Department of Environmental Conservation

Division of Hazardous Waste Remediation

Rome Landfill, Tannery Road

Site Number 633012
Oneida County, New York

Record of Decision

March 1995

Funded Under Title 3
of the
1986 Environmental Quality Bond Act

New York State Department of Environmental Conservation
GEORGE E. PATAKI, *Governor* MICHAEL D. ZAGATA, *Commissioner*

RECORD OF DECISION

ROME LANDFILL, TANNERY ROAD
CITY OF ROME
ONEIDA COUNTY, NEW YORK
ID NUMBER 633012

PREPARED BY
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS WASTE REMEDIATION
MARCH 1995

DECLARATION STATEMENT - RECORD OF DECISION

Rome Landfill Inactive Hazardous Waste Site
City of Rome, Oneida County, New York
Site No. 633012

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedial action for the Rome Landfill inactive hazardous waste disposal site which was chosen in accordance with the New York State Environmental Conservation Law (ECL) and consistent with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 USC Section 9601, et., sec., as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA).

This decision is based upon the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Rome Landfill Inactive Hazardous Waste Site and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A bibliography of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of hazardous waste constituents from this site, if not addressed by implementing the response action selected in this ROD, may present a current or potential threat to public health and the environment.

Description of Selected Remedy

Based upon the results of the Remedial Investigation/Feasibility Study (RI/FS) for the Rome Landfill and the criteria identified for evaluation of alternatives the NYSDEC has selected waste reconsolidation, capping, leachate control, and municipal water for downgradient users for Rome Landfill on Tannery Road. The components of the remedy are as follows:

- regrading the landfill by reconsolidating approximately 244,000 cubic yards of in-place material and placing approximately 134,300 cubic yards of alternative grading material (AGM); resulting in a reduction in the landfill footprint from 57 acres to 44 acres and the recreation of approximately 11 acres of wetland;

- installation of a Flexible Membrane Liner (FML) cap over the landfill that meets NYSDEC Part 360 standards;

- construction of a full slurry wall surrounding the landfill waste, and the pumping and treatment of approximately 4 million gallons of leachate per year with treatment at the Rome POTW.

- construction of a municipal water supply extension to replace impacted and threatened private water wells along Tannery Road;

- fencing, deed restrictions, baseline groundwater monitoring, site monitoring and maintenance, and periodic reviews.

New York State Department of Health Acceptance

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

Declaration

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

Since the remedy results in hazardous waste remaining within the landfill, a long term monitoring program will be instituted. This long term monitoring program will allow the effectiveness of the remedy to be monitored by sampling and testing of the groundwater and surface water.

3/30/95
Date

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

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RECORD OF DECISION

ROME LANDFILL
City of Rome, Oneida County, New York
Site No. 633012
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SECTION 1: SITE DESCRIPTION

The Rome Landfill, NYSDEC Site #633012, also referred to as the Tannery Road Landfill, is located on Tannery Road, approximatedly 0.9 miles south of Route 69 and 1.2 miles north of Oswego Road in the Western portion of the City of Rome (Figure 1). The site is located on a 140 acre tract of land leased by the City of Rome. The actual "footprint" of the landfill is approximately 57 acres. It is a relatively rural area with some residential and commercial development along Tannery Road. The landfill is currently a large plateau with steep sides rising approximately 30 feet above the surrounding low lying terrain. The site is bordered on the north by the abandoned New York Central Railroad line, on the west and south by Freshwater Wetland VE-2, and on the east by the 14.5 acre Oneida County Ash Landfill. Leachate seeps discharging into the wetlands and red stained sediments are visible at several locations around the landfill. Several sandy knolls which are characteristic of the topography of the Rome Sand Plains are located just south and east of the site. The Rome Sand Plains are considered to be a botanically distinct region containing several unique or rare habitat types.

The site is situated within the eastern portion of the Oswego River Drainage Basin. Most of the site surface drainage is conveyed to Canada Creek by two small unnamed streams or drainage features. These streams flow red from landfill leachate staining. Canada Creek flows south, and is located approximately 500 feet east of the site. Surface water drains on the western side of the site into Freshwater Wetland VE-2. Surface water flow becomes channelized southwest of the site.

SECTION 2: SITE HISTORY

2.1: Operational/Disposal History

Sand mining operations began at the site in the early 1900's, and the site has reportedly been used for disposal purposes since the early 1950's. Over the years, industrial wastes from various industries in the City of Rome were codisposed with muncipial solid waste. The site was closed on December 1, 1985.

2.2: Remedial History

In December 1974 the first surface water analytical results were obtained for a March 1975 Site Evaluation Study. In May 1980 three monitoring wells were installed on site as part of the NYSDEC

Open Dump Inventory. Groundwater analytical results indicated that groundwater was impacted by the landfill.

On June 2, 1982 the City of Rome signed a NYSDEC consent order agreeing to upgrade and close the landfill. In 1984 and 1985 the NYSDEC and USEPA obtained additional analytical data which indicated significant levels of volatile organic contaminants in landfill leachate. As previously stated, the landfill was closed by the City on December 1, 1985. In 1987 the Rome Landfill was listed as a Class 2 Site on the State Inactive Hazardous Waste Disposal Site Registry. A Class 2 Site is a site which poses a significant threat to public health or the environment, requiring remediation.

In February 1992, the City of Rome entered into a second Order on Consent with the NYSDEC which required the City to implement a remedial program.

SECTION 3: CURRENT STATUS

3.1: Summary of the Remedial Investigation

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

The RI field work was conducted between December 1992 and October 1993. A report entitled "Remedial Investigation - Tannery Road Landfill, Rome, New York, December, 1993, Revised May, 1994 has been prepared describing the field activities and findings of the RI in detail.

The RI activities consisted of the following:

- *Geophysical survey to determine the limits of the fill and areas underlain by contaminated groundwater*
- *Soil gas investigation*
- *Explosive gas investigation*
- *Vector investigation*
- *Installation of soil borings, monitoring wells, and piezometers for analysis of soils and groundwater as well as physical properties of soil and hydrogeologic conditions.*
- *Continuous monitoring of water levels*
- *Leachate, surface water and sediment analysis*
- *Air quality survey*
- *Residential well sampling and analysis*
- *Excavation of test pits to help delineate the limits of waste.*

To determine which media (soil, groundwater, etc.) contain contamination at levels of concern, the analytical data obtained from the RI was compared to Environmental Standards, Criteria, and Guidance (SCGs). Groundwater, drinking water and surface water SCGs identified for the Rome Landfill site were based on NYSDEC Ambient Water Quality Standards and Guidance Values and Part V of NYS Sanitary Code. For the evaluation and interpretation of soil and sediment analytical results, NYSDEC soil cleanup guidelines for the protection of groundwater, background conditions, and risk-based remediation criteria were used to develop remediation goals for soil.

Based upon the results of the remedial investigation in comparison to the SCGs and potential public health and environmental exposure routes, certain areas and media of the site require remediation. These are summarized below. More complete information can be found in the RI Report.

Chemical concentrations are reported in parts per billion (ppb), and parts per million (ppm). For comparison purposes, SCGs are given for each medium.

Groundwater in the vicinity of Tannery Road is used by private residents as a potable water supply and is obtained primarily from two distinct hydraulic units: an upper unconfined sand unit and the underlying bedrock, and to a lesser extent from discontinuous sand and gravel lenses which occur within the till deposits. Groundwater in the bedrock and sand and gravel lenses underlying the Site is hydraulically separated from the unconfined lacustrine sand unit by a low permeability lacustrine clay and silt aquitard and a glacial till aquitard. Contaminants related to the Tannery Road Landfill have appeared in the upper unconfined sand unit. The water table has been observed at the surface in many areas around the landfill perimeter, as demonstrated by the presence of wetlands. The horizontal component of groundwater flow in the unconfined sand aquifer is radially away from the landfill, with components of groundwater flow to the west and south, and with the predominant regional groundwater flow direction east toward Canada Creek. The private potable water wells immediately around the Site utilize both the upper unconfined lacustrine sand unit and the bedrock aquifer.

Environmental samples were collected in April and May 1993 and again in October 1993. Figure 2 shows the location of the sampling points. Groundwater analytical results revealed that groundwater from four monitoring wells (MW-3S, MW-4S, MW-6S, MW-7D) exhibited concentrations of volatile organic compounds (VOCs) that exceeded their respective NYSDEC groundwater standards. Concentrations of total VOCs ranged from 8 ppb to 1,173 ppb, with the highest levels of contamination in MW-4S.

Analytical results for semi-volatile organic compounds indicated the presence of two compounds above standards in MW-4S. Pesticide/PCB groundwater analysis indicated trace levels of pesticides in MW-3S, MW-5D, and MW-7D. The October 1993 sampling also indicated an estimated concentration of PCB Aroclor 1254 of 0.52ppb. The groundwater standard for this compound is 0.1ppb. A summary of the volatile and semi-volatile organic compounds detected in groundwater is shown on Table 1.

The high turbidity values in the groundwater samples indicate that the reported April 1993 metals data may be biased high. Comparison of total metals data from upgradient monitoring well MW-9S to downgradient wells indicates that groundwater from all monitoring wells except MW-1S and MW-2S exhibit concentrations of at least one metal analyte elevated with respect to upgradient values.

The October 1993 filtered metals data tends to indicate that the landfill has impacted shallow groundwater in the vicinity of the site with respect to iron, manganese, barium, boron, and sodium.

Groundwater leachate indicator parameters are general water quality indicator analytes that are commonly found at elevated concentrations in municipal landfill leachates. Analytical data from the April 1993 groundwater samples revealed that groundwater from monitoring wells MW-2D, MW-3S, MW-4S, MW-5S, MW-6S, and MW-7D exhibited ammonia concentrations that ranged from 3ppm to 68ppm, exceeding the NYSDEC groundwater standard of 2ppm. Groundwater from monitoring wells MW-3S and MW-4S exhibited choride concentrations of 737ppm and 557ppm, exceeding the standard of 250ppm.

Surface water analytical data reveal that surface water in wetland VE-2 (SW-5) have VOCs and semi-VOCs that exceed standards (approx.150-160ppb). Surface water in wetland VE-2 west of and adjacent to the landfill(SW-5) exhibited concentrations of six metals(iron, copper, manganese, nickel, lead, and zinc) that exceeded NYSDEC surface water standards. Two downgradient Canada Creek samples exhibited iron and manganese concentrations that slightly exceeded the NYSDEC surface water standards. Leachate indicator parameters indicate that surface water has been impacted from the landfill and exceeds standards for ammonia and total dissolved solids, but that the impact to Canada Creek and the wetland is limited in extent.

Landfill leachate samples revealed the presence of VOCs and semi-VOCs. Leachate sample L-1 had approximately 1.1ppm of total VOCs, mostly acetone and 2-butanone, and 480ppb of phenolic compounds.

Sediment sample results indicate that sediments in both wetland VE-2 and Canada Creek have not been significantly impacted by landfill related constituents. Although several VOCs were detected in the wetland VE-2 sediment samples collected west of the landfill, concentrations were generally below applicable NYSDEC sediment criteria values or the contract required quantitation limit(CRQL).

Air samples taken both on site and at the site perimeter did not indicate the presence of any VOCs.

It should be noted that the data collected during the RI represents a "snap shot" of landfills conditions. It is known from landfill records and statements from former landfill workers that significant quanities of hazardous industrial waste were disposed of in the landfill. Given the size of the landfill, the analytical results obtained may not reflect the highest concentrations of contamination that may exist at the landfill, nor can the RI determine what future releases there may be if the landfill is left unremediated.

