TOWN OF ELLENBURG

HAMLETS OF

ELLENBURG CENTER

ELLENBURG CORNERS

ELLENBURG DEPOT

WATER SUPPLY STUDY

AND

PRELIMINARY ENGINEERING REPORT

PREPARED FOR

THE TOWN OF ELLENBURG

CLINTON COUNTY

NEW YORK

PREPARED BY

ARCHITECTURAL & ENGINEERING
DESIGN ASSOCIATES

JANUARY 27, 1997

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ARCHITECTURAL & ENGINEERING DESIGN ASSOC.
GEORGE W. ROSENVOLD - R.A. - ARCHITECT
ANDREW C. ABDALLAH - P.E. - ENGINEER
BOX 762, PLATTSBURGH, NEW YORK 12901 - 518-562-1800 FAX # - 518-562-1702

Introduction

Architectural and Engineering Design Associates in conjunction with the Town of Ellenburg and the assistance of the Clinton County Dept. of Public Health has investigated the need and potential for a community water system designed to serve the Hamlets of Ellenburg Center, Ellenburg Corners and Ellenburg Depot. All three hamlets will be served by a single water system with the source and storage to be located within the Hamlet of Ellenburg Center.

Background

The three hamlet areas are located as follows:

1. Ellenburg Center is situated along Route 5 also referred to as Old Route 190. Ellenburg Center is located at the foothills of the Adirondacks and along the banks of the North Branch of the Great Chazy River.

2. Ellenburg Corners is located approximately 3.5 miles northeast of Ellenburg Center. Ellenburg Corners is situated at the intersection of NYS Route 11, County Route 5 and NYS Route 190. Ellenburg Corners is situated along the bank of the North Branch of the Great Chazy River.

3. Ellenburg Depot is located approximately 2 miles east of Ellenburg Corners at the intersection of Route 11 and the Plank Road. Ellenburg Depot is situated along the banks of the North Branch of the Great Chazy River.

The three hamlet areas are predominantly residential with some light commercial (example: Post Office, State Police Substation, Telephone Service Center, Restaurants, Mini-Marts, etc.). Also located within the water system service area is the Northern Adirondack Central School. People residing within Ellenburg Hamlets generally commute to areas outside the hamlet for employment.

The three hamlets are not currently served by a public water system or a public sewage treatment system. Water supplies in the area are mainly individual and shared drilled wells and shallow springs. Domestic waste water is generally treated by on-site subsurface sewage treatment systems.

Public Health Concerns

Generally, rural communities such as Ellenburg Center, Ellenburg Corners and Ellenburg Depot are served adequately by individual on-site drilled wells. The Town of Ellenburg is presented with past and on-going problems of multiple well contamination within the Hamlets of Ellenburg Depot, Ellenburg Corners and Ellenburg Center. Much of the well contamination reported within the Hamlet of Ellenburg Depot and Ellenburg Center has been verified and documented by the New York State Department of Health and New York State Department of Environmental Conservation. Reported well contamination within the Hamlet of Ellenburg Corners was derived at as a result of discussions with residents, neighbors and others knowledgeable about the hamlet area.

Existing well contamination and general water supply concerns within the Hamlets of Ellenburg Depot, Ellenburg Center and Ellenburg Corners are as follows:

Ellenburg Depot

Since about 1989, the New York State Department of Environmental Conservation and subsequently the New York State Department of Public Health and the Clinton County Department of Public Health have been involved in investigation of complaints regarding contamination of residential water supplies. In excess of 75 different water sources have been sampled and tested. The water sources sampled were located in the vicinity of Route 11 between Canaan Road and Bull Run Road. Approximately 30 separate water sources were contaminated with the solvent Trichloroetylene. The concentrations of Trichloroethylene were below the NYSDOH standard of 5.0 ug/l. It should be noted that this standard was established for a public water supply. As a result of the indication of the groundwater contamination, an investigation was performed by NYSDEC (See Appendix A for the conclusions of the Investigation dated April 1991 by TWM) at the Atlas Missile Silo #11. This investigation was supplemented by previous study conducted by the Department of Defense (See Appendix B for the Summary of the Department of Defense Study). Both investigations indicated contamination by Trichloroethylene at slightly higher concentrations than found within individual water sources sampled. The Atlas Missile System was the foundation of the United States Intercontinental Ballistic Missile Program during the late 1950's and early 1960's. By approximately 1965, the Atlas Missile facilities were being dismantled and their silos sold for salvage.

In addition to the before mentioned work, New York State Department of Environmental Conservation conducted separate and unrelated investigations. These investigations resulted in the discovery of petroleum contamination in three separate locations. The areas of contamination and extent of groundwater impacts are as follows:

1. A groundwater investigation by NYSDEC indicated contamination from leaking gasoline storage tanks along Route 11 on the eastern side of Ellenburg Depot. This contamination was confined to the owner's property (See Appendix C for DEC correspondence).

2. A groundwater investigation by NYSDEC indicated contamination of six residential water systems. The source of the contamination was the Agway Petroleum storage facility at the intersection of Route 11 and the Canaan Road (See Appendix C for DEC correspondence).

3. Investigation at a third site identified soil and groundwater contamination by petroleum at two parcels on the western end of Route 11 between Station Hill Road and Bull Run Road (Note: See Appendix D for approximate well contamination locations).

It should be noted that on February 7, 1994, property owners near the former Atlas Missile Site S-11, located on Bull Run Road in the Town of Ellenburg were notified that the site had been added as a Class 2 in the Registry of sites where hazardous waste disposal has occurred. (Refer to Appendix E for NYSDEC correspondence and related area newspaper article).

In addition to contamination of groundwater sources, the Hamlet of Ellenburg Depot includes an area which is currently served by public water system. This public water system serves a residential development situated along the eastern shore of Lake Roxanne. This water system serves approximately 4 to 5 residential homes and is currently in violation of New York State Dept. of Health Codes, Rules and Regulations governing operation of public water systems. The water system owner/operator wishes to abandon the water system. In order to provide for a water source for each resident currently being served, potential well sites have been proposed for each resident. The current concern is the availability of a potable water source. (Refer to Appendix D for location). (Refer to Appendix I for additional NYSDEC and NYSDOH correspondence indicating groundwater contamination within Ellenburg Depot

Hamlet).

Ellenburg Corners and Ellenburg Center

Residents within the Hamlets of Ellenburg Corners and Ellenburg Center have often reported poor water quality. Common complaints with respect to water quality generally relate to water clarity and odor problems. In 1991, the Clinton County Dept. of Health was involved with investigating several complaints. The investigation resulted in the determination that bacteriological contamination had occurred. (See Appendix F for Clinton County Dept. of Health correspondence and residents letters of concern). The specific source of the bacteriological contaminant is not known, however, the assumed source is from existing agricultural activities or failing sewage treatment systems.

On August 22, 1988, a newly drilled well was reported to have a noticeable petroleum odor. A subsequent investigation by the New York State Dept. of Environmental Conservation resulted in the verification of groundwater contamination. Three individual and one shared water source were sampled and analyzed at the request of NYSDEC by C.T. Male. It was determined that two wells had been contaminated by petroleum hydrocarbons. The newly drilled well was pumped for approximately three months and after resampling was determined to remain contaminated. The investigation determined that the source of the contamination was a former underground storage tank located at the intersection of the Brandy Brook Road and the Carlson Road. It should be noted that the study conducted by Empire Soils Investigations, Inc. at the request of NYSDEC concluded that the aquifer impacted by the contaminant release is comprised of unconsolidated materials of well graded sands and gravels with lesser amounts of silt. It was concluded that the consolidated aquifer has been impacted. (Refer to Appendix G for the location and conclusions of the investigation conducted by Empire Soil Investigations, Inc.). During sampling and testing conducted by NYSDEC regarding the petroleum spill, one well was determined to be free of volatile organic compounds but bacteria contamination was present

Ellenburg Depot, Ellenburg Corners and Ellenburg Center

In addition to the before mentioned existing water quality problems, each hamlet would benefit from fire protection provided by the public water supply system. Currently, fire protection is provided by tank trucks.

Conclusions

Due to the apparent widespread contamination of the shallow bedrock aquifer in areas previously discussed, a significant threat to public health exists. The actual magnitude of the threat posed by the contamination is still somewhat unknown but it is evident that all governmental agencies and area individuals involved agree that the health of the public within these areas are at risk. As a result of the existing public health concerns, the Town of Ellenburg should proceed with obtaining project financing, development and installation of a community water supply system.

The proposed community water system should consist of the following componets:

1. Groundwater Source
2. Elevated Water Storage
3. Chlorination System
4. Transmission Mains
5. Hydrants

Groundwater Source

As a result of groundwater contamination reported within the Hamlet's of Ellenburg Depot, Ellenburg Center and portions of Ellenburg Center, the groundwater source should be located within an area of Ellenburg Center considered unaffected and protected from existing contamination or possible future contamination.

Elevated Storage

Large volume storage should be developed to provide constant pressure, compensation for variations in flows, regulating pumping cycles, reserve supply for temporary outages and reserve supply for fire flow. The tank should be located at a high point within the Hamlet of Ellenburg Center. New State Standards for flow quantity for storage - would have water to flush toilets as auxiliary power is required for community water supply

Chlorination System

The proposed water system should be installed with a chlorination facilities system. The chlorination system will provide disinfection in the result of well or water system contamination and/or while they try to obtain a waiver (2 years of satisfactory sample results prior to treatment)

Distribution System

A distribution system consisting of 12", 10", 8" and 6" mains will be installed throughout each hamlet. Each hamlet will be connected by 12" diameter transmission main. Connection of hamlet areas will eliminate the need for multiple sources and storage facilities. Water mains will be

Scale back to Ellenburg Center (separate) from E. Corners & E. Depot.
Perhaps each hamlet should develop their own eventually & then grow towards each other before interconnecting??

Communal water systems are routinely tested for bacteriological quality (X # of samples/month pending population served), chemical samples one annually for parameters listed with Part 5 Drinking Water Standards, heavy metals, toxics, synthetic organics, etc. annually to insure satisfactory water quality. The supply is monitored and treated as deemed necessary on a daily basis by the Water Superintendent with provides another full time & part time position within the water service area(s).

looped when possible to facilitate flow and hold pressure.

Fire Hydrants

The water system will be equipped with fire hydrants and necessary appurtenances. Fire hydrants will provide readily accessible water for community fire protection. This lowers fire insurance and provides for periodic flushing & cleaning of the water lines

Service Area Population

Census estimates for the Hamlets of Ellenburg Center, Ellenburg Corners and Ellenburg Depot, based upon the 1990 census statistics as provided by the Clinton County Planning Department are as follows: Please note that the area referred to as Ellenburg Depot is partly located within the Town of Altona. The water system currently proposed includes those residents residing in the portion of Ellenburg Depot situated within the Town of Altona:

Hamlet		Population	Housing Units
Ellenburg Depot (Ellenburg)		190	100
Ellenburg Depot (Altona)		140	60
Ellenburg Corners	350	350	140
Ellenburg Center	320	320	120
	Total	1000	420

The population of the three referenced hamlets have experienced minimal to no growth over the past two decades. Based upon previous population growth rates within the hamlets, a yearly population growth of 1.5% is used to estimate future hamlet populations.

Year	Estimated Population of Three Hamlets Combined
2000	1015
2010	1030
2020	1045
2030	1060

Utilizing existing population census data along with future projected populations within the proposed service area, water usage estimates are as follows: Note: estimates are based upon 100 GPD/person.

Year	Population	Water Usage
1996	1000	100,000
2000	1015	101,500
2010	1030	103,000
2020	1045	104,500
2030	1060	106,000

Proposed Water System

The water system proposed to serve the Hamlets of Ellenburg Center, Ellenburg Depot and Ellenburg Corners will consist of the following components: (Refer to Appendix H for Individual Hamlet Distribution System Layout).

Groundwater

Two independent groundwater supplies will be developed. Due to acquifer contamination in Ellenburg Depot and the apparent elevational advantage of Ellenburg Center, the proposed groundwater source will be situated within the Hamlet of Ellenburg Center.

Storage

Due to the elevational advantage of Ellenburg Center, the proposed water system storage facility will be located within the Hamlet of Ellenburg Center. The storage facility will be elevated due to the minimal elevational change within Ellenburg Center.

Based upon demand predictions (200% times estimated daily usage) and required fire flow quantities, a 300,000 gallon storage tank would meet the essential needs of the proposed service area as well as provide for minimal future expansion.

Distribution and Transmission Mains

Each individual hamlet will be served by a network of distribution piping. The distribution piping within each hamlet will primarily consist of 8" diameter piping. The hamlets will be connected by 12" diameter transmission mains.

In addition to distribution and transmission mains, the proposed system will include fire hydrants and main line 8" and 12" gate valves.

ARCHITECTURAL & ENGINEERING DESIGN ASSOC.
GEORGE W. ROSENVOLD - R.A. - ARCHITECT
ANDREW C. ABDALLAH - P.E. - ENGINEER
BOX 762, PLATTSBURGH, NEW YORK 12901 - 518-562-1800 FAX # - 518-562-1702

Estimated Project Cost

Ellenburg Center, Ellenburg Corners

and Ellenburg Depot

Water System

Individual project component costs for the Town of Ellenburg Water System are based upon the Means Building Construction Cost Data 1997 and current bid prices as received on similar competitive bid projects. Estimated project costs by hamlet are as follows:

Hamlet of Ellenburg Center

Description	Quantity	Unit Price	Total Estimated Cost
12" Water Main	4000 Lin.Ft.	$55/Ft.	$ 220,000
8" Water Main	7200 Lin.Ft.	$39/Ft.	$ 280,800
Hydrants w/Valve	14 ea.	$1,700 ea.	$ 23,800
12" Gate Valves	7 ea.	$2,100 ea.	$ 14,700
8" Gate Valves	19 ea.	$1,300 ea.	$ 24,700
300,000 Gallon Elevated Tank	1 ea.	Lump Sum	$ 350,000
Wells, Pump, Land Acquisition, Quantity & Quality Testing	1 ea.	Lump Sum	$ 150,000
Subsurface Exploration	30,300 Lin.Ft.	$1.0/Ft.	$ 30,300
12" Transmission Main	19,100 Lin.Ft.	$55/Ft.	$1,050.500

Subtotal No.1 **$2,144,800.00**

Hamlet of Ellenburg Corners

Description	Quantity	Unit Price	Cost
12" Water Main	4300 Lin.Ft.	$55.00	$236,500
8" Water Main	4100 Lin.Ft.	$39.00	$159,900
Fire Hydrants/Valves	11 ea.	$1,700.00	$18,700
12" Gate Valves	10 ea.	$2,100.00	$21,000
8" Gate Valves	8 ea.	$1,300.00	$10,400
12" Transmission Main	16,848 Lin.Ft.	$1.00/Ft.	$16,848

Subtotal No.2 **$927,988.00**

Hamlet of Ellenburg Depot

Description	Quantity	Unit Price	Cost
12" Water Main	1200 Lin.Ft.	$55.00	$66,000
8" Water Main	14,000 Lin.Ft.	$39.00	$546,000
Fire Hydrant/Valves	22 ea.	$1,700.00	$37,400
12" Gate Valves	2 ea.	$2,100.00	$4,200
8" Gate Valves	30 ea.	$1,300.00	$39,000
Subsurface Exploration	15,200 Lin.Ft.	$1.00/Ft.	$15,200

Subtotal No.3 **$ 707,800.00**

Total Construction Cost **$ 3,780,588.00**

Additional Project Costs

Contingency Cost (5%)	567,088.00
Engineering Cost (3%)	113,418.00
Construction Supervision Based Upon 18 Months	50,400.00
Contract Administration (1%)	37,806.00
Legal (1.5%)	56,709.00
Insurance Cost (3%)	113,418.00

Subtotal No.4 **$ 938,839.00**

Total Estimated Project Cost **$4,719,427.00**

ARCHITECTURAL & ENGINEERING DESIGN ASSOC.
GEORGE W. ROSENVOLD - R.A. - ARCHITECT
ANDREW C. ABDALLAH - P.E. - ENGINEER
BOX 762, PLATTSBURGH, NEW YORK 12901 - 518-562-1800 FAX # - 518-562-1702

TOWN OF ELLENBURG

WATER SYSTEM

FINANCING COST

The total project cost in the Hamlets of Ellenburg Center, Ellenburg Depot and Ellenburg Corners is $4,719,427.00. The annual debt service for 0% DSWRF Funding would be as follows for various financing terms:

20 years	25 years	30 years
$235,972	$188,778	$157,315

Based upon the total number of household units, as provided by the Clinton County Department of Planning, the average yearly debt payment for each household would be as follows:

20 years	25 years	30 years
$562	$450	$375

Operation and Maintenance Cost for the early years of the proposed system is estimated to be about $25,000.00 or $50 per user.

The total cost per household unit would be:

20 years	25 years	30 years
$622	$510	$435

LONG-TERM INDEBTEDNESS NOT TO BE REFINANCED:

Owed to	Purpose	Balance Owed	Amort-ization Period	Date Payment Due	Final Due Date	Annual Payment (Include Interest)	Interest Rate	Security

APPENDIX A

Subsurface Investigation for Ellenburg Depot, New York

Spill No. 8909014 Pin SP99452

TWM Northeast No. G0222.06

August, 1990

Prepared By

TWM Northeast
2A Williston Park
Williston, Vermont
05495

TABLE 1

CHEMICAL ANALYSIS SUMMARY
Ellenburg Depot, New York
Spill No. 8909014 PIN SP99452
June 20, 1990

Trichloroethylene		Additional parameters
C. Sunderland	3.9 ppb	
Varin's Market	3.7 ppb	
Key Bank	3.0 ppb	
Baxter	3.0 ppb	
Cheesman Farm	2.9 ppb	Styrene 3.5 ppb
McGregor	2.8 ppb	Styrene 1.8 ppb
Wheeler	2.7 ppb	
Noel	2.4 ppb	
C. Sunderland Farm	2.4 ppb	
Lafave Spring	1.8 ppb	
Van Arman	0.5 ppb	
Scott	0.5 ppb	

Other parameters	
Soper, tetrachloroethylene	3.6 ppb
Cook, dichloromethane	1.4 ppb
New York Telephone, toluene	1.0 ppb
chloromethane	220 ppb
Equipment Blank, 1,1,1-trichloroethane	20 ppb
Trip Blank, 1,1,1-trichloroethane	26 ppb
carbon tetrachloride	5.0 ppb

Notes:

1. EPA Method 524.2 analysis by TMA/Skinner & Sherman Laboratory.
2. This table summarized compounds detected above the detection limits for each compound. All other compounds tested for were below the detection limits for those compounds.

4.0 Conclusions

The data obtained as a result of Sections 2 and 3 of this report suggest the following:

1. The contaminated drilled wells and spring contain low levels (0.5-4 ppb) of trichloroethylene. Present commercial and light industrial activity in the study area does not appear to provide a source for the contaminating solvents.

2. Analytical data from the overburden monitoring wells, MW-1, MW-4, MW-5, and MW-6 and the bedrock monitoring well MW-2 did not report any parameters above the detection limits of the parameters analyzed as EPA Method 524.2. The contamination appears to be located in the bedrock aquifer, or possibly in the overburden in areas other than where the subsurface investigation took place.

3. USGS topographic maps indicate an abandoned railroad track located to the north/northwest and upgradient of the study site. Activities along this railroad line may have contaminated the area.

4. An old spill may have occurred at any location where old 55 gallon drums may have been rinsed out. Drums are presently located at the trailer on Station Hill Road

5. The old hardware store fire may have resulted in solvents being released to the soil or groundwater.

6. - Fractures may be extending beneath the North Branch Great Chazy River in the vicinity of Lake Roxanne Road, south of the Wheeler residence. If the river water is contaminated with solvents, and if the river is recharging the bedrock aquifer at this point, solvents may have a path to the drilled water supplies and the spring.

Based on the monitoring well data, groundwater flow in the overburden appears to be flowing in a southeast direction. It is important to note that contaminated groundwater flow through bedrock fractures will only affect the wells sharing similar contaminated fractures. This may explain why some wells are contaminated and other wells are not.

