Department of Environmental Conservation

Division of Environmental Remediation

Environmental Restoration
Record of Decision
Gansevoort/Franklin Street Brownfield Site
City of Albany, Albany County
Site Number B-00055-4

March 2001

New York State Department of Environmental Conservation
GEORGE E. PATAKI, *Governor* ERIN M. CROTTY, *Acting Commissioner*

DECLARATION STATEMENT
ENVIRONMENTAL RESTORATION RECORD OF DECISION

Gansevoort/Franklin Street Environmental Restoration Site
City of Albany, Albany County, New York
Site No. B-00055-4

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedy for the Gansevoort/Franklin Street environmental restoration site which was chosen in accordance with the New York State Environmental Conservation Law.

This decision is based on the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Gansevoort/Franklin Street environmental restoration site and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A listing of the documents included as a part of the Administrative Record is included in Appendix A of the ROD.

Assessment of the Site

Elevated levels of metals (lead, potassium) and polycyclic aromatic hydrocarbons or PAH contaminants in the surface and subsurface soils from this site, if not addressed by implementing the remedy selected in this ROD, presents a current or potential threat to public health and the environment.

Description of Selected Remedy

Based on the results of the Site Investigation Report (SI) and the Remedial Alternatives Report (RAR) for the Gansevoort/Franklin Street environmental restoration site and the criteria identified for evaluation of alternatives, the NYSDEC has selected a remedy for the site consisting of one hot spot excavation, site capping and deed restrictions. The components of the remedy are as follows:

- Excavate a hot spot of contamination to a depth of 9 feet in the area of monitoring well #4 with off-site disposal. Backfill with on-site soil from regrading along the sidewalks for the protective cover;

- Provide a protective cover or barrier over the entire site, either a one foot thick soil cover or an acceptable alternative method such as asphalt/concrete pavement, building foot print, paved/concrete sidewalks, or some combination;

- Proper disposal of any excavated contaminated soil related to the installation of the protective cover;

- Place deed restrictions on the property which includes preventing the use of groundwater at the site and taking appropriate action (excavation and proper disposal) should intrusive activities disturb contaminated soils; and

- Maintenance (O&M) of protective cover.

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.

3/20/01
Date

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

TABLE OF CONTENTS

Environmental Restoration
RECORD OF DECISION

Gansevoort/Franklin Street Brownfield Site
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SECTION 1: SUMMARY OF THE RECORD OF DECISION

The New York State Department of Environmental Conservation (NYSDEC) in consultation with the New York State Department of Health has selected this remedy to address the threat to human health and/or the environment created by the presence of hazardous substances at the Gansevoort/Franklin Street Brownfield site.

The 1996 Clean Water/ Clean Air Bond Act provides funding to municipalities for the investigation and cleanup of brownfields. Under the Environmental Restoration (Brownfields) Program, the State may provide a grant to Albany County to reimburse up to 75 percent of the eligible costs for site remediation or clean-up activities. Once remediated, the property can then be reused.

Owned by Albany County, the site is located at the corner of Franklin Street and Gansevoort Street in the City of Albany. This vacant 0.6 acre property, consisting of seven parcels, is a commercial/light industrial area of South Albany approximately 0.5 miles from the Hudson River.

As more fully described in Sections 3 and 4 of this document, past use of the site as a coal yard and as a trucking company with underground storage tanks (USTs) has resulted in the disposal of a number of hazardous substances, including inorganic compounds (metals) and semi-volatile organic compounds (SVOCs) which include polycyclic aromatic hydrocarbons (PAHs). These disposal activities have resulted in the following threats to the public health:

- A potential threat to human health associated with the direct contact with contaminated soils due to elevated levels of metals (lead, potassium) and contaminants in the surface and subsurface soils.

In order to eliminate or mitigate the threats to the public health and/or the environment that the hazardous substances disposed at the Gansevoort/Franklin Street brownfield site have caused, the following remedy was selected to allow for commercial/light industrial use of the site:

- Excavate a hot spot of contamination to a depth of 9 feet in the area of monitoring well #4 with off-site disposal. Backfill with on-site soil from regrading along the sidewalks for the protective cover;

- Provide a protective cover or barrier over the entire site, either a one foot thick soil cover or an acceptable alternative method such as asphalt/concrete pavement, building foot print, paved/concrete sidewalks, or some combination;

- Proper disposal of any excavated contaminated soil related to the installation of the protective cover;

- Place deed restrictions on the property which includes preventing the use of groundwater at the site and taking appropriate action (excavation and proper disposal) should intrusive activities disturb contaminated soils; and

- Maintenance (O&M) of protective cover.

The selected remedy, discussed in detail in Section 8 of this document, is intended to attain the remediation goals selected for this site in Section 6 of this Record of Decision (ROD) in conformity with applicable Standards, Criteria, and Guidance (SCGs).

SECTION 2: SITE LOCATION AND DESCRIPTION

The Gansevoort/Franklin Street Brownfield Site (# B00055-4) is a 0.6 acre vacant property in the south end of the City of Albany. Located at the corner of Franklin Street and Gansevoort Street, this Albany County owned site consists of a total of seven parcels, which includes a parcel identified as the rear of 366 South Pearl Street.

The site is a few blocks from Downtown Albany and I-787 and the Hudson River is approximately 0.5 miles to the east (see Figure 1). The Jared Holt Manufacturing Brownfield site (B00005-4) is only a few blocks to the north west of this site on Broad Street and Third Avenue.

The site is situated in a moderately developed commercial/industrial area. A liquor store and a vacant lot is located to the west of the site. Albany Firehouse No. 5 and a public bathhouse are located immediately north. A gas station/convenience store is located adjacent to the northwest corner of the site. Warehouses are located to the east and a commercial business and a vacant lot are located to the south (see Figure 2). Although residences are not adjacent to the site, there are residential neighborhoods in close proximity to the site.

SECTION 3: SITE HISTORY

3.1: Operational/Disposal History

The site is believed to have been residential until approximately 1945 when it was acquired by Wm. McEwan Coal Company and served as a coal yard in the late 1940's and mid 1950's. The McArdle and Cazazzar Trucking Company used the site in the late 1960's. The property was subsequently acquired by Grand Realty Company and remains vacant. It was acquired by Albany County through foreclosure in 1973.

