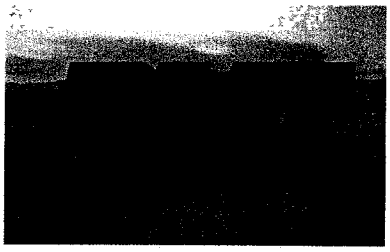

Design Plan for Soil Remediation

DB Oaks Facility
Fort Atkinson, Wisconsin

WDNR BRRTS #03-28-176509

August 2006

RMT, Inc. | Gardner Denver, Inc.
Final
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RMT®
Integrated Environmental Solutions

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August 24, 2006

Mr. Jim Kralick
Wisconsin Department of Natural Resources
2514 Morse Street
Janesville, WI 53545

Subject: Design Plan for Environmental Remediation
DB Oaks Facility - Fort Atkinson, Wisconsin
WDNR BRRTS #03-28-176509

Dear Jim:

RMT, Inc., is pleased to present you with the attached Design Plan for Soil Remediation at the DB Oaks Facility in Fort Atkinson, Wisconsin. This Plan has been prepared to meet the current objective of conducting a source control remedy for the soil at the site.

We are proposing a single alternative for the soil remediation at the site, so a direct comparison to other remediation alternatives is not presented. We have combined the important elements of a Remedial Action Options Plan (RAOP) and a Design Report to present to WDNR.

Groundwater investigation activities will continue while we are conducting the soil remediation at the site. These investigation activities are also addressed in the enclosed document, but groundwater remediation activities are not within the scope of the current Design Plan. The Client (Gardner Denver) wishes to further investigate the effects of the soil remediation before developing a groundwater remediation plan.

The purpose of this submittal is to advise the WDNR of the impending soil remediation prior to implementation, and to seek approval before startup. A fee has been previously forwarded to your attention to cover the costs of the Design Plan review and approval process.

Sincerely,

RMT, Inc.

Daniel W. Hall

Daniel W. Hall, P.G.
Project Manager

Attachment: Design Plan for Environmental Remediation (2)

cc: Mark Chiado - Gardner Denver (1)
Bill Seno - RMT, Inc. (1)

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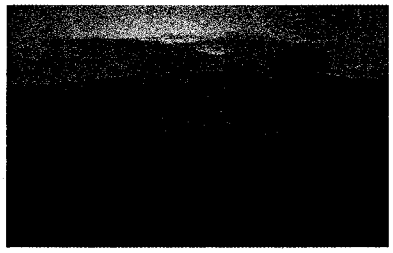


Design Plan for Soil Remediation

DB Oaks Facility
Fort Atkinson, Wisconsin

WDNR BRRTS #03-28-176509

August 2006

Executive Summary

The D.B. Oaks facility is located on the north side of Fort Atkinson, Wisconsin. The 180,000–square foot facility is currently leased to tenants who operate their businesses at the facility. Based on the results of Phase 1 (1994) and Phase 2 (1995) Environmental Site Assessments conducted at the site, the WDNR (2004) required that Thomas Industries conduct a site investigation. The environmental liability for the site is with Gardner Denver of Quincy, Illinois. Site investigation phases conducted between 2004 and 2006 (by NewFields) indicated that the soil and groundwater at the property are contaminated with chlorinated volatile organic compounds, principally tetrachloroethene (PCE) and degradation products, with minor amounts of metals and petroleum compounds.

The localized source areas for the chlorinated VOC contamination appear to be the former 10,000-gallon PCE tank near the northeast corner of the facility building, the vicinity of the loading dock located on the east side of the building, and an area about 50 feet southeast of the loading dock. The total VOC concentrations in groundwater from March 2006 are highest in the vicinity of the loading dock, near the current MW-3 well nest, where concentrations in groundwater are about 38,700 µg/L. The water table is approximately 5 to 10 feet below ground surface in these source areas. VOCs were not detected upgradient (well MW-5 nest to the north and MW-6 nest to the south). Groundwater flows to the south-southwest.

Soil contamination has been characterized at depth below ground surface to groundwater (10 feet bgs) in the vicinity of the three source areas. The volume of soil with greater than 10 ppm total VOCs to a depth of 10 feet is estimated to be 5,115 cubic yards in four areas on the east side of the property. The volume of soil between 1 and 10 ppm total VOCs is estimated to be 6,504 cubic yards in five areas between and around the more highly concentrated areas (NewFields, 2005)

Gardner Denver wants to approach remediation at this facility in two steps. The first step will be to remediate soil contamination above the water table as a voluntary source removal action. This Design Plan addresses this soil remediation phase. The cleanup of the soil, to the extent possible, will have a positive effect on limiting further contamination of the groundwater through rainwater infiltration. Soil remediation, alone, will not effect a groundwater cleanup in a reasonable amount of time. The effect of the soil remediation on groundwater will be determined and a plan to address groundwater remediation (the second remediation step) will be submitted after the effects of the soil remediation on groundwater are better understood.

RMT is proposing in this Design Plan to remediate the soil (to the water table) using *in situ* vapor extraction (ISVE), combined with soil conditioning to enhance soil permeability and the effectiveness of the ISVE. The target soil cleanup levels are calculated Residual Contaminant

Levels for RCLs under NR 720.19 for direct contact of soil in an industrial setting from the WDNR's *Determining Residual Contaminant Levels Using the EPA Soil Screening Level Web Site.*

To date, Gardner Denver has complied with the requirements of submitting the Site Investigation Report to the Wisconsin Department of Natural Resources (WDNR) under NR 716. This Design Plan is the next step in the process to implement a remedy for soil remediation at the site. Groundwater investigation at the site will continue with the goal of selecting a groundwater remedy to implement.

Background

The DB Oaks Facility is located on the north side of Fort Atkinson, Wisconsin (see Figure 1). The building is used to house tenants who lease commercial space, but currently approximately 80 percent of the space is empty. From NewFields (2005), "Residential lighting fixtures were manufactured at the facility by Moe Brothers Lighting in 1939; Moe Brothers Manufacturing changed its name to Moe Lighting in 1939 and was acquired by Thomas Industries in 1948. Lighting fixtures continued to be manufactured at the facility until 1985, when Thomas sold the facility....The Wand Corporation (Wand) subsequently utilized the facility to manufacture storm doors and windows in 1985, but vacated the building by 1992. Two other businesses (Gross EMO and Wisconsin Packaging Corporation) occupied portions of the property between 1986 and 1994. Miller Machining began operating at a portion of the property in 1994. The property is currently owned by D.B. Oaks; and the building is occupied by 5 Alarm Fire and Safety Equipment, Inc., and W&A Distribution."

"In an August 28, 1985, letter to Wand, RMT, Inc., identified a 10,000-gallon aboveground storage tank (AST) that was used to store tetrachloroethene (PCE), and an 18,000-gallon underground storage tank (UST) that held No. 2 fuel oil (see Figure 2). The Wisconsin Department of Natural Resources (WDNR) subsequently performed a generator inspection on March 27, 1986, completed at the time Wand had occupied the property. The inspection was completed by Wendell Wojner of the WDNR and described in an April 1986 memo. As described in that memo, no hazardous waste was observed during the inspection. Foundation for a large AST remained on-site at the rear of the building, but the tank had been removed."

Since 1986, additional investigations have been conducted on the site, summarized below (NewFields, 2005):

- 1994, Gabriel Midwest, Phase 1 ESA – Could not find evidence of the fuel oil UST, but did find evidence of the PCE AST cradle.

- 1995, ATEC Associates, Phase 2 ESA – Conducted soil and groundwater investigation to evaluate potential releases from the fuel oil AST, PCE UST, and a former 500-gallon gasoline UST. PCE and degradation products were found in soil and groundwater on the east and south sides of the building, collected from Geoprobe® borings.
- 2005, NewFields, Site Investigation Report – On behalf of Thomas Industries, responding to letters from the WDNR in March and May 2004, investigations were conducted between December 2004 and August 2005, and are summarized in this report. The scope of the investigations included the installation of water table wells and piezometers, and the collection of groundwater and soil samples for laboratory analysis.
- 2006, NewFields, Supplemental Hydrogeologic Site Investigation Status Report – The scope of investigation included the installation of an additional water table well and two piezometers, the collection of soil samples for waste profiling, and the collection of groundwater samples for laboratory analysis.

The results described by NewFields in their 2005 and 2006 reports indicate that the VOC contamination in soil and groundwater occurs on the east side of the facility, and consists primarily of PCE and its degradation products. The localized source areas appear to be the former PCE tank, the vicinity of the loading dock, and an area about 50 feet southeast of the loading dock, based on soil VOC concentrations (see Figure 3). The total VOC concentrations in groundwater from March 2006 are highest in the vicinity of the MW-3 well nest, where concentrations are about 38,700 µg/L (see Figure 4). The water table is approximately 5 to 10 feet below ground surface in these source areas. VOCs were not detected upgradient (well MW-5 nest to the north and MW-6 nest to the south). Shallow groundwater flows to the south-southeast (see Figure 5), as does groundwater at depth as determined from piezometer water level measurements (see Figure 6).

Soil contamination has been characterized at depth below ground surface to groundwater in the vicinity of the three source areas on the east side of the facility. Figures 7 through 9 illustrate the results of soil sampling on a gridded pattern for VOCs on the east side of the property, indicating the isoconcentrations of total VOCs in 2.5-foot increments to 7.5 feet. Newfields (2005) estimated the volume of soil with greater than 10 ppm total VOCs to a depth of 10 feet to be 5,115 cubic yards in four areas on the east side of the property. Newfields (2005) also estimated the volume of soil between 1 and 10 ppm total VOCs to be 6,504 cubic yards in five areas between and around the more highly concentrated areas (see Figure 10). The total volume of soil to be treated is less than sum of the volumes above, since the water table is less than 10 feet over the site, and the treatment is for soils above the water table.

Gardner Denver wants to approach remediation at this facility in two steps. The first step will be to remediate soil contamination above the water table as a voluntary source removal action. The second step will be to address the groundwater remedy. Although the soil is a source of

contamination, and a risk for both direct contact and groundwater contamination, the majority of the contamination is below the water table. The cleanup of the soil, to the extent possible, will have a positive effect on limiting further contamination of the groundwater through rainwater infiltration. The Client (Gardner Denver) wishes to complete the soil cleanup to determine the effects on groundwater and the develop an action plan to remediate groundwater.

To date, Gardner Denver has complied with the requirements of submitting the Site Investigation Report to the Wisconsin Department of Natural Resources (WDNR) under NR 716. This Design Plan is the next step in the process to implement a remedy for soil remediation at the site. Groundwater investigation at the site will continue toward selecting a groundwater remedy to implement.

The objective of this soil remediation Design Plan is to complete a source control remedy of the vadose zone soil. Remedy selection and design report information is presented in the following section.

Remedy Selection

The following sections identify and evaluate the selected remedial action option.