APPENDIX B

FINAL REPORT

CONFIRMATION STUDY OF FORMER ATLAS MISSILE SITES FOR POTENTIAL TOXIC AND HAZARDOUS WASTE CONTAMINATION

FORMER ATLAS SITE S-11
ELLENBURG, NEW YORK

Prepared for
Department of the Army
Kansas City District, Corps of Engineers
700 Federal Building
Kansas City, Missouri

Prepared by
Law Environmental Incorporated
Government Services Division
112 Townpark Drive
Kennesaw, Georgia
LEGS Job No. 11-7006-05

June, 1988

EXECUTIVE SUMMARY

The Department of Defense (DOD) is investigating former ATLAS missile sites throughout the United States for potential toxic and hazardous waste contamination. This report documents the confirmation study performed at ATLAS Missile Site S-11, located in Ellenburg, New York. The field investigation consisted of installing and sampling three ground-water monitoring wells, sampling surface soils, and sampling water from the missile silo at the installation. The samples were analyzed for purgeable aromatics, purgeable halocarbons, base/neutral extractables and metals. The analytical data for this inventory study are summarized in Section 4.0 of the report and are fully presented in the Appendices.

Evaluation of the data gathered during the site investigation at ATLAS Site S-11 indicate the following conclusions:

- Barium was present at low concentrations in the ground water and barium and lead were present in low concentrations in the silo water samples collected at the site. The concentrations of these two metals were below Maximum Contaminant Levels (MCLs). The low concentrations of barium and lead detected in the water samples does not indicate contamination.

- The chlorinated compound trans-1,2-dichloroethylene was present below the detection limit of 0.005 mg/l in the ground-water samples from MW-1102 and MW-1103 and in the silo water samples. Operations at the ATLAS facility may have used solvents or degreasers which contained trans-1,2-dichloroethylene. The concentrations of trans-1,2-dichloroethylene in the water samples is below the Maximum Contaminant Level Goal (MCLG) of 0.07 mg/l. The presence of this chlorinated compound in the ground and silo water samples may be a result of DOD activities, but the

concentrations detected are not indicative of significant contamination.

- The chlorinated compound trichloroethylene was detected at a concentration below the measurable detection limit of 0.005 mg/l in water samples from MW-1102 and the missile silo. The concentration of trichloroethylene in well MW-1103, 0.006 mg/l, slightly exceeded the MCL of 0.005 mg/l. Maintenance operations at the ATLAS facility may have used chlorinated solvents such as trichloroethylene. Therefore, the trichloroethylene detected in the water samples may be a result of DOD activities and the concentration in MW-1103 may represent significant contamination. This conclusion is mitigated by two factors: the trichloroethylene in MW-1103 was the only constituent which exceeded, although slightly, the regulatory standards, and levels of trichloroethylene less than 0.010 mg/l in shallow aquifers has been associated with nonpoint sources such as air pollution (Trouwborst, 1981).

- The volatile organic compound toluene was present in groundwater sample MW-1101 at a concentration below regulatory standards. The presence of toluene, a constituent of fuel, may be a result of DOD activity. However, the low concentration of toluene detected at the site is not indicative of significant contamination.

- The concentrations of metals in the soil samples collected at the site were near those of the background sample and within average levels established by Bowen (1966). The metals detected in the soil samples at Site S-11 most likely reflect natural soil concentrations.

- The pyrene which was found below the measurable detection limit in soil sample S-5 may be a result of ATLAS facility operations. Pyrene is a constituent of many common materials such as diesel fuel, asphalt, and coal tar.

Additionally, pyrene adheres readily to soil particles and tends to be relatively immobile in soil. The presence of pyrene at the low concentrations detected in the soil is not indicative of significant contamination.

The following preliminary conclusions and recommendations have been made based on the results of this investigation.

(1) Metals concentrations in the silo and ground water are below regulatory criteria and metals in the soil are within natural background levels.

(2) Trans-1,2-dichloroethylene was detected in the silo and ground water and toluene was detected in a single ground-water sample. However, the concentrations of these compounds are below drinking water standards.

(3) Trichloroethylene was detected in the silo and ground water. The concentration of trichloroethylene in MW-1103 slightly exceeded the drinking water standard and therefore may warrant further investigation.

The concentration of trichloroethylene indicates further study is necessary at Atlas Site S-11. Monitoring well MW-1103 should be resampled to determine if the concentration of trichloroethylene actually exceeds the MCL. If resampling confirms the finding that the concentration of trichloroethylene exceeds the MCL, a Public Health Assessment (PHA) should be performed on the site. ATLAS Site S-11 in Ellenburg, New York, should be referred to the Missouri River Division (MRD) for further study.

APPENDIX C

New York State Department of Environmental Conservation
Route 86, P.O. Box 296
Ray Brook, NY 12977

Thomas C. Jorling
Commissioner

November 30, 1993

Constancio J. Labeste
United States Army Corps of Engineers
CENAN-EN-IR, Room 2043
26 Federal Plaza
New York, New York 10278

FILE

Re: **Ellenburg Depot, Clinton County**
1. **Atlas Missile Silo #11, Bull Run Road**
2. **Atlas Missile Silo #10, Harrigan's Corners**

Dear Mr. Labeste:

As per our discussions, enclosed are copies of the groundwater investigation reports developed under the direction of the New York State Department of Environmental Conservation (DEC). I have also attached a summary of all current water sample data generated by the DEC and by responsible parties at petroleum cleanup sites under DEC supervision in this area.

An investigation of a complaint regarding pollution of a residential water supply in 1989 by the DEC resulted in the discovery of widespread groundwater contamination in the hamlet. Approximately 75 different water sources have been sampled in the vicinity of Route 11 between Canaan Road and Bull Run Road. The most common contaminant found in over thirty separate water supplies was the solvent trichloroethylene at concentrations below the New York State Department of Health standard of 5.0 ug/l (parts per billion). A groundwater investigation performed by the DEC (TWM, April, 1991) at the Atlas Missile Silo #11 to supplement earlier work by the Department of Defense showed contamination by trichloroethylene at slightly higher concentrations. During the initial response, carbon filters were installed by the DEC on six residences in the area of the intersection with Lake Roxeanne Road at the outset of this investigation.

Petroleum contamination was found at three separate locations:

1. A groundwater investigation by the DEC showed contamination from leaking gasoline storage tanks was confined to the owner's property at T&M Minimart (currently Jehovah's Witnesses meeting hall) along Route 11 on the eastern side of Ellenburg Depot (TWM, March 1991).

2. A groundwater investigation by the DEC showed contamination of six residential water systems from the Agway petroleum storage facility at the intersection of Route 11 and the Canaan Road. Agway is currently performing the cleanup and maintaining the carbon filters on these residences under DEC supervision (TWM, July 1990;October 1990).

3. Initial work at a third DEC directed groundwater investigation has identified soil and groundwater contamination by petroleum at two properties on the western end of Route 11 between the Station Hill Road and Bull Run Road. A carbon filter has been installed by the DEC on one residential well affected at this location. Additional monitoring wells are being installed at this location to define the area of contamination (TerraTech, October, 1993).

4. Monitoring well and supply well sampling at the privately owned Harrigan's Corners Atlas Missile Silo #10 for trichlorethylene and PCB's was performed in August and September of 1993. TCE concentrations in the monitoring wells were less than 5.0 ug/l;PCB's and volatiles were non-detectable in the supply well.

Additional sampling has been performed by the New York State Department of Health and the Clinton County Department of Health - this data is not included in the package from this Department.

As you know, significant public concern has been raised regarding the presence of the contaminants in the groundwater and the health threats this may pose to the residents. This interest has been stimulated recently by the environmental review and debate of a permit application to construct a medical waste incinerator in the rural community. Public concern has also been raised regarding the transport of contaminants south of the Great Chazy River although no data currently substantiates movement beyond this hydrologic barrier.

There are no other possible sources of solvent contamination in this area which are situated in a position capable of affecting such a widespread area. Contamination by trichloroethylene has been identified at the Atlas Missile Silo #11 and in the residential hamlet area. Sampling at other potential contributors to the solvent contamination has not demonstrated any solvent use, storage or presence in likely areas of impact. Additionally, current knowledge about the groundwater flow regime from the studies referenced above shows that potential sources are capable of affecting only limited areas of the hamlet.

The likely source of the trichloroethylene contamination is the Atlas Missile Silo #11 on the Bull Run Road. Additional investigative work to characterize the contamination at the silo and downgradient toward the hamlet would be beneficial. The contamination has been found to be affecting a large number of residences and this additional information would be useful in assessing current and future impacts on the residents and to determine if remediation work is appropriate. This work is beyond the scope of the New York State Oil Spill Compensation Fund currently used to support DEC work at this location. RECRA funding for investigation and remediation by this Department's Division of Hazardous Waste Remediation is not applicable due to the low contaminant concentrations identified. These facts combined with the ownership of the site by the Department of Defense at the time of the release necessitates federal funding and the involvement of the Corps of Engineers in the additional work.

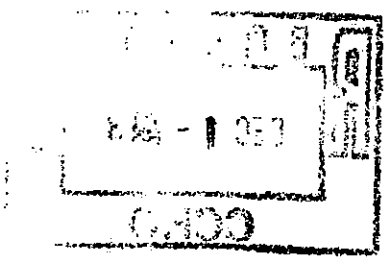
If you have any questions or require any additional information, please contact me at (518) 891-1370.

Sincerely,

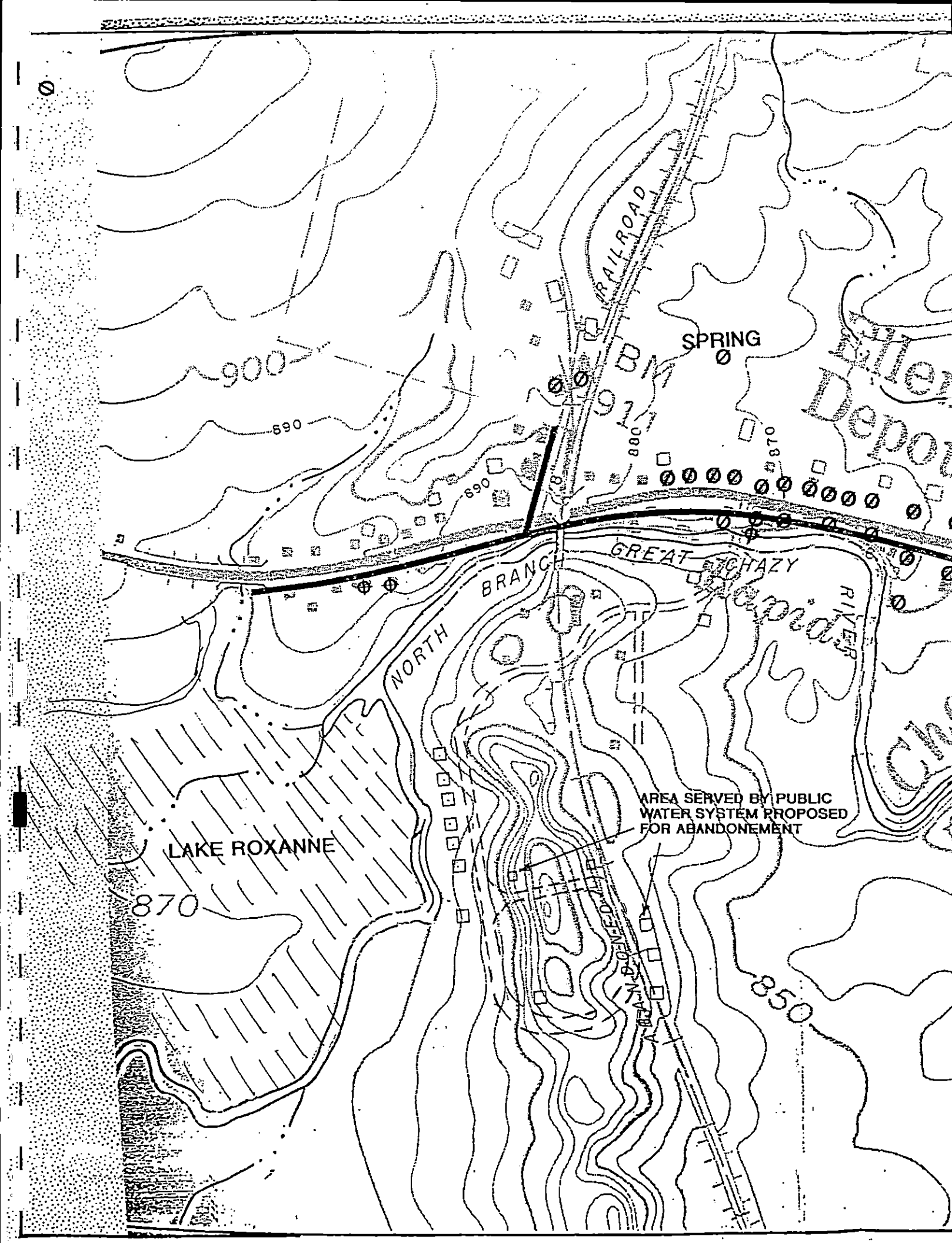
Arthur W. Stemp
Water Program Specialist 2

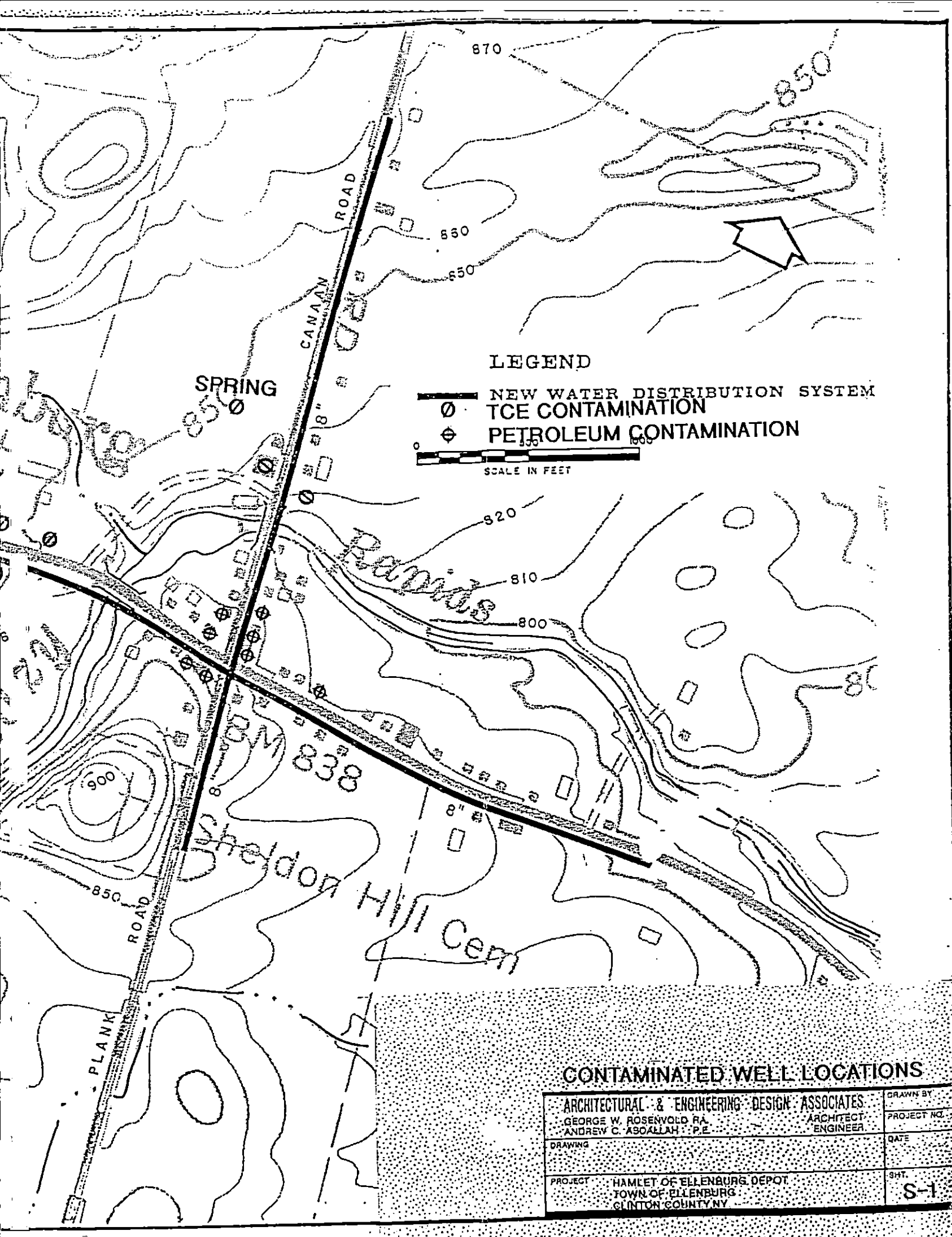
AWS:bf
Encs.

cc: Town Supervisor, Ellenburg w/encs.
CCDOH, E. Snizek
NYSDOH, R. Fedigan
D. Steenberge
R. Wagner



APPENDIX D


RAILROAD
SPRING
900
890
880
870
690
690
GREAT CHAZY
NORTH BRANCH
RIVER
LAKE ROXANNE
870
AREA SERVED BY PUBLIC WATER SYSTEM PROPOSED FOR ABANDONEMENT
ABANDONED
850



CONTAMINATED WELL LOCATIONS

ARCHITECTURAL & ENGINEERING DESIGN ASSOCIATES GEORGE W. ROSENVOLD RA ANDREW C. ABDALLAH P.E. ARCHITECT ENGINEER	DRAWN BY PROJECT NO.
DRAWING	DATE
PROJECT HAMLET OF ELLENBURG DEPOT TOWN OF ELLENBURG CLINTON COUNTY NY	SHT. S-1

APPENDIX E

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Center for Environmental Health 2 University Place Albany, New York 12203-3399

Mark R. Chassin, M.D., M.P.P., M.P.H.
Commissioner
Paula Wilson
Executive Deputy Commissioner

OFFICE OF PUBLIC HEALTH
Lloyd F. Novick, M.D., M.P.H.
Director
Diana Jones Ritter
Executive Deputy Director
William N. Stasiuk, P.E., Ph.D.
Center Director

November 23, 1993

Mr. Earl Barcomb, P.E., Director
Bureau of Hazardous Site Control
NYS Dept. of Environmental Conservation
50 Wolf Rd., Room 218
Albany, NY 12233

RE: **Registry Site Classification Decision**
Atlas Missile Silo #11
Site ID #510501
Ellenburg/Clinton County

Dear Mr. Bacromb:

Over the past several years we have been investigating contamination of private water supply wells near the Atlas Missile Silo #11 site in the Village of Ellenburg, Clinton County. Based on our data, there are about 30 water supplies that are contaminated with trichloroethene (TCE): six of these private drinking water supply wells have carbon filter systems because the contamination exceeds the 5 mcg/L Public Drinking Water Standard for TCE.

In August 1991 the site was proposed for listing as a Class 2 (copy enclosed). Although Mr. Ronald Tramontano signed the classification form, no action was taken. You should be aware that there is substantial community concern about health impacts and the potential for exposure to high concentrations of TCE. Because of the continuing presence of TCE in the groundwater and the existence of a potentially significant nearby source that appears to have contaminated or threatens to contaminate a number of private water supplies, I believe that the site represents a potential significant human health threat, and that the Atlas Missile Silo #11 should be listed as a Class 2 site, and that the State should enter into negotiations with the Department of the Army to investigate and remediate the site.

If you have any questions please contact Mr. Gary Litwin at 458-6306.

Sincerely,

G. Anders Carlson

G. Anders Carlson, Ph.D.
Director
Bureau of Environmental Exposure
Investigation

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233

Thomas C. Jorling
Commissioner

FEB 07 1994

Dear Sir & Madam:

The Department of Environmental Conservation (DEC) maintains a Registry of sites where hazardous waste disposal has occurred. Property located at *on Bull Run Road* in the *Town* of Ellenburg and County of Clinton and designated as Tax Map Number 70-1-4.2 was recently added as a Class 2 in the Registry. The name and site I.D. number of this property as listed in the Registry is Atlas Missile Site 5-11, #510009.

The Classification Code 2 means that this site poses a significant threat to public health or the environment and requires further investigation.

We are sending this letter to you and others who own property near the site listed above, as well as the county and town clerks. We are notifying you about these activities at this site because we believe it is important to keep you informed.

If you currently are renting or leasing your property to someone else, please share this information with them. If you no longer own the property to which this letter was sent, please provide this information to the new owner and provide this office with the name and address of the new owner so that we can correct our records.

The reason for this recent classification decision is as follows:
Trichloroethene, a hazardous waste disposed of at the deactivated missile silo, has contaminated groundwater in Ellenburg Depot. Wells have been contaminated in about thirty homes, six at levels high enough that carbon filtration systems had to be installed. All homeowners are believed to be drinking water shich meets State standards at present, but a Remedial Investigation is needed to determine if there is a concentrated source area of the contaminant and to fully characterize the threat posed by this contamination.

