7 J	2.0 J
Mercury	µg/L	0.2	2	NA	NA	NA	< 0.10	< 0.10	< 0.10	NA	NA	NA	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Selenium	µg/L	10	50	NA	NA	NA	7.8 J	4.7 J	4.0 J	NA	NA	NA	< 1.7	2.3 J	1.9 J	< 1.7	2.0 J	< 1.7
Silver	µg/L	10	50	NA	NA	NA	0.76 J	< 0.34	0.48 J	NA	NA	NA	< 0.45	0.43 J	< 0.45	< 0.45	0.42 J	< 0.45
<b>PAHs</b>																		
1-Methylnaphthalene	µg/L	NE	NE	NA	ND	< 0.011	< 0.010	< 0.0095	< 0.0097	NA	NA	< 1.7	< 0.043	0.019 J	< 0.0096	< 0.043	0.013 J	< 0.0096
2-Methylnaphthalene	µg/L	NE	NE	NA	ND	< 0.012	< 0.011	< 0.011	< 0.011	NA	NA	< 1.9	< 0.048	0.035 J	< 0.011	< 0.048	0.014 J	< 0.011
Acenaphthene	µg/L	NE	NE	NA	ND	< 0.0085	< 0.0083	< 0.0078	< 0.0080	NA	NA	3.4 Q	< 0.035	0.018 J	< 0.0079	< 0.035	< 0.0079	< 0.0079
Acenaphthylene	µg/L	NE	NE	NA	ND	< 0.0084	< 0.0053	< 0.0050	< 0.0051	NA	NA	< 1.3	< 0.022	< 0.0053	< 0.0050	< 0.022	< 0.0050	< 0.0050
Anthracene	µg/L	600	3,000	NA	ND	< 0.012	< 0.0069	0.0091 J	< 0.0066	NA	NA	10	0.077 J	< 0.0070	0.031 J	0.077 J	< 0.0066	< 0.0066
Benzo(a)anthracene	µg/L	NE	NE	NA	ND	< 0.016	< 0.0037	< 0.0035	< 0.0035	NA	NA	11	0.61	< 0.0037	0.0079 J	0.61	< 0.0035	< 0.0035
Benzo(a)pyrene	µg/L	0.02	0.2	NA	ND	< 0.019	< 0.0057	< 0.0054	< 0.0055	NA	NA	11	0.65	< 0.0058	0.0057 J	0.65	< 0.0055	< 0.0055
Benzo(b)fluoranthene	µg/L	0.02	0.2	NA	ND	< 0.016	< 0.0055	< 0.0051	< 0.0052	NA	NA	9.2 Z	0.57	< 0.0055	< 0.0052	0.57	< 0.0052	< 0.0052
Benzo(ghi)perylene	µg/L	NE	NE	NA	ND	< 0.020	< 0.0066	< 0.0062	< 0.0064	NA	NA	6.1 Q	0.44	< 0.0067	< 0.0063	0.44	< 0.0063	< 0.0063
Benzo(k)fluoranthene	µg/L	NE	NE	NA	ND	< 0.020	< 0.0082	< 0.0078	< 0.0079	NA	NA	9.8 QZ	0.55	< 0.0083	< 0.0078	0.55	< 0.0078	< 0.0078
Chrysene	µg/L	0.02	0.2	NA	ND	< 0.020	< 0.0074	< 0.0070	< 0.0071	NA	NA	12	0.58	< 0.0075	0.0085 J	0.58	< 0.0071	< 0.0071
Dibenz(a,h)anthracene	µg/L	NE	NE	NA	ND	< 0.020	< 0.0046	< 0.0043	< 0.0044	NA	NA	< 3.1	0.094 J	< 0.0046	< 0.0043	0.094 J	< 0.0043	< 0.0043
Fluoranthene	µg/L	80	400	NA	ND	< 0.016	< 0.0057	< 0.0053	< 0.0054	NA	NA	29	1.1	0.0079 J	0.054	1.1	< 0.0054	< 0.0054
Fluorene	µg/L	80	400	NA	ND	< 0.0094	< 0.0066	< 0.0063	< 0.0064	NA	NA	3.8 Q	< 0.028	< 0.0067	< 0.0063	< 0.028	< 0.0063	< 0.0063
Indeno(1,2,3-cd)pyrene	µg/L	NE	NE	NA	ND	< 0.020	< 0.0038	< 0.0036	< 0.0037	NA	NA	4.8 Q	0.35	< 0.0039	< 0.0036	0.38	< 0.0036	< 0.0036
Naphthalene	µg/L	8	40	NA	ND	0.020 Q	< 0.017	< 0.016	< 0.017	NA	NA	< 2.0	< 0.074	0.043 J	0.020 J	< 0.074	0.096	< 0.017
Phenanthrene	µg/L	NE	NE	NA	ND	< 0.012	< 0.0079	< 0.0075	< 0.0076	NA	NA	18	0.13 J	< 0.0080	< 0.0075	0.13 J	< 0.0075	< 0.0075
Pyrene	µg/L	50	250	NA	ND	< 0.015	< 0.0072	< 0.0068	< 0.0069	NA	NA	23	1.1	< 0.0072	0.033 J	1.1	< 0.0068	< 0.0068