Identify Remedial Action Option

The soil remedial option we propose is *in situ* soil vapor extraction (ISVE). This is an effective and economical alternative to other soil remedial options. We intend to include a soil-conditioning step to increase the soil permeability, and thus the effectiveness of the ISVE in the silt and clay soil, which otherwise would not be amenable to effective treatment via ISVE. The soil-conditioning step will be the mixing of lime into the soil matrix. The soil conditioning will be accomplished using standard excavation equipment to the approximate depth of the groundwater (about 7.5 feet bgs), while excavating for placement of horizontal ISVE wells and conveyance pipe trenching.

The approach for this soil remediation project is to conduct the soil conditioning/ISVE within the approximate boundaries of the areas containing soil that are of concern for direct contact, which includes ingestion and dust inhalation. NR 720 regulations (soil cleanup standards) do not include default cleanup values for chlorinated solvents, so Residual Contaminant Levels (RCLs) were calculated under NR 720.19 for direct contact of soil in an industrial setting from the WDNR's *Determining Residual Contaminant Levels Using the EPA Soil Screening Level Web Site* (January 11, 2002), as presented in the table below.

Industrial RCLs

PARAMETER	PCE	TCE	CIS-1,2-DCE[1]	VINYL CHLORIDE
Ingestion (mg/kg)	55	7.15	10,200	1.91
Inhalation dust (mg/kg)	1,800,000	9,480	NA	119,000

Note:
[1] = noncarcinogenic.

The footprint of the cleanup, assuming a 1XE-06 cancer risk, is guided by the combination of the most conservative parameter, which in this case is vinyl chloride for ingestion of volatiles (1.91 mg/kg), and the other targeted parameters. This scenario covers most of the areas included in the 1 to 10 mg/kg and > 10 mg/kg total VOC areas outlined by Newfields (see Figure 10).

Evaluate Remedial Action Option

Pursuant to s. NR 722.07(3) and (4), we present below an evaluation of the proposed remedial action option to address contaminated soil.

Technical Feasibility

The technical feasibility of the remedial action has been evaluated using the following criteria:

- **Long-term effectiveness** - ISVE remediation has the ability to reduce the concentration of VOCs in soil bounded by the physical structures at the site (*i.e.*, building foundation, railroad tracks, etc.). The removal of VOCs from site soil will reduce the volume and toxicity of the VOCs. The ISVE vacuum created within the soil will alter the mobility of the contaminants within the vapor phase. Reduction in the volume of high-concentration soil will reduce the amount of VOCs partitioning into the vapor phase with time.

  ISVE will permanently remove VOCs from the site soil that is accessible by the system. Soil will be treated to reach direct contact standards. In addition, removal of the soil contamination will have some effect on reducing the potential infiltration of VOCs to the groundwater.

- **Short-term effectiveness** - During the soil-conditioning portion of the project, the open area of the excavation will be kept small to minimize the volume of VOCs released from the soil. A health and safety plan will guide the work conducted by the remediation workers during construction of the system, and standard safety precautions will be used in addressing

any construction or chemical hazards associated with the project. During implementation of the ISVE system, VOCs from the ISVE system exhaust will be captured and treated by the carbon treatment system.

- **Implementability** - The construction activities and treatment systems for ISVE are technically feasible to construct and implement. The remediation area is open and amenable to the backhoe activities associated with the soil conditioning and installation of the ISVE piping. Some physical limitations exist for soil treatment directly adjacent to the railroad tracks and building foundations, where setbacks will be required to maintain a safe distance to prevent soil/foundation collapse. An assessment of these structures and setback distances will be established before remediation activities begin.

  Materials, equipment, and contractors to install ISVE systems are available. The ISVE system will be installed by RMT or a qualified contractor under the direction of RMT.

  Difficulties that may potentially be encountered during the remediation activities include collapsing soil near the railroad tracks and near the building foundation. These potential difficulties will be mitigated by identifying safe setback distances and keeping a minimum open area of the backhoe trench at any given time. No off-site disposal of any soil is anticipated with the ISVE remediation. In addition, a natural gas line and a storm water sewer line cross the site within the depth of excavation, but current plans are to excavate around the gas line and to remove and then replace the storm water sewer.

  Monitoring of the effectiveness of the soil remediation will be through treatment system flow rates and influent/effluent VOC concentrations. Monitoring of similar systems has proved to be effective. Further, confirmation soil sampling for VOCs will be conducted within the area of treatment to assess whether the treatment has achieved the desired treatment levels.

  This alternative is administratively feasible, since ISVE systems have been approved before. The carbon treatment system on the exhaust from the ISVE blower is anticipated to capture enough organic compound emissions, such that an NR 406, Wisconsin Administrative Code, air permit is not needed. The ISVE system will develop a condensate, which will be barreled at the site and disposed after waste characterization. Form 4400-120 "Notification to Treat or Dispose of Contaminated Soil and Water" will be prepared for the treatment of the soil with the ISVE.

No federal or state threatened species are expected to be affected by the "remediation" in this urbanized area of Fort Atkinson.

Treating VOC soil with ISVE is known to be technically feasible. The soil conditioning will enhance the technical feasibility of the ISVE method.

Natural attenuation, alone, will not reduce the VOCs in soil in a reasonable amount of time; therefore, ISVE is proposed to reduce the VOC concentrations in soil to direct contact standards.

- **Restoration time frame** - ISVE treatment system construction should be completed within approximately 4 weeks, barring unforeseen difficulties. Actual treatment time is estimated to be less than a year. Consideration must be given to the Owner's (D. B. Oaks') operation, so that they have access to the building during and after remediation activities.

The facility is located near numerous commercial, industrial, and residential properties, but none are known to be environmental receptors with respect to direct contact or groundwater use. Businesses currently occupy the facility building, so employees of the businesses are present during working hours.

No known sensitive receptors inhabit the site or areas within proximity to the site. The nearest residential site is located approximately 400 feet west of the area to be remediated on the facility, on the west side of Oak Street.

No endangered species are expected to inhabit the facility.

The City of Fort Atkinson uses groundwater as their drinking water resource. The nearest public well is located approximately 0.5 mile west of the facility. Groundwater flow is south-southwest from the facility.

The magnitude of the soil VOCs at the facility appear to be restricted to the area on the east side of the building, bounded by the building to the west and the railroad tracks the east. Total VOC concentrations in soil on the site range from approximately nondetect to 7,603 mg/kg (at a depth of 5-7.5 feet, just north of the MW-3 well nest; see Figure 9). Soil contamination has been characterized at depth below ground surface to groundwater (10 feet bgs) in the vicinity of the three source areas. The volume of soil with greater than 10 ppm total VOCs to a depth of 10 feet is estimated to be 5,115 cubic yards in four areas on the east side of the property. The volume of soil between 1 and 10 ppm total VOCs is estimated to be 6,504 cubic yards in five areas between and around the more highly concentrated areas. Mobility of the TCE in the clayey site soil

is fairly minimal. PCE, and its breakdown products TCE and VC, are classified as potential carcinogens. Some soil testing conducted by NewFields indicated that the soil may be classified as hazardous waste due to the toxicity of the VOC concentrations.

Site geology is described by NewFields (2006) as having a "surficial fine-grained unit consisting of interbedded clays, silts and clayey sand. This unit extends from the surface to depths varying from approximately 10 feet on the north side of the property (the MW-4 well nest)" to about 30 feet on the south side (the MW-2 well nest," and to 13 ft at MW-7 to the north. This fine-grained soil is in turn underlain by highly permeable outwash and till sands across the site to approximately 40 to 45 feet below ground surface. At MW-3, the deepest boring on the site,"...interbedded clay/silt and silty sand...was encountered from 40 to 61 feet, underlain by silt to 77 feet, and slightly silty sand to the maximum depth of 80 feet." Groundwater flow across the site is to the south-southwest at the water table and at depth, according to NewFields (2006). Further, the water table flow is apparently influenced by a drainage ditch in the vicinity of downgradient well MW-6, off-site to the south of the facility.

Institutional controls may be part of the overall closure of the site, including listing the site on the GIS registry.

Natural attenuation in the soil is not occurring quickly enough to remediate the VOCs in a reasonable amount of time.

Economic Feasibility

Because this remediation technique is not being compared with other alternatives, cost information is not provided for comparison to assess feasibility.

Design Report

Pursuant to s. NR 724.09, a design report for the selected soil remedial action is presented below, including the following information:

General Site Information Under NR 724.05

Project title:	Design Plan for Soil Remediation at the DB Oaks Facility Fort Atkinson, Wisconsin

Property owner:	D.B. Oaks
Consultant contact:	Daniel W. Hall, Project Manager RMT, Inc. 744 Heartland Trail, Madison, WI 53717-1934
Site name:	DB Oaks Facility 700-710 Oak Street Fort Atkinson, WI 53538 W½, SW¼, Section 34, T6N, R14E (see Figure 1)

Nature and Extent of Contamination

The VOC contamination in soil and groundwater occurs on the east side of the facility, and consists primarily of PCE and its degradation products. The localized source areas appear to be the former PCE tank, the vicinity of the loading dock, and an area about 50 feet southeast of the loading dock (see Figures 2, 3, 7, 8, and 9). The water table is approximately 5 to 10 feet below ground surface in these source areas (see Figures 4 and 5).

Soil contamination has been characterized at depth below ground surface to groundwater (10 feet bgs) in the vicinity of the three source areas. The volume of soil with greater than 10 ppm total VOCs to a depth of 10 feet is estimated to be 5,115 cubic yards in four areas on the east side of the property. The volume of soil between 1 and 10 ppm total VOCs is estimated to be 6,504 cubic yards in five areas between and around the more highly concentrated areas.

The extent of the soil contamination appears to be confined to the property, essentially bounded by the railroad tracks on the west and the building on the east.

Design Report Information Under NR 724.09

Facility Description

The DB Oaks Facility is an approximately 180,000–square foot–high bay 1-story building constructed of brick, located on a triangular-shaped property (see Figure 2). It is bounded on the west and fronted on Oak Street, on the north, by a wooded area and then East Cramer Street; on the west by the C& NW railroad tracks and then Lorman Iron & Metal; and on the south by the 2L Lobe property. A parking lot is located on the west side of the building. On the east

side of the building, a gravel driveway between the building and railroad tracks provides access to loading docks.

Description of Remedial Action

Preconstruction Activities

- **Assessment of building foundation, railroad track concerns, and underground piping** - Since the contaminated soil is adjacent to both the railroad tracks and the building, some setbacks will be needed, which will result in some contaminated soil left in place. Currently, the setbacks are 10 feet for both the railroad tracks and the building. RMT will not be working on or within railroad property rights-of-way, or easements (if required, RMT will request a change order for additional engineering and construction considerations). For the building setback, RMT will conduct an assessment of the building foundation to determine if the setback can be reduced, and if so, by how much, to get closer to the building (this will depend on the foundation construction and condition). RMT will review the building foundation type and condition as part of this assessment, to determine if the setback distance can be reduced and if shallow excavations adjacent to the building can be conducted without creating foundation problems. Further, the assessment will determine if it is possible to excavate to a depth of at least 2 feet bgs within the setback areas adjacent to the building to address direct contact issues.

