Harding Lawson Associates

Transmittal/Memorandum

To: Alameda County Flood Control
5997 Parkside Drive
Pleasanton, California 94566

Attention: Mr. Craig Mayfield

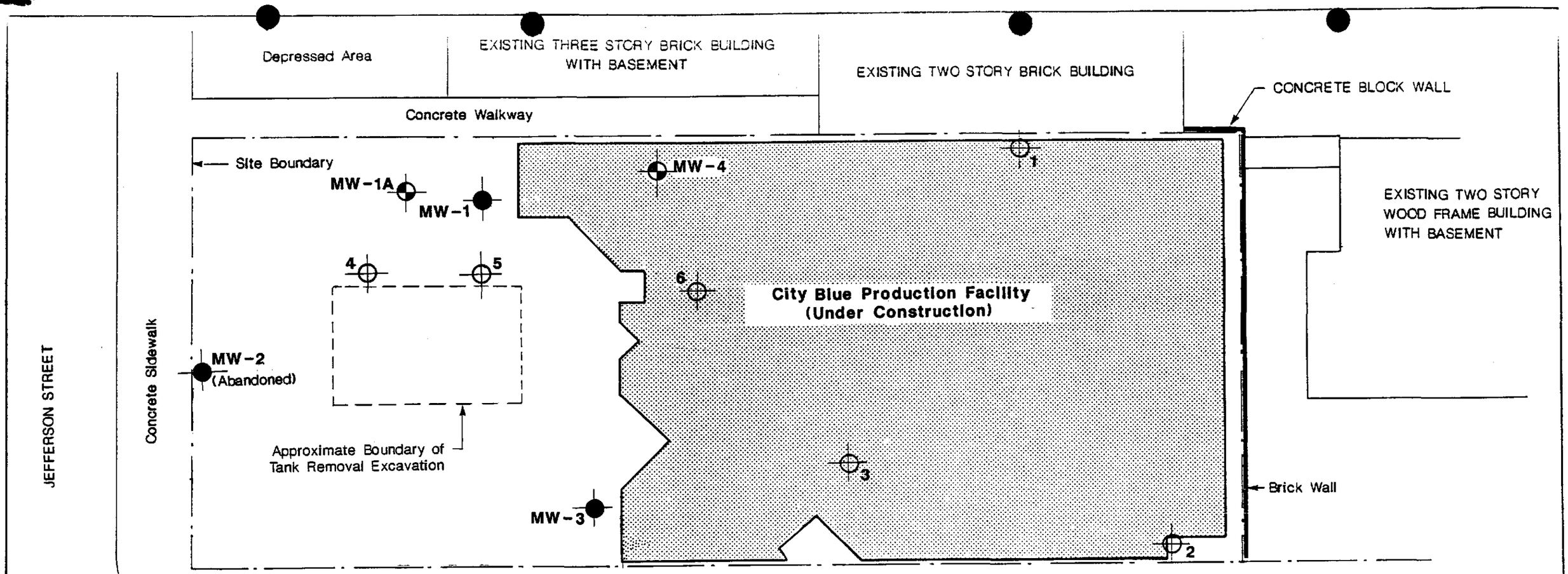
From: Dan Louis DL
Date: January 19, 1988
Subject: City Blue Facility, Oakland
Job No.: 18106,004.04

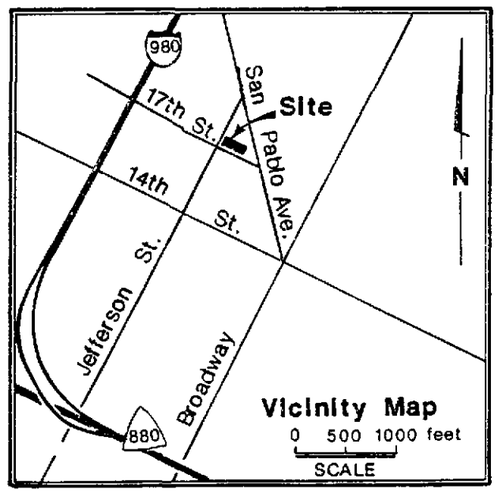
Remarks: In accordance with our approved permit application #87329 dated December 31, 1987, attached are Plates 1 to 6 including the Site Plan, Boring Logs and Well Completion Schematics for the City Blue Facility at 1700 Jefferson Street in Oakland, California. If you have questions, please call.