Notes:  
 (1) July 6, 1993, October 20, 1993, and August 9, 1994, groundwater VOC analyses were done using EPA Method 8020 (Wisconsin LUST PVOC List). Only PVOCs were analyzed.  
 (2) Total PAHs using Method SW-816  
 NA = Not analyzed.  
 ND = None detected.  
 NE = None established  
 Bold indicates PAL exceedences.  
 Shading indicates ES exceedences.  
 Q = Analyte detected between the limit of detection and the limit of quantitation.  
 Z = This compound was separated in the check standard but it did not meet the resolution criteria as set forth in SW846.  
 J = Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

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Table 1  
Summary of Groundwater Elevations  
WisDOT West Allis Sign Shop

Well I.D.	Date	Top of Casing Elevation	Depth to Water From Top of Casing	Water Elevation
MW-1	10/20/1992	690.65	4.47	686.18
	7/6/1993		2.83	687.82
	10/20/1993		3.02	687.63
	8/9/1994		3.43	687.22
MW-2	10/20/1992	687.01	4.42	682.59
	7/6/1993		3.72	683.29
	10/20/1993		4.48	682.53
	8/9/1994		4.18	682.83
MW-3	10/20/1992	687.21	11.78	675.43
	7/6/1993		3.30	683.91
	10/20/1993		2.19	685.02
	8/9/1994		2.83	684.38
MW-4	10/20/1992	688.83	2.08	686.75
	7/6/1993		3.11	685.72
	10/20/1993		1.11	687.72
	8/9/1994		WELL ABANDONED	
MW-5	10/20/1992	690.76	8.08	682.68
	7/6/1993		3.39	687.37
	10/20/1993		3.10	687.66
	8/9/1994		WELL NOT ACCESSIBLE	
MW-6	7/6/1993	685.97	8.69	677.28
	10/20/1993		11.62	674.35
	8/9/1994		10.24	675.73
	9/13/2006		11.95	674.02
	6/3/2008		11.10	674.87
MW-7	10/20/1993	680.43	7.10	673.33
	8/9/1994		6.51	673.92
	9/13/2006		7.00	673.43
	6/3/2008		6.95	673.48
MW-8	10/20/1993	677.23	7.11	670.12
	8/9/1994		6.78	670.45
	9/13/2006		5.00	672.23
	6/3/2008		6.78	670.45
MW-9	10/20/1993	687.05	5.37	681.68
	8/9/1994		4.95	682.10
MW-10	6/3/2008	686.03	10.38	675.65
MW-11	6/2/2008	681.10	8.54	672.56