3.2: Environmental Investigation History

Two Phase 1 Environmental Assessments were completed for this Site. The first was in 1988 by Dunn Geoscience Corporation and the second by Applied Geoenvironmental Services, Inc. in 1991. Both Assessments concluded that there was evidence to indicate the potential of soil contamination at the site associated with at least two underground storage tanks (USTs). Underground piping was also found in the area which contained 17,000 part per million (ppm) of acetone, 5,900 ppm of 2-butanone, 610 ppm of benzene, and 760 ppm of toluene. In addition, several areas of slight, localized petroleum residue staining were discovered; however, there was no indication of any pervasive or large-scale dumping of hazardous materials at the Gansevoort/Franklin Street site.

SECTION 4: CURRENT STATUS

Albany County has recently conducted a site investigation resulting in a Site Investigation Report (SI) to determine the nature and extent of any contamination by hazardous substances of this environmental restoration site.

NYSDEC has developed a Remedial Alternatives Report (RAR) based on the SI Report with alternatives to address the significant threat to human health and the environment posed by the presence of hazardous substances.

4.1: Summary of the Site Investigation

The purpose of the SI was to define the nature and extent of any contamination resulting from previous activities at the site. The site investigation activities were conducted between October 1999 and November 2000. A report entitled "Site Investigation Report, Environmental Restoration Project, Gansevoort/Franklin Street Site, Albany, New York" prepared by Malcolm Pirnie, Inc. under contract with Albany County, dated August 2000 has been prepared which describes the field activities and findings of the SI in detail.

The SI included the following activities:

- Magnetic Survey
- Ground Penetrating Radar (GPR)
- Six soil borings
- Installation of eight monitoring wells
- Three rounds of monitoring well sampling
- Six surface soil samples
- Six subsurface soil samples
- Two background (surface) soil samples
- Interim Remedial Measure (IRM) Removal of four 1500 gallon USTs

To determine which media (soil, groundwater, etc.) are contaminated at levels of concern, the SI analytical data was compared to environmental Standards, Criteria, and Guidance values (SCGs). Groundwater, drinking water and surface water SCGs identified for the Gansevoort/Franklin Street site are based on NYSDEC Ambient Water Quality Standards and Guidance Values and Part V of New York State Sanitary Code. For soils, NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 provides soil cleanup guidelines for the protection of groundwater, background conditions and health-based exposure scenarios. In addition, for soils, background concentration levels can be considered for certain categories of contaminants.

Based on the Site Investigation results in comparison to the SCGs and potential public health and environmental exposure routes, certain media and areas of the site require remediation. These are summarized below. More complete information can be found in the SI Report and RAR Report.

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

4.1.1: Site Geology and Hydrogeology

The geologic and hydrogeologic conditions encountered at the Gansevoort/Franklin Street site are consistent with the regional geology. The surficial geology is characterized as lacustrine silts and clays of varying thickness that were deposited in preglacial Lake Albany. Underlying the lacustrine silts and clays is Ordovician aged Normanskill Shale, which consists primarily of shale with minor amounts of mudstone and sandstone.

The surficial material observed during the SI was predominantly fill with an average thickness of approximately four feet. The maximum depth of overburden encountered during drilling was 22 feet below ground surface (bgs). Bedrock was not encountered during drilling.

All on-site and off-site monitoring wells are screened within the overburden materials which consist primarily of oxidized red brown to gray clay with occasional fine sand and silt layers of varying thickness. The depth to the groundwater table ranges between four feet and nine feet below the surface. Groundwater flow on-site is generally to the east. This is similar to the regional groundwater flow pattern, which is towards the Hudson River.

4.1.2: Nature of Contamination

As described in the SI Report, many surface and subsurface soil tests and groundwater tests were conducted to characterize the nature and extent of contamination that may be present at the site. Contamination from the former commercial activities that took place at this site exceeded the SCGs. The main category of contaminants is semi-volatile organic compounds (SVOCs). Other categories of contaminants that were detected and exceeded SCGs in various media were volatile organic compounds (VOCs) and inorganic compounds (metals).

Known underground storage tanks (USTs) were also investigated because of the suspicion that the tanks may be leaking and possibly causing groundwater contamination.

The SVOC contaminants found above SCGs are polycyclic aromatic hydrocarbons (PAHs - a subset of SVOCs) including benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, and dibenzo(a,h)anthracene. These contaminants were detected in surface and subsurface soils. Elevated levels of inorganic (metals) compounds above the SCGs were found in both the surface and subsurface soils.

No VOCs were detected in any media that exceeded SCGs except in the groundwater at monitoring well MW-4. Levels encountered in MW-4 are relatively low and data supports the conclusion that this contamination is not migrating off-site.

There are no known drinking water wells located in the site vicinity. Drinking water is supplied by the municipal water supply system. There is no surface water on or adjacent to the site. Based on this, groundwater contamination was determined to not be a health concern.

4.1.3: Extent of Contamination

Table 1 summarizes the extent of contamination for the contaminants of concern in surface soils, subsurface soils, and groundwater and compares the data with the SCGs for the site. The following are the media which were investigated and a summary of the findings of the investigation.

Surface Soil

During the initial phase of the site investigation in October 1999, five surface soil samples were collected (3 on-site and 2 background). Two of the three on-site samples (SS-1, SS-3) were analyzed for polychlorinated biphenyls (PCBs) and the two off-site samples (SS-4, SS-5) were analyzed for SVOCs, metals, and PCB's. Surface soil sample SS-2 was not analyzed because of its close proximity to SS-1.

No detections above the TAGM 4046 Soil Clean-up Objectives were present in the initial phase of surface soil samples collected on and off site for SVOCs, metals, and PCBs.

Since the two initial on-site surface soil samples were analyzed only for PCBs, a second phase of on-site sampling was conducted in June 2000. Four additional samples were collected and analyzed for SVOCs and metals.

