STATE OF NEW YORK: DEPARTMENT OF ENVIRONMENTAL CONSERVATION

In the Matter of the Development and Implementation of a Remedial Program for an Inactive Hazardous Waste Disposal Site, Under Article 27, Title 13, and Article 71, Title 27 of the Environmental Conservation Law of the State of New York by:	ORDER ON CONSENT
	Index # B9-0501-20-07
CMS Property Associates, L.L.C., Respondent	
	Site Code # 9-15-168

WHEREAS,

1. The New York State Department of Environmental Conservation (the "Department") is responsible for the enforcement of Article 27, Title 13 of the Environmental Conservation Law of the State of New York ("ECL"), entitled "Inactive Hazardous Waste Disposal Sites." This Order is issued pursuant to the Department's authority under, inter alia, ECL Article 27, Title 13 and under ECL 3-0301, and constitutes an administrative settlement pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), [42 USC 9601, et seq., as amended] for purposes of 42 USC 9613(f).

2. CMS Property Associates, L.L.C., ("Respondent"), is a New York limited liability corporation doing business in the State of New York. Respondent is the successor to CMS Associates, a New York partnership whose managing partner was Robert E. Mariacher. Respondent owns real property at 210 French Road in the Town of Cheektowaga, Erie County ("the Site"). Respondent and its predecessor, CMS Associates, has conducted an interim remedial measure and investigation at the Site, and has submitted reports detailing its activities, all pursuant to a previous Order on Consent, Index # B9-0501-96-10, dated January 28,1997.

3. The Site is an inactive hazardous waste disposal site, as that term is defined at

ECL 27-1301.2, and presents a significant threat to the public health or environment. The Site has been listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State as Site Number 9-15-168. The Department classified the Site as a Classification "2" pursuant to ECL 27-1305.4.b. Upon confirmation of the implementation of institutional controls protecting the remedy for the Site, the Department anticipates that the Site will be reclassified.

4. A. Pursuant to ECL 27-1313.3.a, whenever the Commissioner of Environmental Conservation (the "Commissioner") finds that hazardous wastes at an inactive hazardous waste disposal site constitute a significant threat to the environment, he may order the owner of such site and/or any person responsible for the disposal of hazardous wastes at such site (i) to develop an inactive hazardous waste disposal site remedial program, subject to the approval of the department, at such site, and (ii) to implement such program within reasonable time limits specified in the order.

B. Any person under order pursuant to ECL 27-1313.3.a has a duty imposed by ECL Article 27, Title 13 to carry out the remedial program committed to under order. ECL 71-2705 provides that any person who fails to perform any duty imposed by ECL Article 27, Title 13 shall be liable for civil, administrative and/or criminal sanctions.

C. The Department also has the power, inter alia, to provide for the prevention and abatement of all water, land, and air pollution. ECL 3-0301.1.i.

5. Following a period of public comment, the Department selected a final remedial alternative for the Site in a Record of Decision ("ROD"). The ROD is attached to this Order as Appendix "A" and is incorporated as an enforceable part of this Order.

6. The Department and Respondent agree that the goals of this Order are for

Respondent to (i) implement, in accordance with the ROD, the inactive hazardous waste disposal site remedial program ("Remedial Program") for the Site; and (ii) reimburse the State's administrative costs.

7. Respondent, having waived it's right to a hearing herein as provided by law, and having consented to the issuance and entry of this Order, agrees to be bound by its terms. Respondent consents to and agrees not to contest the authority or jurisdiction of the Department to issue or enforce this Order, and agrees not to contest the validity of this Order or its terms.

NOW, having considered this matter and being duly advised, IT IS ORDERED THAT:

I. Remedial Design

The Work Plan, entitled Operation Maintenance and Monitoring Plan, CMS Associates Remediation Site #915168, dated July 2001, by Ken W. Kloeber Consulting Engineers, having been approved by the Department, is attached to this Order as Appendix "B" and incorporated herein and made a part of this Order.

II. Work Plan Implementation and Reporting

A. Respondent shall implement the Work Plan and report on the groundwater pumping and monitoring program contained therein in accordance with the Department-approved schedule and Work Plan.

B. If the Department concludes that any element of the remedial program fails to achieve its objectives or otherwise fails to protect human health or the environment, Respondent shall take whatever action the Department determines to be reasonably necessary to achieve those objectives or to ensure that the remedial program otherwise protects human health and the environment.

III. Reports

A. Respondent shall submit to the parties identified in Subparagraph XI.B in the numbers specified therein copies of written monitoring reports that:

1. describe the actions which have been taken toward achieving compliance with this Order during the reporting period;

2. include all results of sampling and tests and all other data received or generated by Respondent or Respondent's contractors or agents in the reporting period, including quality assurance/quality control information, whether conducted pursuant to this Order or conducted independently by Respondent;

3. describe all actions, including, but not limited to, data collection and implementation of work plans, that are scheduled for the next reporting period and provide other information relating to the progress at the Site;

4. include information regarding percentage of completion, unresolved delays encountered or anticipated that may affect the future schedule for implementation of the Respondent's obligations under the Order, and efforts made to mitigate those delays or anticipated delays; and

5. include any modifications to any work plans or reporting schedules that Respondent has proposed to the Department or that the Department has approved.

B. Respondent shall submit these reports to the Department in accordance with the schedule for reporting as set forth in the approved Work Plan.

C. Respondent also shall allow the Department to attend, and shall provide

the Department at least seven days advance notice of, any of the following activities which are conducted in relation to the Work Plan: prebid meetings, job progress meetings, substantial completion meeting and inspection, and final inspection and meeting.

IV. Review of Submittals

A. 1. The Department shall review each of the submittals Respondent makes pursuant to this Order to determine whether it was prepared, and whether the work done to generate the data and other information in the submittal was done, in accordance with this Order and generally accepted technical and scientific principles. The Department shall notify Respondent in writing of its approval or disapproval of the submittal. All Department-approved submittals shall be incorporated into and become an enforceable part of this Order.

2. a. If the Department disapproves a submittal, it shall so notify Respondent in writing and shall specify the reasons for its disapproval. Within 30 days after receiving written notice that Respondent's submittal has been disapproved, Respondent shall make a revised submittal to the Department that addresses and resolves all of the Department's stated reasons for disapproving the first submittal.

b. After receipt of the revised submittal, the Department shall notify Respondent in writing of its approval or disapproval. If the Department disapproves the revised submittal, Respondent shall be in violation of this Order and the Department may take any action or pursue whatever rights it has pursuant to any provision of statutory or common law. If the Department approves the revised submittal, it shall be incorporated into and become an enforceable part of this Order.

B. Respondent shall modify and/or amplify and expand a submittal upon the

Department's direction to do so if the Department determines, as a result of reviewing data generated by an activity required under this Order or as a result of reviewing any other data or facts, that further work is necessary.

V. Penalties

A. 1. Respondent's failure to comply with any term of this Order constitutes a violation of this Order and the ECL.

2. Respondent shall be liable for payment to the Department of the sums set forth at ECL § 71-2705 as penalties for each day or part thereof that the Respondent is in violation of the terms of this Order. All penalties begin to accrue on the first day Respondent is in violation of the terms of this Order and continue to accrue through the final day of correction of any violation.

B. Respondent shall not suffer any penalty under this Order or be subject to any proceeding or action if it cannot comply with any requirement hereof because of war, riot, or an unforeseeable disaster arising exclusively from natural causes, or as a result of any other event arising from causes beyond Respondent's reasonable control which the exercise of ordinary human prudence could not have prevented. Respondent shall, within five days of when it obtains knowledge of any such condition, notify the Department in writing. Respondent shall include in such notice the measures taken and to be taken by Respondent to prevent or minimize any delays and shall request an appropriate extension or modification of this Order. Failure to give such notice within such five-day period constitutes a waiver of any claim that a delay is not subject to penalties. Respondent shall have the burden of proving that an event is a defense to compliance with this Order pursuant to this Subparagraph V.B.

VI. Entry upon Site

Respondent hereby consents to the entry upon the Site or areas in the vicinity of the Site which may be under the control of the Respondent by any duly designated employee, consultant, contractor, or agent of the Department or any State agency for purposes of inspection, sampling, and testing and to ensure Respondent's compliance with this Order. Respondent shall provide the Department with suitable office space at the Site, including access to a telephone, and shall permit the Department full access to all records relating to matters addressed by this Order and job meetings.

VII. Payment of State Costs

A. Within 30 days after receipt of an itemized invoice from the Department, Respondent shall pay to the Department a sum of money which shall represent reimbursement for the State's expenses including, but not limited to, direct labor, fringe benefits, indirect costs, travel, analytical costs, and contractor costs incurred by the State of New York after the date of the ROD for work related to the Site prior to the effective date of this Order, as well as for reviewing and revising submittals made pursuant to this Order, overseeing activities conducted pursuant to this Order, collecting and analyzing samples, and administrative costs associated with this Order.

B. Personal service costs shall be documented by reports of Direct Personal Service, which shall identify the employee name, title, biweekly salary, and time spent (in hours) on the project during the billing period, as identified by an assigned time and activity code. Approved agency fringe benefit and indirect cost rates shall be applied. Non-personal service costs shall be summarized by category of expense (e.g., supplies, materials, travel,

contractual) and shall be documented by expenditure reports.

C. Such invoice shall be sent to the Respondent at the following address:

Robert E. Mariacher
CMS Property Associates, L.L.C.
210 French Road
Cheektowaga, NY 14227

D. Such payment shall be made by check payable to the Department of Environmental Conservation and shall be sent to:

Bureau of Program Management
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway Avenue
Albany, NY 12233-7012

E. Each party shall notify the other within 90 days of any change in the foregoing addresses.

VIII. Department Reservation of Rights

A. Nothing contained in this Order shall be construed as barring, diminishing, adjudicating, or in any way affecting any of the Department's civil, criminal, administrative, or equitable rights or authorities.

B. Nothing contained in this Order shall be construed to prohibit the Commissioner or his duly authorized representative from exercising any summary abatement powers.

IX. Indemnification

Respondent shall indemnify and hold the Department, the State of New York, and their representatives and employees harmless for all claims, suits, actions, damages, and costs of every name and description arising out of or resulting from the fulfillment or attempted

fulfillment of this Order by Respondent, and/or Respondent's directors, officers, employees, servants, agents, successors, and assigns.

X. Public Notice

A. Within 30 days after the effective date of this Order, Respondent shall file a Declaration of Covenants and Restrictions with the Clerk of Erie County to give all parties who may acquire any interest in the Site notice of this Order. The Declaration of Covenants and Restriction shall prohibit the use of groundwater, shall restrict excavations and new construction unless prior approval is received by the Department, and shall restrict the use of the property to industrial or commercial uses excluding day care, child care and medical care uses.