  During the assessment, the excavation issues, along with the gas line and storm water line, will also be evaluated. The current plan is to replace the storm water line and leave the gas line in place.

- **Assessment of construction logistics** - Discussions with the current building tenant must occur regarding construction sequencing, construction space requirements, health and safety considerations, and scheduling of remedial activities, with respect to their current operations. In addition, RMT will need access to power, water, and restroom facilities during the course of the construction work.

- **Health and Safety Plan development** - A Health and Safety Plan (HASP) will be prepared for protection of RMT personnel. The HASP will address the potential risks at the site and the necessary health and safety procedures (this Plan will also cover the groundwater monitoring in Element 1).

- **Utility locating and site visit** - Utilities must be accurately located coming onto the site so as to avoid any risk of damage or injury during the

construction activities. RMT will contact the local utility marker (Digger's Hotline) prior to construction. We understand that a gas line and a storm water sewer run beneath the property in the remediation area, which are located on the site maps. We will need to ascertain the depth of these utilities to understand whether or how they affect the remediation process (including their potential removal during excavation and replacement after).

The RMT design engineer and construction manager will visit the site to review the project objectives, review the site layout, evaluate utility issues, and assess construction issues with respect to the items above.

Construction Implementation

- **Conduct the soil conditioning** - Backhoe equipment will be mobilized to the site to conduct the soil conditioning to the desired depth (water table, approximately 7.5 feet bgs), within the shaded area presented on Figure 10. During soil conditioning, only a small area of excavation will be open at any given time; effectively, an area on the order of 10 ft by 15 ft or smaller. The total area to be conditioned over the period of a working day will be on the order of 40 ft x 40 ft, but only a portion of this area will be open at any given time, as described above. The soil conditioning will be coordinated with ventilation piping installation, allowing for temporary stockpiling of a minimum amount of soil during soil conditioning, as well as allowing for installation of ventilation piping at the same time. Excavated soil will be kept within the area of contaminated soil. Even though some of the soil is hazardous for volatiles, the soil-conditioning process will not be generating a hazardous waste, because soil excavations will be staged such that the soil does not leave the footprint of the contaminated soil, satisfying the EPA's Area of Contamination concept.

  The duration of the soil conditioning, combined with the ISVE installation described below, is estimated at 20 to 24 days.

- **Install ISVE** - In parallel with the excavation and soil conditioning activity described above, RMT construction personnel will install the *in situ* soil vapor extraction system (ISVE), based on the proposed design, concurrent with conducting the soil conditioning (see Figure 11 for system piping layout). The system will consist of the following components:

  - 4-inch PVC piping placed horizontally within the area at a depth of approximately 4 feet below ground surface
  - Aboveground header piping connecting the belowground piping network to the blower

- Attachment to a blower to create the system vacuum
- Condensate knockout tank
- System controls, including knockout tank high level shutoff, air dilution valve, extraction vacuum gauges, header line temperature gauge, and system pressure relief valve

RMT will use its trailer-mounted blower system for this project. A separate blower system will not need to be purchased for the project. The trailer contains the system components and electrical controls (see Figure 12 for the system components and process flow diagram of the ISVE system).

Monitoring of the exhaust emissions will be conducted upon exhaust treatment from the ISVE system using grab samples analyzed by a gas chromatograph (GC). Condensate that accumulates in the knockout tank will be drummed, characterized for disposal, and disposed, as described in the OM&M task, below.

- **Site restoration** - After the soil conditioning and the installation of the ISVE system, the site surface will be restored to a flat surface, although the grade will be somewhat higher, due to the soil conditioning and excavation. Once the ISVE project is completed, RMT will remove its surface equipment from the job site, and the underground piping will be properly abandoned in place.
- **Investigation-derived waste disposal** - Incidental wastes related to the construction work will be managed appropriately for testing and disposal. Investigation-derived soil or groundwater is not expected to be removed from the site for treatment and disposal, other than the condensate water from the knockout tank. Waste materials such as soiled gloves, rags, or other materials that come into contact with the wastes will be drummed and disposed through a licensed disposal facility.

Engineering Criteria/Assumptions

The basic layout of the ISVE system is presented on Figures 11 and 12. Because the soil will be disturbed during the excavation activities, soil conditioning, and soil backfilling, these operations afford the opportunity to place a horizontal ISVE piping system in the ground. The key design criteria of the horizontal piping system are the pipe spacing and pipe size. The pipe spacing is 20 feet on center, based on experience and best professional judgement. The pipe size (4 inch) was determined using calculations that account for friction loss at design maximum and normal airflow rates, such that it could achieve adequate vacuum influence on the entire manifold lengths.

The soil conditioning will include the mixing in of a lime product at a bulk concentration of 1 to 2 percent by weight of soil during excavation and soil working. The amount of lime product is based on experience and professional judgement for amending the soil sufficiently.

RMT intends to use its trailer-mounted SVE blower unit for the system. The system components and capabilities include removing 220 cfm at a vacuum of 12 inches of mercury. These system capabilities were checked against the field requirements, by conducting vacuum calculations to estimate the vacuum influence at each length of horizontal SVE well pipe. The calculations indicate that the blower is adequate to achieve 0.1 to 5 inches of H_2O vacuum influence along the length of the lateral pipes. This capacity can be modified by operational changes, such as regulating bleed air at the blower inlet or closing isolation valves at the manifold.

The system exhaust will be fitted with a carbon treatment system, to limit the amount of organic compounds emitted to the atmosphere to below state standards (permit thresholds and hazardous air pollutant emission trigger levels within NR 445, Wisconsin Administrative Code).

The initial operation of the SVE system will determine emission rates and confirm operating blower rates, as well as operation scenarios regarding valving at the manifold. Exhaust sampling conducted upon startup will be used to confirm that organic compound emissions after treatment meet the standard after the carbon treatment. Exhaust emissions will be controlled to less than regulatory standards through carbon treatment, and if needed, regulating vacuum and flows from parts of the system. Adjustments and/or modifications will be made to the system based on the results of the initial gas samples collected when the system is started up for normal operations.

We assume that very little condensate will be accumulate in the knockout tank during the ISVE operation, estimated at 1 to 3 gal/day. The ISVE treatment system is expected to operate until soil cleanup standards are achieved, estimated between 3 and 12 months, which would result in a range of total condensate volume of 3 to 36 gallons. As a result, a site-specific condensate treatment system is not proposed as a system component. Condensate will be analyzed and disposed locally, as appropriate.

Treatability Information

No treatability studies were conducted for this project. ISVE is known to remediate VOCs in soil. Sampling of the ISVE exhaust after carbon treatment during the initial days of operation will be conducted to test for emission levels.

Permits Listing

This remediation project will be conducted on privately-owned property. No applicable local, state, or federal permits have been identified for this project concerning the soil remediation. Air emissions will be controlled from the ISVE system exhaust, such that an air permit is not needed.

Public Health and Environmental Laws

The ISVE project can be implemented in compliance with environmental laws and standards. Specifically, the media of concern with respect to this project is soil. Pursuant to the standards in NR 722.19 (direct contact to contaminated soil) the soil cleanup will be conducted in compliance with regulations in NR 724 and NR 726.

Preliminary Discussion of Monitoring

See discussion below.

Preliminary Discussion of Operation and Maintenance

See discussion below.

Proposed Schedule

The soil remediation project has a projected duration of approximately 6 to 7 months after startup, through preparation of the construction documentation report, as detailed below, not including delays between tasks. Operation of the ISVE could last longer than the anticipated 3 months duration shown in the schedule below:

ELEMENT	DURATION (weeks)	COMMENTS
Soil Remediation	4	Assumes 3 weeks in the field
ISVE Operation, Maintenance, and Monitoring	16	Assumes 3 months of OM&M and 1 month for performance monitoring, with normal laboratory TAT
Construction Documentation Report	8	

Design Plans and Specifications Under NR 724.11

The following drawings have been prepared to illustrate remediation plans and specifications, as described in this document:

- **Figure 11** - Drawing showing ISVE layout and equipment plan
- **Figure 12** - Drawing showing ISVE treatment system equipment detail

Operation and Maintenance Plan Under NR 724.13, Including Monitoring

System Startup/Shakedown

As part of startup testing of the ISVE, five (grab) air samples will be collected over a 3-day period and analyzed for VOCs with a gas chromatograph to confirm that the vapor-phase carbon treatment system is functioning as planned to limit emissions below state standards. Additionally, the startup phase air monitoring will determine any need for run-time-sequencing of the system, but it will likely run full-time with the anticipated piping configuration.

After the initial system startup sampling, up to 3 additional air samples will be collected from the exhaust treatment system to determine that emissions are below state standards (one per month for the 3-month estimated remediation duration).

Routine ISVE OM&M

The following tasks will be conducted as part of routine operation, maintenance, and monitoring (OM&M) for the ISVE system:

- Make biweekly trips (every other week) to the site to inspect and document equipment settings:
  - Operating status of electrically operated equipment

  - Meter readings
  - ISVE system flow rate
  - Pressures and temperatures
- Record observations that may indicate malfunction and troubleshooting activities.
- Manage condensate from the knockout tank for characterization and disposal, as needed (assumed to be 750 gal/quarter.)
- Adjust pump settings, flow rates, blower timer, etc., to optimize system functioning, as needed.
- Monitor ISVE system exhaust for VOCs (portable GC) and flow rate on a monthly basis.

RMT will review the system's exhaust data (portable GC), to evaluate whether the system is still removing a significant of amount of VOCs from the soil. When the system is removing VOCs at a low-level asymptotic concentration, then RMT will conduct the performance monitoring described below.

OM&M is assumed for a period of up to 3 months after ISVE startup, but actual cleanup to meet performance objectives may take more or less time. An annual report will be submitted to the WDNR for the OM&M of this system.

Quarterly Progress Reports (2 pages in length) will be prepared and submitted to the WDNR, including the following information:

- Extraction totals to date
- System operating details (shutdowns, problems/solutions)
- System effectiveness
- Recommendations for modifications, if appropriate
- Field data, extraction rates, and flow rates
- Water levels from monitoring wells
- Laboratory data and tables

ISVE Performance Monitoring

After a period of 3 months (or less if asymptotic concentrations are achieved earlier), RMT will collect soil samples within the treated area, to confirm that the treated soil has reached cleanup goals. The sampling will consist of the following components:

- The site will be gridded out on a 25-foot interval spacing from sidewall to sidewall and along the length of the ISVE system (assuming that the entire site is remediated, this will result in about 60 to 70 sampling locations).
- Samples will be collected with a hydraulic probe from a depth of approximately 3 feet below ground surface.
- The samples will be sent to a Wisconsin-certified laboratory under chain-of-custody procedures for VOC analysis.
- The sample results will be averaged and compared with cleanup goals for PCE; TCE; cis-1,2-DCE; and vinyl chloride.

