ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION (LOP)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

August 18, 1997
STID 3806

Ned Clyde Construction, Inc.
159 Mason Circle
Concord CA 94520
Attn: Ned Clyde

Susan Church
2311 F Adeline St.
Oakland CA 94607

REMEDIAL ACTION COMPLETION CERTIFICATION

RE: 2311 Adeline St., Oakland CA 94607
Case File Number 3806

Dear Mr. Clyde and Ms. Church,

This letter confirms the completion of site investigation and remedial action for the underground storage tank formerly located at the above referenced site. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank is greatly appreciated.

Based on information in the above-referenced file, and with the provision that the information provided to this agency was accurate and representative of site conditions, **no further action related to the underground tank release is required.**

This notice is issued pursuant to a regulation contained in Title 23, Division 3, Chapter 16, Section 2721(e) of the California Code of Regulations.

Please contact our office if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung, Director

cc: Kevin Graves, RWQCB
Dave Deaner, SWRCB, UST Cleanup Fund Program
Attn: Leroy Griffin, Supervisor, Hazardous Materials Program, City of Oakland, Fire Services Agency, 505-14th St., suite 702, Oakland CA 94612
Scott MacLeod, Cambria, 1144-65th St., Suite C, Oakland CA 94608
Jennifer Eberle (3 copies of letter only)

LOP/Completion
je.3806clos.let

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August 18, 1997
STID 3806

Ned Clyde Construction, Inc.
159 Mason Circle
Concord CA 94520
Attn: Ned Clyde

Susan Church
2311 F Adeline St.
Oakland CA 94607

RE: **CASE CLOSURE**
one 2,000-gallon gasoline underground storage tank
2311 Adeline St., Oakland CA 94607

Dear Mr. Clyde and Ms. Church,

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board (SWRCB) adopted this letter on 2/20/97. As of 3/1/97, Alameda County Health Care Services Agency, Environmental Health Services, Local Oversight Program is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. **The subject fuel leak case is closed.**

SITE INVESTIGATION AND CLEANUP SUMMARY:

Please be advised that the following conditions exist at the site:

* Eight hundred seventy parts per million (ppm) Total Petroleum Hydrocarbons as Gasoline (TPH-g), 8.4 ppm benzene, 36 ppm toluene, 17 ppm ethylbenzene, and 160 ppm xylenes remain *in the native soil.*

* Sixty-five parts per million (ppm) TPH-g, 6.1 ppm benzene, 6.7 ppm toluene, 1.9 ppm ethylbenzene, and 11 ppm xylenes remain *in the groundwater.*

If you have any questions, please call Ms. Jennifer Eberle at 510-567-6761. Thank you.

Sincerely,

Tom Peacock
Supervisor, Local Oversight Program

Enclosures:
1. Case Closure Letter
2. Case Closure Summary

cc: Scott MacLeod, Cambria, 1144-65th St., Suite C, Oakland CA 94608
Attn: Leroy Griffin, Supervisor, Hazardous Materials Program, City of Oakland, Fire Services Agency, 505-14th St., suite 702, Oakland CA 94612
Jennifer Eberle (3 copies of letter only)

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION

Date: 8/17/95

Agency name: **Alameda County-HazMat** Address: **1131 Harbor Bay Pky**
City/State/Zip: **Alameda CA 94502** Phone: **(510) 567-6700**
Responsible staff person: **Jennifer Eberle** Title: **Hazardous Materials Spec.**

II. CASE INFORMATION

Site facility name: **Ned Clyde Construction**
Site facility address: **2311 Adeline St., Oakland CA 94607**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **3806**
URF filing date: 1/30/89 SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:

Susan Church, et al, 2311-F Adeline St., Oakland CA 94607 (property owner)

Ned Clyde, 159 Mason Circle, Concord CA 94520 (689-5411)

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	2,000	gasoline	removed	12/88

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: unknown
Site characterization complete? YES
Monitoring Wells installed? YES Number: 7
Proper screened interval? YES
Highest GW depth below ground surface: 4.5'bgs (SB1 and SB4 on 3/21 and 3/25/96)
Lowest depth: 11.5'bgs (SB3 on 3/21/96)
Flow direction: South
Most sensitive current use: construction company
Are drinking water wells affected? NO Aquifer name: n/a
Is surface water affected? NO Nearest affected SW name: n/a
Off-site beneficial use impacts (addresses/locations): n/a
Report(s) on file? **YES** Where is report(s) filed?
Alameda County, 1131 Harbor Bay Pky, Alameda Ca 94502

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment of Disposal w/destination)	Date
Tank	no information in the file		
Soil	approx 175 yd3	disposed to W. Contra Costa landfill	1989
Groundwater	5,000 gal	aerated and discharged into storm drain	1989

III. RELEASE AND SITE CHARACTERIZATION INFORMATION (Continued)
Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppm)	
	Before	After	Before	After
TPH (Gas)	350	870	80	65
Benzene	<9	8.4	24	6.1
Toluene	45	36	3.7	6.7
Xylene	87	160	18	11
Ethylbenzene	<20	17	18	1.9

Comments (Depth of Remediation, etc.):
"Before" soil samples are the first samples collected from the excavation on 12/14/88.
"After" soil samples are from the borings installed in March 1996; see Table 8 and Figure 8.
"Before" water samples are the first samples taken from MW2 on 4/12/89 (now destroyed by excavation); see Table 7 and Figure 4.
"After" water sample is a grab sample from boring SB-2 installed in March 1996; see Table 8 and Figure 8.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Undetermined
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Undetermined
Does corrective action protect public health for current land use? YES
Site management requirements: NA
Should corrective action be reviewed if land use changes? YES
Monitoring wells Decommisioned: Not yet (waiting for RWQCB signoff)
Number Decommisioned: 0 Number Retained: 7

List enforcement actions taken:none List enforcement actions rescinded: none

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Jennifer Eberle Title: Hazardous Materials Specialist
Signature: J Eberle Date: 3-14-97

Reviewed by

1) Name: Madhulla Logan Title: Hazardous Materials Specialist
Signature: Madhulla Logan Date: 3/14/97

2) Name: Tom Peacock Title: Supervising Hazardous Materials Specialist
Signature: Tom Peacock Date: 3-24-97

VI. RWQCB NOTIFICATION

Date Submitted to RB: 3-25-97 RB Response: Approved
RWQCB Staff Name: Kevin Graves Title: AWRCE Date:
Kevin Graves 4/8/97

VII. ADDITIONAL COMMENTS, DATA, ETC.

A 2,000-gal gasoline UST was removed on 12/14/88. Two soil samples were collected from both ends of the pit. **See Fig 1.** Results indicated up to 350 ppm TPHg, ND benzene, up to 45 ppm toluene, up to 87 ppm xylenes, and ND ethylbenzene from the pit samples. The stockpile sample (composited) had 600 ppm TPHg, ND BTE, and 140 ppm xylenes. On 1/16/89, the stockpile was spread out and aerated onsite.

Three borings were drilled around the excavation in January 1989. One of these borings was converted to a well (MW1). Maximum concentrations in soil were from the 6' bgs depth in the MW. **See Fig 2.** Two additional samples were taken from the open excavation, apparently at 11' bgs and 13' bgs. Maximum concentrations were 340 ppm TPHg and 10 ppm benzene (at 13'bgs).

The pit was apparently overexcavated on March 15 and 17 1989, and confirmatory samples were taken on 3/15/89 and 3/17/89. **See Fig 3 and Table 2.** Seven additional borings were drilled around the excavation between April 10-12, 1989. This was done to delineate the extent of the soil contamination. Results are tabulated on Table 3. **See Fig 4 and Table 3.** Approximately 100 yd3 of soil were generated from the 3/89 excavation, and divided into two stockpiles. The average TPH concentration from these stockpiles was reportedly 98 ppm and 22 ppm. This stockpile was aerated for one week, then offhauled to Richmond Sanitary Service's (RSS) West Contra Costa County Sanitary landfill.