B. If Respondent proposes to convey the whole or any part of Respondent's ownership interest in the Site, Respondent shall, not fewer than 60 days before the date of conveyance, notify the Department in writing of the identity of the transferee and of the nature and proposed date of the conveyance and shall notify the transferee in writing, with a copy to the Department, of the applicability of this Order.

XI. Communications

A. All written communications required by this Order shall be transmitted by United States Postal Service, by private courier service, or hand delivered as follows:

Communication from Respondent shall be sent to:

Martin L. Doster, P.E.
Division of Environmental Remediation
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2999

with a copy sent to: Gary Litwin
Director, Bureau of Environmental Exposure Investigation
New York State Department of Health
Flanagan Square
547 River Street
Troy, New York 12180-2216

and to: Edward Belmore, P.E.
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway Avenue
Albany, New York 12233-7017

and to: Glen R. Bailey, Esq.
New York State Department of Environmental Conservation
Division of Environmental Enforcement
270 Michigan Avenue
Buffalo, New York 14203-2999

Copies of work plans and reports shall be submitted as follows:

Four copies (one unbound) to Martin Doster, Division of Environmental Remediation.

Two copies to the Director, Bureau of Environmental Exposure Investigation.

Two copies to Edward Belmore, Division of Environmental Remediation, Albany

One copy to Glen Bailey, Division of Environmental Enforcement, Buffalo

C. Within 30 days of the Department's approval of any report submitted pursuant to this Order, Respondent shall submit to Martin Doster a computer readable magnetic media copy of the approved report in American Standard Code for Information Interchange (ASCII) format.

D. Communication to be made from the Department to Respondent shall be sent to: Robert E. Mariacher
CMS Property Associates, L.L.C.
210 French Road
Cheektowaga, New York 14227
and to:

Ken W. Kloeber, P.E.
Ken W. Kloeber Consulting Engineers
8397 Boston State Road
Boston, New York 14025

and to:

Guy J. Agostinelli, Esq.
Zdarsky, Sawicki & Agostinelli
404 Cathedral Place
298 MainStreet
Buffalo, New York 14202

E. The Department and Respondent reserve the right to designate additional or different addressees for communication or written notice to the other.

XII. Miscellaneous

A. All activities and submittals required by this Order shall address both on-Site and off-Site contamination resulting from the disposal of hazardous wastes at the Site.

B. Respondent shall retain professional consultants, contractors, laboratories, quality assurance/quality control personnel, and data validators acceptable to the Department to perform the technical, engineering, and analytical obligations required by this Order. The experience, capabilities, and qualifications of the firms or individuals selected by Respondent shall be submitted to the Department within 5 days after the effective date of this Order. The Department's approval of these firms or individuals shall be obtained before the start of any activities for which Respondent and such firms or individuals will be responsible. The responsibility for the performance of the professionals retained by Respondent shall rest solely with Respondent.

C. The Department shall have the right to obtain split samples, duplicate samples, or both, of all substances and materials sampled by Respondent, and the Department also shall have the right to take its own samples. Respondent shall make available to the

Department the results of all sampling and/or tests or other data generated by Respondent with respect to implementation of this Order and shall submit these results in the progress reports required by this Order.

D. Respondent shall notify the Department at least 10 working days in advance of any field activities to be conducted pursuant to this Order.

E. Respondent shall obtain all permits, easements, rights-of-way, rights-of-entry, approvals, or authorizations necessary to perform Respondent's obligations under this Order.

F. Respondent and Respondent's officers, directors, members, agents, servants, employees, successors, and assigns shall be bound by this Order. Any change in ownership or status of Respondent including, but not limited to, any transfer of assets or real or personal property shall in no way alter Respondent's responsibilities under this Order. Respondent's officers, directors, members, employees, servants, and agents shall be obliged to comply with the relevant provisions of this Order in the performance of their designated duties on behalf of Respondent.

G. Respondent shall provide a copy of this Order to each contractor hired to perform work required by this Order and to each person representing Respondent with respect to the Site and shall condition all contracts entered into in order to carry out the obligations identified in this Order upon performance in conformity with the terms of this Order. Respondent or Respondent's contractors shall provide written notice of this Order to all subcontractors hired to perform any portion of the work required by this Order. Respondent shall nonetheless be responsible for ensuring that Respondent's contractors and subcontractors

perform the work in satisfaction of the requirements of this Order.

H. All references to "professional engineer" in this Order are to an individual registered as a professional engineer in accordance with Article 145 of the New York State Education Law. If such individual is a member of a firm, that firm must be authorized to offer professional engineering services in the State of New York in accordance with Article 145 of the New York State Education Law.

I. All references to "days" in this Order are to calendar days unless otherwise specified.

J. The paragraph headings set forth in this Order are included for convenience of reference only and shall be disregarded in the construction and interpretation of any of the provisions of this Order.

K. 1. The terms of this Order shall constitute the complete and entire Order between Respondent and the Department concerning the Site. No term, condition, understanding, or agreement purporting to modify or vary any term of this Order shall be binding unless made in writing and subscribed by the party to be bound. No informal advice, guidance, suggestion, or comment by the Department regarding any report, proposal, plan, specification, schedule, or any other submittal shall be construed as relieving Respondent of Respondent's obligation to obtain such formal approvals as may be required by this Order.

2. If Respondent desires that any provision of this Order be changed, Respondent shall make timely written application, signed by Respondent, to the Commissioner setting forth reasonable grounds for the relief sought. Copies of such written application shall be delivered or mailed to Martin Doster and to Glen R. Bailey.

L. The effective date of this Order shall be the date it is signed by the Commissioner or the Commissioner's designee.

DATED: Albany, New York
, 2002

MAR 18 2003

ERIN M. CROTTY
Commissioner
New York State Department of
Environmental Conservation

By: _____
Dale A. Desnoyers

CONSENT BY RESPONDENT

Respondent hereby consents to the issuing and entering of this Order, waives Respondent's right to a hearing herein as provided by law, and agrees to be bound by this Order.

CMS Property Associates, L.L.C.

By: _____
Robert E. Mariacher

Title: Member

Date: August 30, 2002

STATE OF NEW YORK)
) s.s.:
COUNTY OF ERIE)

On the 30th day of August, in the year 2002, before me, the undersigned, personally appeared Robert E. Mariacher, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me the he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public

GUY J. AGOSTINELLI
Notary Public, State of New York
Qualified in Erie County
My Commission Expires Nov. 30, 20 05

APPENDIX "A"

Record of Decision

Department of Environmental Conservation

Division of Environmental Remediation

Record of Decision

CMS Associates Site
Town of Cheektowaga, Erie County
Site Number 9-15-168

March 2000

New York State Department of Environmental Conservation
GEORGE E. PATAKI, *Governor* JOHN P. CAHILL, *Commissioner*

DECLARATION STATEMENT - RECORD OF DECISION

CMS Associates Inactive Hazardous Waste Site
Town of Cheektowaga, Erie County, New York
Site No. 9-15-168

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for the CMS Associates class 2 inactive hazardous waste disposal site which was chosen in accordance with the New York State Environmental Conservation Law. The remedial program selected is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300).

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the CMS Associates inactive hazardous waste site and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of hazardous waste constituents from this site have been addressed by implementing the interim remedial measures identified in this ROD, therefore the site no longer represents a current or potential significant threat to public health and the environment.

Description of Selected Remedy

Based on the results of the investigation of the CMS Associates site and the success of the interim remedial measures, the NYSDEC has selected a no further remedial action remedy with continued operation and maintenance of the groundwater recovery system and monitoring. The components of the remedy are as follows:

- continued operation of the existing groundwater recovery and treatment system,
- deed restrictions to preclude the use of the groundwater for drinking or manufacturing and to restrict the property to commercial or industrial use,
- long-term sampling of the site groundwater monitoring wells; and
- annual evaluation of the operation and monitoring data for trends in contaminant concentrations.

DECLARATION STATEMENT - RECORD OF DECISION

CMS Associates Inactive Hazardous Waste Site
Town of Cheektowaga, Erie County, New York
Site No. 9-15-168

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for the CMS Associates class 2 inactive hazardous waste disposal site which was chosen in accordance with the New York State Environmental Conservation Law. The remedial program selected is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300).

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the CMS Associates inactive hazardous waste site and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A listing of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of hazardous waste constituents from this site have been addressed by implementing the interim remedial measures identified in this ROD, therefore the site no longer represents a current or potential significant threat to public health and the environment.

Description of Selected Remedy

Based on the results of the investigation of the CMS Associates site and the success of the interim remedial measures, the NYSDEC has selected a no further remedial action remedy with continued operation and maintenance of the groundwater recovery system and monitoring. The components of the remedy are as follows:

- continued operation of the existing groundwater recovery and treatment system,
- deed restrictions to preclude the use of the groundwater for drinking or manufacturing and to restrict the property to commercial or industrial use,
- long-term sampling of the site groundwater monitoring wells; and
- annual evaluation of the operation and monitoring data for trends in contaminant concentrations.

New York State Department of Health Acceptance

The New York State Department of Health concurs with the remedy selected for this site as being protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

3/30/2000
Date

Michael J. O'Toole, Jr., Director
Division of Environmental Remediation

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RECORD OF DECISION

CMS Associates Site
Town of Cheektowaga, Erie County
Site No. 9-15-168
March 2000

SECTION 1: SUMMARY OF THE RECORD OF DECISION

The New York State Department of Environmental Conservation (NYSDEC), in consultation with the New York State Department of Health (NYSDOH), has selected no further remedial action for the CMS Associates site, a class 2 inactive hazardous waste disposal site. As more fully described in Sections 3 and 4 of this document, a leaking underground storage tank resulted in the disposal of a number of hazardous wastes, including: trichloroethene; 1,1,1-trichloroethane; cis-1,2 dichloroethene; and 1,1-dichloroethane, some of which were likely released or migrated from the site to surrounding areas of the industrial park in which the site is located. These disposal activities resulted in a significant environmental threat associated with the impacts of contaminants to the groundwater resources beneath the site.

During the course of the investigation certain actions, known as Interim Remedial Measures (IRMs), were undertaken at the CMS Associates site in response to the threat identified above. An IRM is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the site investigation. The IRMs undertaken at this site included:

- Removal and off-site disposal of the leaking underground storage tank and its contents;
- Excavation of the contaminated soils surrounding the tank, on-site treatment of the soils, and the placement of the treated soils over the surface of the site;
- Installation and operation of a vacuum-enhanced groundwater recovery and treatment system, pumping contaminated groundwater from the immediate vicinity of the tank's location.