Assuming that the soil, on average, meets cleanup goals, the ISVE system will be shut down. A letter will be prepared for submittal to WDNR indicating shutdown of the system. With the WDNR's concurrence, or at the discretion of Gardner Denver, ISVE equipment will be removed from the site.

If average soil sampling results do not indicate that cleanup goals have been achieved, the following contingent actions will be assessed: (1) the site OM&M function will continue and the soil sampling will be re-conducted after a specified period of time, depending on the initial soil sampling results; (2) selected areas will be reconditioned, and (3) specific soil removals will be conducted for off-site disposal.

The operation and maintenance plan includes routine (quarterly) progress reporting of the system performance.

Long-term Monitoring Plan Under NR 724.17

The ISVE system will not need a long-term monitoring plan, since the performance monitoring will determine when the project has achieved cleanup goals. System monitoring will continue until performance monitoring indicates that the system can be shut down.

Construction Documentation Report - ISVE System

Within 60 days of the installation of the ISVE system, a documentation "as-built" report will be prepared and submitted to the WDNR under NR 724.15, describing how the remedial action meets remedial design objectives. To the extent possible, it will include the information in the design report, so that details are not re-created. The report will include the following:

– A location/features map (NR 724.05e), including buildings and utilities

- As-built maps illustrating the ISVE system location and appurtenant equipment, and the area of soil contamination
- A table of airflow rate, vacuum levels, and temperature at startup
- Water table levels from wells
- A synopsis and certification that the remedial action was built as designed and an explanation of any changes
- A brief description of applicable health and environmental laws affected
- A revised operations and maintenance program, if appropriate

NR 716 Continuing Water Quality Evaluation

Well nest MW-3 is located near the truck dock, in a source area of contamination to the groundwater. Monitoring well MW-3B is installed to a depth of approximately 81 feet into a sand unit, and is screened just beneath the approximately 15-foot–thick silt layer near the truck dock. Well MW-3B has substantial VOC concentration at depth, but shows no degradation products like the overlying sample from well MW-3A (see Figures 4 and 5, and insert table below), installed in a shallower sand. Further, the chemical "fingerprint" of the MW-3B sample is similar to that of the shallow well MW-3 sample. The total VOC concentration at well MW-3B is slightly more than that of MW-3A, suggesting that no attenuation is taking place across the silt layer. The water quality at the further upgradient source near MW-4 (TCE dominant) does not match the water quality at MW-3B (PCE dominant), so the source area at MW4 is not responsible for the contamination at MW-3B. Combined, these data suggest the possibility that the contamination in well MW-3B may have been carried down from the shallow groundwater, which is an inherent risk in drilling through a contaminant source area. Before any additional groundwater investigation is conducted at the site, we recommend that water quality at the MW-3 nest be confirmed.

WELL/CVOC[1]	PCE	TCE	CIS-1,2-DCE	VC	TOTAL VOCs
MW-3	28,000	7,200	3500	ND	38,700
MW-3A	4,200	2,900	12,000	740	20,370[2]
MW-3B	17,000	2,800	600	ND	22,310[2]
MW-4	5,400	38,000	ND	ND	43,980[2]
MW-4A	6.9	38,000	ND	ND	8.59[2]

Notes:
(1) Units in µg/L.
(2) Total VOCs include additional parameters not shown in adjacent columns.

Water quality testing will be conducted at the MW-3 well nest to evaluate whether the VOCs previously detected in well MW-3B have similar chemistry to those of the last sampling. In addition, a second round of sampling will be collected at each of the other two new wells (MW-7 and MW-7A) on the site. The scope of work will include the following steps:

- Purge each of the five wells of three casing volumes of water.
- Collect water quality samples from each of the wells using low-flow sampling methods for laboratory VOC analysis and field measurements for pH, redox, dissolved oxygen, temperature, and specific conductivity.

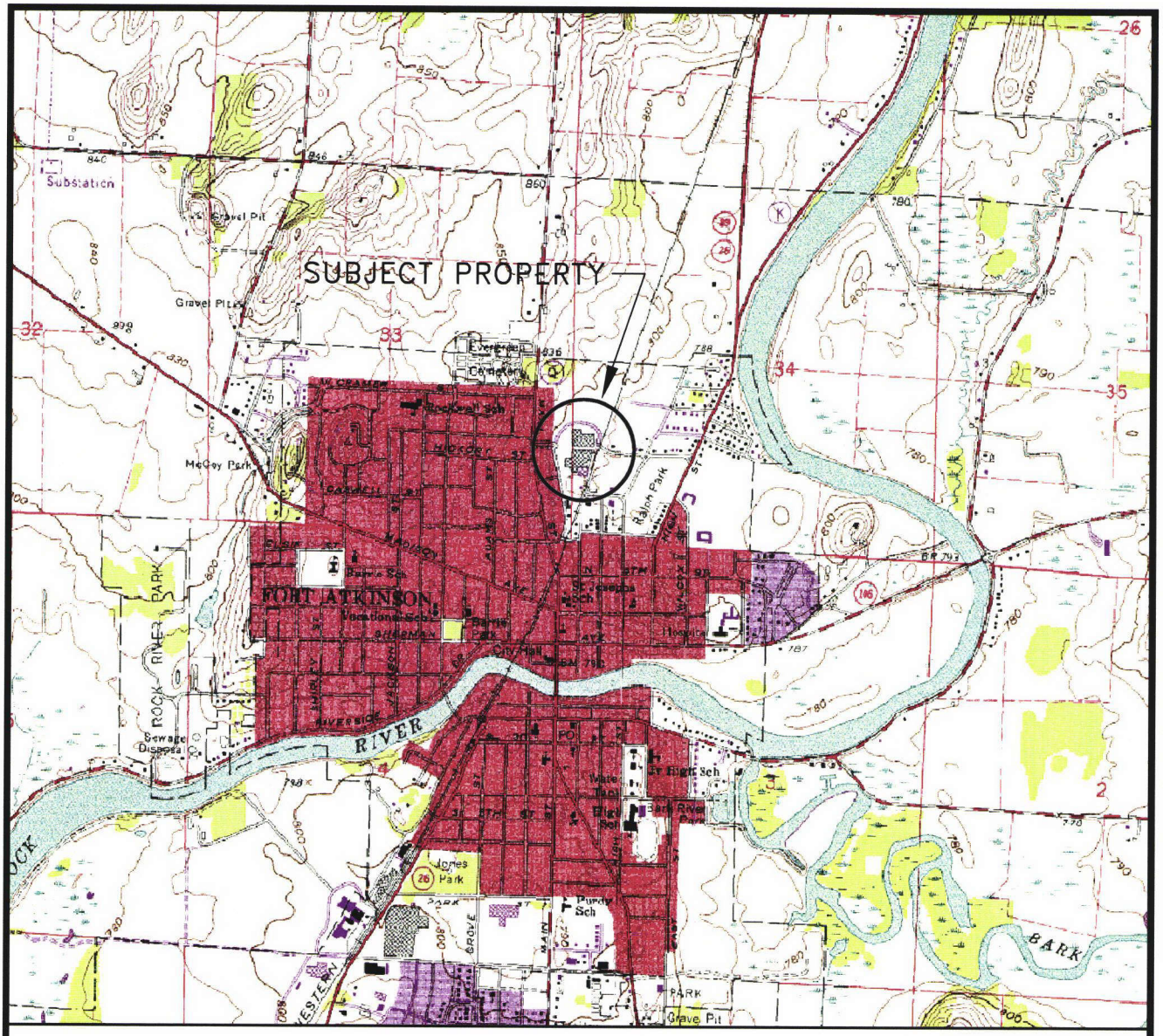
Data from the MW-3 nest of wells will be evaluated for the type and concentration of individual VOC concentrations and for changes since the last sampling. In particular, the chemistry in well MW-3B will be evaluated to determine if concentrations have changed or if the proportion of individual chlorinated VOCs has changed. These evaluations should provide some preliminary information with which to evaluate the actual presence of VOCs beneath the silt layer (*e.g.*, if the concentration has dropped considerably). The data from the MW-7 nest will be evaluated to confirm the first round sampling results.

Purge water will be barreled and then temporarily stored on-site until it can be picked up and treated/disposed. We anticipate that the sampling will generate approximately 1 barrel of purge water.

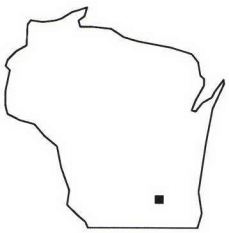
If the preliminary evaluation of the MW-3B data is not definitive, then additional steps may be recommended to evaluate the presence of VOCs, possibly including a brief pump-down test of well MW-3B, to evaluate chemistry concentration changes over time, or the installation of a downgradient well/boring beneath the silt layer outside of the source area.

A brief letter report will be prepared describing the methods and results, along with recommendations on how to proceed with any additional investigation of groundwater to determine degree and extent.

Additional monitoring will be discussed with the WDNR prior to development of a plan for groundwater remediation. A separate groundwater remediation evaluation and design plan will be prepared at some time in the future.



BASE MAP SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE, FORT ATKINSON, WISCONSIN, DATED 1987.



QUADRANGLE LOCATION

NORTH
SCALE: 1"=2400'