If you would like additional information about this site or the inactive hazardous waste site remedial program, call:

DEC's Inactive Hazardous Waste Site Toll-Free Information Number 1-800-342-9296 or
New York State Health Department's Health Liaison Program (HeLP) 1-800-458-1158, ext. 402.

Sincerely,

Robert L. Marino
Chief, Site Control Section
Bureau of Hazardous Site Control
Division of Hazardous Waste Remediation

Chemical found in area water

By STEVE MANOR
Staff Writer
Northern Clinton Bureau

.LENBURG DEPOT — Low
ls of trichloroethane, a
ning agent, have been
tected in the groundwater and
ne wells in Ellenburg Depot.
e trichloroethane (TCE) is
ved to have come from the
er Atlas Missile Silo site,
owned by the Town of Ellen-
rg and located on the Bull Run
ad.
hough the water is consid-
contaminated, it still meets
drinking-water standards,
ding to state officials.
The Town of Ellenburg, the
w York State Department of
onmental Conservation and
New York State Health
rtment aren't sure just how
ny wells have been affected.
The State Health Department,
ding to spokeswoman Susan
atten, began testing wells
eek and will continue this

We'll do well-water testing,
g door to door as needed,
g with the homes closest
missile site and working
here," she said.
said they are working
h Environmentally Concerned
zens of Ellenburg to gather
, addresses and telephone
rs of the people whose
might have been affected.
oncerned Citizens member
thia Rowe, who lives in
burg Depot and whose
ater is currently being
says more than 30 homes
be impacted by the TCE
amination problem. She said
east five homeowners have
arbon filters installed by
on their well-water
s.
said Concerned Citizens
documents that show the
burg Town Board wasn't
of the TCE contamination
n. It was a Concerned
ens consultant who
overed the problem while
earching some other en-
ental issues.
burg Depot resident Bet-
iss had a carbon-filtering
installed by the DEC to
her water well over a year
"We're so very thankful for
e DEC has done — their
esponse and action — so we
t least use our well water,
h was excellent water, up
a few years ago," she said.
iss would like to see the
et a federal grant to clean
groundwater or to build a
ystem for the community
lenburg Depot.
ay Lowe of the DEC
al Office in Ray Brook con-
that some homes in the
rg Depot area have al-
been equipped with carbon
s. "At this point, only very
low levels of TCE have been found," Lowe said.

Ellenburg Supervisor James Bilow said the TCE was found in Ellenburg Depot groundwater last year as the result of an oil spill at the Agway outlet there.

"If it hadn't been for the oil spill, the water quality would never have been checked, and we would never have known. The town hadn't received an official complaint from a landowner until this past September, but things have been moving very rapidly since that time," Bilow said.

He said the town was contacted last week by the U.S. Army Corps of Engineers. "They recognize that there's a problem...," Bilow said. "We are really pleased that they are getting involved and everyone, the state and local health department, the DEC, the town, everyone is working together on this problem."

He feels the TCE contamination problem at the Ellenburg missile site is not an isolated case. "Similar contaminants have been found at the privately owned missile site at Harrigan's Corners near Ellenburg Center. I think this is a bigger problem than anyone admits. It was first thought that the contaminant was limited to the north side of the Great Chazy River but now it has been found on the south side as well," he added.

DEC Engineer Dan Steenberge said that the Bull Run Road missile site and silo itself haven't been proven to be the source of the TCE, but it is likely.

Steenberge said DEC has determined that the missile site is not a hazardous-waste site, but there are contaminants in the groundwater there, and the same contaminants have been found a mile and a half away.

"Water samples taken by both the department (DEC) and the Army Corps show low levels of contaminants near the silo and very low levels at the homes affected. These samples have shown that the water is within Health Department drinking water standards, but there's still contaminants in it," Steenberge added.

The contamination has to meet certain criteria for the area to be designated a hazardous-waste site. It didn't meet those criteria.

"We realize that it is frustrating for the people involved," Steenberge said. "While there are contaminants in their drinking water, the water still meets state ... standards. They are looking for help, and there's really not that much we can do. In this particular case it falls to state Health Department, who will doing all the testing in the weeks to come."

Taking a licking

Photo/Judy Phillips

Ice-cream social: Kelly Arnold's Petrova School second-grade class celebrated the 90th anniversary of the ice-cream cone recently by going out for an ice cream in downtown Saranac Lake.

Rangers get extension on their search for hiker

By MARY THILL
Staff Writer
Saranac Lake Bureau

INDIAN LAKE — State forest rangers have permission to continue searching the High Peaks for a missing hiker until Friday.

A tip from two hikers who told rangers they saw 44-year-old Thomas Carleton hiking near Indian Pass on Oct. 9 gave the search a new life, according to Forest Ranger Gregory George. The effort might otherwise have been called off today.

George downplayed the discovery of evidence of a small fire at the outlet of Scott Pond on a branch of the Indian Pass trail. A scrap of a Victor newspaper was discovered at the primitive camping site. Victor is a rural suburb east of Rochester, about 50 miles from Carleton's hometown of Skaneateles, a bedroom community west of Syracuse.

"We don't know if it had a lot of significance," George said. "We're not putting a lot of stock in it."

Carleton entered the High Peaks on Oct. 9 on what was supposed to be a solo three-day trip. He did not return and left no clues to his whereabouts other than his car parked at the Adirondak Loj trailhead.

Twenty rangers spent Tuesday scouring the Indian Pass-Wallface Mountain area, George said. Two rangers worked only on contacting other hikers who were in that area over Columbus Day weekend. So far, that effort has turned up the tip from the two hikers who said they saw Carleton at Scott Clearing.

Because Carleton brought a .357 Magnum with him, an unusual step for an experienced hiker, rangers at first thought the prison psychologist might have been suicidal.

"We spoke to a hiking companion of his who told him he would not go into the woods without a gun for fear of rabid animals. It's unusual. Not that many hikers carry guns with them," George said. "But the more we've gotten into it, the more we think he actually got lost or got injured somewhere where he can't be seen."

George described the off-trail terrain around Wallface as rugged and thickly vegetated.

A Department of Environmental Conservation helicopter will ferry rangers in to continue the search today.

Local woman pleads not guilty to false record in adoption case

By LOHR McKINSTRY
Staff Writer
Southern Essex Bureau

MIDDLEBURY, Vt. — Port Henry resident Angela Harriman pleaded innocent in Vermont District Court this week to one count of felony false swearing in a highly publicized child-custody case.

Harriman, 22, of Route 9N, Port Henry appeared before District Court Judge Edward Cashman and was allowed to remain free on her own recognizance pending trial. She is accused of filing an affidavit in Addison County (Vt.) Probate Court that stated her boyfriend, and not her husband, was the father of a baby boy she was putting up for adoption, when in fact her estranged husband was the father. He sued for custody of the baby.

The adoption fight ended with Daniel Harriman being named the child's father and Donna McDurfee listed as the mother on the birth certificate. He was granted visitation rights and the child, born in November 1992, is being raised by the McDurfees.

Vermont State Police Detective Sgt. David Yustin said an investigation showed Angela and Daniel Harriman lived together in March and April 1992 while he was in the U.S. Air Force and stationed at Barksdale Air Force Base, La. Yustin said he has statements from Harriman's brother and sister-in-law in Churubusco, that the couple spent two nights at their home and slept on the sofa, after March 1991.

15 miles of the school.

Moriah Central School officials said Angela Harriman moved into an apartment on Route 9N this summer that measures 14.6 miles from St. Mary's when a special route, suggested by Moriah parents of St. Mary's students, is used to compute the distance.

Angela Harriman does not have a listed telephone number and could not be contacted for this story.

Busing St. Mary's students from Moriah has twice been defeated by school district voters, in 1990 and 1993, but each time the state law on private-school transportation has been invoked with the 15-mile provision. Another student was used to

pper sawmill project set

IPPER LAKE — A new
-of-the-art sawmill will
e as many as 70 jobs at a

The company will invest nearly $2 million to buy property in the Adirondack Park, an

APPENDIX F

CLINTON COUNTY DEPARTMENT OF PUBLIC HEALTH

P.O. BOX 769 • PLATTSBURGH, NEW YORK 12901

JOHN V. ANDRUS
Director
Public Health

TEL: (518) 565-
Administration 3250
Environmental 3231
Nursing Division 3270
D & T (Clinics) 3400
WIC Program 3280
Health Education 3250
FAX: (518) 563-4586

October 11, 1991

Darlene & Neil Rowe
RD 1, Box 19
Ellenburg Center, NY 12934

Dear Mr. & Mrs. Rowe:

The Clinton County Department of Public Health has been involved with investigating several complaints relating to water clarity and odor problems in your area. At this time, this department has determined the nature of the contaminant which has impacted your well. Every effort is being made to insure that the problem does not reoccur in the future.

Currently, the contaminant is working its way through the system and water clarity should improve over the next few days. Unfortunately, a definite time as to when the water clarity will improve is impossible to predict without hydrogeologic data.

Enclosed is a copy of the disinfection procedures for individual wells. This department will notify all homeowners who have been affected when the disinfection process can begin.

The addition of a disinfectant to your well, at this time, would be premature. The amount of organic material still present would deactivate the chlorine and, therefore, would not be effective.

The Clinton County Department of Public Health will take additional bacteriological samples after the disinfection procedure. Residents should continue using bottled water until further notice.

Thank you.

Sincerely,

Edward Snizek
Director of Environmental Health

ES/pm

CLINTON COUNTY DEPARTMENT OF PUBLIC HEALTH

NUISANCE COMPLAINT INFORMATION FORM

FILE

* SECTION A - TO BE COMPLETED BY COMPLAINANT

Type of Complaint

Water ✓ (1) Food ____ (2) Housing ____ (3) Vermin ____ (4) Smoking ____ (5) Solid Waste ____ (6) Sewage ____ (7) Indoor Air ____ (8) Air Pollution ____ (9) Other ____ (10) Specify ____

ALLEGED VIOLATOR:

NAME Michael + Chris Trombley MAILING ADDRESS RR 1 ~~Rt 190~~ Box 109

Ellenburg Center, NY 12934 PHONE # (H) 594-7348 (W) 492-7115 Chris

IS THE NUISANCE AT A FACILITY PERMITTED BY THE HEALTH DEPARTMENT? NO ✓ YES ____

IF YES, TYPE OF FACILITY ____, NAME OF FACILITY ____

LOCATION OF PROBLEM - (TOWN)/VILLAGE/CITY Ellenburg LEG. DIST. 2

DIRECTIONS TO GET THERE On Star Rd (Rt 190) - 4 miles from corner of Old 190 & 190. On farm on right. blue house - white barn with blue trim end of barn has ~~Our~~ picture of Cow with Trombley written above or below it.

NATURE OF PROBLEM Water smell like manure

COMPLAINANT:

NAME Leona Martin MAILING ADDRESS R.R. 1 Box 57

Ellenburg Dept, NY PHONE # (H) 594-3225 (W) 565-3250.

SIGNATURE Leona Martin DATE 3/09/93

****

* SECTION B - TO BE COMPLETED BY INVESTIGATOR COMPLAINT NO. #24

PHT ASSIGNED ____ DATE 2/13/93 ASSIGNED BY Sm

SR. PHT ASSIGNED ____ DATE ____ ASSIGNED BY ____

INVESTIGATION REPORT AND CORRECTIONS REQUIRED Samples taken problem resolved self.

NO. OF VISITS Numerous INVESTIGATOR JM Klein

OTHERS PRESENT ____

03/91

COMPLETED ✓

CLINTON COUNTY DEPARTMENT OF PUBLIC HEALTH

NUISANCE COMPLAINT INFORMATION FORM

* SECTION A - TO BE COMPLETED BY COMPLAINANT

Type of Complaint

Water_____(1) Food_____(2) Housing_____(3) Vermin_____(4) Smoking_____(5) Solid Waste_____(6) Sewage_____(7) Indoor Air_____(8) Air Pollution_____(9) Other_____(10) Specify_____

ALLEGED VIOLATOR:

NAME_____ MAILING ADDRESS_____

_____ PHONE # (H)_____ (W)_____

IS THE NUISANCE AT A FACILITY PERMITTED BY THE HEALTH DEPARTMENT? NO_____ YES_____

IF YES, TYPE OF FACILITY_____, NAME OF FACILITY_____

LOCATION OF PROBLEM - TOWN/VILLAGE/CITY_____ LEG. DIST._____

DIRECTIONS TO GET THERE Star Rd.-Old Rt 190 (Corner A) on right side 5th Trailer

NATURE OF PROBLEM Water smells like marine - Started This morning - laundry smells like marine & is discolored

COMPLAINANT:

NAME Brenda Raymond Burdo MAILING ADDRESS PO Box 23, Star Rd. Ellenburg, NY 12933 PHONE # (H) 594-3821 (W)_____

X SIGNATURE_____ DATE_____

****

* SECTION B - TO BE COMPLETED BY INVESTIGATOR COMPLAINT NO._____

PHT ASSIGNED_____ DATE_____ ASSIGNED BY_____

SR. PHT ASSIGNED_____ DATE_____ ASSIGNED BY_____

INVESTIGATION REPORT AND CORRECTIONS REQUIRED_____

NO. OF VISITS_____ INVESTIGATOR_____

OTHERS PRESENT_____

03/91

COMPLETED

Grandmother is having problem.
Rhoda Nichols (Stark Rd. - Old Rt. 190 corner - ON
Old Rt 190 corner 2 house south of corner
She has smell & color.

Gregory Garvey 561-7373
Steve Mahoney

Have Greg to review situation
JR &

\# MAKE suggests

: No one available to with,
: will go by themself?

talked to Gregory Garvey on 3/10/92 (JP)

Working [illegible] JR Trombley. [illegible] Problem
They set aside some federal $ so he
can store manure for at least 6 months.
The project will be this summer.

If there is a problem - Not alot
what USDA can do.

Warned J.R. Not let waste go over
top. Will check c JR on this.

Michael Trombleys
Problem winter spread of manure
related to weather conditions (Thaw)

Will take another ride up there
tomorrow

believes problem is winter-spread MANURE
& run-off. Believe problem is Not a

point ~~surface~~ source. If a pit it would be a continuous problem.

3/10/92 / 2:38 pm

Barbara LaBombard 594-3986 (W-NACS Elemen...

- Share same well was as Rhoda Nichols

Water is coming like mud - started 3 days ago. (Started when thaw begins - odor in Hot water).

Getting a lawyer. Will contact DEC. Her address:

PO Box 93
Ellenburg, NY 12933

Chris & Mike Trombly (H) 594-7348 (W) 492-7115

3/10/92 / 12:51 pm

She ~~believes~~ want the problem located. Well house is dry even though not cemented. Will cement tonight.

Water is brown & smells like manure.

Sandy & Gerald La Barre had pond that had to be moved for New Road. They had to dynamite for new POND.

Francis LeClair has manure pile Near LaBarre's pond.

Very Frustrated - wants to Know the problems ~~&~~ - wants full Sanitary survey, if can't dye tell her why.

Poor Communications with CCHD

She does not believe same problem as Burdo's.

3/10/92 13:46

Neil &
Darlene Rowe ☎ 594-7557
Live Star Rd. – 3rd house on right
Water problems started 3/9/92 (smell) & 3/10/92 (colored).
Have two small children & baby S.I.T.
Address: RD1, Box 19
Ellenburg Center, NY
12934

CLINTON COUNTY DEPARTMENT OF PUBLIC HEALTH

P.O. BOX 769 • PLATTSBURGH, NEW YORK 12901

JOHN V. ANDRUS
Director
Public Health

TEL: (518) 565-
Administration 3250
Environmental 3231
Nursing Division 3270
D & T (Clinics) 3400
WIC Program : 3280
Health Education 3250
FAX: (518) 563-4586

M E M O R A N D U M

TO: Greg Harvey
FR: Susan Thew
DA: 2/21/92
RE: Complaints in Ellenburg

==========

2/21/92 Tried to call Greg to refer complaint
2/24/92 Greg Harvey stated he'd like us to forward all information to his office for further action. Greg Harvey also stated that he spoke to Mr. Trombly this morn. and that his water was clear on Saturday 2/22/92 and that it would be impossible to disinfect well because the cows are drinking all the time.
2/25/92 Sent how to disinfect well info. to Mrs. LaBarre.

CLINTON COUNTY DEPARTMENT OF PUBLIC HEALTH

NUISANCE COMPLAINT INFORMATION FORM

FILE

SECTION A - TO BE COMPLETED BY COMPLAINANT

Type of Complaint

Water ✓ (1) Food ___ (2) Housing ___ (3) Vermin ___ (4)
Smoking ___ (5) Solid Waste ___ (6) Sewage ___ (7) Indoor Air ___ (8)
Air Pollution ___ (9) Other ___ (10) Specify ___

ALLEGED VIOLATOR:

NAME Unknown MAILING ADDRESS ___

___ PHONE # (H) ___ (W) ___

IS THE NUISANCE AT A FACILITY PERMITTED BY THE HEALTH DEPARTMENT? NO ✓ YES ___

IF YES, TYPE OF FACILITY ___, NAME OF FACILITY ___

LOCATION OF PROBLEM - TOWN/VILLAGE/CITY Ellenburg LEG. DIST. 2

DIRECTIONS TO GET THERE 5 mile down Rt. 190 from Adirondack Cent. School on right side of road,

NATURE OF PROBLEM water has brown color and strong oder
problem started in the morning on 2/20/92

COMPLAINANT:

NAME Mike Trombley "Christine" *Walter* 594-7382 MAILING ADDRESS Box 109, RD 1
Ellenburg Center, NY, 12934 PHONE # (H) 594-7348 (W) ___

SIGNATURE ___ DATE 2/20/92

****

SECTION B - TO BE COMPLETED BY INVESTIGATOR COMPLAINT NO. #20

PHT ASSIGNED ___ DATE ___ ASSIGNED BY JMT

SR. PHT ASSIGNED ___ DATE ___ ASSIGNED BY ___

INVESTIGATION REPORT AND CORRECTIONS REQUIRED

Drilled / on his own farm (in front of barn) 150' deep
Another farm 2½ miles away, Barbosa & Bow-Tar, Another farm 1 mile away Gr Trombly to Carter
bubbles in sink, brown color, well also supplies water to the barn
look for possible cross connections.

NO. OF VISITS Numerous INVESTIGATOR JMT

OTHERS PRESENT ___

3/91

COMPLETED ✓ 12/93

Town Board of Ellenburg
P.O. Box 7
Ellenburg N.Y.
12933

January 21, 1997

Darlene and Neil Rowe
Star Road, Ellenburg Corners
N.Y.
(518) 594-7557

This letter is in regards to the proposal of town water in Ellenburg.
In 1991, after receiving several complaints of odor and discoloration, the Clinton County Health Department conducted a door to door survey, collecting samples of water on the Star Rd in Ellenburg Corners.
Organic materials and bacteria contaminants were found working its way through our water systems. We were advised not drink our water and to begin disinfecting our wells.
Every spring thaw and rain during the summer we always have discolored water and terrible odor in our water systems. We wonder what contaminants lie within our wells.
Our drinking water is now purchased weekly and has become very costly.
I hope you see the need for town water to be available to our area.
Listed below are names and telephone numbers of neighbors who also feel the need for clean water.

Barb and Brian LaBombard
Star Road, Ellenburg Corners
N.Y.
(518) 594-7487

Carol LaClair
Star Road, Elleburg Corners
N.Y.
(518) 594-7690

Enclosure

Thank you,
Darlene Rowe
Darlene and Neil Rowe

New York State Department of Environmental Conservation
Ray Brook, New York 12977
Telephone (518) 891-1370

Thomas C. Jorling
Commissioner

May 31, 1991

Mr. Donald Lancto
Old Route 190
Ellenburg Center, New York 12934

file

Re: Spill No. 9004987
Ellenburg Center, New York

Dear Mr. Lancto:

Enclosed are the results from the laboratory analysis of a water sample collected at your residence on May 9, 1991. Volatile organic compounds were not detected in the water sample. Bacteria contamination was present in the sample.

As per our phone conversation, Fourth Coast Pollution Control will be advised to contact you to arrange for removal of the carbon filters and ultraviolet light purification unit.

If you have any questions regarding the interpretation of these results or the use of this water supply, please contact the Clinton County Department of Health (518) 565-3250.

Sincerely,

Richard L. Wagner, P.E.
Regional Spill Engineer

By: Arthur W. Stemp
Water Program Specialist I

RLW:AWS:bf
Enc.

cc: Clinton Co. Dept. of Health, w/attach.