Based upon the success of the above IRMs, the findings of the investigation of this site indicate that the site no longer poses a threat to human health or the environment, therefore continued management of the current groundwater collection and treatment system was selected as the remedy for this site. The Department will also reclassify the site to a Class 4 on the New York State Registry of Inactive Hazardous Waste Disposal Sites, signifying that the site is properly closed but will require continued management.

SECTION 2: SITE LOCATION AND DESCRIPTION

The site is located at 210 French Road, approximately 2,000 feet east of Union Road, in the Town of Cheektowaga. The site is located on the north side of French Road, between Boxwood

Lane and Azalea Drive. The properties to the north, west and east of the site are commercial and light industrial. A vacant, wooded lot is located opposite the site, on the south side of French Road. Apartment buildings and private residences are also located on the south side of French Road, approximately 300 feet to the southwest and southeast. Slate Bottom Creek, a class C stream, is located approximately 2,100 feet north of the site (see Figure 1).

A one-story concrete block structure, built on a slab foundation, is located on the 3.77 acre site. The building is presently used as an office, warehouse and manufacturing facility. A 2,000 gallon underground storage tank, removed from service, was located near the northwest corner of the building (see Figure 2).

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

In the mid- to late-1960s a 2,000 gallon underground gasoline storage tank was installed by one of the building tenants, near the northwest corner of the building. Sometime later, the tank was abandoned in place; the vents and connections were removed.

In March 1996, the site owner uncovered the underground tank and notified the NYSDEC that it would be removed. It was found that the abandoned tank still contained approximately 1,810 gallons of liquid. Chemical analysis revealed that the contents were a mixture of chlorinated solvents and gasoline. Leaks in the tank were also observed when it was removed. Subsequent investigations would find that the leaking tank, which rested on the top of bedrock, had contaminated the groundwater and surrounding soils.

3.2: Remedial History

In March 1996, the contents of the leaking underground storage tank were removed and disposed of at an off-site hazardous waste disposal facility. The empty tank was scrapped and also disposed off site.

Soil borings were advanced in close proximity to the location of the tank, to determine the extent of the soil contamination. Approximately 350 tons of contaminated soil were excavated. The walls of the excavation were sampled to confirm that all of the contaminated soils had been removed before the excavation was lined with plastic sheeting and backfilled with clean soils. The excavated, contaminated soils were stored on site.

In December 1996, the excavated soils were placed in bioventing treatment cells; wooden boxes fitted with vent pipes, built on site. Bacteria was added to the soils and air was forced through the soils to promote biodegradation and the removal of the volatile contaminants. The vapor was collected in the vents and passed through activated carbon treatment canisters before being released to the atmosphere. The treated soils were sampled and analyzed to confirm that treatment had achieved the NYSDEC's recommended cleanup objectives. The treated soil was then spread over an unpaved portion of the site near the location of the removed tank, covered with topsoil and seeded with grass.

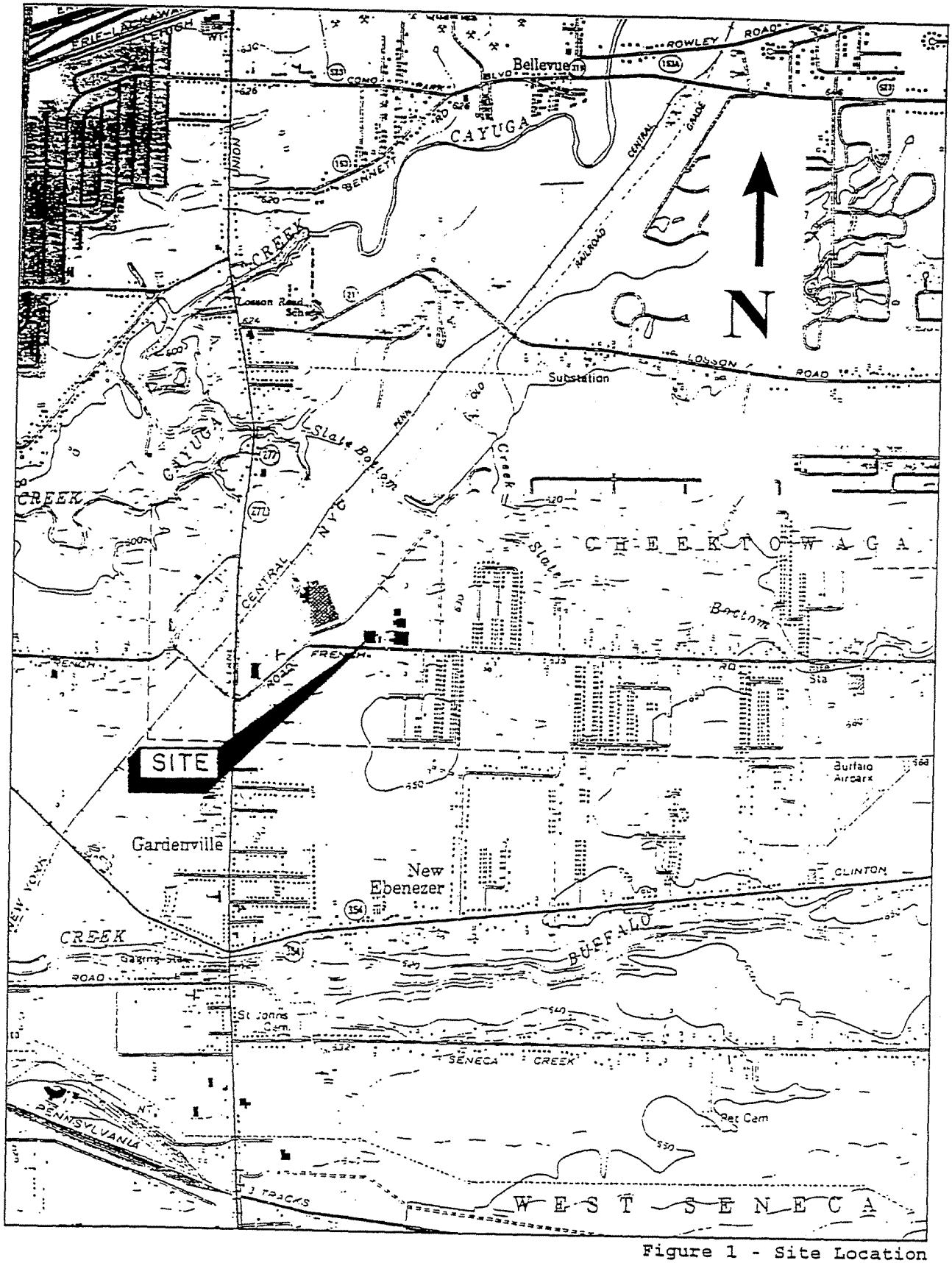


Figure 1 - Site Location

scale: 1" = approx. 2,400'

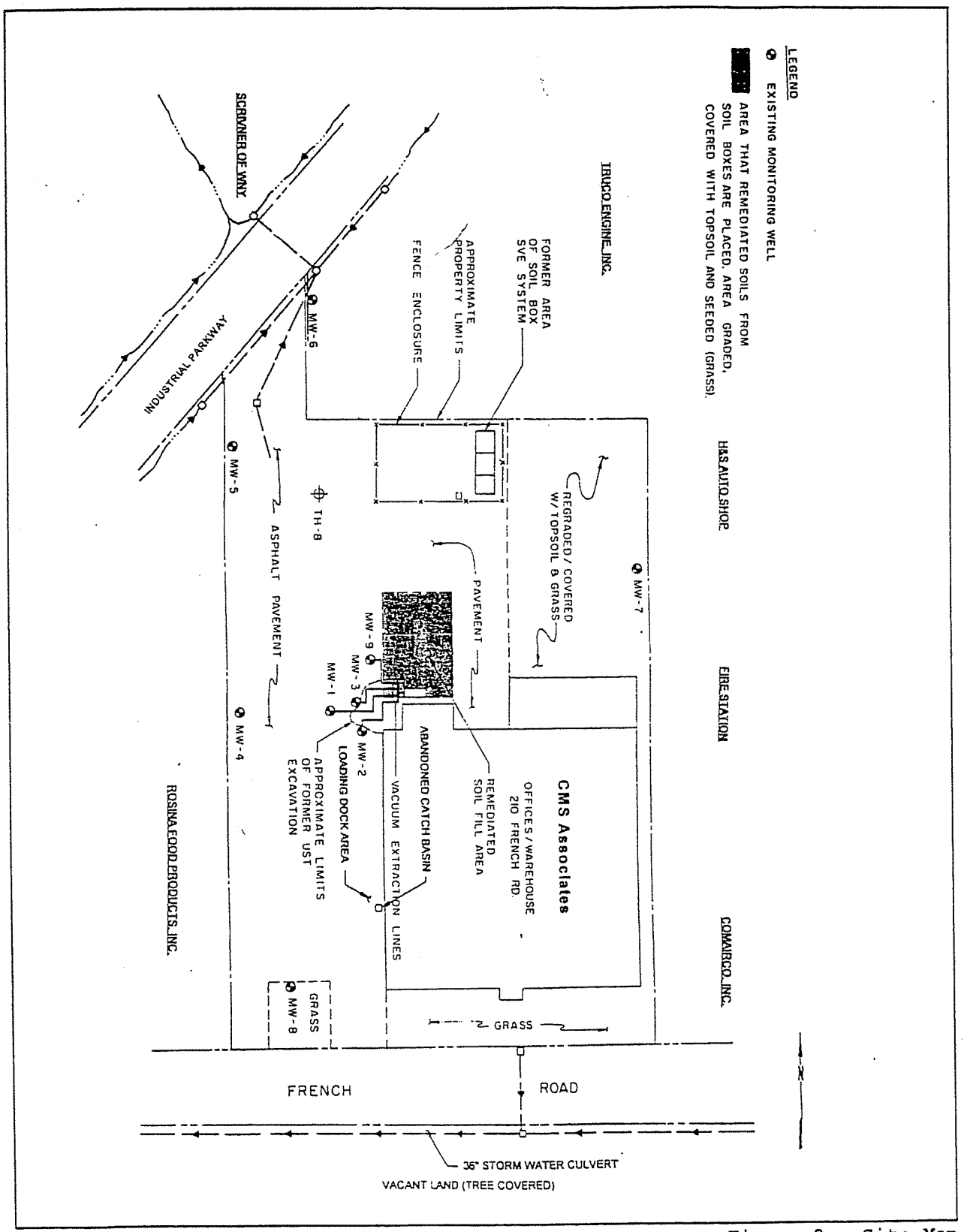


Figure 2 - Site Map

scale: 1" = approx. 123'

SECTION 4: SITE CONTAMINATION

To evaluate the contamination present at the site and to evaluate alternatives to address the significant threat to human health and/or the environment posed by the presence of the hazardous waste, the site owner conducted a phased environmental investigation and focused feasibility study.

