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Department of Environmental Conservation

Town of Van Buren Landfill

Onondaga County, New York
Site Number 734031

New York State
Record of Decision

February 1992

Funded Under Title 3
of the
1986 Environmental Quality Bond Act

PREPARED BY:

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION

New York State Department of Environmental Conservation
MARIO M. CUOMO, *Governor* THOMAS C. JORLING, *Commissioner*

DECLARATION
RECORD OF DECISION

SITE NAME AND LOCATION

Town of Van Buren Landfill
Town of Van Buren
Onondaga County, New York
Site Code: 734031
Funding Source: 1986 Environmental Quality Bond Act

STATEMENT OF PURPOSE

This document describes the remedial alternatives considered for the Town of Van Buren Landfill and identifies the New York State Department of Environmental Conservation's (NYSDEC) preferred remedial alternative, developed in accordance with the New York State Environmental Conservation Law (ECL), and consistent with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 USC Section 9601, et., seq., as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). Exhibit A identifies the documents that comprise the Administrative Record for the site and includes the final Remedial Investigation and Feasibility Study (RI/FS) reports. The documents in the Administrative Record are the basis for the proposed remedial action.

This document provides some background information on the Van Buren Landfill, briefly describes the alternatives which were considered to remediate the site and presents the Department's preferred alternative. For a detailed description and evaluation of the alternatives considered, the RI/FS report mentioned above should be consulted.

This proposed plan is being distributed to solicit public comments regarding the Department's proposal to remediate the site. Changes to the preferred remedy may be made if public comments or additional data indicate that such a change will result in a more appropriate action. The final decision regarding the selected remedy will be made after NYSDEC has taken into consideration all comments received from the public.

ASSESSMENT OF THE SITE

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action described in this Proposed Remedial Action Plan (PRAP), present a current or potential threat to public health, welfare, and the environment.

STATEMENT OF BASIS

This proposal is based upon the administrative record for the Van Buren Landfill. A copy of the record is available for public review and/or copying at the following locations:

New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation: Brian H. Davidson
50 Wolf Road, Albany, NY 12233-7010
Hours: 8:30 AM - 4:45 PM Monday - Friday 518-457-1641

Van Buren Town Offices: Elizabeth McCarthy-Bowers, Clerk
7575 Van Buren Road
Baldwinsville, NY 13027
Hours: 8:00 AM - 3:30 PM Monday - Friday 315-635-3009

Documents are also be available for public review at the NYSDEC Regional Office at 615 Erie Boulevard West, Syracuse, NY, and the New York State Department of Health (NYSDOH) at 677 South Salina Street, Syracuse, NY. These offices are open from 8:30 to 4:45 Monday through Friday.

The following documents are the primary components of the administrative record:

A. "Town of Van Buren Landfill: Final Feasibility Study Report" November 1991; prepared by Clough, Harbour and Associates.

B. Town of Van Buren Landfill: "Final Remedial Investigation Report" November 1991; prepared by Clough, Harbour and Associates.

C. April 15, 1991 Correspondence from Frank LaVardera to Raymond Fetcho, Addendum to RI/FS Supplemental Work Plans.

D. "Work Plans Remedial Investigation-Phase II Feasibility Study" February 1991 prepared by Clough Harbour and Associates.

E. February 22, 1989 Correspondence from David W. Stoner to Brian H. Davidson - Remedial Investigation/Feasibility Study (RI/FS) Work Plan Addendum.

F. "Remedial Investigation/Feasibility Study Work Plan for the Town of Van Buren Landfill" January 1989 prepared by Stearns and Wheler Engineers and Scientists.

G. "Phase II Investigation Town of Van Buren Landfill" January 1987 prepared by Stearns and Wheler.

DESCRIPTION OF PROPOSED REMEDY

The proposed remedy for the Van Buren Landfill, Alternatives 2 and 3 combined, consists of a landfill cap and closure in accordance with 6 NYCRR Part 360, New York State's Solid Waste Management Facility regulations, effective December 31, 1988, as well as institutional controls. The landfill cap will cover the area where waste is known to have been disposed, approximately 16 acres. The landfill cap will consist of a properly graded multi-layered cover system including a gas venting layer, a low permeability soil layer or impermeable geosynetic membrane, a protective barrier layer, and topsoil to be seeded, fertilized, and maintained.

The site will be fenced and will have deed restrictions to prevent future uses of the site that would interfere with the remedial measures. The existing drainage system, which conveys upgradient drain tile runoff through the landfill will be grouted and abandoned with drainage being redirected around the landfill or it will be completely reconstructed with water tight HDPE pipe. The proposed remedy will also include providing and maintaining individual water purification units on the three residential wells on Kingdom Road which have consistently shown elevated concentrations of iron. Groundwater in the vicinity of the site will be monitored for 30 years. The total present worth cost of the proposed remedy, including 30 years of operation and maintenance is estimated to be $3,660,000.

DECLARATION

The selected remedy is designed to be protective of human health and the environment, is designed to comply with applicable State environmental quality standards, and is cost-effective. This remedy results in hazardous waste materials remaining present under the engineered capping system and as such will require periodic evaluations of the post-closure monitoring program to determine the effectiveness of the selected remedy. The site was operated as a municipal landfill prior to promulgation of rules and regulations concerning the disposal of hazardous material and as such has been shown to contain materials typical of that time frame. The presence of these materials in the landfill will require the imposition of deed restrictions which limit the future uses of the site to specific non-intrusive activities, and restricts the utilization of groundwaters beneath the site in accordance with the operational and maintenance programs to be developed during the Remedial Design.

2-27-92
Date

Edward O. Sullivan
Deputy Commissioner
Office of Environmental Remediation

TABLE OF CONTENTS

FIGURES

TABLES

EXHIBITS

I. Site Location and Description

The Town of Van Buren Landfill is located on Kingdom Road in the Town of Van Buren, Onondaga County, New York (Figure 1). The total landfill property is approximately 32 acres, approximately 16 of which have been landfilled. It is an unlined former municipal landfill which can be separated into two distinct fill areas. The older area, covering the western third of the site (Area 1), is a former gravel pit which has been filled with refuse to a depth of approximately 50 feet. In the newer area (Areas 2-6), filling has primarily been above grade and reaches a maximum height of approximately 30 feet (Figure 2). Groundwater flow beneath the site is to the north-northwest toward a small stream, Tributary 22 to the Seneca River. There are a number of residences in the vicinity of the site which depend upon private wells for water supply.

II. Site History

Aerial photographs indicate that the western portion of the site was mined for sand and gravel beginning some time prior to 1938. In the early 1950's, the Town began leasing the property for sand and gravel mining, but by that time, the resources had been nearly depleted. Exactly when the site became a landfill is uncertain, but it probably happened slowly over a period of time, beginning in the 1950's.

By July 1963, the Town was operating the site as a refuse dump for its residents. In February 1973, daily operation of the landfill was turned over to a contractor in order to comply with New York State regulations governing landfill operations. On September 1, 1973, the Onondaga County Solid Waste Disposal Authority (OCSWDA) took over the landfill operations as part of a plan to control and monitor all refuse disposal in Onondaga County. Operations were discontinued in the former gravel pit, and landfilling of the eastern portion of the site began.

In 1977, operation of the landfill was turned back over to the Town of Van Buren from the Onondaga County Solid Waste Disposal Authority, and in 1978 the NYSDEC issued a permit to operate a sanitary landfill to the Town of Van Buren.

In August of 1979, Stearns and Wheler was contracted by the Town of Van Buren to initiate a hydrogeologic investigation of the landfill and to develop plans for closure by mid-1989. In December 1981, as a response to concerns regarding local groundwater contamination from the landfill, the Onondaga County Health Department began sampling and testing nearby homeowners' wells. In 1982, five shallow monitoring wells were installed as part of an initial hydrogeologic investigation of the site in preparation for normal closure.

In 1984, in response to a waste disposal questionnaire from NYSDEC, Syroco Inc., disclosed that between 1963 and 1978 they disposed of waste paint and paint booth filters at the landfill. Syroco disclosed that approximately 30 gallons per month of industrial waste, both liquid and solids, were deposited at the landfill. For 15 years of dumping, this amounts to a total of 5,400 gallons. This disclosure prompted the NYSDEC to list the landfill as a "Class 2a" waste site, or a site which potentially poses a significant threat to public health or the environment.

In 1986, a "Phase II" investigation was conducted, and five well pairs were installed. In 1987, the site was reclassified as a "Class 2" waste site, or a site which poses a significant threat to public health or the environment.

On September 16, 1988, a Consent Order was entered into between the Town of Van Buren and NYSDEC, which put into effect a timetable for completion of an RI/FS, the remedial design, and the final construction and closure of the landfill. In November 1988, the RI/FS Work Plan was submitted to NYSDEC. On March 1, 1989, the Work Plan was approved and the Remedial Investigation was initiated. On July 1, 1989, the landfill officially closed its gates.

In October 1990, the Town of Van Buren elected to replace their Town Engineers, Stearns and Wheler Engineers and Scientists, with the firm Clough, Harbour and Associates (CHA). At the time of the replacement, a draft Remedial Investigation Report had been submitted to the NYSDEC. The document had been reviewed, the State's comments received, and an acceptable course of action had been outlined to address those comments.

In April 1991, the NYSDEC approved a technical work plan prepared by CHA to complete the RI/FS. The Final Remedial Investigation Report was approved by the NYSDEC in November 1991 with the concurrence of the New York State Department of Health. The Final Feasibility Report was determined to be acceptable for public review and comment in December 1991.

III. Enforcement Status:

Orders on Consent

Date	Index No.	Subject of Order
September 16, 1988	A6-0114-87-07	Implementation of a Remedial Program

The 1986 Environmental Quality Bond Act is being used to reimburse the Town for up to 75 percent (75%) of the costs for the remedial program. An amendment to the Order on Consent, dated September 8,

1989, provided a 90-day period for the Town to place 2700 cubic yards of compacted construction and demolition debris on the north slope of the site to lessen the severity of the grade in that area. However, the Town never exercised the option.

IV. Current Site Status

A. Summary of Field Investigations:

The following paragraphs summarize the components and conclusions of the field investigations performed at the site. The Remedial Investigation was conducted in accordance with plans formally approved by the NYSDEC in March 1989 and April 1991. For more detailed information regarding the Remedial Investigation or for additional regional information, refer to the Remedial Investigation Report, dated November 1991, or the appropriate reports or correspondences listed in the Administrative Record (Exhibit 1).

B. Summary of Site Conditions/Contaminants of Concern and Risk:

The Remedial Investigation (RI) was conducted by two consultants, Stearns and Wheler Engineers and Scientists who carried the program through the initial investigations and risk assessment and who wrote the Draft Remedial Investigation Report, and Clough, Harbour and Associates who have completed additional investigations required by the NYSDEC and who finalized the Remedial Investigation Report.

Various site investigation activities were undertaken to completely characterize the subsurface conditions at the site, to identify the soil and bedrock character, to delineate groundwater flow patterns and chemistries, examine the air contaminant pathway, and to establish any impacts that the landfill might be having on the environment. These include historical research, an explosive gas investigation, a three-phased organic vapor investigation, drilling of 35 borings and construction of 34 monitoring wells, in-situ hydraulic conductivity testing of the completed wells, topographic mapping of the landfill, groundwater and surface water flow monitoring, determination of groundwater flow velocities, and three rounds of sampling for chemical analysis of groundwater, surface water, leachate and/or solids samples (Figure 3). The two later rounds of samples collected were analyzed for a reduced list of compounds identified as potential contaminants of concern during the first round of sampling.

The subsurface investigation revealed the bedrock to be Vernon Shale which is composed of soft red and green shale with

layers and fracture fillings of gypsum and halite. Natural bedrock groundwater quality in the area is poor, with high levels of hardness, sulfate, and several metals. The overburden consists of varying thicknesses of glacial deposits consisting of, in order of decreasing age, dense lodgement till, and loose melt-out till interbedded with gravelly ice-contact deposits and sandy-silty rythmites. Groundwater flow within the overburden is to the north toward the Seneca River, closely controlled by the bedrock surface topography (Figures 4 through 8).

Crushed Vernon Shale was used as daily cover and makes up 20 to 25 percent of the landfill mass. Distinguishing between leachate-contaminated groundwater and naturally poor-quality groundwater is difficult. It was determined that organic compounds are not of concern with respect to migration from the landfill as none were detected in the groundwater. Five metals, arsenic, barium, iron, manganese and mercury, were determined to be of concern, as concentrations of these metals were elevated in some groundwater samples. A small plume of groundwater contamination in the overburden was identified downgradient of the former gravel pit where about ten feet of refuse is below the water table. Groundwater standards are exceeded only for iron and manganese. In the bedrock aquifer, MW-1-D shows elevated levels of some metals and in the remainder of the bedrock wells, only iron is elevated above background concentrations. The elevated iron concentrations could be resulting from the reducing conditions in the landfill which alter the geochemical conditions in the bedrock aquifer, thereby allowing more iron to go into solution from the rock matrix. Further downgradient of the landfill, these reducing conditions dissipate, and iron concentrations return to background levels.

The extent of the contaminant plume in the overburden is much less than would be expected from the calculated flow velocities due to geochemical controls on the solubility of iron and manganese which result in attenuated concentrations in the groundwater. Similar trends noted in the bedrock aquifer are also controlled by the geochemical environment of the bedrock aquifer, as noted above. By reducing infiltration through the waste mass, it is anticipated that the influence of the landfill on the local geochemical gradient will be reduced which will, over time, result in lowered concentrations of trace metals downgradient of the site.

There is only a relatively minimal public health risk associated with the Van Buren Landfill. There is some carcinogenic risk associated with ingesting well water from the bedrock, underlying the site, based on arsenic concentrations observed in MW-1D. Arsenic, however, is believed to be present at this location due to reducing conditions and is not attributed directly to waste disposed of at the landfill.

The incremental health risk associated with compsumption of groundwater within the limited area of iron and maganese contamination identified in the overburden is very small since the overburden does not yield potable water due to a naturally high inorganic chemical content. The bedrock aquifer is protected in this area by a low permeability lodgement till and an upper weathered zone in the bedrock. In addition, vertical gradients are upward in the bedrock in this area, and this should preclude contaminates from moving directly downward.

There is some health risk associated with direct repeated contact with surficial landfill leachate present on site. This exposure route would be eliminated by a landfill cap.