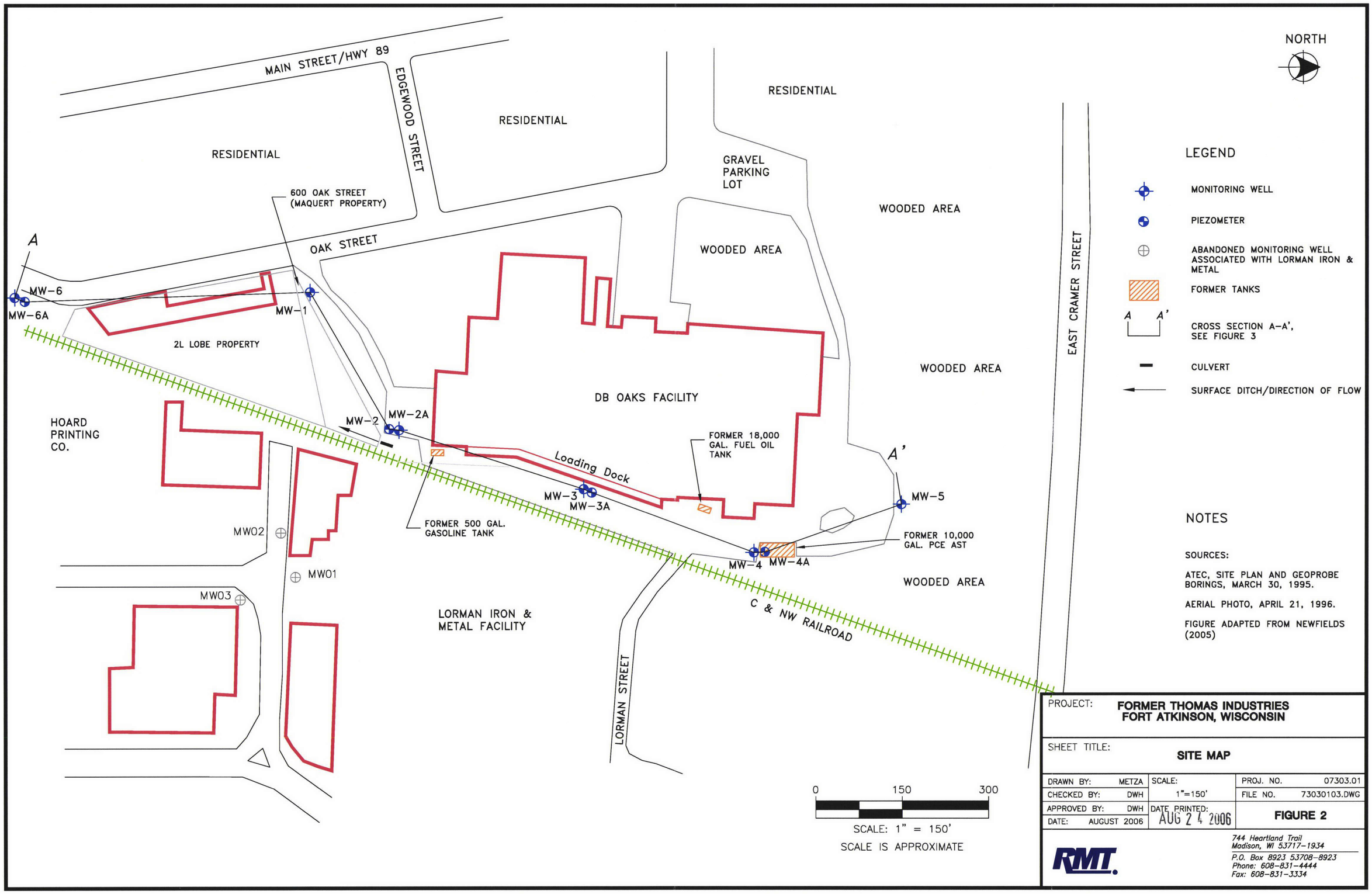
NOTE: FIGURE ADAPTED FROM NEWFIELDS (2005)

RMT

FORMER THOMAS FACILITY
FORT ATKINSON, WISCONSIN

SITE LOCATION
FIGURE 1

DRAWN BY:	METZA
APPROVED BY:	DWH
PROJECT NO.	07303.01
FILE NO.	73030102.DWG
DATE:	AUGUST 2006



NOTES

SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

FIGURE ADAPTED FROM NEWFIELDS (2005)

PROJECT: **FORMER THOMAS INDUSTRIES FORT ATKINSON, WISCONSIN**

SHEET TITLE: **SITE MAP**

DRAWN BY: METZA	SCALE: 1"=150'	PROJ. NO.	07303.01
CHECKED BY: DWH		FILE NO.	73030103.DWG
APPROVED BY: DWH	DATE PRINTED: AUG 2 4 2006	**FIGURE 2**	
DATE: AUGUST 2006			

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Phone: 608-831-4444
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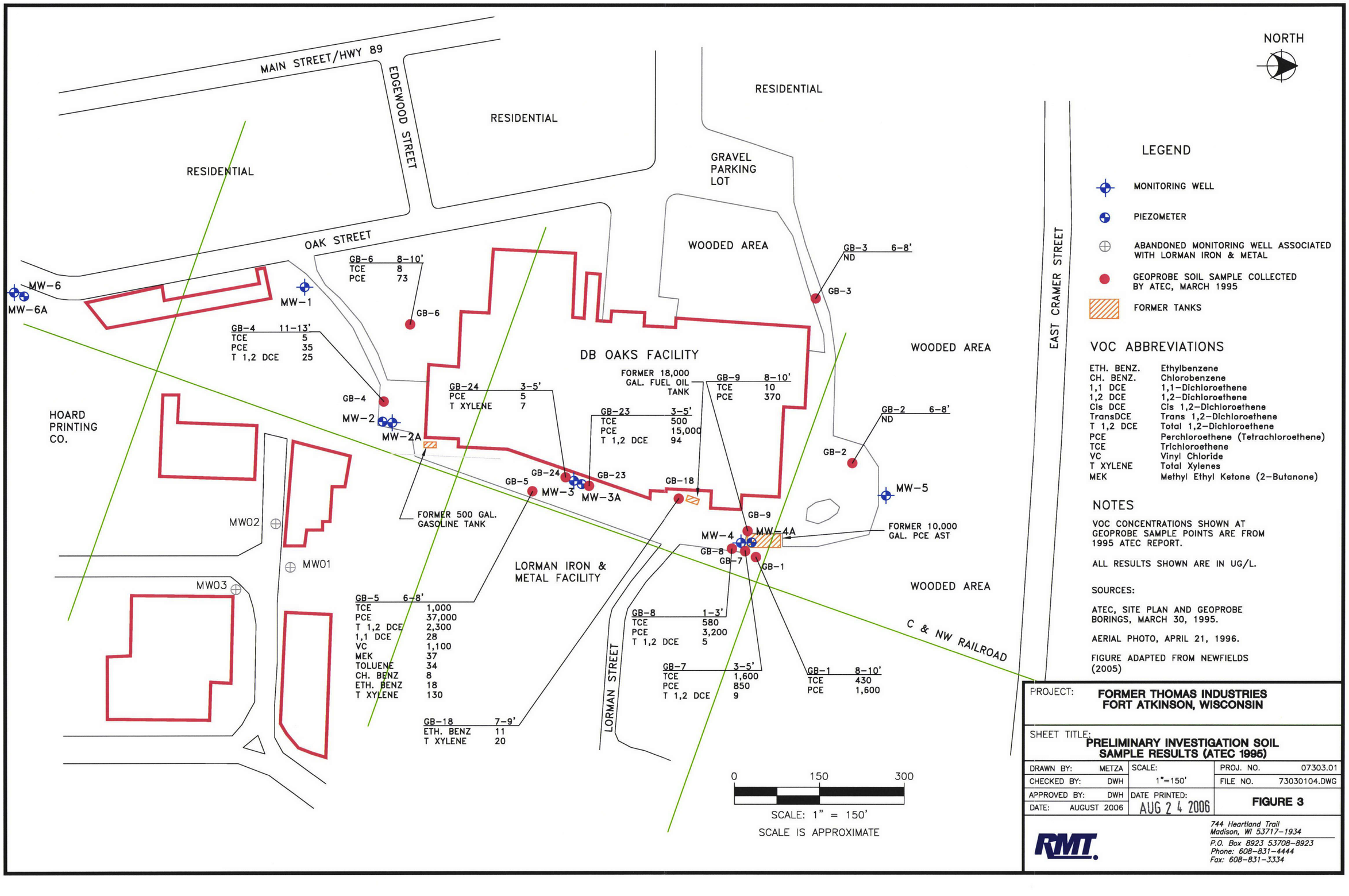

LEGEND

- MONITORING WELL
- PIEZOMETER
- ABANDONED MONITORING WELL ASSOCIATED WITH LORMAN IRON & METAL
- GEOPROBE SOIL SAMPLE COLLECTED BY ATEC, MARCH 1995
- FORMER TANKS

VOC ABBREVIATIONS

ETH. BENZ.	Ethylbenzene
CH. BENZ.	Chlorobenzene
1,1 DCE	1,1–Dichloroethene
1,2 DCE	1,2–Dichloroethene
Cis DCE	Cis 1,2–Dichloroethene
TransDCE	Trans 1,2–Dichloroethene
T 1,2 DCE	Total 1,2–Dichloroethene
PCE	Perchloroethene (Tetrachloroethene)
TCE	Trichloroethene
VC	Vinyl Chloride
T XYLENE	Total Xylenes
MEK	Methyl Ethyl Ketone (2–Butanone)

NOTES

VOC CONCENTRATIONS SHOWN AT GEOPROBE SAMPLE POINTS ARE FROM 1995 ATEC REPORT.

ALL RESULTS SHOWN ARE IN UG/L.

SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

FIGURE ADAPTED FROM NEWFIELDS (2005)

PROJECT: **FORMER THOMAS INDUSTRIES FORT ATKINSON, WISCONSIN**

SHEET TITLE: **PRELIMINARY INVESTIGATION SOIL SAMPLE RESULTS (ATEC 1995)**

DRAWN BY: METZA	SCALE: 1"=150'	PROJ. NO.	07303.01
CHECKED BY: DWH		FILE NO.	73030104.DWG
APPROVED BY: DWH	DATE PRINTED: AUG 2 4 2006	**FIGURE 3**	
DATE: AUGUST 2006			

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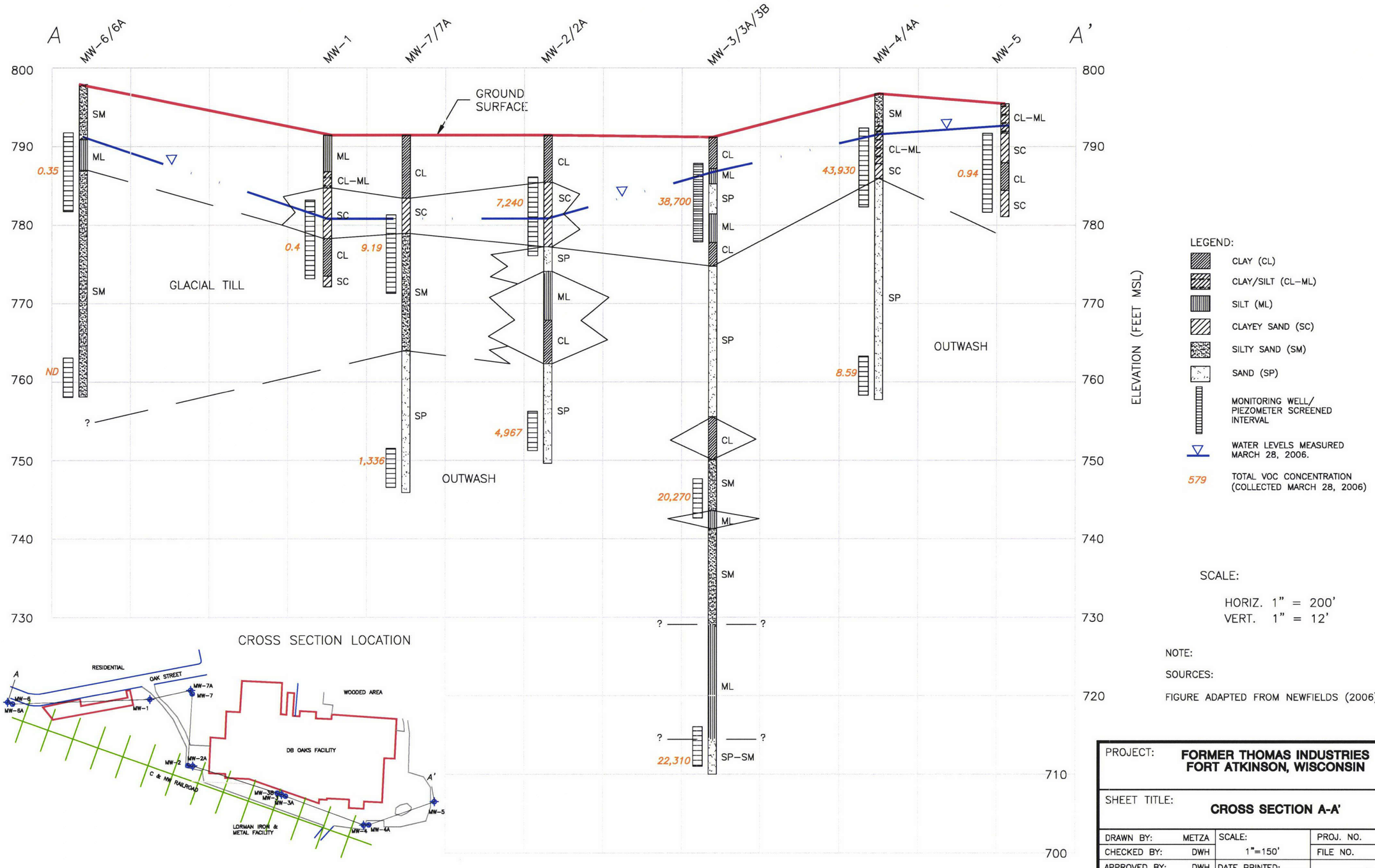