4.1: Summary of the Site Investigation

The purpose of the environmental investigation was to define the nature and extent of any contamination resulting from previous activities at the site.

The investigation was conducted in essentially four phases. The first phase was conducted between March and June 1996, as part of the tank removal action. The second phase was conducted between August 1996 and October 1997 to better characterize the environmental conditions on site. The third phase of investigation was begun in January 1998, and included the resampling of the existing on-site groundwater monitoring wells and the installation and sampling of two off-site groundwater monitoring wells. The last phase of investigation consisted of a round of groundwater samples collected in June 1999, after a year of operating and monitoring the groundwater recovery and treatment system in the tank area, which is described later in this document.

A letter report dated June 4, 1996 describes the tank removal and the initial phase of site investigations. Reports entitled *Phase II Environmental Site Evaluation* (November 1996), *March 1997 Groundwater Sampling and Analytical Testing Event* (April 1997) and *Focused Feasibility Study* (October 1997) describe the field activities and findings of the second phase of the investigation in detail. The results of the off-site investigation are summarized in the report entitled *Interim Remediation Measure Report* (January 1999) and in correspondence dated January 28, 1999. The results of the last phase of the investigation were reported on July 6, 1999. Monitoring of the groundwater recovery system was also conducted and the findings reported quarterly.

The site investigation included the following activities:

- Installation of soil borings and monitoring wells for the analysis of groundwater and soil, and to determine the hydrogeologic conditions beneath the site.
- Analysis of storm sewer water, sediment and sewer bedding material.

To determine which media (soil, groundwater, etc.) contained contamination at levels of concern, the site investigation analytical data were compared to environmental Standards, Criteria, and Guidance values (SCGs). Groundwater, drinking water and surface water SCGs identified for the CMS Associates site are based on NYSDEC Ambient Water Quality Standards and Guidance Values and Part 5 of the NYS Sanitary Code. For soils, NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) 4046 provides soil cleanup guidelines for the protection of groundwater, background conditions, and health-based exposure scenarios. In

addition, for soils, site-specific background concentration levels can be considered for certain classes of contaminants.

Based on the site investigation results, in comparison to the SCGs and potential public health and environmental exposure routes, certain areas and media of the site required remediation. These are summarized below. More complete information can be found in the reports and correspondence cited earlier.

Chemical concentrations are reported in parts per billion (ppb), or parts per million (ppm). For comparison purposes, where applicable, SCGs are provided for each medium.

4.1.1 Site Geology and Hydrogeology:

Top soil and miscellaneous fill were encountered at the site extending from ground surface to depths of 2 to 2.5 feet. Beneath the fill materials were brown sandy silts and clayey silts.

The top of bedrock was located at depths ranging from about 6.4 feet below ground surface (location MW-8) at the south end of the site to 2.5 feet below ground surface (MW-11) north of the site. The bedrock consisted of a dark gray limestone with occasional, weathered dark gray shale partings, overlying a dense dark gray to black shale. The limestone layer averaged approximately 8.5 feet in thickness. Based on the test borings completed, the top of the limestone and the top of the underlying shale formation slope downward slightly from east to west and from north to south.

As part of the second phase of site investigations, a monitoring well (MW-9) and test hole (TH-8) were installed in the bedrock, for the purpose of testing the hydrogeological characteristics of the bedrock. Pressure testing of a 6.5 foot interval in MW-9, spanning the limestone and the upper portion of the shale layer, initially indicated a near-zero hydraulic conductivity; the bedrock did not accept any of the injected water. However, after increasing the water pressure, and possibly opening joints and bedding planes in the bedrock, the hydraulic conductivity was estimated to be approximately 1.45×10^{-3} cm/sec. When a deeper interval in MW-9 was tested, spanning only the shale formation, again the bedrock did not accept any of the injected water (near-zero hydraulic conductivity). Similar testing on TH-8 found that the hydraulic conductivity of the limestone and upper shale was approximately 1.6×10^{-4} cm/sec. However, unlike MW-9, the shale formation in TH-8 had a hydraulic conductivity of approximately 1.2×10^{-3} cm/sec.

Hydraulic conductivities greater than 10^{-2} cm/sec are considered high, whereas conductivities of less than 10^{-4} cm/sec are generally considered to be low. The hydraulic conductivity of the bedrock beneath the site might therefore be categorized as low to moderate. This is consistent with observations made during sampling; most of the wells were either pumped dry or were slow to recover. The results of the pressure tests at MW-9 and TH-8 also indicated that there may be some variability in the bedrock characteristics from one location to another.

The principal water-bearing features in the bedrock are joints and fractures. Thin, widely-spaced vertical and bedding-plane (horizontal) joints were found in the bedrock beneath the site. The surface of the limestone appeared to be slightly to moderately weathered. Rock cores from most of the monitoring wells installed on site were examined and Rock Quality Designations (RQDs)

were assigned to each length of core. The RQD is a measurement of the degree of natural fracturing; the higher the RQD the greater the number of joints or fractures in the bedrock. On the average, the RQD of the limestone beneath the site was fair to good, ranging from 55 to 98%; whereas the RQD of the shale was poor to fair, ranging from 13 to 84%. While the shale might have more joints than the limestone, the joints are expected to be generally smaller. At greater depths the soil and rock above is likely to compress these joints, so the deeper shale is expected to conduct even less groundwater than the upper shale and limestone.

Before the groundwater recovery and treatment system was put into operation, the groundwater elevation near the location of the removed underground storage tank was higher than most of the site; the groundwater here was "mounded" several feet higher than at the perimeter of the site. Near the tank the groundwater was as much as 2.6 feet above the top of bedrock. Off site and at the site perimeter, groundwater was generally found 1 to 3 feet below the top of bedrock. Exceptions were found in monitoring wells MW-4 and -6. Unlike the other site monitoring wells, where groundwater elevations varied only a few feet over time, the groundwater elevation in MW-4 fluctuated by as much as 18 feet over the course of the site investigation; on occasions the groundwater was less than one foot below ground surface and well above the bedrock surface. The groundwater elevations in MW-6 changed by as much as 11 feet, and were frequently lower than the elevations measured in MW-11, located north of MW-6. On these occasions, there was an apparent reversal in the expected direction of groundwater flow, i.e., groundwater appeared to flow southward from MW-11 to MW-6 instead of northward to Slate Bottom Creek. As discussed below, groundwater flow from the site is generally to the north, however groundwater flow is dominated by bedrock fractures and precipitation/recharge events.

It is assumed that the groundwater is recharged or supplemented with precipitation passing through the thin cover of soil to the weathered, fractured surface of the bedrock, entering the deeper bedrock through the widely-spaced vertical fractures. Studies of the regional geology suggest that the weathered, fracture zone of the upper bedrock is discontinuous. Because the depth to bedrock is so shallow, it is likely that the site drainage ditches, and the underground utilities and building foundations which may have been built into the top of bedrock, have a pronounced effect on the degree of groundwater recharge and pattern of groundwater flow.

Figure 3 depicts the groundwater contours measured in March 1997, a year after the underground storage tank had been removed, and more than a year before the groundwater recovery system was put into operation. As indicated in Figure 3, groundwater beneath the site generally flowed north and northeast towards Slate Bottom Creek, but from the groundwater mound at the tank location there were also components of groundwater flow to the west and northwest. However, as will be discussed later in this document, the degree of groundwater contamination west of the tank location, at monitoring well MW-4, was actually much less than at other monitoring wells located further from the tank. With the groundwater recovery system in operation, it is believed that the groundwater mound at the tank location has been reduced or eliminated. Based on the March 1997 groundwater elevations, the horizontal rate of groundwater flow off site to the north and northeast from monitoring wells MW-6 and -7 has been estimated to be 22 and 17 feet per year respectively.

4.1.2 Nature of Contamination:

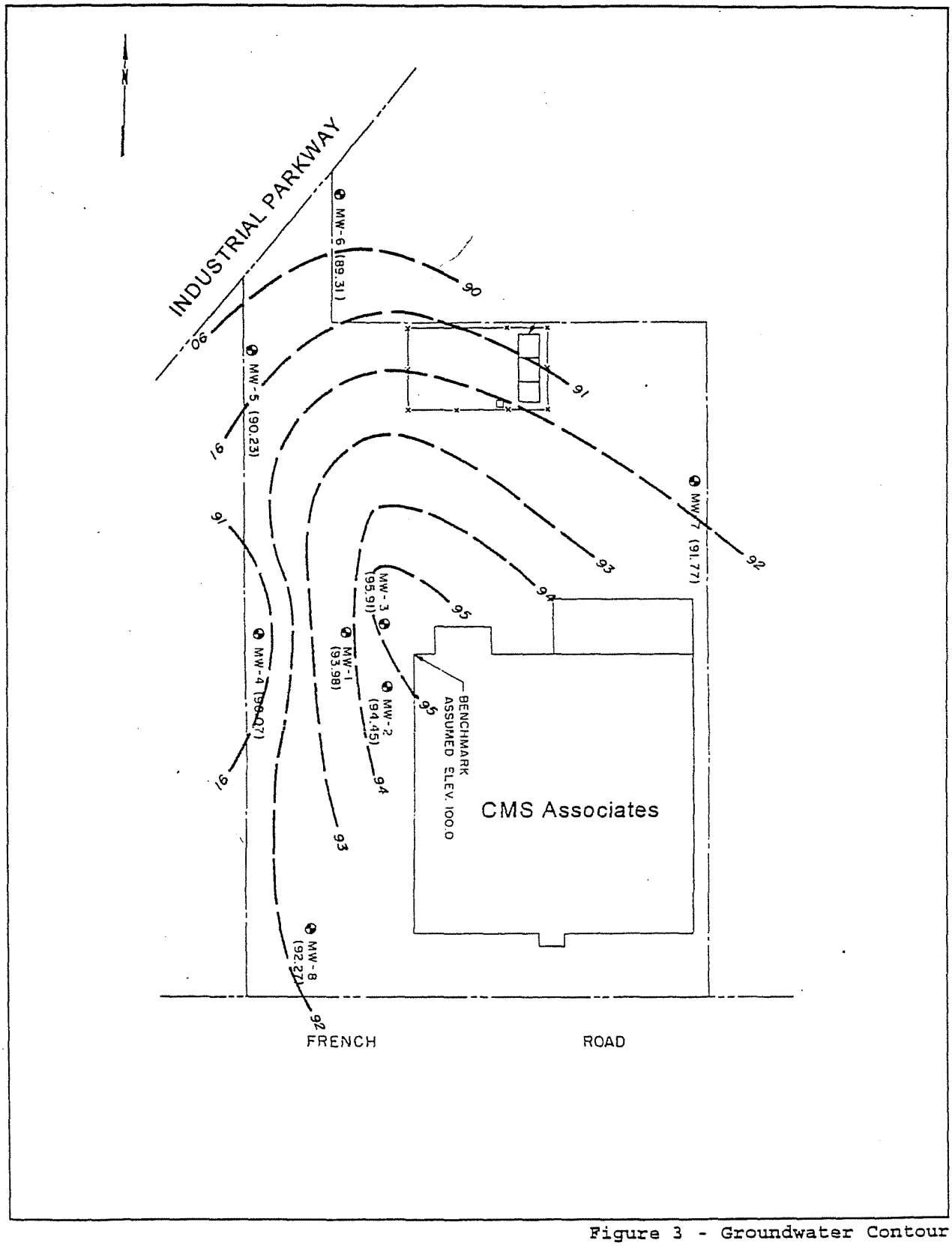


Figure 3 - Groundwater Contour
March 1997 scale: 1" = approx. 105'

The leaking underground storage tank rested directly on top of bedrock. The site investigations therefore focused primarily on the bedrock and the groundwater within it. As described in the site investigation reports, many groundwater samples and a limited number of soil, sediment and surface water samples were collected at the site to characterize the nature and extent of contamination.