The pit was again overexcavated on April 25 1989, and confirmatory samples were taken on 4/25/89. **See Fig 5 and Table 4.** Maximum concentrations remaining in place were 190 ppm TPHg and 2.7 ppm benzene (sample S35-W10 at 9'bgs). Approximately 150 yd3 of soil were generated from the 4/89 excavation, and divided into three stockpiles. The average TPH concentration from these stockpiles was reportedly 21, 22, and 5.3 ppm. This stockpile was offhauled to Richmond Sanitary Service's (RSS) West Contra Costa County Sanitary landfill. However, an unknown amount of this stockpile was aerated and then reused in the upper portions of the excavation.

Water which had seeped or precipitated into the excavation was pumped out and stored in a Baker tank prior to the overexcavation activities in March and April. The total quantity was approximately 6,000 gallons. The RWQCB gave permission by way of letter dated 5/3/89 to waive storm water discharge requirements. The water was aerated, sampled, and then discharged to a storm sewer on 5/8/89.

Monitoring well MW2 was installed in April 1989, and MW3 through MW6 were installed in May 1989. **See Fig 6.** Soils from the boreholes were apparently not sampled. Further soil excavation was conducted in Nov 1990; this excavation destroyed MW2. **See Fig 7.** Maximum concentrations remaining in place were 160 ppm TPH-g at 13' bgs; BTEX was apparently not analyzed. **See Table 5.**

MW7 was installed in November 1990, subsequent to the destruction of MW2 and overexcavation in the area of MW2. Soils in the borehole were analyzed. Maximum concentrations remaining in place were 2 ppm TPHg and 0.3 ppm benzene at 13.5'bgs. **See Table 6.** The wells (MW3 through MW7) were surveyed, apparently by Woodward Clyde Co., relative to an assumed benchmark of 100.00 feet in January 1993. The wells (MW3 through MW7) were surveyed to msl on 5/18/95, by a licensed land surveyor. Groundwater flow direction was back-calculated, and found to be generally towards the south.

Groundwater has been analyzed since 1989. Upgradient MW3 has been historically ND, as has MW4 since 8/3/89. MW5 and MW6 have historically had ND or very low concentrations of TPHg, and ND BTEX. MW7 is the only well with any notable concentrations, while MW5, located approximately 40' downgradient of MW7, has been ND for BTEX and has had very low concentrations of TPHg. There has been a general downward trend of TPHg and BTEX. The most recent concentrations were 1,400 ppb TPHg, 91 ppb benzene, 4.5 ppb toluene, 100 ppb ethylbenzene, and 21 ppb xylenes (4/21/95). **See Table 7.**

In 1996, Cambria was contracted to assess the extent of the hydrocarbons immediately downgradient of the former tank location. They drilled 5 soil borings in March 1996. One of the borings (SB-5) was angled beneath the building. **See Figure 8.** A temporary well was constructed in SB-2. Soil and grab groundwater samples were collected. **See Table 8.** Soil results indicated a maximum benzene concentration of 8.4 ppm (at 12'bgs), and maximum TPHg concentration of 870 ppm (at 9'bgs). Groundwater results indicated 6,100 ppb benzene and 65,000 ppb TPHg. The depth to water ranged from 4.5'bgs to 11.5'bgs.

Since these concentrations were greater than the RBSLs for indoor air in the ASTM RBCA document's Tier 1 Look Up table, a Tier 2 risk assessment was conducted. Cambria submitted a Tier II RBCA document dated 8/28/96, which was based on the site use being continued as commercial. Modications and clarifications were requested in a letter from the County dated 11/5/96. Cambria submitted an "Addendum to Tier II RBCA" dated 2/4/97, which clarified these issues. The soil benzene concentration selected was 8.4 mg/kg, while the groundwater benzene concentration selected was 6,100 ug/L. Using these concentrations, the risk level and the Site Specific Target Levels (SSTLs) were back-calculated. Cambria concluded that the potential risk to human health from indoor air inhalation of benzene vapors created by volatilization is in the acceptable range of between 10^{-4} to 10^{-5} for a commercial scenario.

Ned Clyde Construction
2311 Adeline St., Oakland
Project No. 8910023A

TABLE 1
ANALYTICAL LABORATORY RESULTS
FOR SOIL
TPH and BTE&X (ppm)
(EPA METHOD 5030 or 3810/8015/8020)

1-27-89

excavation

PARAMETER	SAMPLE depth	MW1-1-3 (5.5 ft)	MW1-1-4 (6 ft)	MW1-2-4 (11 ft)	B1-1-4 (6 ft)	B2-1-4 (6 ft)	EX-11 (11 ft)	EX-13 (13 ft)	BACK-FILL (0.5 ft)	Detection Limit	DESIGNATED LEVELS TO PROTECT GW* total in solid
Total Petroleum Hydrocarbons		31	230	13	57	37	77	340	20	1	- - -
Benzene		0.65	7.6	1.2	0.69	1.1	5.5	10	0.07	0.05	0.7
Ethyl Benzene		1.5	11	1.2	1.4	1.3	6.1	23	ND	0.1	29
Toluene		0.84	4.1	0.22	1.2	0.63	1.2	5.8	ND	0.1	100
Xylenes		4.4	26	1.2	4.4	2.5	7.1	35	2.3	0.1	620

ND=Non Detected

* Ref. Marshack, J.B., "The Designated Level Methodology for Waste Classification and Cleanup Level Determination, RWQCB, Central Valley Region, 1987

water

All -30-8' ND ND

Ned Clyde Construction
2311 Adeline St., Oakland
Project No. 8910023B

TABLE 2
ANALYTICAL LABORATORY RESULTS
FOR SOIL GRAB SAMPLES FROM EXCAVATION SIDEWALLS (MARCH 17, 1989)
TPH and BTE&X (ppm)
(EPA METHOD 5030 or 3810/8015/8020)

	SAMPLE IDENTIFICATION*										
PARAMETER	0 -C- 18	10S -C- 18	10N -C- 18	5N10E -C- 5	5S10E -C- 8	15S -C- 8	5S10W -C- 6	5N10W -C- 5	15N -C- 7	Detection Limit	DESIGNATED LEVELS TO PROTECT GW** total in solid
Total Petroleum Hydrocarbons	620	4.2	310	120	2700	420	360	25	150	1	- - -
Benzene	9.0	0.17	3.7	1.3	34	8.0	4.0	0.64	2.4	0.05	0.7
Toluene	33	0.13	17	4.9	130	27	11	2.0	4.9	0.1	100
Ethyl Benzene	11	ND	8.1	2.2	44	8.0	6.7	0.68	2.7	0.1	29
Xylenes	57	0.29	53	13	230	41	34	3.1	10	0.1	620

ND=Non Detected

* Sample ID is by location, i.e. 5N10E-C-8 is 5 ft North and 10 ft East of Center and 8 ft deep

** Ref. Marshack, J.B., "The Designated Level Methodology for Waste Classification and Cleanup Level Determination, RWQCB, Central Valley Region, 1987

Ned Clyde Construction
2311 Adeline St., Oakland
Project No. 8910023C

TABLE 3
ANALYTICAL LABORATORY RESULTS
FOR SOIL
TPH and BTE&X (ppm)
(EPA METHOD 5030 or 3810/8015/8020)