V. Goals for the Remedial Actions

The remedial alternative proposed for the site by the Department was developed in accordance with the New York State Environmental Conservation Law (ECL) and is consistent with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 USC Section 9601, et., seq., as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA). The criteria used in evaluating the potential remedial alternatives can be summarized as follows:

1. Compliance with Applicable or Relevant and Appropriate New York State Standards, Criteria and Guidelines (SCGs)--SCGs are divided into the categories of chemical-specific (e.g., groundwater standards), action-specific (e.g., design of a landfill), and location-specific (e.g., protection of wetlands).

2. Protection of Human Health and the Environment--This criterion is an overall and final evaluation of the health and environmental impacts to assess whether each alternative is protective. This is based upon a composite of factors assessed under other criteria, especially short/long-term effectiveness and compliance with SCGs.

3. Short-term Impacts and Effectiveness--The potential short-term adverse impacts of the remedial action upon the community, the workers, and the environment is evaluated. The length of time needed to achieve the remedial objectives is estimated and compared with other alternatives.

4. Long-term Effectiveness and Permanence--If wastes or residuals will remain at the site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude and nature of the risk presented by the remaining wastes; 2) the adequacy of the controls intended to limit the risk to protective levels; and 3) the reliability of these controls.

5. Reduction of Toxicity, Mobility, and Volume--Department policy is to give preference to alternatives that permanently and significantly reduce the toxicity, mobility, and volume of the wastes at the site. This includes assessing the fate of the residues generated from treating the wastes at the site.

6. Implementablity--The technical and administrative feasibility of implementing the alternative is evaluated. Technically, this includes the difficulties associated with the construction and operation of the alternative, the reliability of the technology, and the ability to effectively monitor the effectiveness of the remedy. Administratively, the availability of the necessary personnel and material is evaluated along with potential difficulties in obtaining special permits, rights-of-way for construction, etc.

7. Cost--Capital and operation and maintenance costs are estimated for the alternatives and compared on a present worth basis. Although cost is the last criterion evaluated, where two or more alternatives have met the requirements of the remaining criteria, lower cost can be used as the basis for final selection.

The overall objective of the remediation is to reduce the concentrations of contaminants and the routes of exposure to levels which are protective of human health and the environment. The site-specific goals for remediating the site can be summarized in general as follows:

- o Reduce, control, or eliminate the contamination present in the shallow saturated zone (leachate water) within the fill mass.
- o Eliminate the threat to surface waters by containing any future surface leaching from the fill mass.
- o Redirect and reconstruct the existing drainage system to allow clean upgradient shallow groundwater to pass through the site without picking up contamination from the site.
- o Eliminate the potential for direct human or animal contact with the waste mass and leachate seeps.

The following section addresses the alternatives that have been evaluated to achieve these goals.

VI. Summary of the Evaluation of the Remedial Alternatives

A. Initial Screening of the Alternatives:

The Town of Van Buren Landfill has been evaluated as a single "operable unit." That is, the site consists essentially of a single contaminated area and the evaluations would not benefit from dividing the site into separate pieces.

The FS screened different alternatives for technical implementability in achieving the remedial goals. The following section describes the alternatives considered in the detailed analysis. More complete descriptions of the alternatives can be found in the RI/FS Report.

The FS Report presents four (4) conceivable alternatives. The first alternative is No Action. The second alternative involves applying limited action by providing institutional controls. The third alternative is a source control employing an impermeable cap on the site per 6 NYCRR Part 360 regulations. The fourth alternative emphasizes upgradient groundwater control strategies in conjunction with a 6 NYCRR Part 360 closure.

B. Evaluation of Alternatives

Alternative 1 involves No Action at the site other than annual monitoring of on-site wells and downgradient residential wells. Alternative 1 provides no control of exposure to the landfilled wastes, and allows for the possible continued migration of the contaminate plume and further degradation of the groundwater supply in the area. Alternative No. 1 would not meet applicable or relevant and appropriate requirements (ARARs).

Alternative 2, Institutional Controls, addresses the risk of exposure pathways be restricting site access with a perimeter fence. Alternative 2 also includes individual treatment systems and the three residential wells across from the landfill which, based on iron levels, may have been impacted by the landfill. Another alternative for a water supply for the potentially affected residences would be to extend municipal water mains. This would involve constructing pump stations and storage towers in addition to extending mains. The final component of Alternative 2 to place deed restrictions on the site. Alternative 2 could also include a long-term monitoring program.

Although Alternative 2 reduces risks associated with direct exposure by fencing, and individual water treatment systems will help protect human health, Alternative 2 is not fully protective of human health and the environment. Leachate seeps will continue unabated and infiltration though the landfill mass will be a continuing source of leachate generation and potential groundwater contamination. The existing drainage system, which conveys upgradient drain tile runoff through the landfill will continue to pick up low levels of contamination from the landfill. Alternative 2 will also not satisfy ARAR's.

Alternative 3, Landfill Closure, consists of landfill capping and closure per 6 NYCRR Part 360 regulations. The landfill cap would consist of a gas venting layer, including gas riser vents

keyed into the refuse, a barrier layer, a barrier protection layer and a topsoil layer. A leachate collection system is also anticipated with this option. Due to the limited effective life of the system and the relatively high capitol costs associated with on-site treatment, off-site treatment at a local POTW is anticipated. Alternative 3 would also include a long-term monitoring and inspection plan as required to comply with NYSDEC post-closure O&M criteria.

Closure of the landfill in accordance with 6 NYCRR Part 360 would comply with ARARs and would be protective of human health and the environment.

Although some of the contaminants of concern may still persist in the downgradient monitoring and water supply wells at levels slightly above their respective chemical specific ARARs, the closure/capping of the landfill would allow the existing contamination to be naturally attenuated due to the elimination of its driving force. If it is deemed necessary, individual drinking water purification systems could be installed on any downgradient domestic drinking water supplies during the attenuation period. The quarterly groundwater monitoring program required under 6 NYCRR Part 360 would enable the NYSDEC to monitor the attenuation of the existing contamination and to determine the point at which the need for the purification of drinking water is no longer needed. Although capping the Van Buren Landfill would not reduce the volume or toxicity of the landfilled waste, the mobility of the contaminants associated with the waste would be significantly reduced. Alternative 3 would comply with ARARs.

Alternative 4 essentially consists of Alternative 3 with upgradient groundwater controls. Groundwater controls would consist of either an upgradient extraction well system which would intercept the groundwater before it flows through the landfill and pump it around the landfill to prevent its contact with the site for disposal, or a soil/bentonite slurry wall which would direct the flow of the groundwater around the landfill to prevent its contact with the landfilled waste. Alternative 4 would comply with ARARs.

The alternatives are evaluated in detail in Section 4 of the FS Report.

The costs associated with Alternatives 1, 2, 3 and 4 are shown on Table 1.

C. Selection of the Preferred Alternative:

The selected alternative must result in a remedy which is both protective health and the environment and which recognizes the unique conditions associated with the landfill.

Only two of the four alternatives presented in the FS Report comply with ARARs and are protective of human health and the environment. They are Alternatives 3 and 4.

The present worth cost of Alternative 4 is $5,253,000 with a slurry wall and $4,052,000 with groundwater extraction. These groundwater control technologies may, in fact, be difficult to implement due to site-specific conditions such as the relatively low permeability of on-site soils and the absence of a continuous highly impermeable "key" layer underlying the site. Their effectiveness would also be limited by the relatively slow rate of groundwater flow through the landfill and the naturally occurring poor quality groundwater in the area.

VII. Citizen Participation

The New York State Department of Environmental Conservation is committed to a citizen participation program as part of its responsibilities for the inactive hazardous waste site remedial program. Citizen participation promotes public understanding of the Department's responsibilities, the Town's responsibilities, planning activities and remedial activities at inactive hazardous waste disposal sites. It provides an opportunity for the Department and the Town to learn from the public information that will assist in the development of a comprehensive remedial program which is protective of both public health and the environment.

A public informational meeting was held after the RI/FS work plan was approved by the Department but before the start of field work in spring of 1989. Public informational meetings were also held in 1990 after each of the first two rounds of residential well sampling.

A Proposed Remedial Action Plan (PRAP) was issued by the Department in December 1991 based on the final RI/FS Reports. A 30-day public comment period began on January 7, 1992 and ended on February 6, 1992. A notice of the public comment period and public meeting was published on January 6 and January 16 in the Syracuse Herald-Journal.

The public meeting was held on January 21, 1992 at the Town of Van Buren Town Hall. Approximately 10 people attended the meeting in addition to the members of the Town Board.

The Citizen Participation Plan, Legal Notice, Press Release, letter to citizens listed on the contact list, newspaper articles and attendance sheet from the January 21, 1992 public meeting are included as "Exhibit D." The Responsiveness Summary for the January 21, 1992 public meeting is included in this Record of Decision as "Exhibit E."

VIII. Summary of the Government's Decision

The proposed remedial action is Alternative 3 together with the institutional controls of Alternative 2.

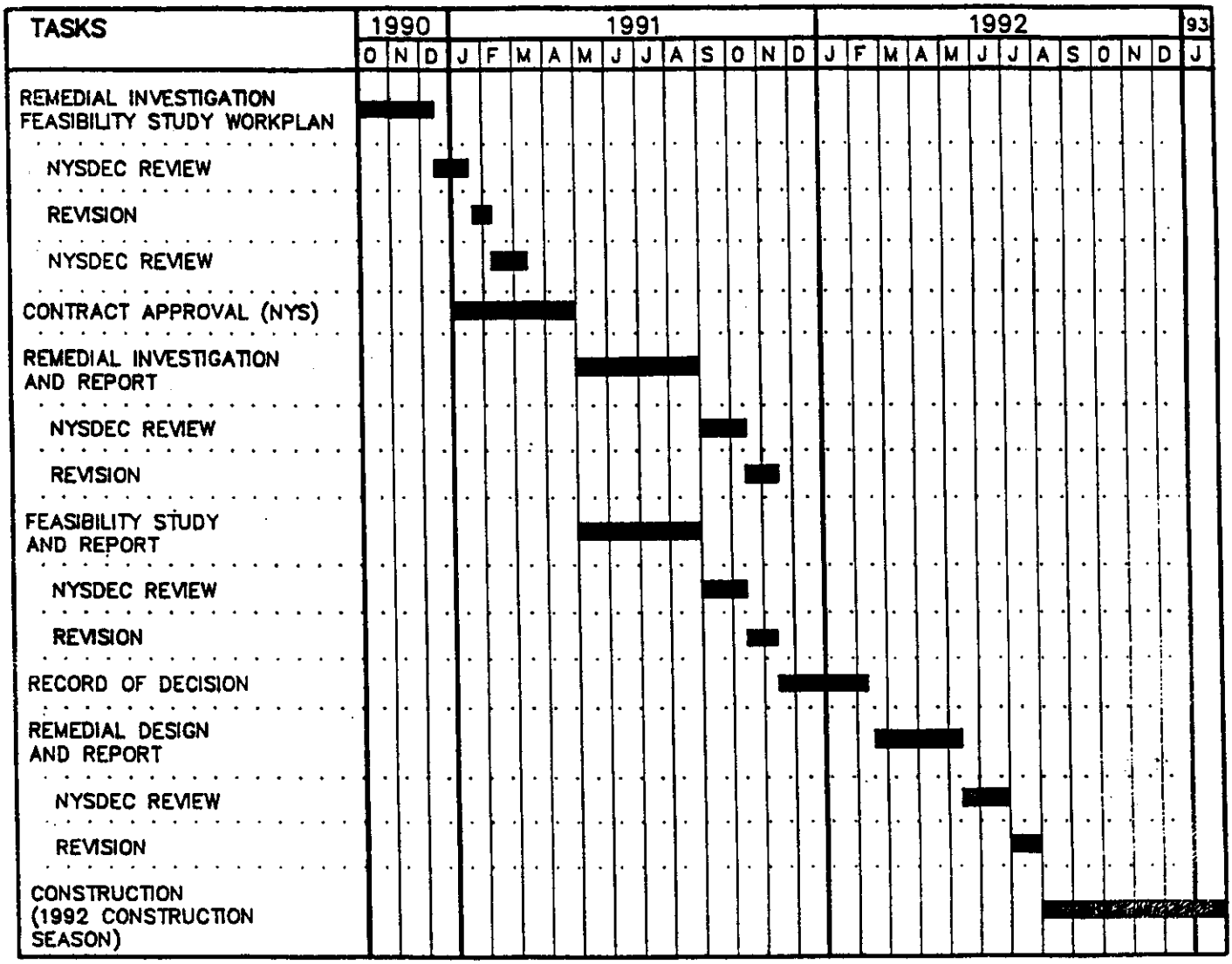
Alternative 3 consists of a 6 NYCRR Part 360 closure/cap, and redirecting the upgradient field drainage culvert around the landfill. The institutional controls include fencing and site deed restrictions, in addition to providing and maintaining individual water treatment systems on the three residential wells on Kingdom Road which have consistently shown elevated concentrations of iron.

Alternative 3 implemented together with Alternative 2 will prevent human exposure to waste or leachate, will protect the environment from further contamination, and will be effective and permanent in the long term. The actions are easily implemented with common construction practices and costs are appropriate based upon the costs associated with the closure of similar landfills. Other alternatives or combinations may meet the criteria set-forth, but the recommended alternative is thought to be the most effective and economical.

Since quarterly sampling is included in both estimates of Alternatives 2 and 3, evaluation of the recommended alternative requires a separate cost analysis. Alternative 3 has a present worth cost of $3,480,000. If Alternative 2, with individual purification units, is examined without quarterly sampling the 30 year present worth becomes $180,000. Therefore, the inclusive present worth cost of the recommended alternative is $3,660,000. A breakdown of the costs associated with the selected remedy are shown on Table 2.