Soil and water samples were analyzed primarily for volatile organic compounds (VOCs). The VOCs found most frequently and in the highest concentrations included: trichloroethene (TCE); 1,1,1 trichloroethane (1,1,1 TCA); cis-1,2 dichloroethene (cis-1,2 DCE); 1,1 dichloroethane (1,1 DCA) and tetrachloroethene. These chlorinated VOCs are solvents often used for cleaning and degreasing. Lower concentrations of benzene, toluene, ethylbenzene and xylene were also found in the groundwater from monitoring wells located nearest the underground tank. These unchlorinated VOCs are believed to be the remains of the gasoline that was once stored in the tank.

4.1.3 Extent of Contamination

Tables 1, 2 and 3 summarize the extent of contamination for the contaminants of concern in groundwater and soil and compare the data with the SCGs for the Site. The following are the media which were investigated and a summary of the findings of the investigation.

Groundwater

A network of six groundwater monitoring wells was installed on site at the time that the underground storage tank was removed, in an effort to determine the extent of contaminant migration from the release. The first three monitoring wells were installed at the perimeter of the tank excavation, and three more were subsequently installed in the vicinities of the western and northern property boundaries (see Figure 2). The first groundwater samples collected contained several chlorinated VOCs and gasoline-related compounds, at concentrations exceeding SCGs by factors of several hundred to a few thousand. The total concentration of VOCs found in the monitoring wells nearest the tank (MW-1, -2 and -3) ranged from approximately 19,000 to 95,000 ppb. Similar results were found in monitoring wells MW-4 and -5 at the western perimeter of the site. At the site's northern perimeter, in monitoring well MW-6, the total VOC concentration was only 86 ppb.

Subsequent sampling in the first phase of the investigation confirmed the concentrations of contaminants in the monitoring wells MW-1, -2 , -3, -5, and -6 (see Table 2).However, the contaminant concentrations in monitoring well MW-4 dropped substantially; the total VOC concentration ranged from only 138 to 620 ppb. After the groundwater recovery system was put into operation, the total VOC concentration in monitoring well MW-4 dropped further to 16 ppb.

In the second phase of the site investigation, three additional monitoring wells (MW-7, -8, and -9) were installed and added to the groundwater monitoring program. Monitoring wells MW-7 and -8 were placed at the eastern and southern perimeters of the site respectively, to further define the areal extent of the groundwater contamination. Monitoring well MW-9 was installed a short distance from the tank location, to examine the hydrogeological characteristics of the bedrock beneath the site.

Table 1
Nature and Extent of Contamination
Groundwater

CLASS	CONTAMINANT OF CONCERN	CONCENTRATION RANGE (ppb)	FREQUENCY EXCEEDING SCGs	SCG (ppb)
Volatile Organic Compounds (VOCs)	1,1 dichloroethane	ND - 32,000	59 of 68	5
	1,1,1 trichloroethane	ND - 84,000	25 of 68	5
	trichloroethene	ND - 12,000	37 of 68	5
	cis - 1,2 dichloroethene	ND - 6,700	37 of 68	5
	tetrachloroethene	ND - 14,000	18 of 68	5
	1,2 dichloroethane	ND - 650	13 of 68	0.6
	vinyl chloride	ND - 930	16 of 68	2
	1,1 dichloroethene	ND - 1,200	12 of 68	5
	toluene	ND - 290	14 of 42	5
	benzene	ND- 120	11 of 42	1
	ethylbenzene	ND - 81	9 of 42	5
	total xylenes	ND - 247	9 of 21	5*
TAL Inorganics	iron	53,000	1 of 1	300
	magnesium	53,000	1 of 1	35,000
	manganese	960	1 of 1	300
	sodium	76,000	1 of 1	20,000

ND - Non Detect

SCG - Standards, Criteria and Guidance values, from TOGS 1.1.1 - *Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations* (June 1998)

* - Applies to each individual isomer; ortho-, meta-, and para-xylene

Table 2
Groundwater
Total VOC Concentration
(parts per billion)

Monitoring Well MW -		1	2	3	9	4	5	6	7	8	10	11
SAMPLE DATE		RECOVERY WELLS				PERIMETER WELLS					OFF-SITE WELLS	
5/15/96	PHASE I	27,440	95,010	19,130								
5/29/96						20,970	12,990	86				
6/5/96						138	4,038					
6/15/96		42,180	130,070	49,387		442	3,717	147				
10/9/96	PHASE II		130,600	55,700		620	5,230	277	1,500	249		
10/12/96		27,400										
10/30/96			149,000									
3/20/97			117,861	29,134		600	5,800	100	2,000	72		
1/7/98	PHASE III		7,770									
2/10/98		5,240	457				6,700	111	2,000			
8/12/98			3,740*				4,080		751			
10/12/98			30,100*	10,600*	29,800*							
1/13/99											ND	ND
2/10/99			8,920*	6,300*								
5/28/99		8,500*	12,270*	10,600*	3,210*							
6/25/99	PHASE IV		33,000*			16	5,040	103	1,100	282	ND	2**
10/22/99		40,990*	28,400*	28,400*	10,490*							

* - Pulse-pumping of the groundwater recovery wells began on 6/4/98; the concentrations reported do not accurately reflect static groundwater conditions

ND - Non detect

** - Detected 2 ppb of total xylenes in the NYSDEC split sample

Table 3
Post-IRM, Residual Contamination
Soil

CLASS	CONTAMINANT OF CONCERN	CONCENTRATION RANGE (ppm)	FREQUENCY EXCEEDING SCGs	SCG (ppm)
Volatile Organic Compounds (VOCs)	tetrachloroethene	0.029 - 0.74	0 of 4	1.4
	1,1,1 trichloroethane	ND - 0.026	0 of 5	0.8
	2-butanone	ND - 0.067	0 of 4	0.3
	trichloroethene	ND - 0.016	0 of 5	0.7
	cis 1,2 dichloroethene	ND - 0.018	0 of 5	NA
	methylene chloride	0.007 - 0.079	0 of 5	0.1
	vinyl chloride	ND - 0.002	0 of 5	0.2
	acetone	ND - 0.038	0 of 4	0.2
TAL Inorganics	cobalt	29 - 320	1 of 2	30 or SB
	iron	14,000 - 16,000	2 of 2	2,000 or SB
	nickel	17 - 20	2 of 2	13 or SB
	zinc	80 - 140	2 of 2	20 or SB
	beryllium	ND - 0.66	1 of 2	0.16 or SB
	copper	29 - 40	2 of 2	25 or SB
	mercury	ND - 0.22	1 of 2	0.1

Note: Table 3 summarizes the extent of residual contamination in the soil following the completion of the IRMs, and includes only the analyses of the treated excavated soils, the confirmatory sample from the tank excavation side walls and the soils in the bedding of the on-site storm sewer. Only those **VOCs** which were detected, and only those **TAL Inorganics** which exceeded SCGs in one or more sample, are included here.
ND - non detect
NA - not available
SCG - Standards, Criteria and Guidance values, from TAGM 4046 - *Determination of Soil Cleanup Objectives and Cleanup Levels* (January 1994)
SB - Site Background levels for the CMS site were never determined, the default values provided by TAGM 4046 were used for comparison instead
TAL - Target Analyte List

The total VOC concentrations found in MW-7 ranged from over 700 ppb to approximately 2,600 ppb. Unlike the earlier wells, none of the gasoline-related compounds (benzene, toluene, ethylbenzene or xylenes) were found in MW-7, only chlorinated VOCs were detected. Located presumably upgradient of the tank location, MW-8 also did not find evidence of gasoline contamination. However, chlorinated VOCs were found, at concentrations exceeding SCGs; the total concentration of VOCs in MW-8 ranged from 72 to 282 ppb.

In January and February 1998, as part of the third phase of the site investigation, monitoring wells MW-2, -5, -6, and -7 were resampled. The purpose of the sampling was to determine if there were any substantial changes in the groundwater contamination, nearly two years after the leaking tank had been removed. Contaminant concentrations in MW-2 did in fact drop from an earlier maximum of 149,000 ppb total VOCs to 7,700 and 457 ppb total VOCs in January and February 1998 respectively. However, the total VOC concentrations at the site perimeters (MW-5, -6, and -7) showed no significant change. Given the estimated rate of groundwater flow (17 to 22 feet/year), significant changes in the groundwater quality at the site perimeter, 200 or more feet from the tank location, most likely would not be observed in the first few years following the removal of the leaking tank.

In June 1998, the groundwater recovery and treatment system was put into operation, pumping water from monitoring wells MW-1, -2, -3, and -9. Quarterly monitoring of the system has included the sampling and analysis of the groundwater from each of the four monitoring wells. Before the pumping began, the total VOC concentration in monitoring well MW-2 had fallen to 457 ppb. After the recovery system started, the total VOC concentration in monitoring well MW-2 increased to 3,740 ppb in October 1998 and 33,000 ppb in June 1999. Monitoring wells MW-1 and -9 have shown a moderate decrease in total VOC concentrations since pumping began while the level of contamination in monitoring well MW-3 has remained relatively constant. The increased concentrations during pumping may indicate that part of the contaminant plume which had migrated from the vicinity of the monitoring wells is being drawn back.

In the latest phase of the site investigation, monitoring wells MW-10 and -11 were installed off site, to the north and northeast, to determine the extent of the groundwater contamination (see Figure 4). Sampled in January and June of 1999, these two off-site monitoring wells have thus far shown no evidence of site-related contamination.

A summary of the extent of the groundwater contamination is provided in Table 1. Table 2 provides a summary of the total VOC concentrations found in the various site monitoring wells during the course of the investigation.

