LUST SITE
5771 & 5770
↓
lead in water & soil (2 locations)

CITY OF HOQUIAM
DEPARTMENT OF PUBLIC WORKS
P.O. BOX 300
609 EIGHTH STREET
HOQUIAM, WASHINGTON 98550-3511
PHONE (360) 532-5700 / FAX (360) 538-0938

October 26, 2000

Mr. Steve Loftness
Solid Waste & Financial Assistance Program
Washington State Department of Ecology
P. O. Box 47600
Olympia, Washington 98504-7555

SUBECT: UST SITE ASSESSMENT REPORT FOR THE HOQUIAM CITY HALL
LUST 5770 → 609 EIGHTH STREET

Dear Mr. Loftness:

Enclosed for your review and examination is the Fourth Quarter Groundwater Analysis Report and the UST Assessment Report. This information was delivered to the City on October 25, 2000.

This information should complete the fieldwork that was required with the monitoring wells. The results imply that any contamination was removed to levels below those established as minimum acceptable by Washington State Department of Ecology (DOE) Standards.

Should you need additional information or backup material, please contact this office and not the Financial Department. Please advise what steps are now necessary for the City to Receive the grant funds?

Very truly yours,

M. Dean Parsons, P.E.
Director of Public Works

Department of Ecology
OCT 30 2000
SW & FAP

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P.O. BOX 300
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October 26, 2000

Mr. Mark Robinson
Engineering Geologist
Northwest Testing Company, Inc.
P. O. Box 11581
Olympia, Washington 98508-1581

SUBJECT: City of Hoquiam, Washington Site at 609 8th Street

Dear Mr. Robinson:

Thank you for your telephone call advising that the work for the Fourth Quarter Groundwater Analysis Report for the project behind City Hall had been conducted and the report completed.

Your report was hand carried to our office on Tuesday, October 24, 2000 by Mr. Larry Miller of Evergreen Environmental, Inc. after he received a copy of my letter to your office.

Your prompt attention to this matter was appreciated.

Very truly yours,

M. Dean Parsons, P. E.
Director of Public Works

c/c Mr. Larry Miller

UST SITE ASSESSMENT REPORT

for the

HOQUIAM CITY HALL

609 8th Street

Hoquiam, Washington

August 01, 20000

Prepared By:

Northwest Testing Company PO Box 11581

Olympia, Washington 98508-1581 Phone/Fax: (360) 866-3647

Northwest Testing Company, Inc.

CONSTRUCTION TESTING AND INSPECTION
ENVIRONMENTAL CONSULTATION AND ASSESSMENT

August 17, 2000

Larry Miller
Evergreen Environmental, Inc.
601 West State Street
PO Box 167
Aberdeen, WA. 98520

RE: Hoquiam City Hall Site Assessment Project

Dear Larry:

We have completed and enclosed herein the UST Site Assessment you requested for the above referenced project. The results of the assessment indicate that while no gas and BTEX was found in subsurface soils, lead levels in soil and water are over the Method A Cleanup Levels.

Please call me if you have any questions regarding this assessment. We appreciate this opportunity to be of service to you.

Respectfully,

NORTHWEST TESTING COMPANY

Mark Robinson

Mark Robinson
Engineering Geologist
Registered Site Assessor

P. O. BOX 11581 · OLYMPIA, WASHINGTON 98508-1581 · PHONE or FAX 360/866-3647

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APPENDICES

UST SITE ASSESSMENT REPORT

for the

HOQUIAM CITY HALL, HOQUIAM, WA.

August 01, 2000

0.0 EXECUTIVE SUMMARY:

This underground storage tank site characterization has been provided by Northwest Testing Company in conjunction with Evergreen Environmental Company, Inc., for the Hoquiam City Hall, located in Hoquiam, Washington. This report outlines the site assessment for one closed-in-place underground storage tank previously used for an emergency generator at the fire station. The tank was closed as part of a larger decommissioning project completed in the fall of 1999.

This report has been prepared under the format dictated by the *Guidance for Site Checks and Site Assessments for Underground Storage Tanks*, Department of Ecology issue of February 1, 1991 and revised, October 1992.