Section IX

PROJECT SCHEDULE



CHA
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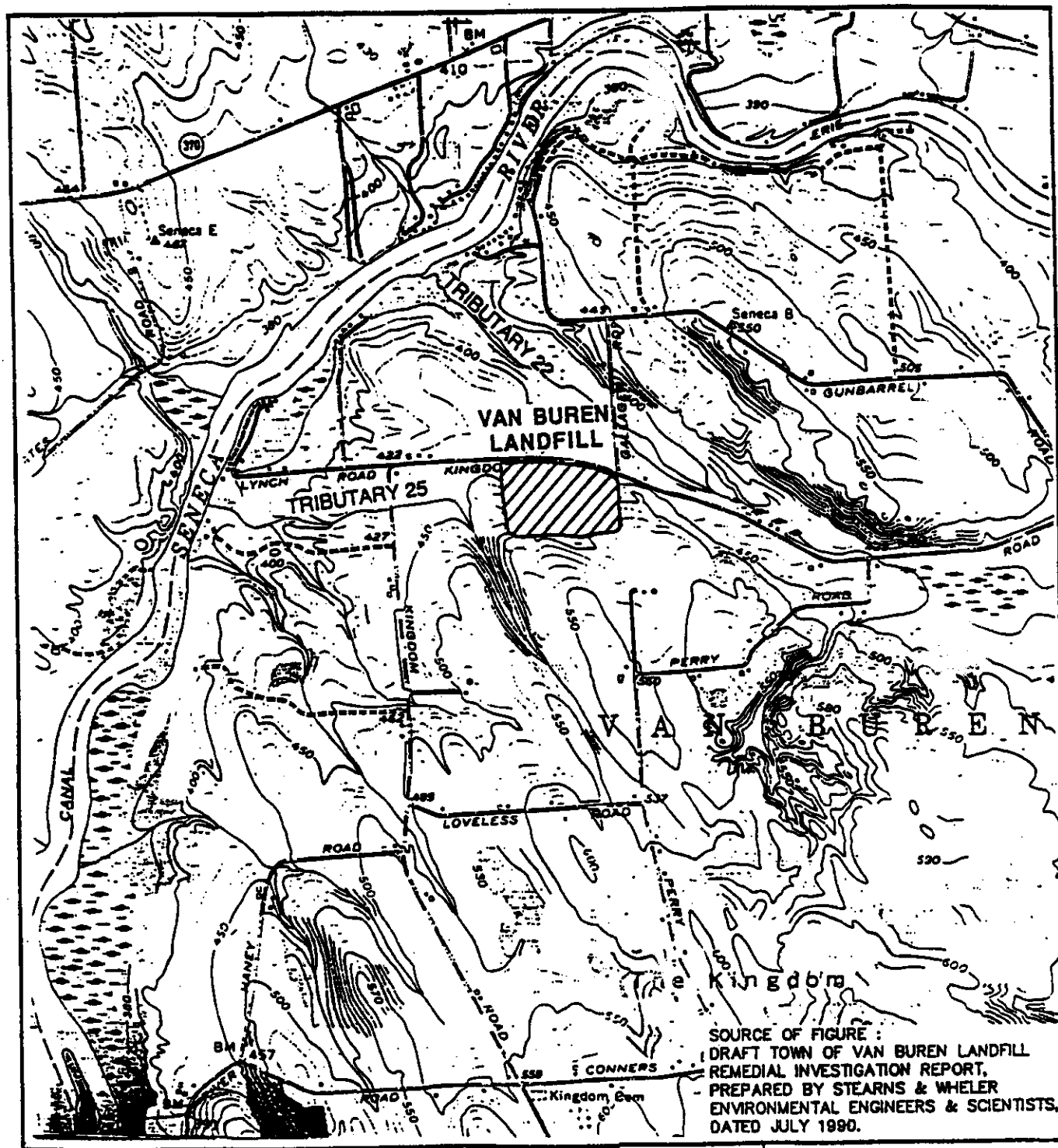
CLOUGH, HARBOUR & ASSOCIATES
ENGINEERS, SURVEYORS & PLANNERS
III WINNERS CIRCLE ALBANY, NEW YORK, 12205

TOWN OF VAN BUREN LANDFILL
REMEDIAL INVESTIGATION FEASIBILITY STUDY

PROJECT SCHEDULE

FIGURE NO. 6.1 | DATE: JUNE 1991

FIGURES



SOURCE OF FIGURE :
DRAFT TOWN OF VAN BUREN LANDFILL REMEDIAL INVESTIGATION REPORT, PREPARED BY STEARNS & WHELER ENVIRONMENTAL ENGINEERS & SCIENTISTS, DATED JULY 1990.

-N-

QUADRANGLE LOCATION

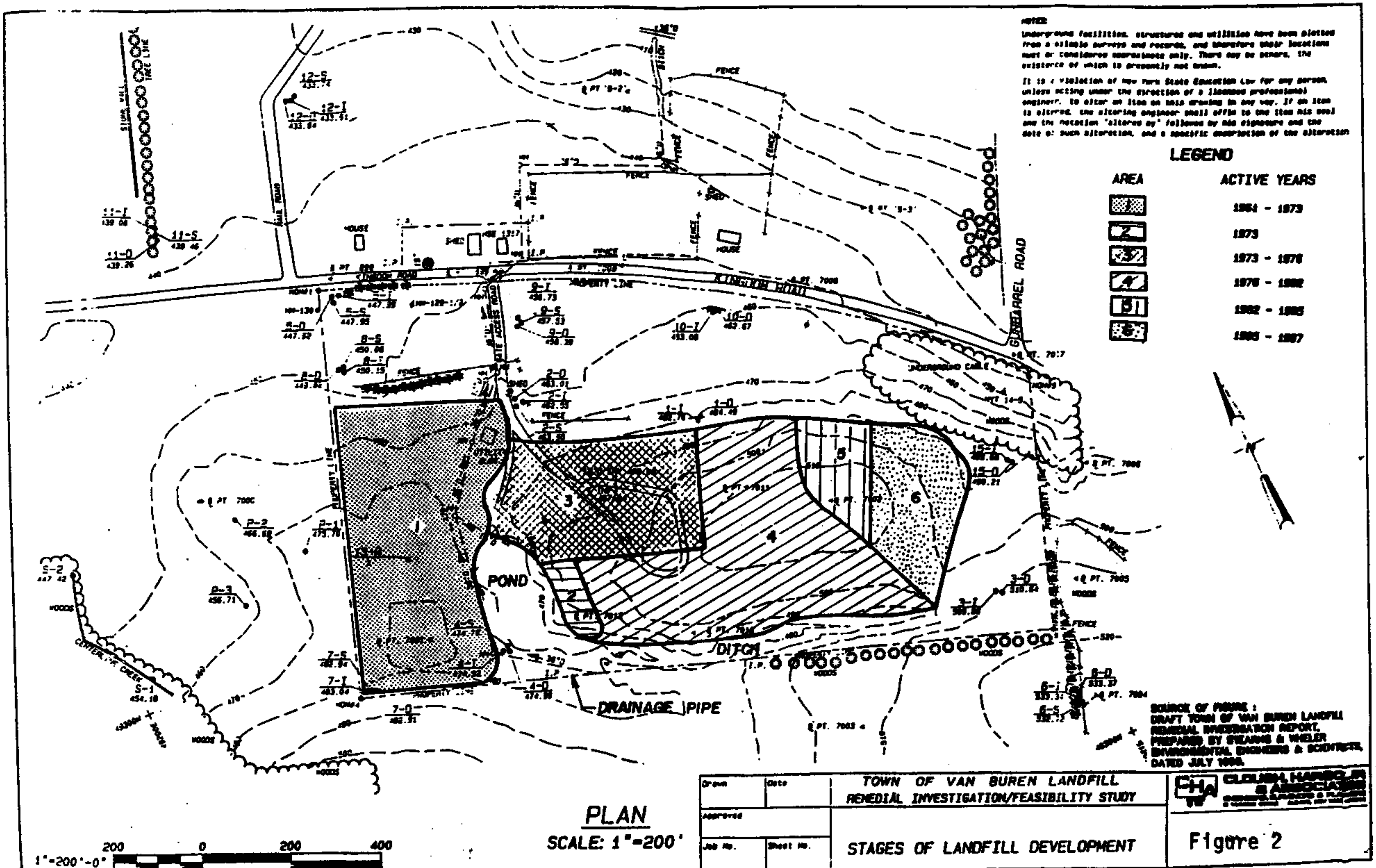
LYSANDER QUADRANGLE
USGS 7.5 SERIES, 1955