PARAMETER / SAMPLE / vertical depth	MW2-1-4 (9 ft)	MW2-2-4 (14 ft)	B3-1-4 (9 ft)	B3-2-4 (14 ft)	B4-1-4 (9 ft)	B4-2-3 (14 ft)	B5-1-3 (9 ft)	B6-1-4 (9 ft)	B7-2-4 (11 ft)	B7-3-4 (15 ft)	B8-5-3 (25 ft)	B10-1 (5.5 ft)	Detection Limit	DESIGNATED LEVELS TO PROTECT GW* total in solid
Total Petroleum Hydrocarbons	81	1.4	86	2.3	320	1.2	170	62	520	150	ND	650	1	- - -
Benzene	2.5	0.051	2.5	0.07	5.2	ND	2.7	0.92	14	1.9	ND	8.1	0.05	0.7
Toluene	74	0.14	7.9	0.27	18	0.15	7.8	3.7	52	0.2	ND	50	0.1	100
Ethyl Benzene	2.2	ND	2.1	ND	9.3	ND	3.9	1.5	11	4.0	ND	13	0.1	29
Xylenes	12	0.14	11	0.2	61	0.16	20	7.5	60	19	ND	87	0.1	620

ND=Non Detected

* Ref. Marshack, J.B., "The Designated Level Methodology for Waste Classification and Cleanup Level Determination, RWQCB, Central Valley Region, 1987

Ned Clyde Construction
2311 Adeline St., Oakland
Project No. 8910023B

TABLE ~~3~~ 4
ANALYTICAL LABORATORY RESULTS
FOR SOIL GRAB SAMPLES FROM EXCAVATION SIDEWALLS (APRIL 25,1989)
TPH and BTE&X (ppm)
(EPA METHOD 5030 or 3810/8015/8020)

PARAMETER	SAMPLE IDENTIFICATION* S35 W10 9	S15 W30 9	S0 W30 9	S20 W25 9	S25 W0 9	Detection Limit	DESIGNATED LEVELS TO PROTECT GW** total in solid
Total Petroleum Hydrocarbons	190	110	170	25	81	1	- - -
Benzene	2.7	0.86	1.1	0.17	0.93	0.05	0.7
Toluene	13	1.8	3.6	1.2	3.8	0.1	100
Ethyl Benzene	5.4	3.4	5	0.72	2.2	0.1	29
Xylenes	27	14	21	3.6	11	0.1	620

ND=Non Detected

* Sample ID is by location, i.e. S35W10-9 is 35 feet south and 10 ft west and 9 ft deep of location of former dispensing pump

** Ref. Marshack, J.B., "The Designated Level Methodology for Waste Classification and Cleanup Level Determination, RWQCB, Central Valley Region, 1987

Ned Clyde Construction
2311 Adeline St., Oakland
Project No. 8910023B

TABLE 5
ANALYTICAL LABORATORY RESULTS
FOR NOVEMBER 1990 EXCAVATED SOIL (ppm)

(EPA Method 8015/5030)

SAMPLE ID	SAMPLE TYPE/LOCATION*	DATE SAMPLED	TPH AS GASOLINE	DETECTION LIMIT
S1	SIDEWALL	11/6/90	4	1
S2	SIDEWALL	11/6/90	40	10
SE	SIDEWALL	11/13/90	160	50
NCP	"CLEAN" STOCKPILE	11/6/90	1	1
SCP	"CLEAN" STOCKPILE	11/6/90	N.D.	1
WCP	"CLEAN" STOCKPILE	11/7/90	N.D.	1
ECP	"CLEAN" STOCKPILE	11/7/90	N.D.	1
DP	"DIRTY" STOCKPILE	11/6/90	30	10
CP	"DIRTY" STOCKPILE	11/13/90	0.7	0.5
NC COMP N	"DIRTY" STOCKPILE	11/29/90	N.D.	0.5
NC COMP S	"DIRTY" STOCKPILE	11/29/90	N.D.	0.5

N.D.=Non Detected

*Sample locations are shown on Figure 2.

Ned Clyde Construction
2311 Adeline St., Oakland
Project No. 8910023B

TABLE ~~2~~ 6
ANALYTICAL LABORATORY RESULTS
FOR MONITORING WELL MW-7 (SOILS)
TPH and BTE&X (ppm)
(EPA METHOD 5030 or 3810/8015/8020)

11-29-90

PARAMETER	SAMPLE depth	MW-7 (9.0 ft)	MW-7 (13.5 ft)	MW-7 (15 ft)	MW-7 (17 ft)	Detection Limit
Total Petroleum Hydrocarbon		N.D.	2	N.D.	N.D.	1
Benzene		N.T.	0.3	0.006	N.T.	0.005
Ethyl Benzene		N.T.	N.D.	N.D.	N.T.	0.005
Toluene		N.T.	0.29	0.007	N.T.	0.005
Xylenes		N.T.	0.31	0.023	N.T.	0.005

N.D. = Non Detected
N.T. = Not Tested

Cumulative Table of Well Data and Analytical Results

Table 7

GWE

Vertical Measurements are in feet. Analytical values are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene
MW-1									
Mar. 1989	--	--	--	Well was destroyed during site excavation.					
MW-2									
04/12/89	--	--	--		80,000	24,000	3,700	18,000	18,000
-- 5-12-89	--	--	--	Well was destroyed in 1990 during further site excavation.	150,000	14,000	1,400	23,000	17,000
MW-3									
05/12/89	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
08/03/89	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
11/16/89	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
02/23/90	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
05/22/90	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
09/06/90	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
12/14/90	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
02/26/91	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
06/05/91	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
09/06/91	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
12/12/91	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
08/03/92	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
12/28/92	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
10/12/93	--	--	8.58		N.D.	N.D.	N.D.	N.D.	N.D.
04/21/94	--	--	7.17		N.D.	N.D.	N.D.	N.D.	N.D.
10/26/94	--	--	--	Well was covered by paving	N.T.	N.T.	N.T.	N.T.	N.T.
04/21/95*	8.80	3.10	5.70		N.D.	N.D.	N.D.	N.D.	N.D.

no gradient or gw flow
- no gradi[illegible]
*NE at 0.03[illegible]
-* S[illegible] 0.024 [illegible]

* This well was resurveyed on May 18, 1995

* Cam[illegible]

N.D.= Not Detected
N.T.= Not Tested

Table 7 cont

Cumulative Table of Well Data and Analytical Results

GWE

Vertical Measurements are in feet. Analytical values are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene
MW-4									
05/12/89	--	--	--		150	2.7	2.2	N.D.	0.68
08/03/89	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
11/16/89	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
02/23/90	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
05/22/90	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
09/06/90	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
12/14/90	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
02/26/91	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
06/05/91	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
09/06/91	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
12/12/91	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
08/03/92	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
12/28/92	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
10/12/93	--	--	10.70		N.D.	N.D.	N.D.	N.D.	N.D.
04/21/94	--	--	10.30		N.D.	N.D.	N.D.	N.D.	N.D.
10/26/94	--	--	10.76		N.D.	N.D.	N.D.	N.D.	N.D.
04/21/95*	8.87	-0.63	9.50		N.D.	N.D.	N.D.	N.D.	N.D.

* This well was resurveyed on May 18, 1995.

