

SURREY COMPANY AND SURREY CORPORATION

ALSY MANUFACTURING
Oyster Bay, Nassau County

Site No. 130027

SUPPLEMENTAL
REMEDIAL INVESTIGATION REPORT

December 1997

LAWLER, MATUSKY & SKELLY ENGINEERS LLP
Environmental Science & Engineering Consultants
One Blue Hill Plaza
Pearl River, New York 10965

TABLE OF CONTENTS

		Page No.
1	INTRODUCTION	1
	1.1 Summary of the Remedial Investigation	1
2	SUPPLEMENTAL FIELD INVESTIGATION	2
	2.1 Objectives of the Sampling Effort	2
	2.2 Probe Soil and Groundwater Sampling Procedures	2
	2.3 Probe Soil and Groundwater Sampling Results	3
	2.4 Decontamination	3

1 INTRODUCTION

The Alsy Manufacturing Site (the Site) is located at 270 and 280 Duffy Avenue in the Town of Hicksville, Nassau County, New York (Figure 1-1). It has been designated as Class 2 (No. 1-30-027) in the New York State Registry of Inactive Hazardous Waste Disposal Sites (the Registry). The Site is presently owned by the Surrey Company and consists of 2 one-story brick and stucco buildings, one smaller building, and paved parking areas on approximately four acres of land (Figure 1-2). The building at 270 Duffy Avenue is currently occupied by several commercial operations and the building at 280 Duffy Avenue is occupied by a wholesale shoe store.

1.1 SUMMARY OF THE REMEDIAL INVESTIGATION

During the Remedial Investigation (RI) conducted by Lawler, Matusky & Skelly Engineers LLP (LMS), soil, soil gas, and groundwater samples were collected from various locations on the Site. Samples from various matrices were taken at 62 locations including the soil berms located along the eastern and northern property lines, deep perimeter probes, shallow on-site probes, angled probes under the building, and groundwater monitoring wells. From these locations, 26 soil samples were analyzed for Toxicity Characteristic Leaching Procedure (TCLP) metals; 126 water, 30 soil gas, and 75 water samples were analyzed for volatile organics (VOCs); and 25 soil and 66 water samples were analyzed for total metals (an additional 66 water samples were analyzed for dissolved metals).