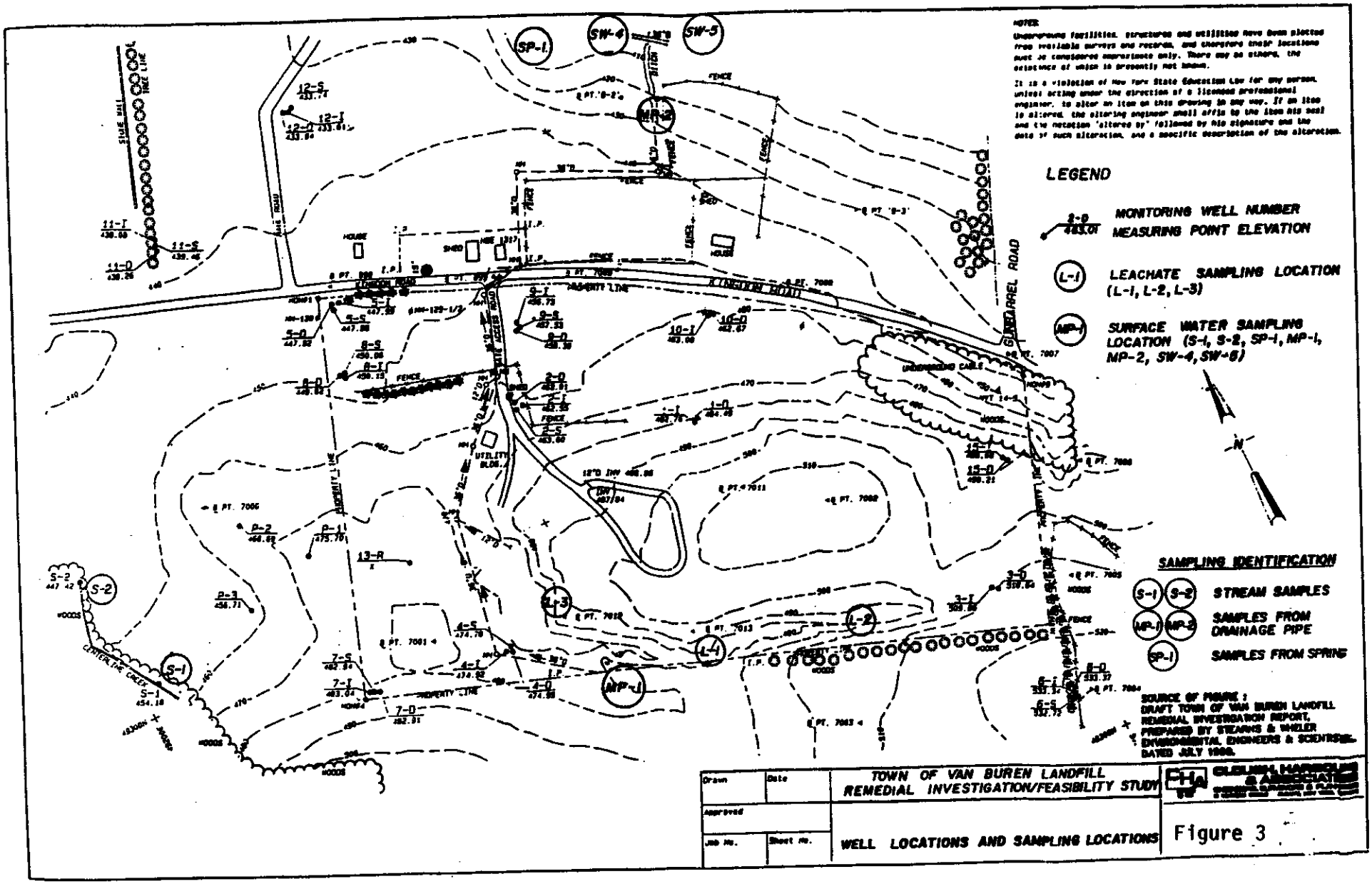
CLOUGH, HARBOUR & ASSOCIATES
ENGINEERS, SURVEYORS & PLANNERS

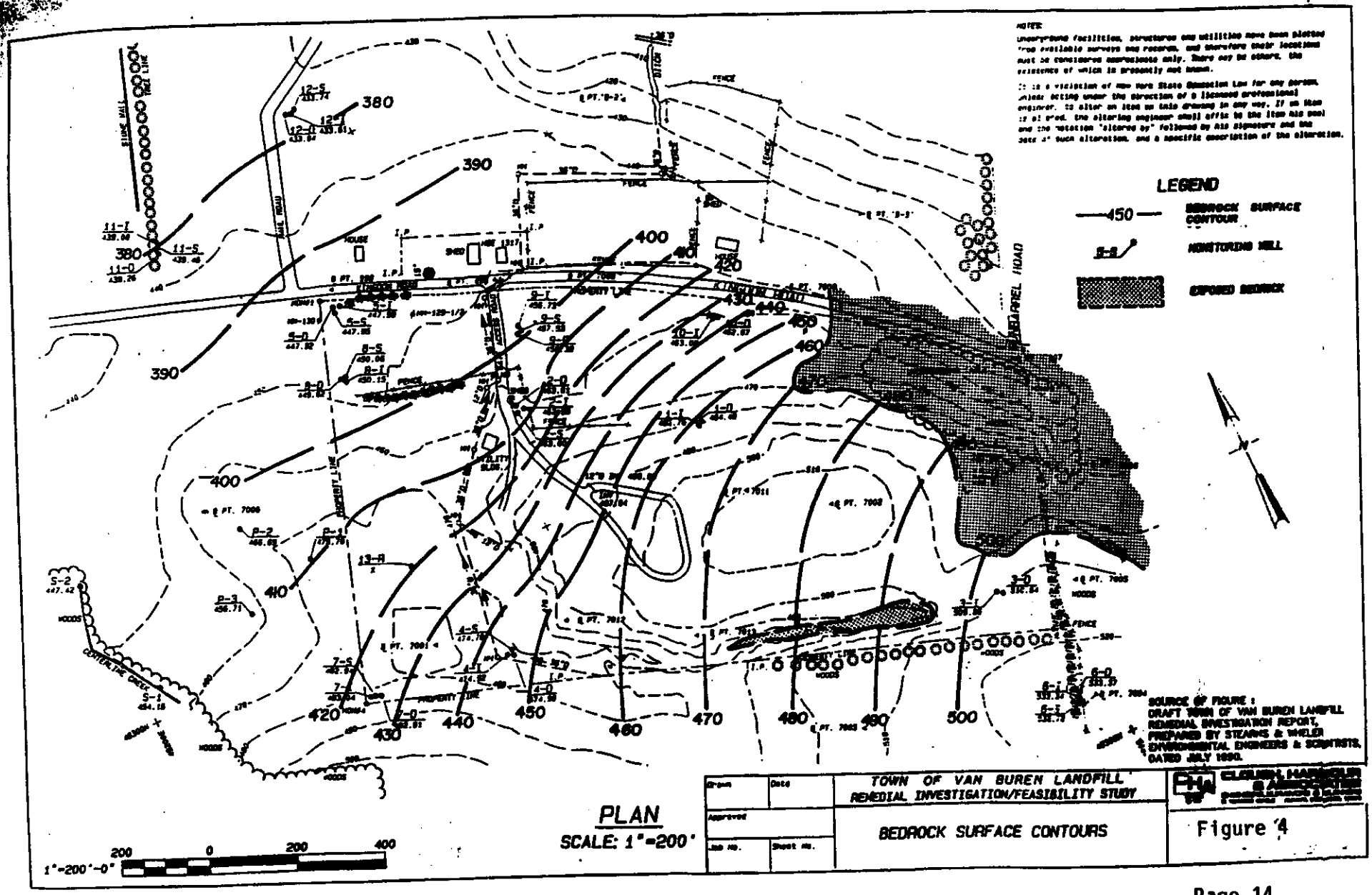
TOWN OF VAN BUREN LANDFILL R/FS

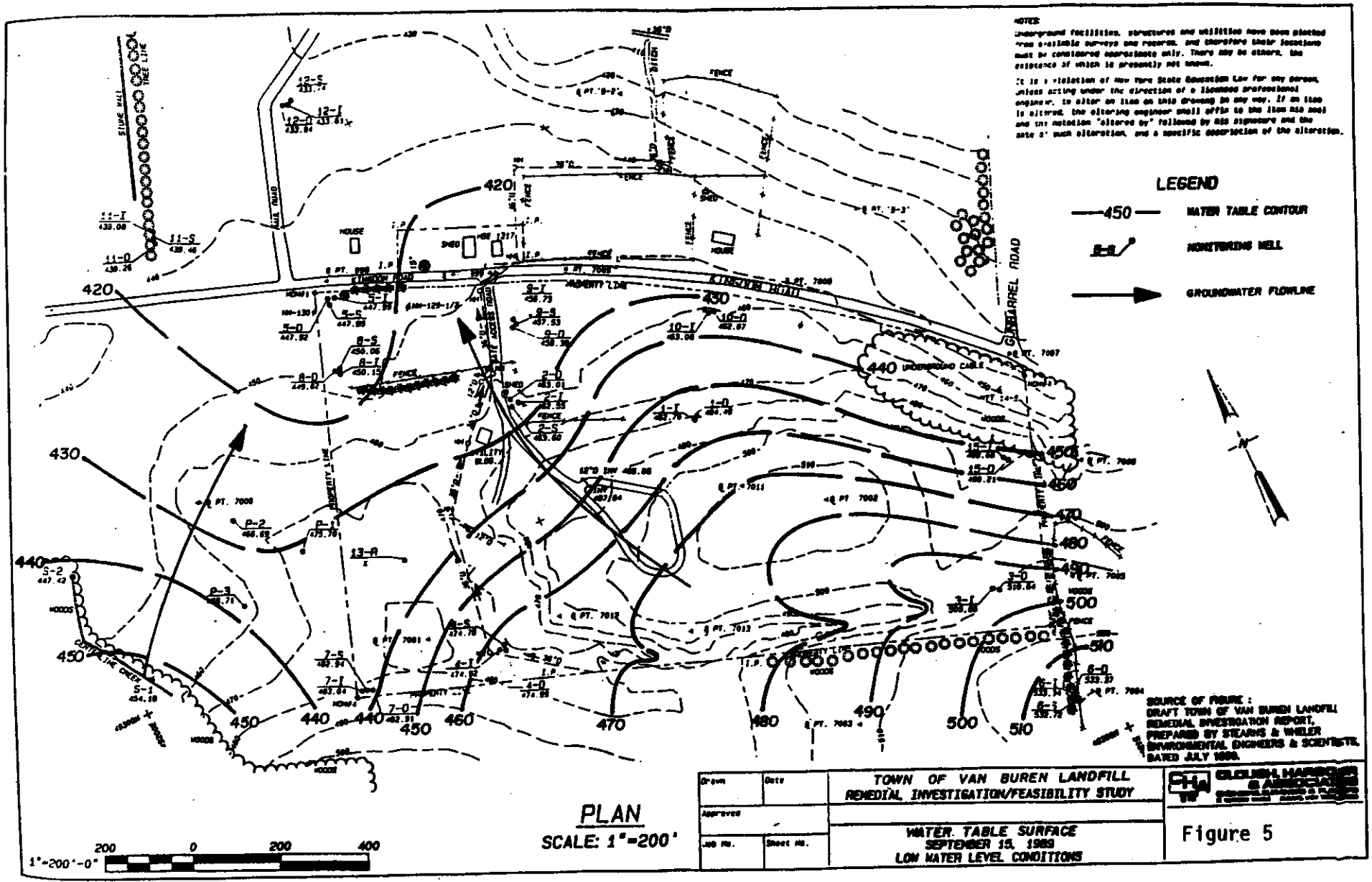
Figure 1

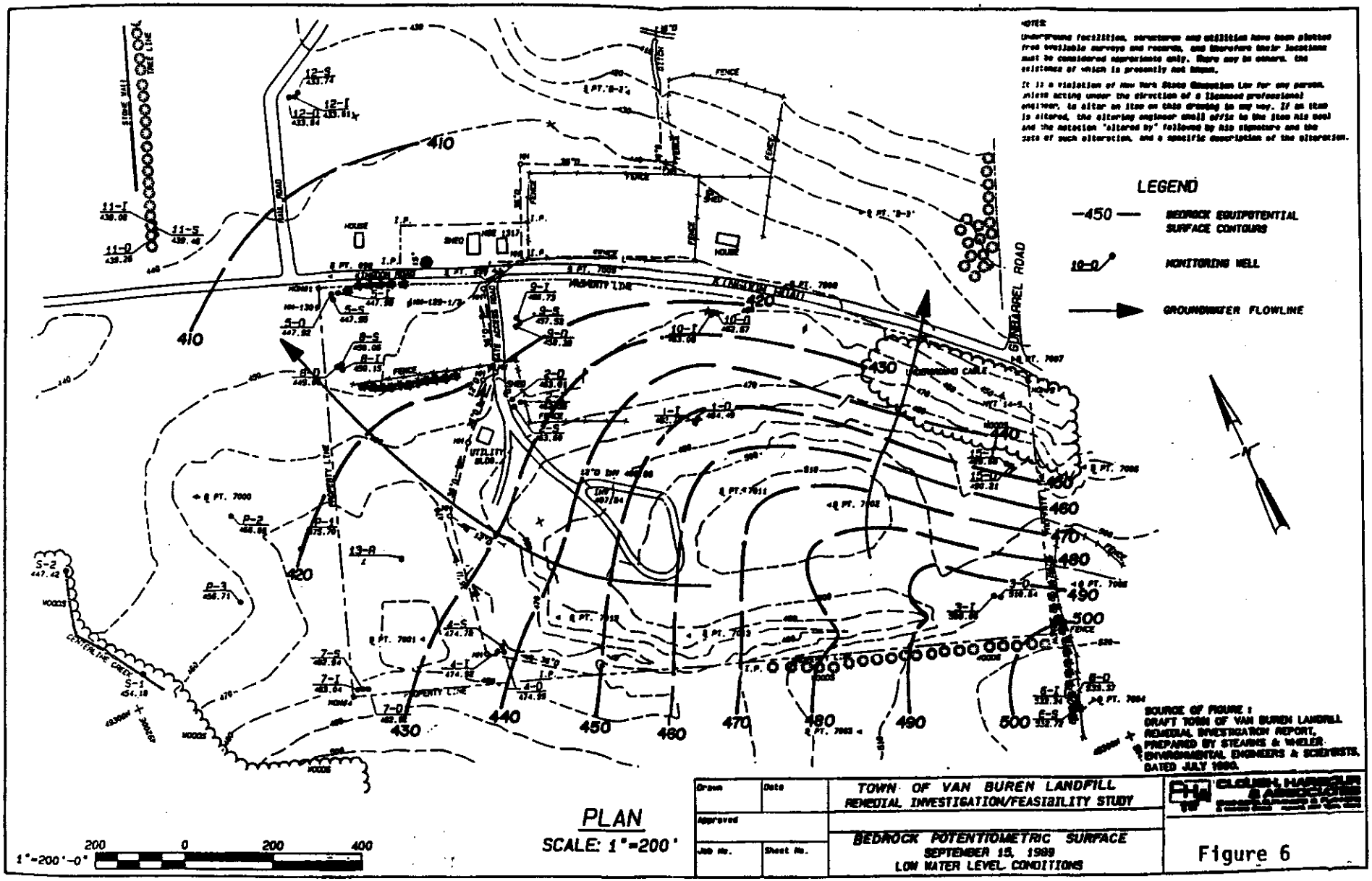
SITE LOCATION MAP


LEGEND
AREA
ACTIVE YEARS
1973
KINGDOM ROAD
GUNBARREL ROAD
POND
DITCH
DRAINAGE PIPE
SOURCE OF FIGURE :
DRAFT TOWN OF VAN BUREN LANDFILL
REMEDIAL INVESTIGATION REPORT,
PREPARED BY STEARNS & WHELER
ENVIRONMENTAL ENGINEERS & SCIENTISTS,
PLAN
SCALE: 1"=200'
200 0 200 400
1"=200'-0"
TOWN OF VAN BUREN LANDFILL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
STAGES OF LANDFILL DEVELOPMENT
Figure 2


NOTES:
Underground facilities, structures and utilities have been plotted from available surveys and records, and therefore their locations must be considered approximate only. There may be others, the existence of which is presently not known.
It is a violation of New York State Education Law for any person, unless acting under the direction of a licensed professional engineer, to alter an item on this drawing in any way. If an item is altered, the altering engineer shall affix to the item his seal and the notation 'altered by' followed by his signature and the date of such alteration, and a specific description of the alteration.
LEGEND
MONITORING WELL NUMBER
MEASURING POINT ELEVATION
LEACHATE SAMPLING LOCATION (L-1, L-2, L-3)
SURFACE WATER SAMPLING LOCATION (S-1, S-2, SP-1, MP-1, MP-2, SW-4, SW-5)
SAMPLING IDENTIFICATION
STREAM SAMPLES
SAMPLES FROM DRAINAGE PIPE
SAMPLES FROM SPRING
SOURCE OF FIGURE:
DRAFT TOWN OF VAN BUREN LANDFILL REMEDIAL INVESTIGATION REPORT, PREPARED BY STEARNS & WHELER ENVIRONMENTAL ENGINEERS & SCIENTISTS, DATED JULY 1988.
TOWN OF VAN BUREN LANDFILL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
WELL LOCATIONS AND SAMPLING LOCATIONS
Figure 3


LEGEND
450
BEDROCK SURFACE CONTOUR
MONITORING WELL
EXPOSED BEDROCK
N
SOURCE OF FIGURE :
DRAFT TOWN OF VAN BUREN LANDFILL REMEDIAL INVESTIGATION REPORT, PREPARED BY STEARNS & WHELER ENVIRONMENTAL ENGINEERS & SCIENTISTS, DATED JULY 1990.
PLAN
SCALE: 1"=200'
1"=200'-0"
200 0 200 400
TOWN OF VAN BUREN LANDFILL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
BEDROCK SURFACE CONTOURS
Figure 4


