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FACSIMILE TRANSMISSION COVER SHEET

To: <u>WDNR</u>	Date: <u>12/11/95</u>
Attention: <u>SCOTT FERGUSON</u>	Time: <u>4:10 pm</u>
From: <u>Wenbin Yuan</u>	Fax Number: <u>229-0810</u>
Subject: <u>VME/Waukesha</u> <u>work plan</u>	Phone Number: _____
	Total Pages Including Cover: _____

Dear Scott:

I am sorry for being ~~to~~ late to submit this plan. Please let me know if you have any questions about this plan ASAP. We are doing ~~a~~ geophysical survey tomorrow.

Wenbin Yuan

Site Investigation Work Plan
For the 1005 Perkins Avenue Site
Waukesha, WI

WDNR #: PID 268 09189 0, County of Waukesha, HW/GENCL
DEW #: 95101103

This Work Plan is Prepared for:

Mr. Frank Giuffre, Sr.
Mallory Improvements
6635 S. 13th Street
Milwaukee, WI 53221

November 30, 1995

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1.0 INTRODUCTION

Dakota Environmental of Wisconsin, Inc. (CONSULTANT) has been retained by Mr. Frank Giuffre of Mallory Improvements (CLIENT) to prepare this site investigation work plan for the 1005 Perkins Avenue property, Waukesha, Wisconsin, owned by CLIENT. The following items will detail the scope of the work based on our understanding of the site conditions.

2.0 BACKGROUND REVIEW

2.1 Site Condition Description

The site is located in an industrial and residential area in northeast of Waukesha, WI (see Figure 1). It encompasses 16 acres of land and is separated into two portions by the railroad together with a small unnamed creek, see Figure 2. The west portion is occupied by approximately 245,000 square feet facility buildings together with parking lots. The building is now divided into rental warehouse spaces and office spaces. The east portion of the property is basically vacant lot with only a storage shed on the northern boundary.

A fill area is located on the eastern portion of the property which covers approximately 150' by 150' area. The fill consists of bricks, gravel, cement blocks, scrap metal, and other debris.

On November 11, 1993, Wisconsin Department of Natural Resources (WDNR) began to investigate the site to determine the validity of an anonymous complaint alleging the disposal of hundreds of 55-gallon drums containing waste paints and solvents in the property. The WDNR personnel did find partially exposed 30-gallon drums in the northeast corner of the site. One soil sample and two waste samples were taken from the site, and all of the samples showed high levels of heavy metals, including chromium and lead.

Upon the review of the site conditions and negotiation between responsible parties and the WDNR personnel in a meeting held on September 27, 1995, the WDNR required that a site investigation plan and a site remediation be performed (WDNR letter of October 2, 1995). This work plan is to address the WDNR requirements for the site investigation.

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2.2 Site History

The current site owners are Dominick J. Giuffre and Frank P. Giuffre, Mallory Improvements, 6635 S. 13th Street, Milwaukee, WI 53221. (414)764-9200. Mallory Improvements purchased this property from VME Americas, Inc. (VME) in February, 1993. VME's current address is 1 West Pack Square, Asheville, North Carolina 28801, (704)257-2528. VME used the property from 1981 to 1993. Prior to VME, the property is owned and operated by Hein-Werner from 1955 to 1981.

The facility was used for manufacturing and assembling heavy construction equipment from 1955 to 1992. The western portion of the property was basically used for manufacturing activities, while the eastern portion was used for demonstrating and testing for the construction equipment manufactured by the previously owners/operators of the facility.

The complete inventory of waste generated during the past manufacturing operations is not known at this time. No party has claimed to be responsible for the disposal of hazardous waste at this property.

An underground storage tank (UST) Closure Checklist report dated November 21, 1993, was prepared for the VME Americas Inc. by Versar Inc. Five petroleum and hydraulic oil USTs were removed from the eastern portion of the property and a UST removal assessment was performed by Versar Inc. Contaminated soil excavation was conducted to remove the impacted soil from the tank locations.