Laboratory results of the second round of sampling indicated detections above the SCGs for both SVOCs and metals in these surface samples (Table 1). The SVOC contaminant levels were exceeded for PAHs.

Subsurface Soil

Based on the results of the field magnetic survey, six soil borings and five monitoring well locations were selected and a total of 11 soil borings advanced. The purpose of this work was to characterize subsurface soil conditions across the site. These initial soil boring locations can be found in the SI Report and on Figure 3.

In the field, continuous soil samples from each boring were observed, field screened for VOCs and logged.

Six soil samples were collected and sent to the laboratory during this initial phase of work. SVOCs were detected in all six samples. However, only soil from MW-4 showed exceedances above the TAGM clean-up levels for benzo(a)anthracene, chrysene, benzo(a)pyrene, and dibenzo(a,h)anthracene. The inorganic guidance values and/or background values were exceeded for copper, antimony, and silver in two subsurface soil samples. None of these subsurface soil samples exceeded their respective TAGM 4046 clean-up objectives for VOCs.

A second phase of investigation work included collection of an additional three subsurface soil samples, one from each of three additional monitoring wells. Since the field soil screening during this second phase of work indicated no VOC's, no soil samples were sent to the laboratory for analysis.

Groundwater

The groundwater samples were collected and analyzed for VOCs, SVOCs, and inorganics (metals). The results from this sampling were compared with the New York State Groundwater Standards (6 NYCRR Part 703).

During the initial phase of the site investigation, there were exceedances of the Groundwater Standards for VOCs in MW-2 and MW-4 including concentrations of benzene, ethylbenzene, m - & p-xylenes, o-xylenes, isopropylbenzene, n-propylbenzene, 1,2,4-trimethylbenzene, naphthalene, toluene, and methylene chloride (Table 1). However, the SVOCs in all five samples (MW-1 to MW-5) were all below the Groundwater Standards. There was no detectable non-aqueous phase liquid (NAPL) in the monitoring wells.

Inorganics were found to be elevated for arsenic, iron, manganese, and sodium in all five samples, but no significant source of metals was found on the site to suggest a groundwater quality issue from the site. High turbidity in MW-3 could cause exaggerated analytical sample results for inorganics. However, the MW-3 results were similar to the other four sample results (MW-1, MW-2, MW-4, MW-5) which all had acceptable turbidity levels. The metals that were detected are all naturally occurring in soil particles and therefore are not believed to be linked to any on-site contamination.

The findings from MW-2 and MW-4 resulted in the installation of three new groundwater monitoring wells: MW-6, MW-7, and MW-8. On June 21, 2000, a second round of VOC groundwater samples were collected from the original MW-2 and MW-4 wells plus the newly installed MW-6, MW-7, and MW-8 wells. The laboratory results were non-detect for all the compounds in all five samples except for MW-4 which indicated a slightly elevated concentration of — & p-xylenes (7.8 ppb) above the NYSDEC Class GA Groundwater Standard of 5 ppb.

Because of the difference between the results of the first and second rounds, a third confirmatory round of sampling of these five monitoring wells was performed for VOCs on November 1, 2000. The third round results indicated only exceedences in MW-4 of eight VOC compounds: ethyl benzene (19 ppb), m - & p-xylenes (15 ppb), isopropylbenzene (87 ppb), n-propylbenzene (130 ppb), 1,3,5-trimethylbenzene (11 ppb), 1,2,4-trimethylbenzene (160 ppb), sec-butylbenzene (19 ppb), and n-butylbenzene (16 ppb).

4.2: Interim Remedial Measures

An Interim Remedial Measure (IRM) is conducted at a site when a source of contamination or exposure pathway can be effectively addressed before completion of the SI and RAR. An Interim Remedial Measure was undertaken at the Gansevoort/Franklin Street Site in response

to the threats identified above. This IRM included the removal of four underground storage tanks, liquids in the tanks, related piping and contaminated soil.

4.3: Summary of Human Exposure Pathways

This section describes the types of human exposures that may present health risks to persons walking or trespassing at or around the site.

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

Pathways which are known to or may exist at the site include:

- contact with site surface soil;
- ingestion of the site soil; and
- inhalation of airborne dust.

Source of Contamination: The likely source of SVOC contamination at the site is from use as a coal yard for approximately ten years and then later as a trucking company. The by-products of these activities could contain SVOCs (PAHs), VOCs, and metals which may have contributed to the contamination found at the site today. Areas of fill material and some demolition debris/fill were also encountered. One source of contamination at the site was eliminated by removing four USTs during the Interim Remedial Measure. The SI results indicate VOC s in the groundwater at an isolated area around MW-4 which is not near the USTs. However, evidence suggests this contamination is not widespread since it is not present in adjacent monitoring wells only 15 ft. to 20 ft. away.

Environmental Media/Transport Mechanisms: The primary human exposure pathway at the Gansevoort/Franklin Street site would be through the soil, and specifically the surface soil. Exposure to contaminants via the groundwater is unlikely since there are no drinking water sources (wells) in the area either on-site or off-site. The transport mechanisms for the volatile contaminants within the site would be migration within the groundwater and volatilization into the atmosphere.

Point of Exposure: The point of exposure is the PAHs and metals found in the surface soil.

Route of Exposure: The route of exposure would be direct contact with the PAHs and metals found in the surface soil. With the site in its current state, the threat of exposure to subsurface soils is low, but should the property be redeveloped, exposure through incidental ingestion would be increased as these contaminated soils are exposed through the disturbance of the underlying soils.

Receptor Population: Humans walking through the site, workers maintaining the site (mowing) or workers involved with any development activities, especially excavation, might be exposed to dust to some degree.

4.4: Summary of Environmental Exposure Pathways

This section summarizes the types of environmental exposures and ecological risks which may be presented by the site.

Since this site is in a commercial/industrial and residential area, the likelihood of wildlife being impacted is low. The closest water body is the Hudson River, approximately one half mile east of the site. No significant site contaminants are shown to be moving in the groundwater, and therefore no significant impacts to fish or wildlife resources are considered to exist.