Soil

When the underground storage tank was removed it was discovered that it had leaked into the top of the bedrock and surrounding soils. Soils which appeared to be stained or otherwise heavily contaminated were excavated and stored on site to await treatment and disposal. Seven soil borings were then advanced around the excavation to define the limits of contamination. Samples from each boring were examined with field instruments for evidence of VOCs and the excavation was then expanded where needed. A composite soil sample was then collected from the walls of the excavation, verifying that TAGM 4046 cleanup objectives had been reached.

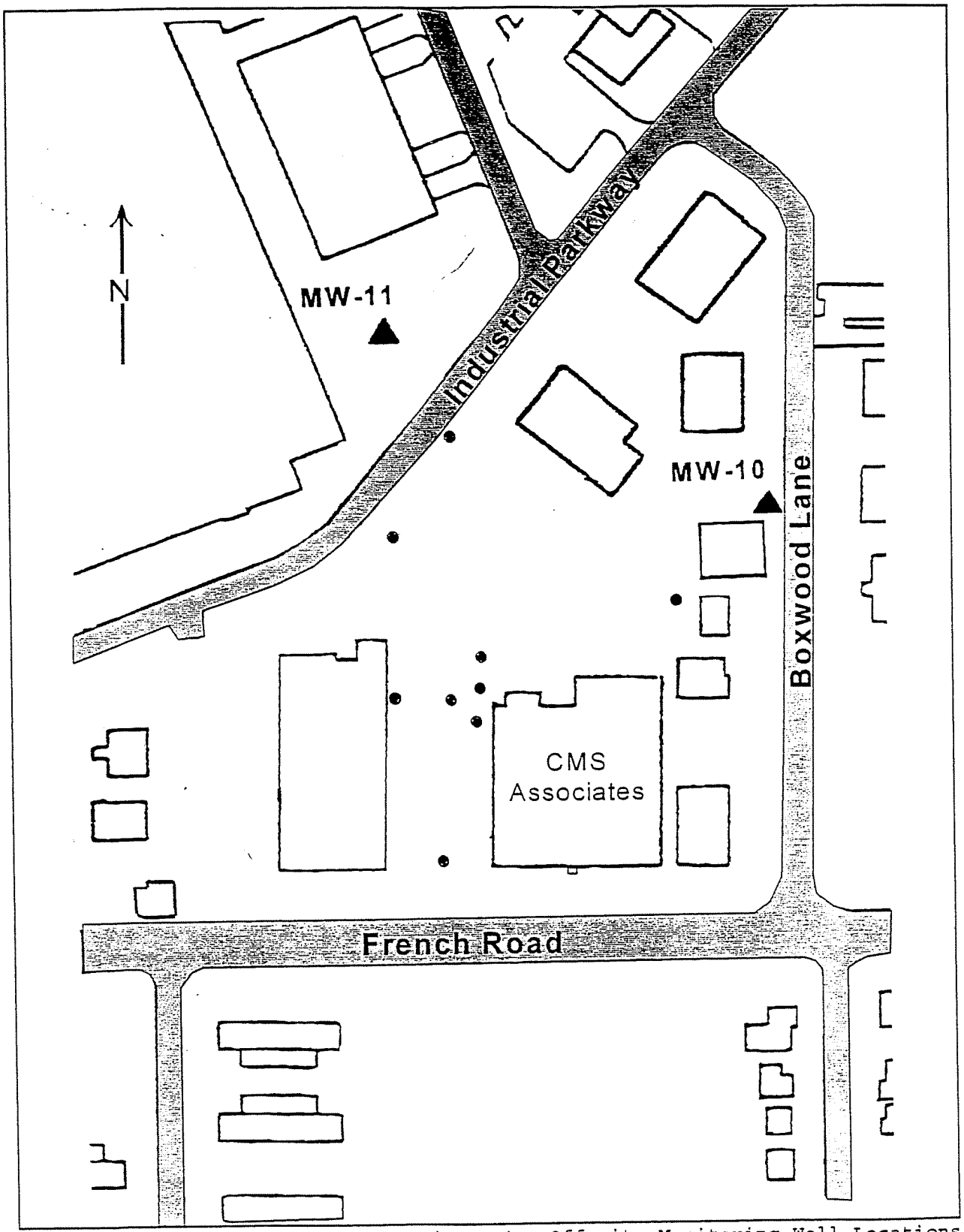


Figure 4 - Off-site Monitoring Well Locations

scale: 1" = approx. 190'

Initial composite samples of the contaminated soil excavated from around the tank contained more than 28 ppm of tetrachloroethene, 14 ppm of 1,1,1 trichloroethane, and 1.7 ppm of xylene; the total VOC concentration was as high as 45 ppm. The cleanup guidance levels for these three compounds are 1.4, 0.8, and 1.2 ppm respectively. As described earlier in Section 3.2 of this PRAP, the excavated soil was later treated, reducing the concentrations of VOCs to below TAGM 4046 cleanup objectives, and the treated soil placed on the site.

The contaminated soil excavated from around the tank was also analyzed for the Target Analyte List (TAL) of inorganic substances. The concentrations of TAL inorganics that were found are be considered typical of an industrial site. Since the same inorganic had not been found in the groundwater at levels of concern and were considered to pose no significant environmental threat; further treatment of the soil was deemed unnecessary. The analytical results for the three samples of treated soil and the composite sample collected from the walls of the completed tank excavation are included in Table 3.

As part of the second phase of the site investigation, soil from beneath an on-site storm sewer catch basin was sampled. The underground sewer flowed from a loading dock near the southwest corner of the building, northwards to the catch basin near Industrial Parkway (see Figure 2). Since the sewer passed near the underground storage tank, it was believed that the bedding or loose soil backfilled around the outside of the sewer might have been acting as a migration pathway for contaminants. While the same VOCs detected in the tank and surrounding soils were also detected in the soil beneath the sewer catch basin, the concentrations found ranged from only 4 to 310 parts per billion, well below the parts per million range of the TAGM 4046 cleanup objectives. Remediation of the sewer bedding was deemed unnecessary. The analytical results for this soil sample are also incorporated into Table 3.

Storm Water and Sewer Sediment

The storm sewer catch basin, located in the loading dock area at the southwest corner of the facility, had been sealed and abandoned shortly after the underground tank was removed. To determine if contaminated groundwater may have also traveled inside this storm sewer , a sample of water was collected from the sewer's downstream catch basin, located near Industrial Parkway. The sample was "standing" water, collected during a dry weather period.

The catch basin water sample was analyzed for VOCs only. Three such compounds were found at low concentrations: 6 ppb of 1,1 dichloroethene, 6 ppb of tetrachloroethene and 30 ppb of 1,1,1 trichloroethene. The groundwater quality standard (SCG) for each of these VOCs is 5 ppb.

The catch basin empties into an open drainage ditch which flows north through the industrial park to Slate Bottom Creek. Except during storm events, the drainage ditch is usually dry. Given the relatively low concentrations detected, it was determined that the contaminants found in the catch basin water did not require remediation.

The on-site storm sewer was installed above the top of bedrock. It is believed that the groundwater recovery system has lowered the groundwater mound in the vicinity of the tank location and has thereby eliminated or reduced the flow of contaminated groundwater to the sewer bedding.

A composite sample of sewer sediment within two of the on-site catch basins was also collected and analyzed for VOCs and TAL inorganic substances. Several VOCs were found, typically in concentrations of parts per billion (ppb); 100 ppb of 1,1,1 trichloroethane was the highest concentration of any VOC detected. Unlike a creek or stream, the storm sewer is not considered a viable aquatic habitat; stream sediment SCGs are not applicable or appropriate criteria for sewer sediments. The sewer sediment sample results were instead compared to the soil cleanup objectives of TAGM 4046, and found to be well below the cleanup levels. Since all of the TAL inorganic found were also below the TAGM 4046 cleanup levels, cleanup of the sewer sediments was deemed unnecessary.

Waste Materials

Other than the contents of the underground storage tank, no discrete waste materials were found at the site. Groundwater and soil contamination were the issues of concern. The tank contained a mixture of waste chlorinated solvents with some components of gasoline present. The mixture included 110,000 ppm of tetrachloroethene; 200,000 ppm of 1,1,1 trichloroethane and 10,000 ppm of 1,2,4 trimethylbenzene. The tank contents were removed and disposed at an off-site hazardous waste disposal facility. After the tank and surrounding soils had been removed, the first few groundwater samples from the nearby monitoring wells MW-2 and -3 exhibited a slight oily sheen. However, there has been no other direct evidence of non-aqueous phase liquids found.

As described in Section 4.2 of this proposal, wastewater, consisting of contaminated groundwater recovered from beneath the site, is currently being treated on site. The treated water is discharged under permit to an Erie County Sewer District (ECSD) sanitary sewer located beneath French Road, and transported to the Buffalo Sewer Authority (BSA) wastewater treatment facility. As required by the ECSD/BSA permit, the treated wastewater is sampled monthly and has been found in compliance with discharge limits for site-related contaminants. As of the end of the last reporting period (August 1999) it is estimated that over 74,000 gallons of groundwater has been extracted and treated at average rates ranging from 60 to 570 gallons per day.

Air

Air monitoring was conducted using field instruments during site investigation activities. No site impacts on air quality were observed. The discharge from the groundwater treatment system has also been monitored and found to be in compliance with NYSDEC permits for air emission sources.

4.2 Interim Remedial Measures:

Interim Remedial Measures (IRMs) are conducted at sites when a source of contamination or exposure pathway can be effectively addressed without extensive investigation and evaluation, to prevent, mitigate, or remedy an environmental or public health threat.

As previously discussed, the first IRM completed at this site, was the removal of the leaking underground tank. The second IRM completed was the excavation and treatment of the contaminated soils from around the leaking tank.

The initial phase of the site investigation had indicated that groundwater in the immediate vicinity of the underground storage tank was significantly contaminated. Two remedial alternatives were examined in a focused feasibility study; 1.) take no active response and allow natural attenuation processes to reduce the level of groundwater contamination, or 2.) pump and treat the contaminated groundwater. Pumping and treating groundwater from the "hot spot" of contamination, in the vicinity of the tank, would reduce the total mass of contaminants, mitigating the spread of groundwater contamination. Since this pump and treat alternative would also reduce the time required for natural attenuation processes to restore the groundwater to its beneficial use, it was selected as an IRM.