2.3 Site Geology and Hydrology

According to Versar's report, varying thickness of borrow fill was placed across the site. The fill consists of a conglomeration of clay, silt, sand, gravel, spent casting or foundry sand, brick, wood, metal, and concrete. Glacial till underlies several feet below the fill and extends to the depth of average 9 ft below the ground surface. Poorly sorted outwash sand and sandy gravel underlie the till. The sandy material is saturated and contain trace amount of fines. The outwash base is located approximately 22 ft. below ground surface. Lacustrine silt and clayey silt are located under the outwash. The silty deposits grades to fine sand at approximately 40 feet below the ground surface. The fine sand layer represents the erosion deposit over the bedrock. Silurian dolomite bedrock was encountered at the depth around 40 to 45 ft. below ground surface according to the boring logs.

The poorly sorted sandy outwash located at the depth between 9 and 22 ft. is considered a shallow aquifer. It is confined or partially confined by the upper till.

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The Lacustrine silt and clayey silt located under the outwash is considered a confining layer with low conductivity. The erosion sand together with the jointed dolomite functioned as an aquifer.

The surface water drains to the small unnamed creek which flows across the middle of the property (see Figure 2). It divides the property into two portions together with the railroad tracks.

Local residents are furnished with potable water obtained from deep wells (~2,000 ft. deep, Versar Inc., 1993). The nearest potable water supply well is approximately one mile southwest of the site.

3.0 OBJECTIVE OF WORK

The Work Plan is prepared for the Client to define the scope of work, sequence of work, and the estimated cost of the work. The scope of work and procedures for this project are prepared in accordance with the WDNR's requirements (i.e. Michael Ellenbecker, March 7, 1995, Debby Roszak, October 2, 1995) and the guideline of Closure of Unlicensed Hazardous Waste Treatment, Storage, and Disposal Facilities (WDNR, 1994).

The objective of the site investigation is to define the extent and degree of contamination caused by the previous facility operation at the referred site. Since hazardous waste has been confirmed by the WDNR sampling, surveying for additional drums/waste disposal areas, if any, and characterizing the wastes are also part of the project. A site remedial action plan can be developed based on the results of the proposed site investigation.

4.0 SCOPE OF WORK

The scope of work of the site investigation will include:

1. *Perform a geophysical site survey to locate any buried drums or waste burial areas.* A magnetometer will be employed to screen the subsurface of the property. A comprehensive survey report will be provided. This technology will be able to identify the possible extent of buried drums or other indicative metals. Because there is little risk of generating dust during the geophysical survey, a modified level D protection for personnel health and safety will be used.
2. *Expose each identified potential drum/waste area and retrieve waste samples from the waste drums or waste burial pits.* This phase of work is designed to confirm the survey results and to characterize the contaminants in the waste by sampling and analyzing. Send 20 to 60 representative waste samples from the drums or pits identified by the geophysical survey for analysis of VOCs and selected heavy metals.

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The actual number of samples will depend on the number of drums and extent of the contamination. A level C protection for health and safety is expected.

3. *Analyze the data generated through the site investigation and provide a report based on the project results.* A comprehensive site investigation report will be prepared based on the existing data.
4. *Develop a remedial action recommendations for the site.* A brief description of the future remedial plan will be included in the report, which will evaluate various options and rationales for the selection of the remedial technologies. A site remedial plan can be developed based on the data and recommendations.

Based on the fact that the known or suspected contaminants are solvents and paint related heavy metals, DEW plans to analyze VOCs for all of the samples using the EPA 8260/SW846 methodologies for the testing. Eight major toxic metals, namely Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver, will be analyzed by a certified lab for each soil sample.