3.2 Summary of Human Exposure Pathways:

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

Possible complete human exposure pathways associated with the Rome Landfill include:

1. Current and future ingestion and household use of contaminated groundwater by nearby residents;

2. Skin contact or inadvertent ingestion of surface water or sediments;

3. Inhalation of volatile air contaminants.

No significant carcinogenic health risks were identified from current groundwater ingestion and use. Certain metal and VOC concentrations may contribute to potential human health risks posed by future uses of groundwater if unfiltered monitoring well groundwater concentrations were considered to reflect potential future drinking water levels. The majority of the potential health risks due to future ingestion and use of groundwater are expected to be due to the noncarcinogenic effects of iron, manganese and sodium in monitoring well groundwater. Concentrations of these metals exceed standards in groundwater affected by the landfill and in background groundwater samples. The potential carcinogenic effects from VOCs detected in groundwater are also of concern with respect to future use.

Surface waters in Canada Creek, the wetlands, the drainage ditch on the north side of the landfill, and leachate seeps are not expected to pose a potential risk to human health based on the levels detected and the expected infrequent, limited contact with these surface waters.

Sediments in Canada Creek, the wetlands, drainage ditch, and leachate seep areas are not expected to pose a risk to human health based on the extremely limited potential exposures and the relatively low levels of site-specific chemicals. Likewise, the air pathway is not expected to present a significant risk to human health. A more detailed discussion of health risks can be found in Section 7 of the RI Report.

3.3 Summary of Environmental Exposure Pathways:

This section summarizes the types of environmental exposures which may be presented by the site. The Habitat Based Assessment included in the RI presents a more detailed discussion of the potential impact at the site on fish and wildlife resources.

Freshwater Wetland VE-2 and Canada Creek are the ecosystems that could potentially be impacted by from the Site. Impacts to Wetland VE-2 appear to be limited to the area adjacent to and west of the landfill in the vicinity of SW-5 and SW-9. The concentration of iron in the vicinity of SW-5 is 1000 times the surface water standard, and the concentration of iron in the drainage ditch north of the landfill is 30 times the standard. The surface water standard for iron is 300ppb. In addition to causing unsightly red discoloration, high iron concentrations lead to anoxic conditions and suffocation of aquatic life.

Surface water samples collected from Canada Creek indicate a slight increase in certain landfill leachate indicator parameters, such as ammonia, which is toxic to fish, and chemical oxygen demand near the confluence of the surface drainage features that drain the site area and Canada Creek. There is also a measurable increase in iron and manganese in Canada Creek compared to an upstream sample.

Cadmium, zinc, and copper and were also detected in surface water at concentrations which affect the survival of fish and benthic invertebrates. Concentrations of arsenic and low levels of pesticides detected in groundwater are also of concern as the shallow groundwater ultimately discharges to Canada Creek.

Sediment analytical results indicated that sediment in wetland VE-2 and Canada Creek have not been significantly impacted with respect to toxicity to aquatic life. The elevated leachate indicator and metals parameters detected in surface water samples will be reduced once remedial measures have been taken and the leachate discharge to the wetlands and surface waters is discontinued.

SECTION 4: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The NYSDEC and the City of Rome entered into a Consent Order on Feburary 3, 1992. The Order obligates the City of Rome to implement a full remedial program and allows reimbursement to the City of Rome of up to 75 percent of the eligible cost of the remediation.

The following orders summarize the chronological enforcement history of this site.

Orders on Consent

Date	Index	Subject
6/11/82	File No. 6-0135	Landfill Closure
2/3/92	A6-0250-90-11	Remedial Program

SECTION 5: SUMMARY OF THE REMEDIATION GOALS

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375-1.10. These goals are established under the overall goal of meeting all standards, criteria, and guidance (SCGs) and protecting human health and the environment.

At a minimum, the remedy selected should eliminate or mitigate all significant threats to the public health and to the environment presented by the hazardous waste disposed at the site through the proper application of scientific and engineering principles.

The goals selected for this site are:

- Reduce, control, or eliminate the generation of leachate within the soils/waste on site.
- Eliminate the threat to surface waters by eliminating any future contaminated surface run-off from the contaminated soils on site.
- Eliminate the potential for direct human or animal contact with landfill waste.
- Mitigate the impacts of contaminated groundwater on the environment.
- Prevent, to the extent practical, migration of contaminants in the landfill to groundwater.
- Provide for attainment of SCGs for groundwater quality at the limits of the area of concern (AOC).
- Ensure a safe water supply for any downgradient residents whose wells may have been impacted by the landfill.

SECTION 6: SUMMARY OF THE EVALUATION OF ALTERNATIVES

Potential remedial alternatives for the Rome Landfill site were identified, screened and evaluated in a Feasibility Study. This evaluation is presented in the report entitled City of Rome Tannery Road Landfill Site Feasibility Study, May 11, 1994, Revised: December, 1994. A summary of the detailed analysis follows.

6.1: Description of Alternatives

The potential remedies are intended to address the contaminated surface water and groundwater at the site, as well as the waste mass as a source of contamination.

The remedial alternatives for the Site have been grouped into four separate series of alternatives. Each series addresses a component of the overall recommended remedial plan. The four series are: A.) Landfill Grade; B.) Landfill Cap; C.) Leachate Control; and D.) Mitigation of Existing Contaminant Migration Impacts. A "No Action Alternative" is included as the first alternative within each series, to allow for benchmark evaluation of the various alternatives within each series. The alternatives retained after screening are shown on Table 2.

No Action

The no action alternative is evaluated as a procedural requirement and as a basis for comparison. It requires continued monitoring only, allowing the site to remain in an unremediated state. Under this alternative the site would remain in its present condition and human health and the environment would not be provided any additional protection.

The first alternative in each series, Alternatives A1, B1, C1, and D1 are all no action alternatives.

Series A - Landfill Grade

Alternative A2 - Regrading by Acceptance of Clean Fill

Present Worth:	$ 6,794,000
Capital Cost:	$ 5,312,000
Cost for capping additional 13 acres:	$ 1,482,000
Time to Implement:	6 months

This alternative would consist of achieving the necessary final grade standards by the acceptance of clean soil fill from off-site, spread and compacted over the existing 57 acre landfill footprint. Approximately 425,800 cubic yards of clean soil fill would be required, in conjunction with regrading/replacement of approximately 27,000 cubic yards of existing waste materials.

Alternative A4 - Regrading by Combination of Waste Reconsolidation and Clean Soil Acceptance.

Present Worth:	$ 6,047,800
Capital Cost:	$ 6,047,800
Time to Implement:	6 months

This alternative would consist of achieving the necessary final grade standards by a combination of waste reconsolidation and clean soil acceptance, reducing the landfill footprint from 57 acres to 44 acres, resulting in the recreation of approximately 11 acres of wetland environment. Approximately 244,600 cubic yards of existing waste would be reconsolidated, in combination with acceptance of approximately 134,300 cubic yards of clean soil from off-site.

Alternative A5 - Regrading by Combination of Waste Reconsolidation and Alternate Grading Material

Present Worth:	$ 3,899,100
Capital Cost:	$ 4,570,600
Direct Revenue:	
Acceptance of alternate grading material -	($ 671,500)
Time to Implement:	1 year

This is similar to Alternative A4 above, however alternate grading material (AGM) would be used rather than clean soil. AGM is select processed construction and demolition debris that would be regulated and controled in accordance with the AGM Operations Plan, dated August 10, 1994, Revised: November 8, 1994.

Series B - Landfill Cap

Alternative B2 - NYSDEC Part 360 Clay Cap

Present Worth:	$ 6,847,000
Capital Cost:	$ 6,604,100
Annual O&M:	$ 15,800
Time to Implement:	6 months - 1 year

This alternative consists of installing a clay cap over the landfill(44 acres after consolidation) that meets NYSDEC Part 360 standards for capping of unlined landfills.

Alternative B3 - NYSDEC Part 360 FML Cap

Present Worth:	$ 5,994,800
Capital Cost:	$ 5,751,900
Annual O&M:	$ 15,800
Time to Implement	6 months - 1 year

This alternative consists of installing a 40 mil flexible membrane liner (FML) cap over the 44 acre landfill that meets NYSDEC Part 360 standards for capping of unlined landfills.

Series C - Leachate Control

Alternative C4 - Install Leachate Collection Wells; Off-Site Treatment

Present Worth:	$ 11,269,000
Capital Cost:	$ 1,077,000
Annual O&M:	$ 663,000
Time to Implement:	6 months

This alternative would consist of installing 4 leachate collection wells within the landfill to control and significantly reduce continued migration of leachate. Approximately 9 million gallons of the extracted leachate would be transported to the Rome Water Pollution Control Facility for treatment.

Alternative C6 - Install Full Slurry Wall; Leachate Collection; Off-Site Treatment;

Present Worth:	$ 8,249,000
Capital Cost:	$ 3,668,000
Annual O&M:	$ 298,000
Time to Implement:	6 months - 1 year

This alternative would consist of installing a slurry wall around the entire perimeter of the reconsolidated landfill to control leachate. A leachate collection system would be installed inside of the

slurry wall to maintain inward gradient conditions. Approximately 4 millon gallons per year of leachate would be collected and transported to the Rome Water Pollution Control Facility for treatment by a sewer line.

Series D - Mitigation of Existing Contaminant Migration Impacts

Alternative D2 - Install Deep Groundwater Wells For Downgradient Users

Present Worth:	$ 115,300
Capital Cost:	$ 61,500
Annual O&M:	$ 3,500
Time to Implement:	2 months

This alternative would consist of installing new double cased wells into deeper groundwater-bearing formations that would remain unaffected by the existing landfill groundwater contamination, as a potable water supply for current and future residents located downgradient from the landfill.

Alternative D3 - Install Municipal Water Supply to Downgradient Residents

Present Worth:	$ 704,500
Capital Cost:	$ 693,700
Annual O&M:	$ 700,000
Time to Implement:	6 months

This alternative would consist of extending the City of Rome municipal water supply system to current users located in the downgradient vicinity of the landfill along Tannery Road.

6.2 Evaluation of Remedial Alternatives

The criteria used to compare the potential remedial alternatives are defined in the regulation that directs the remediation of inactive hazardous waste sites in New York State (6NYCRR Part 375). For each of the criteria, a brief description is provided followed by an evaluation of the alternatives against that criterion. A detailed discussion of the evaluation criteria and comparative analysis is contained in the Feasibility Study.

The first two evaluation criteria are termed threshold criteria and must be satisfied in order for an alternative to be considered for selection.

1. Compliance with New York State Standards, Criteria, and Guidance (SCGs). Compliance with SCGs addresses whether or not a remedy will meet applicable environmental laws, regulations, standards, and guidance.

   All of the Series A and Series B alternatives meet SCGs, except for no action. Any fugitive emissions generated during regrading would be short-term, and would be minimized through the use of dust suppressants or masking agents, as necessary, to comply with standards.

If Alternative C1, no action for leachate control, were implemented, background conditions for groundwater would essentially never be reached. Both Alternatives C4 and C6 would theoretically result in background conditions in groundwater at Tannery Road in about 40 years.

Both Alternatives D2 and D3 meet SCGs with respect to the landfill. It should be noted, however, that the natural background groundwater contains certain metals, such as iron, in concentations higher than the New York State SCG.

2. Protection of Human Health and the Environment. This criterion is an overall evaluation of the health and environmental impacts to assess whether each alternative is protective.

All of the Series A and Series B alternatives, with the exception of no action are protective of human health and the environment.

Alternatives A4 and A5 are more protective of the environment than A2 in that they provide for the creation of approximately 11 acres of wetland on the south side of the landfill and provide for additional buffer to the existing wetlands from the landfill. Alternatives B2 and B3 provide protection of human health and the environment by eliminating any potential direct exposure to waste or leachate seeps, and minimizing leachate generation.

Alternative C1, no action for leachate collection, would allow refuse which is below the watertable under the landfill to continue to generate leachate and contaminate groundwater. Alternatives C4 and C6 would protect the groundwater resource. Alternative C4 would hydraulically contain and capture leachate and contaminated groundwater. This would require the pumping and treatment of approximately 9 million gallons per year of contaminated water, however this may adversely impact wetlands adjacent to the landfill. Alternative C6 would control leachate and protect the groundwater resource while preventing dewatering of the freshwater wetlands adjacent to the landfill.