Rick,

Remove system from this residence.
Phone number (518) 594-7019 (Home)
483-7882 (Work)

UNITED STATES POSTAL SERVICE

DATE: *January 17, 1997*

OUR REF:

SUBJECT:

TO: *To Whom it may concern:*

On April 18, 1992 I became the new Postmaster of Ellenburg, N.Y. 12933. This new postal position brought more responsibility including location, roads, names and faces.

Having been in perfect health all my life I noticed things began to change by late summer to early fall. The result was my fingernails began to change shape, thicken and develop bumps and the most puzzling was the purple streak under the nails. My family doctor was totally puzzled. He consulted with several colleagues and decided to send me to a Dermatologist "Euclid H. Jones." Several different tests were taken but the most painful was the biopsy in which included drilling threw the nail. After all the test results and prescription drugs there was still no answer to my problem. In consulting with Dr. Jones, his first question was, "What have you done differently in the last 6 months?" My response was the new work location and drinking excess water from the existing building. His advise was to have the water tested in which we did. In conversation with other occupants of the building I found that they had not been drinking the water because of their own experience. When the water level was high there was a strong odor of fuel and even at times a black film would be in the sink.

Within a short period of time after I stopped drinking the water I noticed my fingernails were improving and without another treatment or any medication. The purple streaks are permanent damage but all other infections have cleared up and since I have been in great health.

In conclusion I feel that there is no doubt in my mind that the drinking water at the Ellenburg Municipal building is where my problem started and therefor the final result of my recovery is proof enough.

Postmaster,

Dianne L Bombard

CARL L. TROMBLEY C.E.O.
164 WEST HILL RD
ELLENBURG CTR NY 12934

January 21, 1997

Dear Mr Glen Rouie.

In responce To The proposal of Town Water, I would like To say That it is a good proposal That will benefit a number of people, including my immediate neighbor Neil Trombley. He has invested Thousands of dollars in a water system That he cannot drink. In addition his water Turns all faucets, pipes, sinks, and washer savagly brown That is next To impossible To clean. The Thought of being able To hook-up To good water is Wonderful To him, and I am sure To many, many more in The Ellenburg Center area.

Sincerely
Carl L Trombley CEO

APPENDIX G

EMPIRE
SOILS INVESTIGATIONS INC

HYDROGEOLOGIC EVALUATIONS
PETROLEUM SPILL INVESTIGATION
ELLENBURG CENTER, NEW YORK
SPILL NO. 8804687
P.I.N. SP98260

Prepared For:
NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
REGION NO. 5

Prepared By:
EMPIRE SOILS INVESTIGATIONS, INC.
LATHAM, NEW YORK

FILE NO.: ATA-89-274
JANUARY 1990

585 TROY-SCHENECTADY ROAD, P.O. BOX 280, (RT. 7), LATHAM, NY 12110, 518-783-1555, TELEFAX 518-783-1323

No measurable free-phase petroleum product has been observed in the wells during the course of the study. Within the project site one contaminant plume is observed in the area of monitor MW-102 and supply well SW-1. The extent of the contaminant plume has not been delineated through his study.

F. Conclusions

Petroleum contamination of private supply well SW-2 at the Daighnault residence has been documented by the sampling performed on September 9 and December 1, 1988 and May 10, 1989 by C.T. Male Associates. The analytical results of the above mentioned sampling events of SW-2 and neighboring supply wells are presented in Appendix D. All of these sampling events were performed prior to the initiation of this study. It is doubtful that supply well SW-2 can be rehabilitated as contamination was still noted within the groundwater at SW-2 after having been pumped from October to December 1988.

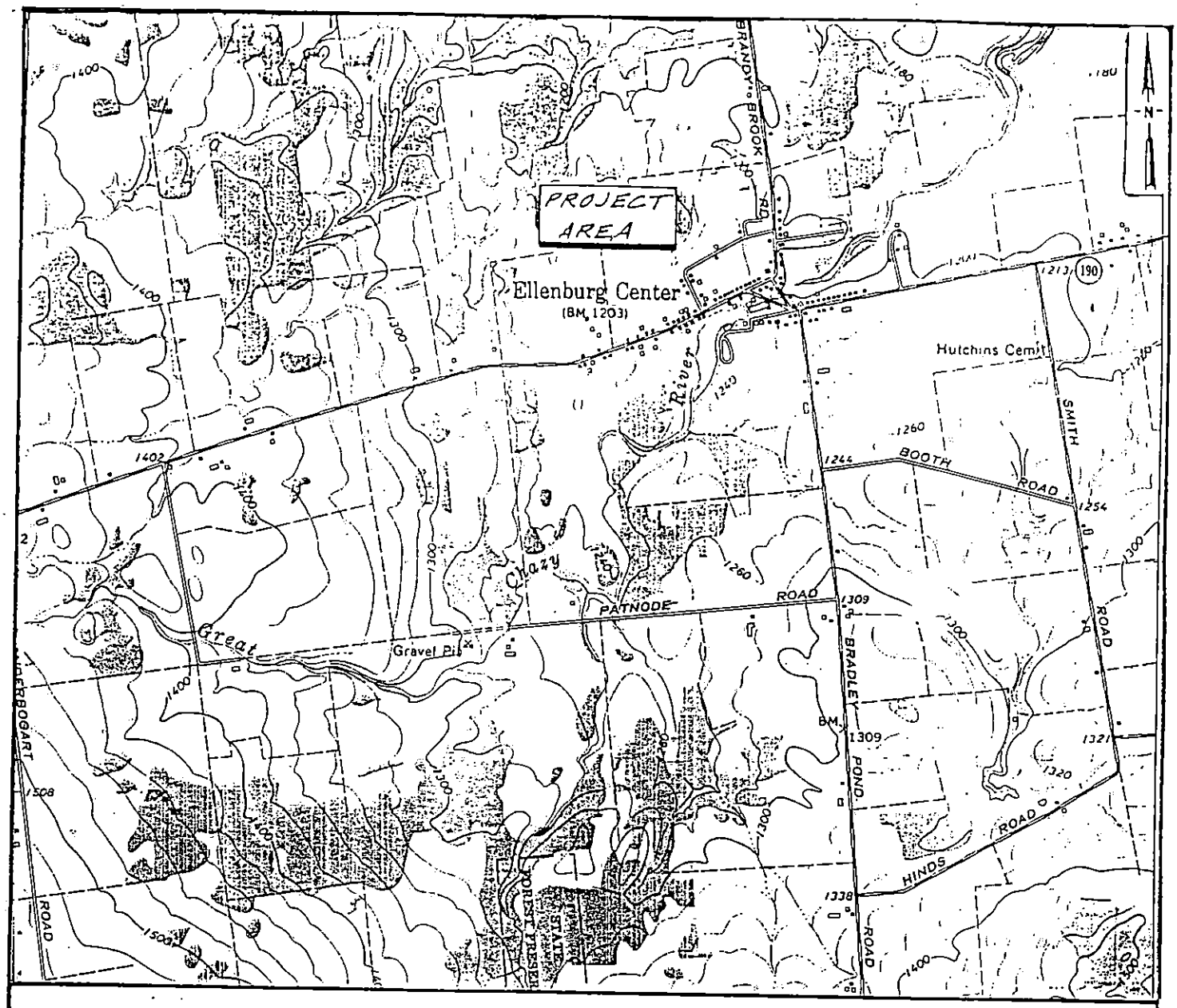
The aquifer impacted by the contaminant release is comprised of unconsolidated materials of well graded sands and gravels with lesser amounts of silt. It is thought that the consolidated aquifer (bedrock) has been impacted by the contaminant release in the overburden soils as

reflected from the results of sampling at the Daighnault newly drilled well. Groundwater exists at depths ranging from 4.0 to 18.0 feet. The direction of the groundwater flow beneath the site is generally to the north-northeast.

The presence of soluble petroleum contamination of groundwater within the area has been documented by this study. Through this study it was determined that the area of the former underground storage tank pit is the source of the contamination of concern. There is one contaminant plume apparent beneath the site, originating from the area of the former underground storage tank pit. The areal extent of the contamination to the north and northeast (hydraulic downgradient) was not fully defined through this study. It has been documented from earlier sampling events on September 9, 1988 and May 10, 1989, that the Torville private supply well was found not to contain any VOC's above the detection limit of the test method utilized. This well is situated downgradient from the identified contaminant source.

G. Recommendations

Contaminant source clean-up should be implemented to remediate the contamination of concern. For this the contaminated soils within the former underground storage tank pit area should be removed. The excavated soils should be



SCALE 1:24000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 5 0 1 KILOMETER

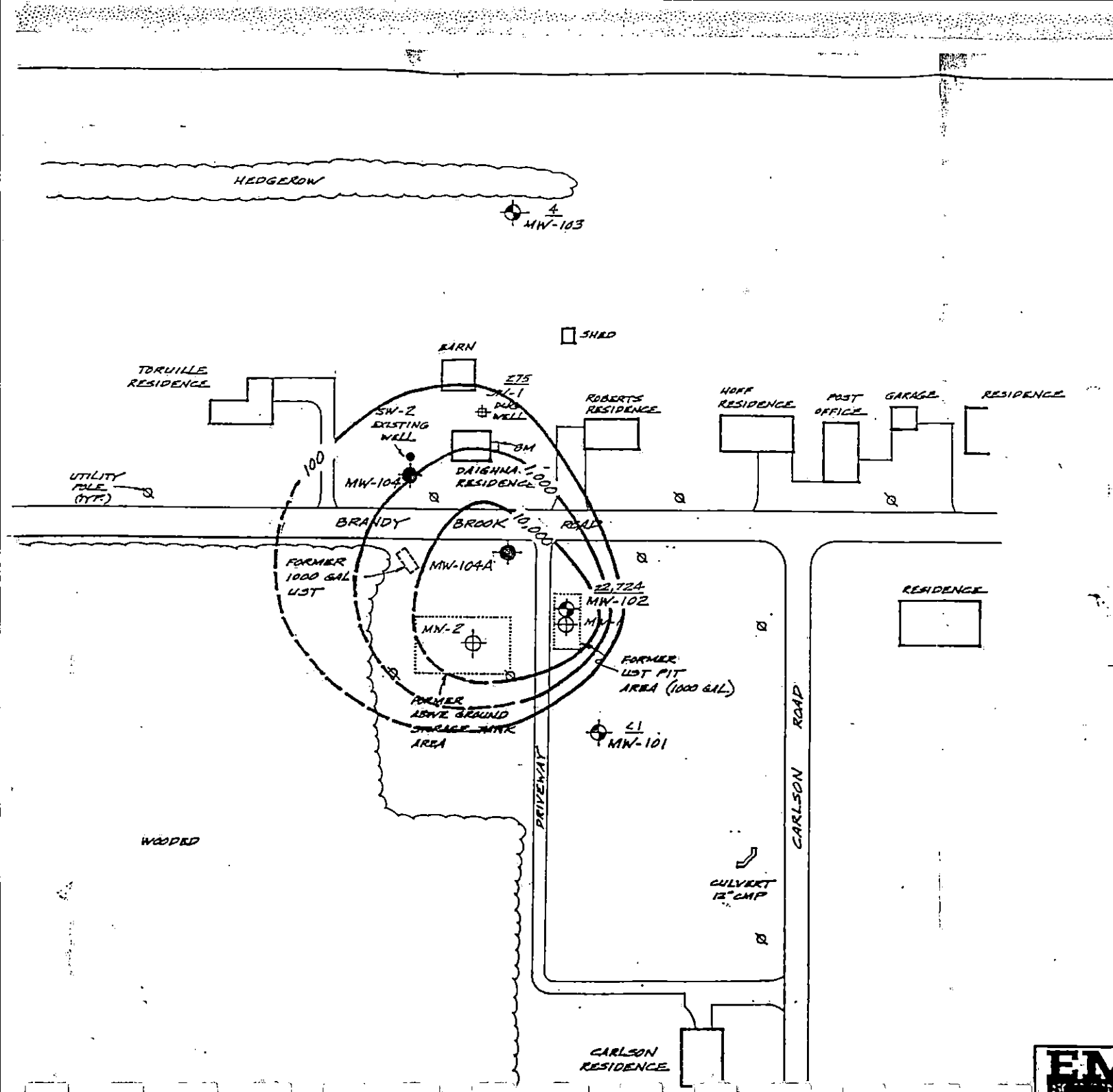
CONTOUR INTERVAL 10 FEET
DATUM IS MEAN SEA LEVEL

EMPIRE SOILS INVESTIGATIONS INC.

PETROLEUM SPILL INVESTIGATION
ELLENBURG CENTER, NEW UORK

SITE LOCATION MAP

DR.BY:	SCALE: As Shown	PROJ. NO. ATA-89-274
CK'D.BY:	DATE: 1-90	DRWG.NO. 1



LEGEND

MW-104 — Test Boring Compl… Empire Soils on 1…

MW-101 — 2" PVC Groundwate… Well Installed by …

MW-1 — 4" PVC Underdrain … ation Well Instal… on June 5, 1989

SW-1 — Daighnault and Rol… Supply Well Dug/D… Others

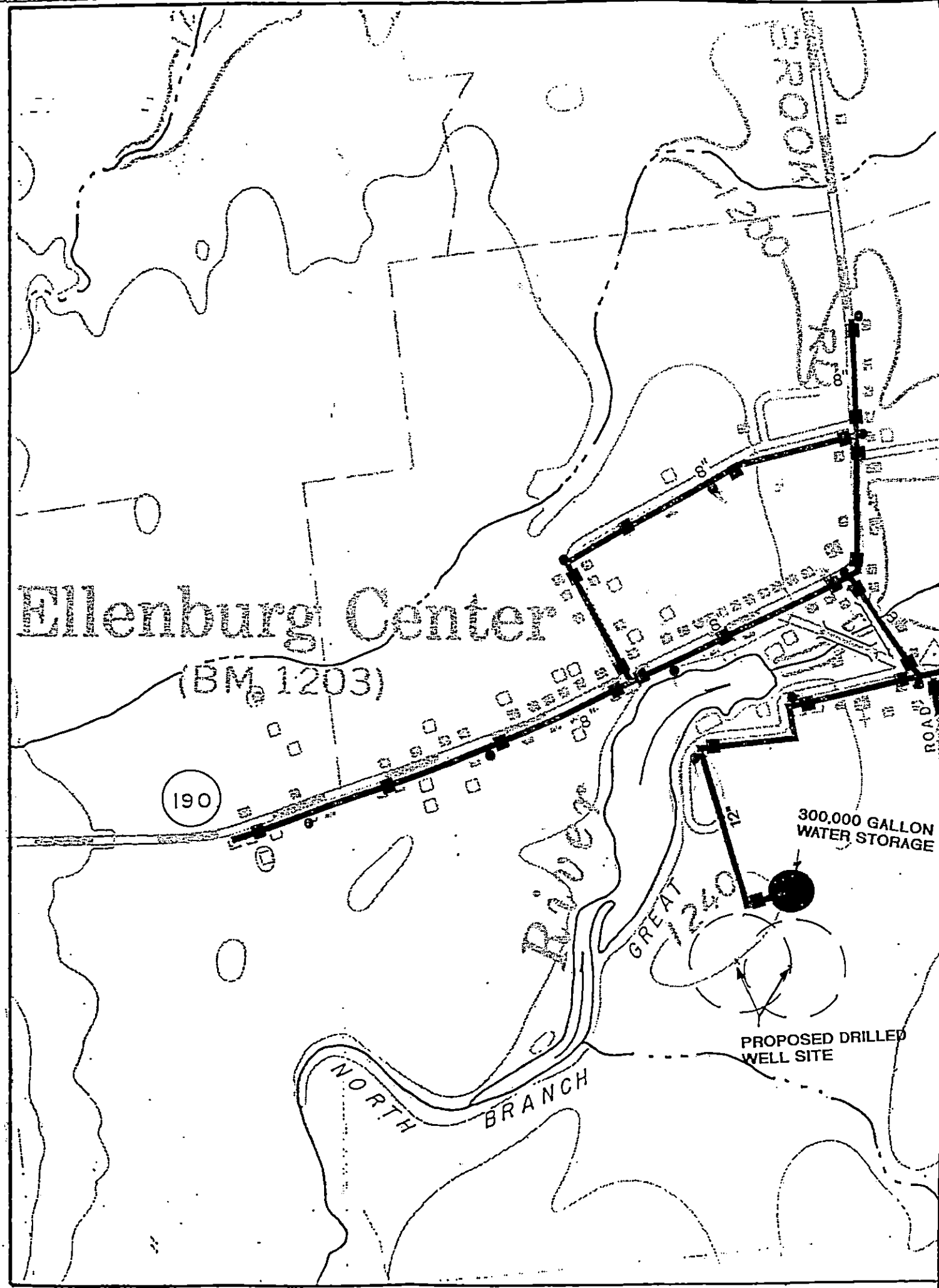
SW-2 — Daighnault Private… Installed by Othe…

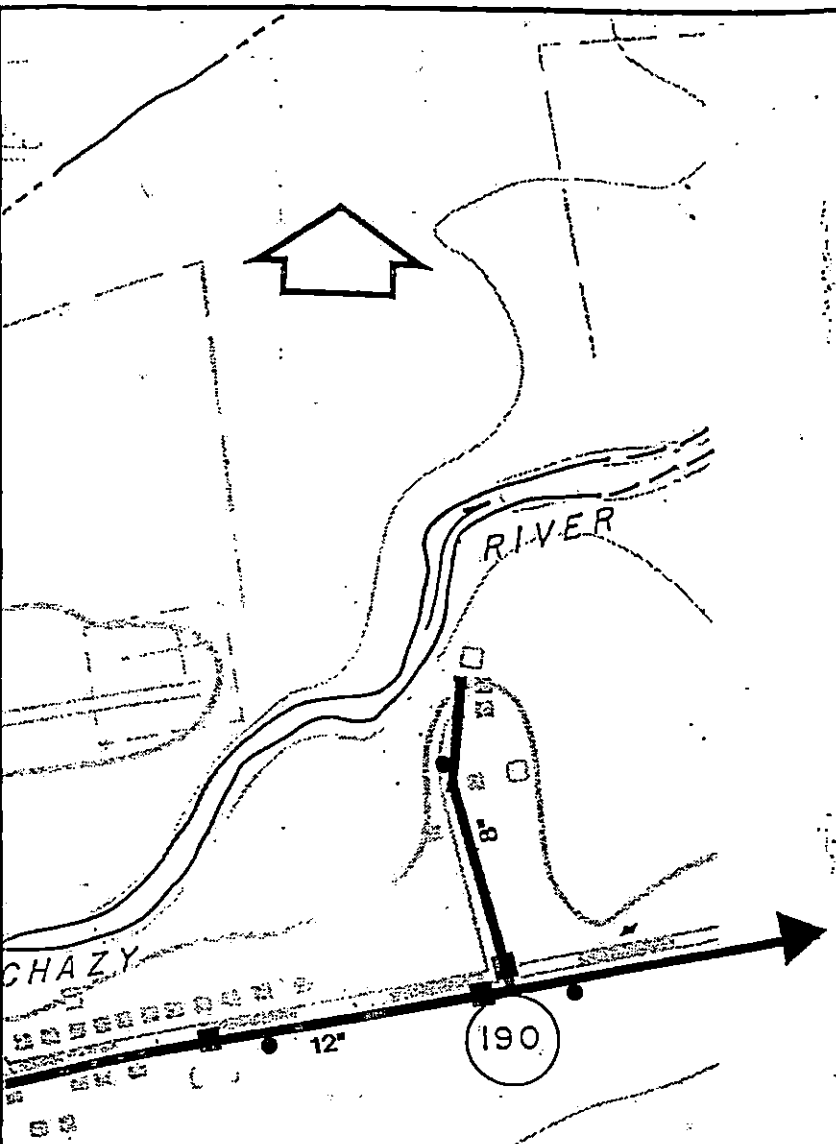
12 — Denotes Concentrat… Detected VOC's in … billion at Respect… and Supply Well Lo…

100 — Isopleths for Obse… ant Concentrations … (dashed where infe…

EMPIRE

APPENDIX H


Ellenburg Center
(BM 1203)
190
8"
8"
8"
8"
12"
ROAD
300,000 GALLON
WATER STORAGE
GREAT
PROPOSED DRILLED
WELL SITE
NORTH
BRANCH



3.6 MILES OF 12" TRANSMISSION MAIN TO ELLENBURG CORNERS.

NOTE:

NO WATER DISTRIBUTION SYSTEM PRESENTLY EXISTS.