Attachments: Plate 1 - Site Plan
Plate 2 - Log of Boring MW-1A
Plate 3 - Log of Boring MW-4
Plate 4 - MW-1A Well Completion Schematic
Plate 5 - MW-4 Well Completion Schematic
Plate 6 - Soil Classification Chart and Key to Test Data

cc: Blue Print Service Company - Attention: Mr. Paul Koze
✓Alameda County Environmental Health Service - Attention: Mr. Storm Goranson, P.E.

Engineers and Geoscientists | 666 Howard St. San Francisco California 94105 | Telephone 415/543-8422 | Alaska California Colorado Hawaii Nevada Texas | Telecopy 415/777-9706





EXPLANATION

MW-1 — Approximate Monitoring Well Location and Number, previous investigation

1 — Approximate Boring Location and Number, previous investigation

MW-4 — Approximate Monitoring Well Location and Number, this investigation

REFERENCES:

1. "Preliminary Site Plan, City Blue Production Facility, 1700 Jefferson Street, Oakland, California," by Garcia/Wagner and Associates, dated Feb. 17, 1987.
2. Untitled Survey (partial print), Seventeenth Street and Jefferson Street, Surveyor unknown.

N

0 16

Scale in feet

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Site Plan
Remedial Investigation
City Blue Production Facility
Oakland, California

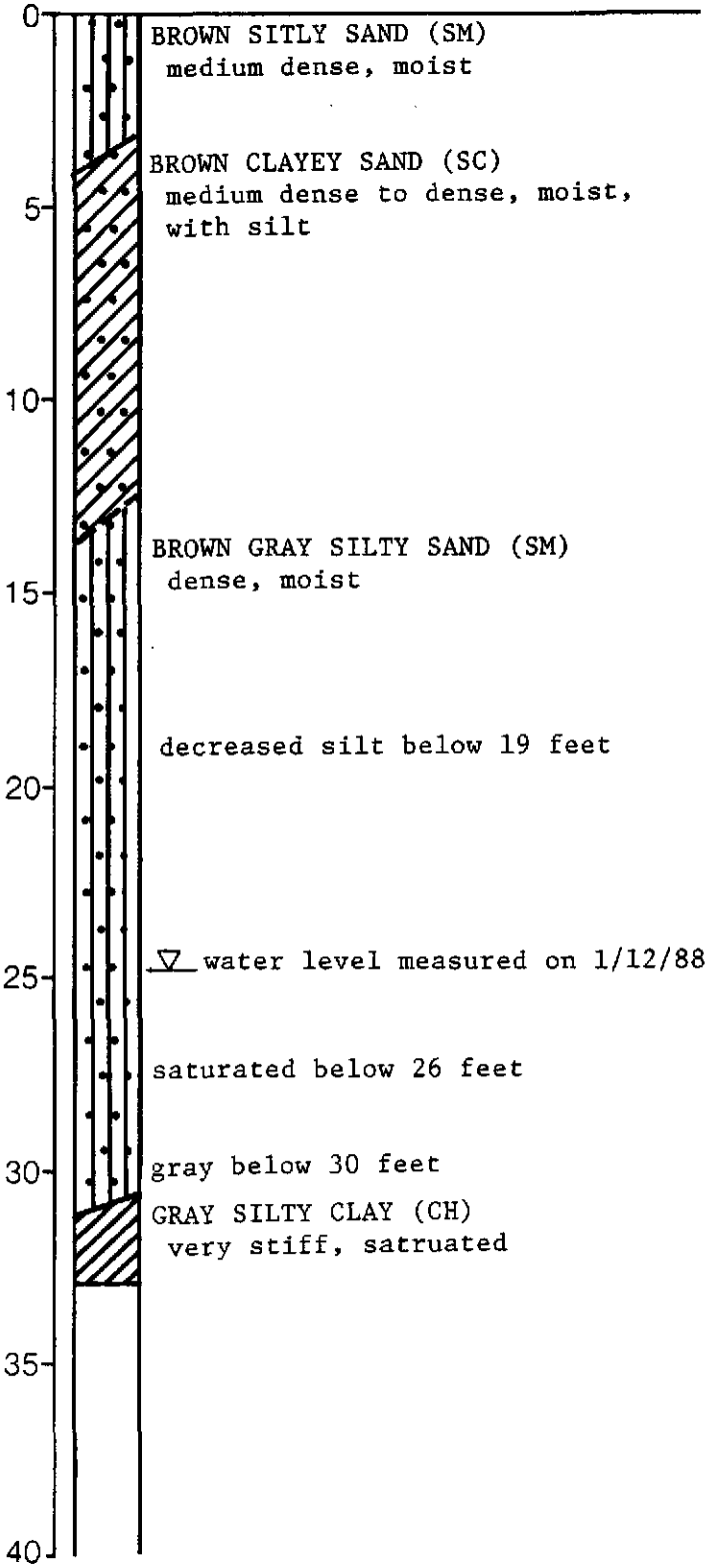
PLATE **1**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
AG	18106,004.04	DL	1/88		