NOTES:
Underground facilities, structures and utilities have been plotted from available surveys and records, and therefore their locations must be considered approximate only. There may be others, the existence of which is presently not known.
It is a violation of New York State Education Law for any person, unless acting under the direction of a licensed professional engineer, to alter an item on this drawing in any way. If an item is altered, the altering engineer shall affix to the item his seal and the notation "altered by" followed by his signature and the date of such alteration, and a specific description of the alteration.
LEGEND
450 WATER TABLE CONTOUR
S-8 MONITORING WELL
GROUNDWATER FLOWLINE
KINSMAN ROAD
GLENDARREL ROAD
PLAN
SCALE: 1"=200'
1"=200'-0"
200 0 200 400
SOURCE OF FIGURE :
DRAFT TOWN OF VAN BUREN LANDFILL
REMEDIAL INVESTIGATION REPORT,
PREPARED BY STEARNS & WHELER
ENVIRONMENTAL ENGINEERS & SCIENTISTS,
DATED JULY 1988.
Drawn
Date
Approved
Job No.
Sheet No.
TOWN OF VAN BUREN LANDFILL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
WATER TABLE SURFACE
SEPTEMBER 15, 1989
LOW WATER LEVEL CONDITIONS
CLOUGH, HARBOUR & ASSOCIATES
Figure 5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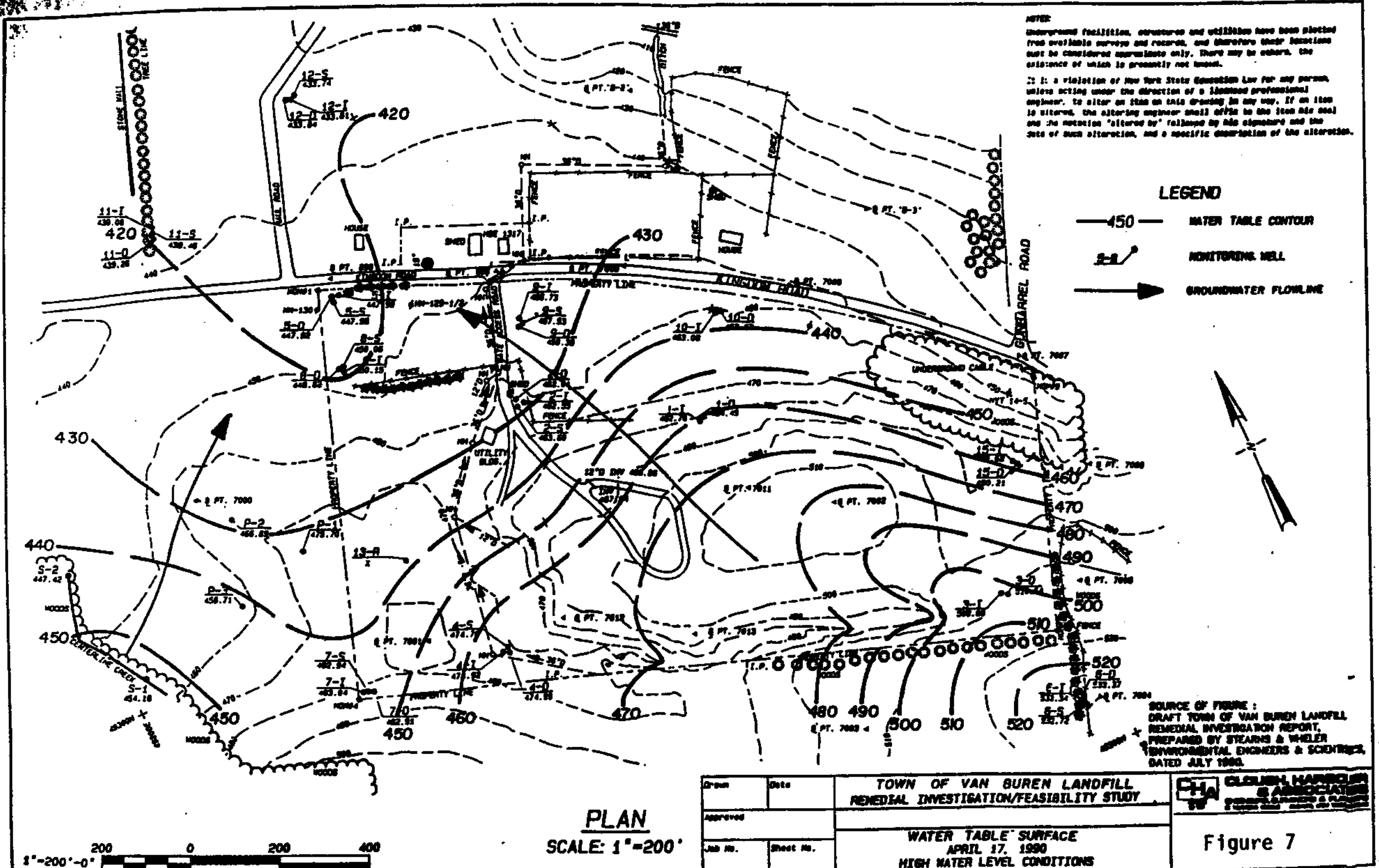
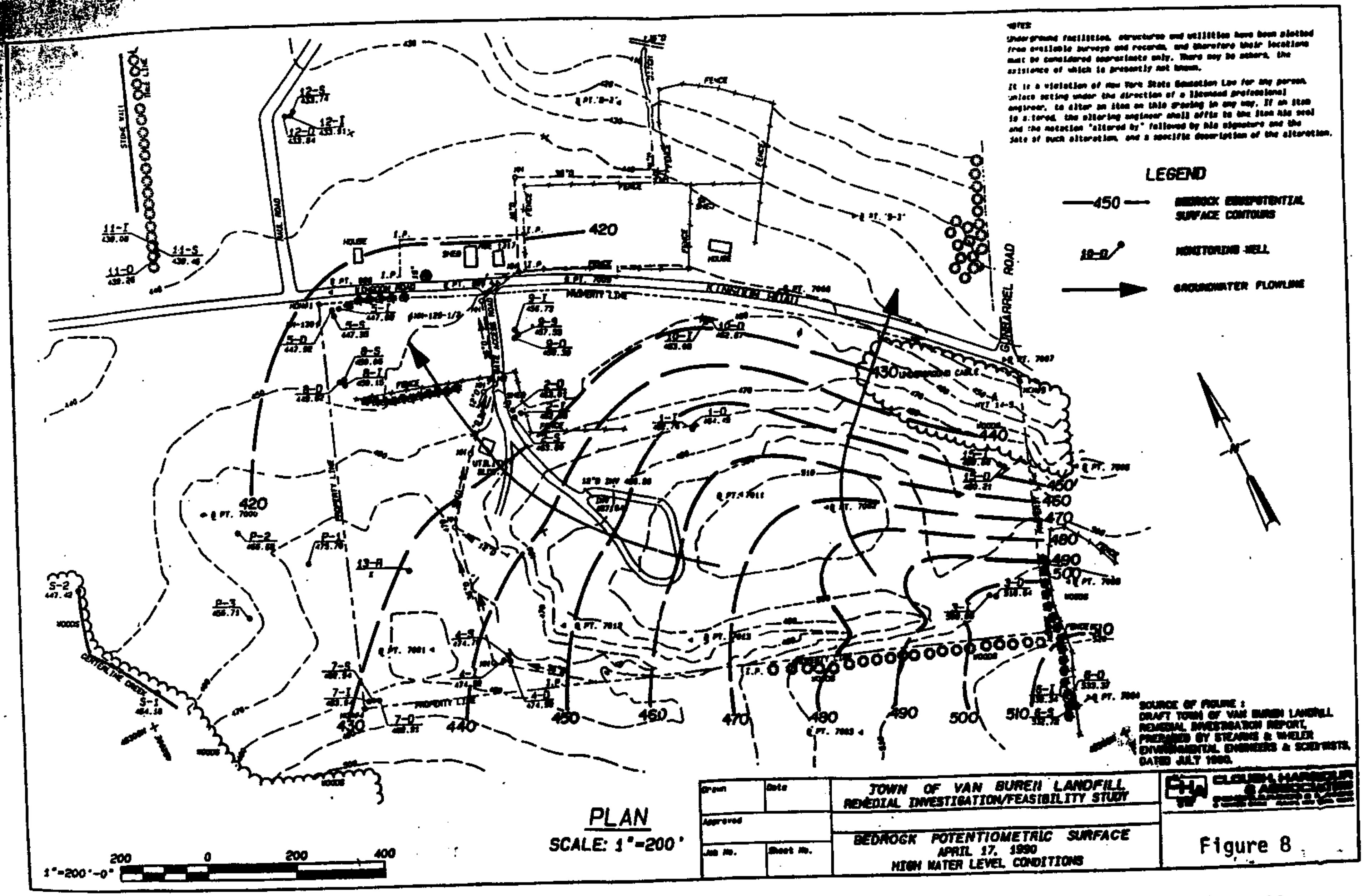
LEGEND
450 BEDROCK EQUIPOTENTIAL SURFACE CONTOURS
10-0 MONITORING WELL
GROUNDWATER FLOWLINE
SOURCE OF FIGURE 1
DRAFT TOWN OF VAN BUREN LANDFILL REMEDIAL INVESTIGATION REPORT, PREPARED BY STEARNS & WHELER ENVIRONMENTAL ENGINEERS & SCIENTISTS, DATED JULY 1990.
PLAN
SCALE: 1"=200'
1"=200'-0"
200 0 200 400
Drawn
Date
Approved
Job No.
Sheet No.
TOWN OF VAN BUREN LANDFILL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
BEDROCK POTENTIOMETRIC SURFACE
SEPTEMBER 15, 1989
LOW WATER LEVEL CONDITIONS
CLOUGH, HARBOUR & ASSOCIATES
Figure 6


LEGEND
—450— WATER TABLE CONTOUR
MONITORING WELL
GROUNDWATER FLOWLINE
KINGDON ROAD
GRAVEL ROAD
MAIL ROAD
STONE WALL
TREE LINE
PROPERTY LINE
UNDERGROUND CABLE
FENCE
HOUSE
SHED
UTILITY BLDG.
CENTERLINE CREEK
WOODS
DITCH
12-S
12-I
12-D
11-I
11-S
11-D
8-D
8-S
8-I
9-I
9-S
9-D
10-I
10-D
1-I
1-D
13-S
13-D
13-R
P-1
P-2
P-3
S-1
S-2
7-S
7-I
7-D
4-S
4-I
4-D
3-D
3-I
6-I
6-S
6-D
420
430
440
450
460
470
480
490
500
510
520
PLAN
SCALE: 1"=200'
1"=200'-0"
200
0
200
400
SOURCE OF FIGURE:
DRAFT TOWN OF VAN BUREN LANDFILL
REMEDIAL INVESTIGATION REPORT,
PREPARED BY STEARNS & WHELER
ENVIRONMENTAL ENGINEERS & SCIENTISTS,
DATED JULY 1990.
Drawn
Date
Approved
Job No.
Sheet No.
TOWN OF VAN BUREN LANDFILL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
WATER TABLE SURFACE
APRIL 17, 1990
HIGH WATER LEVEL CONDITIONS
Figure 7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LEGEND
450 BEDROCK EQUIPOTENTIAL SURFACE CONTOURS
MONITORING WELL
GROUNDWATER FLOWLINE
KINGDON ROAD
GUNBARREL ROAD
PROPERTY LINE
CENTERLINE CREEK
STONE WALL
FENCE
HOUSE
SHED
WOODS
420
430
440
450
460
470
480
490
500
510
SOURCE OF FIGURE:
DRAFT TOWN OF VAN BUREN LANDFILL REMEDIAL INVESTIGATION REPORT, PREPARED BY STEARNS & WHELER ENVIRONMENTAL ENGINEERS & SCIENTISTS, DATED JULY 1990.
PLAN
SCALE: 1"=200'
1"=200'-0"
200
0
200
400
TOWN OF VAN BUREN LANDFILL
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
BEDROCK POTENTIOMETRIC SURFACE
APRIL 17, 1990
HIGH WATER LEVEL CONDITIONS
Drawn
Date
Approved
Job No.
Sheet No.
Figure 8

TABLES

Table 1
Cost of Remedial Alternatives

	Capital Cost	First Year Annual O&M Cost	Present Worth Cost
Alternative 1 No Action	$0	$32,000	$492,000
Alternative 2 Institutional Controls	W/purification: $ 85,000 W/extension: $1,675,000	W/purification: $38,000 W/extension: $35,000	W/purification: $670,000 W/extraction: $2,215,000
Alternative 3 Closure Per 6 NYCRR Part 360	$2,850,000	$41,000	$3,480,000
Alternative 4 Closure Per 6 NYCRR Part 360 Plus Upgradient Groundwater Controls	W/slurry wall: $4,600,000 W/extraction: $3,200,000	W/slurry wall: $42,500 W/extraction: $47,500	W/slurry wall: $5,253,000 W/extraction: $4,052,000

Total Present Worth Cost of the proposed remedy, Alternative 3 and Alternative 2 with purification systems $3,660,000.

TABLE 2

TOWN OF VAN BUREN MUNICIPAL LANDFILL
RI/FS

ESTIMATED COST OF RECOMMENDED ALTERNATIVE

RECOMMENDED ALTERNATIVE – [ALTERNATIVE 3 & ALTERNATIVE 2 WITH THREE (3) PURIFICATION SYSTEMS]

		ANNUAL O&M	PRESENT WORTH INCLUDING 30 YEARS O&M
CLOSURE PER 6 NYCRR PART 360	**$2,850,000**	**$9,000**	**$2,988,000**
QUARTERLY SAMPLING	**$ 0**	**$32,000**	**$492,000**
INSTITUTIONAL CONTROLS (FENCING & DEED RESTRICTIONS & WATER PURIFICATION UNITS)	**$85,000**	**$6,000**	**$178,000**

RECOMMENDED ALTERNATIVE TOTAL PRESENT WORTH COST - $3,658,000

CHA

EXHIBITS

EXHIBIT A
ADMINISTRATIVE RECORD

- Correspondence from David A. Haas, Supervisor, Town of Van Buren, to Norman H. Nosenchuck, Director, Division of Solid and Hazardous Waste, December 10, 1985.

- Correspondence from Norman H. Nosenchuck to David A. Haas, February 14, 1986.

- Phase II Investigation Town of Van Buren Landfill prepared by Stearns and Wheler, January 1987.

- *Order on Consent* Index No. AG-01114-87-07 executed September 16, 1988.

- Correspondence from Richard Fedigan, New York State Department of Health to Brian H. Davidson, December 19, 1988.

- EQBA Grant Application from the Town of Van Buren, January 26, 1989.

- "Remedial Investigation/Feasibility Study Work Plan for the Town of Van Buren Landfill" January 1989 prepared by Stearns and Wheler Engineers and Scientists.

- Correspondence from Michael J. O'Toole, Director, Division of Hazardous Waste Remediation to David A. Haas, Supervisor, Town of Van Buren, February 21, 1989.

- Correspondence from David W. Stoner to Brian H. Davidson, Remedial Investigation/Feasibility Study Work Plan Addendum, February 22, 1989.

- Correspondence from Brian H. Davidson to David W. Stoner, March 1, 1989.

- Correspondence from Paul Van Cott, NYSDEC, to Charles Farrell, May 15, 1989.

- Correspondence from Henriette Hamel to Brian H. Davidson, August 13, 1991. RE: Draft RI

- Town of Van Buren State Assistance Contract - Approved by the State Comptroller, August 22, 1989.

- Correspondence from Louis A. Inglis, Department of Agriculture and Markets to Charles N. Goddard, Division of Hazardous Waste Remediation, September 12, 1989.

- Correspondence from Robert J. Cozzy to David A. Haas, September 19, 1989. RE: Executed Contract

- Correspondence from Brian H. Davidson to Louis A. Inglis, October 10, 1989.
- Correspondence from Thomas R. Byrnes to Brian H. Davidson, December 14, 1989. RE: Second Round RI Sampling
- Town of Van Buren RI/FS Project Management Plan, December 1989.
- Correspondence from Brian H. Davidson to Thomas R. Byrnes, August 29, 1990. RE: Draft RI Report
- Correspondence from Thomas R. Byrnes to Brian H. Davidson, September 18, 1990. RE: Draft RI Report
- Syracuse Post Standard Newspaper Article, October 11, 1990.
- Correspondence from Joseph F. Davoli to Commissioner Thomas C. Jorling, October 12, 1990.
- Correspondence from Brian H. Davidson to Edward R. Hallenbeck, October 12, 1990. RE: Termination of Stearns and Wheler
- Correspondence from Joseph F. Davoli to Brian H. Davidson, October 24, 1990.
- Correspondence from Brian H. Davidson to Edward R. Hallenbeck, November 7, 1990. RE: Procurement
- Correspondence from Meta R. Murray to Joseph F. Davoli, November 8, 1990.
- Correspondence from Frank LaVardera to Brian H. Davidson, November 16, 1990.
- Correspondence from Edward R. Hallenbeck to Brian H. Davidson, November 19, 1990.
- Correspondence from Frank LaVardera to Brian H. Davidson, December 14, 1990.