5.0 SCHEDULE OF WORK IMPLEMENTATION

Upon the review and approval of your company and the WDNR, DEW proposes to use the following schedule for the site investigation:

December 1995	Work Plan Review, Modification, and Approval
Mid-December - 1995	Geophysical Survey
March - 1996	Exploration Digging, Sampling, and Testing
April - 1996	Site Investigation Report (draft)
May - 1996	Review and modification, Supplemental Data Gathering (if required)
June - 1996	Final Report and Remedial Action Plan Development

Above are the projected schedule for the project. The schedule may be revised when circumstance dictates. Hopefully, a remedial design can be completed and the remedial action can be initiated within 1996. DEW plans to include the drum removal and waste excavation, if needed, in the remedial phase of the project. This will allow sufficient time to characterize the contaminants and evaluate the most economic and effective remedial options for the site.

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6.0 SITE SAFETY AND INVESTIGATION GENERATED WASTE MANAGEMENT

According to the site's known history, only containers (cans and drums) with paints or paint-related wastes together with industrial solvents are identified or suspected at this site. The major potential hazardous concerns are from the solvents and heavy metals. DEW believes that a modified OSHA Level D protection for the geophysical survey work crew with precautions avoiding inhale, congestion, and fire will be sufficient for the operation of the geophysical survey investigation. The intrusive backhoe digging and sampling stage can be an OSHA level C protection. A site safety and health plan will be developed prior to the site investigation and administered during the investigation.

Since the concentration of contaminants can only be identified after the sampling, the soil or waste excavated from the exploration digging will be backfilled with the initial excavated materials after the sampling. This is to avoid surface water run-off or run-on problems. Upon the characterization of the contamination, further decision of the site clean-up will be made to handle the wastes.

A decontamination station will be established during the site investigation. The decontamination water will be contained in drums for further disposal decisions.

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7.0 ACCEPTANCE AND AGREEMENT

CLIENT acknowledges and approves the above work plan and the attached Appendices 1 and 2. CLIENT hereby authorizes, by signing below, the CONSULTANT to proceed with the proposed scope of work. Client agrees to pay for all the services rendered through this project in the proposed scope of work within 30 days after the reception of the progressive project cost invoices. A General Terms and Conditions is attached in Appendix 1, while a cost estimation is in the Appendix 2.

CLIENT:

Signature: _____ Date: _____
Name(Print): Frank P. Giuffre, Sr. Title: President
Company Name: Giuffre Brothers Cranes, Inc.
Address: 6635 S. 13th Street, Milwaukee, WI 53221

CONSULTANT:

Signature: _____ Date: _____
Name(Print): Wenbin Yuan Title: General Manager

This Work Plan is prepared by:

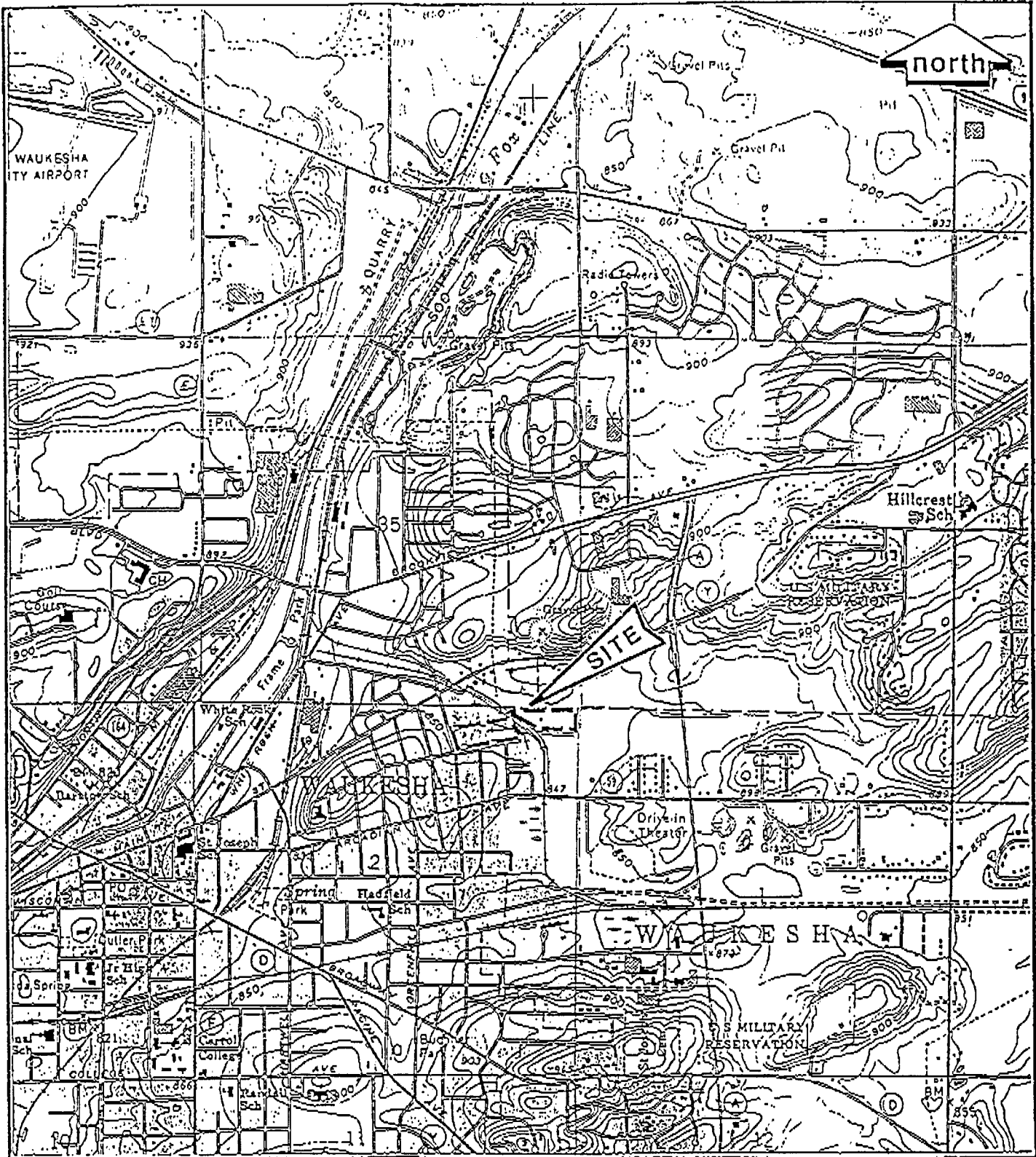
_____(Signature) _____(Date)
Minghua Wan, Professional Geologist (#92)

This Work Plan is reviewed by:

_____(Signature) _____(Date)
Wenbin Yuan, Professional Geologist (#95)

- Attachments: 1. DEW's Terms & Conditions of Engagement
- 2. Cost Estimation

C:\A-Mike\Perkins\WKPLN1.wps



Waukesha, WI USGS 7.5-minute-series topographic quadrangle map, 1958. Photorevised 1971.

Dashed line encloses site location.

SCALE 1:24000

Photinspected 1978.

Quadrangle Location

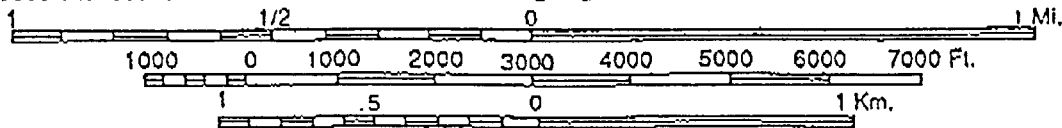


Figure 1.