Cumulative Table of Well Data and Analytical Results

Table 1 cont

Vertical Measurements are in feet. Analytical values are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene
MW-5									
05/12/89	--	--	--		98	1.5	2.6	N.D.	1.1
08/03/89	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
11/16/89	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
02/23/90	--	--	--		120	N.D.	N.D.	N.D.	N.D.
05/22/90	--	--	--		210	N.D.	N.D.	N.D.	N.D.
09/06/90	--	--	--		N.T.	N.D.	N.D.	N.D.	N.D.
12/14/90	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
02/26/91	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
06/05/91	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
09/06/91	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
12/12/91	--	--	--		80	N.T.	N.T.	N.T.	N.T.
08/03/92	--	--	--		100	N.D.	N.D.	N.D.	N.D.
12/28/92	--	--	--		90	N.T.	N.T.	N.T.	N.T.
10/12/93	--	--	10.55		120*	N.D.	N.D.	N.D.	N.D.
04/21/94	--	--	9.78		130*	N.D.	N.D.	N.D.	N.D.
10/26/94	--	--	10.58		160	N.D.	N.D.	N.D.	N.D.
04/21/95**	8.64✓	--	--	Vehicle parked on well					

* The concentration reported as gasoline for sample MW-5 is primarily due to the presence of a discrete peak not indicative of gasoline.
** This well was resurveyed on May 18, 1995.

Cumulative Table of Well Data and Analytical Results

Table 7 cont

Vertical Measurements are in feet. Analytical values are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene
MW-6									
05/12/89	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
08/03/89	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
11/16/89	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
02/23/90	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
05/22/90	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
09/06/90	--	--	--		N.T.	N.D.	N.D.	N.D.	N.D.
12/14/90	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
02/26/91	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
06/05/91	--	--	--		210	N.T.	N.T.	N.T.	N.T.
09/06/91	--	--	--		N.D.	N.T.	N.T.	N.T.	N.T.
12/12/91	--	--	--		50	N.T.	N.T.	N.T.	N.T.
08/03/92	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
12/28/92	--	--	--		76	N.T.	N.T.	N.T.	N.T.
10/12/93	--	--	10.03		50	N.D.	N.D.	N.D.	N.D.
04/21/94	--	--	10.30		N.D.	N.D.	N.D.	N.D.	N.D.
10/26/94	--	--	--	Well was covered by paving.	N.T.	N.T.	N.T.	N.T.	N.T.
04/21/95*	8.13	-0.95	9.08		N.D.	N.D.	N.D.	N.D.	N.D.

* This well was resurveyed on May 18, 1995

Cumulative Table of Well Data and Analytical Results

Table 7 con't

Vertical Measurements are in feet. Analytical values are in parts per billion (ppb)

DATE	Well Head Elev.	Ground Water Elev.	Depth To Water	Notes	TPH-Gasoline	Benzene	Toluene	Ethyl-Benzene	Xylene
MW-7									
12/14/90*	--	--	--		N.D.	N.D.	N.D.	N.D.	N.D.
02/26/91	--	--	--		7,000	2,300	60	460	2,200
06/06/91	--	--	--		8,000	1,500	30	410	1,000
09/06/91	--	--	--		880	240	0.4	95	88
12/12/91	--	--	--		3,200	1,300	6	310	87
08/03/92	--	--	--		2,200	490	7.7	290	78
12/28/92	--	--	--		1,100	230	<1	110	130
10/12/93	--	--	10.80		2,000	460	N.D.	500	210
04/21/94	--	--	10.48		3,300	330	N.D.	370	50
10/26/94	--	--	10.94		2,200	170	4.7	180	98
04/21/95**	8.93	-0.57	9.50		1400	91	4.5	100	21

* Analytical results for this initial sampling of MW-7 appear anomolously low (i.e., All results were "N.D." and are believed to be erroneous data).
** This well was resurveyed on May 18, 1995.

Note: Blaine Tech Services, Inc. began routine monitoring of the groundwater wells at this site on October 1993.
Earlier field data and analytical results are drawn from the June 25, 1993 Woodward-Clyde Consultants report.

ABBREVIATIONS:
TPH = Total Petroleum Hydrocarbons

Table 8

CAMBRIA

~~Table 1.~~ Soil and Groundwater Sample Data, Ned Clyde Property, 2311 Adeline Street, Oakland, California

Sample ID	Date Sampled	TPHG	Benzene	Toluene	Ethylbenzene	Xylenes
Soil Samples		**Concentrations in parts per million**				
SB-2 (11')	3/20/96	200	7.5	2.9	3.1	20.0
SB-3 (12')	3/20/96	740	8.4	16.0	15.0	160.0
SB-5 (8.2')	3/25/96	530	8.0	29.0	10.0	63.0
SB-5 (9')	3/25/96	870	7.9	36.0	17.0	100.0
Groundwater Sample		**Concentrations in parts per billion**				
SB-2	3/20/96	65,000	6,100	6,700	1,900	11,000

Abbreviations
TPHg = Total petroleum hydrocarbons as gasoline.

Notes
TPHg analyzed by modified EPA Method 8015.
Benzene, ethylbenzene, toluene, and xylenes analyzed by EPA Method 8020.