- Correspondence from Raymond Fetcho to Frank LaVardera, January 4, 1991.

- Correspondence from Brian H. Davidson to Edward R. Hallenbeck, Feburary 4, 1991.

- Correspondence from Thomas G. Marzullo to Brian H. Davidson, February 14, 1991. RE: EQBA Funding

- Correspondence from Robert J. Cozzy to Thomas G. Marzullo, February 22, 1991.

- "Work Plans Remedial Investigation Phase II Feasibility Study," February 1991 prepared by Clough, Harbour and Associates.

- Correspondence from Raymond Fetcho to Frank LaVardera, March 12, 1991.

- Correspondence from Brian H. Davidson to Henriette Hamel, April 1, 1991.

- Correspondence from Thomas G. Marzullo to Brian H. Davidson, April 16, 1991. RE: Breakdown of Work Completed

- Correspondence from Robert J. Cozzy to Douglas Boettner, April 19, 1991.

- Correspondence from Frank LaVardera to Raymond Fetcho, Addendum to RI/FS Supplemental Work Plans.

- Correspondence from Raymond Fetcho to Frank LaVardera, April 25, 1991. RE: Work Plan Modifications for Phase II

- Correspondece from John Dawson, OSC, to Robert J. Cozzy, May 1, 1991.

- Correspondence from Brian H. Davidson to Edward R. Hallenbeck, May 7, 1991. RE: EQBA Funding

- Correspondence from Henriette Hamel to Brian H. Davidson, June 21, 1991. RE: Supplemental Home Well Sampling

- Correspondence from Michael J. O'Toole to Edward R. Hallenbeck, August 16, 1991. RE: Contract Amendment No. 1 Transmittal

- Town of Van Buren Landfill "Final Remedial Investigation Report," August 1991 prepared by Clough Harbour and Associates.

- Correspondence from Henriette Hamel to Brian H. Davidson, September 16, 1991. RE: Final RI/Draft/FS

- Correspondence from Robert L. Burdick, OCDH, to Brian H. Davidson. RE: Final RI/Draft/FS Reports

- Correspondence from Brian H. Davidson to Frank LaVardera, October 8, 1991. RE: Final RI/Draft/FS

- Correspondence from Robert J. Cozzy to Edward R. Hallenbeck, November 4, 1991. RE: Contract Amendment No. 1

- Correspondence from Frank LaVardera to Brian H. Davidson, November 12, 1991. RE: Final RI/FS Transmittal

- Correspondence from Brian H. Davidson to Frank LaVardera, December 4, 1991. RE: RI/FS Reports

- Proposed Remedial Action Plan (PRAP), December 1991.

- Correspondence from G. Anders Carlson to Michael J. O'Toole, January 8, 1992. RE: Concurrence on PRAP

- Transcript from the Proposed Remedial Action Plan Public Meeting, January 21, 1992, prepared by John F. Drury, CSR, PRP.

Exhibit B
Project Chronology
Town of Van Buren Landfill
Onondaga County, New York
ID Number 734031

1950's	Dumping began at the site.
2/73	Daily operation of the landfill was turned over to a contractor in order to comply with State regulations.
9/73	Onondaga County Solid Waste Disposal Authority (OCSWDA) took over landfill operations.
1977	Operation of the landfill was turned back to the Town.
1978	NYSDEC permit issued to operate a sanitary landfill.
8/79	Stearns and Wheler was contracted by the Town to initiate a hydrogeologic investigation.
12/81	Onondaga County Health Department began sampling nearby homeowners' wells.
1982	Five shallow monitoring wells installed.
1984	Syroco disclosed that between 1963 and 1978 waste paint and paint booth filters were disposed at the site, which prompted the listing of the site as - Class "2a."
1/87	Phase II Investigation Report issued. The site was subsequently listed as a Class "2" waste site, or a site which poses a significant threat to public health or the environment.
9/16/88	Order on Consent signed by the Commissioner of the NYSDEC. The Order put into effect a timetable for completion of an RI/FS, a remedial design and construction, and allowed the Town to apply for EQBA Title 3 funding.
1/26/89	The Town of Van Buren applied for EQBA Title 3 Funding.
3/1/89	Technical Work Plan for the RI/FS approved by the State.
5/89	Remedial Investigation field work began.
7/1/89	Landfill gates closed.
8/22/89	Town of Van Buren State Assistance Contract approved by the State Comptroller.

7/90	Draft Remedial Investigation Report submitted to the State for review.
10/90	Town of Van Buren terminated it's Engineering Contract with Stearns and Wheler.
4/91	The State approves a technical work plan, submitted by Clough, Harbour and Associates, for completion of the RI/FS.
5/91	The State Comptroller approves funding of Clough, Harbour's costs associated with performing the remedial program.
9/91	Final RI/Draft/FS Reports submitted to the State.
11/91	Final RI/FS Report submitted to the State.
12/91	Proposed Remedial Action Plan (PRAP) issued by NYSDEC.
1/92	Public Meeting on PRAP.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION
INACTIVE HAZARDOUS WASTE DISPOSAL REPORT

EXHIBIT C

CLASSIFICATION CODE: 2 REGION: 7 SITE CODE: 734031
EPA ID:

NAME OF SITE : Van Buren Town Landfill
STREET ADDRESS: Kingdom Road

TOWN/CITY:	COUNTY:	ZIP:
Van Buren	Onondaga	13027

SITE TYPE: Open Dump- Structure- Lagoon- Landfill-X Treatment Pond-
ESTIMATED SIZE: 20+ Acres

SITE OWNER/OPERATOR INFORMATION:
CURRENT OWNER NAME....: Town of Van Buren c/o Mr. D. Haas
CURRENT OWNER ADDRESS.: P.O. Box 10, Baldwinsville, NY
OWNER(S) DURING USE...: Town of Van Buren
OPERATOR DURING USE...: Town of Van Buren c/o Mr. D. Haas
OPERATOR ADDRESS.....: P.O. Box 10, Baldwinsville, NY
PERIOD ASSOCIATED WITH HAZARDOUS WASTE: From unknown To

SITE DESCRIPTION:
A municipal landfill that was identified thru the Community Right-to-Know report. An inspection report indicates that a county inspector witnessed the dumping of drums from Syroco Inc. in this landfill. The Phase II Investigation done at this site shows that there is groundwater contamination attributable to the landfill. The highest concentrations of most solvents were in the downgradient wells. Analytical data from the Department of Health points out that several downgradient domestic wells may be impacted by a plume of contamination emanating from the landfill. Approximately 5400 gallons of waste paint from Syroco, Inc. were disposed of at this landfill over a period of 15 years of dumping. The landfill was closed on July 1, 1989. An RI/FS is currently underway. The Draft RI report is anticipated in April 1990.

HAZARDOUS WASTE DISPOSED: TYPE	Confirmed-X	Suspected- QUANTITY (units)
Paint thinner, paint spray, booth filter, waste paint		5400 gal. (waste paint)

SITE CODE: 734031

ANALYTICAL DATA AVAILABLE:
Air- Surface Water- Groundwater- Soil- Sediment-

CONTRAVENTION OF STANDARDS:
Groundwater-X Drinking Water- Surface Water- Air-

LEGAL ACTION:

TYPE..: Consent Order State- X Federal-
STATUS: Negotiation in Progress- Order Signed- X

REMEDIAL ACTION:

Proposed- Under design- In Progress- Completed-
NATURE OF ACTION:

GEOTECHNICAL INFORMATION:
SOIL TYPE:
GROUNDWATER DEPTH:

ASSESSMENT OF ENVIRONMENTAL PROBLEMS:

Documented groundwater contamination. Residential wells in the area could be affected due to the local hydrogeology.

ASSESSMENT OF HEALTH PROBLEMS:

Elevated levels of selenium, arsenic and strontium in private wells appear to be naturally occurring. Repeated sampling of private wells by DOH has not indicated contamination attributable to the landfill.

EXHIBIT D

Citizen Participation Plan
Town of Van Buren Landfill
(ID No. 734031)

I. Introduction to Plan

II. Basic Site Information and Project Description

III. Identification of Affected and/or Interested Public (Contact List)

IV. Identification of Department Contacts

V. Identification of Document Repositories

VI. Description of Specific Citizen Participation Activities

VII. Glossary of Key Terms and Major Program Elements

Section I - Introduction to Plan

The New York State Department of Environmental Conservation is committed to a citizen participation program as part of its responsibilities for the inactive hazardous waste site remedial program. Citizen participation promotes public understanding of the Department's responsibilities, the Town's responsibilities, planning activities, and remedial activities at inactive hazardous waste disposal sites. It provides an opportunity for the Department and the Town to learn from the public information that will assist in the development of a comprehensive remedial program which is protective of both public health and the environment.

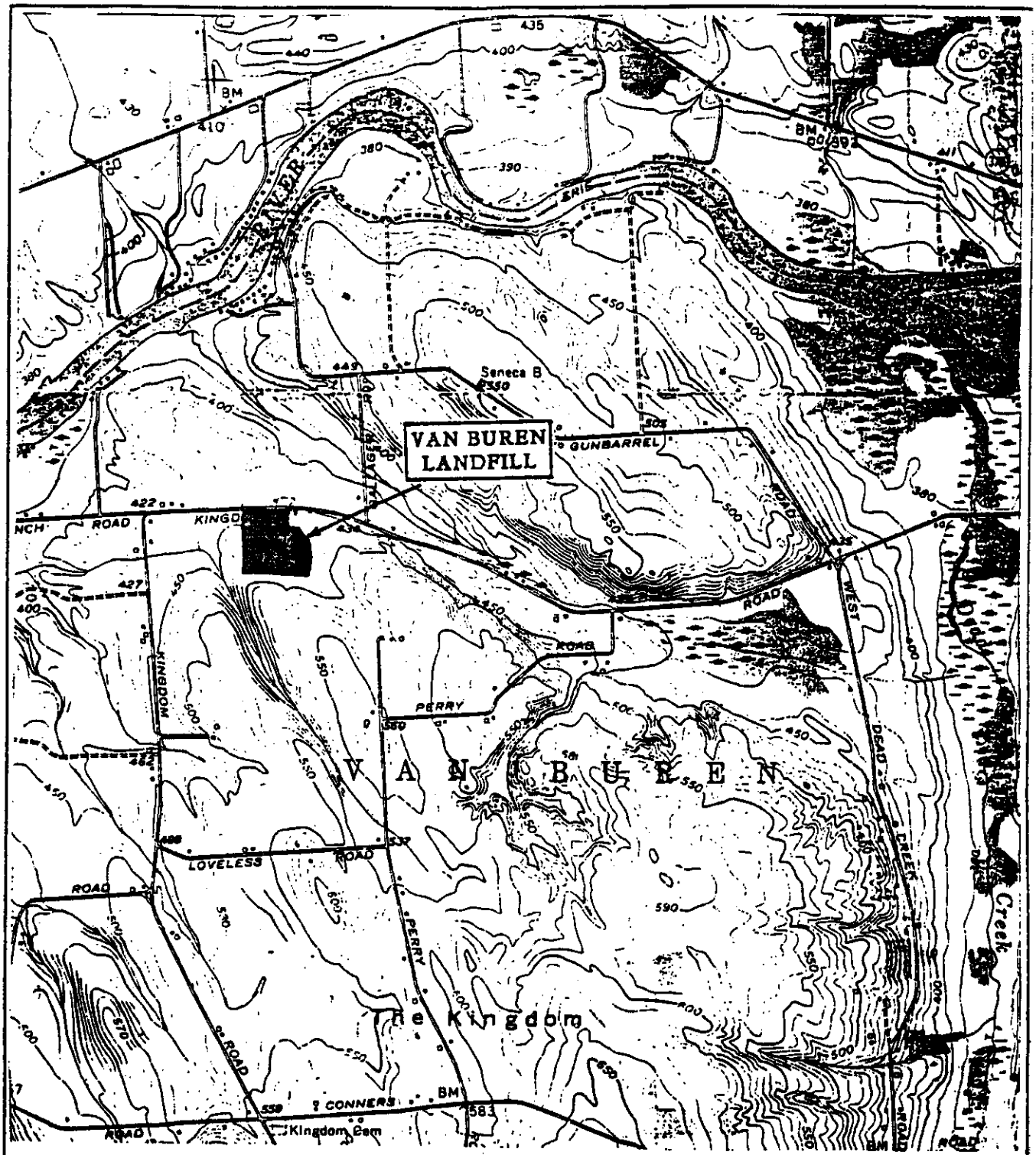
Mr. Edward Hallenbeck, Supervisor of the Town of Van Buren, will serve as Community Relations officer for the project.

Section II - Basic Site Information and Project Description

The Town of Van Buren landfill, located on Kingdom Road in the Town of Van Buren, Onondaga County, New York (Figure 1), is designated a Class 2 Inactive Hazardous Waste Site. The landfill has been owned and operated by the Town of Van Buren throughout its history except for the period from 1974 to 1976, when operations were turned over to the Onondaga County Solid Waste Authority.

Dumping at the landfill was largely unregulated until 1978. Prior to 1978, leaded waste paint and waste paint booth filters were dumped at the landfill by Syroco, Inc. Samples of paint and paint booth filters were taken at the Syroco Plant and analyzed. The analytical results showed the samples contained toxic levels of cromium. In 1978, the Town received a permit to operate a sanitary landfill and industrial wastes were no longer accepted at the landfill.

A Phase II Investigation, performed in 1987, indicated the presence of low levels of certain organic compounds that exceeded groundwater standards in some monitoring wells at the landfill. In September 1988, the Town entered into a Consent Order with the New York State Department of Environmental Conservation (NYSDEC). The Consent Order calls for the performance of a remedial investigation and feasibility study for the remediation of the landfill. Field work for the remedial investigation began in May 1989. The Remedial Investigation Report was approved by the NYSDEC with the concurrence of the New York State Department of Health (NYSDOH) in November 1991. The Final Feasibility Study Report was approved in December 1991.