SECTION 5: ENFORCEMENT STATUS

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

Since no viable PRPs have been identified, there are currently no ongoing enforcement actions. However, legal action may be initiated at a future date by the State to recover State response costs should PRPs be identified. Albany County will assist the State in its efforts by providing all information to the State which identifies PRPs. However, Albany County will not enter into any agreement regarding response costs without the approval of the NYSDEC.

SECTION 6: SUMMARY OF THE REMEDIATION GOALS AND SELECTED ACTION

Goals for the remedial program have been established through the remedy selection process stated in 6 NYCRR Part 375-1.10. The overall remedial goal is to meet all Standards, Criteria, and Guidance (SCGs) and be protective of human health and the environment. At a minimum, the remedy selected must eliminate or mitigate all significant threats to the public health and to the environment presented by the hazardous substance disposed at the site through the proper application of scientific and engineering principles.

The proposed future use for the Gansevoort/Franklin Street Brownfield site is commercial/industrial. The goals selected for this site are:

- Reduce, control, or eliminate to the extent practicable the contamination present within the soils/waste and groundwater on site.

- Eliminate the potential for direct human or animal contact with the contaminated soils on site.

SECTION 7: SUMMARY OF THE EVALUATION OF ALTERNATIVES

The selected remedy must be protective of human health and the environment, be cost effective and comply with other statutory requirements. Potential remedial alternatives for the Gansevoort/Franklin Street site were identified, screened and evaluated in a Remedial Alternatives Report. This evaluation is presented in the NYSDEC report entitled *"Gansevoort/Franklin Street Brownfield Site Remedial Alternatives Report, Dated December 2000"*.

A summary of the detailed analysis follows. As presented below, the time to implement reflects only the time required to implement the remedy, and does not include the time required to design the remedy or procure contracts for design and construction.

7.1: Description of Remedial Alternatives

The potential remedies are intended to address the contaminated soil at the site.

Alternative #1:	**No Action**
Present Worth:	*$ 0*
Capital Cost:	*$ 0*
Annual O&M:	*$ 0*
Time to Implement	N/A

The No Action alternative is typically evaluated as a procedural requirement and as a basis for comparison. It allows the site to remain in an unremediated state. This alternative would leave the site in its present condition. No activities would take place to remove, contain, or treat contaminated soils. This alternative would not provide any additional protection to human health or the environment. There would be no costs associated with implementing the No Action alternative.

Alternative 2: **Full Depth Excavation (2 Feet) / One Hot Spot Deep Excavation / Landfill Disposal / Backfill**

Present Worth:	*$ 328,000*
Capital Cost:	*$ 328,000*
Annual O&M:	*$ 0*
Time to Implement	2 to 3 months

With the exception of the already remediated UST areas, the entire site would be excavated to a depth of approximately 2 feet below the existing grade to remove PAH and metals contaminated soil/fill. In addition, one deep hot spot of contamination would be excavated around monitoring well #4 (MW-4) to a depth of 9 feet. Once the contaminated material has been removed off-site to a permitted disposal facility, on-site soil from regrading along the sidewalks for the protective cover would be used as backfill. This includes four inches of top soil to be placed above the clean fill, then seeded, fertilized and mulched. No deed restriction would be needed for reuse after implementation of this remedy.

Alternative #3: **One Hot Spot Deep Excavation / Landfill Disposal / Cover Entire Site (1 Foot Soil/ Other Methods) / Deed Restrictions / Operation and Maintenance.**

Present Worth:	*$ 84,400*
Capital Cost:	*$ 69,000*
Annual O&M:	*$ 1,000*
Time to Implement	1 to 2 months

One deep hot spot of contamination would be excavated around monitoring well #4 (MW-4) to a depth of 9 feet. Once the contaminated material has been removed off-site to a permitted disposal facility, on-site soil from regrading would be used as backfill. The entire site would then be covered with a one foot thick protective soil cover layer with a marker barrier, top soil and grass. Some additional contaminated subsurface or surface soil would be removed at the perimeter of the site which may require soil excavation/disposal to blend the one foot of cover to the existing side walks. The grassed soil cover would require periodic maintenance (O&M). Since this alternative would leave all the PAH and metal contaminated surface soil material in place, deed restrictions would be required after implementation to notify owners of the restricted use of the property and the prohibited use of the groundwater. Future developers of the site would be required to properly dispose of excavated materials.

Optional protective cover possibilities for Alternative #3 would be: concrete sidewalks, asphalt/concrete parking lots, building footprints, or other acceptable strategies that provide a

barrier to contact with the surface soils. Any excavated contaminated soil needed to implement an acceptable alternative protective cover would be properly disposed off-site.

7.2 Evaluation of Remedial Alternatives

The criteria used to compare the potential remedial alternatives are defined in the regulation that directs the remediation of environmental restoration project sites in New York State (6 NYCCR 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 included in the Remedial Alternatives Report.

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.

The No Action Alternative #1 would leave, in place, levels of PAH contaminated soils found to be above the SCG levels. These levels may be typical for an urban setting, however, many of the compounds found are carcinogenic PAHs and pose a significant threat from direct contact with soils.

The Full Depth Excavation (2 feet) / One Hot Spot Deep Excavation, Alternative #2, would meet the SCG's for site contaminants. This alternative would eliminate all known direct contact hazards. Also, all known shallow contaminated soils and the one hot spot would be removed.

The Cover Soil / One Hot Spot Deep Excavation Alternative #3, which would remove the one hot spot and cover the entire site with one foot of soil, would not meet all the SCGs. Contaminated soils in the one hot spot would be removed and disposed off-site to meet the SCGs, but none of the surface soil would be removed. However, the cover soil would eliminate all direct contact hazards to surface soils. In addition to the protective cover, appropriate deed restrictions would be placed to ensure safety to workers and the surrounding community from exposure during future development.

2. Protection of Human Health and the Environment. This criterion is an overall evaluation of each alternative's ability to protect public health and the environment.

All alternatives except for Alternative #1 would eliminate the exposure route via direct contact for the contaminated soils at the site. Alternative #2 would remove contaminants (excavation

alternative) while Alternative #3 would leave the contaminated surface soils in place (cover alternative), relying on the new cover and deed restrictions for protection.