TANK

POND

BRADLEY

LEGEND

NEW WATER DISTRIBUTION SYSTEM

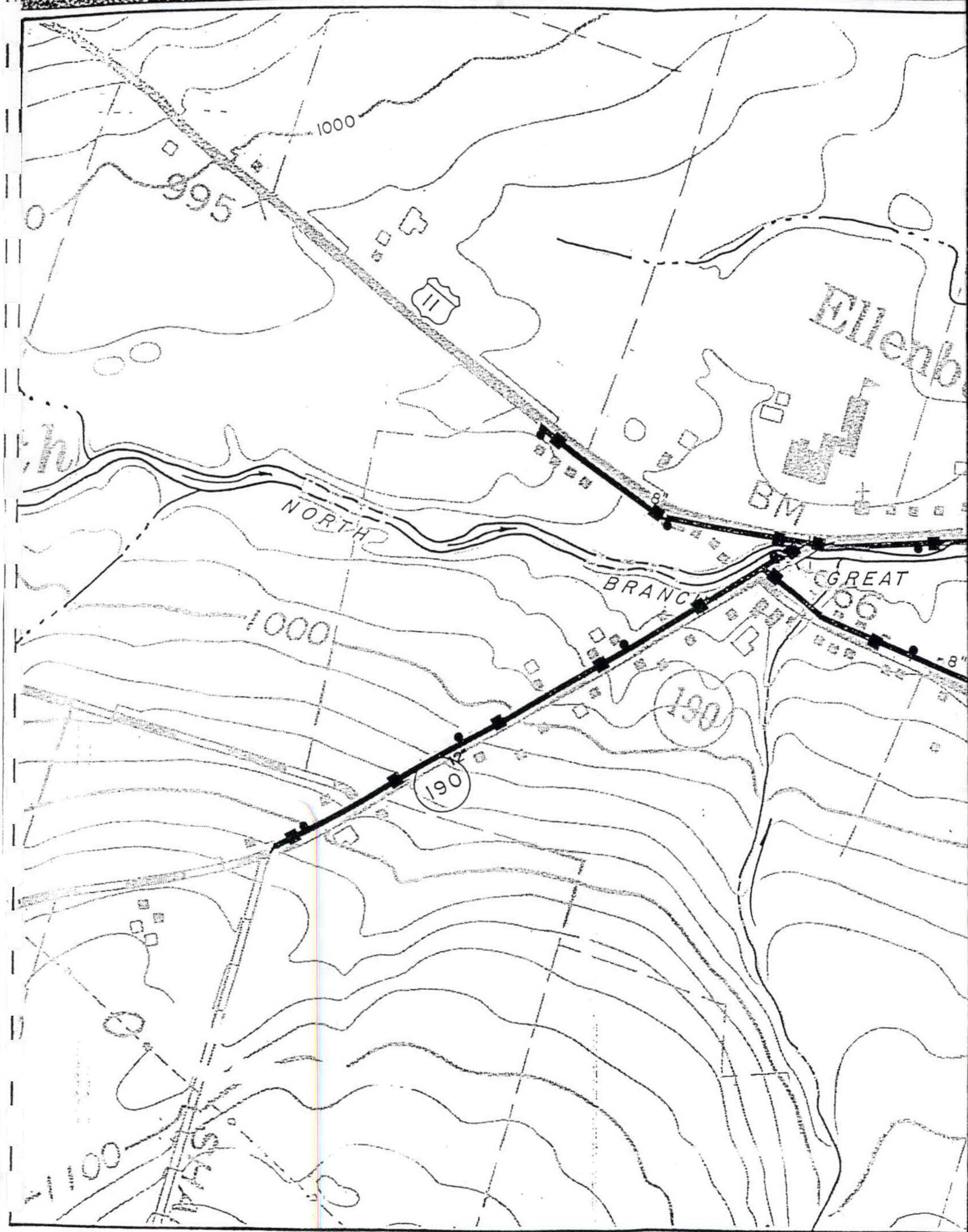
TYPICAL HYDRANT LOCATION

TYPICAL MAIN LINE VALVE LOCATION

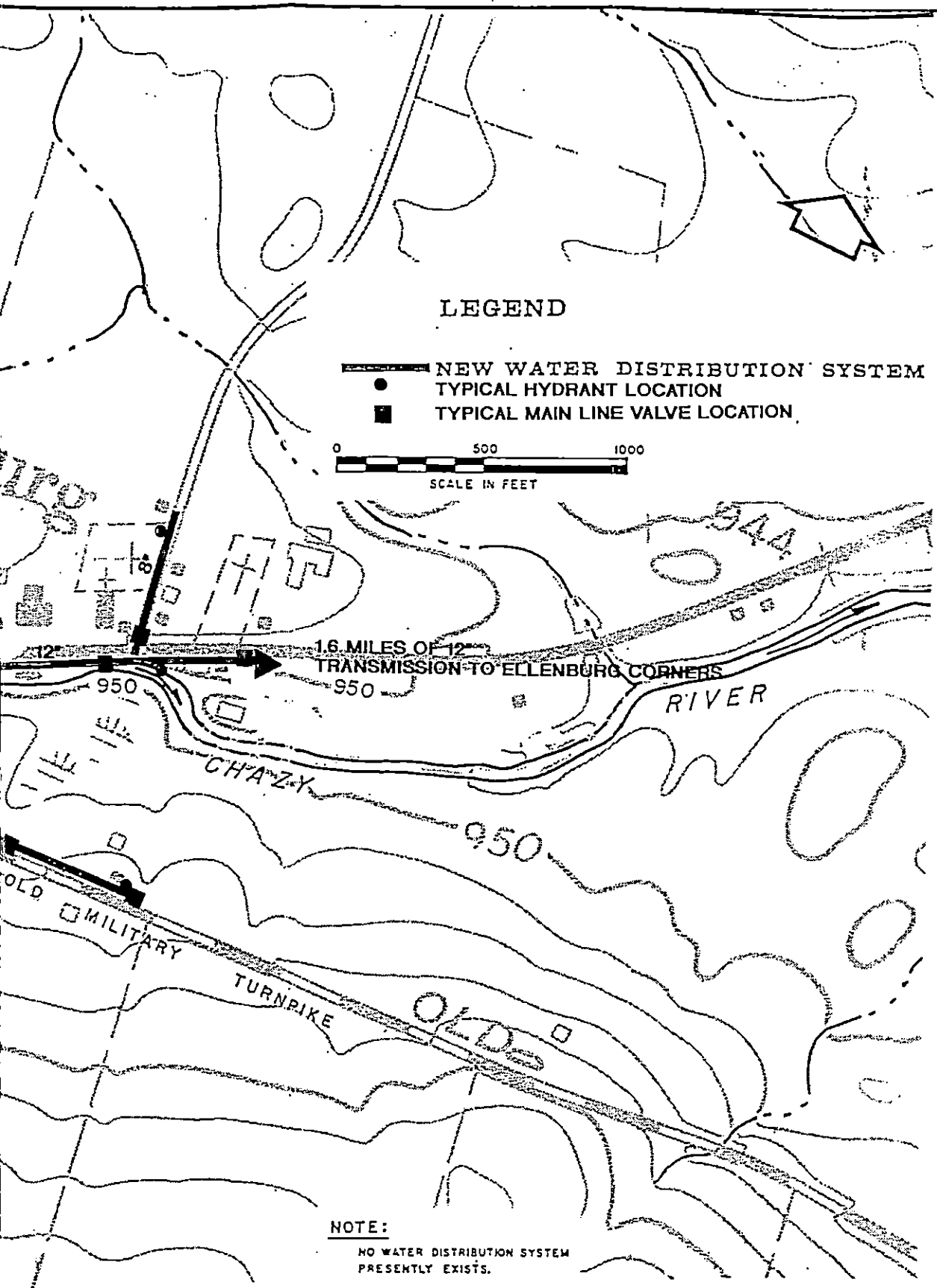
0 500 1000

SCALE IN FEET

REVISED: MK. BY DATE	ARCHITECTURAL & ENGINEERING DESIGN ASSOCIATES. GEORGE W. ROSENVOLD RA. ARCHITECT; ANDREW C. ABDALLAH P.E. ENGINEER	DRAWN BY
		PROJECT NO. —
	DRAWING: ELLENBURG CENTER DISTRIBUTION SYSTEM	DATE
CHECKED BY:	PROJECT: HAMLET OF ELLENBURG CENTER TOWN OF ELLENBURG CLINTON COUNTY, NEW YORK	SHT. ECTR1
DATE:		



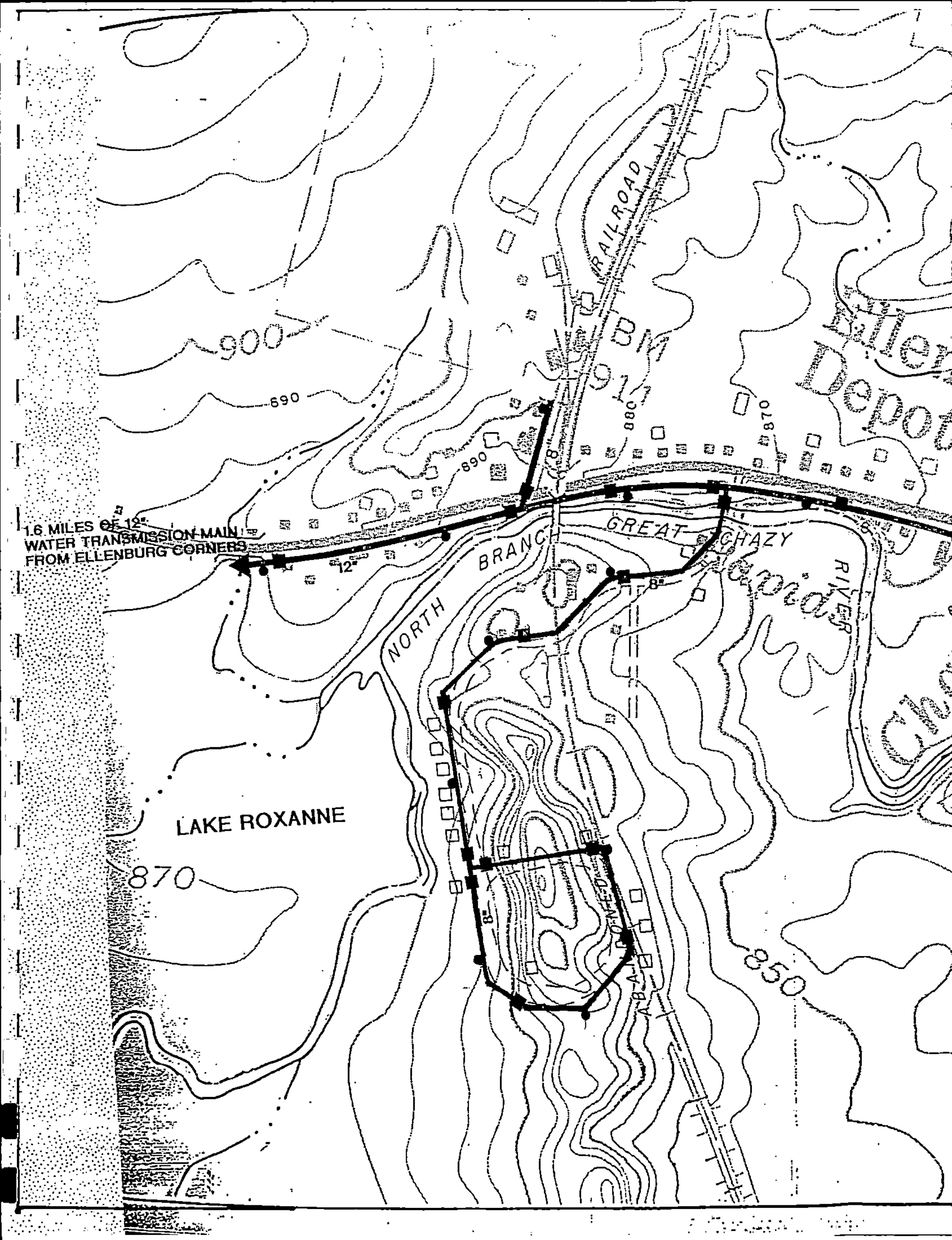
1000
995
11
Ellenb
8"
BM
NORTH
BRANCH
GREAT
196
1000
8"
190
12"
190
1100

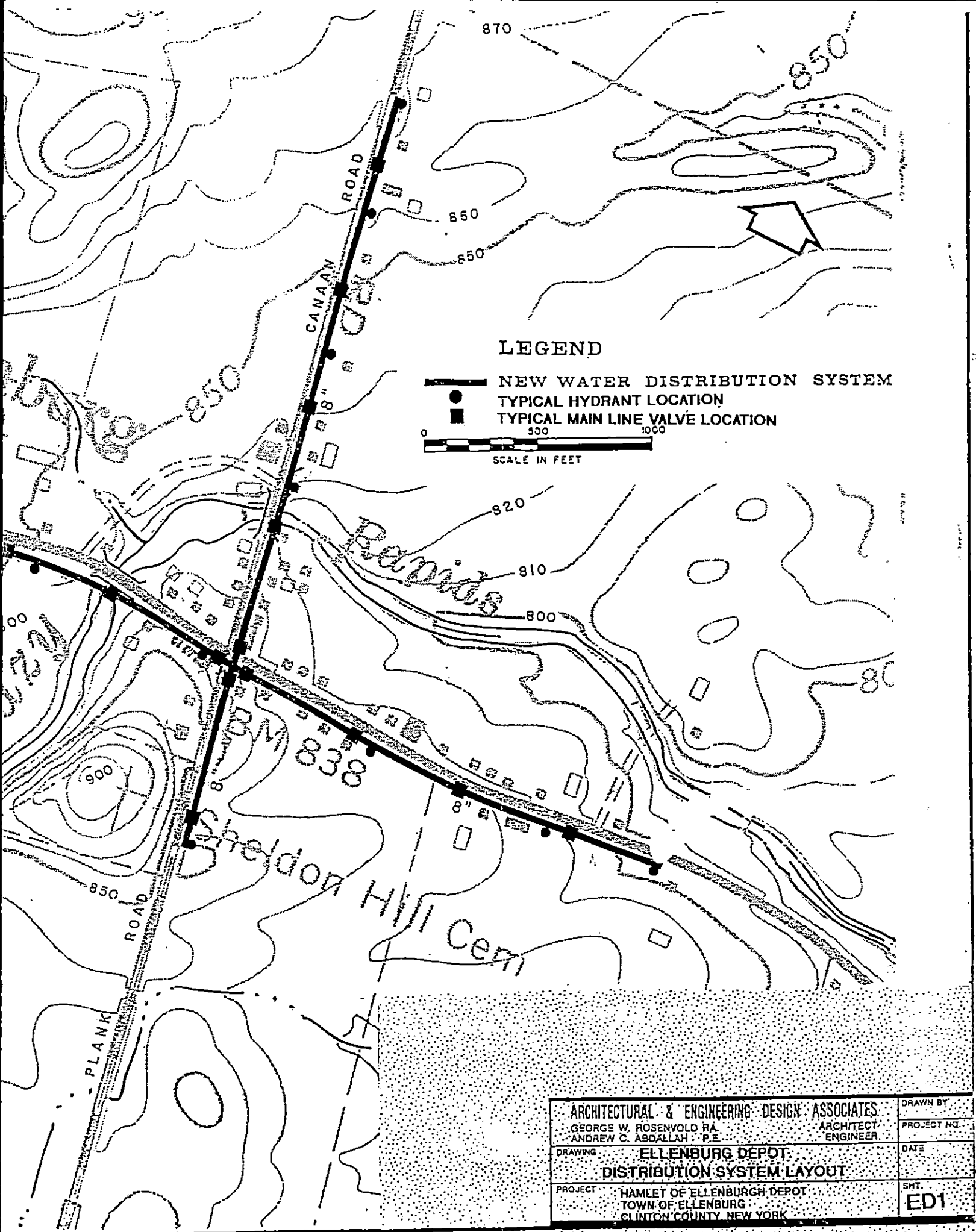


NOTE:

NO WATER DISTRIBUTION SYSTEM PRESENTLY EXISTS.

REVISED: MK. | BY | DATE	ARCHITECTURAL & ENGINEERING DESIGN ASSOCIATES GEORGE W. ROSENVOLD RA. ARCHITECT ANDREW C. ABDALLAH P.E. ENGINEER	DRAWN BY
	DRAWING: ELLENBURG CORNERS DISTRIBUTION LAYOUT	PROJECT NO.
		DATE
CHECKED BY:	PROJECT: HAMLET OF ELLENBURG CORNERS TOWN OF ELLENBURG CLINTON COUNTY, NEW YORK	SHT. ECOR1
DATE:		


1.6 MILES OF 12"
WATER TRANSMISSION MAIN
FROM ELLENBURG CORNERS
LAKE ROXANNE
NORTH BRANCH
GREAT CHAZY RIVER
RAILROAD
ABANDONED
BM
911
900
890
880
870
850
12"
8"
6"



ARCHITECTURAL & ENGINEERING DESIGN ASSOCIATES GEORGE W. ROSENVOLD RA. ARCHITECT ANDREW C. ABDALLAH P.E. ENGINEER	DRAWN BY
	PROJECT NO.
DRAWING: ELLENBURG DEPOT DISTRIBUTION SYSTEM LAYOUT	DATE
PROJECT: HAMLET OF ELLENBURGH DEPOT TOWN OF ELLENBURG CLINTON COUNTY, NEW YORK	SHT. ED1

APPENDIX I

New York State Department of Environmental Conservation
Ray Brook, New York 12977
Telephone (518) 891-1370

July 8, 1991

Thomas C. Jorling
Commissioner

Ms. Claudine Jones
Bureau of Environmental Exposure Investigation
New York State Department of Health
2 University Place
Room 205
Albany, New York 12203

file

Re: Spill No. 8909014
Ellenburg Depot (West), Clinton Co.

Dear Claudine:

Attached is a summary of sample data for the referenced location. Five residences at the location currently have Department of Environmental Conservation supplied carbon filters on their water systems. The systems were installed prior to our determination of the scope or magnitude of the problem.

As described in the groundwater investigation reports supplied to you, it appears that widespread contamination of the shallow bedrock aquifer in the area has occurred at concentrations at or below NYSDOH drinking water standards. Contamination has been found in over thirty water systems at low concentrations. The systems are typically bedrock wells less than 70 feet in depth. Two springs have been affected. One of the springs continues to be used as a public water source for residents from a wide area of northern Clinton County.

Shallow monitoring wells sampling the overburdened aquifer in the area of Lake Roxanne Road did not show contamination.

Trichloroethene was identified in samples collected from shallow monitoring wells at the Atlas Missile Silo on Bull Run Road approximately 6,000 feet northwest of the hamlet. The shallow wells were installed by Department of Defense contractors and DEC contractors.

The project has been referred to our Division of Hazardous Waste Remediation for review and possible listing. It appears that the missile silo is the likely source of contamination but further work needs to be done to determine the scope of the contamination. Lateral and vertical boundaries of the contaminant plume remain to be identified. Most of the water supplies have not been resampled to verify or determine trends. Decisions must be made regarding the public health impact of the contamination.

Since this does not constitute a spill of petroleum or unknown substance and since the likely source of the contamination has been determined, NYSDEC Spill Response will be unable to continue expending Oil Spill Compensation Fund monies on the project. The carbon filters currently installed will be removed or turned over to the residence owner for servicing and maintenance at their cost. I will advise the owners and the town supervisors of this decision after August 1, 1991 unless I receive your opinion to the contrary.

The complete set of data and investigation has not been provided to the town supervisors. I have had no further contact with them since advising them of the contamination present in the McGregor spring. Due to the public health issues raised by this investigation, please advise me if you will be discussing the results and the need for alternative water supplies with the towns.

If you have any questions regarding this matter, please contact me at (518) 891-1370.