CROSS SECTION LOCATION

LEGEND:

- CLAY (CL)
- CLAY/SILT (CL-ML)
- SILT (ML)
- CLAYEY SAND (SC)
- SILTY SAND (SM)
- SAND (SP)
- MONITORING WELL/ PIEZOMETER SCREENED INTERVAL
- WATER LEVELS MEASURED MARCH 28, 2006.
- 579 TOTAL VOC CONCENTRATION (COLLECTED MARCH 28, 2006)

SCALE:

HORIZ. 1" = 200'
VERT. 1" = 12'

NOTE:

SOURCES:

FIGURE ADAPTED FROM NEWFIELDS (2006)

PROJECT: **FORMER THOMAS INDUSTRIES FORT ATKINSON, WISCONSIN**

SHEET TITLE: **CROSS SECTION A-A'**

DRAWN BY: METZA	SCALE: 1"=150'	PROJ. NO.	07303.01
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APPROVED BY: DWH	DATE PRINTED: AUG 2 4 2006	**FIGURE 4**	
DATE: AUGUST 2006			

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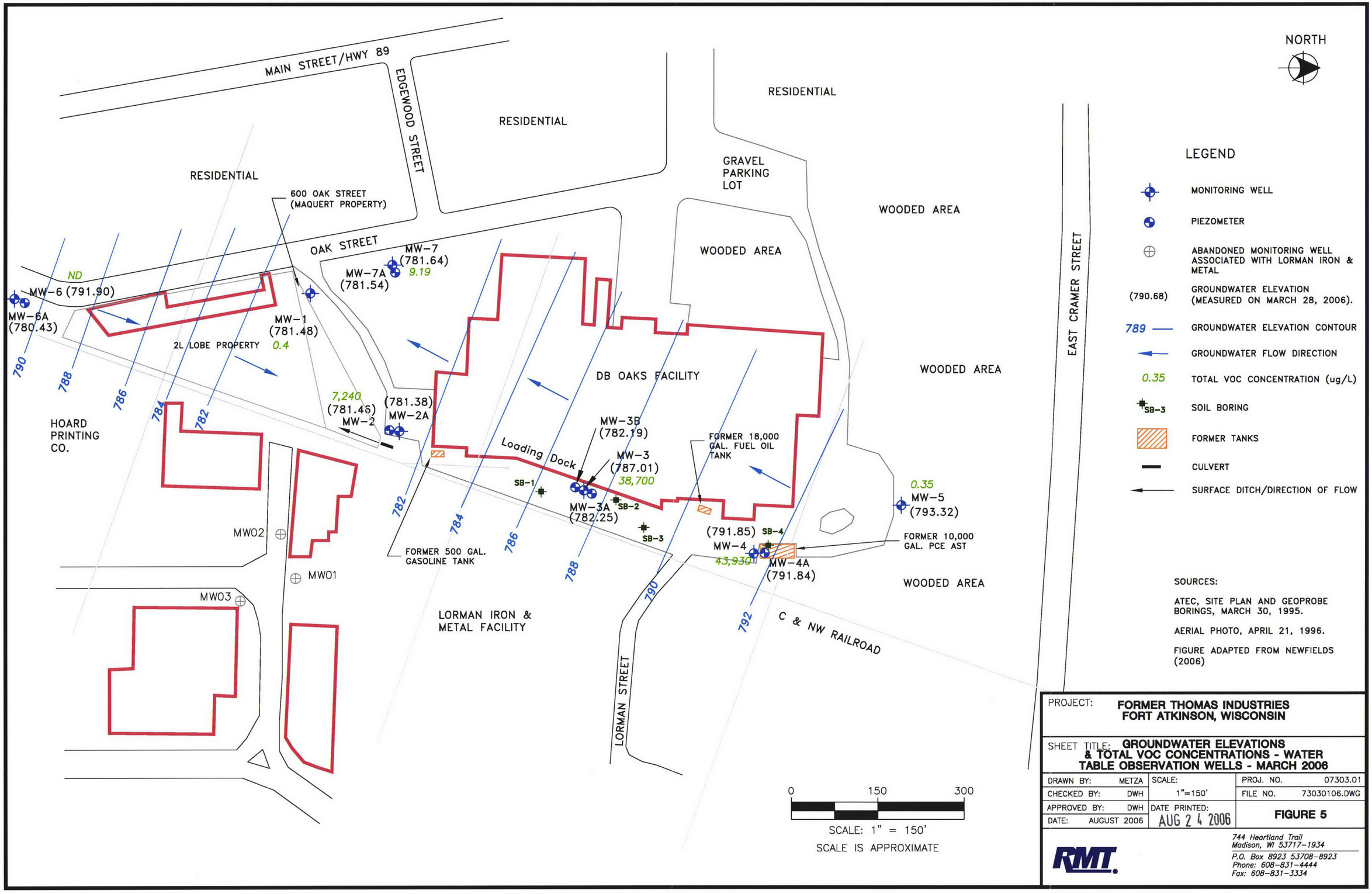

LEGEND

- MONITORING WELL
- PIEZOMETER
- ABANDONED MONITORING WELL ASSOCIATED WITH LORMAN IRON & METAL
- (790.68) GROUNDWATER ELEVATION (MEASURED ON MARCH 28, 2006).
- 789 GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- 0.35 TOTAL VOC CONCENTRATION (ug/L)
- SB-3 SOIL BORING
- FORMER TANKS
- CULVERT
- SURFACE DITCH/DIRECTION OF FLOW

SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

FIGURE ADAPTED FROM NEWFIELDS (2006)

PROJECT: **FORMER THOMAS INDUSTRIES FORT ATKINSON, WISCONSIN**

SHEET TITLE: **GROUNDWATER ELEVATIONS & TOTAL VOC CONCENTRATIONS - WATER TABLE OBSERVATION WELLS - MARCH 2006**

DRAWN BY: METZA	SCALE:	PROJ. NO.	07303.01
CHECKED BY: DWH	1"=150'	FILE NO.	73030106.DWG
APPROVED BY: DWH	DATE PRINTED:	**FIGURE 5**	
DATE: AUGUST 2006	AUG 2 4 2006		

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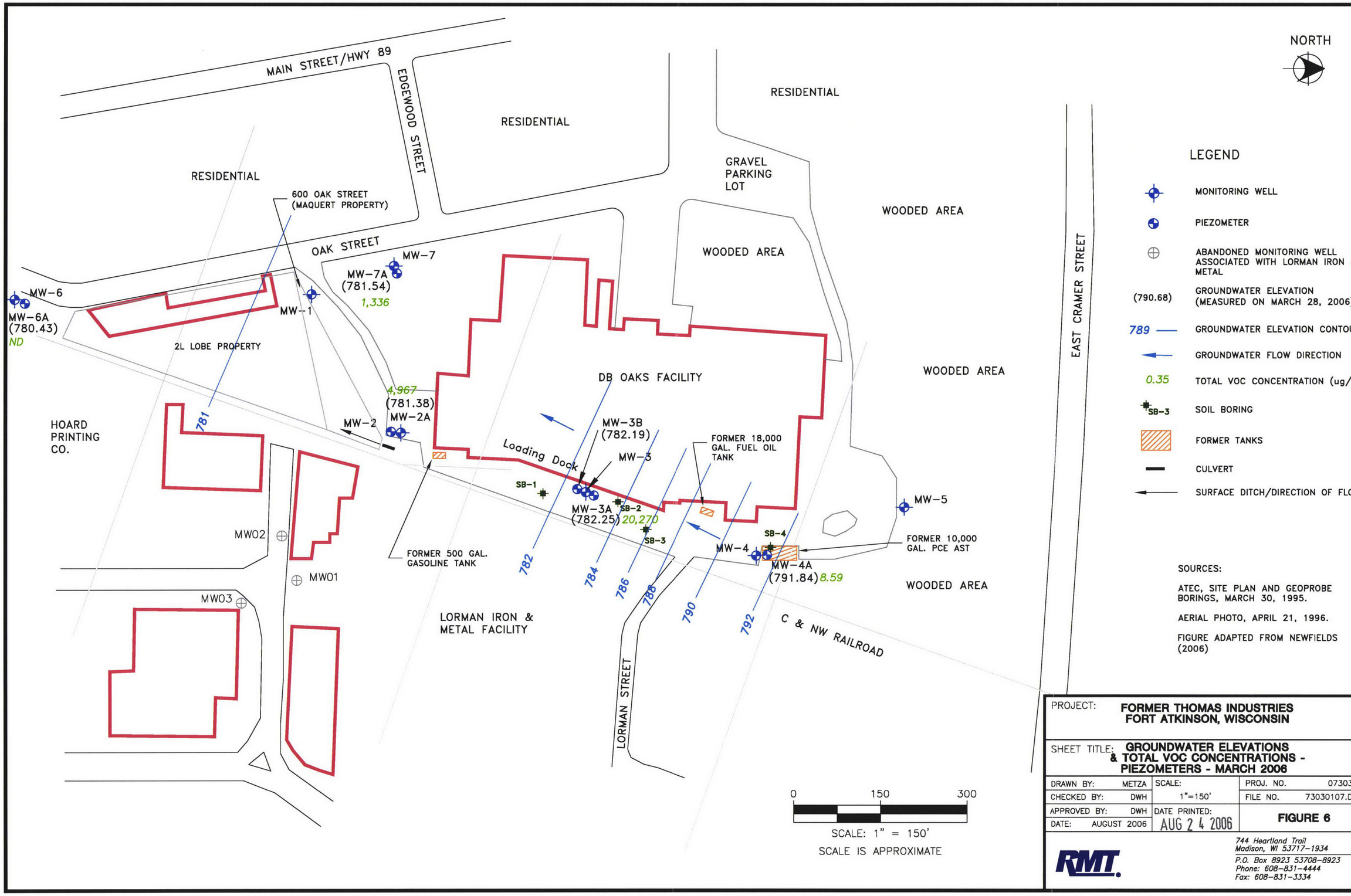