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/or implementation are evaluated. The length of time needed to achieve the remedial objectives is also estimated and compared against the other alternatives.

As there would be no remedial action, there would be no short term adverse impacts associated with Alternate #1. The threat of exposure to contaminated surface soils would still exist and pose a threat to the public health and the environment. There is no time involved with this alternative.

Alternative #2 would involve some degree of construction related impacts from related excavation, moving and managing of soil, thereby creating the possibility of short term exposures to noise, dust, and contaminants. These potential exposures would be minimized with the use of engineering controls (noise and dust suppression) during the clean-up work. The estimated time to achieve the remedial objectives for this alternative is 2 to 3 months.

Alternative #3 would not create as much exposure to noise, dust, and contamination since it requires less time to implement and requires less construction activity than Alternate #2. The estimated time to achieve the remedial objectives for this alternative is 1 to 2 months.

4. Long-term Effectiveness and Permanence. This criterion evaluates the long-term effectiveness of the remedial alternatives after implementation. 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.

Alternative #1 would leave soils with elevated PAH and metals concentrations in place for the long term. There is a continued risk from exposure to contaminated surface soils. Full Depth Excavation (Alternative #2) would remove all the contaminants of concern and therefore, remove all of the long term risks.

Alternative #3 would provide long term effectiveness by removing the one hot spot and providing a barrier to any physical contact with contaminated soils. The associated deed restrictions to ensure safety to workers and the surrounding community would also be a long term solution to threats from future intrusive excavations. Long term maintenance of the protective cover is an important element of this alternative.

5. Reduction of Toxicity, Mobility or Volume. Preference is given to alternatives that permanently and significantly reduce the toxicity, mobility or volume of the substances at the site.

Alternative #1 would not change the toxicity, mobility, or volume of contaminants. Current conditions do not support that mobility of subsurface contamination is a concern, but the toxicity and mobility of the surface soils would remain unchanged.

Alternative #2, Full Depth Excavation (2 Feet) / One Hot Spot Deep Excavation, would reduce the mobility, toxicity and volume of on-site contaminants since the full volume of known contamination would be removed to a permitted landfill

Alternative #3, does not completely reduce the volume nor the toxicity of the contaminants but it reduces the mobility by providing a cover barrier.

6. Implementability. The technical and administrative feasibility of implementing each alternative are evaluated. Technical feasibility includes the difficulties associated with the construction and the ability to monitor the effectiveness of the remedy. For administrative feasibility, the availability of the necessary personnel and material is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, etc.. All of the alternatives are considered to be implementable.

Alternative #1, No Action, would have no construction and therefore nothing to implement. Site exposure and the threat to public health and the environment would continue to be an issue.

Alternative #2 requires excavation and backfill. This work would pose typical construction safety issues but these could be addressed by appropriate construction management controls.

The Alternative #3 protective cover is easily implemented as clean fill is readily available. The soil excavation and disposal involved to remove the one hot spot and blend the cover soil to the existing sidewalk is routine work.

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.

This final criterion is considered a modifying criterion and is taken into account after evaluating those above. It is evaluated after public comments on the Proposed Remedial Action Plan have been received.

8. Community Acceptance - Concerns of the community regarding the SI/RAR reports and the Proposed Remedial Action Plan have been evaluated. A "Responsiveness Summary" represents any public comments received and the Department's response to any concerns raised. No comments were received during the public comment period.

SECTION 8: SUMMARY OF THE SELECTED REMEDY

Based on the results of the SI Report, the RAR Report, and the evaluation presented in Section 7, the NYSDEC is selecting Alternative #3 as the remedy for this site.

This selection is based on the evaluation of the three alternatives developed for this site. With the exception of the No Action Alternative #1, each alternative would comply with the threshold criteria. Alternatives #2 and #3 are similar with respect to the majority of the balancing criteria, but Alternative #2 is a more permanent remedy and has more benefits than Alternate #3. However, the cost difference between these two alternatives is significant. Alternative #3 (1 ft. cover) was the lowest cost alternative (excluding Alternative #1).

The estimated present worth cost to implement the Alternative #3 remedy is $84,400. The cost to construct the remedy is estimated to be $69,000 and the estimated average annual operation and maintenance cost for 30 years is $1,000.

The elements of the proposed remedy are as follows:

A remedial design program to verify the components of the conceptual design and provide the details necessary for the construction and operation and maintenance of the remedy.

1. Excavate, to a depth of 9 feet, one hot spot of contamination at MW-4 with off-site disposal. Backfill with on-site soil from regrading along the sidewalks for the protective cover;

2. The site will be regraded and covered with a protective layer of one foot of clean soil over green spaces, that is, areas not occupied by buildings, pavement or sidewalk. Beneath the one-foot soil layer, commercial grade filter fabric or orange plastic snow fencing will be placed as a demarcation of where the contaminated layer begins. This demarcation will help prevent contact with contaminated soils.

   Where necessary, the site will be excavated to allow the soil cover material to be sloped to the required one-foot elevation, to allow for gradual elevation rise. Any

excavated material not used for regrading purposes will be shipped off site to an approved and permitted landfill.

Acceptable alternative protective cover possibilities are sidewalks, parking lots, building footprints, or other approved strategies that provide a barrier to contact with the contaminated subsurface soils.

3. A deed restriction will be used to require owners to maintain the protective layer materials as provided for in this selected plan and Record of Decision and to also prohibit the usage of groundwater. If development or excavation occurs on site, any subsurface soils below the protective layer that are excavated will have to be disposed off site at an approved and permitted landfill in accordance with NYSDEC regulations. A plan will be submitted and approval must be given before any development or excavation work proceeds.

   The deed restriction will also require owners to annually certify to the NYSDEC that the remedy and protective cover have been maintained and that the conditions at the site are fully protective of public health and the environment in accordance with the selected plan and Record of Decision.