Alternative C6 would require the construction of a 30 foot wide construction pad around the perimeter of the landfill waste mass in order to construct the slurry wall. This would result in a temporary distrubance to about 3 acres of wetland which would be restored following the construction.

All of the Series D alternatives, except for alternative D1 no action, are protective of human health and the environment. Although there is no documented evidence of contamination from the landfill in at least three of the four downgradient residential wells sampled, there is a potential risk of future contamination. Alternative D3 is more protective than Alternative D2 in that the natural background deep groundwater may contain natural gas and certain metals in concentations higher than New York State standards. A pressurized water supply line provided in Alternative D3 would provide a more reliable water supply to downgradient residents with respect to both quality and quantity. The regional groundwater gradients may carry existing landfill contaminants which have migrated beyond the limits of the waste mass to the vicinity of new residential supply wells, creating the potential for cross-contamination of the deeper wells. However, since the deep aquifers in the site vicinity (bedrock and deep gravel lenses) are separated from the shallow unconfined lacustrine sand aquifer by a continuous low permeability clay and silt aquitard unit,

double cased wells included in Alternative D2 could prevent contaminants in the shallow aquifer from migrating downward along well casings.

The next five "primary balancing criteria" are used to compare the positive and negative aspects of each of the remedial strategies.

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

   Alternative A1, Landfill Grade, No Action, would result in no short-term risks. Alternative A2 would result in some short-term risks associated with airborne emissions and truck traffic necessary to transport 425,800 cubic yards of clean soil to the site, as well as the excavation and replacement of waste. Alternatives A3 and A4 would have short-term effects that are similiar to A2, but with less truck traffic.

   Within the Series B Alternatives, any short-term effects from Alternatives B2 and B3, such as fugitive dust, can be mitigated by appropriate protective equipment and procedures.

   Within the Series C Alternatives, Alternatives C4 and C6 would have short-term construction impacts associated with the installation of the sewerline for C4 and slurry wall and sewerline for Alternative C6.

   Within the Series D Alternatives, there would be short-term construction impacts related to the construction of a water main on Tannery Road.

4. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of alternatives after implementation of the response actions. If wastes or treated residuals remain on site after the selected remedy has been implemented, the following items are evaluated: 1) the magnitude of the remaining risks, 2) the adequacy of the controls intended to limit the risk, and 3) the reliability of these controls.

   All of the alternatives result in waste remaining on site. Within the Series A Alternatives, Alternatives A2, A4, and A5 would reduce the adverse effects of remaining waste by regrading which would increase runoff. Within the Series B Alternatives, both B2 and B3 are proven reliable long-term methods for isolating a waste mass and reducing leachate. Within the Series C Alternatives, no action would result in an increase in long-term risk to human health and the environment due to the continued migration of contaminated groundwater generated from waste below the watertable. Alternative C6 would provide better long-term effectiveness than Alternative C4 in that once in place leachate would be controled without a potential hydraulic impact to the freshwater wetlands. Within the Series D Alternatives, both alternatives D2 and D3 should result in an effective remedies, but Alternative D3 provides a more reliable long-term remedy for existing residents.

5. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the wastes at the site.
Series A Alternatives A2, A4, or A5 combined with Series B Alternatives B2 or B3 would significantly reduce the mobility of contaminates by reducing precipitation infiltration and leachate generation. Within the Series C Alternatives, both C4 and C6 would significantly reduce the mobility, and volume of contaminants escaping to the environment. Alternative C6 would provide a more passive and perhaps more reliable permanent barrier for contaminate migration. The Series D Alternatives would not contribute to the reduction of the toxicity, mobility, or volume of landfill contaminants. The Series D Alternatives are intended to address the potential effects of existing contamination.

6. Implementability. The technical and administrative feasibility of implementing each alternative is evaluated. Technically, this includes the difficulties associated with the construction, the reliability of the technology, and the ability to monitor the effectiveness of the remedy. Administratively, the availability of the necessary personal and material is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, etc..

   All of the Series A Alternatives are implementable. Alternative A5 would require more effort to implement, as it would require implementation in accordance with an AGM Program Operations Plan. The Series B, C, and D Alternatives are also technically and administratively implementable. Alternative C6 will require limited encroachment into the wetland and in general will be more difficult to construct due to inclusion of the slurry wall.

7. Cost. Capital and operation and maintenance costs are estimated for each alternative and compared on a present worth basis. Although cost is the last balancing criterion evaluated, where two or more alternatives have met the requirements of the remaining criteria, cost effectiveness can be used as the basis for the final decision. The costs for each alternative are presented in Table 2. The Capital Cost is the actual construction cost. The Annual O&M refers to the annual operation and maintenance cost and the Present Worth Cost is the estimated cost including 30 years of annual operation and maintenance. As previously stated, the final remedy for this site will include one alternative from each of the four series.

8. Community Acceptance - This final criterion is considered a modifying criterion and is taken into account after evaluating those above. Concerns of the community regarding the RI/FS reports and the Proposed Remedial Action Plan were evaluated. A "Responsiveness Summary" was prepared that describes public comments received and how concerns were addressed.

SECTION 7: SUMMARY OF THE SELECTED ALTERNATIVE

Based upon the results of the RI/FS, and the evaluation presented in Section 6, the NYSDEC has selected Alternative A5, B3, C6 and D3 as the remedy for this site. The cost estimate for the components of the remedy are shown on Table 3.

Within the Series A alternatives for the landfill grade, Alternative A5, regrading by a combination of waste reconsolidation and alternative grading material, was selected because it will shrink the landfill footprint from 57 to 44 acres and result in the recreation of approximately 11 acres of freshwater wetland

in excavation areas 1 & 2. Utilizing alternative grading material (AGM) provides a beneficial use for the AGM material, is cost effective and is more environmentally sound than mining approximately 134,300 cubic yards of clean soil fill to bring the landfill up to proper grade before capping.

The final reconsolidated landfill footprint and landfill grade is shown on Figure 3.

Within the Series B Alternatives for the landfill cap, alternatives B2 and B3 would provide similar results when evaluated against most of the described criteria. The two alternatives provide similar levels of protection of human health and the environment and reduction of the mobility of the landfill contaminants. However, due to the relatively high estimated cost to procure qualifying clay soil in the vicinity of the landfill, the cost of Alternative B3 is estimated to be lower than the estimated cost of alternative B2. Therefore, on the basis of a lesser cost for similar cap performances, Alternative B3 was selected.

Within the Series C Alternatives which address leachate control, Alternatives C4 and C6 effectively control landfill leachate. However, only Alternative C6 will comply with SCGs or background conditons in groundwater at Tannery Road without adversely impacting the wetlands. Alternative C6 would control leachate while preventing the dewatering of the wetland, and will result in the pumping and treatment of significantly less contaminated water. Alternative C6 will provide a more reliable passive and cost effective means of preventing leachate movement. Alternative C6 will cost $ 2.5 million more in capital cost than Alternative C4, however since less water would have to be pumped and treated, the present worth cost is over $ 3 million less. In addition, the site geology, sand overlying silt and clay, is ideally suited for slurry wall construction.

Within the Series D Alternatives, which address mitigation of existing contaminant migration, Alternative D3 is more protective than Alternative D2 in that the natural background deep groundwater may contain natural gas, salt, or certain metals in concentations higher than New York State standards. A pressurized water supply line provided in Alternative D3 will provide a more reliable water supply to downgradient residents with respect to both quality and quantity. The regional groundwater gradients may carry existing landfill contaminates which have migrated beyond the limits of the waste mass to the vicinity of residential supply wells, creating the potential for cross-contamination. Therefore, within the Series D alternatives, Alternative D3, shown on Figure 4, was selected.

The estimated present worth cost to implement the remedy is $19,639,100. The cost to construct the remedy is estimated to be $ 14,125,800 and the estimated average annual operation and maintenance (O&M) cost for 30 years is $ 298,000. It should be noted that the annual O&M costs includes a rate of 7 cents per gallon for treatment of leachate at the treatment plant. This rate was used for comparision purposes, and the actual annual O&M cost to the City of Rome for the selected alternative will be much less, since the City owns and operates the treatment plant. The actual annual O&M cost to the City will be approximately $ 58,000.

These totals include the costs of fencing, groundwater monitoring, and periodic reviews not included with the four alternative series. The elements of the selected remedy are as follows:

1. A remedial design program to verify the components of the conceptual design and provide the details necessary for the construction, operation and maintenance, and monitoring of the remedial program. Uncertainties identified during the RI/FS will be resolved.

2. A remedial construction program consisting of the following:

   - regrading the landfill by reconsolidating approximately 244,000 cubic yards of in-place material and placing approximately 134,300 cubic yards of alternative grading material (AGM); resulting in a reduction in the landfill footprint from 57 acres to 44 acres and the recreation of approximately 11 acres of wetland;

   - installation of an FML cap over the landfill that meets NYSDEC Part 360 standards;

   - construction of a full slurry wall surrounding the landfill waste, and the pumping and treatment of approximately 4 million gallons of leachate per year with treatment at the Rome POTW;

   - extension of a public water supply main to replace impacted and threatened private water wells along Tannery Road;

   - fencing, deed restrictions, maintenance, and periodic reviews;

   - since the remedy results in hazardous waste remaining within the landfill, a long term monitoring program will be instituted. This long term monitoring program will allow the effectiveness of the selected remedy to be monitored by sampling and testing of groundwater and surface water.

7.1: Documentation of Significant Changes

The February 1995 Proposed Remedial Action Plan (PRAP) proposed the selection of Alternative D2, double cased deep wells, rather than Alternative D3, public water supply, within the Series D Alternatives. After carefully considering the statements made at the public meeting and the comments received during the public comment period, the Department reviewed the data collected during the Remedial Investigation (RI).

Residential well R-4 had a presence of 4-methylphenol and 20 tentatively identified compounds in the first round of sampling. All four residential wells were high in sodium, and three of the four wells exceeded standards for iron. Well R-3 also had concentrations of manganese and thallium that exceeded standards. The RI data also indicates a significant amount of radial flow from ground water mounding at the landfill site. Natural groundwater has concentrations of certain metals, such as iron, that exceed standards, making it difficult to definitively identify the limits where groundwater has been impacted by the landfill. In the Department's judgement, however, there remains a potential for future contamination of downgradient water supply wells from contaminated groundwater in the shallow aquifer which has migrated beyond the edge of the fill. Evidence of this potential risk includes a concentration of 190ppb of total VOCs detected in monitoring well 7D which is outside the proposed slurry wall.

Given the conditions discussed above, there is a need to provide an adaquate long term water supply. Individual well filters are not an acceptable long term solution when other viable options exist. Individual well filter systems require a considerable amount maintenance and therefore they are often not cost effective over the long term. Well filters must be periodically monitored both before and after the filter. They are less reliable than other water supply options since contaminants may "break through" filters in between monitoring events.

Likewise, the double cased deep wells provided in Alternative D2 may not provide an acceptable long term water supply for residents on Tannery Road that could be potentially affected. Although gravel lenses within the glacial till unit could provide good water supplies, the probability of intersecting these lenses and the long term yields these gravel lenses can provide are unknown. The bedrock underlying the till unit is Ordovician age Utica Shale, a black and gray carbonaceous shale with calcareous argillites. Water wells completed in the bedrock within the site vicinity are reportedly poor quality, often containing natural gas and salt, with limited yields.

The Department considered installing double cased deep wells for potentially affected residents on Tannery Road, and extending the water main if potable water supplies could not be developed. However, given the potential that some or all of the deep wells may have poor natural quality, this was considered an unacceptable risk in terms of selecting a cost effective and protective water source. Also, there would always be some uncertainty about landfill contaminants leaking through the silt and clay aquitard unit to clean aquifers below. In order to insure that the deep wells were clean a monitoring program would be required. If the water main was eventually required, this option would cost at least 30% more than extending the water main at this time.

Therefore, after carefully considering the alternatives for ensuring a good water supply for potentially affected residents on Tannery Road, with respect to both quality and quantity, the pressurized water main provided with Alternative D3 was selected. The capital cost of Alternative D3 is estimated to be $693,700.