LYSANDER QUADRANGLE
USGS 7.5 SERIES, 1955

JOB NO. 1336

FIGURE 1

PROJECT LOCATION

Stearns & Wheler
ENGINEERS AND SCIENTISTS
CAZENOVIA, NEW YORK DARIEN CONNECTICUT

Section III - Identification of Affected and/or Interested Public

(Contact List - the Contact List will be expanded as affected or interested public are identified)

Mrs. Charlene Gayetty
1780 Church Road
Baldwinsville, New York 13027

Mr. James F. Nolan
1317 Kingdom Road
Baldwinsville, New York 13027

Arthur and Dora Eiss
1245 Kingdom Road
Baldwinsville, New York 13027

Donald and Elizabeth Walker
RD No. 1, Breed Road
Baldwinsville, New York 13027

Mr. and Mrs. Alfred Downs
7931 Cornwall Road
Baldwinsville, New York 13027

Mr. and Mrs. Gordon Potter
7920 Cornwall Road
Baldwinsville, New York 13027

Mr. Thomas E. Davis
1301 Kingdom Road
Baldwinsville, New York 13027

Albert and Patricia Johnson
Kingdom Road
Baldwinsville, New York 13027

Mr. and Mrs. Merle F. Temple
7758 Breed Road
Baldwinsville, New York 13027

Baldwinsville Rod and Gun Club
PO Box 232
Baldwinsville, New York 13027

Section IV - Identification of Department Contacts

Project Community Relations Officer:

Mr. Edward Hallenbeck
Supervisor
Town of Van Buren
PO Box 10
Baldwinsville, New York 13027
315-635-3009

NYSDEC Project Manager:

Mr. Brian H. Davidson
New York State Department of
Environmental Conservation
50 Wolf Road - Room 224
Albany, New York 12233-7010
518-457-1641

NYSDEC Regional Contact:

Mr. Charles Branagh
New York State Department of
Environmental Conservation
615 Erie Boulevard West
Syracuse, New York 13204
315-426-7400

NYSDEC Citizen Participation Specialist:

Ms. Kate Lacey
New York State Department of
Environmental Conservation
615 Erie Boulevard West
Syracuse, New York 13204
315-426-7400

NYSDOH Contacts:

Mr. Gary Litwin
New York State Department of Health
Bureau of Environmental Exposure Investigation
2 University Place, Room 205
Albany, New York 12203

Ms. Henriette Hamel
New York State Department of Health
677 South Salina Street
Syracuse, New York 13202

NYSDEC Toll Free Information Phone:

1-800-342-9296

Section V - Identification of Document Repositories

New York State Department of
Environmental Conservation
50 Wolf Road, Room 224
Albany, New York 12233-7010

Office of the Supervisor
7575 Van Buren Road
Baldwinsville, New York 13027

Section VI - Description of Citizen Participation Activities

Public informational meetings have been held periodically since the beginning of the Remedial Program at the Van Buren Town Hall. Two public informational meetings were held in 1989 after each round of residential well sampling was completed.

SECTION VII

Definitions of Significant Elements and Terms of the Remedial Program

NOTE: The first eight definitions represent major elements of the remedial process. They are presented in the order in which they occur, rather than in alphabetical order, to provide a context to aid in their definition.

Site Placed on Registry of Inactive Hazardous Waste Sites - Each inactive site known or suspected of containing hazardous waste must be included in the Registry. Therefore, all sites which state or county environmental or public health agencies identify as known or suspected to have received hazardous waste should be listed in the Registry as they are identified. Whenever possible, the Department carries out an initial evaluation at the site before listing.

Phase I Site Investigation - Preliminary characterizations of hazardous substances present at a site; estimates pathways by which pollutants might be migrating away from the original site of disposal; identifies population or resources which might be affected by pollutants from a site; observes how the disposal area was used or operated; and gathers information regarding who might be responsible for wastes at a site. Involves a search of records from all agencies known to be involved with a site, interviews with site owners, employees and local residents to gather pertinent information about a site. Information gathered is summarized in a Phase I report.

After a Phase I investigation, DEC may choose to initiate an emergency response; to nominate the site for the National Priorities List; or, where additional information is needed to determine site significance, to conduct further (Phase II) investigation.

Phase II Site Investigation - Ordered by DEC when additional information is still needed after completion of Phase I to properly classify the site. A Phase II investigation is not sufficiently detailed to determine the full extent of the contamination, to evaluate remedial alternatives, or to prepare a conceptual design for construction. Information gathered is summarized in a Phase II report and is used to arrive at a final hazard ranking score and to classify the site.

Remedial Investigation (RI) - A process to determine the nature and extent of contamination by collecting data and analyzing the site. It includes sampling and monitoring, as necessary, and includes the gathering of sufficient information to determine the necessity for, and proposed extent of, a remedial program for the site.

Feasibility Study (FS) - A process for developing, evaluating and selecting remedial actions, using data gathered during the remedial investigation to: define the objectives of the remedial program for the site and broadly develop remedial action alternatives; perform an initial screening of these alternatives; and perform a detailed analysis of a limited number of alternatives which remain after the initial screening stage.

Ranking System - The United States Environmental Protection Agency uses a hazard ranking system (HRS) to assign numerical scores to each inactive hazardous waste site. The scores express the relative risk or danger from the site.

Responsible Parties - Individuals, companies (e.g. site owners, operators, transporters or generators of hazardous waste) responsible for or contributing to the contamination problems at a hazardous waste site. PRP is a potentially responsible party.

Site Classification - The Department assigns sites to classifications established by state law, as follows:

o Classification 1 - A site causing or presenting an imminent danger of causing irreversible or irreparable damage to the public health or environment --immediate action required.

o Classification 2 - A site posing a significant threat to the public health or environment--action required.

o Classification 2a - A temporary classification for a site known or suspected to contain hazardous waste. Most likely the site will require a Phase I and Phase II investigation to obtain more information. Based on the results, the site then would be reclassified or removed from the state Registry if found not to contain hazardous wastes.

o Classification 3 - A site which has hazardous waste confirmed, but not a significant threat to the public health or environment--action may be deferred.

o Classification 4 - A site which has been properly closed--requires continued management.

o Classification 5 - A site which has been properly closed, with no evidence of present or potential adverse impact--no further action required.

State-Lead Site - An inactive hazardous waste site at which the Department has responsibility for investigating problems at the site and for developing and implementing the site's remedial program. The Department uses money available from the State Superfund and the Environmental Quality Bond Act of 1986 to pay for these activities. The Department has direct control and responsibility for the remedial program.

Remedial Design - Once a remedial action has been selected, technical drawings and specifications for remedial construction at a site are developed, as specified in the final RI/FS report. Design documents are used to bid and construct the chosen remedial actions. Remedial design is prepared by consulting engineers with experience in inactive hazardous waste disposal site remedial actions.

Construction - DEC selects contractors and supervises construction work to carry out the designed remedial alternative. Construction may be as straightforward as excavation of contaminated soil with disposal at a permitted hazardous waste facility. On the other hand, it may involve drum sampling and identification, complete encapsulation, leachate collection, storage and treatment, groundwater management, or other technologies. Construction costs may vary from several thousand dollars to many millions of dollars, depending on the size of the site, the soil, groundwater and other conditions, and the nature of the wastes.

Monitoring/Maintenance - Denotes post-closure activities to insure continued effectiveness of the remedial actions. Typical monitoring/maintenance activities include quarterly inspection by an engineering technician; measurement of level of water in monitoring wells; or collection of ground water and surface water samples and analysis for factors showing the condition of water, presence of toxic substances, or other indicators of possible pollution from the site. Monitoring/maintenance may be required indefinitely at many sites.

Consent Order - A legal and enforceable negotiated agreement between the Department and responsible parties where responsible parties agree to undertake investigation and cleanup or pay for the costs of investigation and cleanup work at a site. The order includes a description of the remedial actions to be undertaken at the site and a schedule for implementation.

Contract - A legal document signed by a contractor and the Department to carry out specific site remediation activities.

Contractor - A person or firm hired to furnish materials or perform services, especially in construction projects.

Delisting - Removal of a site from the state Registry based on study which shows the site does not contain hazardous wastes.

Potentially Responsible Party Lead Site - An inactive hazardous waste site at which those legally liable for the site have accepted responsibility for investigating problems at the site, and for developing and implementing the site's remedial program. PRP's include: those who owned the site during the time wastes were placed, current owners, past and present operators of the site, and those who generated the wastes placed at the site. Remedial programs developed and implemented by PRP's generally result from an enforcement action taken by the State and the costs of the remedial program are generally borne by the PRP.

Notice of Public Comment Period and
Public Meeting by the New York State
Department of Environmental Conservation

Notice is hereby given that at the time and place designated below the New York State Department of Environmental Conservation (NYSDEC) will be holding a public meeting to solicit public comments on the Proposed Remedial Action Plan (PRAP) for the Van Buren Town Landfill Inactive Hazardous Waste Site (No. 734031) located on Kingdom Road in the Town of Van Buren. Written comments will be accepted during a public comment period that will begin on January 7, 1992 and will continue until February 6, 1992.

The Van Buren Town Landfill is an unlined former municipal landfill that is approximately 32 acres in size. Approximately 16 acres have actually been landfilled. The landfill site was originally mined for sand and gravel, and landfilling operations are believed to have began in the 1950's.

In 1984, in response to a waste disposal questionnaire from the NYSDEC, Syroco, Inc. disclosed that between 1963 and 1978 waste paint and paint booth filters were disposed of at the landfill. In 1987, the site was classified as a "Class 2" waste site, or a site which poses a significant threat to public health or the environment.

On September 16, 1988 an Order on Consent was entered into between the Town of Van Buren and the NYSDEC. The Order on Consent put into effect a timetable for the completion of a Remedial Investigation/ Feasibility Study (RI/FS), Remedial Design, and Remedial Construction. The Order on Consent also required the landfill to close on July 1, 1989.

The work plan for the RI/FS was presented to the public at a public meeting in March 1989. The RI/FS has now been completed. The Remedial Investigation (RI) Report concluded that:

- groundwater flow in the vicinity of the landfill is to the north and northwest
- background groundwater quality in the Vernon Shale bedrock is poor due to high concentrations of naturally occurring sulfate, chloride, and certain metals
- no organic chemicals were detected in the groundwater
- five metals were identified at levels above or near groundwater standards in the immediate vicinity of the landfill

- a small plume of contaminated groundwater was identified immediately downgradient of the older portion of the landfill in the shallow glacial overburden deposits

- three residential wells on Kingdom Road across from the landfill have elevated concentrations of iron.

The Feasibility Study (FS) Report evaluated the following four (4) remedial alternatives for the site:

- Alternative 1: No action with monitoring

- Alternative 2: Institutional Controls - site fencing, alternative water supply or treatment for three (3) residences on Kingdom Road, site deed restrictions and monitoring

- Alternative 3: Landfill cap and closure per 6 NYCRR Part 360 regulations

- Alternative 4: Landfill cap and closure per 6 NYCRR Part 360 regulations with upgradient groundwater diversion.

The FS Report recommends that both Alternatives 2 and 3 above be implemented. The remedy will include a landfill cap, fence, deed restrictions, reconstructing or redirecting the galvanized pipe drainage system which runs through the site, water treatment systems for three residences on Kingdom Road, and long-term groundwater monitoring. The total present worth cost of implementing this remedy is estimated to be $3,660,000.

The NYSDEC has issued the PRAP based on the findings of the RI/FS. The PRAP and the administrative record file are available for public review at the following locations:

Van Buren Town Hall
7575 Van Buren Road
Baldwinsville, New York 13027
Telephone: (315) 635-3009
Hours: 8:00 - 3:30 Monday through Friday

New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation
50 Wolf Road
Albany, New York 12233-7010
Telephone: (518) 457-1641
Hours: 8:30 - 4:45 Monday through Friday

The PRAP and other documents are also available for public review at the NYSDEC Regional Office at 615 Erie Boulevard West, Syracuse, New York and the New York State Department of Health, at 677 South Salina Street, Syracuse, New York. These offices are open from 8:30 through 4:45 Monday through Friday.

Location of Public Meeting	Date and Time
Van Buren Town Hall 7575 Van Buren Road Baldwinsville, New York	January 21, 1992 7:30

Written and oral comments will be documented in the Responsiveness Summary Section of the Record of Decision (ROD), the document which formalizes the selection of the remedy.

Written comments should be sent to:

Mr. Brian H. Davidson
Project Manager
Division of Hazardous Waste Remediation
New York State Department of Environmental Conservation
50 Wolf Road - Room 222
Albany, New York 12233-7010

News Release Region 7

New York State Department of Environmental Conservation

THOMAS C. JORLING, *Commissioner*
C. THOMAS MALE, ACTING REGIONAL DIRECTOR

615 Erie Boulevard West
Syracuse, New York 13204

PRESS ADVISORY
January 17, 1992

On Tuesday, January 21, at 7:30 p.m. during the regular Van Buren Town Board Meeting at the Town Hall, an informational session will be held to explain results of the Remedial Investigation of the Van Buren town landfill. The landfill is designated as a Class 2 hazardous waste site on the New York State list of sites needing evaluation and cleanup. DEC staff will describe the investigation and the recently completed Feasibility Study which evaluates four possible cleanup strategies. The proposal favored by DEC includes capping the 16 acre site, fencing the area, redirecting drainage which now goes through the waste area and possible construction of a leachate collection system. The cost of the proposed remediation is $3.6 million, including 30 years of maintenance and monitoring. Under terms of an agreement between the town and DEC, Van Buren would be reimbursed for 75% of the remedial costs from funds provided under the 1986 Environmental Quality Bond Act. Public comments, questions, and criticisms will be addressed before a final Record of Decision is issued, selecting the remedial option which will be carried out. Remedial work is expected to begin during the 1992 construction season.

CONTACT: Kate Lacey
426-7403

SYRACUSE MEDIA LIST

Syracuse Post Standard
Att: Bob Andrews 470-2177
Fax: 470-3081

Syracuse Herald Journal
Att: Mark Weiner 470-2274
City Desk 470-2265
Fax: 470-3019

WIXT - 9
Ron Lombard 446-4780
Dan Cummings Fax: 446-9283
Jeanne Kessner
Paul Ennis
Christi Cacciati

WSTM - 3
Jim Kenyon 474-5000
Laura Hand Fax: 474-5122
John Coffin
Paula Gerraults

WTVH - 5
Tony Rizzo 425-5555
Tracey Davidson 425-5545
Maureen Green Fax: 425-5513

Radio	Newsroom	Fax
WHEN	457-6110	457-1605
WSYR	472-9797	472-1904
WNDR	446-9090	446-1614
WKIX	487-1500	487-1526
WRVO	341-3690	341-3174

New York State Department of Environmental Conservation
615 Erie Blvd. W., Syracuse, NY 13204-2400

Region 7 Headquarters
(315) 426-7400

Thomas C. Jorling
Commissioner

Dear

The plan for remediation of the Van Buren Town Landfill on Kingdom Road will be the subject of a public hearing on January 21st. The hearing will take place during the regular meeting of the Van Buren Town Board at 7:30 p.m. in the Town Hall.