1.0 SITE BACKGROUND:

The site assessment took place on August 01, 2000 at the Hoquiam City Hall complex. The site address follows:

Hoquiam City Hall
609 8th Street
Hoquiam, Washington 98550
Site Contact Person: Dean Parsons
Phone (360) 532-5700

The City Hall complex consists of several buildings, the main ones being the City Hall itself, the Fire Department / Medic and First Aid building, and the shop and maintenance buildings. Small residential housing, the public library, and small commercial offices characterize the local area. Two gasoline and one diesel underground storage tanks were removed from the site in the fall of 1999, along with a significant amount of gasoline range hydrocarbon contaminated soils. The subject tank was closed in place at this time, based upon the results of subsurface soil tests performed in July of 1996. Since the tank had remained in use during the period of 1996 to 1999, and the outstanding issue of lead in groundwater found at the time of the original assessment, the Department of Ecology requested another site assessment for the tank closure. For further details, see the *Interim Remedial Action Report for the Hoquiam City Hall, October 29, 1999*, and the July 09, 1996 *Site Assessment Report for the Hoquiam City Hall*, both issued by this company. The site is situated approximately one-quarter mile west of the Hoquiam River. Municipal water and sewer serve the area, and there are no domestic wells in the area.

2.0 GEOLOGICAL and HYDROLOGICAL CONDITIONS:

The general geology of the area is alluvial, consisting of mostly unconsolidated silt, sand, and gravel valley fill with some clays and local glacial deposits. The specific soil geology at the site consists of dark brown to black moist plastic silts with clay (ML), with intermittent lenses of peat. Due to the proximity to the river, the groundwater in the area may be tidally influenced. Groundwater was noted as shallow as 18" bgs in one of the borings.

3.0 SYSTEM DATA:

The following description of the tank was provided by the city (depth of tank bottom below ground surface was previously determined by this agency in the field):

Tank #13: Site: Fire Station Site ID 005771 (listed as tank #18 in DOE records)
Capacity: 200 gallons
Product: Gasoline, leaded
Type: Metal
Age: 21 years
Status: In Service (emergency generator)
Bottom of Tank bgs: 45"

The tank remains located in the driveway of the Fire Station and has been filled with cement/sand slurry. The line into the building also remains in place, but has been capped. The tank had no secondary containment or leak detection systems. It was tested for tightness in 1995 and passed.

The soils surrounding the tank were checked in July of 1996 in the course of a larger assessment conducted at the site. While no gasoline contamination was encountered at this time, lead was noted in the water sampled in the area (9 mg/L), and a slightly elevated lead level was found in one of the soil samples. It was speculated that the tank could be closed in place if the lead in the water issue could be addressed

4.0 SAMPLING PROCEDURES:

Soil samples were obtained by coring through the asphalt with the soils extracted by a hand auger fitted with sample spoon. The sampling spoon was washed and decontaminated between samples. Water samples were extracted with disposable plastic dragger tubes. All samples were immediately placed into glass laboratory containers, sealed and identified, and stored in a chilled cooler for transport to the laboratory.

4.1 FIELD SCREENING:

Extracted soils were field screened with a PID meter measuring petroleum vapors in an enclosed headspace. Soil and water samples were also screened by use of the water sheen test. Probe spoils were observed for general indications of contamination (odor, texture, etc).

observed for general indications of contamination (odor, texture, etc).

5.0 PREPARATION AND SAFETY:

Normal safety precautions were taken while extracting and handling of samples. Personnel wore coveralls, boots, and latex gloves.

6.0 SITE ASSESSMENT:

The soil and water samples extracted at probe location #1 showed a slight sheen, with a PID reading of 30 ppm for soil introduced into a sealed headspace. In addition to subsurface soil, a water sample was also extracted at this location. No other locations indicated any contamination in field screening. A sand backfill was encountered from the surface to approximately five feet bgs, underlain by native silts. See attached table for test locations and results.

Sampling locations and methodology were adapted from the Field Sampling Procedures found in the February 1991 issue of the Department of Ecology Guidance for Site Checks and Site Assessments of Underground Storage Tanks and its revision. Samples were stored and transported to the laboratory for analysis, per sections 5.5 and 7.4 of the above referenced publication, and its revisions. All samples were analyzed at TEG Laboratories in Lacey, Washington.