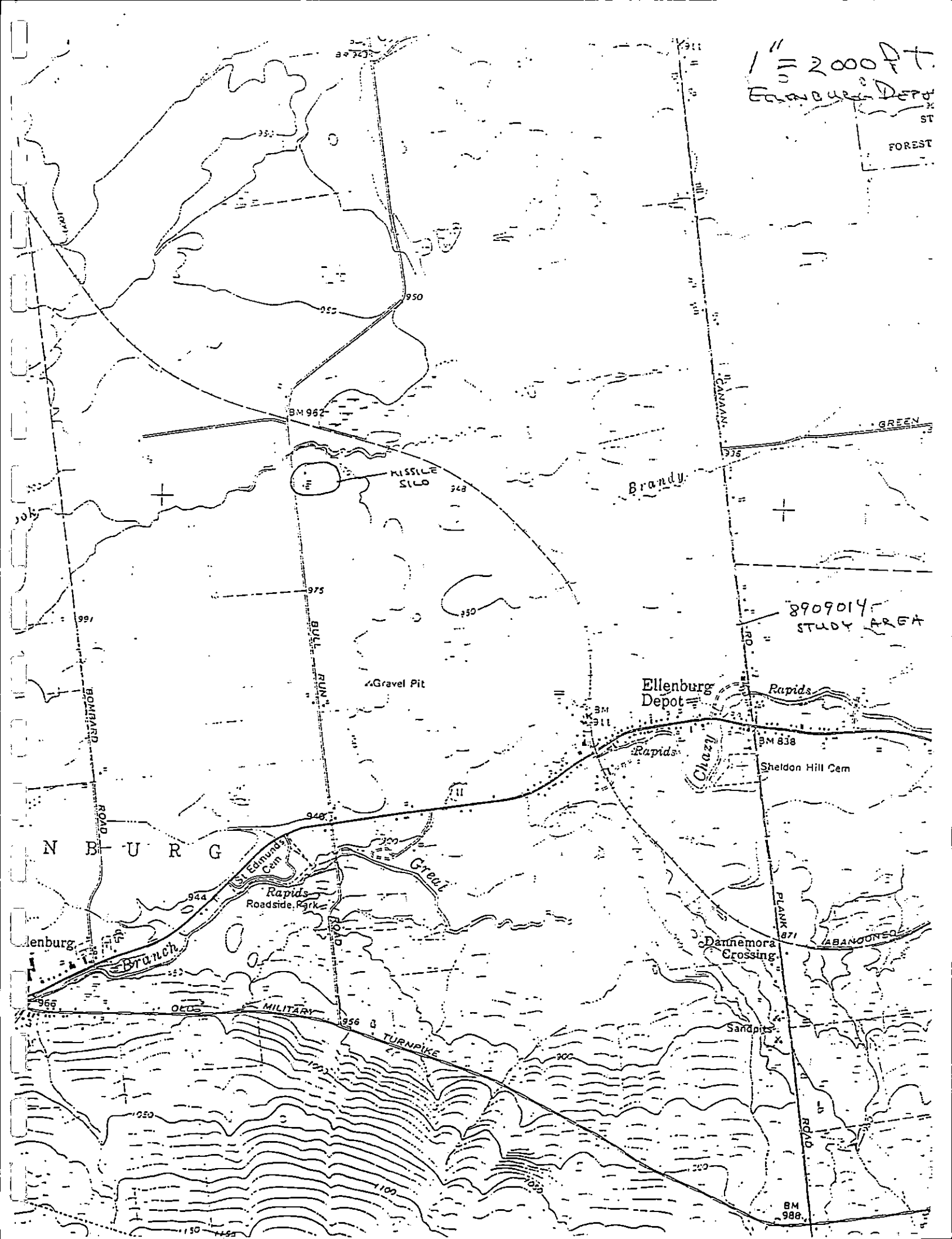
Sincerely,

Richard L. Wagner, P.E.
Regional Spill Engineer

By: Arthur W. Stemp
Water Program Specialist I

RLW:AWS:bf
Attach.

cc: Clinton County Dept. of Health, w/attach.
Dan Steenberge, w/attach.


1" = 2000 ft.
Ellenburg Depo
FOREST
BM 962
MISSILE SILO
Brandy
GREEN
CANAAN
8909014
STUDY AREA
Gravel Pit
BULL RUN
BONBARD
ROAD
Ellenburg Depot
Rapids
BM 838
Sheldon Hill Cem
Chazy
N B U R G
St Edmunds Cem
Rapids
Roadside Park
Great
Branch
Dannemora Crossing
PLANK ROAD
ABANDONED
MILITARY
TURNPIKE
Sandpits
BM 988

ELLENBURG DEPOT WEST 8909014

NUM	DATE	RESIDENCE	COMPOUNDS
	1171	BAXTER	TCE 3.0
	1333	BOYEA	TOLUENE 1.2
			ETHYLBENZENE 0.5
	1123	BULRISS	TCE 3.0
	1149	BULRISS	TCE 2.9
	1197	BULRISS	TCE 2.0
	1226	BULRISS	TCE 3.0
	1257	BULRISS	TCE 3.0
	1282	BULRISS	ND
	1304	BULRISS	TCE 4.0
	1344	BULRISS	TCE 4.0
	2169	BULRISS	TCE 3.0
	1218	CHAZY R.#1	ND
	1218	CHAZY R.#2	ND
	1218	CHAZY R.#3	ND
	1333	CHEESEMAN	TCE 3.1
	1171	CHEESEMAN FARM	TCE 2.9
	1171	COOK	DICHLOROMETHANE 1.4
	1171	C.SUNDERLAND F	TCE 2.4
	1171	C.SUNDERLAND H	TCE 3.9
	1333	DANFORTH BARN	DICHLOROMETHANE 1.9
	1333	DROWN,DORIS	ND
	1198	EF DROWN FH	ND
	1218	ELLENBURG AUTO P	1,2,4 TRIMETHYLBENZENE 1.2
	1218	ELLENBURG HARDW	ND
	1123	GIBSON	TCE 2.0
	1225	HERBERT	ND
	1025	KEY BANK	ND
	1123	KEY BANK	TCE 3.0
	1171	KEY BANK	TCE 3.0
	1123	LAFAVE	TCE 2.0
	1149	LAFAVE	TCE 3.6
			NAPHTHALENE 1.2
	1197	LAFAVE	TCE 4.0
	1226	LAFAVE	ND
	1257	LAFAVE	TCE 4.0
	1282	LAFAVE	TCE 5.0
	1305	LAFAVE	TCE 3.0
	2169	LAFAVE	TCE 8.0
	1123	LAFAVE SPRING	TCE 3.0
	1171	LAFAVE SPRING	TCE 1.8
	1123	LAFOUNTAIN	TCE 2.0
	1149	LAFOUNTAIN	TCE 3.0
	1197	LAFOUNTAIN	TCE 3.0
	1226	LAFOUNTAIN	TCE 2.0
	1257	LAFOUNTAIN	TCE 3.0
	1304	LAFOUNTAIN	ND
	1344	LAFOUNTAIN	TCE 4.0
	2169	LAFOUNTAIN	TCE 3.0
	1171	MCGREGOR	TCE 2.8
	1218	MCGREGOR SPRING	TCE 2.1

1149	MILLER	TOLUENE 1.2
2010	NICOLE	ND
1171	NOEL	TCE 2.4
1218	NORTHLAND BARN	TCE 3.3
1218	NORTHLAND FARM	TCE 2.5
1218	NORTHLAND HIDES	TCE 3.4
1333	NORTHLAND SEEP	CHLORIDE 6290 MG/L
		SEMI VOL ND
		METHYLENE CHLORIDE 7.1
1025	NYT	TCE 1.0
		TOLUENE 2.0
1123	NYT	ND
1171	NYT	CHLOROMETHANE 220
		TOLUENE 1.0
1123	POST OFFICE	TCE 2.0
1149	POST OFFICE	TCE 2.9
1123	ROWE	TCE 2.0
1149	ROWE	TCE 3.2
1218	ROWE APTS.	ND
1123	RUSS	ND
1149	RUSS	BENZENE 0.9
		NAPHTHALENE 1.2
1197	RUSS	ND
1226	RUSS	ND
1257	RUSS	TCE 4.0
1282	RUSS	TCE 3.0
1305	RUSS	TCE 3.0
1333	RUSS	TOLUENE 1.2
1345	RUSS	ND
2169	RUSS	TCE 1.0
1171	SCOTT	TCE 0.5
1123	SHUTTS	TCE 4.0
1171	SOPER	TETRACHLOROETHYLENE 3.6
1171	VANARMAN	TCE 0.5
1171	VARIN'S MARKET	TCE 3.7
355	WHEELER	TCE 2.0
355		BENZENE 1.0
1058	WHEELER	TCE 2.0
1088	WHEELER	TCE 1.0
1110	WHEELER	ND
1171	WHEELER	TCE 2.7
1226	WHEELER	TCE 3.0
1257	WHEELER	TCE 3.0
1282	WHEELER	TCE 4.0
1304	WHEELER	TCE 4.0
1344	WHEELER	TCE 5.0
2169	WHEELER	TCE 4.0
1149	WHISPERING MAPLES	NAPHTHALENE 3.8
1149		TCE 2.0
1149		BUTYLBENZENE 1.5

1. ALL CONCENTRATIONS IN UG/L UNLESS OTHERWISE NOTED.
2. REFER TO FILE FOR METHODS USED. INCLUDES 503.1, 601, 524
3. NUMERICAL DATE: 0 TO 365 = 1989, 1000 TO 1365 = 1990,
   2000 TO 2365 = 1991

4. CARBON FILTERS BY NYSDEC ON WHEELER, RUSS, LAFAVE,
LAFOUNTAIN AND BULRISS
ALL RESULTS SHOWN FOR BEFORE CARBON SAMPLE

ELLENWES.WK4

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Center for Environmental Health 2 University Place Albany, New York 12203-3399

Mark R. Chassin, M.D., M.P.P., M.P.H.
Commissioner

Paula Wilson
Executive Deputy Commissioner

OFFICE OF PUBLIC HEALTH
Lloyd F. Novick, M.D., M.P.H.
Director

Diana Jones Ritter
Executive Deputy Director

William N. Stasiuk, P.E., Ph.D.
Center Director

October 14, 1993

Mr. Paul Maharis
P.O. Box 155
Kew Gardens, New York 11415-0155

Dear Mr. Maharis:

Your letter of September 4, 1993, to Commissioner Chassin raised concerns about contamination in private wells in Ellenburg Depot. The New York State Departments of Environmental Conservation (NYSDEC) and Health (NYSDOH) have sampled many, but not all, of the private wells of homes along Route 11, Station Hill Road and Bull Run Road. Some of the samples have been taken to investigate oil spills; other samples were taken to investigate possible groundwater contamination by chlorinated solvents from the Atlas Missile site.

The NYS DEC has investigated several oil spills in the area. Wells that contain chemicals such as benzene and toluene have probably been contaminated by gasoline or petroleum spills. New York State's oil spill funds have been used to provide carbon filters for wells contaminated by petroleum products. The carbon filters are effective in removing these contaminants from water. These oil spills have occurred on both sides of the Chazy River.

The Atlas Missile Silo Site on Bull Run Road is suspected of being the source of contaminants such as trichloroethene. So far, the wells contaminated by this type of chemical are north of the Chazy River. If the Chazy River intercepts groundwater migrating from the Atlas site, wells south of the river would not be contaminated by chemicals from the site. The concentrations of these contaminants in most of the wells are below the drinking water standards for public water supplies; these standards are used as guidelines when for private well water.

Recently, staff from the Bureau of Environmental Exposure Investigation visited Ellenburg Depot. They collected water samples from the public water supply serving the Lake Roxanne Development and from several other public and private water supplies. We expect to get the analytical results for these samples in about a month.

We are putting together a fact sheet about all the sampling in the area. We would also like to have a public meeting in the near future to talk with people in Ellenburg Depot about the sampling results and to hear their concerns. We would like to have the results from our recent sampling before the meeting and we are still in the process of compiling older data from both NYS DEC and our own files. You requested these data. In general, we do not like to release sampling results from a private well to anyone except the residents. The fact sheet will summarize the data by geographical area without identifying individual home owner results. However, if you are not satisfied with the summary, we will discuss releasing the results to you with individual home owners. Another possible approach would be for you to speak with them directly.

You mentioned in your letter that 50 out of 500, or 10 percent, of Ellenburg Depot residents have or had cancer. This incidence is well below the national average of 33%. The NYS DOH has a cancer registry which can be used to evaluate cancer incidence in a specific area.

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Corning Tower The Governor Nelson A. Rockefeller Empire State Plaza Albany, New York 12237

David Axelrod, M.D.
Commissioner

OFFICE OF PUBLIC HEALTH

Linda A. Randolph, M.D., M.P.H.
Director

William F. Leavy
Executive Deputy Director

January 11, 1991

JAN 16 1991

Mr. Jack Andrus
Public Health Director
Clinton County Health Department
6 Margaret St.
P.O. Box 769
Plattsburgh, NY 12901

RE: Ellenburg Depot TCE Spill (8909014)
Ellenburg Depot, Clinton County
MacGregor Spring Sample Results

Dear Mr. Andrus:

On December 6, 1990, Mr. John Sheehan and I met with Mr. Art Stemp of the Region V, New York State Department of Environmental Conservation (NYSDEC), in the hamlet of Ellenburg Depot in Clinton County, to discuss the status of two separate spills in this area. At that time, we collected water supply samples from homes and businesses impacted by the Agway gasoline spill (Spill No. 9001363).

A portion of this sampling effort included collection of a water sample from MacGregor Spring. This spring is located on the west side of Canaan Road and adjacent to the hardware store which is situated just north of the intersection of Route 11 and Canaan Road in Ellenburg Depot (see attached map). Art Stemp has indicated that local residents reportedly use MacGregor Spring to obtain drinking water.

A water sample collected from MacGregor Spring was submitted to the New York State Department of Health (NYSDOH) Wadsworth Center for Laboratories and Research for analysis of coliform bacteria, volatile halogenated organics, aromatic purgeables and ketones. The enclosed sample results indicate the presence of Trichloroethene (TCE) at 2.0 ug/l, which is currently below the drinking water standard of 5.0 ug/l. Results of the bacteriological analysis were reported to be inconclusive by the laboratory due to the presence of a mat growth on the sample media which impeded interpretation of the actual coliform count. This location will have to be resampled for analysis of coliform bacteria by the MPN method, and for halogenated organics to verify the presence of TCE.

The presence of TCE at this location is thought to be related to a groundwater contaminant plume which is currently under investigation by NYSDEC and has been defined, to date, as being centered largely at the intersection of Route 11 and Roxanne Road in Ellenburg Depot. This contaminant plume has been reported to be comprised of chlorinated and aromatic hydrocarbons.

It is understood that MacGregor Spring is not considered to be a "formal" drinking water supply source, nor is it known to be maintained by the county or a local municipality. However, this Department feels that this should be brought to your attention as it is supposedly used by local residents for drinking water purposes. I would greatly appreciate discussing this with you in the near future so that we may determine how to address such a situation.

I have only just recently received final analytical results for the other water supplies sampled on 12/6/90 in Ellenburg Depot and I will forward copies of the homeowner sample result letters to you as soon as possible. Should you have any questions, I can be reached at (518) 458-6306. Again, I look forward to hearing from you regarding this situation.

Sincerely,

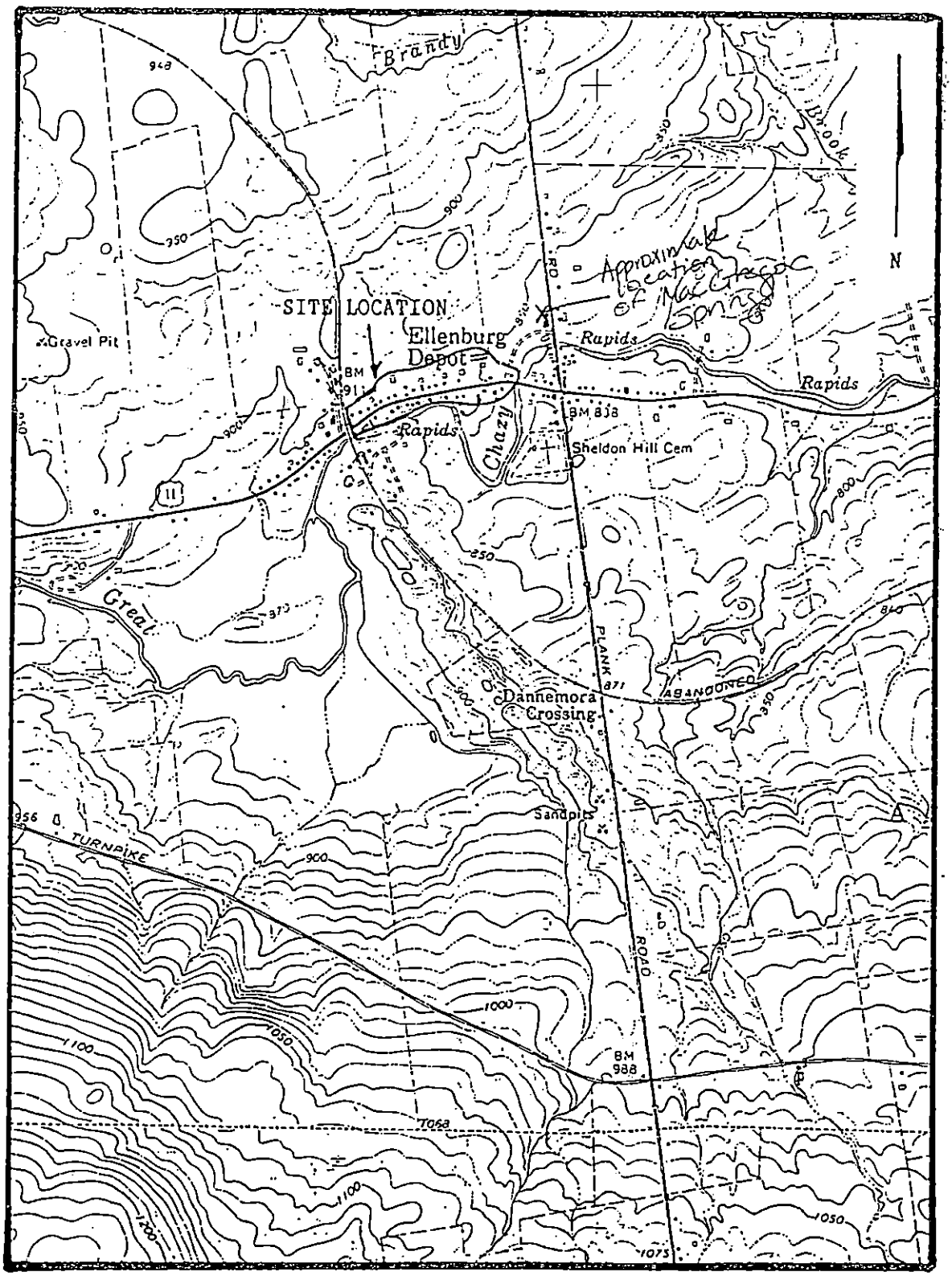
Claudine F. Jones

Claudine F. Jones
Program Research Specialist II
Bureau of Environmental Exposure
Investigation

jlh/10090071

Attachments

cc: wo/att: Mr. Tramontano/Mr. Litwin
Mr. Smith - CRU
Mr. Bilow, Supervisor - Town of Ellenburg
w/att: Mr. Stemp - DEC - Region V



SITE LOCATION MAP
SPILL NO. 8909014 PIN SP99452
ELLENBURG DEPOT, NEW YORK

USGS TOPOGRAPHIC MAP, ELLENBURG DEPOT, NY
7.5 MINUTE QUADRANGLE

SCALE 1:24,000

New York State Department of Environmental Conservation
Ray Brook, New York 12977
Telephone (518) 891-1370

JUL 5 - 1990

Thomas C. Jorling
Commissioner

July 2, 1990

Mr. Glenn Rowe
Ellenburg Depot,
New York 12935

Re: Spill No. 8909614/99452
Ellenburg Depot, Clinton Co.

Dear Mr. Rowe:

Attached are the results from the laboratory analysis of your water supply.

Carbon filtration systems have been installed on those residential water systems which show or are suspected to contain contamination above New York State Department of Health drinking water guidelines. Sampling work performed to date has shown the presence of low level hydrocarbon contamination in several wells along Route 11. This Department is conducting an investigation to determine the source and extent of contamination.

If you have any questions regarding the interpretation of these results, please contact the Clinton County Health Department at (518) 565-3250.

If you have any other questions regarding this or other work at the location, please feel to contact me at (518) 891-1370.

Sincerely,

Richard L. Wagner
Regional Spill Engineer

By: Arthur W. Stemp
Water Program Specialist I

RLW:AWS:bd
Attach.

cc: Clinton County Health Dept., w/attach.

New York State Department of Environmental Conservation
Ray Brook, New York 12977
Telephone (518) 891-1370

#P041 936 520
CERTIFIED MAIL
RETURN RECEIPT REQUESTED

FEB 27 1991

Thomas C. Jorling
Commissioner

February 25, 1991

Jim Clark
Agway, Inc.
P. O. Box 4933
Syracuse, New York 13221-4933

Re: Agway, Inc., ~~Ellenburg~~ Depot, Clinton Co.
Spill No. 9001636/90067 — File toxic Site

Dear Mr. Clark:

As per our discussions and agreements regarding the performance of the spill remediation work at the referenced location, we noted Article 12 of the New York State Navigation Law requires that a spiller perform the necessary work in a timely and effective manner.