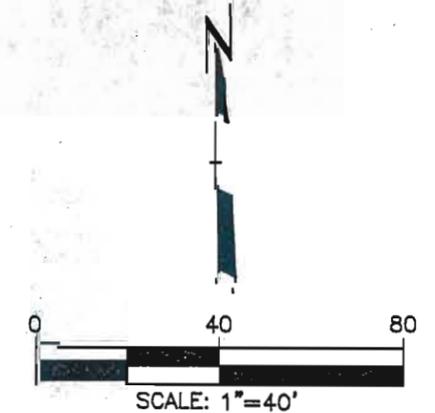
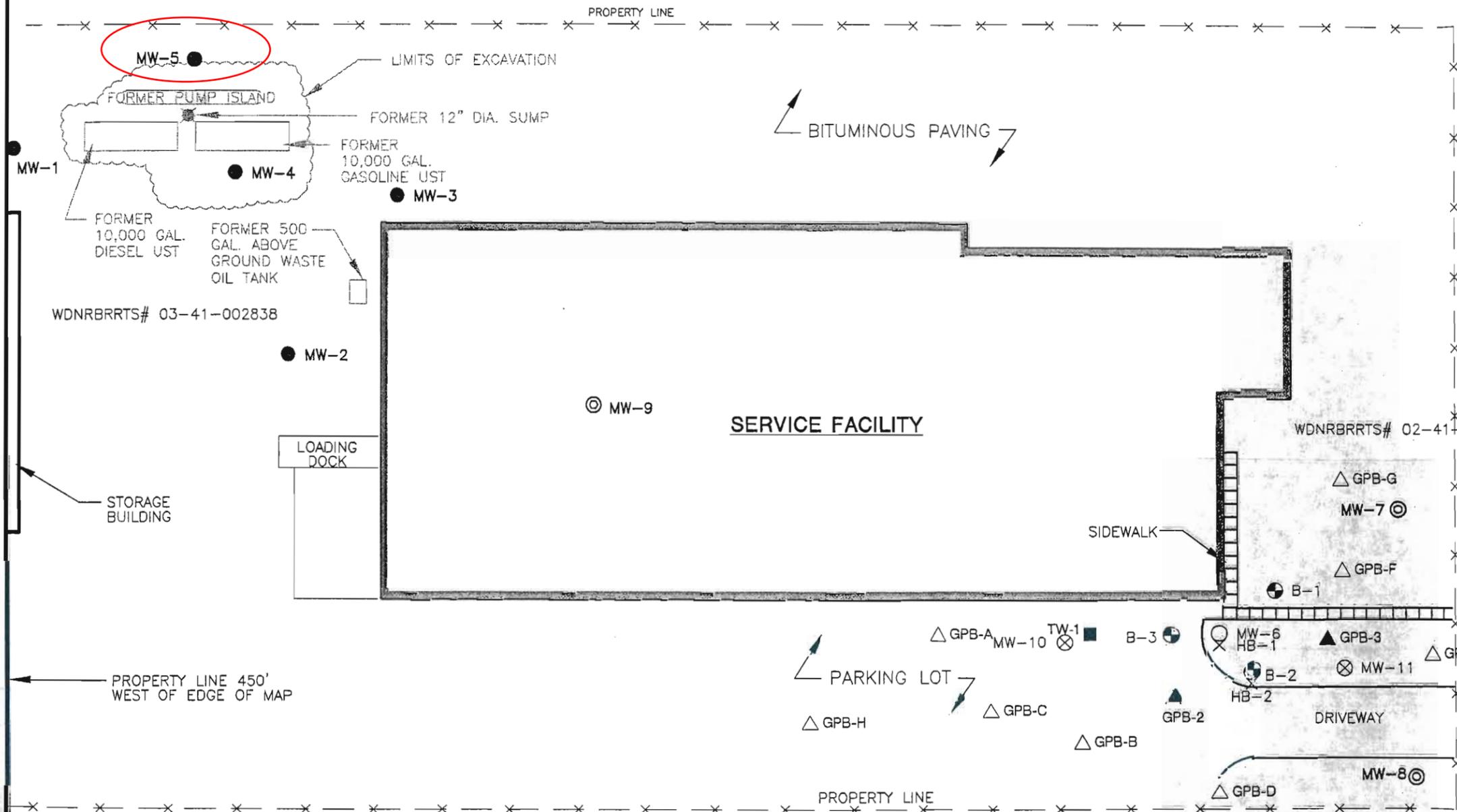
IMPROPERLY ABANDONED  
MONITORING WELL

**LEGEND**

- MW-1 MONITORING WELL-INSTALLED 10/10/92
- MW-6 MONITORING WELL-INSTALLED 6/11/93
- ⊗ MW-10 MONITORING WELL-INSTALLED 6/2/08
- ⊙ MW-9 MONITORING WELL-INSTALLED OCTOBER 1993
- ⊕ B-1 SOIL BORING-INSTALLED OCTOBER 1993
- x- FENCE
- x HB-1 HAND AUGER BORING - INSTALLED 9/13/06
- TW-1 TEMPORARY MONITORING WELL - INSTALLED 2/22/07
- ▲ GPB-2 SOIL BORING - INSTALLED 2/22/07
- △ GPB-A SOIL BORING - INSTALLED 6/6/08