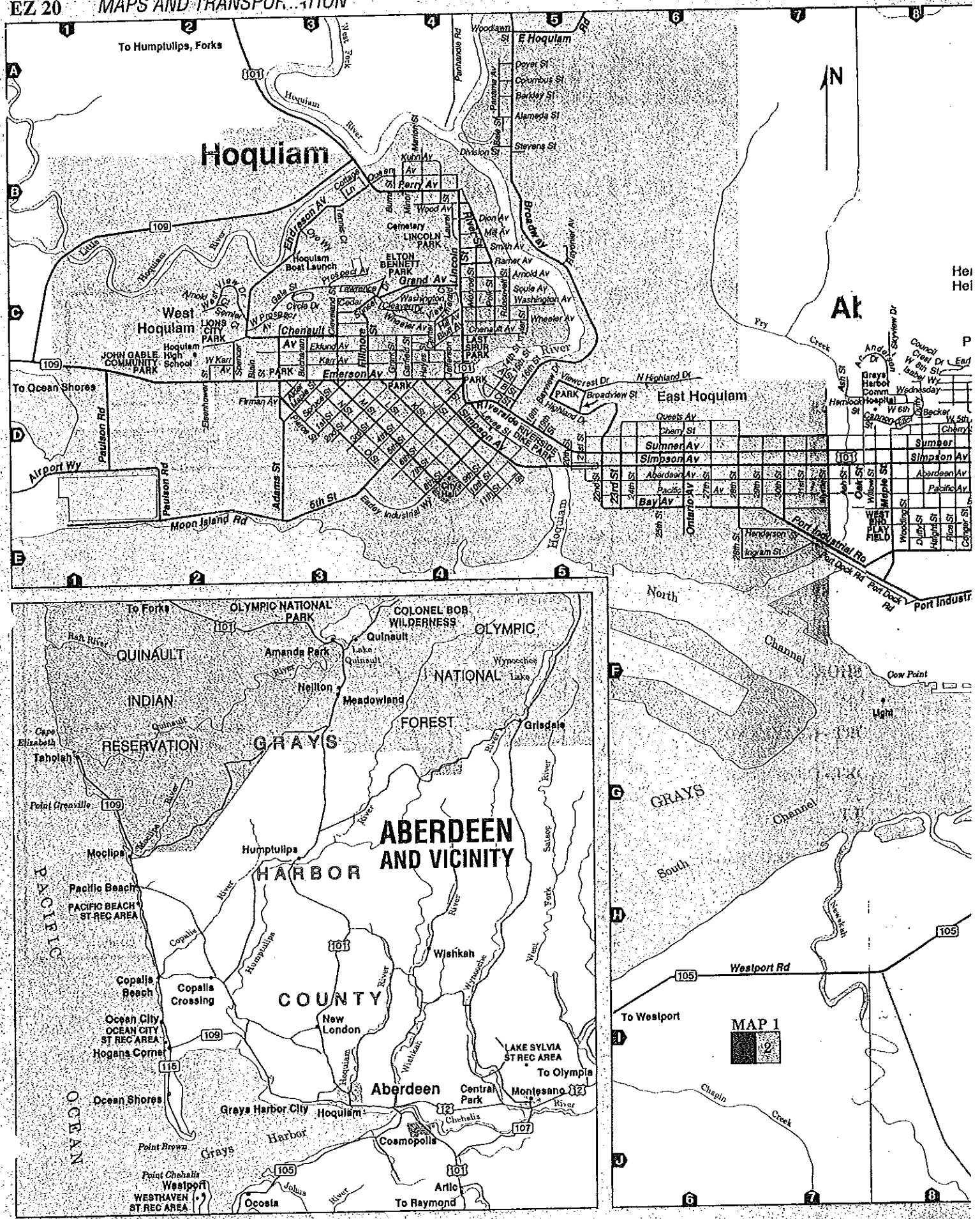
7.0 CONCLUSION of INVESTIGATION:

Laboratory analysis confirmed lead contamination in excess of Washington State Department of Ecology MTCA Method A cleanup standards remain in groundwater at the site. Lead contamination was also confirmed in soil at two locations adjacent to the tank. Further investigation of the site is recommended to map out the soil strata contaminated with excess levels of lead. Disposal of soils with high lead content would not be possible at the same facility that accepted the previous gasoline/diesel contaminated soils. The cost of disposal of lead-contaminated soil is expensive, so it would be prudent to determine the limits of contamination as accurately as possible. Filtered groundwater samples should be obtained at the site after removal of lead contaminated soils.