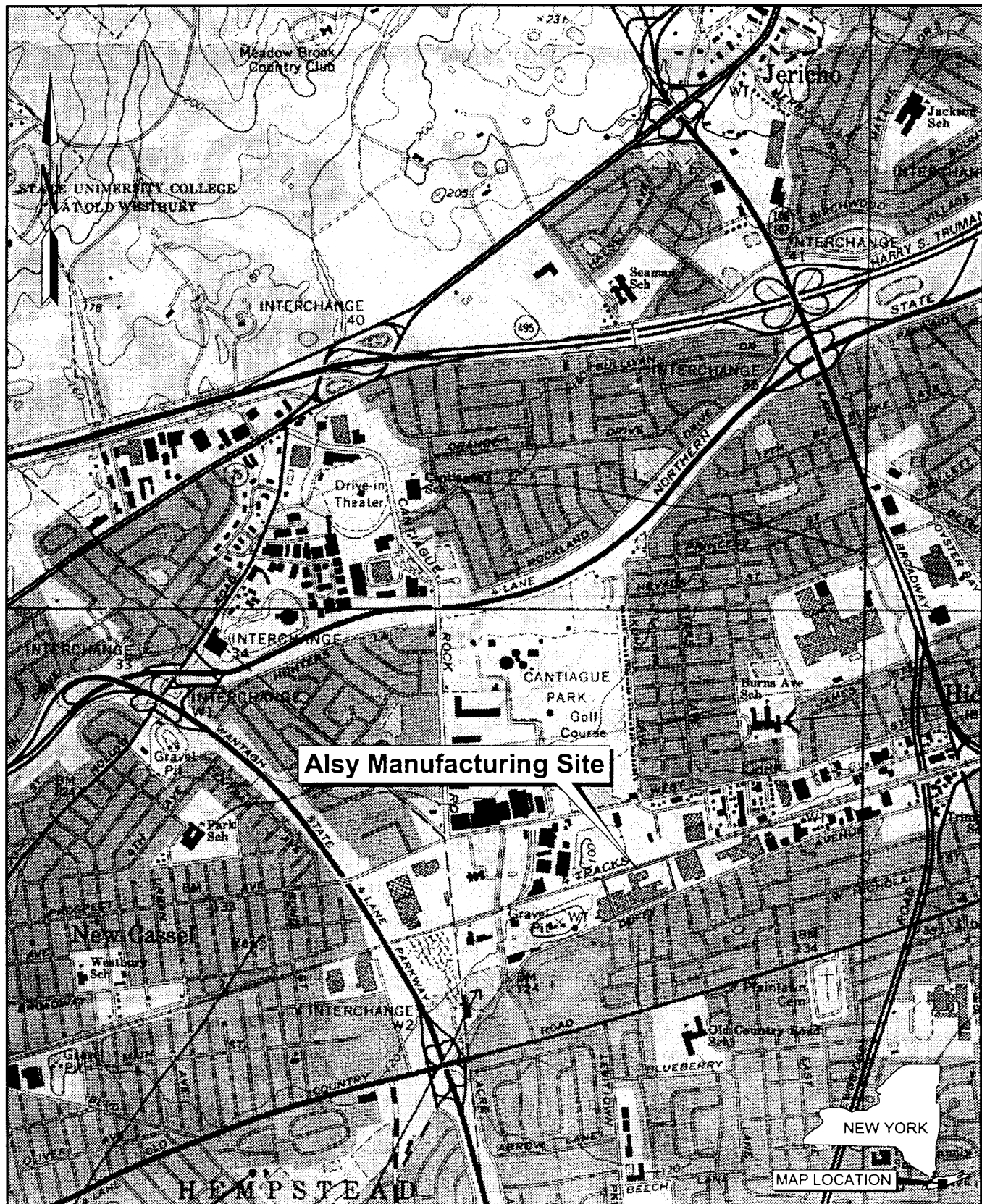
2 SUPPLEMENTAL FIELD INVESTIGATION

2.1 OBJECTIVES OF THE SAMPLING EFFORT

During the RI, shallow soil samples were collected from the structures, however, due to the open construction of these structures, deep samples could not be collected from within the confines of the structures. The objectives of the supplemental RI sampling were to collect and analyze soil samples in two of the on-site drainage structures (CB-1 and CB-2) (Figure 1-2) and to resample two monitoring wells (AMS-2 and LMS-4). The purpose of the analysis is to attempt to determine if a potential source of the nickel contamination in the groundwater exists in the soil within and/or under these structures.

2.2 SOIL AND GROUNDWATER SAMPLING PROCEDURES

All field sampling procedures were conducted in accordance with the field activities plan (FAP) (March 1996) that was prepared by LMS and accepted by the New York State Department of Environmental Conservation (NYSDEC) and the site-specific health and safety plan (HASp) (March 1996).