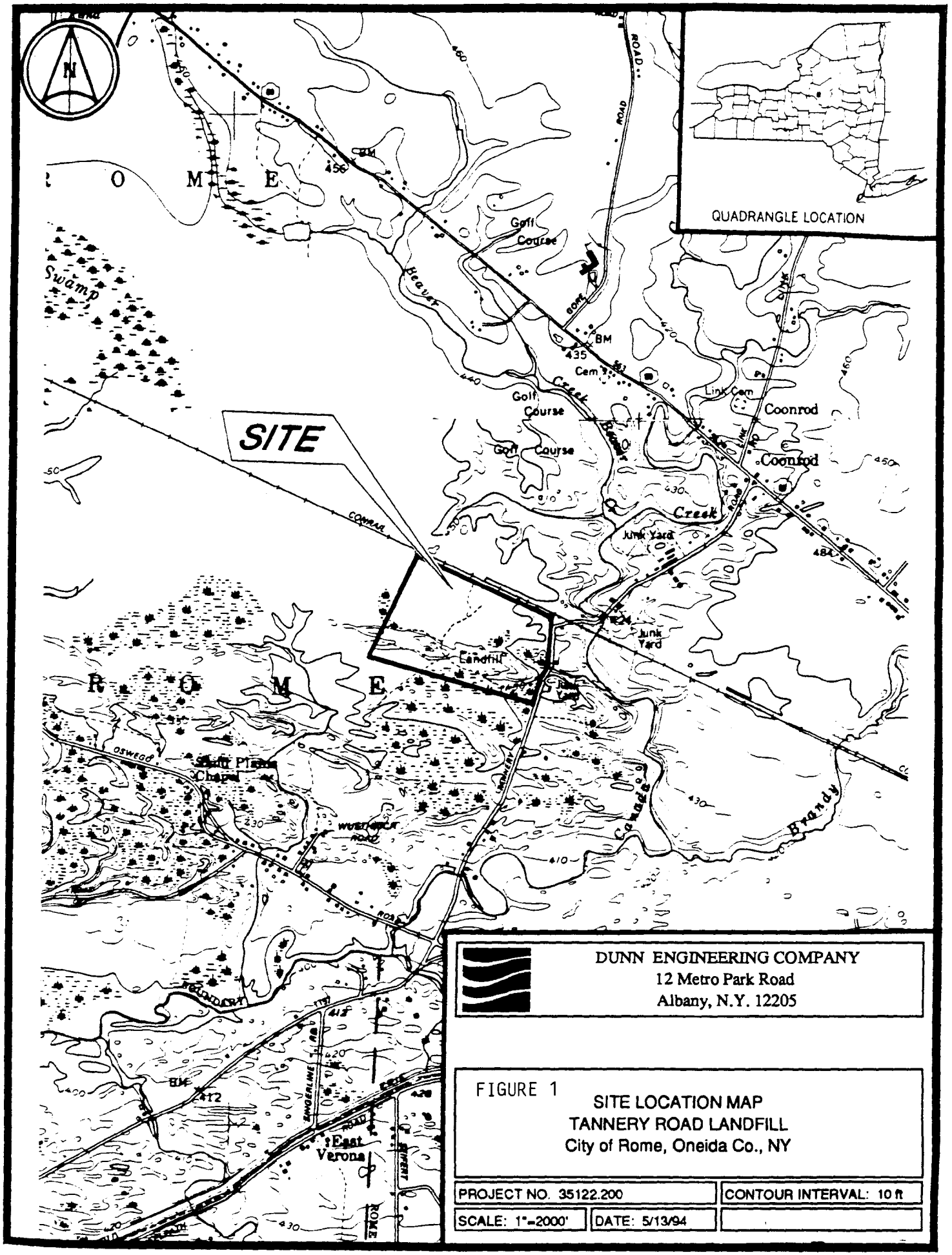
SECTION 8: HIGHLIGHTS OF COMMUNITY PARTICIPATION

The first public meeting on the remedial program was held on November 30, 1992 at Rome City Hall. A press release was issued and letters were mailed to interested parties to inform them of the meeting. The remedial program was explained at the meeting, and the RI/FS Workplan was presented. The ongoing RI/FS was periodically discussed and occasional updates were provided at the City of Rome Common Council Meetings.

The public comment period on the Proposed Remedial Action Plan (PRAP) was held from February 3, 1995 to March 6, 1995. The PRAP public meeting was held on February 9, 1995. A press release was issued, and a letter was mailed out to interested parties annoucing the public comment period and second public meeting.

All final reports were placed in the document repositories and made available to the public for review. As previously discussed in Section 7.1, the proposed remedy was modified largely because of the public comments received. The public meeting on the PRAP and the comments received during the public comment period are summarized in the Responsiveness Summary Section of this document, Appendix A.

FIGURES

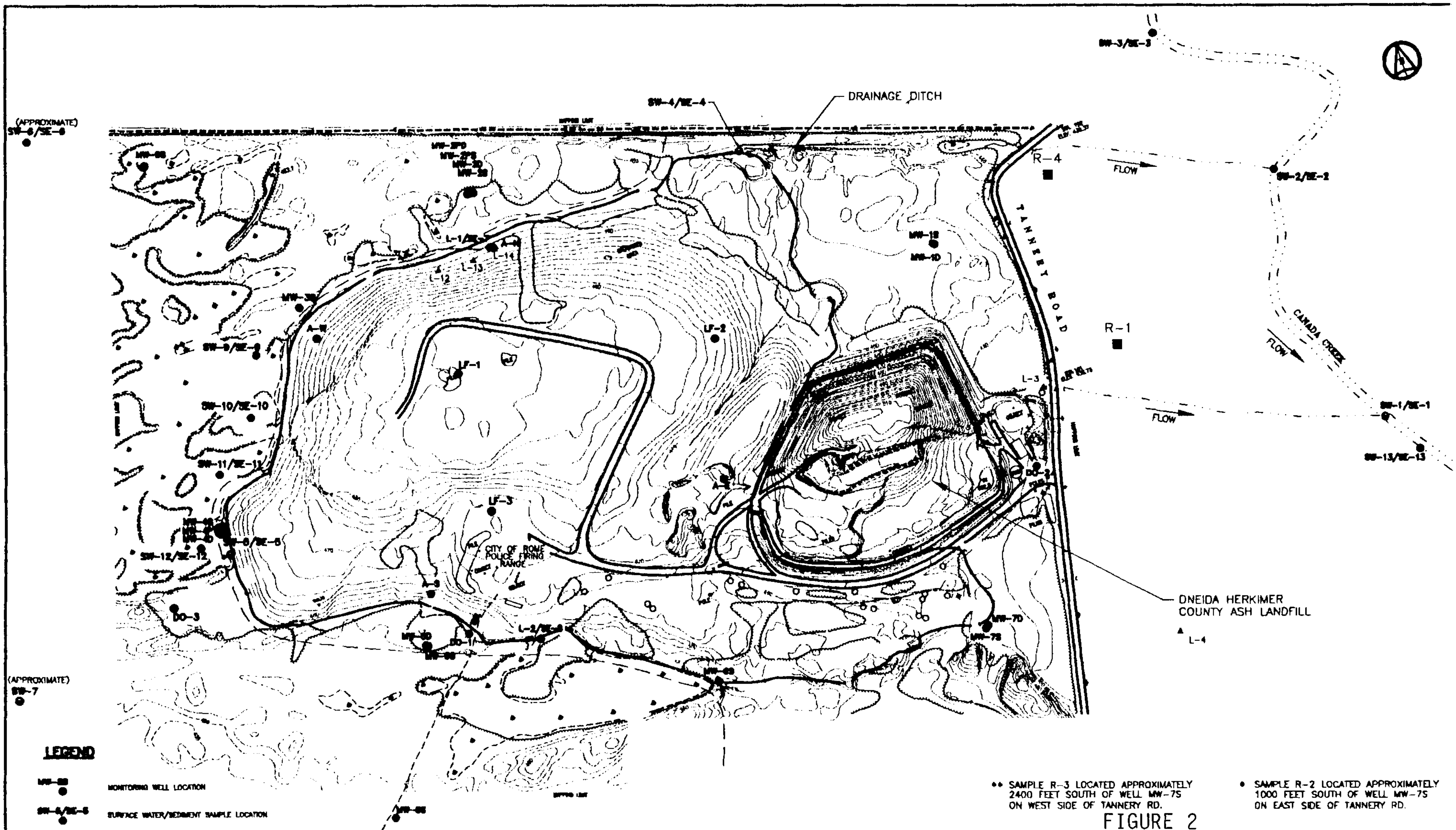


DUNN ENGINEERING COMPANY
12 Metro Park Road
Albany, N.Y. 12205

FIGURE 1

SITE LOCATION MAP
TANNERY ROAD LANDFILL
City of Rome, Oneida Co., NY

PROJECT NO. 35122.200	CONTOUR INTERVAL: 10 ft
SCALE: 1"=2000'	DATE: 5/13/94



LEGEND

- MW-8S ● MONITORING WELL LOCATION
- SW-6/SE-6 ● SURFACE WATER/SEDIMENT SAMPLE LOCATION
- L-1 ▲ LEACHATE SAMPLE LOCATION
- A-6 ● AIR MONITORING LOCATION
- EDGE OF FILL
- APPROXIMATE WETLAND BOUNDARY
- R-1 ■ RESIDENTIAL SAMPLE LOCATION

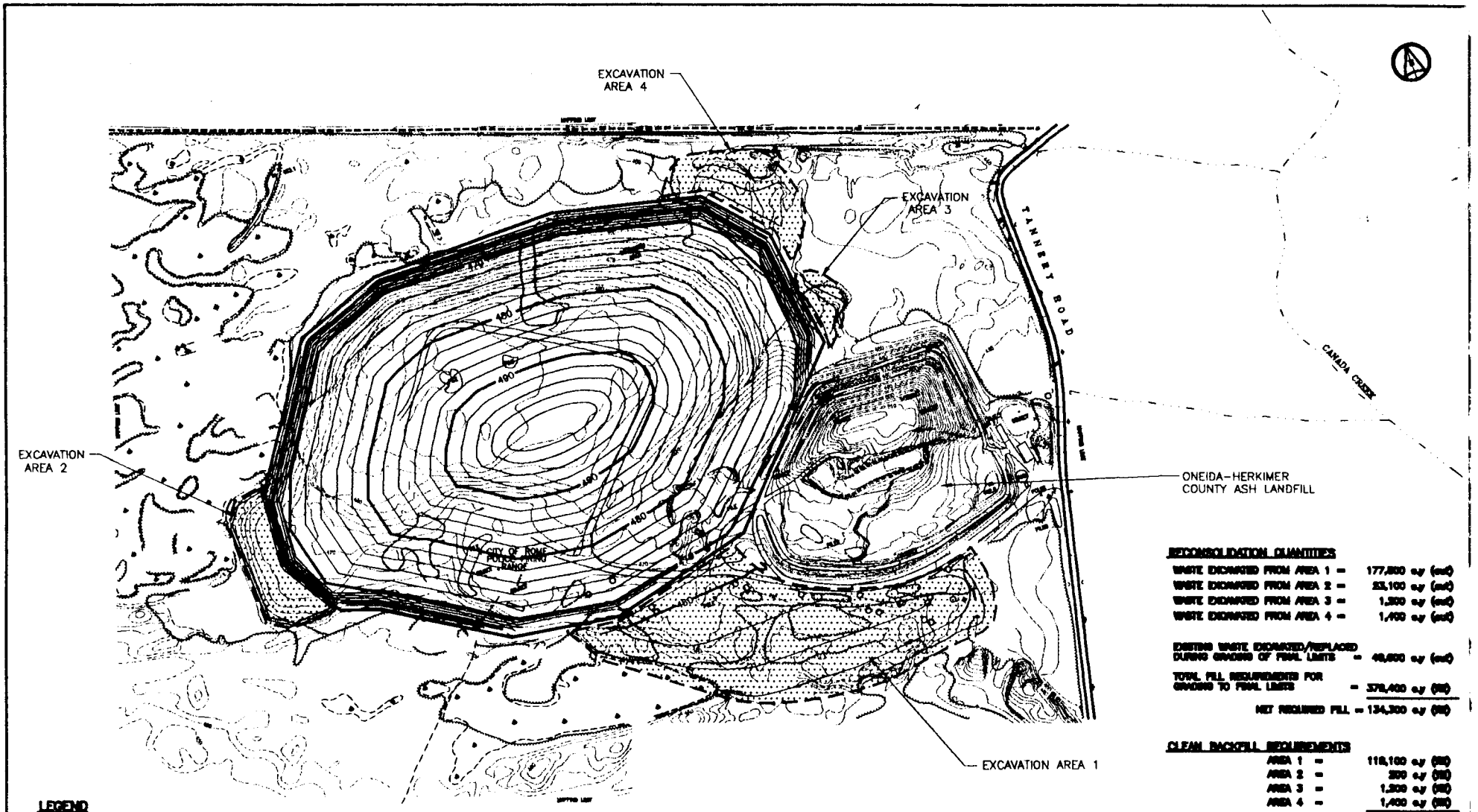
** SAMPLE R-3 LOCATED APPROXIMATELY 2400 FEET SOUTH OF WELL MW-7S ON WEST SIDE OF TANNERY RD.