Site Location Map



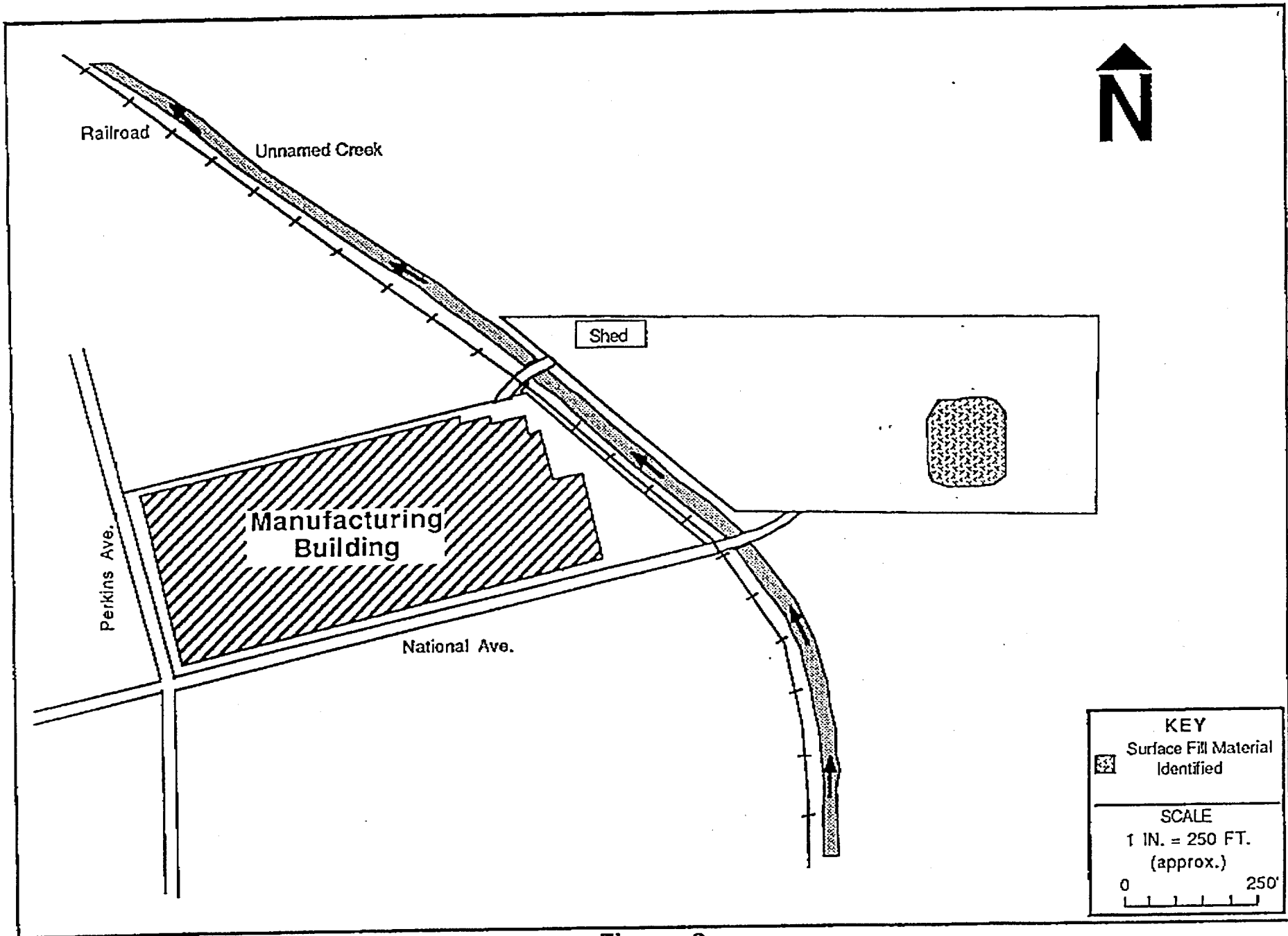


Figure 2.
Property Features Map
(After Versar Inc.)