**NOTES**

1. UTILITY LOCATIONS ARE APPROXIMATE.



PROJECT: <b>WisDOT - WEST ALLIS SIGN SHOP WEST ALLIS, WISCONSIN</b>		
SHEET TITLE: <b>SITE PLAN</b>		
DRAWN BY: NOLDENR	SCALE: 1"=40'	PROJ. NO. 10319.11
CHECKED BY:	DATE PRINTED:	FILE NO. 103191101.DWG
APPROVED BY:	DATE: JUNE 2009	
<b>FIGURE A3</b>		



744 Heartland Trail  
Madison, WI 53717-1934  
P.O. Box 8923 53708-8923  
Phone: 608-831-4444  
Fax: 608-831-3334

PLOT DATA  
 Drawing Name: c:\o319\11\103191101.dwg  
 Operator Name: noldenr  
 Scale: 1"=40'

**IMPROPERLY ABANDONED MONITORING WELL**

Route to:

- Solid Waste  Haz. Waste  Wastewater   
 Env. Response & Repair  Underground Tanks  Other

**MONITORING WELL CONSTRUCTION**

Form 4400-113A

Rev. 4-90

Facility/Project Name West Allis Sign Shop	Local Grid Location of Well <input type="checkbox"/> N. <input type="checkbox"/> E. _____ ft. <input type="checkbox"/> S. _____ ft. <input type="checkbox"/> W.	Well Name MW-6
Facility License, Permit or Monitoring Number	Grid Origin Location Lat. _____ Long. _____ or	Wis. Unique Well Number _____ DNR Well Number _____
Type of Well Water Table Observation Well <input checked="" type="checkbox"/> 11 Piezometer <input type="checkbox"/> 12	St. Plane _____ ft. N, _____ ft. E.	Date Well Installed 06 / 11 / 93
Distance Well Is From Waste/Source Boundary _____ ft.	Section Location of Waste/Source <input type="checkbox"/> E. 1/4 of _____ 1/4 of Sec. _____, T. _____ N, R. _____ W.	Well Installed By: (Person's Name & Firm) Brandon Powers Environmental & Foundation Drilling, Inc.
Is Well A Point of Enforcement Std. Application? <input type="checkbox"/> Yes <input type="checkbox"/> No	Location of Well Relative to Waste/Source u <input type="checkbox"/> Upgradient s <input type="checkbox"/> Sidegradient d <input type="checkbox"/> Downgradient n <input type="checkbox"/> Not Known	

- A. Protective Pipe, top elevation \_\_\_ 0.0 \_\_\_ ft. MSL  
 B. Well casing, top elevation \_\_\_ 0.5 \_\_\_ ft. MSL  
 C. Land surface elevation \_\_\_\_\_ ft. MSL  
 D. Surface seal, bottom \_\_\_\_\_ ft. MSL or \_\_\_\_\_ ft.