At our meeting on December 20, 1990 and in correspondence dated December 18, 1990 and January 22, 1991, you were advised of the need for installation of carbon filters at the Norton residence. The filters were not installed prior to our phone conversation on February 4, 1991.

In correspondence dated January 22, 1991 and in our phone conversation on February 4, 1991, you were provided sample results and advised of the need for filter replacement and additional sampling at adjacent residences on Route 11. None of this work was performed as of this date.

Effective immediately, this Department will perform the necessary installation and maintenance of all residential carbon filters installed as a consequence of this spill. Water sampling and analysis of the carbon filter systems and other residential water systems will be performed by this Department, as necessary. Agway, Inc. will be responsible for all direct and indirect costs incurred as a result of this effort.

The groundwater recovery and treatment system installation was complete on December 20, 1990. Samples were reportedly collected December 21, 1990 for analysis for the purpose of submitting the necessary applications for operation of the air stripper and the groundwater discharge. As of this date, the system is not operational and permit applications have not been received.

Permit application forms for air emissions and water discharges were supplied to you at our meeting on December 20, 1990. You were reminded of the need for the permits in correspondence on January 22, 1991, and on February 4, 1991 you advised me that the SPDES application was "enroute." As of this date, the completed application forms have not been received by this Department.

The completed air resources and SPDES application forms must be received by the Division of Regulatory Affairs in this regional office within five (5) days of the date of receipt of this letter. The system must be operational in accordance with permit conditions within five (5) days of your receipt of the approval to operate. Failure to comply with this schedule or to meet permit conditions will cause this Department to immediately undertake all necessary work without further notice.

If you have any questions regarding this matter, please contact me at (518) 891-1370.

Sincerely,

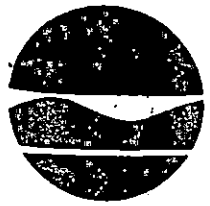
Richard L. Wagner, P.E.
Regional Spill Engineer

By: Arthur W. Stemp
Water Program Specialist I

RLW:AWS:bf

cc: D. Trost
D. Fontana
Clinton Co. Dept. of Health
NYSDOH, Albany, Atten.: Claudine Jones
Supervisor, Town of Ellenburg
Supervisor, Town of Altona

New York State Department of Environmental Conservation
Ray Brook, New York 12977
Telephone (518) 891-1370



Thomas C. Jorling
Commissioner

November 18, 1992

Mr. Craig Miller
Station Hill Road
Ellenburg Depot, New York 12935

Re: Spill No. 8909614
Ellenburg Depot (West)

FILE

Dear Mr. Miller:

Attached are the results from the laboratory analysis of a water sample collected at your residence on October 20, 1992. Low concentrations of organic chemicals were found in the water sample. Also, bacterial contamination was present in the sample.

The laboratory will resample the water supply to confirm the presence of the chemical contamination. After receipt of the results, we will be in a better position to determine the appropriate course of action to resolve the presence of the organic chemicals.

The bacterial contamination may be a cause of the odors in your water supply system. You are responsible for the treatment and removal of this contamination. An excerpt regarding well disinfection procedures from the New York State Department of Health pamphlet entitled "Rural Water Supply" is attached.

If you have any questions regarding the interpretation of these results or the appropriate well disinfection procedures, please contact the Clinton County Department of Health at (518) 565-3251.

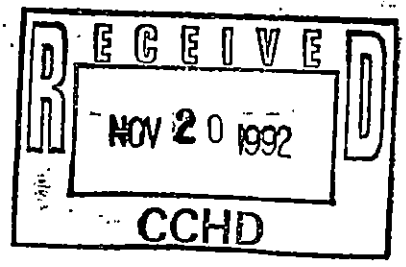
If you have any questions regarding the investigation of the contamination, please contact me at (518) 891-1370.

Sincerely,

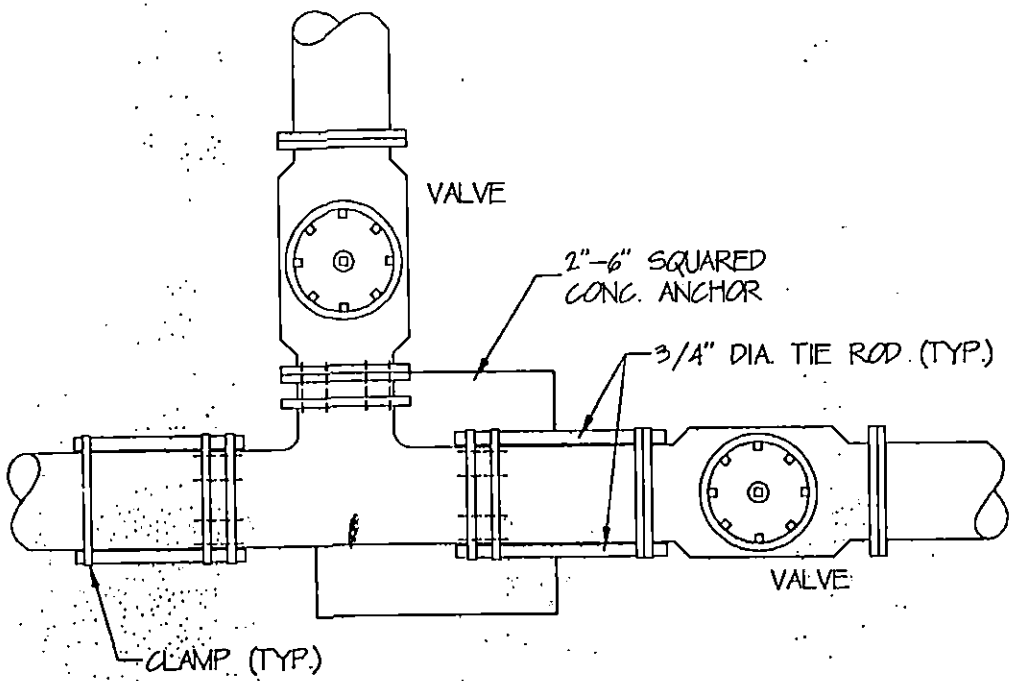
Arthur W. Stemp
Water Program Specialist II

AWS:bf
Attach.

cc: CCDOH, w/attach.



APPENDIX J



ARCHITECTURAL & ENGINEERING DESIGN ASSOCIATES
GEORGE W. ROSENVOLD RA ARCHITECT
ANDREW C. ABDALLAH, PE ENGINEER

DRAWING TITLE **PLAN DETAIL FOR TEE OR CROSS W/ CONCRETE ANCHOR**

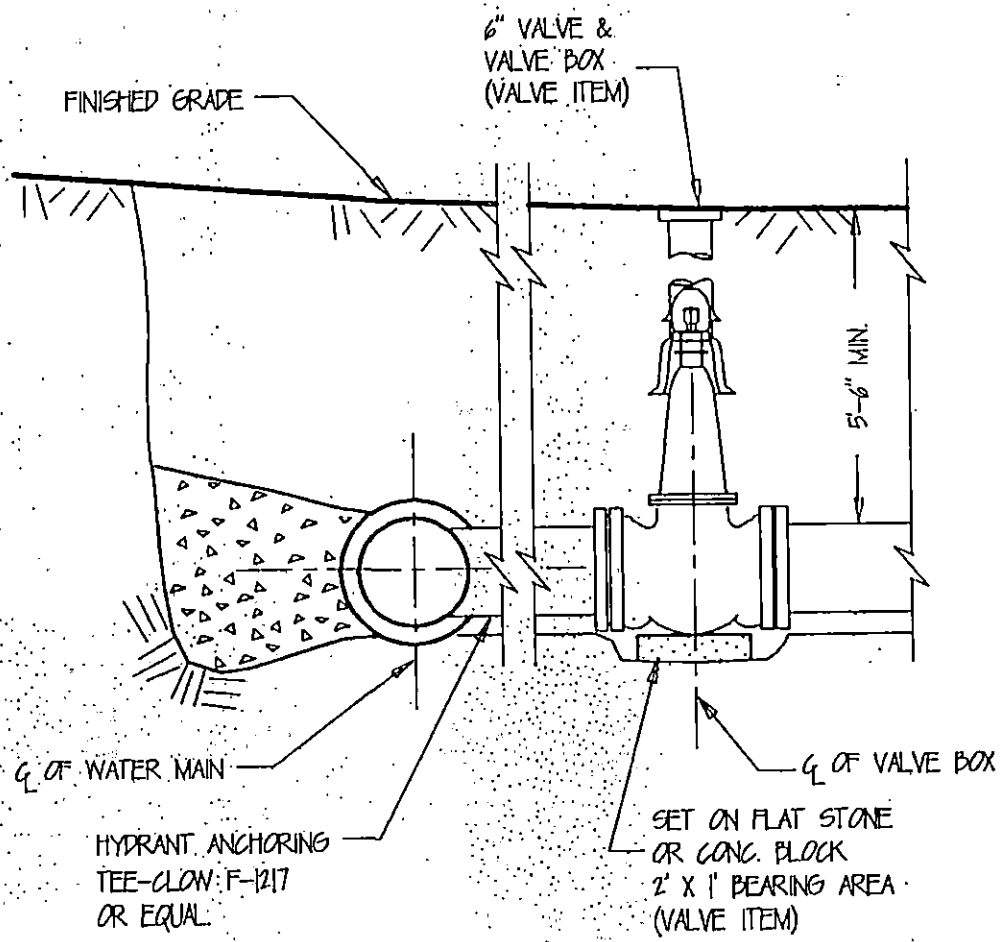
SCALE: N.T.S.

DATE:

DRAWING NUMBER **02VALVE2**

NOTES:

1. PROVIDE JOINT RESTRAINT AS REQUIRED



ARCHITECTURAL & ENGINEERING DESIGN ASSOCIATES GEORGE W. ROSENVOLD RA ANDREW C. ABDALLAH PE ARCHITECT ENGINEER	DRAWING TITLE **TYPICAL SHUT-OFF VALVE DETAIL**	SCALE: N.T.S. DATE:	DRAWING NUMBER **02VALVE1**

NOTES:

LINING SHALL BE WELL GRADED, SCREENED GRAVEL, CRUSHED GRAVEL OR CRUSHED STONE FREE OF EXCESSIVE AMOUNTS OF ORGANIC OR OTHER UNSUITABLE MATERIAL.

A. SCREENED GRAVEL SHALL CONSIST OF CLEAN, DURABLE GRAVEL, FREE FROM COATINGS.
B. CRUSHED GRAVEL SHALL CONSIST OF CLEAN, DURABLE ANGLED FRAGMENTS OF GRAVEL, FREE FROM COATINGS.
C. CRUSHED STONE SHALL CONSIST OF CLEAN, DURABLE SHARP-ANGLED FRAGMENTS OF ROCK OF UNIFORM QUALITY.

ALL LINING MATERIAL SHALL BE WELL GRADED FROM LARGE TO SMALL PARTICLE SIZE. ALL MATERIAL MUST BE CAPABLE OF BEING PASSED THROUGH A 1 1/2" SCREEN AND A MAXIMUM OF 15% SHALL PASS A 1/4" SCREEN.

SELECT BACKFILL SHALL BE NATIVE SOIL EXCAVATED FROM THE TRENCH, FREE OF ANY ROCKS WITH A DIMENSION OF 8 INCHES OR LARGER, WITH NO FOREIGN MATERIAL OR FROZEN EARTH.

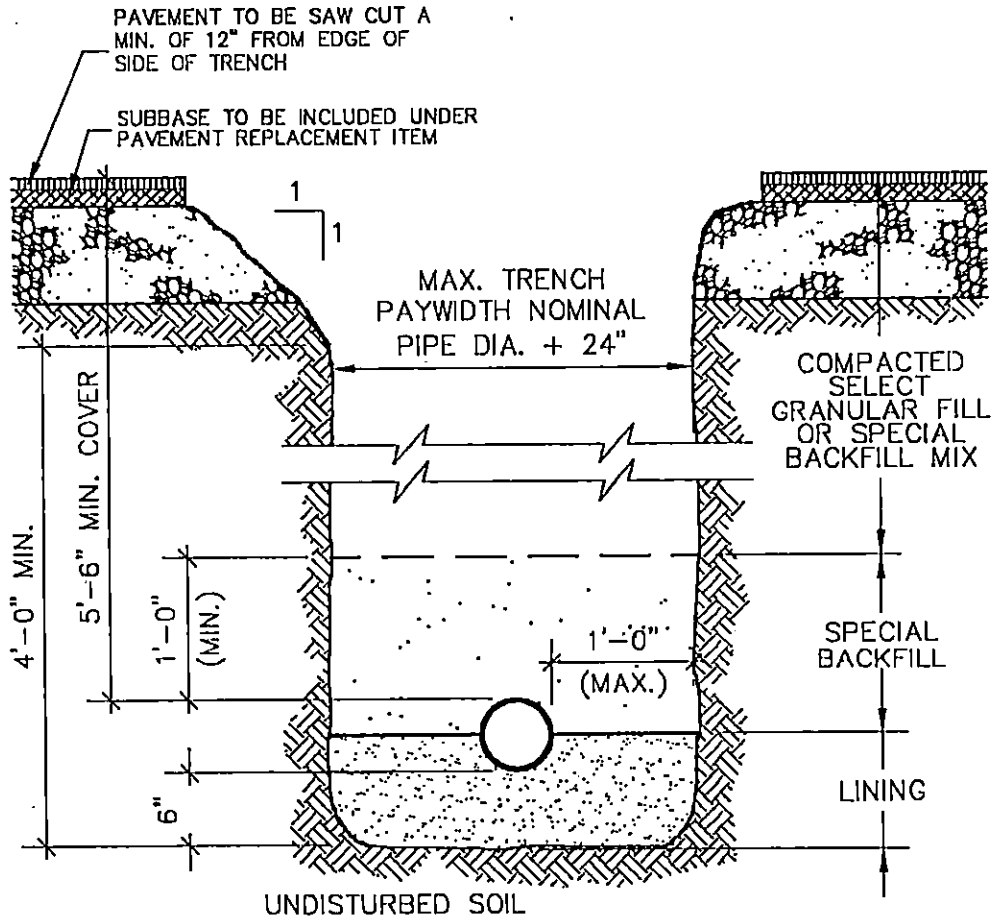
SPECIAL BACKFILL SHALL CONSIST OF SAND, GRAVEL OR BROKEN STONE FREE FROM ORGANIC OR OTHER UNSUITABLE MATERIAL. THE LARGEST STONE SHALL NOT EXCEED 1 1/2 INCHES ALONG ITS LONGEST DIMENSION.

SPECIAL BACKFILL MIX SHALL CONSIST OF DRY CEMENT AND RUN OF BANK GRAVEL MIXED IN THE PROPORTION OF 1:15 BY VOLUME.

SELECT GRANULAR FILL SHALL HAVE THE FOLLOWING GRADUATION:

SIEVE SIZE	PER CENT PASSING BY WEIGHT
4 INCH	100
NO. 40	0-70
NO. 200	0-15

THE MATERIAL SHALL BE SUBSTANTIALLY FREE OF SHALE, OR OTHER SOFT, POOR DURABILITY PARTICLES. IF TESTED, A MATERIAL WITH A MAGNESIUM SULFATE SOUNDNESS LOSS EXCEEDING 30 PER CENT WILL BE REJECTED.



ARCHITECTURAL & ENGINEERING DESIGN ASSOCIATES GEORGE W. ROSENVOLD RA ANDREW C. ABDALLAH PE ARCHITECT ENGINEER	DRAWING TITLE **PAVEMENT PIPE TRENCH DETAIL**	SCALE: 3/4"=1'-0" DATE:	DRAWING NUMBER **02TRNCH3**

NOTES:

LINING SHALL BE WELL GRADED, SCREENED GRAVEL, CRUSHED GRAVEL OR CRUSHED STONE FREE OF EXCESSIVE AMOUNTS OF ORGANIC OR OTHER UNSUITABLE MATERIAL.

A. SCREENED GRAVEL SHALL CONSIST OF CLEAN, DURABLE GRAVEL, FREE FROM COATINGS.
B. CRUSHED GRAVEL SHALL CONSIST OF CLEAN, DURABLE ANGLED FRAGMENTS OF GRAVEL, FREE FROM COATINGS.
C. CRUSHED STONE SHALL CONSIST OF CLEAN, DURABLE SHARP-ANGLED FRAGMENTS OF ROCK OF UNIFORM QUALITY.

ALL LINING MATERIAL SHALL BE WELL GRADED FROM LARGE TO SMALL PARTICLE SIZE. ALL MATERIAL MUST BE CAPABLE OF BEING PASSED THROUGH A 1 1/2" SCREEN AND A MAXIMUM OF 15% SHALL PASS A 1/4" SCREEN.

SELECT BACKFILL SHALL BE NATIVE SOIL EXCAVATED FROM THE TRENCH, FREE OF ANY ROCKS WITH A DIMENSION OF 8 INCHES OR LARGER, WITH NO FOREIGN MATERIAL OR FROZEN EARTH.

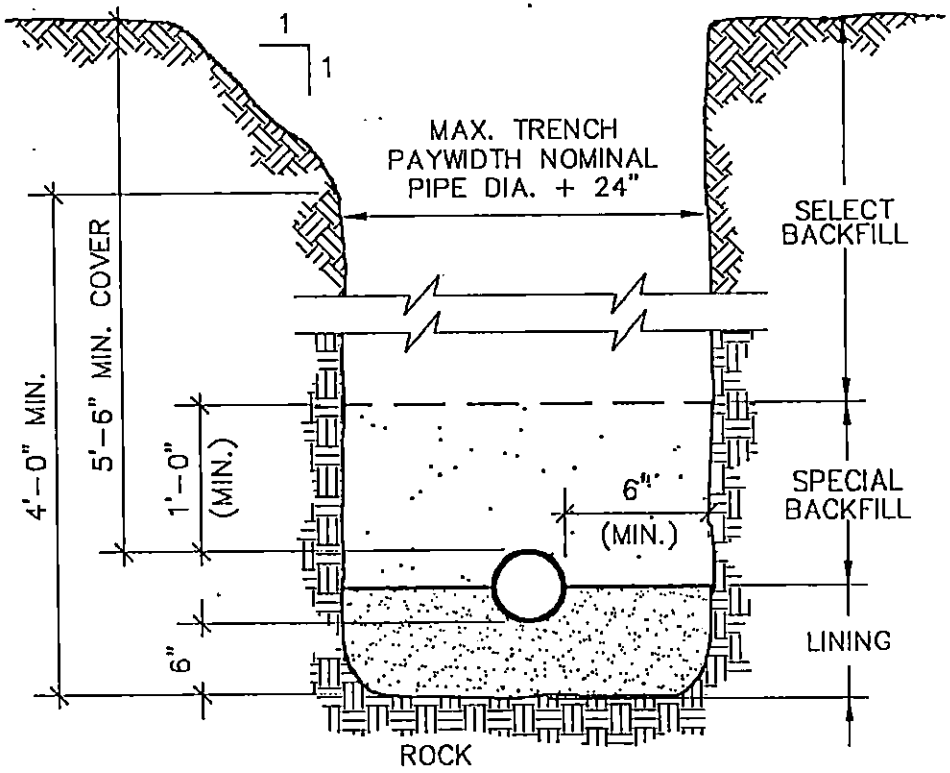
SPECIAL BACKFILL SHALL CONSIST OF SAND, GRAVEL OR BROKEN STONE FREE FROM ORGANIC OR OTHER UNSUITABLE MATERIAL. THE LARGEST STONE SHALL NOT EXCEED 1 1/2 INCHES ALONG ITS LONGEST DIMENSION.

SPECIAL BACKFILL MIX SHALL CONSIST OF DRY CEMENT AND RUN OF BANK GRAVEL MIXED IN THE PROPORTION OF 1:15 BY VOLUME.

SELECT GRANULAR FILL SHALL HAVE THE FOLLOWING GRADUATION:

SIEVE SIZE	PER CENT PASSING BY WEIGHT
4 INCH	100
NO. 40	0-70
NO. 200	0-15

THE MATERIAL SHALL BE SUBSTANTIALLY FREE OF SHALE, OR OTHER SOFT, POOR DURABILITY PARTICLES. IF TESTED, A MATERIAL WITH A MAGNESIUM SULFATE SOUNDNESS LOSS EXCEEDING 30 PER CENT WILL BE REJECTED.