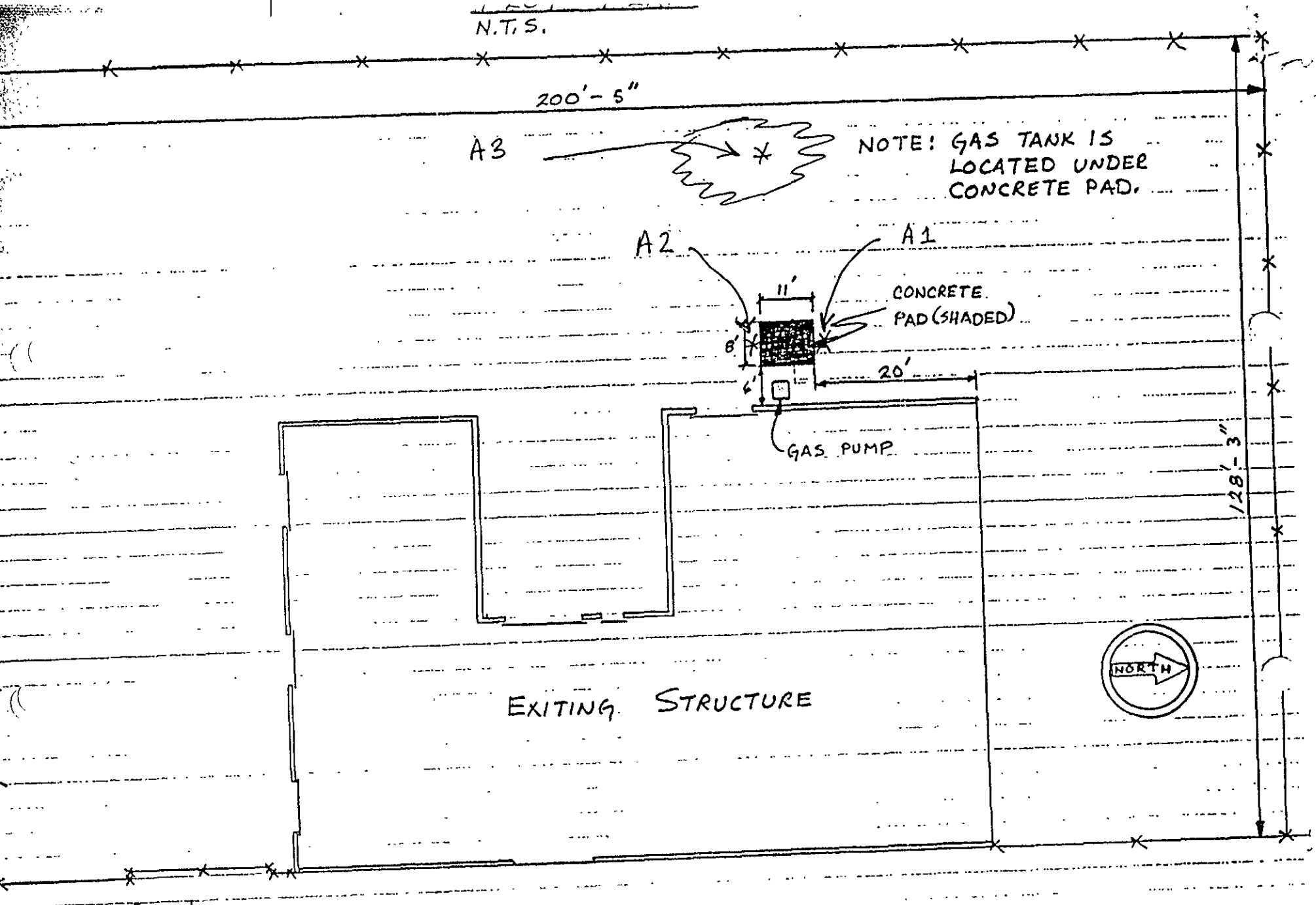
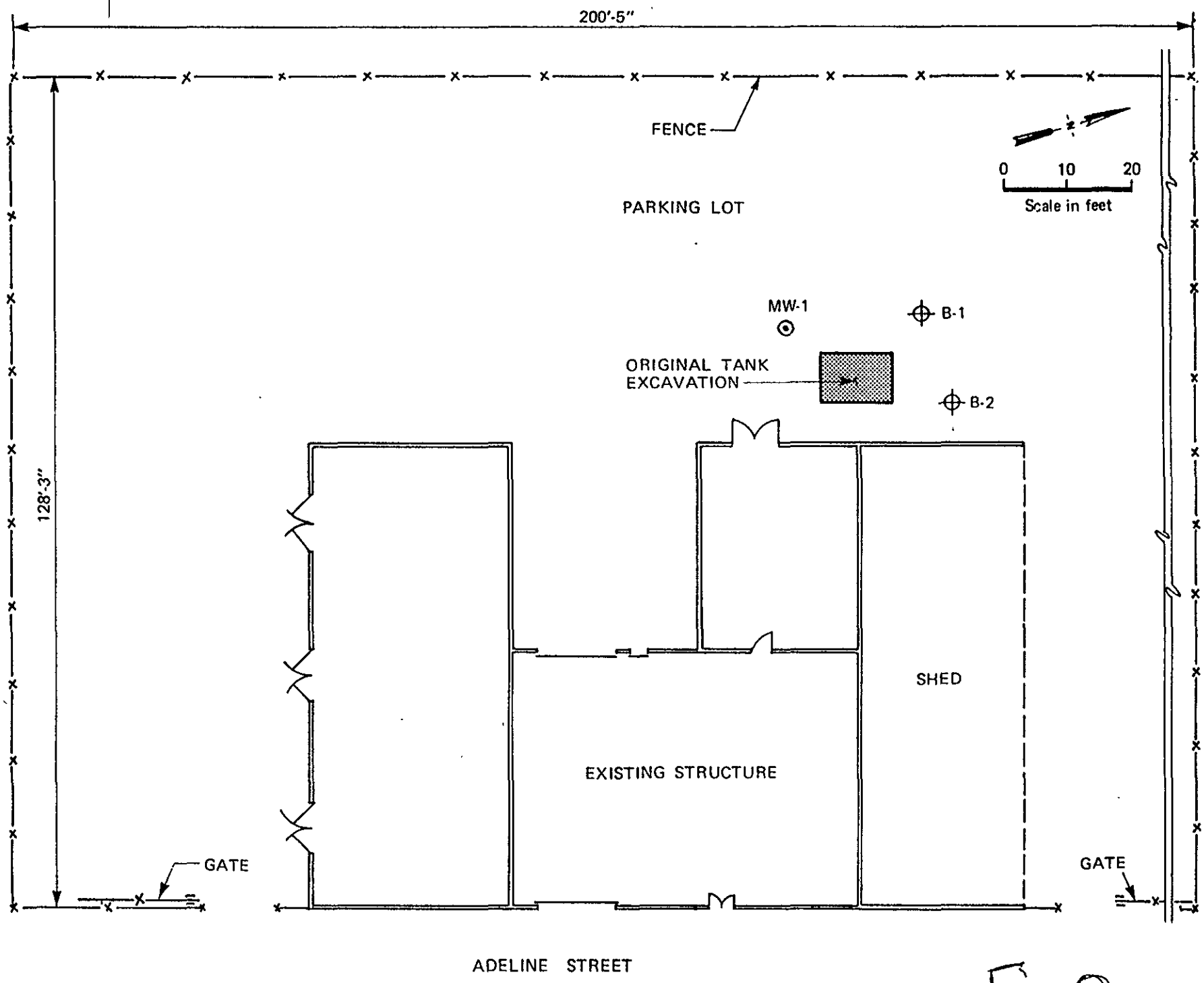

N.T.S.
200'-5"
A3
NOTE: GAS TANK IS LOCATED UNDER CONCRETE PAD.
A2
A1
11'
CONCRETE PAD (SHADED)
8'
4'
20'
GAS PUMP
128'-3"
NORTH
EXITING STRUCTURE
Clyde Const
Adeline St
Ca
ADELINE STREET