169801U1.ds4

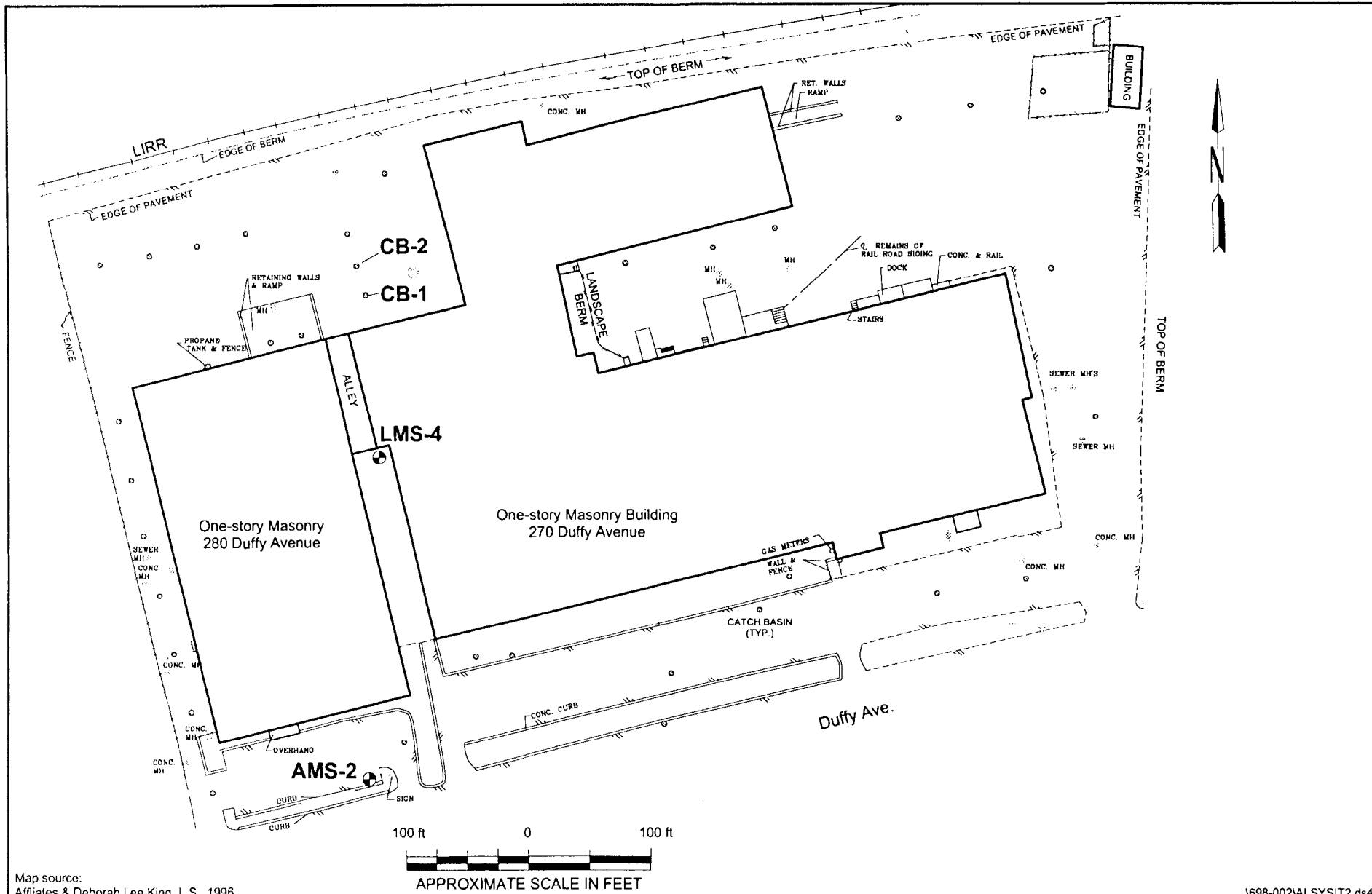
Map source: USGS 7.5-minute series quadrangle, Hicksville, NY, 1967, photorevised 1979.



LMS Lawler, Matusky & Skelly Engineers LLP
One Blue Hill Plaza • Pearl River, New York 10965
ENVIRONMENTAL SCIENCE & ENGINEERING CONSULTANTS

Site Location
Alsy Manufacturing - Oyster Bay, New York

Figure
1-1



Map source:
Affiliates & Deborah Lee King, L.S., 1996.

\\698-002\VALSYS\IT2.ds4

LMS Lawler, Matusky & Skelly Engineers LLP
One Blue Hill Plaza • Pearl River, New York 10965
ENVIRONMENTAL SCIENCE & ENGINEERING CONSULTANTS

Site Layout and Sampling Points

Alsy Manufacturing - Oyster Bay, New York

Figure
1-2

Soil samples were collected from test borings installed using a truck mounted drill rig equipped with hollow stem augers. Each soil sample was removed using a 2-ft split spoon driven ahead of the augers. Samples began at the sediment surface and continued to the water table in 10 ft intervals (approximately 60-ft below grade). Samples from each location were collected from 20 to 22-ft, 30 to 32-ft, 40 to 42-ft, 50 to 52-ft, and 60 to 62-ft.

Soil samples were placed in laboratory supplied containers and labeled with the sample identification, the name of the sampler, the date and time of collection, and the analysis required. The samples were delivered to the New York Test Environmental Inc. (NYTest) under the chain-of-custody protocol. Each soil sample was submitted for total nickel using EPA Method SW 846 6010A and TCLP.

One groundwater sample was collected from each sampling location using a hydropunch[®] system. Groundwater samples were filtered in the field using dedicated filtration devices.