LEGEND

- MONITORING WELL
- PIEZOMETER
- ABANDONED MONITORING WELL ASSOCIATED WITH LORMAN IRON & METAL
- (790.68) GROUNDWATER ELEVATION (MEASURED ON MARCH 28, 2006).
- 789 GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION
- 0.35 TOTAL VOC CONCENTRATION (ug/L)
- SB-3 SOIL BORING
- FORMER TANKS
- CULVERT
- SURFACE DITCH/DIRECTION OF FLOW

SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

FIGURE ADAPTED FROM NEWFIELDS (2006)

PROJECT: **FORMER THOMAS INDUSTRIES FORT ATKINSON, WISCONSIN**

SHEET TITLE: **GROUNDWATER ELEVATIONS & TOTAL VOC CONCENTRATIONS - PIEZOMETERS - MARCH 2006**

DRAWN BY: METZA	SCALE:	PROJ. NO.	07303.01
CHECKED BY: DWH	1"=150'	FILE NO.	73030107.DWG
APPROVED BY: DWH	DATE PRINTED: AUG 2 4 2006	**FIGURE 6**	
DATE: AUGUST 2006			

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DB OAKS BUILDING

NORTH

MW-2A

MW-2

A6

A4

A10

A8

MW-3A

MW-3

X13

Y13

MW-4

MW-4A

C & NW RAILROAD

LORMAN IRON &
METAL FACILITY

LORMAN STREET

SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

FIGURE ADAPTED FROM NEWFIELDS (2005)

0 50 100

SCALE: 1" = 50'

SCALE IS APPROXIMATE

LEGEND

- INDOOR GEOPROBE BORING
- PRIMARY GEOPROBE BORING
- SECONDARY GEOPROBE BORING
- 0.49 TOTAL VOC CONCENTRATION (PPM)
- TOTAL VOC CONCENTRATION (10 PPM)
- TOTAL VOC CONCENTRATION (1 PPM)
- STORM SEWER
- GAS LINE

PROJECT: **FORMER THOMAS INDUSTRIES FORT ATKINSON, WISCONSIN**

SHEET TITLE: **LATERAL EXTENT OF TOTAL VOCS IN SOIL, 0-2.5 FOOT INTERVAL**

DRAWN BY: METZA	SCALE:	PROJ. NO.	07303.01
CHECKED BY: DWH	1"=50'	FILE NO.	73030108.DWG
APPROVED BY: DWH	DATE PRINTED: AUG 2 4 2006	**FIGURE 7**	
DATE: AUGUST 2006			

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NORTH

DB OAKS BUILDING

MW-2A

MW-2

A6 1.05

A4 0.23

A10 3.08

MW-3A

MW-3

A8 76.2

X13

Y13

MW-4

MW-4A

LORMAN IRON &
METAL FACILITY

C & NW RAILROAD

LORMAN STREET

SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

FIGURE ADAPTED FROM NEWFIELDS (2005)

0 50 100

SCALE: 1" = 50'

SCALE IS APPROXIMATE

LEGEND

- INDOOR GEOPROBE BORING
- PRIMARY GEOPROBE BORING
- SECONDARY GEOPROBE BORING
- 0.49 TOTAL VOC CONCENTRATION (PPM)
- TOTAL VOC CONCENTRATION (10 PPM)
- TOTAL VOC CONCENTRATION (1 PPM)
- SS STORM SEWER
- GAS LINE

PROJECT: **FORMER THOMAS INDUSTRIES FORT ATKINSON, WISCONSIN**

SHEET TITLE: **LATERAL EXTENT OF TOTAL VOCS IN SOIL, 2.5-5 FOOT INTERVAL**

DRAWN BY: METZA	SCALE: 1"=50'	PROJ. NO.	07303.01
CHECKED BY: DWH		FILE NO.	73030109.DWG
APPROVED BY: DWH	DATE PRINTED: AUG 2 4 2006	**FIGURE 8**	
DATE: AUGUST 2006			

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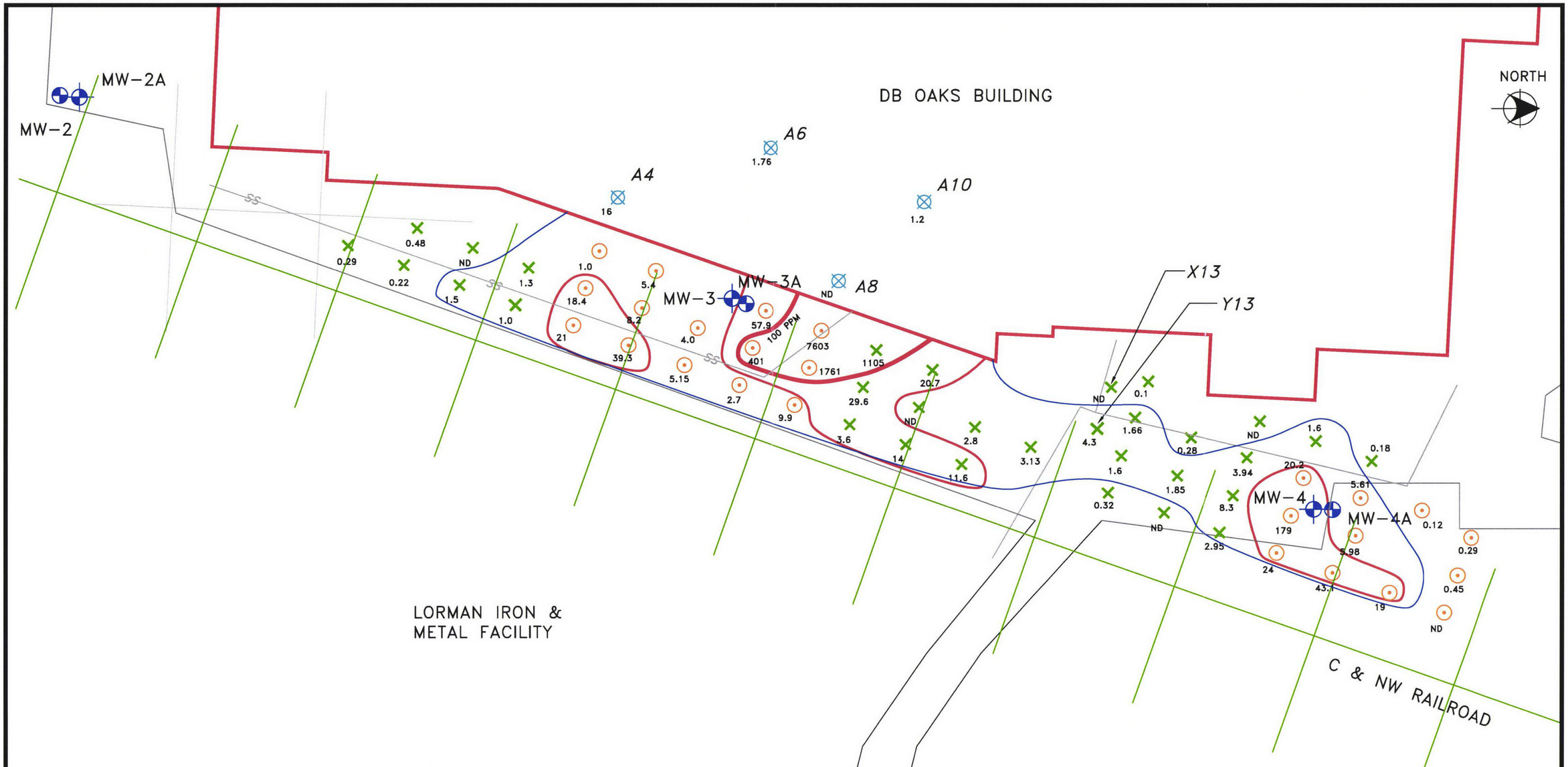

LORMAN IRON &
METAL FACILITY

SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

FIGURE ADAPTED FROM NEWFIELDS (2005)

0 50 100

SCALE: 1" = 50'

SCALE IS APPROXIMATE

LEGEND

- INDOOR GEOPROBE BORING
- PRIMARY GEOPROBE BORING
- SECONDARY GEOPROBE BORING
- 0.49 TOTAL VOC CONCENTRATION (PPM)
- TOTAL VOC CONCENTRATION (10 PPM)
- TOTAL VOC CONCENTRATION (1 PPM)
- SS STORM SEWER
- GAS LINE

PROJECT: **FORMER THOMAS INDUSTRIES FORT ATKINSON, WISCONSIN**

SHEET TITLE: **LATERAL EXTENT OF TOTAL VOCS IN SOIL, 5-7.5 FOOT INTERVAL**

DRAWN BY: METZA	SCALE: 1"=50'	PROJ. NO.	07303.01
CHECKED BY: DWH		FILE NO.	73030110.DWG
APPROVED BY: DWH	DATE PRINTED: AUG 24 2006	**FIGURE 9**	
DATE: AUGUST 2006			