SECTION 9: HIGHLIGHTS OF COMMUNITY PARTICIPATION

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

- Four repositories were established for documents pertaining to the Site Investigation Report, Remedial Alternatives Report, Proposed Remedial Action Plan, and Fact Sheet;

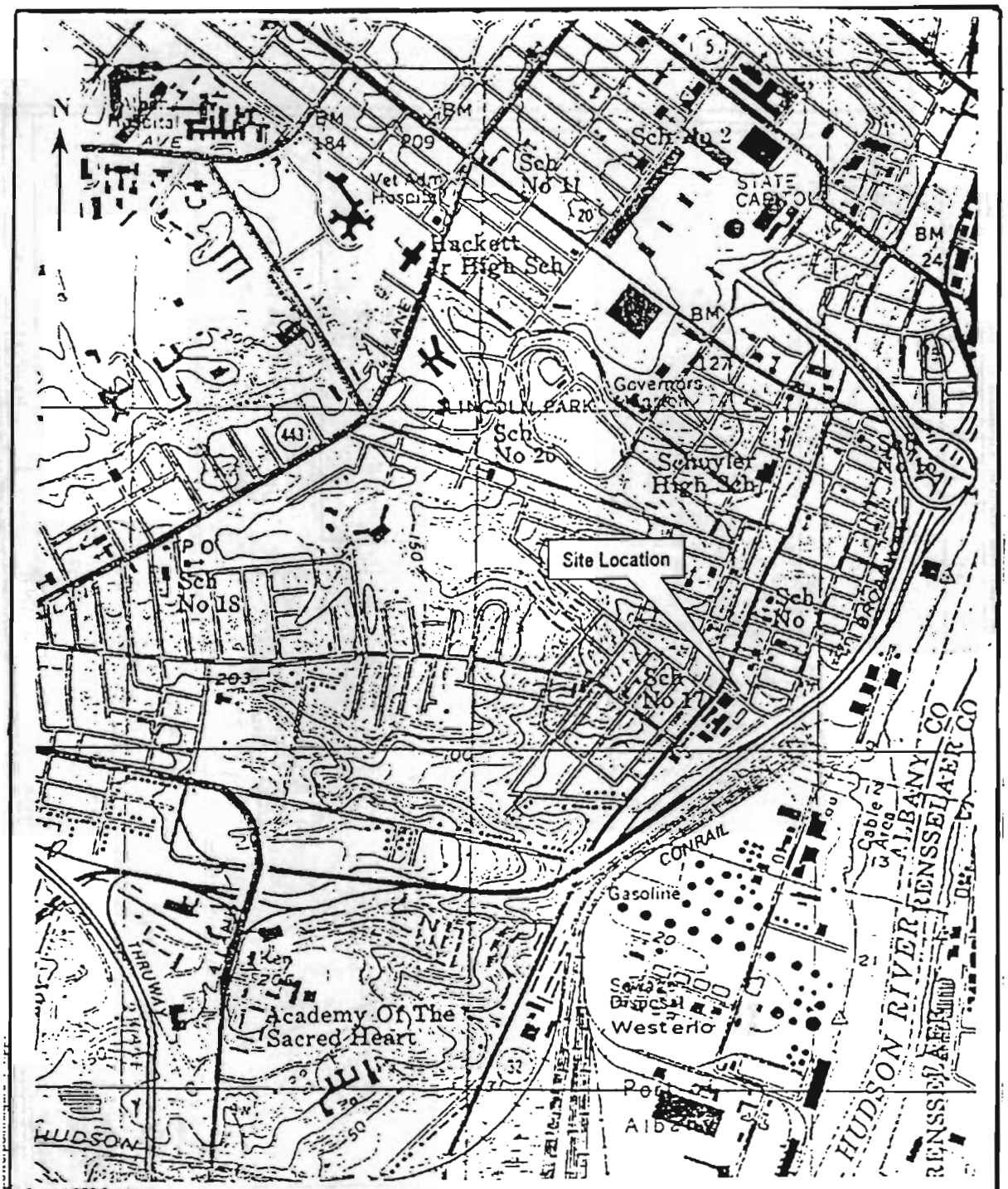
- A site mailing list was established which included nearby property owners, local political and government officials, local media (television, radio, newspapers) and other interested groups;

- A Fact Sheet announcing the release of the PRAP was mailed to those on the site mailing list informing the public of the PRAP's availability. The Fact Sheet summarized the site investigation, site history, proposed remedy, and provided the time of the public meeting and the public comment period;