ARCHITECTURAL & ENGINEERING DESIGN ASSOCIATES GEORGE W. ROSENVOLD RA ARCHITECT ANDREW C. ABDALLAH PE ENGINEER	DRAWING TITLE **ROCK PIPE TRENCH DETAIL**	SCALE: 3/4"=1'-0" DATE:	DRAWING NUMBER **02TRNCH2**

NOTES:

LINING SHALL BE WELL GRADED, SCREENED GRAVEL, CRUSHED GRAVEL OR CRUSHED STONE FREE OF EXCESSIVE AMOUNTS OF ORGANIC OR OTHER UNSUITABLE MATERIAL.

A. SCREENED GRAVEL SHALL CONSIST OF CLEAN, DURABLE GRAVEL, FREE FROM COATINGS.
B. CRUSHED GRAVEL SHALL CONSIST OF CLEAN, DURABLE ANGLED FRAGMENTS OF GRAVEL, FREE FROM COATINGS.
C. CRUSHED STONE SHALL CONSIST OF CLEAN, DURABLE SHARP-ANGLED FRAGMENTS OF ROCK OF UNIFORM QUALITY.

ALL LINING MATERIAL SHALL BE WELL GRADED FROM LARGE TO SMALL PARTICLE SIZE. ALL MATERIAL MUST BE CAPABLE OF BEING PASSED THROUGH A 1 1/2" SCREEN AND A MAXIMUM OF 15% SHALL PASS A 1/4" SCREEN.

SELECT BACKFILL SHALL BE NATIVE SOIL EXCAVATED FROM THE TRENCH, FREE OF ANY ROCKS WITH A DIMENSION OF 8 INCHES OR LARGER, WITH NO FOREIGN MATERIAL OR FROZEN EARTH.

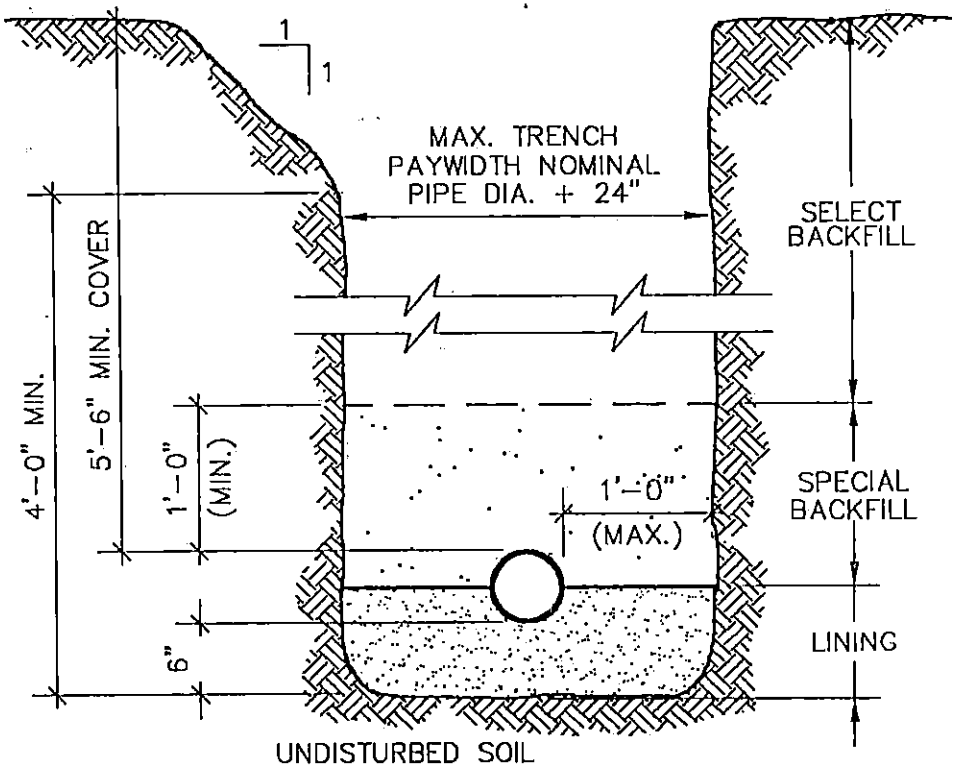
SPECIAL BACKFILL SHALL CONSIST OF SAND, GRAVEL OR BROKEN STONE FREE FROM ORGANIC OR OTHER UNSUITABLE MATERIAL. THE LARGEST STONE SHALL NOT EXCEED 1 1/2 INCHES ALONG ITS LONGEST DIMENSION.

SPECIAL BACKFILL MIX SHALL CONSIST OF DRY CEMENT AND RUN OF BANK GRAVEL MIXED IN THE PROPORTION OF 1:15 BY VOLUME.

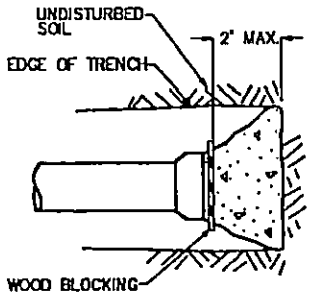
SELECT GRANULAR FILL SHALL HAVE THE FOLLOWING GRADUATION:

SIEVE SIZE	PER CENT PASSING BY WEIGHT
4 INCH	100
NO. 40	0-70
NO. 200	0-15

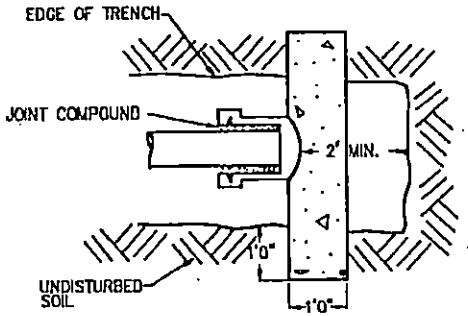
THE MATERIAL SHALL BE SUBSTANTIALLY FREE OF SHALE, OR OTHER SOFT, POOR DURABILITY PARTICLES. IF TESTED, A MATERIAL WITH A MAGNESIUM SULFATE SOUNDNESS LOSS EXCEEDING 30 PER CENT WILL BE REJECTED.



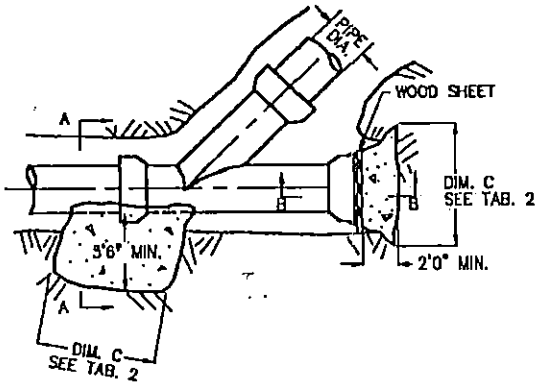
ARCHITECTURAL & ENGINEERING DESIGN ASSOCIATES GEORGE W. ROSENVOLD RA ARCHITECT ANDREW C. ABDALLAH PE ENGINEER	DRAWING TITLE **EARTH PIPE TRENCH DETAIL**	SCALE: 3/4"=1'-0" DATE:	DRAWING NUMBER **02TRNCH1**



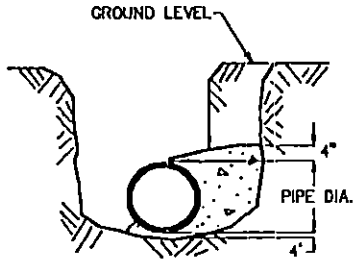
PLAN OF PLUG



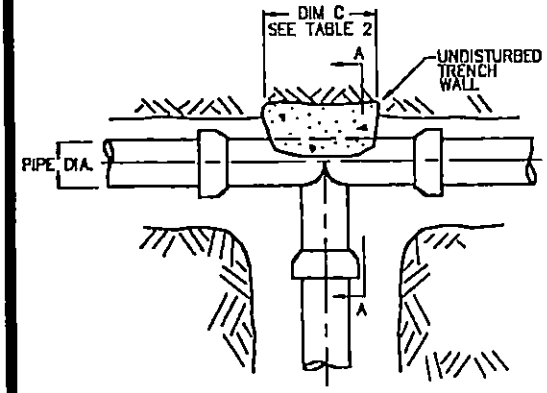
PLAN OF CAP



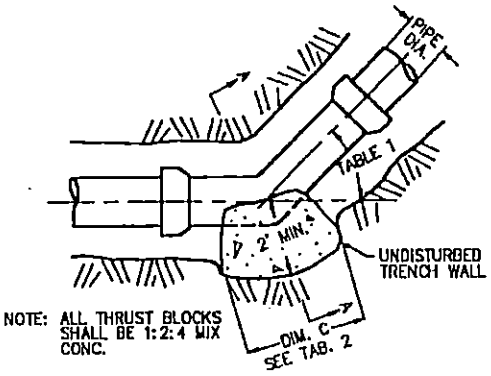
BRANCH WYES AND PLUGS



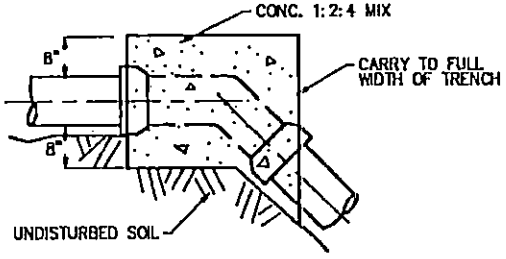
SECTION A–A



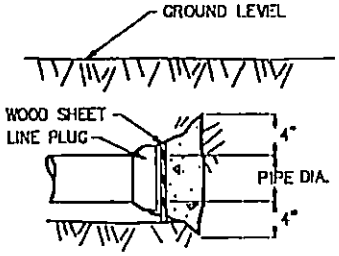
TEES



BENDS
5° TO 90°



SIDE ELEVATION OF VERTICAL BENDS



SECTION B–B

TABLE 1

PIPE DIA. IN.	5° – 22.5° C FT.–IN.	5° – 22.5° CONC. C.Y.	22.5° – 45° C FT.–IN.	22.5° – 45° CONC. C.Y.	45° – 67.5° C FT.–IN.	45° – 67.5° CONC. C.Y.	67.5° – 90° C FT.–IN.	67.5° – 90° CONC. C.Y.
6 & SM.	0–4	.03	0–8	.07	1–0	.10	1–3	.14
8	0–6	.07	0–11	.14	1–3	.21	1–10	.28
10	0–8	.11	1–4	.22	1–11	.33	2–9	.44
12	0–11	.16	1–10	.32	2–6	.46	3–7	.64
15	1–3	.23	2–6	.45	3–3	.68	5–0	.90
16	1–4	.25	2–9	.50	3–6	.75	5–5	1.00
18	1–7	.33	3–2	.67	4–5	1.00	6–4	1.33

TABLE 2

PIPE DIA. IN.	C FT.–IN.	C.Y. OF CONCRETE TEES & PLUGS	C.Y. OF CONCRETE WYES
6 & SM	0–9	0.06	0.13
8	1–2	0.18	0.25
10	1–9	0.30	0.42
12	2–2	0.39	0.55
14	3–0	0.65	0.88
16	3–3	0.70	0.98
18	3–10	0.89	1.24

ARCHITECTURAL & ENGINEERING DESIGN ASSOCIATES
GEORGE W. ROSENVOLD RA ARCHITECT
ANDREW C. ABDALLAH PE ENGINEER

DRAWING TITLE **THRUST BLOCK TABLES & DETAILS**

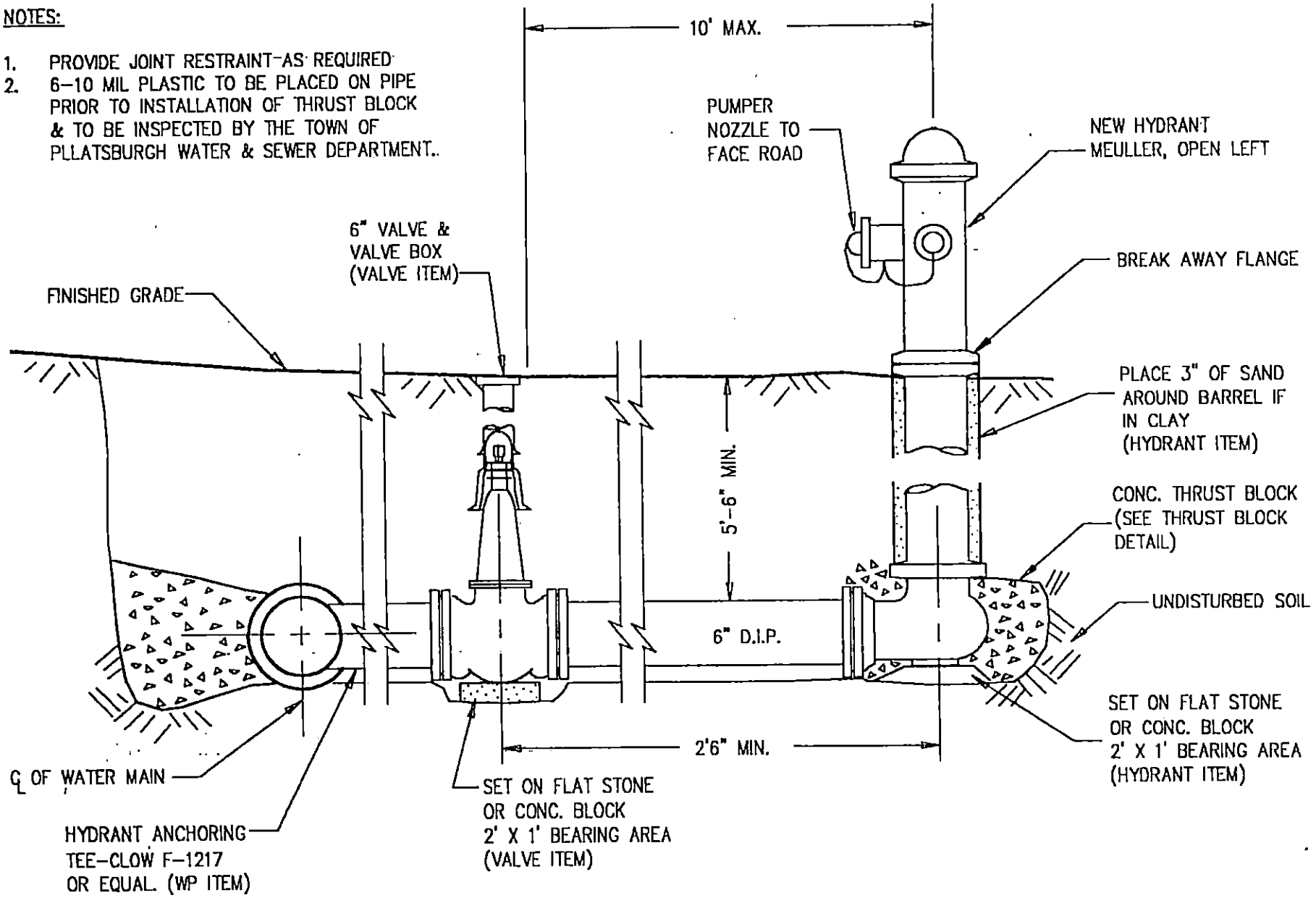
SCALE: N.T.S.

DATE:

DRAWING NUMBER **02TBTBL1**

NOTES:

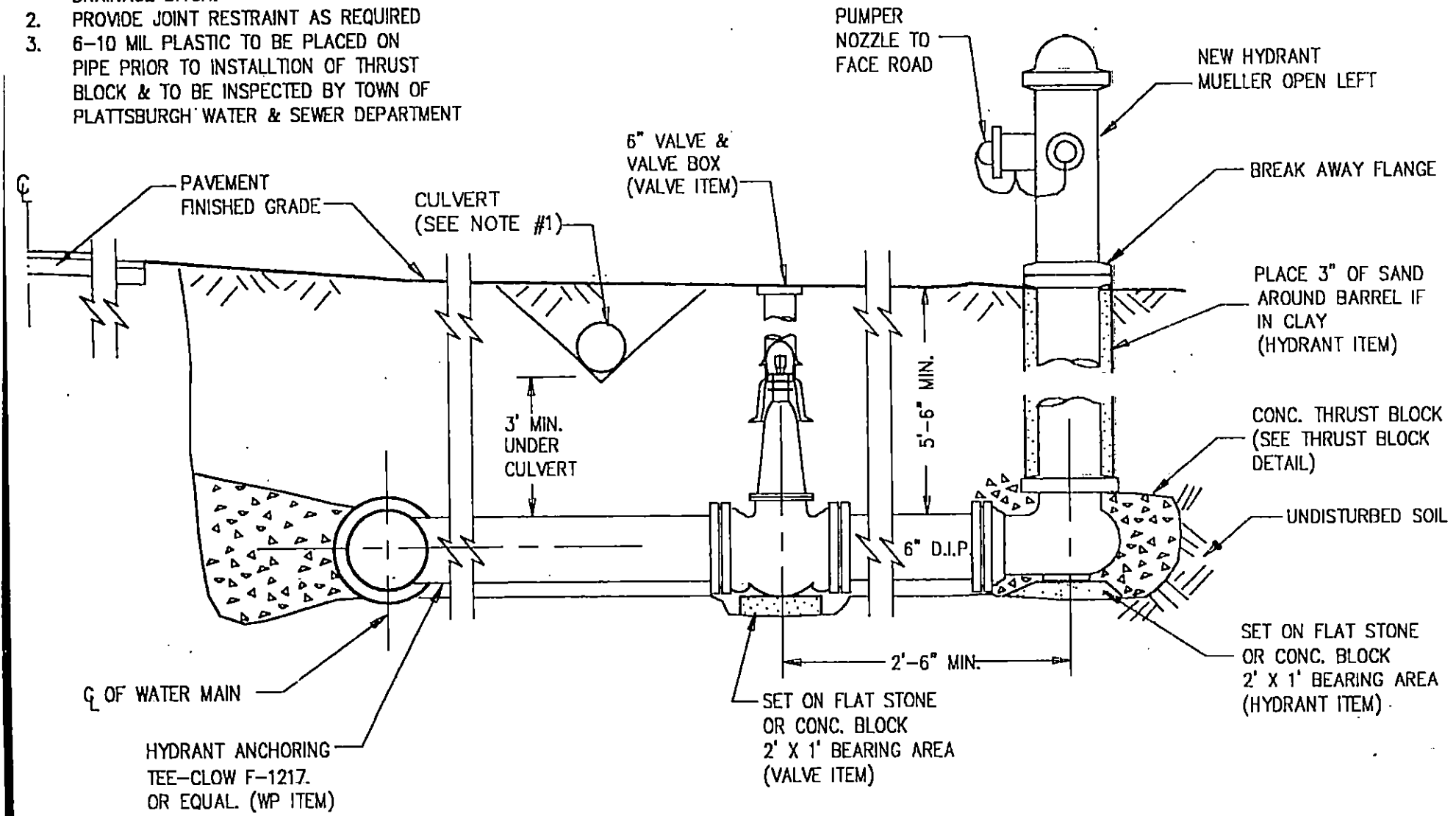
1. PROVIDE JOINT RESTRAINT-AS REQUIRED
2. 6-10 MIL PLASTIC TO BE PLACED ON PIPE PRIOR TO INSTALLATION OF THRUST BLOCK & TO BE INSPECTED BY THE TOWN OF PLLATSBURGH WATER & SEWER DEPARTMENT..



AEDA ARCHITECTURAL & ENGINEERING DESIGN ASSOCIATES GEORGE W. ROSENVOLD RA ANDREW C. ABDALLAH PE ARCHITECT ENGINEER	DRAWING TITLE **TYPICAL HYDRANT DETAIL**	SCALE: N.T.S. DATE:	DRAWING NUMBER **02HYDT02**

NOTES:

1. INSTALL TEN L.F. OF SUITABLY SIZED CULVERT (FIVE FT. EACH SIDE OF HYDRANT) IN CENTER OF ROADSIDE DRAINAGE DITCH.
2. PROVIDE JOINT RESTRAINT AS REQUIRED
3. 6-10 MIL PLASTIC TO BE PLACED ON PIPE PRIOR TO INSTALLTION OF THRUST BLOCK & TO BE INSPECTED BY TOWN OF PLATTSBURGH WATER & SEWER DEPARTMENT



AEDA ARCHITECTURAL & ENGINEERING DESIGN ASSOCIATES GEORGE W. ROSENVOLD RA ANDREW C. ABDALLAH PE ARCHITECT ENGINEER	DRAWING TITLE **HYDRANT DETAIL W/ CULVERT**	SCALE: N.T.S. DATE:	DRAWING NUMBER **02HYDT01**