Equipment 10.75-inch diameter Hollow Stem Auger

Elevation 31.5 feet* Date 1/6/88

Laboratory Tests	Odor	Field Gastech Reading (ppm)
	none	ND**
	none	ND
	none	ND
	none	35
	weak	320
	strong	500+
	strong	500+



*City of Oakland datum

**ND = not detected

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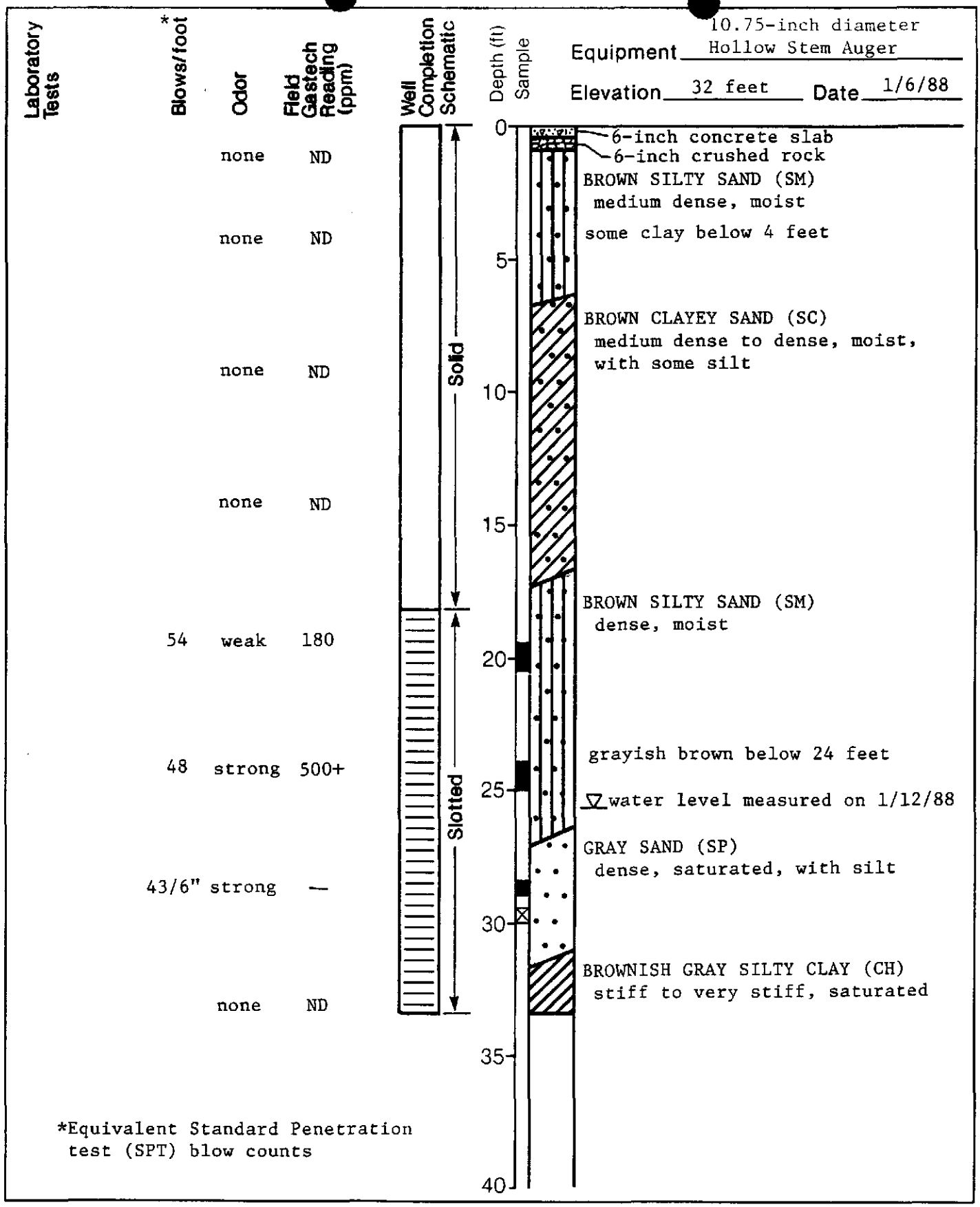
Log of Boring MW-1A