NORTHWEST TESTING COMPANY

Mark Robinson

Mark Robinson
Engineering Geologist
Registered Site Assessor



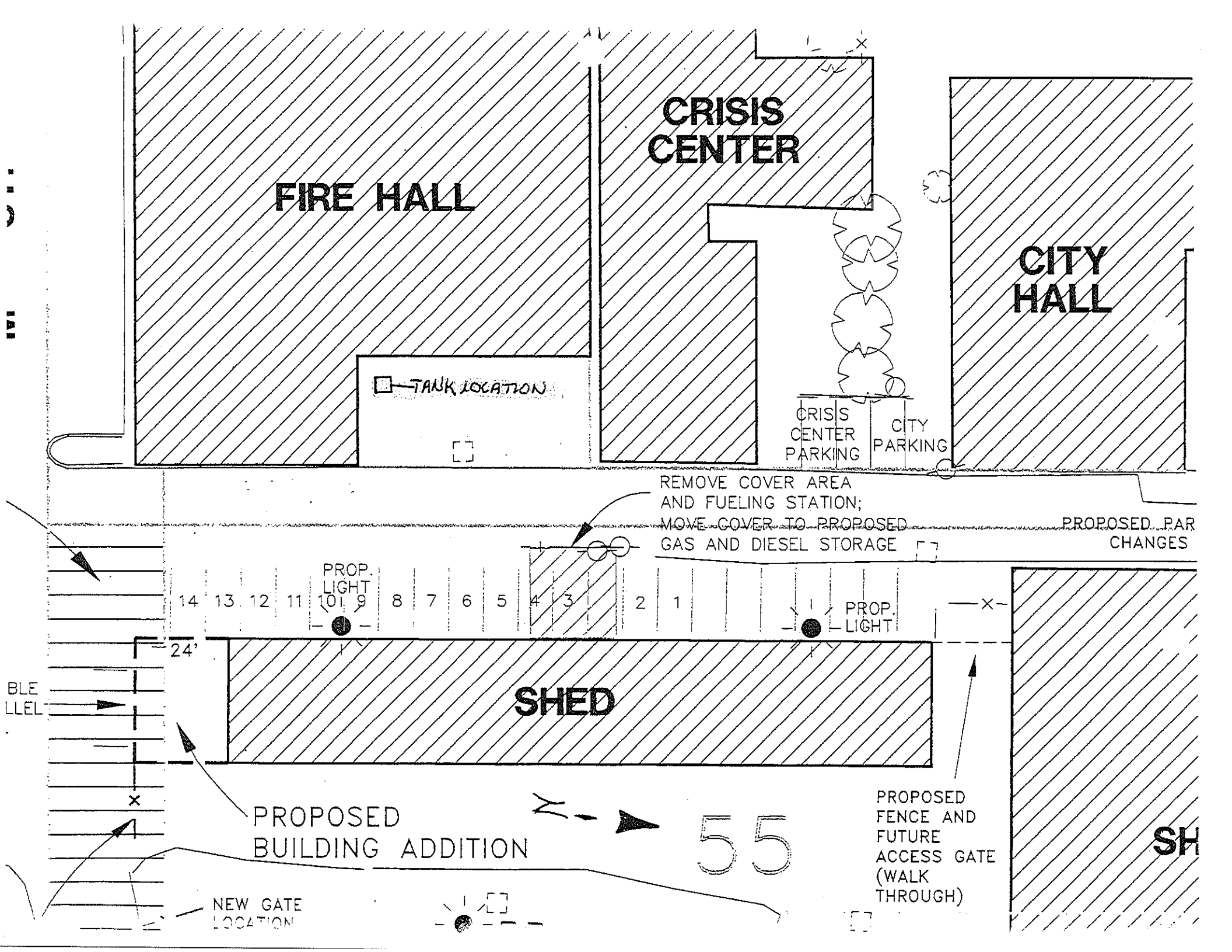
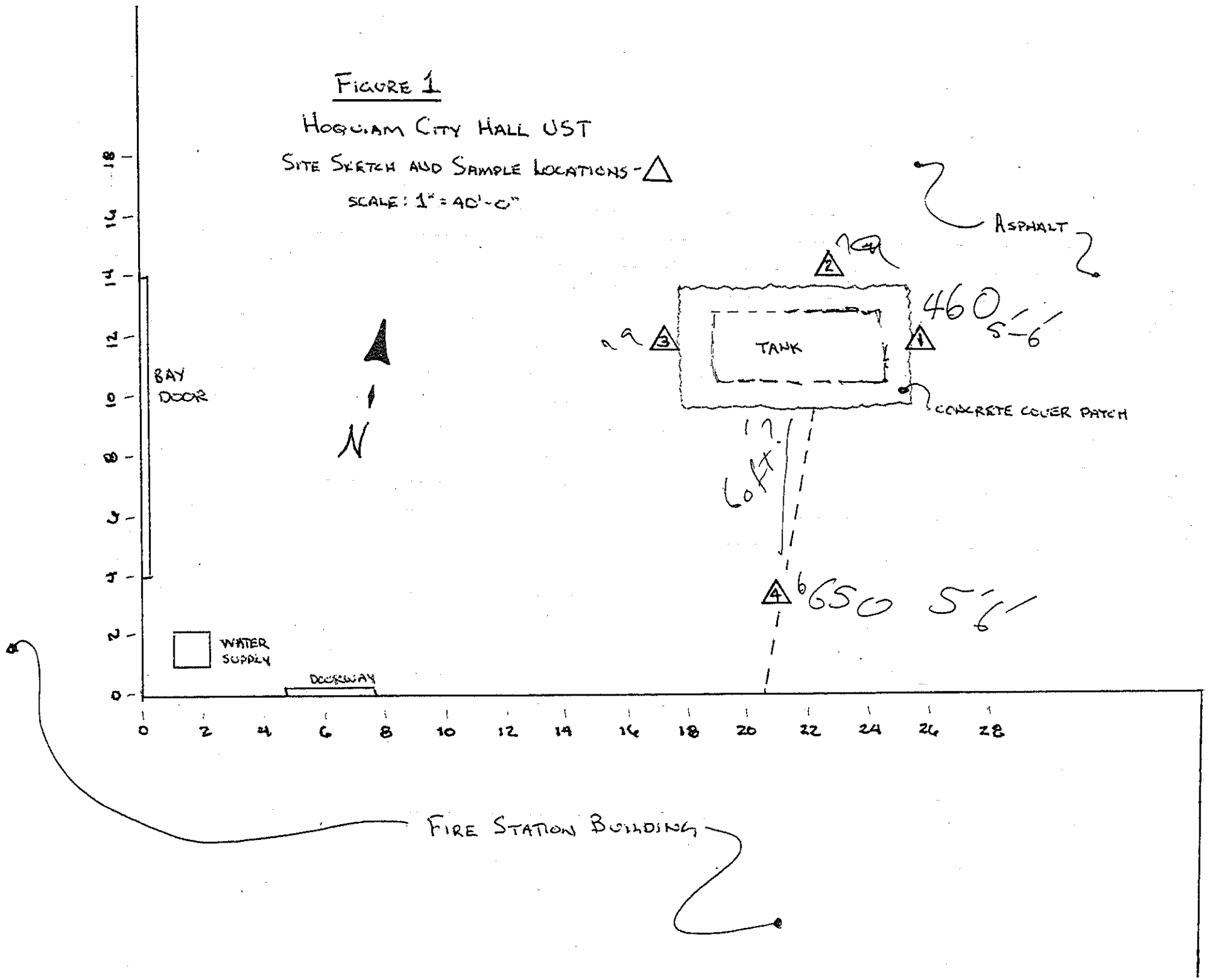