12. USCS classification of soil near screen:  
 GP  GM  GC  GW  SW  SP   
 SM  SC  ML  MH  CL  CH   
 Bedrock

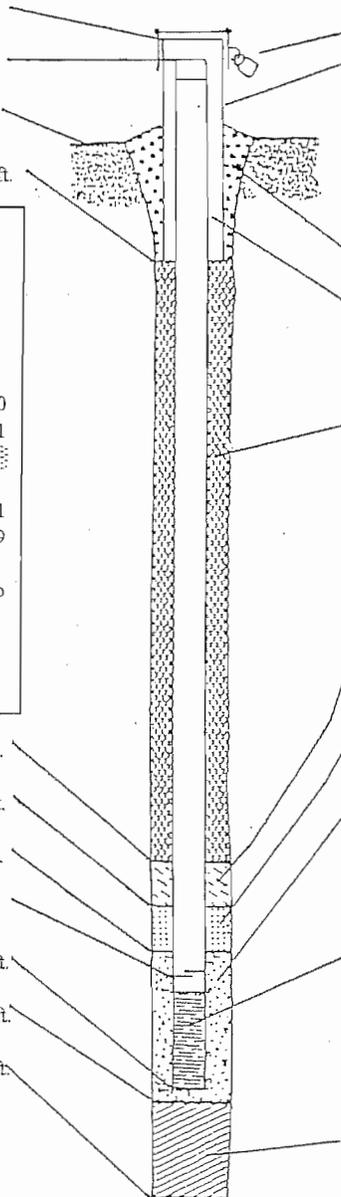
13. Sieve analysis attached?  Yes  No

14. Drilling method used: Rotary  50  
 Hollow Stem Auger  41  
 Other

15. Drilling fluid used: Water  02 Air  01  
 Drilling Mud  03 None  99

16. Drilling additives used?  Yes  No  
 Describe \_\_\_\_\_

17. Source of water (attach analysis): \_\_\_\_\_



1. Cap & lock?  Yes  No
2. Protective cover pipe:  
 a. Inside diameter: \_\_\_ 8.0 \_\_\_ in.  
 b. Length: \_\_\_ 1.0 \_\_\_ ft.  
 c. Material: Steel  04  
 Other   
 d. Additional protection?  Yes  No  
 If yes, describe: \_\_\_\_\_
3. Surface seal: \_\_\_\_\_  
 Bentonite  30  
 Concrete  01  
 Other
4. Material between well casing & protective pipe:  
 Bentonite  30  
 Annular space seal   
 Other
5. Annular space seal:  
 a. Granular Bentonite  33  
 b. \_\_\_\_\_ Lbs/gal mud weight..... Bentonite-sand slurry  35  
 c. \_\_\_\_\_ Lbs/gal mud weight..... Bentonite slurry  31  
 d. \_\_\_\_\_ % Bentonite..... Bentonite-cement grout  50  
 e. 100# \_\_\_\_\_ Ft<sup>3</sup> volume added for any of the above  
 f. How installed: Tremie  01  
 Tremie pumped  02  
 Gravity  08
6. Bentonite seal:  
 a. Bentonite granules  33  
 b.  1/4 in.  3/8 in.  1/2 in. Bentonite pellets  32  
 c. \_\_\_\_\_ Other
7. Fine sand material: Manufacturer, product name and mesh size  
 a. Portage Silica Fine  
 b. Volume added 50# ft<sup>3</sup>
8. Filter pack material: Manufacturer, product name and mesh size  
 a. American Material Flint #30  
 b. Volume added 300# ft<sup>3</sup>
9. Well casing: Flush threaded PVC schedule 40  23  
 Flush threaded PVC schedule 80  24  
 Other
10. Screen Material: PVC  
 a. Screen Type: Factory Cut  11  
 Continuous slot  01  
 Other   
 b. Manufacturer Northern Air  
 c. Slot size: 0.010 in.  
 d. Slotted Length: 10.0 ft.
11. Backfill material (below filter pack):  
 Natural Soil  Other

- E. Bentonite seal, top \_\_\_\_\_ ft. MSL or \_\_\_ 1.0 \_\_\_ ft.  
 F. Fine sand, top \_\_\_\_\_ ft. MSL or \_\_\_ 3.5 \_\_\_ ft.  
 G. Filter pack, top \_\_\_\_\_ ft. MSL or \_\_\_ 4.5 \_\_\_ ft.  
 H. Screen joint, top \_\_\_\_\_ ft. MSL or \_\_\_ 5.0 \_\_\_ ft.  
 I. Well bottom \_\_\_\_\_ ft. MSL or \_\_\_ 15.0 \_\_\_ ft.  
 J. Filter pack, bottom \_\_\_\_\_ ft. MSL or \_\_\_ 15.0 \_\_\_ ft.  
 K. Borehole, bottom \_\_\_\_\_ ft. MSL or \_\_\_ 16.0 \_\_\_ ft.  
 L. Borehole, diameter \_\_\_ 8.3 \_\_\_ in.  
 M. O.D. well casing \_\_\_ 2.2 \_\_\_ in.  
 N. I.D. well casing \_\_\_ 2.0 \_\_\_ in.

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: *[Handwritten Signature]* Firm: Environmental & Foundation Drilling, Inc.

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than \$10, nor more than \$5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than \$10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

**IMPROPERLY ABANDONED  
MONITORING WELL**

State of Wis., Dept. of Natural Resources  
dnr.wi.gov

**Well / Drillhole / Borehole Filling & Sealing**  
Form 3300-005 (R 4/08) Page 1 of 2

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between \$10-25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

Verification Only of Fill and Seal

Route to:  
 Drinking Water       Watershed/Wastewater       Remediation/Redevelopment  
 Waste Management       Other: \_\_\_\_\_