* SAMPLE R-2 LOCATED APPROXIMATELY 1000 FEET SOUTH OF WELL MW-7S ON EAST SIDE OF TANNERY RD.

FIGURE 2

DUNN ENGINEERING COMPANY DIVISION OF RUST ENVIRONMENT & INFRASTRUCTURE	SAMPLE LOCATION MAP TANNERY ROAD LANDFILL CITY OF ROME ONEIDA Co., N.Y.
PROJECT No. 35122.300 / DATE APRIL 1994	DWG. No. 289371_2 / SCALE 1"=300'

PLOT DATE: 4/5/94



RECONSOLIDATION QUANTITIES

WASTE EXCAVATED FROM AREA 1 =	177,800 c.y. (est)
WASTE EXCAVATED FROM AREA 2 =	33,100 c.y. (est)
WASTE EXCAVATED FROM AREA 3 =	1,500 c.y. (est)
WASTE EXCAVATED FROM AREA 4 =	1,400 c.y. (est)
EXISTING WASTE EXCAVATED/REPLACED DURING GRADING OF FINAL LIMITS =	40,600 c.y. (est)
TOTAL FILL REQUIREMENTS FOR GRADING TO FINAL LIMITS =	378,400 c.y. (fill)
NET REQUIRED FILL =	134,300 c.y. (fill)

CLEAN BACKFILL REQUIREMENTS

AREA 1 =	118,100 c.y. (fill)
AREA 2 =	200 c.y. (fill)
AREA 3 =	1,500 c.y. (fill)
AREA 4 =	1,400 c.y. (fill)
TOTAL =	123,800 c.y. (fill)

LEGEND

- EDGE OF RECONSOLIDATED FILL
- 490 FINAL GRADE CONTOUR
- 490 EXISTING GRADE CONTOUR
- EXCAVATION AREAS

NOTE: ALL QUANTITIES ARE IN-PLACE QUANTITIES.

AREA OF EXCAVATIONS

AREA 1 =	5.5 ACRES
AREA 2 =	1.0 ACRES
AREA 3 =	.5 ACRES
AREA 4 =	1.0 ACRES

FIGURE 3

DUNN ENGINEERING COMPANY
DIVISION OF RUST ENVIRONMENT & INFRASTRUCTURE

FINAL LANDFILL GRADE
RECONSOLIDATED FOOTPRINT
TANNERY ROAD LANDFILL
CITY OF ROME ONEIDA Co., N.Y.

PROJECT No. 35122.300	DATE APRIL 1994	DWG. No. 2B9371_14	SCALE 1"=300'	

PLOT DATE: 4/5/94

Date: 5/11/1994
Drawing File: D:\DWG\TANNERY\2B9371_14.DWG (DAM)
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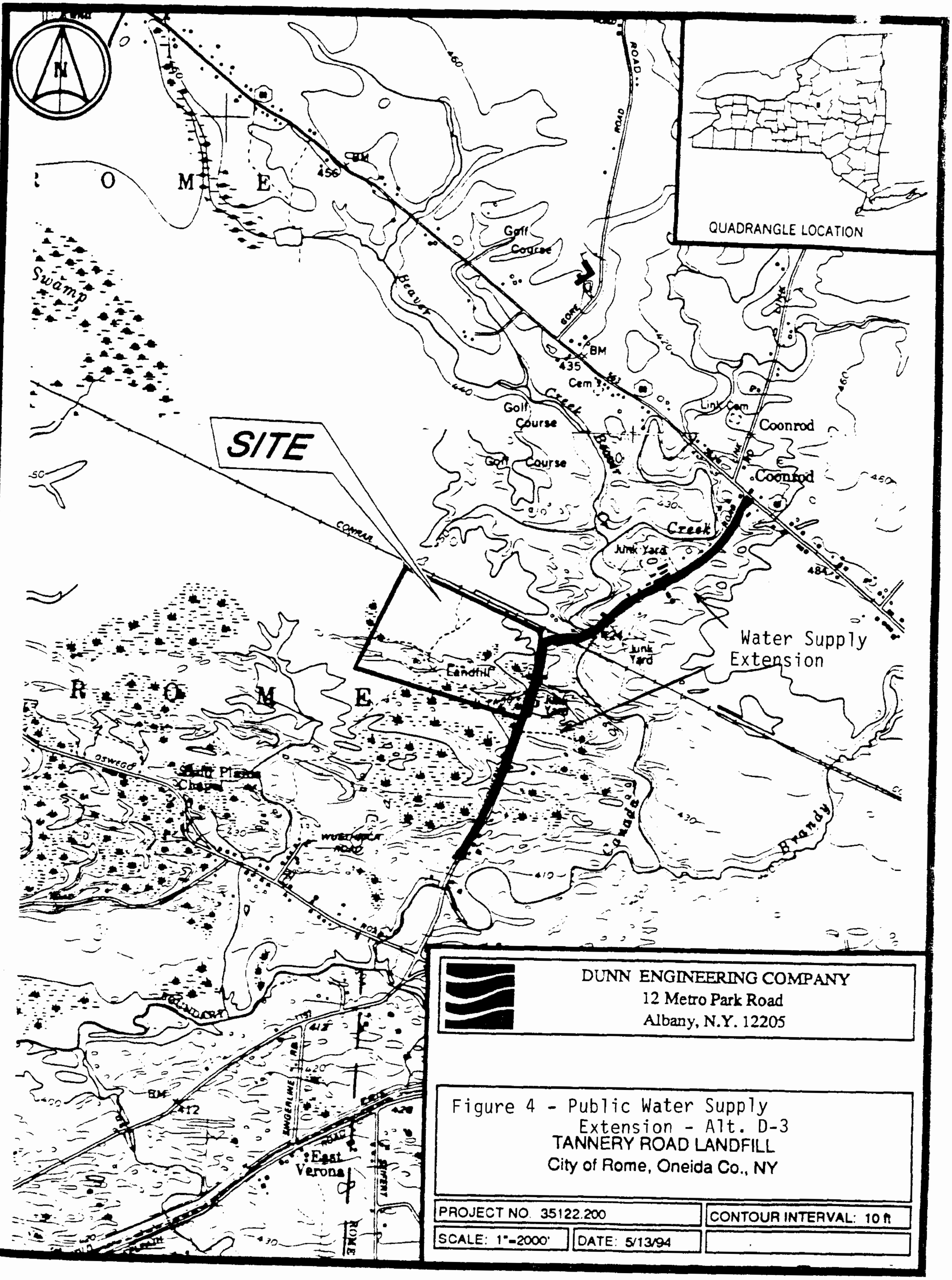

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Albany, N.Y. 12205

Figure 4 - Public Water Supply
Extension - Alt. D-3
TANNERY ROAD LANDFILL
City of Rome, Oneida Co., NY

PROJECT NO. 35122.200	CONTOUR INTERVAL: 10 ft
SCALE: 1"=2000'	DATE: 5/13/94

TABLES

TABLE 1

SUMMARY OF SITE EXCEEDANCES OF GROUNDWATER STANDARDS
FIRST AND SECOND RI SAMPLING EVENTS
TANNERY ROAD LANDFILL

PARAMETER	NYSDEC GROUNDWATER STANDARD (1)	RI SITE RESULT(S) (2)	WELL
VOCs (ug/l)			
Chlorobenzene	5	24/110 100U/12J	MW-7D MW-4S
Toluene	5	45/450	MW-4S
Xylenes	5	120/20 5J/10U 100U/53	MW-7D MW-6S MW-4S
Chloroethane	5	8J/15	MW-3S
1,1-Dichloroethane	5	14J/25U 3J/10U	MW-4S MW-7D
Ethylbenzene	5	6J/10U 100U/18J	MW-7D MW-4S
Benzene	0.7	35/44 1J/10U 100U/5J	MW-7D MW-6S MW-4S
SVOCs (ug/l)			
4-Methylphenol	1	710	MW-4S
Phenol	1	103J	MW4S
Arochlor 1254	0.1	.095JV/.52J	MW-7S

(1) 6 NYCRR Parts 700-704; Groundwater Class GA.
(2) Where two results noted, second result is from second RI sampling event. Single results correspond to the first RI sampling event, except for dissolved inorganic parameters (see note 3).
(3) All results are from the second RI sampling event.

J - Indicates that the reported value is estimated due to a concentration below the CRQL.
U - Indicates non-detected at the reported value.
V - Indicates that the reported value is estimated due to variance from quality control limits.
GV - Indicates NYSDEC guidance value.

TABLE 2
COST SUMMARY
DETAILED REMEDIAL ALTERNATIVES

ALTERNATIVE	PRESENT WORTH	CAPITAL COST	ANNUAL O&M
GENERAL NO ACTION ALTERNATIVE	$904,800	$113,100	$51,500
SERIES A - LANDFILL GRADE			
Alternative A1 - No Action	---	---	---
Alternative A2 - Regrading by Acceptance of Clean Soil Fill	$6,794,000	$5,312,000	$0
Alternative A4 - Regrading by Combination of Waste Reconsolidation and Clean Soil Fill Acceptance	$6,047,800	$6,047,800	$0
Alternative A5 - Regrading by Combination of Waste Reconsolidation and Alternate Grading Material Acceptance (* Includes revenue of $671,500 for AGM acceptance)	$3,899,100*	$4,570,600	$0
SERIES B - LANDFILL CAP			
Alternative B1 - No Action	---	---	---
Alternative B2 - NYSDEC Part 360 Soil Cap	$6,847,000	$6,604,100	$15,800
Alternative B3 - NYSDEC Part 360 FML Cap	$5,994,800	$5,751,900	$15,800
SERIES C - LEACHATE CONTROL			
Alternative C1 - No Action	---	---	---
Alternative C4 - Install Leachate Collection Wells; Off-Site Treatment	$11,269,000	$1,077,000	$663,000
Alternative C6 - Install Full Slurry Wall; Off-Site Treatment	$8,249,000	$3,668,000	$298,000
SERIES D - MITIGATION OF EXISTING CONTAMINANT MIGRATION IMPACTS			
Alternative D1 - No Action	---	---	---
Alternative D2 - Install Deep Double Cased Groundwater Wells for Downgradient Users	$115,300	$61,500	$3,500
Alternative D3 - Provide Municipal Water Supply to Downgradient Users	$704,500	$693,700	$700

TABLE 3
COST ESTIMATE

Component	Capital Cost	Total Annual O&M Costs for 30 Year Monitoring Period (Present worth at 5% discount rate)	Total Present Worth Cost
Alternative Series A			
Landfill Regrading	$3,899,100 *	(None)	$3,899,100
* includes $671,500 of AGM revenue			
Alternative Series B			
Landfill Capping	$5,751,900	$242,900	$5,994,800
Alternative Series C			
Leachate Control	$3,668,000	$4,581,000	$8,249,000
Alternative Series D			
Mitigation of Existing Contaminant Impacts	$693,700	$10,800	$704,500
Fencing/Deed Restrictions/ Baseline Groundwater Monitoring/ Site Monitoring and Maintenance/ and Periodic Reviews	$113,100	$791,700	$904,800
TOTAL	**$14,125,800**	**$5,626,400**	**$19,752,200**

APPENDIX A

APPENDIX A
Responsiveness Summary

The Proposed Remedial Action Plan (PRAP) for the Rome Landfill was issued by the New York State Department of Environmental Conservation in February 1995. A public comment period on the RI/FS Report, PRAP, and perferred alternative was held from February 3, 1995 to March 6, 1995. A public meeting was held during the public comment period on February 9, 1995 at 7:00pm at City Hall, Rome, New York. A press release was issued by the NYSDEC, and letters were mailed to all individuals listed on the Contact list in the Citizen Participation Plan announcing the Public Comment Period and Public Meeting. There was a newspaper article in the Rome Sentinel which included information on the proposed remedy, the public comment period and public meeting.