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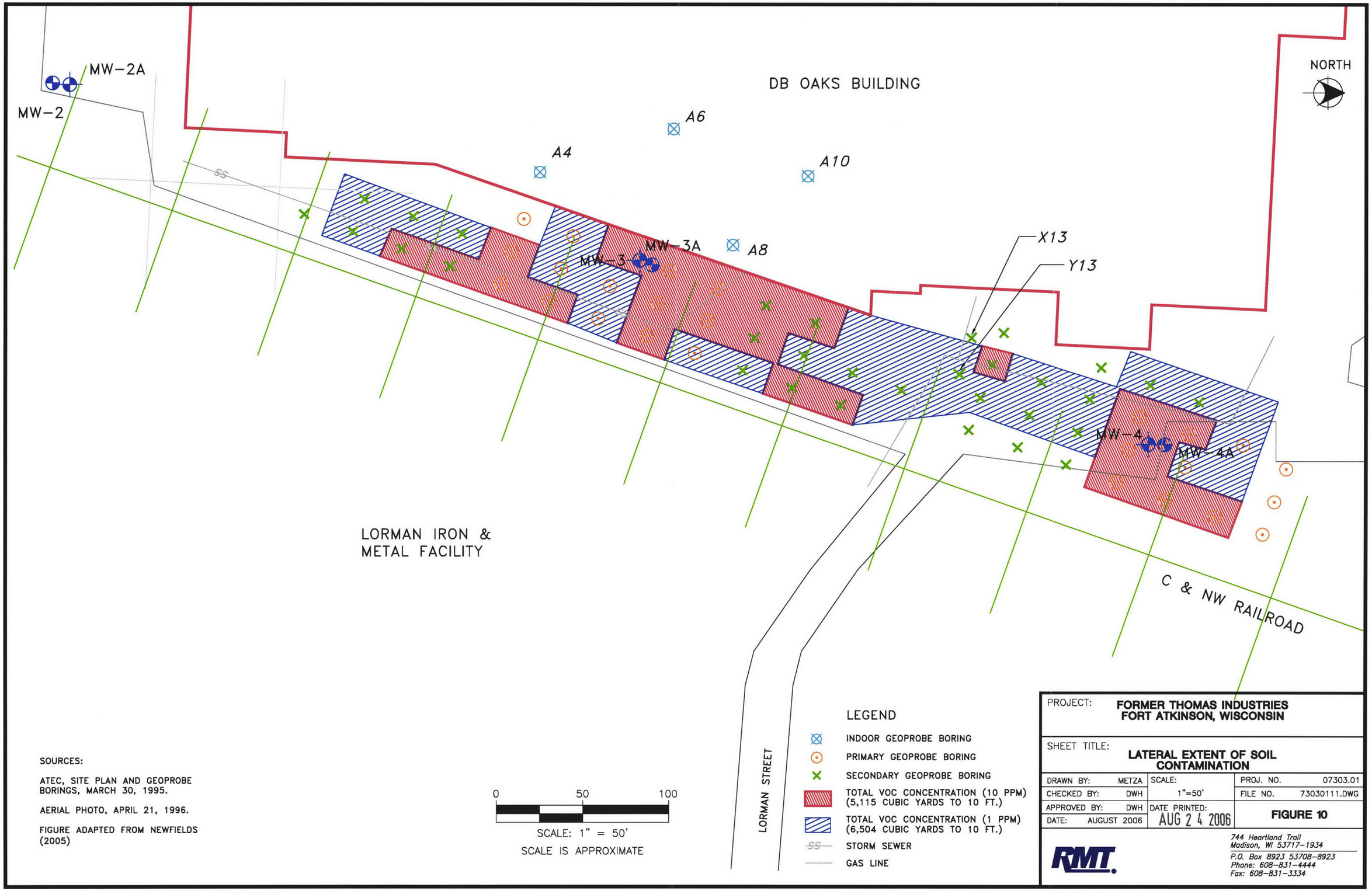

SOURCES:

ATEC, SITE PLAN AND GEOPROBE BORINGS, MARCH 30, 1995.

AERIAL PHOTO, APRIL 21, 1996.

FIGURE ADAPTED FROM NEWFIELDS (2005)

0 50 100

SCALE: 1" = 50'

SCALE IS APPROXIMATE

LEGEND

- INDOOR GEOPROBE BORING
- PRIMARY GEOPROBE BORING
- SECONDARY GEOPROBE BORING
- TOTAL VOC CONCENTRATION (10 PPM) (5,115 CUBIC YARDS TO 10 FT.)
- TOTAL VOC CONCENTRATION (1 PPM) (6,504 CUBIC YARDS TO 10 FT.)
- SS — STORM SEWER
- GAS LINE

PROJECT: **FORMER THOMAS INDUSTRIES FORT ATKINSON, WISCONSIN**

SHEET TITLE: **LATERAL EXTENT OF SOIL CONTAMINATION**

DRAWN BY: METZA	SCALE:	PROJ. NO.	07303.01
CHECKED BY: DWH	1"=50'	FILE NO.	73030111.DWG
APPROVED BY: DWH	DATE PRINTED: AUG 2 4 2006	**FIGURE 10**	
DATE: AUGUST 2006			

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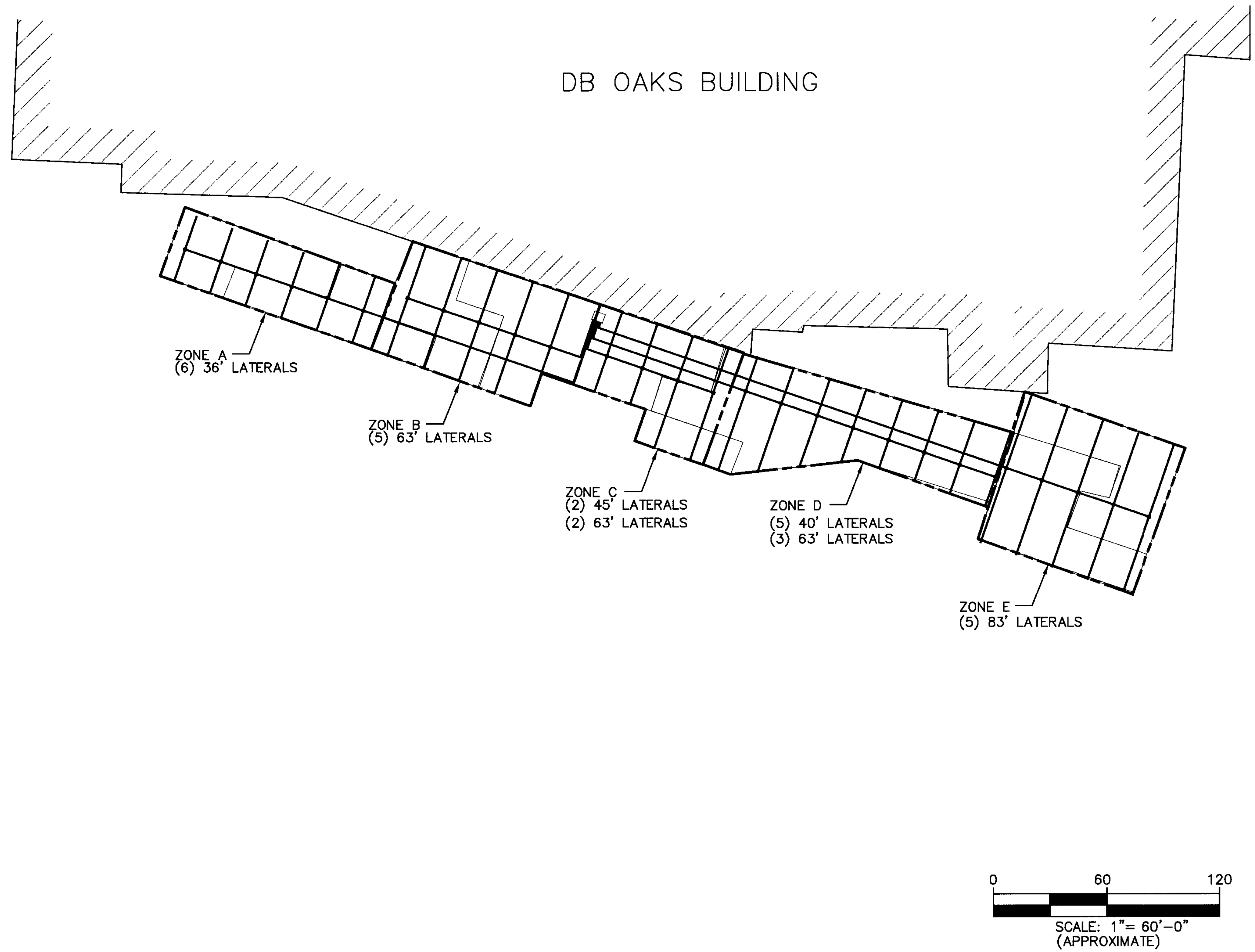

NO.	BY	DATE	REVISION	APP'D.
3.				
2.				
1.				

PROJECT: DB OAKS FACILITY		
SHEET TITLE: SVE SYSTEM PIPING LAYOUT		
DRAWN BY: ADM	SCALE: NONE	PROJ. NO. 07303.01
CHECKED BY: DWH		FILE NO. 73030113.dwg
APPROVED BY: DWH	DATE PRINTED:	FIGURE 11
DATE: AUGUST 2006		

RMT AUG 2 4 2006
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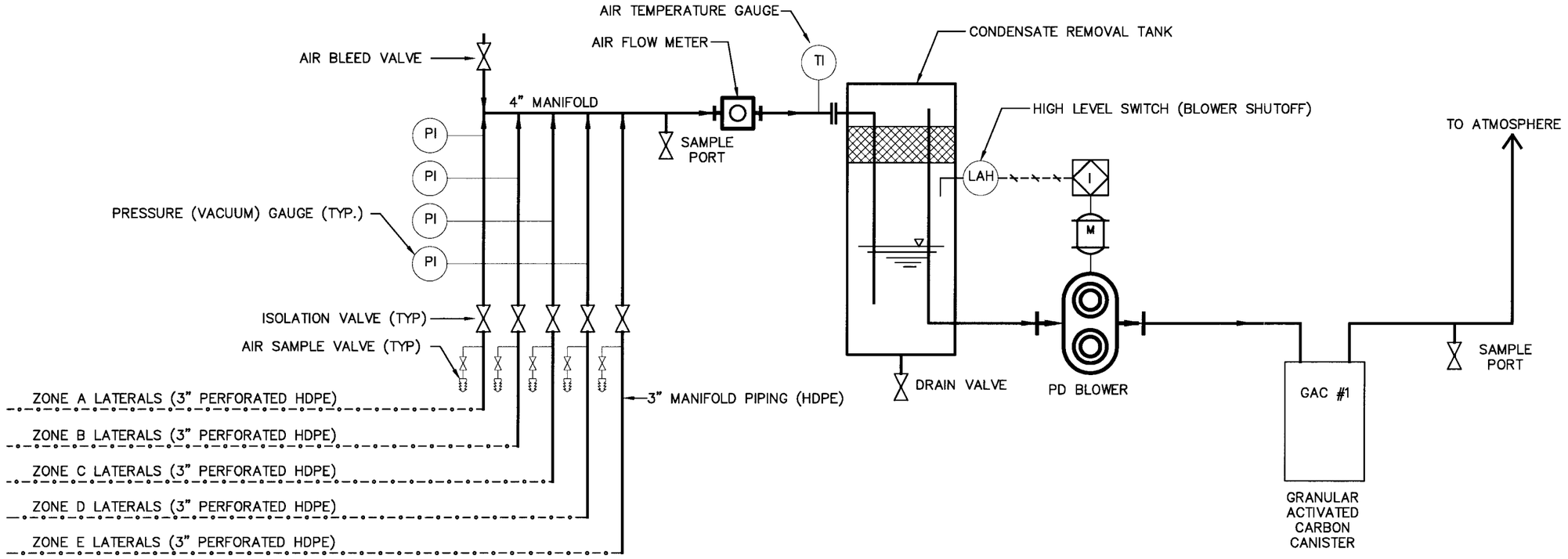

NO.	BY	DATE	REVISION	APP'D.
3.				
2.				
1.				

PROJECT:
DB OAKS FACILITY
FORT ATKINSON, WISCONSIN

SHEET TITLE:
PIPING AND INSTRUMENTATION DIAGRAM
ISVE SYSTEM

DRAWN BY:	METZA	SCALE:	PROJ. NO. 07303.01
CHECKED BY:	DWH	NONE	FILE NO. 73030112.dwg
APPROVED BY:	DWH	DATE PRINTED:	FIGURE 12
DATE:	AUGUST 2006		

RMT AUG 2 4 2006

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