On June 4, 1998, a vacuum-enhanced groundwater recovery and treatment system was put into operation. The system consists of a vacuum pump connected to the monitoring wells MW-1, -2, -3 and -9, which are located nearest the location of the removed tank. These four recovery wells draw groundwater from an interval spanning both the limestone bedrock and the upper portion of the underlying shale formation. Monitoring well MW-9 is approximately 10 feet deeper than the other three recovery wells, penetrating that much deeper into the underlying shale . The bedrock beneath the site is slow to yield groundwater. To recover the optimum volume of groundwater, the pump is set to operate on a cycle; 1 hour on and 5 hours off. The groundwater is pumped from the wells to an air stripper to remove the VOCs, and the treated water is then discharged to the municipal sanitary sewer. It was found that the vapor from the air stripper contained VOCs at low enough concentrations that further treatment was unnecessary; the vapor is discharged directly to the atmosphere in accordance with NYSDEC guidelines. It is estimated that between October 1998 and August 1999, 6 pounds of VOCs were extracted from the 74,000 gallons of groundwater recovered. There is, however, no estimate of the total quantity of VOCs which leaked from the underground storage tank.

4.3 Summary of Human Exposure Pathways:

An exposure pathway is how an individual may come into contact with a contaminant. The five elements of an exposure pathway are 1) the source of contamination; 2) the environmental media and transport mechanisms; 3) the point of exposure; 4) the route of exposure; and 5) the receptor population. These elements of an exposure pathway may be based on past, present, or future events.

Currently there are no completed pathways of human exposure at the site. The localized contaminated groundwater exists primarily within the bedrock and is not used for drinking or industrial processes; a survey of the buildings north, east and west of the site found no production wells or sumps.

A possible future exposure pathway might include the construction of building foundations or the installation or repair of subsurface utilities. Contaminated groundwater exists within several feet of the ground surface; future construction might extend to this depth and workers might come in direct contact with the contaminated groundwater or inhale the volatilized contaminants. However, such exposure would be infrequent; direct contact would likely be of short duration and the levels of contaminants volatilized from groundwater in the unconfined space of an open excavation would pose a minimal inhalation hazard.

4.4 Summary of Environmental Exposure Pathways:

Groundwater flows towards Slate Bottom Creek, but off-site monitoring wells showed no evidence that contamination has migrated to the creek. Having removed the leaking tank, the source of the groundwater contamination was also removed. By treating the more severely contaminated groundwater in the vicinity of the tank, the total mass of contaminants migrating off site will be reduced, mitigating any possible impact to Slate Bottom Creek and reducing the time that it would take for groundwater quality to reach standards via natural attenuation processes.

SECTION 5: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers. For this site, CMS Associates has been identified as the sole responsible party.

The NYSDEC and CMS Associates entered into a Consent Order on January 28, 1997. The order obligated CMS Associates to treat and dispose the contaminated soil previously excavated from around the leaking underground storage tank, and implement an interim remedial program to address the contaminated groundwater.

SECTION 6: SUMMARY OF THE SELECTED REMEDY

The selected remedy for any site should, at a minimum, eliminate or mitigate all significant threats to the public health or the environment presented by the hazardous waste present at the site. The goal selected for this site is to mitigate the impacts of contaminated groundwater to the environment.

The NYSDEC believes that the interim remedial measures taken to date:

- removal of the leaking underground tank,
- excavation and ex situ treatment of the contaminated soils,
- recovery and treatment of the contaminated groundwater,

have accomplished this remedial objective. Provided that it continues to be operated and maintained in a manner consistent with the design, the groundwater recovery system will reduce the mass of contaminants in the groundwater and mitigate the spread of contamination off site.

The NYSDEC has selected no further remedial action beyond the continued operation and monitoring of the current groundwater recovery and treatment system. More specifically, the selected remedy will include:

- continued operation of the vacuum enhanced groundwater recovery and treatment, with periodic sampling of the groundwater recovered and the treated water discharged to the sanitary sewer,

- placement of deed restrictions on the site property to limit use of the property for commercial or industrial purposes only and preclude the use of the groundwater for drinking or manufacture processes,

- long-term sampling of the site groundwater monitoring wells and,

- annual evaluation of the operation and monitoring data for trends in contaminant concentrations.

This no further remedial action remedy is based on:

- The technical impracticability of restoring the groundwater to pre-release conditions, given the complexity of the site hydrogeology;
- The fact that the local groundwater currently has no beneficial use and is unlikely to be used in the foreseeable future;
- The present lack of completed pathways of human exposure and the absence of a significant threat to public health;
- The site's commercial/industrial setting and the absence of sensitive environmental receptors.

The interbedding of shale and limestone, the variable hydraulic conductivity of the bedrock and the fluctuating groundwater elevations noted in certain monitoring wells suggests a complex hydrogeology. Oily sheens observed on the surface of the earliest groundwater samples collected in the vicinity of the buried tank and the high concentrations of contaminants which remain in the groundwater following a year of treatment also suggest the possible presence of non- aqueous phase liquids (NAPL). The complexity of the hydrogeology and the possible presence of NAPL offer a situation for which there is no practical, effective means for returning the site to pre-release conditions.

As noted earlier, off-site properties downgradient of the site are commercial and industrial. A survey of the area found no active drinking water or production water wells, sumps or basements, i.e., the groundwater is currently not used and there are no completed pathways of human exposure. Given the availability of the existing municipal water supply system, it is also unlikely that groundwater would be used as a source of drinking or production water in the foreseeable future. However, as part of the remedy, a deed restriction will be placed on the site to preclude the installation of wells and use of the groundwater. The deed will also include a notice of the site contamination so that appropriate measures might be taken to ensure workers' safety in the event that future building or subsurface utility construction occurs. Owners of the adjacent properties have been notified of the potential impacts of the site contamination. The site would continue to be listed in the annual New York State Registry of Inactive Hazardous Waste Disposal Sites; however, its classification will be revised from class 2 (significant threat to the public health or environment) to class 4 (site properly closed, continued management required).

The potential for ultimately restoring the groundwater to its beneficial use is uncertain, given the complexity of the site geology (i.e., the vertical and horizontal fracturing of the bedrock) and mobility of the contaminants. Because of this, a phased approach has been taken in characterizing the site, with each phase designed to provide information necessary for the next phase. Likewise, a phased approach has been selected for the site remediation, to achieve interim goals at the outset, while developing a more accurate understanding of the restoration potential of the contaminated groundwater.

The selected remedy will include the continued operation of the groundwater collection and treatment system, during which the system's performance will be carefully monitored on a regular

basis and adjusted as warranted by the performance data collected. Modifications might include installation of additional recovery wells, alternating pumping at wells to eliminate stagnation points or changing the pump cycle period.

The continued management of the site will also include a long-term groundwater monitoring program, including the sampling and analysis of groundwater from areas beyond the tank location, at the site perimeter and off-site locations. The data gathered will be evaluated annually for trends in changing contaminant concentrations and a determination made for more extensive investigation and/or additional remedial measures if warranted.

SECTION 7: HIGHLIGHTS OF COMMUNITY PARTICIPATION

As part of the remedial investigation process, a number of Citizen Participation activities were undertaken in an effort to inform and educate the public about conditions at the site and the potential remedial alternatives. The following public participation activities were conducted for the site:

- A repository for documents pertaining to the site was established.
- A site mailing list was established which included nearby property owners, local political officials, local media and other interested parties.
- In March 2000 a Responsiveness Summary was prepared and made available to the public, to address the comments received during the public comment period for the PRAP.

APPENDIX A

Responsiveness Summary

RESPONSIVENESS SUMMARY

CMS Associates
Proposed Remedial Action Plan
Cheektowaga (T), Erie County
Site No. 9-15-168

The Proposed Remedial Action Plan (PRAP) for the CMS Associates site, was prepared by the New York State Department of Environmental Conservation (NYSDEC) and issued to the local document repository on February 18, 2000. This Plan outlined the preferred remedial measure proposed for the remediation of the contaminated soil and sediment at the CMS Associates site. The selected remedy is no additional action beyond the continued operation and monitoring of the current groundwater recovery and treatment system. More specifically, the selected remedy includes:

- continued operation of the vacuum-enhanced groundwater recovery and treatment system, with periodic sampling of the groundwater recovered and the treated water discharged to the local sanitary sewer,
- placement of deed restrictions on the site property to preclude the use of that water for drinking or manufacture processes,
- long-term sampling of the site groundwater monitoring wells and
- annual evaluation of the operation and monitoring data for trends in contaminant concentrations.

The release of the PRAP was announced via a notice to the mailing list, informing the public of the PRAP's availability.

A public meeting was held on February 29, 2000 which included a presentation of the Remedial Investigation (RI) and the Feasibility Study (FS) as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. Written comments were received from Mr. Ken Kloeber. The public comment period for the PRAP ended on March 22, 2000.

This Responsiveness Summary responds to all questions and comments raised at the February 29, 2000 public meeting and to the written comments received.

The following are the comments received at the public meeting, with the NYSDEC's responses:

COMMENT 1: What will be the restrictions on the future use of the property?

RESPONSE 1: The owner will place a deed restriction on the property to preclude the use of groundwater for drinking or manufacturing, and to restrict the property to commercial or industrial use.

COMMENT 2: The Town of Cheektowaga would like a formal notification when the ROD is executed. The Town would also like an update on the remaining hazardous waste sites in the Town.

RESPONSE 2: The NYSDEC will formally notify the Town by issuing a copy of the ROD to the Town Clerk as well as copying Councilman Johnson. An update on the remaining hazardous waste sites was issued to the Councilman and Building Inspector in March 2000.

A letter dated March 2, 2000 was received from Mr. Ken Kloeber of Ken W. Kloeber Consulting Engineers, environmental consultant to CMS Associates, which included the following comment:

COMMENT: The PRAP should state "No Additional Action Required" instead of "No Further Action Required". This revised wording communicates to the public that much work has been accomplished at the site.

RESPONSE: Based on the success of the IRMs taken, the selected remedy for the site is one of no additional remedial action beyond the continued operation and maintenance of the existing groundwater treatment system and periodic evaluations of the effectiveness of the remedy. To be consistent with our documents used throughout the State, the Record of Decision refers to the selected remedy as "no further remedial action."