In addition to and in concurrence with the test boring installation, LMS re-sampled two downgradient monitoring wells, AMS-2 and LMS-4. Prior to sampling, three volumes of water were purged from the wells. The samples were collected in dedicated bailers and placed in laboratory cleaned and supplied bottles and labeled with the sample identification, the date and time of collection, and the analysis required. The samples were hand delivered under the chain-of-custody protocol to NYTest. Monitoring well samples will be submitted for total and dissolved nickel using EPA Method 6010A.

All samples will be analyzed in accordance with New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocol (ASP), 10/95 update.

2.3 DECONTAMINATION

The decontamination procedures that were utilized for this re-sampling are the same as those that were outlined in section 3.13 of the RI.

2.4 SOIL AND GROUNDWATER SAMPLING RESULTS

LMS sampled and analyzed soil from beneath the two drainage structures to the top of the water table. The water table depth at CB-1 was measured at 61 ft and 60.7 ft at CB-2. The soils were sampled at 10-ft intervals and analyzed for total and dissolved nickel using the TCLP as described above. A groundwater sample was also collected from each location as described above. Monitoring wells AMS-2 and LMS-4, were also sampled as described in Section 2.2.

The soil samples from the two drainage structures contained concentrations of nickel ranging between 8.5 to 258 mg/kg (Table 1-1). Some of these samples were above the Recommended Soil Cleanup Objectives for Heavy Metals listed in NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 94-4046. The TCLP nickel concentrations in samples CB-2 (20-22 ft) and CB-2 (30-32 ft) were somewhat elevated, though below the concentrations of nickel found in the monitoring well samples (Table 1-2). Water samples from these structures showed that CB-1 contained 1.5 mg/L dissolved nickel, while CB-2 contained only 0.02 mg/L dissolved nickel (Table 1-3).

Both of the monitoring wells that were re-sampled contained concentrations of total and dissolved nickel that were elevated relative to the rest of the site. In AMS-2, the total nickel concentration was 3,050 µg/L and the dissolved nickel was 3,130 µg/L. In LMS-4, the total nickel concentration was 5,290 µg/L and the dissolved nickel was 5,100 µg/L. The results of the latest sampling confirmed that dissolved nickel is still present in similar concentrations to those found in the initial RI in AMS-2 while concentrations in LMS-4 decreased between sampling events (Table 1-3).

TABLE 1-1

SUPPLEMENTAL SOIL DATA SUMMARY (SEPTEMBER 1997)
Alsy Manufacturing

PARAMETER	CB-1 (20-22 ft)	CB-1 (30-32 ft)	CB-1 (40-42 ft)	CB-1 (50-52 ft)	CB-1 (60-62ft)	CB-2 (20-22 ft)	CB-2 (30-32 ft)	CB-2 (40-42 ft)	CB-2 (50-52 ft)	CB-2 (60-62ft)	RECOMMENDED SOIL CLEANUP OBJECTIVE (b)
METALS (mg/kg)											
Nickel	85.2	32.6	21.8	33.3	8.5	191	258	18.6	49.1	10.5	13 or SB

(b) - NYSDEC Division Technical and Administrative Guidance Memorandum (TAGM), 1/94.
 SB - Site background.

TABLE 1-2

SUPPLEMENTAL TCLP DATA SUMMARY (SEPTEMBER 1997)**Alsy Manufacturing**

PARAMETER	CB-1 (20-22 ft)	CB-1 (30-32 ft)	CB-1 (40-42 ft)	CB-1 (50-52 ft)	CB-1 (60-62ft)	CB-2 (20-22 ft)	CB-2 (30-32 ft)	CB-2 (40-42 ft)	CB-2 (50-52 ft)	CB-2 (60-62ft)
TCLP METAL (mg/L) Nickel	0.16	0.058	0.073	0.094	0.034	1.2	0.75	0.086	0.20	0.087

TABLE 1-3

SUPPLEMENTAL GROUNDWATER DATA SUMMARY (SEPTEMBER 1997)
Alsy Manufacturing

PARAMETER	AMS-2	LMS-4	CB-1GW	CB-2GW	NYSDEC CLASS GA STANDARDS	RISK BASED EPA STANDARDS ^(a)
METALS (µg/L)						
Nickel, total	3,050	5,290	4,660	790	NS	730
Nickel, dissolved	3,130	5,100	1,530	20.6	NS	730

(a) - USEPA Region III Table of Risk Based Concentrations (USEPA, Region III, 19 April 1996).
 NS - No Standard.