Fig. 1



Project No. 89100023A

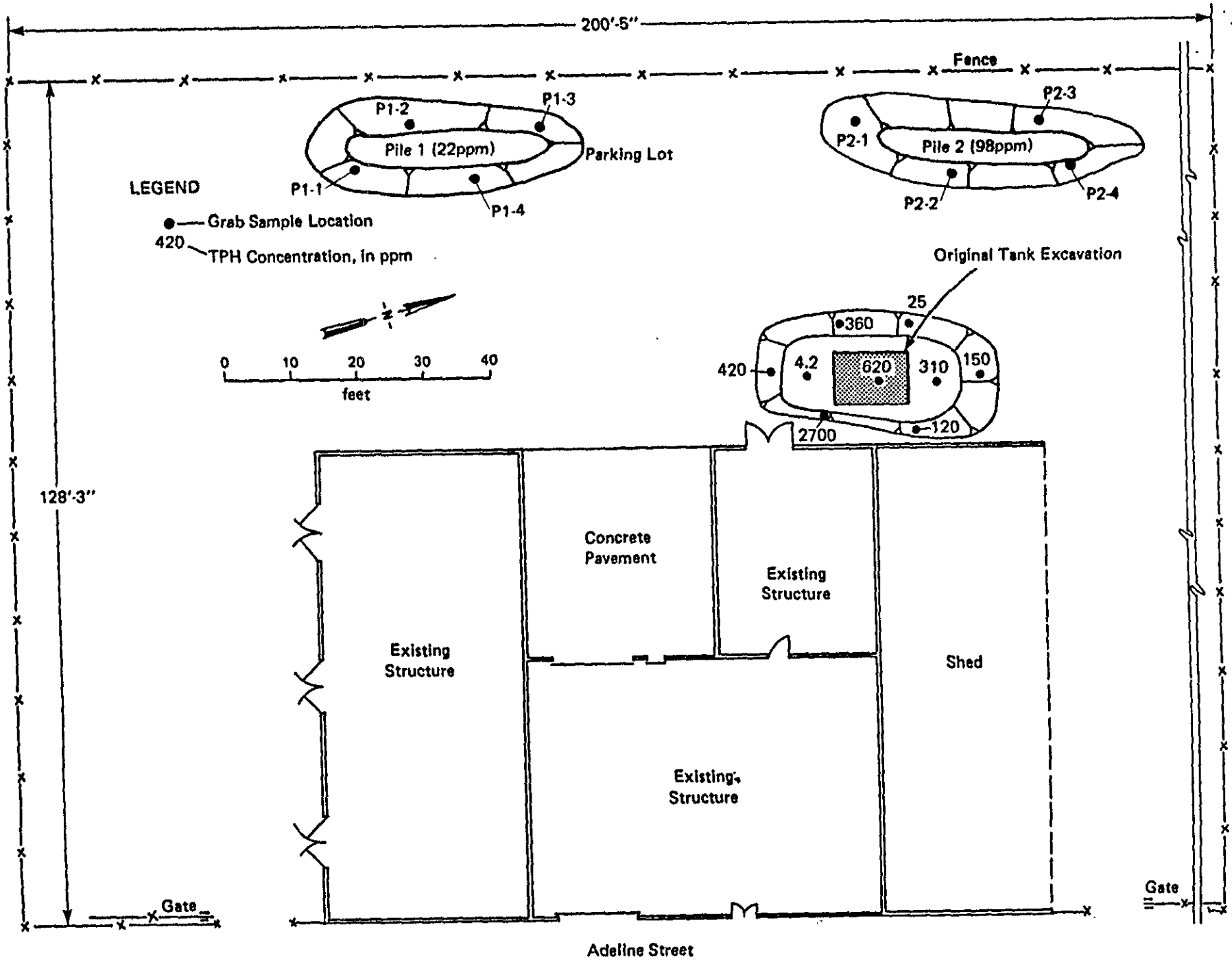
NED CLYDE CONSTRUCTION

Woodward-Clyde Consultants

SITE PLAN
2311 ADELINE STREET

Figure 2

Fig. 2



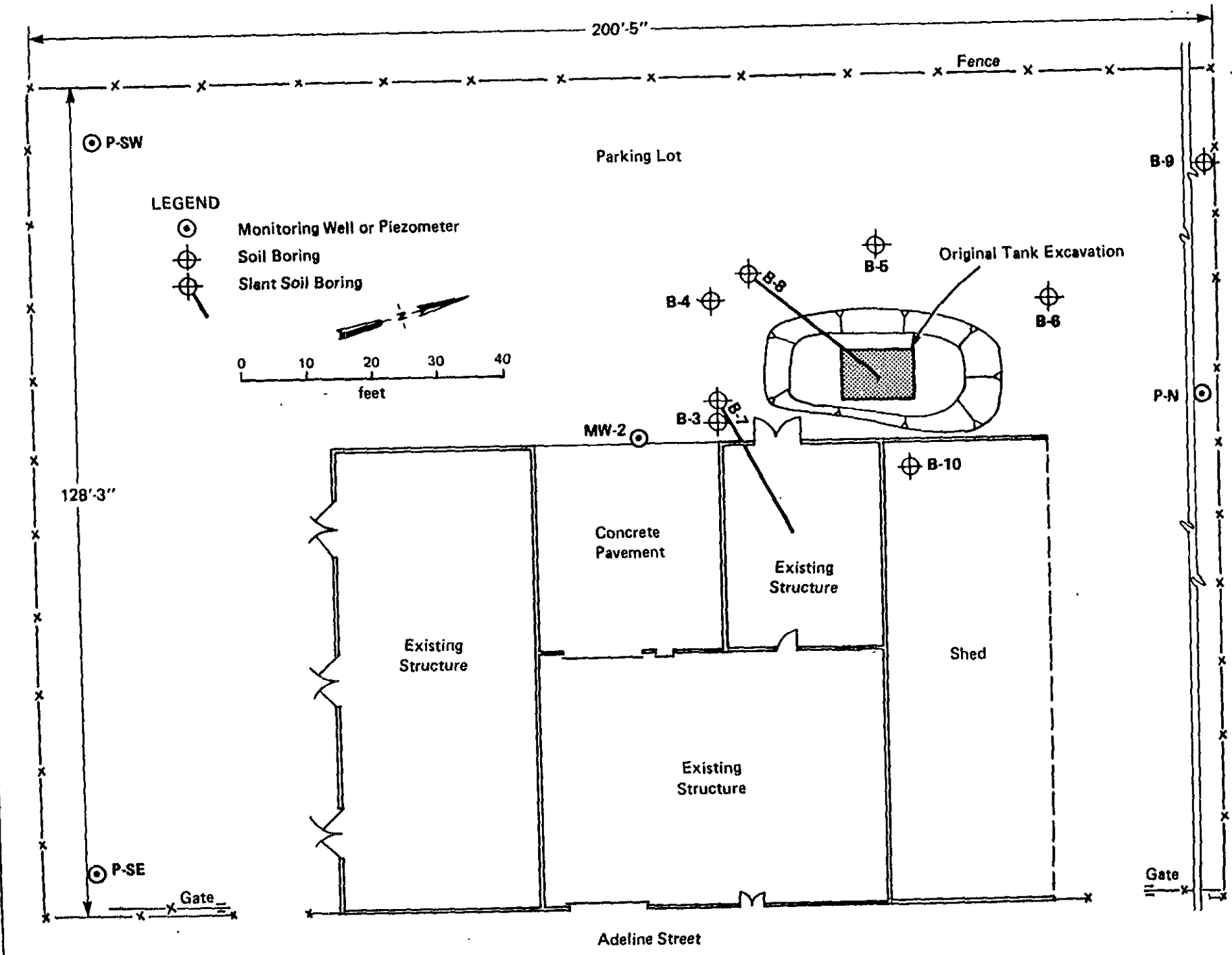
Project No. 8910023B

NED CLYDE CONSTRUCTION

Woodward-Clyde Consultants

MARCH 15 AND 17, 1989
EXCAVATION DOCUMENTATION RESULTS
2311 ADELINE STREET

Figure 3



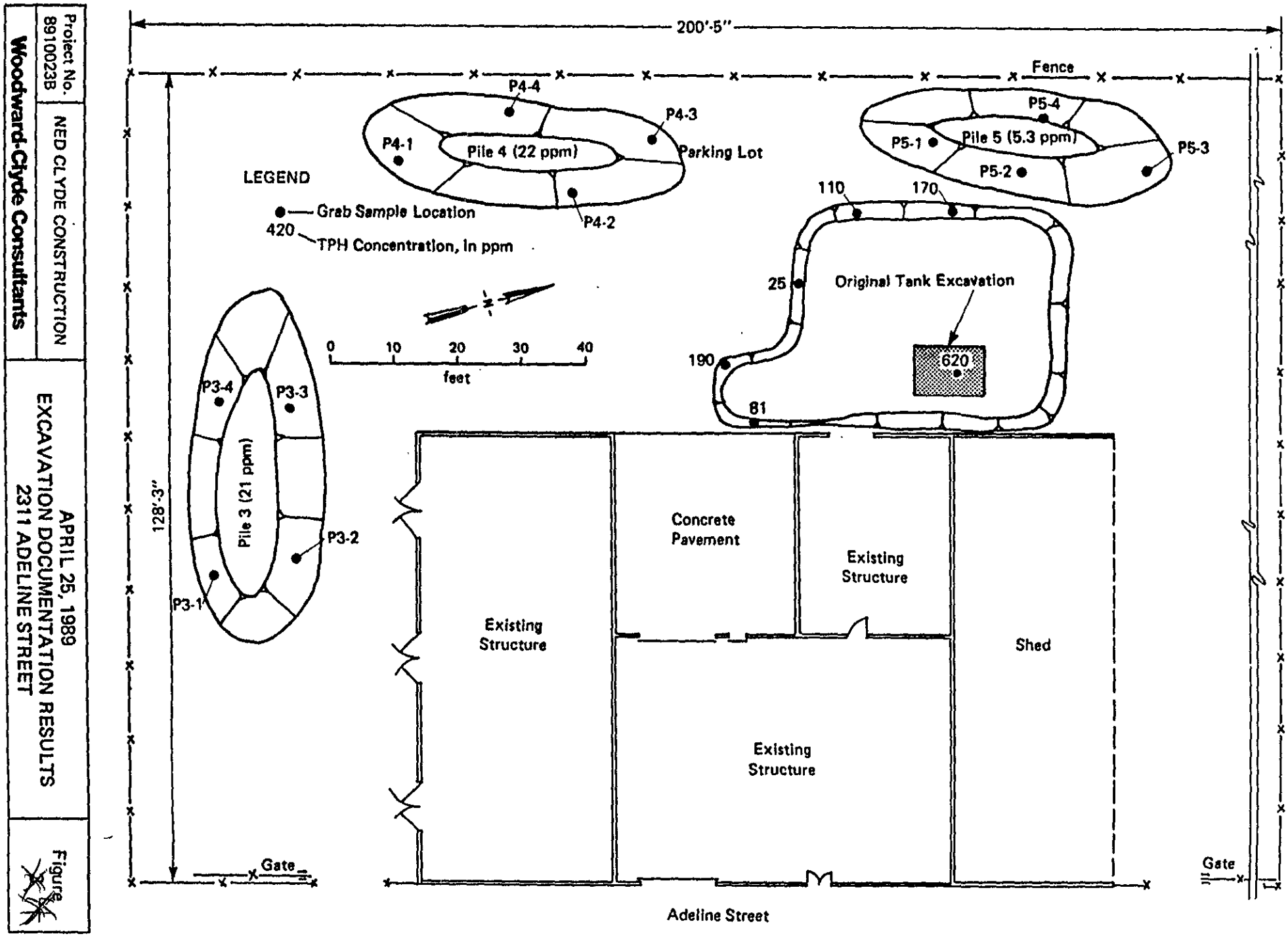
Project No. 8910023C

Woodward-Clyde Consultants

NED CLYDE CONSTRUCTION

PHASE 2 INVESTIGATION PLAN
2311 ADELINE STREET

Figure 4



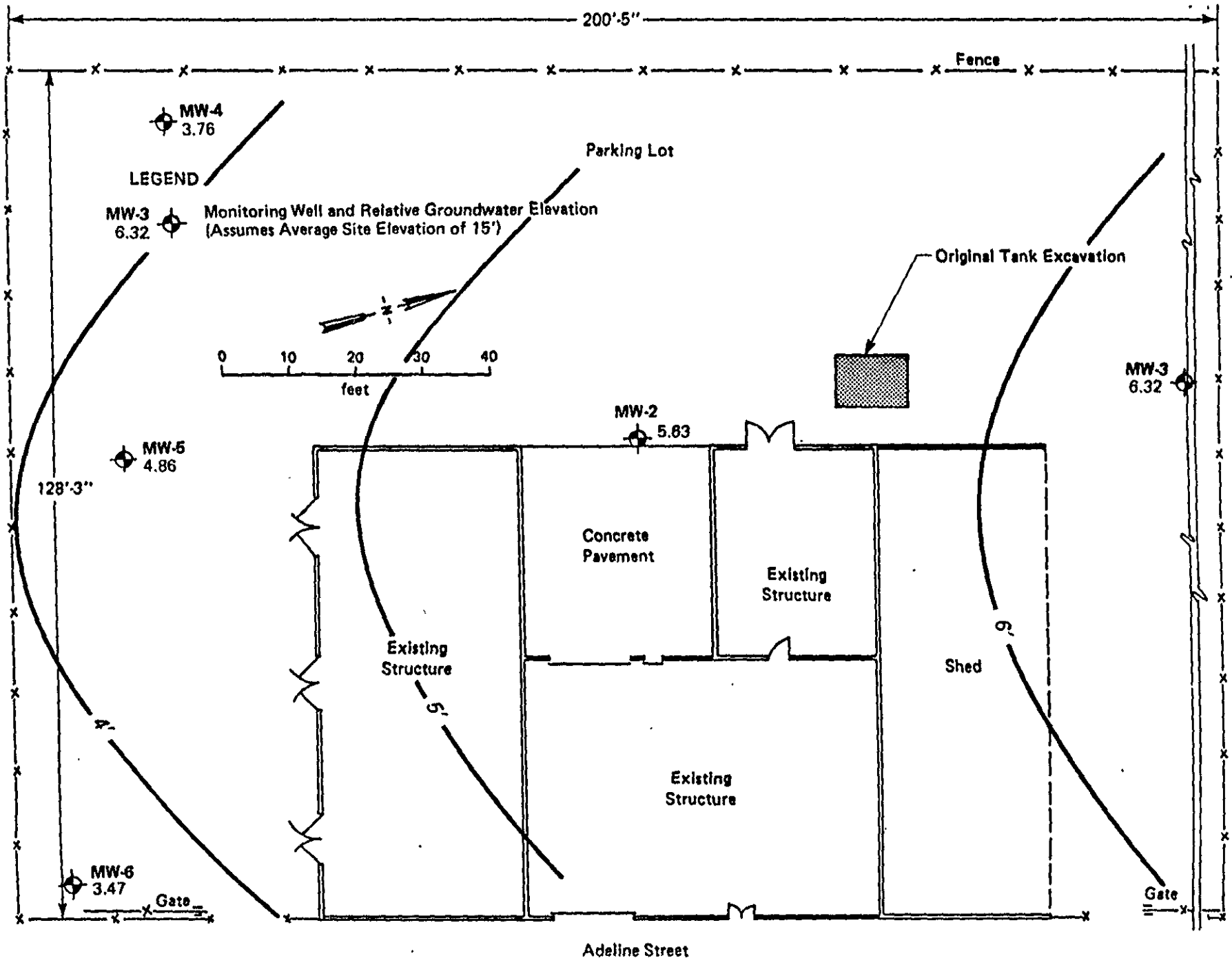
Project No. 8910023B

NED CLYDE CONSTRUCTION

Woodward-Clyde Consultants