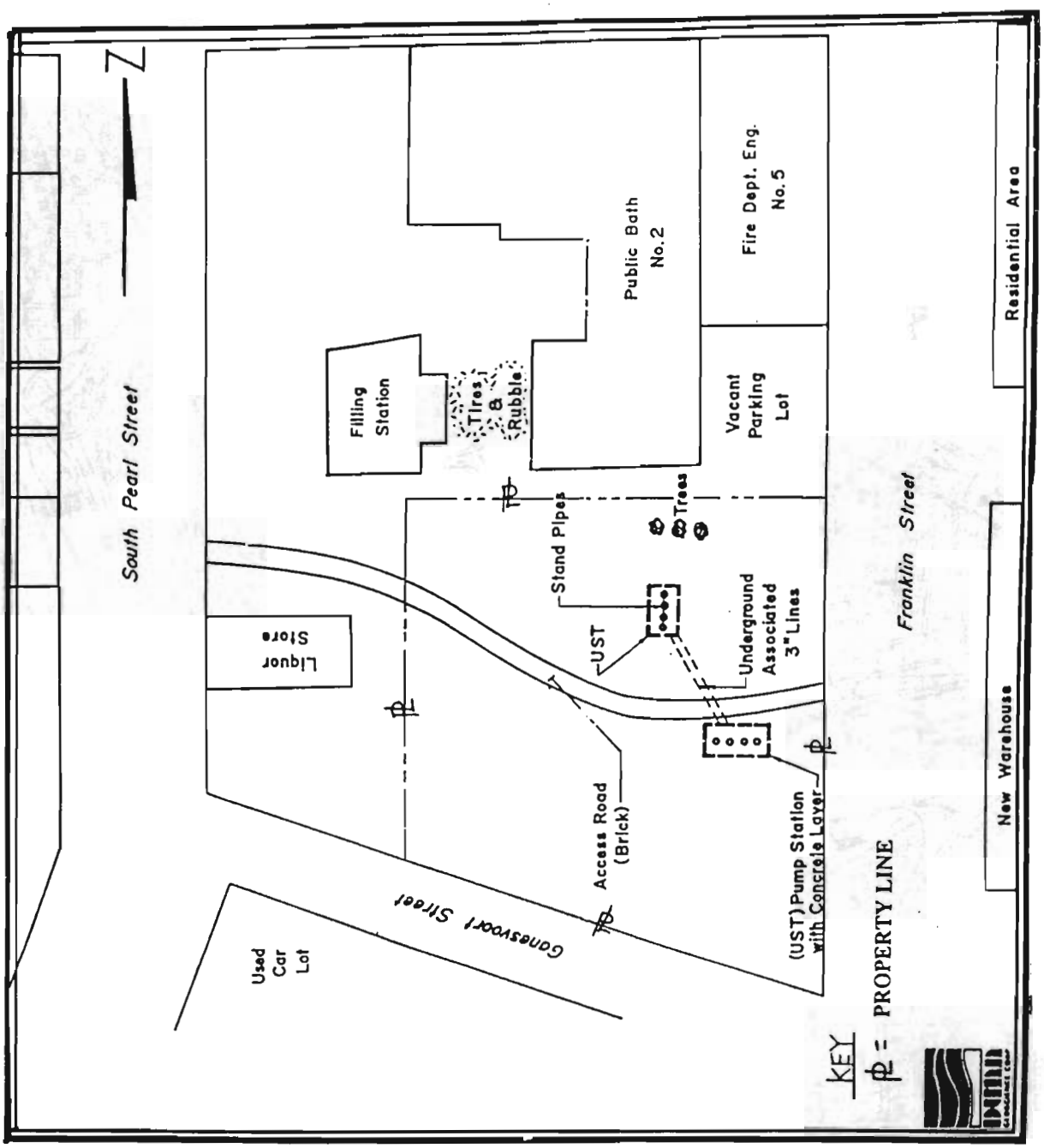
- Numerous Fact Sheets were hand delivered to businesses and residences in the immediate vicinity of the site. The Fact Sheet was discussed at that time with several area business people and residents; and

- A public meeting was held at the Albany Public Library on February 14, 2001 at which time the NYSDEC and NYSDOH were prepared to conduct a presentation of the Site Investigation (SI), Remedial Alternatives Report (RAR), and the proposed remedy. The meeting was to provide an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. However, no one from the public attended the public meeting. The public comment period for the PRAP ended on March 16, 2001. No written comments were received from the public. Therefore, there are no comments to be included as part of the Administrative Record for this site.