The Van Buren Town Landfill is listed on the New York State Registry of Inactive Hazardous Waste Sites. The Department of Environmental Conservation has reviewed the Remedial Investigation/Feasibility Study prepared by Clough, Harbour and Associates, the engineering firm hired by the Town of Van Buren to investigate contamination on the site and recommend remedies.

The Town is eligible for state funding to reimburse the Town for 75% of the costs of clean-up. The state funds come from the voter-approved Environmental Quality Bond Act. The Town is responsible for the remaining 25% of clean-up costs.

Documents outlining the investigation, including sampling results and the recommendations from Clough Harbour, are available for public review at the Town Hall, and at the Offices of DEC, 615 Erie Blvd. West in Syracuse. The public may comment in writing to Brian Davidson, NYSDEC, 50 Wolf Rd., Albany, NY 12233-7010. Comments will be accepted until February 6th. Following the public comment the DEC will issue a Record of Decision outlining the selected remedy for the site.

If you have questions or wish to arrange an appointment to view documents at the Regional DEC office contact Kate Lacey at 426-7400.

Sincerely,

Kate Lacey
Citizen Participation Specialist

KL:fn

Messenger
1/24/92

Closing a dump forever costs dearly

by C. ALAN BAKER

Closing down a town landfill forever is an expensive proposition, especially if it bears a "hazardous" label as with Town of VanBuren's old landfill on Kingdom Rd. Town and state officials hope to cap the old dump permanently this year, and the price tag could hit $3.7 million.

Closed to the public since July 1989, the old dump is classified potentially "a *significant* threat to public health" due to 5,400 gallons of paint waste, plus paint booth filters, deposited there by Syroco company from 1963 to 1978.

State Department of Environmental Conservation, which is paying 75% of the cost of final shutdown, has agreed to a closure plan developed by town engineers Clough, Harbour & Associates. It was aired last week Tuesday evening at a public hearing at town hall, but only three or four questions were raised and easily fielded by DEC staff.

Even with state participation, according to town Supervisor Edward Hallenbeck, close to $1 million will fall on the shoulders of town taxpayers. That translates to $2 per $1,000 assessed valuation over the 30 years the town will take to pay off the debt. For a $75,000 home, assessed at the typical 10%, that amounts to $15 a year.

According to CHA's engineer Frank LaVardera, "construction" of the cap at the dump should begin this summer, and be done before year's end.

Immediately over the waste mass will be laid 12 inches of fill, into which vent pipes will be sunk to allow methane gas to escape to the surface. On top of that will be built either an 18 in. barrier of natural clay, or laid a plastic membrane, depending of the availability of clay nearby. That layer is topped by a least 24 inches of fill to protect the barrier. Completing the cap is six inches of seeded topsoil.

As part of the closure plan, the town will also provide purification systems to three homes across the road from the dump, whose wells show signs of iron and manganese.

The plan also calls for diverting surface drainage around the waste mass, *to minimize leachate*; possible temporary collection of leachate to be treated off-site, until the waste mass dries out; and site fencing.

Thirty-nine wells drilled to differing depths have been used to test groundwater at and around the landfill. These will continue to be monitored for 30 years, LaVardera said.

A DEC chemist reported that groundwater standards at the dump are exceeded only for iron and manganese. These are the elements for which the three residential wells will be treated. She said that levels of such things as mercury, barium, phenols, pesticides, PCBs, sulfates and chlorides "are not of a concern."

Arsenic, occurring in one test site, is felt to be "naturally occurring" from the bedrock shale that was used for daily cover of the waste mass, she explained, adding arsenic was not detected in leachate.

LaVardera said capping the waste mass is done not to keep waste in the dump, rather to eliminate rainwater from penetrating and producing leachate from the mass. Once capped, he said, the waste mass will not contain significant moisture.

The decision to substitute a plastic membrane for a clay barrier will be reached after the availability of *natural clay nearby is determined*. Also, he said, further tests will also determine if vents—one to the acre—will adequately remove methane gas, or if it will need to be collected and flared off.

The estimated $3,669,900 cost of capping and closure could be lower, Hallenbeck said, depending on how contractor bids come in later this year. With a lagging economy making some firms hungry for work, he said, the project could come in lower *than estimated*.

The estimate includes such long-term costs as monitoring of test wells and individual purification units for neighbors.

VanBuren's land fill is one of about three dozen across the state getting DEC assistance is closing.

DEC will accept written comment on the closure plan until Feb. 6, after which it will issue final approval of closure. Address comments to New York State Department of Environmental Conservation, Division of Hazardous Waste Remediation: Brian R. Davidson, 50 Wolf Rd., Albany, NY 12233-7010.

Closure documents may be seen at DEC's regional office, 615 Erie Blvd. W., Syracuse, or the town clerk's office.

While precise origin of the landfill is unclear, it was probably in use in the early 1950s, according to DEC. By 1963, it was operated by the town. From 1973 to 1977, it was operated by the county's Solid Waste Disposal Authority, the town resuming control in 1978.

Groundwater contamination concerns prompted testing in 1982, the paint contamination became known in 1984.

Town to seal former dump

SYR. POST STANDARD 1/22/92

▶ Van Buren's plans call for work to begin in summer.

By Brian Carr
Staff Writer

Construction should start this summer on a $3.58 million cap for the former Van Buren town dump on Kingdom Road.

Plans unveiled by town engineers and state officials Tuesday night call for the 16-acre dump to be covered with five feet of clay, soil and other protective materials.

Those barriers would prevent rain from penetrating the dump and carrying contaminants into the groundwater.

The dump was in operation for more than 30 years before state and town officials agreed to close it in July 1989. It is considered a threat to public health. Tests show high levels of iron and magnesium in three residential wells nearby.

Since 1989, engineers have dug test wells to find what contaminants, if any, lie underneath.

Engineers told the town board Tuesday the tests showed no toxic PCBs or pesticides and no significant traces of mercury or barium. One deep well showed a concentration of arsenic.

Capping the landfill should stop iron and manganese from leaking into the adjacent wells, because there will be no rainwater to carry the contaminants.

Also included in the project is a new fence for the landfill perimeter, drinking water purification systems for the three residential wells with high levels of iron and a 30-year monitoring program that includes four well tests a year.

The state pays 75 percent of the cost, or $2,685,000. The town pays the remainder, $895,000. The amounts could be lower or higher, depending on contractor's bids.

Van Buren Town Supervisor Edward Hallenbeck Jr. said that money will be raised through bonds, so taxpayers will not have to pay in one year. He said if the town issues 30-year bonds, the tax rate could increase about $2 per $1,000 of assessed value on a home.

The public has until Feb. 6 to file and questions or comments with Department of Environmental Conservation officials.

The project will be put out to bid in late spring, Hallenbeck said, and construction could start by July. He said he hopes to have it completed by year's end.

When completed, the dump will appear to be a large grassy mound. Every acre will have a vent in the ground for releasing methane gases from the decaying debris buried underneath the soil.

In 1963, the town operated the site as an official landfill for Van Buren residents and businesses. Syroco, Inc., a plastic accessories manufacturer, started dumping 30 gallons of industrial waste each month at the site. That dumping continued for 15 years and included paint and paint filters.

In 1973, the Onondaga County Solid Waste Disposal Authority took over operation of the landfill as part of a plan to keep track of all trash disposal in the county.

In 1977, the solid waste authority returned control to the town.

In 1978, the state issued a permit allowing Van Buren to run the landfill. Syroco, Inc., stopped dumping industrial waste.

In 1979, the town initiated plans to close the dump in 10 years.

1/21/92

Town of Van Buren

Public Hearing - Kingdom Rd LF

Name	Address
Steve Burdick	101 Mohawk Court Central Square NY 13036
Florence Bork	Van Buren Rd. Baldwinsville, NY
Wm Goodman	59 Maple Rd B'Ville 13027
Roy Peck	6817 N Brickyard Rd Warners 13164
Edward Doran	6737 Canton St Warners, NY 13164
Marc Michalet	207 Resseguie Drive, Syr. N.Y. 1320
Carr, H-Journal	POB 4915, Syracuse 13221
1. Baker, B'ville Messenger	POB 270, B'ville 13027
Mike Lawler	102 Cedarwood Blvd B'ville.

EXHIBIT E - RESPONSIVENESS SUMMARY

A Responsiveness Summary provides a summary of Citizen's comments and concerns and the New York State Department of Environmental Conservation's (NYSDEC) responses to those comments and concerns. All comments summarized in this Section were considered in the NYSDEC's final decision for selection of a remedial alternative for the Van Buren Landfill.

The public comment period on the Town of Van Buren landfill began on January 7, 1992. A public meeting was held at the Van Buren Town Hall on January 21, 1992. The public comment period and public meeting were announced in legal notices which appeared in the January 6, 1992 and January 16, 1992 Syracuse Herald-Journal. A press release was also issued by the NYSDEC.

Local residents listed on the contact list in the Citizen Participation Plan for the Van Buren landfill were mailed letters to encourage their participation and solicit their comments. The press release, legal notice, newspaper articles, citizen participation plan, attendance sheet from the January 21, 1992 public meeting and a copy of the letter mailed to residents are attached in Appendix "D".

The public meeting began at 7:37 pm. Kate Lacey, Regional NYSDEC Citizen Participation Specialist began the meeting by providing some background on the Hazardous Waste Remedial Program and introducing the representatives from the NYSDEC and Clough, Harbour and Associates (CHA), the Town of Van Buren's consultant. NYSDEC Project Manager, Brian Davidson, then presented the site history and CHA personnel presented the RI/FS methodologies and findings. Kate Lacey then opened the meeting for comments or questions from the public. Only four questions were asked. This first question regarded the arsenic hit in one on-site bedrock monitoring well. It was explained that arsenic occurs naturally in the Vernon Shale and that since arsenic was not detected in the leachate, arsenic was assumed to be present at that one location on-site due to reducing conditions.

The second question regarded the presence of selenium. It was explained at the public meeting that selenium was detected during the first round of sampling and not in subsequent rounds. In fact, low levels of selenium were detected at two surface water locations during the first round of sampling, however, as was stated at the public meeting, selenium was not detected in subsequent sample rounds.

The third question regarded methane gas. It was explained at the meeting that all landfills generate some Methane, that the cap would include a methane collection system, and that if there is enough methane it could be used to generate electricity. It was also mentioned the CHA was preparing to perform a supplemental methane investigation on-site. The last question regarded leachate generation over time. It was explained that once the landfill is capped precipitation will be

prohibited from filtering through the landfill mass and leachate generation will significantly decrease. The public meeting concluded at 8:46 pm. The official transcript from the public meeting is a part of the administrative record file and is available for public review at the Van Buren Town Hall and the NYSDEC offices on 615 Erie Boulevard West, Syracuse, New York and 50 Wolf Road, Albany. The public comment period ended February 6, 1992.

Written Comments

One written comment was received from Mr. Charles W. Bowers (attached) one week after the close of the public comment period. Mr. Bowers correspondence essentially recommends implementing the "no action" alternative since no real damage to the environment has been documented from the landfill.

NYSDEC Response

A small plume of groundwater contamination has been identified downgradient from the landfill. New York State's Solid Waste Management Facility regulations, 6 NYCRR Part 360 requires landfills to be properly closed with multi-layer cover systems.

A detailed risk assessment of risks associated with direct exposure to leachate and exposed waste has never been performed since compliance with 6 NYCRR Part 360 has also been anticipated. The proposed remedy actually requires very little beyond minimum closure requirements for landfills required by New York State Solid Waste Management Facility regulations. In addition 6 NYCRR Part 360 requirements, the proposed remedy requires fencing to protect to cap, deed restrictions, redirecting upgradient drainage, and providing and maintaining individual water purification units on the three residential well on Kingdom Road which have consistently shown elevated concentrations at iron. Although no hazardous wastes were detected in the groundwater, liquid and solid industrial hazardous wastes were disposed at the site between 1963 and 1978. Properly capping the landfill will prevent the release of hazardous wastes to the groundwater in the future by eliminating infiltration through the landfill mass. Capping will also eliminate the surfical leachate seeps currently emanating from the landfill.

The estimated cost of closing this landfill per 6 NYCRR Part 360 regulations, not including 30 years of monitoring and maintenance is $2,850,000 or $178,125 per acre. This is slightly above the average cost of properly closing a non-hazardous municipal landfill in upstate New York, which is $136,000 per acre. The Institutional Controls (fencing, deed restrictions and water purification units) costs $85,000, and the total present worth cost of the proposed remedy including 30 years of operation and maintenance is $3,658,000. Although this may seem like a lot of money, it is relatively small compared to the remedial costs at most other inactive hazardous waste sites.

39 Tappan Street
Baldwinsville NY 13027
February 10, 1992

New York State Dept. of Env. Conservation
Division of Waste Remediation
50 Wolf Road
Albany NY 12233-7010

Attn: Brian H. Davidson

Re: Proposed Remedial Action
Plan/Town of Van Buren
Onondaga County, New York
ID #734031

Gentlemen:

I request you consider allowing this letter to become part of written comments to above. I realize February 6, 1992 was official date, but perhaps you can extend it a bit.

The record of actions regarding this site are known to me since late 1980. The official records as noted in DEC document cover the time from 1950 to 1991.

A thorough study of those documents, and of the test reports concerning nearby water supply, and the leachate, does not warrant the proposed spending for remediation.

The report suggests that once people started to document, they wanted to substantiate a need which does not exist. Throughout the report references say "not due to landfill, but due to natural ground water conditions".

Sites such as this one surely cannot hold the importance to public health that many other sites might.

In view of lack of real proof of potential damage, beyond what is inherent in the ground itself, consideration should be given to choosing the alternative of leaving the site as is.

The State of New York has many places to spend its money which will bring a greater result for the taxpayer and all of its citizens. Please reconsider.---

Sincerely,

Charles W. Bowers

CHARLES W. BOWERS