The public meeting, which also served as the City of Rome's Public Availibilty Session for the Alternative Grading Material (AGM) Plan, lasted about two hours. There were about 25 people in attendance, including radio, newspaper, and television reporters. Mr. Robert Commis, Commissioner of Public Works for the City of Rome, opened the meeting by introducing State Representatives and City Councilmen present. He also introduced the representatives of Dunn Engineering Company, the City's consultant on the Landfill. Mr. Gary Kerzic of Dunn then provided an approximately 25 minute presentation on the RI/FS findings.
Mr. Brian Davidson of the NYSDEC then briefly stated the remedy proposed by the State in the PRAP, and opened the meeting to questions.

All questions asked at the public meeting were answered by the City and State representatives present. The first several questions and comments regarded the previous landfill capping, performed in the early 1980's. If the landfill was capped in the early 1980's, why are we doing it again, and will we be capping the landfill again 15 years from now?

It was explained at the public meeting that in the early 1980's, the site was listed as a class 2A, a temporary classification assigned to sites that have inadequate or insufficient data for inclusion in any other classification.
The 1982 Consent Order signed between the City and the Department called for the landfill to be closed and covered. The site was covered with sandy soil. There was no inspection by the State, and apparently there was no quality control. An inspection of current site conditions reveals that whatever cap or cover was placed in the early 1980's is certainly not adequate today, although it has served as nuisance prevention, preventing flies and odors by keeping the raw decomposing garbage covered. In 1987 the site was listed as a Class 2 Site on the State Inactive Hazardous Waste Site Disposal Registry. A Class 2 Site is a site which poses a significant threat to public health or the environment, requiring remediation. This remedy will be inspected by the State during construction and there will be quality assurance and quality control. There will also be long term monitoring.

There were also some questions regarding the slurry wall technology - what is a slurry wall and how will it work?

It was explained at the meeting that the slurry wall is a vertical, very low permeability bentonite (clay) slurry wall, usually installed by backfilling a trench dug by a backhoe with the bentonite slurry. The wall would be 3 feet thick (the width of a backhoe bucket) and an average of 20 feet deep, keyed into

the silt and clay layer. The trench would be backfilled while it was being dug. Slurry walls can also be installed with a vibrating steel beam held by a crane. Wells would be pumped inside the wall to maintain an inward gradient.

Another concern expressed at the public meeting regarded the types of contaminants present in the leachate and the ultimate fate of those contaminants.

The results of the sampling were discussed. It was explained that the levels of contamination found were not unusual for a landfill and do not pose an imminent danger. It was acknowledged that the contaminants in the landfill leachate will ultimately be transported to the Rome POTW, and some contaminants will end up in the sewage sludge. It was explained that the POTW handles approximately 10 million gallons of waste water per day and that this remedy will result in approximately 11 thousand gallons per day being transported to the POTW for treatment. The plant is regulated by a discharge permit and the discharge is monitored. The current treatment processes at the plant will effectively remove the contaminants from the leachate. The contaminants found in the leachate are contaminants commonly found in waste water and currently being removed from waste water at the treatment plant.

The major concern at the public meeting centered around the selection of the Series D alternative. One woman summed up the public sentiment in her statement, "As a resident of Tannery Road it is unacceptable to have just double cased deep wells." Another area resident stated, "Within Series A, B, and C you picked the best alternative, but when it comes to people you picked the second best." A Rome City Councilman stated, "we are cutting corners by leaving the water main out." In addition, the City of Rome went on record as being opposed to the selection of Alternative D2 within the D Series of alternatives. There were also statements made at the meeting regarding low well yields and poor quality water in the Tannery Road area. There were reports of wells with natural gas and salt.

It was explained by the State representatives that the State is not opposed to a water line on Tannery Road, but that the State has to consider the impact of the landfill, and providing public water for all the residents on Tannery Road goes beyond the scope of this project based on the Remedial Investigation analytical results. It was stated at the meeting that if area residents have water supply problems in the future, they should contact the State or County Health Department, but double casing, with the outer casing grouted in the continuous clay unit, will prevent cross contamination. It was also stated that before the State makes a final remedy selection, all public comments will be considered.

The public meeting ended at about 9:00pm. A copy of the sign-in sheet is attached (attachment A-1), although only 8 of the residents present signed in.

Written Comments

Written comments were accepted until March 6, 1995. The following are the Department's responses to the comments received.

1. February 9, 1995 correspondance from Bruce R. Carpenter, Conservation Chair, Old Erie Chapter, National Audubon Society - Attachment A-2

Point One - General Comment

The Proposed Plan does not acknowledge the the importance of the Rome Sand Plains, past mistakes or future responsibilities. If the previous capping had been done correctly, we would not be facing the current problem. Natural resource damages and/or mitigation should be included.

Response to Point One -

The PRAP does acknowledge the presence of the Rome Sand Plains. Section 2 of the PRAP states "The Rome Sand Plains are considered to be a botanically distinct region containing several unique or rare habitat types." The proposed remedy provides for mitigation through the recreation of approximately 11 acres of wetland. The City of Rome will be reimbursed for up to 75% of the eligible costs from the Environmental Quality Bond Act (EQBA) of 1986. Title 3 of the EQBA provides funding for capital costs associated with the investigation and remediation of municipally owned inactive hazardous waste sites. The EQBA does not provide funding for natural resource damages. As was explained at the public meeting, the 1982 Consent Order signed between the City and the Department called for the landfill to be closed and covered. The site was covered with sandy soil. There was no inspection by the State, and apparently there was no quality control. An inspection of current site conditions reveals that whatever cap or cover was placed in the early 1980's is certainly not adequate today, although it has served as nuisance prevention, preventing flies and odors by keeping the raw decomposing garbage covered. In 1987 the site was listed as a Class 2 Site on the State Inactive Hazardous Waste Site Disposal Registry. A Class 2 Site is a site which poses a significant threat to public health or the environment, requiring remediation. This remedy will be inspected by the State during construction and there will be quality assurance and quality control.

Point Two - General Comment

Studies done by the Solid Waste Authority indicate a higher degree of degradation than was addressed in the PRAP. All previous studies should be considered.

Response to Point Two -

The Remedial Investigation (RI) Report included an evaluation of data collected in previous investigations and other investigations performed in the site area, including the investigation performed by the Oneida-Herkimer County Solid Waste Authority on the former Proia Sand Mine property (Sections 1.2.2 & 5.2.2.). The results of the investigation of the former Proia property did not indicate a higher degree of degradation than the RI results.

Point Three - General Comment

1.)How can the public be assured that hazardous materials will not be included in the Alternative Grading Material, & 2.) Studies should be done to assess the effects of the transportation of the Alternative Grading Material.

Response to Point Three -

1.) The Alternative Grading Material (AGM) will be strictly monitored at the source and at the site in accordance with the AGM Program Operations Plan.
2.) Utilizing AGM provides a beneficial use for the AGM material, is cost effective, and is more environmentally sound than mining approximately 134,300 cubic yards of clean soil to bring the landfill up to proper grade before capping. Mining clean soil to bring the landfill up to grade is a waste of the resource when AGM can serve the same purpose. AGM is currently being used at the Gloversville Landfill in the same way as is proposed for the Rome Landfill. The same number of trucks would be needed to haul clean soil to the site as will be needed to haul AGM.

Point Four - General Comment

Providing public water will encourage development in the area which may adversely impact the Rome Sand Plains. Bottled water should be provided to residents and more study should be done on providing services.

Response to Point Four -

Based on the comments received at the Public Meeting and during the public comment period, and after reconsidering the RI data, the State has selected Alternative D3, a public water main within the Series D Alternatives. The State has selected public water over doubled cased deep wells because the ability of doubled cased deep wells to provide good quality water supplies and ensure protection of public health is questionable. A pressurized water supply line will provide a more reliable water supply with respect to quality and quantity. Providing bottled water is not an adequate long term solution. The protection and preservation of the Rome Sand Plains is an important issue. However, the preservation of the Rome Sand Plains is addressed by wetland protection regulations. The focus of this project is protecting public health and the environment from the impacts of the landfill. A water main on Tannery Road will not necessary encourage development in the area, and much of the Sand Plains in the Tannery Road area is protected from development as designated wetlands.

Conclusion - General Comment

A full EIS should be developed, clean fill should be used instead of AGM, deep wells should be provided, and a sum of resource damage money should be allocated. Money for the remediation may not be available in the Governor's proposed budget.

Response -

Preparation of an EIS is not appropriate since this project is an enforcement action overseen by the NYSDEC and therefore is exempt under SEQR. As explained in the responses above, mining clean soil to bring the landfill up to grade is a waste of the resource when AGM can serve the same purpose, and the ability of

doubled cased deep wells to provide good quality water supplies and ensure protection of public health is questionable. The Governor's proposed budget will not effect this project. As previously stated the City of Rome will be reimbursed for up to 75% of the eligible costs from the Environmental Quality Bond Act (EQBA) of 1986, and the EQBA does not provide funding for natural resource damages. The City of Rome and the State of New York will be spending a combined total of approximately 14.1 million dollars in capital costs to ensure protection of public health, the environment, and to provide a long term remedy for this landfill.

2. February 15, 1995 correspondance from Louis P. Ferrara, P.E. Oneida County Department of Health to Mr. Brian H. Davidson - Attachment A-3

General Comment

The County Health Department would prefer an extension to the public water main rather than double cased wells.

Response to Comments -

After considering the statements made at the Public Meeting, written comments received, and after reevaluating the Remedial Investigation data, the NYSDEC is also concerned that double cased deep wells may not provide an adequate long term water supply for potentially affected residents on Tannery Road. Therefore Alternative D3, public water, was selected within the Series D Alternatives.

However, your assertions that "A layer of granite exists approximately 10 to 15 feet beneath grade in a portion of the region" and "The granite may prevent groundwater from reaching certain locations" are not substantiated.
Bedrock underlying the site area occurs at approximately 80 feet below grade, and consists of Ordovician age Utica Shale, a black and gray carbonaceous shale. The glacial deposits overlying the shale bedrock consist of a glacial till unit, a lacustrine clay and silt, and a lacustrine sand.

3. February 24, 1995 correspondance from Andrew E. Zepp, Associate Director, The Nature Conservancy, to Mr. Brian H. Davidson - Attachment A-4

General Comment

The RI/FS did not incorporate NY Natural Heritage Program's most recent field surveys. The utmost protection of the wetlands should be pursued. The 11 acre wetland restoration should restore the actual types of vegetation that once occupied the landfill site.

Response to Comments -

The information provided, including the NY Natural Heritage Program information, will be transmitted to the City of Rome's Engineering Consultant. Alternative C6, a full slurry wall, provides hydrologic protection of the wetlands to the greatest extent possible. The design and vegetation proposed for the 11 acres of restored wetland will be reviewed by Divison of Fish and Wildlife staff before approval.