**1. Well Location Information**      **2. Facility / Owner Information**

County <b>MILWAUKEE</b>	WI Unique Well # of Removed Well _____	Ficap # _____	Facility Name <b>West Allis Sign Shop</b>
Latitude / Longitude (Degrees and Minutes) ____ ° ____ ' ____ " N ____ ° ____ ' ____ " W	Method Code (see instructions) _____		Facility ID (FID or PWS) _____
1/4 NE    1/4 SE    Section    Township    Range <input checked="" type="checkbox"/> E or Gov't Lot #                      34                      7    N                      21 <input type="checkbox"/> W	Original Well Owner _____		License/Permit/Monitoring # _____
Well Street Address _____	Present Well Owner _____		Mailing Address of Present Owner _____
Well City, Village or Town <b>West Allis</b>	Well ZIP Code _____		City of Present Owner    State    ZIP Code _____
Subdivision Name _____	Lot # _____		

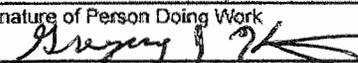
Reason For Removal From Service    WI Unique Well # of Replacement Well  
**To prevent contamination**                      \_\_\_\_\_

**3. Well / Drillhole / Borehole Information**      **4. Pump, Liner, Screen, Casing & Sealing Material**

<input checked="" type="checkbox"/> Monitoring Well <input type="checkbox"/> Water Well <input type="checkbox"/> Borehole / Drillhole	Original Construction Date (mm/dd/yyyy) <b>10/6/1993</b>	Pump and piping removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Construction Type: <input checked="" type="checkbox"/> Drilled <input type="checkbox"/> Driven (Sandpoint) <input type="checkbox"/> Dug <input type="checkbox"/> Other (specify): _____	If a Well Construction Report is available, please attach. _____	Liner(s) removed? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
Formation Type: <input checked="" type="checkbox"/> Unconsolidated Formation <input type="checkbox"/> Bedrock		Screen removed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
Total Well Depth From Ground Surface (ft.) <b>14.5</b>	Casing Diameter (in.) <b>2.38</b>	Casing left in place? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Lower Drillhole Diameter (in.) <b>10</b>	Casing Depth (ft.) <b>4</b>	Was casing cut off below surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
Was well annular space grouted? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown		Did sealing material rise to surface? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
If yes, to what depth (feet)? _____	Depth to Water (feet) <b>10</b>	Did material settle after 24 hours? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
		If yes, was hole retopped? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
		If bentonite chips were used, were they hydrated with water from a known safe source? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
		Required Method of Placing Sealing Material <input type="checkbox"/> Conductor Pipe-Gravity <input type="checkbox"/> Conductor Pipe-Pumped <input type="checkbox"/> Screened & Poured (Bentonite Chips) <input checked="" type="checkbox"/> Other (Explain): <u>Gravity</u>
		Sealing Materials <input type="checkbox"/> Neat Cement Grout <input type="checkbox"/> Clay-Sand Slurry (11 lb./gal. wt.) <input type="checkbox"/> Sand-Cement (Concrete) Grout <input type="checkbox"/> Bentonite-Sand Slurry " " <input type="checkbox"/> Concrete <input type="checkbox"/> Bentonite Chips
		For Monitoring Wells and Monitoring Well Boreholes Only: <input checked="" type="checkbox"/> Bentonite Chips <input type="checkbox"/> Bentonite - Cement Grout <input type="checkbox"/> Granular Bentonite <input type="checkbox"/> Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole	From (ft.)	To (ft.)	Sacks Sealant
Bentonite Chips	Surface	14.5	0.5

**6. Comments**  
MW-7

<b>7. Supervision of Work</b>			<b>DNR Use Only</b>	
Name of Person or Firm Doing Filling & Sealing <b>Kitson Environmental Services, Inc</b>	License # _____	Date of Filling & Sealing (mm/dd/yyyy) <b>6/30/2010</b>	Date Received _____	Noted By _____
Street or Route <b>N4885 County Road D</b>		Telephone Number <b>( 920 ) 674-2378</b>	Comments _____	
City <b>Helenville</b>	State <b>WI</b>	ZIP Code <b>53137-</b>	Signature of Person Doing Work 	Date Signed <b>7/14/2010</b>

## Photographic Log

<b>Client Name:</b> Wisconsin Department of Transportation		<b>Site Location:</b> West Allis Sign Shop West Allis, Wisconsin	<b>Project No.:</b> 02882.11.001
<b>Photo No.</b> 1	<b>Date</b> 5/6/10		
<b>Description</b> Looking east at parking lot near former MW-4 and MW-5 locations			

<b>Photo No.</b> 2	<b>Date</b> 5/6/10		
<b>Description</b> Looking north at parking lot near former MW-4 and MW-5 locations			