APPENDIX B

Administrative Record

ADMINISTRATIVE RECORD

CMS Associates
Proposed Remedial Action Plan
Cheektowaga (T), Erie County
Site No. 9-15-168

UST Removal at 210 French Road, Bio Utilization Group, June 1996

Phase II Environmental Site Evaluation, Hazard Evaluations Inc., November 1996

March 1997 Groundwater Sampling and Analytical Testing Event, Hazard Evaluations Inc., April 1997

Focused Feasibility Study, Hazard Evaluations Inc., October 1997

Periodic Discharge Monitoring Report, Ken W. Kloeber Consulting Engineers, December 1998

Interim Remediation Measure Report, Ken W. Kloeber Consulting Engineers, January 1999

Periodic Discharge Monitoring Report, Ken W. Kloeber Consulting Engineers, January 1999

210 French Road Quarterly Monitoring Report, Ken W. Kloeber Consulting Engineers, March 1999

210 French Road Quarterly Monitoring Report, Ken W. Kloeber Consulting Engineers, July 1999

210 French Road Quarterly Monitoring Report, Ken W. Kloeber Consulting Engineers, December 1999

Proposed Remedial Action Plan - CMS Associates - Site No. 915168; NYSDEC, February 2000

APPENDIX "B"

Operation Maintenance and Monitoring Plan
CMS Associates Remediation
Site # 915168

DECLARATION of COVENANTS and RESTRICTIONS

THIS COVENANT, made the __ day of _____ 2003, by CMS PROPERTY ASSOCIATES, L.L.C., a limited liability corporation organized and existing under the laws of the State of New York and having an office for the transaction of business at 210 French Road, Cheektowaga, New York 14227 (hereinafter referred to as "CMS"):

WHEREAS, CMS is the owner of an inactive hazardous waste disposal site which is listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State as Site Number 9-15-168, located on 210 French Road in the Town of Cheektowaga, County of Erie, State of New York, which is part of lands conveyed by Sereth Properties, Inc., to Robert E. Mariacher and others by deed dated _____ and recorded in the Erie County Clerk's Office on_____ in Book 6872 of Deeds at Page 458 and being more particularly described in Schedule "A", attached to this declaration and made a part hereof, and hereinafter referred to as "the Property"; and

WHEREAS, the Property is the subject of a consent order issued by the New York State Department of Environmental Conservation to CMS Property Associates, L.L.C.; and

WHEREAS, the New York State Department of Environmental Conservation set forth a remedy to eliminate or mitigate all significant threats to the environment presented by hazardous waste disposal at the Site in a Record of Decision ("ROD") dated March 30, 2000, and such ROD and the Work Plan for the implementation of the ROD required that the Property be subject to restrictive covenants.

NOW, THEREFORE, CMS, for itself and its successors and/or assigns, covenants that:

First, the Property subject to this Declaration of Covenants and Restrictions consists of all the premises contained within and described by the metes and bounds description set forth in Schedule "A" and is as shown on the map attached to this declaration as Schedule "B" and made a part hereof, and

Second, unless prior written approval by the New York State Department of Environmental Conservation or, if the Department shall no longer exist, any New York State agency or agencies subsequently created to protect the environment of the State and the health of the State's citizens, hereinafter referred to as "the Relevant Agency," is first obtained, no person shall engage in any activity that will, or that reasonably is anticipated to, prevent or interfere significantly with any proposed, ongoing or completed program at the Property or that will, or is reasonably foreseeable to, expose the public health or the environment to a significantly increased threat of harm or damage.

Third, the owner of the Property shall prohibit the Property from ever being used for purposes other than for restricted commercial or industrial uses without the express written waiver of such prohibition by the Relevant Agency.

Fourth, the owner of the Property shall prohibit the use of the groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Relevant Agency.

Fifth, the owner of the Property shall continue in full force and effect the institutional and engineering controls the Department required Respondent to put into place and maintain as the OM&M Plan, and shall continue to monitor and treat collected groundwater, and shall continue to report on and review annually with the Relevant Agency the results and effectiveness thereof, unless the owner first obtains permission to discontinue or modify such controls from the Relevant Agency.

Sixth, this Declaration is and shall be deemed a covenant that shall run with the land and shall be binding upon all future owners of the Property and shall provide that the owner, and its successors and assigns, consents to the enforcement by the Relevant Agency of these prohibitions and restrictions that Paragraph X of the Order requires to be recorded, and hereby covenants not to contest the authority of the Relevant Agency to seek enforcement.

Seventh, any deed of conveyance of the Property, or any portion thereof, shall recite, unless the Relevant Agency has consented to the termination of such covenants and restrictions, that said conveyance is subject to this Declaration of Covenants and Restrictions.

IN WITNESS WHEREOF, the undersigned has executed this instrument the day written below.

CMS Property Associates, L.L.C.

Date: _____ By: _____

Title: _____

STATE OF NEW YORK)
) s.s.:
COUNTY OF)

On the _____ day of _____, in the year 2003, before me, the undersigned, personally appeared _____, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me the he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

_____
Notary Public

Schedule A

RE: 210 French Road
Cheektowaga, New York

Legal Description

Parcel "A" All that tract or parcel of land situate in the Town of Cheektowaga, County of Erie and State of New York, being part of Lot № 90, Township 10 and Range 7 of the Buffalo Creek Reservation, described as follows:-

Beginning at a point in the north boundary of French Road one hundred twenty (120) feet west of its intersection with the west boundary of Boxwood Lane right of way: thence west three hundred thirty (330) feet to a point in the north boundary of French Road: thence north at 90°, three hundred fifty (350) feet to a point: thence east at 90°, three hundred thirty (330) feet parallel to French Road to a point: thence south at 90°, three hundred fifty (350) feet to the point of beginning, containing about two and six hundred fifty-two thousandths (2.652) acres.

EXCEPTING AND EXCLUDING THEREFROM, any portion of the above described parcel lying within the public right of way of French Road.

RE: 210 French Road
Cheektowaga, New York

Legal Description

Parcel "B" All that tract or parcel of land situate in the Town of Cheektowaga, County of Erie and State of New York, being part of Lot № 90, Township 10 and Range 7 of the Buffalo Creek Reservation, described as follows:-

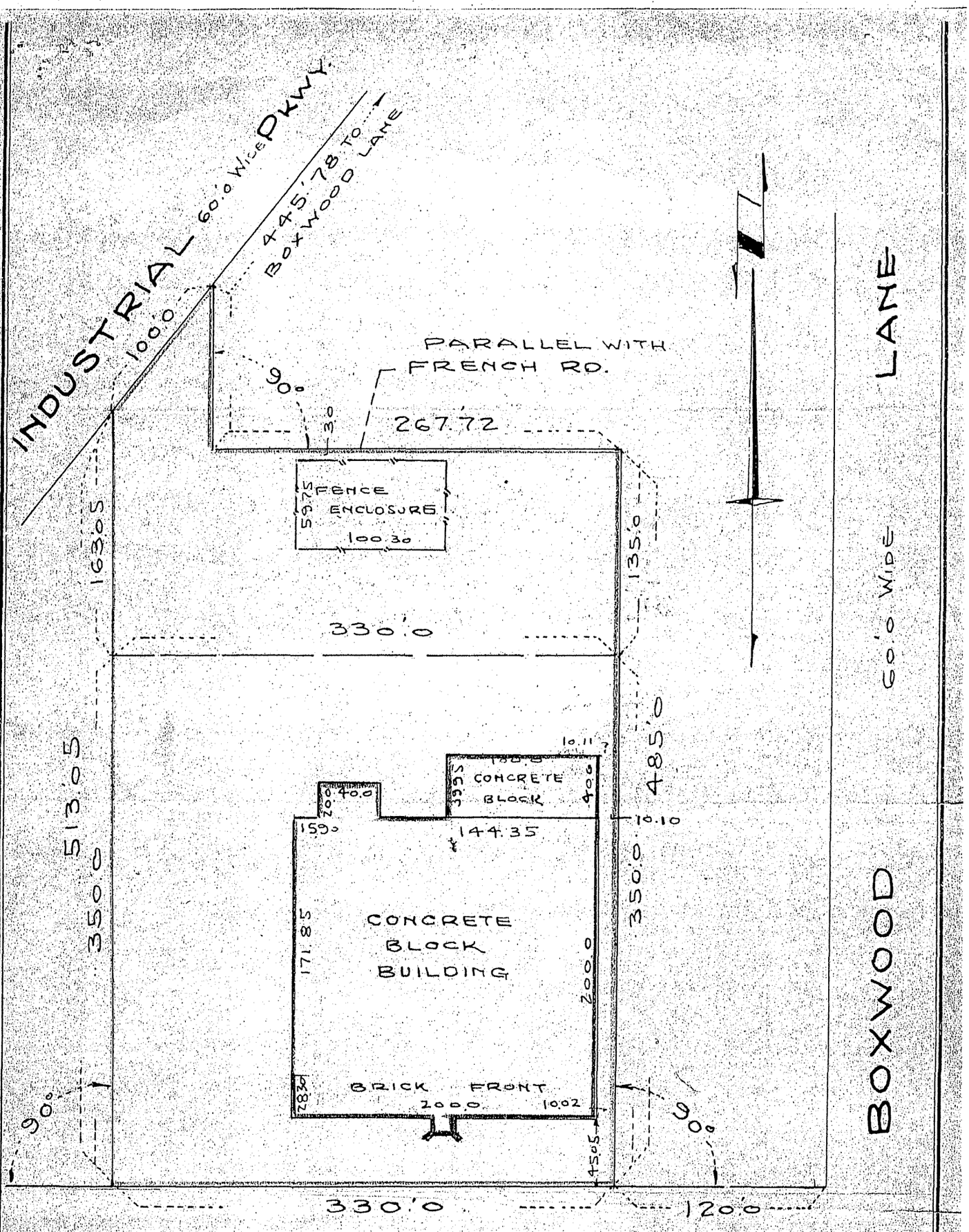
Commencing at a point at the northeast corner of land heretofore conveyed by Sereth Properties Inc. to Robert E. Mariacher and others by deed recorded in Erie County Clerk's Office in liber 6872 of Deeds at page 458, which point is three hundred fifty (350) feet north of French Road and one hundred twenty (120) feet west of Boxwood Lane: running thence northerly and parallel to Boxwood Lane one hundred thirty-five (135) feet to a point: thence westerly at right angles to the last described line and parallel to French Road two hundred sixty-seven and seventy-two hundredths (267.72) feet to a point: thence northerly at right angles one hundred six and thirty hundredths (106.30) feet to a point in the southeasterly line of Industrial Parkway which point is four hundred forty-five and seventy-eight hundredths (445.78) feet southwesterly from the intersection of Industrial Parkway and Boxwood Lane:

RE: 210 French Road
Cheektowaga, New York

Legal Description

thence southwesterly and along the southeasterly line of Industrial Parkway one hundred (100) feet to a point: thence southerly and parallel to Boxwood Lane one hundred sixty-three and five hundredths (163.05) feet to the northwest corner of the aforesaid land heretofore conveyed to Robert E. Mariacher and others: thence easterly parallel to French Road and along the northerly line of said land, three hundred thirty (330) feet to the point or place of beginning.

SCHEDULE "B"



PART OF
LOT 90, T. 10, R. 7
TOWN OF CHEEKTOWAGA

JOHN E. COVEY
LAND SURVEYOR
BUFFALO NEW YORK

SCALE: 1 IN. = 80 FT.	PAGE 8698
DATE: MAY 25, 1972	NUMBER 72-181
RE-SURVEY	
DATE: AUG. 9 1973	NUMBER 73-364
DATE	NUMBER