4. March 3, 1995 correspondance from Robert A. Comis, Commissioner of Public Works, City of Rome, to Mr. Brian H. Davidson - Attachment A-5

General Comment

Alternative D2, double cased deep wells, is not acceptable. An extension to the water main, Alternative D3, should be included in the remedy for the site.

Response to Comments -

Only one of the four residential water supply wells on Tannery Road that were sampled during the Remedial Investigation had an indication of an impact from landfill contaminants. However, the NYSDEC is also concerned that double cased deep wells may not provide an adequate long term water supply for potentially affected residents on Tannery Road. Therefore Alternative D3, public water, was selected within the Series D Alternatives.

5. Correspondance from Mr. & Mrs. David Hyatt & others, to Mr. Brian H. Davidson, received March 3, 1995 - Attachment A-6

General Comment

Deep wells will not provide reliable water supplies. More wells on Tannery Road could be contaminated in the future. An extension to the water main (Alternative D3) should be included in the remedy for the site.

Response to Comments -

Thank you for your input. As stated above in the response to Mr. Robert Comis, only one of the four residential water supply wells on Tannery Road that were sampled during the Remedial Investigation had an indication of an impact from landfill contaminants. However, based largely on the input provided at the public meeting and during the public comment period, the NYSDEC is also concerned that double cased deep wells may not provide an adequate long term water supply for potentially affected residents on Tannery Road. Therefore Alternative D3, public water, has been selected within the Series D Alternatives.

It should be noted that City of Rome's cost associated with supplying public water to potentially affected residents will be eligible for 75% reimbursement from the Environmental Quality Bond Act. This would not apply to all the residents on Tannery Road. The State will reimburse the City for up to 75% of the cost associated with extending the public water main from Route 69 south along Tannery Road, past the landfill, to Residence R-3 located on the west side of Tannery Road approximately 2400 feet south of the landfill. The City of Rome may elect to extend the water main further south, but based on the hydrogeologic data collected during the Remedial Investigation, the costs associated with extending the water main further south are beyond the scope of this project.

ATTACHMENT A-1

PUBLIC HEARING
CITY OF ROME AND NEW YORK STATE DEC
REMEDIAL ACTION AND ALTERNATIVE GRADING PLAN
FOR THE CITY'S FORMER LANDFILL ON TANNERY ROAD
FEBRUARY 9, 1995

NAME	ADDRESS
STEVEN P. DEVAN	ONEIDA-HERKIMER SOLID WASTE AUTHORITY 311 TURNER ST. - SUITE 401 UTICA, NY 13501-1731
David Hyatt	7597 Tannery Rd Rome N.Y.
Debra Hyatt	7597 " " "
Susan Johnson	7792 Tannery Rd " "
Earl + Margery Hyatt	7602 Tannery Rd. Rome, N.Y.
Celia Bahn	7835 Tannery Rd Rome
SUE KESSLER	7828 TANNERY RD
George Kohler Sr	7621 TANNERY RD

ATTACHMENT A-2

OLD ERIE CHAPTER
national audubon society

p.o. 4835
rome, n.y.
13440

February 09, 1995

Mr. Charles Nevin
NYSDEC Region 6
317 Washington Street
Watertown, NY 13601

Dear Mr. Nevin,

As Conservation Chair for Old Erie Audubon, Central New York chapter of the National Audubon Society, I have reviewed the Proposed Remedial Action Plans for the Rome Landfill and would like the following comments entered for the record.

Old Erie Audubon has been actively involved in conservation activities within the area of the current landfill. This landfill is located within the area know as the Rome Sand Plains. The Rome Sand Plains are know for their unique combination of habitats, flora and fauna. Since the early 70's many people, organizations and government agencies have lobbied for protection of this area. That effort has seen dividends in the State purchasing over 600 acres, a 400 acre parcel being transferred to a conservation organization and an ever increasing presence by the Nature Conservancy. The efforts continue on this project and it is currently on the top five list for open space protection by the Region 6 Open Space Committee.

Point One -- No where in the current plans do I find any facts relating to this unique area (the Rome Sand Plains) and its relationship of the landfill. If in fact a new landfill was being proposed for this area, a major effort to mitigate any damages would be presented. There is nothing in your current

plans, no recognition of the past mistakes or future responsibilities to the area's natural resources.

This is not the first action that has been required of the City to ensure the public's health and safety and protect the environment with regards to this project. A tremendous amount of taxpayers money was spent to cap this landfill once already. While not placing blame; construction, monitoring and maintenance of the cap could not have been done correctly or we would not now be facing the current problem. While the taxpayers of Rome and New York State seem satisfied to continue to pay millions of dollars for ill conceived, poorly managed and inadequate remedies of correction, I do not feel the environment should suffer from continued neglect. Natural resource damages and/or mitigation should be included within the scope of this document.

Point Two -- For the last two to five years, monitoring and evaluation of this site was conducted for an additional landfill by the Solid Waste Authority. The City, in comments against this new landfill, of course brought up the Rome Sand Plains, failing to address additional responsibility of waste management and never acknowledging their own past mistakes or the fact that they had severely impacted the Sand Plains at all. Study wells have been drilled in the surrounding area by the solid Waste Authorities consultants, for determining sighting of an additional landfill. The data and results from these wells and other information gathered in the area, I believe, would confer a higher degree of degradation than what is addressed in this plan. A full evaluation of all documents available should be studied and provided to the public so that this issue is completely and openly dealt with. This should be done quickly before any plans are finalized.

Point Three--The City's preferred option calls for demolition debris to be used for a capping material. We have two separate concerns with that option.

1) Given the tract record of the City and DEC in monitoring this project, who is to assure the public that hazardous materiel will not somehow make its way into the capping process? There is talk of using material from GAFB, such hazardous material surely exists at that facility. Without proper monitoring the situation could become worse rather than better.

2) The same type of trucks that would have caused such a disturbance bringing solid waste, the traffic, noise, and pollution, into the area will do the same bringing construction debris to the area. In the last two weeks traffic has increased significantly. Additional studies should be required regarding the transportation of construction debris material through the area.

Additionally, putting City of Rome water in would not help the wildlife in the area adjust to man's mistakes.

Point Four-- While I believe that the people currently living in the area should be (should have been long ago) provided a safe drinking water source, I do not believe the extension of the City waterline to the area would now be a good idea. My concerns with the water extension mirror other points I raise.

1) The full extent of the problem of pollution and how it might effect future development has not been dealt with at all. To put or possibly put more people at risk by encouraging development by providing utilities, is a poor course of action in our opinion. Much more study is needed in the area before providing additional services. Bottled water should be provided to all residents within the area as soon as possible.

2) The Rome Sand plains remain a fragile area. Increased pressure from development should not be encouraged. Both the City and State should be aware of this.

Conclusion--Having reviewed the document Old Erie would recommend the following course of action after a full and complete EIS was developed.

1) Alternative A4--**Regrading by Combination of Waste Consolidation and Acceptance of Clean Fill**

This alternative seems best suited to address all issues in the area while providing long term compatibility with surrounding ecosystem.

2) B3--**NYSDEC Part 360 FML Cap**

For long term protection of the health and safety of all concerned.

3) C4-**Install Full Slurry Wall; Leachate Collection; Off-Sit Treatment**

This will finally address the issues of both ground water and stream contamination.

4) D2 - **Install Deep Groundwater Wells**

Insurance for non-contamination aside, this alternative best suits the area. It should be done in concert with providing bottled water.

A sum of resource damage money should be allocated to the State, Nature Conservancy or other body for further protection of the Rome Sand Plains in conjunction with all above.

There is of course one more problem, moneys for landfill closures and capping, normally coming from the State through the State's Environmental Trust Fund may not be there. The Governor's budget, recently released, provides not an increase as was passed by past legislatures and past administration, but a thirteen million dollar decrease. It appears the Governor cares little for the protection of the state's natural resources or even the health and safety of the public who live near degraded areas, dollars of reduction regardless of consequences , it appears is what his priorities are. We still have federal environmental law to protect our resources, the EPA has been fairly silent in regards to this project. If a lack of funds to properly protect the people, the resource, and the future stands in the way a doubt that silence will continue.

Sincerely.,

Bruce R. Carpenter, Conservation Chair
Old Erie Audubon

ATTACHMENT A-3

RAYMOND A. MEIER
COUNTY EXECUTIVE

COUNTY OF ONEIDA
DEPARTMENT OF HEALTH
800 PARK AVENUE, UTICA, NEW YORK 13501-2984

AGATHA M. SLATER
DIRECTOR
(315) 798-5064
FAX NO. (315) 798-5022

February 15, 1995

Mr. Brian Davidson
New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation
50 Wolf Road
Albany, New York 12233

RE: Rome Landfill, #633012
Proposed Remedial Action Plan

Dear Mr. Davidson:

The Oneida County Health Department has reviewed the Proposed Remedial Action Plan for the Rome Landfill. We are concerned that the double-case wells will not provide an adequate water supply for all residents along Tannery Road.

The geology for the area is highly variable. A layer of granite exists approximately 10 to 15 feet beneath grade in a portion of the region. The granite may prevent groundwater from reaching certain locations.

We would prefer the City of Rome to extend the public water supply to those adversely impacted by the Rome Landfill along Tannery Road.

Sincerely,

Louis P. Ferrara, P.E.
Public Health Engineer

LPF/dk

cc: file

ATTACHMENT A-4

The Nature Conservancy®

Central & Western New York Chapter

315 Alexander Street, Rochester NY 14604-2614 (716)546-8030

FEB 27

February 24, 1995

Mr. Brian H. Davidson
NYSDEC Room 224
50 Wolf Road
Albany, NY 12233-7010

Dear Mr. Davidson:

I am writing in order to comment on the proposed remedial action plan for the Rome landfill in Oneida County. I am very familiar with both the dump and its immediate surroundings as I have toured both the landfill and its adjacent wetlands.

The Nature Conservancy has been working for several years now to secure protection of critical habitats within the Rome Sand Plains. This project has been undertaken in conjunction with a number of partners, including the NYSDEC. The target of these protection efforts is a core area of bogs, forests, and sand dunes spanning some 3,000 acres. The Rome landfill occupies one corner of this core area.

In reviewing Dunn Engineering's assessment of the landfill's impact on surrounding plants and wildlife, I was concerned that the report did not incorporate the NY Natural Heritage Program's most recent field surveys from the site. The report concludes that "due to the distance from the site", several rare habitats, including pitch pine blueberry peat swamp and pitch pine heath barrens, "are most likely not impacted by site related constituents".

I have enclosed field survey forms from 1993 which document these two rare community types, as well as a third - dwarf shrub bog, from immediately adjacent to the landfill site. In fact, it is clear that the dump has had a direct adverse impact on these rare habitats. When viewed from the landfill border, the immediately adjacent wetland is characterized by standing dead pitch pines and emergent cattail vegetation. It appears that chemical and hydrological changes associated with the landfill runoff have dramatically altered the vegetation and structure of this adjacent wetland area.

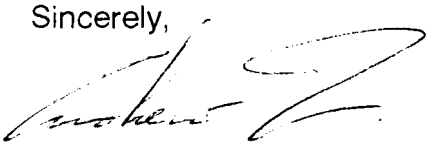
In light of this impact, as well as the fact that the dump is likely situated on a site which previously harbored these rare communities, The Nature Conservancy urges the NYSDEC to explore appropriate mitigation measures for the destruction and alteration of globally rare wetland habitats.

In recapping the existing landfill, the Conservancy asks that the City of Rome and NYSDEC pursue the course that provides the utmost protection to the adjacent wetlands. The possibility of further hydrological alterations is of particular concern. To ensure that this does not happen, the Conservancy asks that monitoring of water quantity and quality be carried out before, during, and after the recapping process.

Given the lack of a specific site plan and design at this time, it is not possible to evaluate the proposed restoration of 11 wetland acres adjacent to the landfill. When a specific plan is developed, the Conservancy asks that it targets restoration of the actual wetland types which once occupied the site. The plan should also incorporate specific methods for the control of non-native weedy vegetation that might spread from disturbed areas associated with the restoration project.