FIRE HALL
CRISIS CENTER
CITY HALL
TANK LOCATION
CRISIS CENTER PARKING
CITY PARKING
REMOVE COVER AREA AND FUELING STATION; MOVE COVER TO PROPOSED GAS AND DIESEL STORAGE
PROPOSED PAR CHANGES
PROP. LIGHT
14 13 12 11 10 9 8 7 6 5 4 3 2 1
PROP. LIGHT
24'
SHED
PROPOSED BUILDING ADDITION
55
PROPOSED FENCE AND FUTURE ACCESS GATE (WALK THROUGH)
NEW GATE LOCATION

FIGURE 1

HOQUIAM CITY HALL UST

SITE SKETCH AND SAMPLE LOCATIONS - △

SCALE: 1" = 40'-0"



HOQUIAM CITY HALL

RESULTS OF FIELD SCREENING AND CHEMICAL ANALYSIS SAMPLING

Sample Number	Sample Location	Sample Depth	Date Sample	Field Screen Results	Gasoline Hydrocarbons NWTPH-G mg/K	Gasoline BTEX EPA-8021B mg/K	Total Lead EPA-7420 mg/K
000801-1	11.5' north of fire station wall, 25'-11" east of fire station wall.	5'-6'	8/1/00	ss/30	nd	nd	460
000801-2	13'-4" north of fire station wall, 22.5 east of fire station wall.	5'-6'	8/1/00	ns/nd	nd	nd	na
000801-3	11.5' north of fire station wall, 17.5' east of fire station wall.	5'-6'	8/1/00	ns/nd	nd	nd	na
000801-4	3.5' north of fire station wall, 21' east of fire station wall.	5'-6'	8/1/00	ns/nd	nd	nd	650
000801-W1	11.5' north of fire station wall, 25'-11" east of fire station wall.	20"	8/1/00	ss	nd (ug/L)	nd (ug/L)	na
000801-W1	11.5' north of fire station wall, 25'-11" east of fire station wall.	20"	8/1/00	ss	na	na	13 (ug/L)

Table Notes:
na=not applicable
nd=non-detect
hs=heavy sheen
ms=moderate sheen
ss=slight sheen
ns=no sheen
ug/L=parts per billion