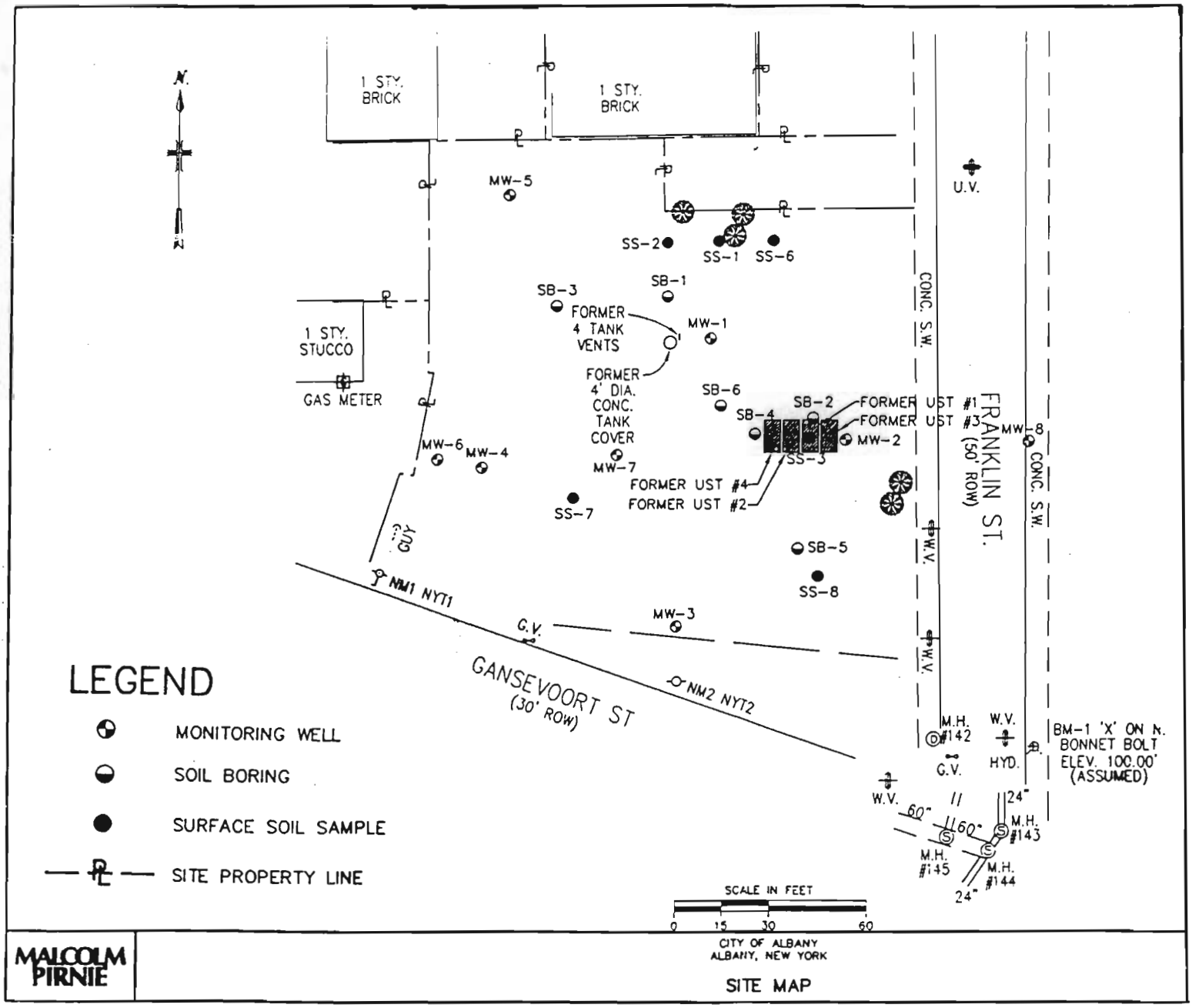
FIGURES



GANSEVOORT/FRANKLIN STREET SITE LOCATION MAP
FIGURE 1



HISTORICAL MAP OF SITE AND RELATED PROPERTIES
FIGURE 2



SITE INVESTIGATION MAP
FIGURE 3

TABLES

Table 1
Nature and Extent of Contamination

MEDIA	CLASS	CONTAMINANT OF CONCERN	CONCENTRATION RANGE (ppm)	FREQUENCY of EXCEEDING SCGs	SCG (ppm)
Subsurface Soils	Semivolatile Organic Compounds (SVOCs)	benzo(a)anthracene	ND to 1.1	1 of 6	0.224
		chrysene	ND to 1.1	1 of 6	0.4
		benzo(a)pyrene	ND to 1.2	1 of 6	0.061
		dibenzo(a,h)anthracene	ND to .081	1 of 6	0.014
Subsurface Soils	Inorganic Compounds (Metals)	antimony	ND to 1.2	1 of 6	1.1 **
		copper	ND to 107	1 of 6	68.6 **
		silver	ND to .590	1 of 6	0.260 **
Surface Soils	Semivolatile Organic Compounds (SVOCs)	benzo(a)anthracene	ND to 4.1	3 of 6	0.224
		chrysene	ND to 7.9	3 of 6	0.4
		benzo(b)fluoranthene	ND to 6.9	2 of 6	1.1
		benzo(k)fluoranthene	ND to 3.3	2 of 6	1.1
		benzo(a)pyrene	ND to 4.6	4 of 6	0.061
		indeno(1,2,3-cd) pyrene	ND to 3.3	1 of 6	3.2
		dibenzo(a,h)anthracene	ND to 0.3	2 of 6	0.014
Surface Soils	Inorganic Compounds (Metals)	antimony	ND to 7.7	1 of 6	1.1 **
		arsenic	ND to 29	2 of 6	17.3 **
		cadmium	ND to 1.2	2 of 6	1 *
		copper	ND to 78.1	2 of 6	68.6 **
		lead	ND to 1,630	4 of 6	500 *
		mercury	ND to 2.2	4 of 6	0.1 *
		potassium	ND to 3,220	1 of 6	1,910 **
		silver	ND to .890	4 of 6	0.260 **
		thallium	ND to 3.7	4 of 6	1.6 **
		zinc	ND to 366	3 of 6	154 **

*Eastern USA background levels

** Site background based on off-site surface soil samples SS-4 and SS-5

Table 1 (continued)
Nature and Extent of Contamination

MEDIA	CLASS	CONTAMINANT OF CONCERN	CONCENTRATION RANGE (ppb)	FREQUENCY of EXCEEDING SCGs	SCG (ppb)
Groundwater	Volatile Organic Compounds (VOCs)	benzene	ND to 800	2 of 10	1
		ethylbenzene	ND to 96	3 of 11	5
		m-xylene/p-xylene	ND to 160	4 of 11	5
		o-xylene	ND to 42	2 of 10	5
		isopropylbenzene	ND to110	3 of 11	5
		n-propylbenzene	ND to 220	3 of 11	5
		1,2,4-trimethylbenzene	ND to 1300	3 of 11	5
		sec-butylbenzene	ND to 28	2 of 11	5
		naphthalene	ND to 12	1 of 10	10
		methylene chloride	ND to 5.6	2 of 10	5
		1,2-dichloroethane	ND to 51	1 of 10	5
		toluene	ND to 19	1 of 10	5
		4-methyl-2-pentanone	ND to 6.5	1 of 10	5
		1,3,5-trimethylbenzene	ND to 27	1 of 10	5
Groundwater	Semivolatile Organic Compounds (SVOCs)	2,4-dimethylphenol	ND to 1.8	2 of 10	1
		phenol,2-ethyl	ND to 8	1 of 10	1
		p-xylene	ND to 28	1 of 10	5
Groundwater	Inorganic Compounds (Metals)	arsenic	ND to 28.9	1 of 7	25
		iron	ND to 18,900	6 of 7	300
		manganese	ND to 6890	6 of 7	300
		sodium	ND to 33,300	5 of 7	20,000

Table 2
Remedial Alternative Costs

Remedial Alternative	Capital Cost	Annual O&M	Total Present Worth
REMEDIAL ALTERNATIVE #1 No Action	$0	$0	$0
REMEDIAL ALTERNATIVE #2	$ 328,000	$0	$ 328,000
REMEDIAL ALTERNATIVE #3	$ 69,000	$1000	$ 84,400

* O&M costs are to maintain the protective cover over the site. The present worth calculation assumed a 5% interest rate and a 30 year life for the cover.

APPENDIX A

Administrative Record

Appendix A

Gansevoort/Franklin Street Brownfield Site
City of Albany, Albany County
Site No. B-00055-4
March 2001

Administrative Record Index

The following documents are included in the Administrative Record:

1. Work Plan - "Environmental Restoration Project under the Clean Water/ Clean Air Act of 1996, Gansevoort/Franklin Street Site, Albany, New York", prepared by Malcolm Pirnie, Inc., dated July 1999.

   Also includes:

   - Health and Safety Plan (HASP)
   - Citizen Participation Plan (CPP)
   - Quality Assurance Project Plan

2. "Site Investigation Report, Environmental Restoration Project, Gansevoort/Franklin Street Site, Albany, New York" prepared by Malcolm Pirnie, Inc., dated August 2000.

3. "Gansevoort/Franklin Street Brownfield Site Remedial Alternatives Report ", prepared by NYSDEC, dated January 2001.

4. "Gansevoort/Franklin Street Brownfield Site Proposed Remedial Action Plan ", prepared by NYSDEC, dated January 2001.