Please do not hesitate to contact me directly if you have any questions concerning any of the above comments. Thank you very much for your consideration.

Sincerely,



Andrew E. Zepp
Associate Director

cc Charles Nevin, NYSDEC
Robert Comis, City of Rome

Attachment A-5

CITY OF ROME
DEPARTMENT OF PUBLIC WORKS
CITY HALL
Rome, N. Y. 13440

March 3, 1995

Mr. Brian Davidson
NYSDEC
50 Wolf Rd.
Albany, NY 12233

Dear Brian,

Enclosed are comments from the City of Rome, relative to the proposed remedial action plan. The plan pertains to the City's Tannery Road Landfill.

Than you for your tie and effort on behalf of the City of Rome.

Sincerely,

Bob Comis

Robert A. Comis
Commissioner of Public Works

RAC/jri

Enclosure

CITY OF ROME
DEPARTMENT OF PUBLIC WORKS
CITY HALL
Rome, N. Y. 13440

CITY OF ROME COMMENTS
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
PUBLIC HEARING
FEBRUARY 9, 1995 - COMMON COUNCIL CHAMBERS
PROPOSED FINAL REMEDY - ROME LANDFILL ON TANNERY ROAD

FROM ROBERT COMIS COMMISSIONER OF PUBLIC WORKS

I would first like to thank the New York State Department of Environmental Conservation for conducting this hearing. It is an opportunity for the citizens of this community to express their opinions relative to our intended action at the City's former landfill on Tannery Road. This proposed action is our opportunity to complete our unfinished business at this site. The actions the City has proposed, and for the most part, DEC has recommended offers a reasonable approach for our landfill.

The only recommended action, from the PROPOSED REMEDIAL ACTION PLAN (PRAP), which I believe falls short of our purpose, is the activity for residential drinking water. The PRAP's preferred remedy is to have four downgradient wells replaced with double cased deep wells. The City had proposed that a public water system be installed along Tannery Road to permit access by the properties. The City's plan of action would eliminate the resident's drinking water concerns. Throughout the remedial investigation and development of feasible solutions for Tannery Road, the State and City have

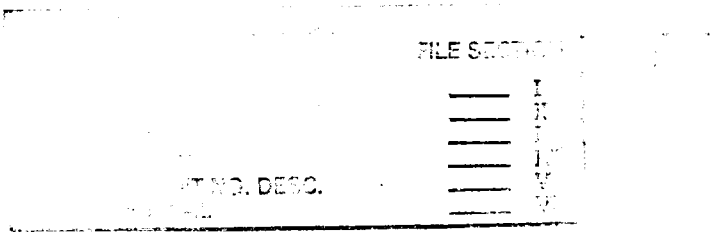
talked about wetlands, animals, groundwater, plants and humans. It seems to me that our plans have been scrutinized by all parties which may have a particular interest in any of the topics listed. Our proposed action, for drinking water, while more conservative and certainly more costly to the citizens of our community and State. It is a plan that is the most reliable for those residents directly affected. The additional cost for the public water system and the reliability if offers is prudent.

For the State to advocate and possibly approve less than what was recommended by Rome, is a mistake. Rome's recommendation is not unreasonable. Rome will, for at least the next three decades, monitor the site to determine the effectiveness of our action. How can we as a City assure these residents, their water will not be affected by our landfill? Worse yet, what happens if our actions are not effective and something happens to the wells during the next three decades or beyond? Could we have reduced or eliminated their concerns and anxieties if the proper action had been taken in 1995? The answer is yes! I would not want to subject my successor to that question.

I know the residents from Tannery Road area will voice their particular concerns tonight. I request the State, on behalf of the City of Rome , reconsider the recommended PRAP action for drinking water, and modify it to be consistent with the City's proposed action. Let us show the residents of Tannery Road that the State and the City want to eliminate one long-term concern in their lives. Please let's properly finish a process that from the

beginning has shown how two government agencies can work cooperatively for a proper solution to the benefit of citizens we serve. Thank you.

ATTACHMENT A-6



Mr. and Mrs. David Hyatt
7597 Tannery Road
Rome, N.Y. 13440

Mr. Brian H. Davidson
NYSDEC RM 224
50 Wolf Road
Albany, New York 12233-7010

Dear Mr. Davidson,

As residents of Tannery Road, we appreciate the opportunity to comment on the proposed remedial action plan for the Rome Landfill. We are pleased that remediation will take place and feel it has been long overdue. We have daily reminders of the negative environmental impact of this landfill; primarily rust colored ground water evidenced in the multiple small brooks that cross our land. This does not address the pollution which we can not see.

We are pleased to know that mitigation will ultimately protect the environment. This is indeed a unique and quite pretty place in which to live. Many of the Tannery Road residents have lived here for long periods of time; they are most familiar with the Sand Plains. They have enjoyed its scenery while hiking and skiing, berry picking, hunting and fishing. We live here, we use the natural resources, we care about the land. We are more than downgradient residents. We are at the top of this ecosystem and are very much a part of the environment.

Perhaps it is this perspective which makes it difficult for us to accept Alternative D2, installation of deep groundwater wells for downgradient users, as the most protective or best choice for people. Alternative D3, installation of municipal water supply to downgradient residents, would be more protective and would provide a more reliable water supply to residents with respect to quality and quantity.

It is interesting to note that the Old Erie Chapter of the National Audubon Society is opposed to construction of public utilities for people around the Rome landfill. They state that public utlities would encourage further development. To assume that municipal utilities would encourage further development on this road than what already exists is unfounded. Another argument the Old Erie Chapter uses is that officials have not dealt with the full extent of pollution. Why then, wouldn't this remediation plan call for the most protective alternative that projects farthest into the future to safeguard

residents?

You are quoted as saying that a water line is a good idea but it can't be justified financially based on the data available. It is hard to argue with dollars and cents logic; however we request you consider the following points.

1. It is probable that the goal of providing people with good quality and a reliable source of water through deep double cased wells will not be able to be met. Wells in the area are much deeper than 40 feet to avoid silt and gas and a salty taste. A resident of Humaston Road has a well of 300 feet with no recovery capability. Wells can be dug, to be sure; however will the water be palatable with recovery adequate to meet demand?

2. You state in your summary report that Series D Alternatives are intended to address the potential effects of existing contamination. It is known that significant quantities of hazardous industrial waste were disposed of in the landfill. The report also mentions the given the size of the landfill, analytical results obtained may not reflect the highest concentration of contaminants that may exist. In addition, as part of the mitigation process, the landfill will be condensed and waste; household and industrial, who knows what, will be moved. Does Alternative D2 adequately address the effects of future contamination of a double cased deep well? There are more than four residents on Tannery Road who use well water. We maintain that the D2 Alternative does not address the potential for future contamination of these wells.

3. Sometimes decisions must take into account the human element as well as the dollars and cents. We do not think you can separate the environment and the residents. We live here and have been a part of the environment for years, some before the inception of the Rome landfill. The majority of Tannery Road residents feel that a water line is the best and safest mitigation choice; with long-term effectiveness after implementation. You, as a DEC representative, admit that it is a good idea. The DEC report states that Alternative D3 is the most reliable and most protective. Surely these considerations have important merit. The Rome landfill has had a negative impact on the quality of peoples' lives for many years. We are enclosing a letter written by Mr. Erwin Johnson which conveys some of the burdens of waste disposal that Tannery Road residents have shouldered. We hope this will provide you with a better understanding of our perspective and why we don't comprehend the failure to provide the best for the people who have put up with the most.

We express our thanks for the opportunity to express our opinions. We close our letter by reiterating our dissatisfaction with the proposed Alternative D2 and request you select

Alternative D3, thereby providing the residents of Tannery Road with a municipal water line.

Sincerely,

David Hyatt   Debra Hyatt

David and Debra Hyatt

We urge you to reconsider your option, Alternative D2 and change it to Alternative D3, thereby providing Tannery Road residents with a municipal water line.

[illegible] Johnson
Earl Hyatt
Margery Hyatt
[illegible]
Mary Lou Rowe
[illegible]
Shelley J Coleman
Mary Rowe
[illegible]
Dawn M Roux
[illegible]
Lisa M Rowe
Michael Eastup
Alfred Eastup
Mary Eastup
Tony [illegible]
George W Kahler Sr.
Gail J. Kahler

[illegible]
John Kirsch

To Whom it may concern:
Pertaining to the Tannery Road Dump, landfill and ash disposal:

To the best of my knowledge, it was started in the 1940's across the road from 7828 Tannery Road with a sort of trench and fill affair, then it was moved further back. As the volume of dumping increased, perpetual fires were burning in the area with little if any attempt to extinguish them. Much later, fires were controlled and burning ceased. Rats, hordes of them and wild dogs fed on the dump site. The dump site was wide open for anyone to dump anything at any time, day or night. After many complaints, dumping time was limited and a fence erected, a dumpster being placed outside of the gate for late dumpers. This created an unsightly mess by the road side. The dumpster was finally removed and a watch was posted to discourage dumping. Not being an all night night watch, people learned when to dump! To my estimation, the dump has never been properly covered, not even now! Large areas of ash, sludge, what have you, lay exposed day and night. I have complained many times about this situation to no avail. As to the stench, sometimes a little lime was spread to rectify? As to a health hazard, it must be there but I'm told testing would be difficult and expensive, so? You may ask why I didn't move? Nearly 74 years ago, I was born on this parcel of land, the only home I have known. Then too, what kind of a price could I get for a home that has a dump across from the front yard and an ash mountain less than 400 feet away?

Respectfully,

Erwin Johnson
7792 Tannery Road
Rome, NY 13440

APPENDIX B

APPENDIX B
Administrative Record

A. Reports

1) Proposed Remedial Action Plan "Rome Landfill" prepared by the New York Department of Environmental Conservation February 1995

2) Feasibility Study "City of Rome - Tannery Road Landfill Site" prepared by Dunn Engineering Company May 11, 1994, Revised: December, 1994

3) Remedial Investigation "Tannery Road Landfill, Rome New York" Volumes I & II, prepared by Dunn Engineering Company, December, 1993, Revised May 1994.

4) Alternative Grading Material (AGM) Program Operations Plan "Tannery Road Landfill Site", prepared by Dunn Engineering Company August 10, 1994, Revised: November 8, 1994.

5) Citizen Participation Plan - Remedial Investigation/Feasibility Study "Tannery Road Landfill" prepared by Dunn Engineering Company January, 1993.

6) Work Plan - Remedial Investigation/Feasibility Study "Tannery Road Landfill", prepared by Dunn Engineering Company January 1993.

7) Sampling and Analysis Plan - Remedial Investigation/Feasibility Study "Tannery Road Landfill" , prepared by Dunn Engineering Company January 1993.

8) Field Health and Safety Plan - Remedial Investigation/Feasibility Study, prepared by Dunn Engineering Company January 1993.

B. Previous Studies

1) Site Inspection Report and Hazardous Ranking System Model Final Draft, Rome Landfill, Rome New York, prepared by NUS Corporation September 30, 1984.

2.) NYSDEC RCRA Open Dump Inventory Groundwater Quality Evaluation, Rome SLF, prepared by Dunn Geoscience Corp. September 26, 1980.

3.) Site Evaluation Study - City of Rome Landfill, prepared by Barton, Brown, Clyde & Loguidice, 1975.

C. Court Orders

Order on Consent, Index # A6-0250-90-11, February 3, 1992

D. **Correspondence & Memorandums**

March 30, 1995 correspondence from G. Anders Carlson, NYSDOH, to Mr. Michael J. O'Toole, NYSDEC - concurrence on the ROD.

January 6, 1995 memorandum from Christina Dowd, Division of Fish and Wildlife to Brian Davidson - concurrence on the PRAP

January 5, 1995 memorandum from Darrell Sweredoski, NYSDEC Region 6, to Robert Cozzy - concurrence on the PRAP