APRIL 25, 1989
EXCAVATION DOCUMENTATION RESULTS
2311 ADELINE STREET

Figure



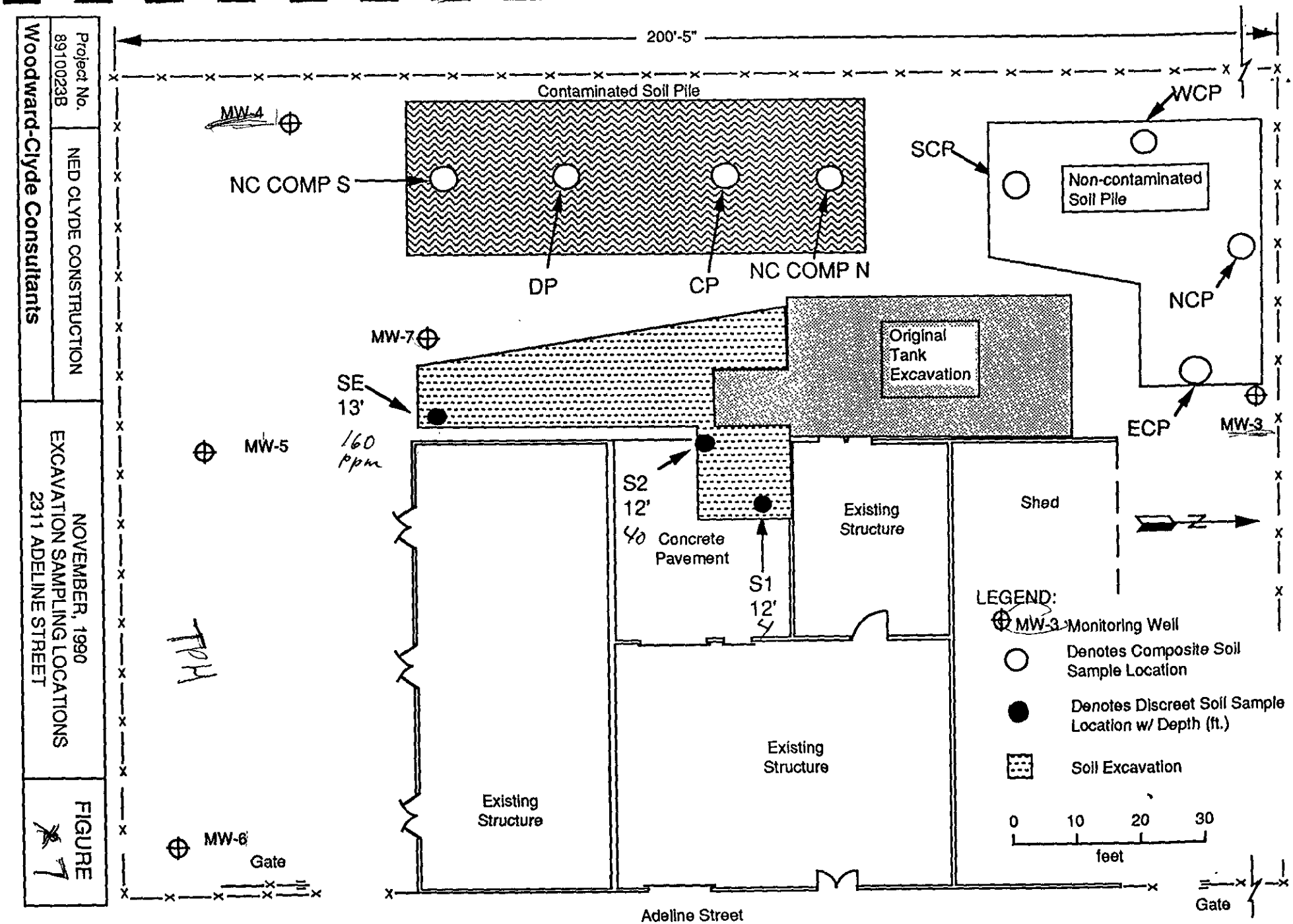
Project No. 8910023B

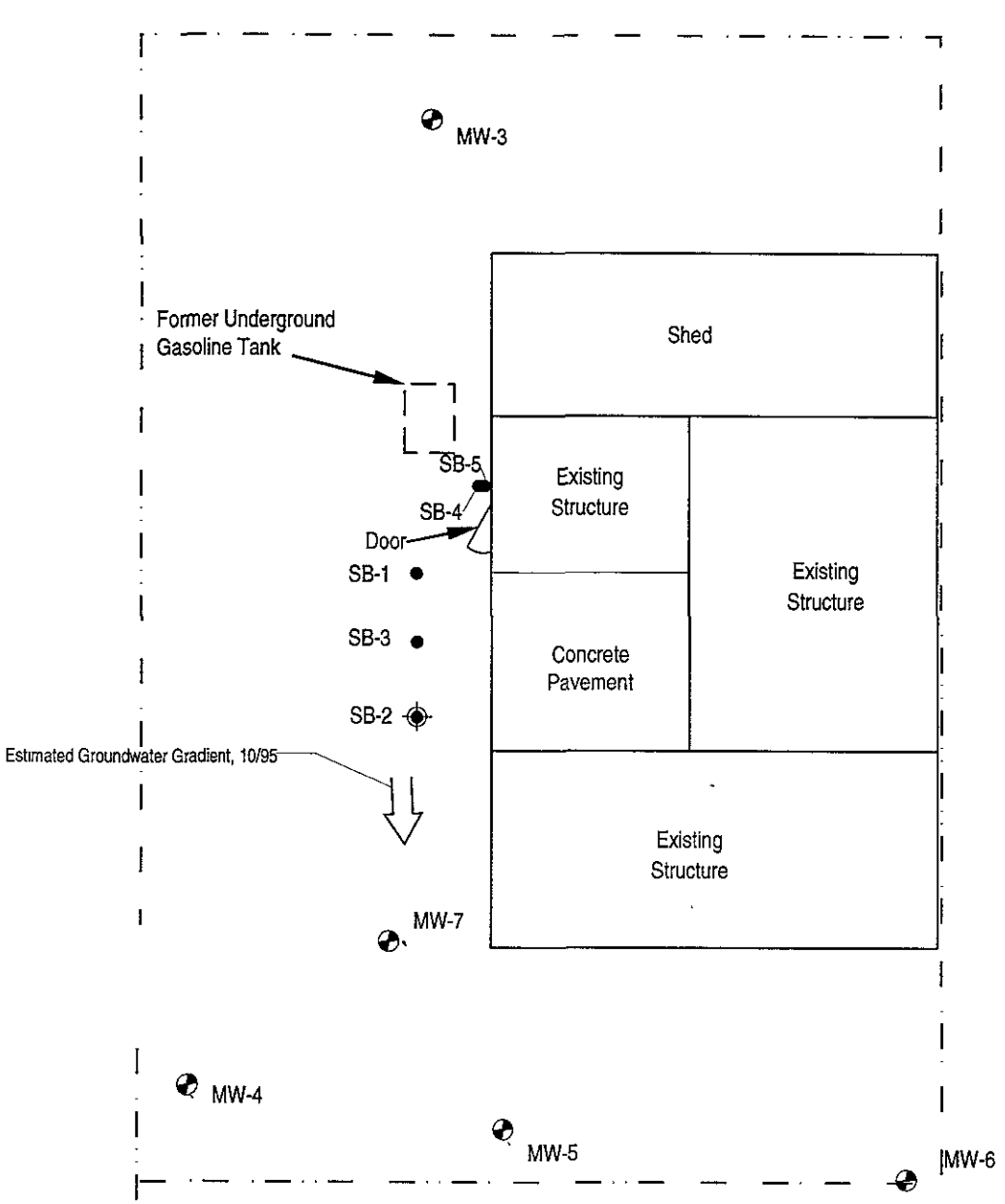
Woodward-Clyde Consultants

NED CLYDE CONSTRUCTION

MAY 23, 1989
RELATIVE GROUNDWATER ELEVATIONS
2311 ADELINE STREET

Figure


Project No. 8910023B
Woodward-Clyde Consultants
NED CLYDE CONSTRUCTION
NOVEMBER, 1990
EXCAVATION SAMPLING LOCATIONS
2311 ADELINE STREET
FIGURE 7
200'-5"
Contaminated Soil Pile
MW-4
NC COMP S
DP
CP
NC COMP N
WCP
SCR
Non-contaminated Soil Pile
NCP
ECP
MW-3
MW-7
SE 13'
160 ppm
Original Tank Excavation
MW-5
S2 12'
40
Concrete Pavement
S1 12'
4
Existing Structure
Shed
Existing Structure
Existing Structure
TPH
MW-6
Gate
LEGEND:
MW-3 Monitoring Well
Denotes Composite Soil Sample Location
Denotes Discreet Soil Sample Location w/ Depth (ft.)
Soil Excavation
0 10 20 30
feet
Gate
Adeline Street



EXPLANATION

- Existing Monitoring Well
- Temporary Monitoring Well
- Soil Boring Location

NOTE:

Boring B-5 was installed at a 35 degree angle and extended underneath the building.

0 15 30

Scale (ft)

CAMBRIA
Environmental Technology, Inc.

Ned Clyde Property
2311 Adeline Street
Oakland, California

D:\PROJECT\BTS\OAKL-146\SITEPLAN.DWG

Additional Investigations

March 21 and 25, 1996

FIGURE

8