City Blue Production Facility
Oakland, California

PLATE 2

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
RS	18106,004.04		1/88		



*Equivalent Standard Penetration test (SPT) blow counts

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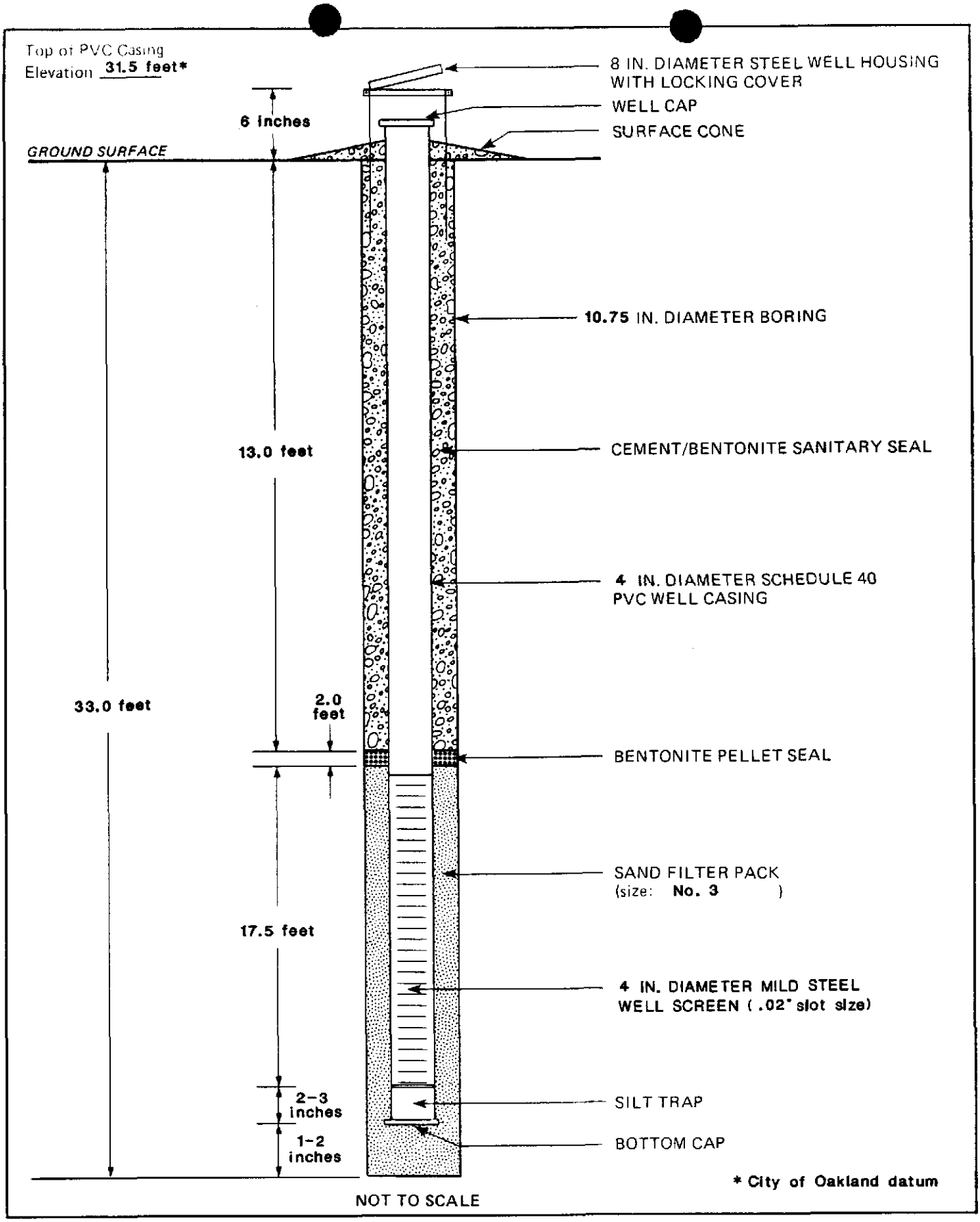
Log of Boring MW-4

City Blue Production Facility
Oakland, California

PLATE 3

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
RS	18106,004.04		1/88		



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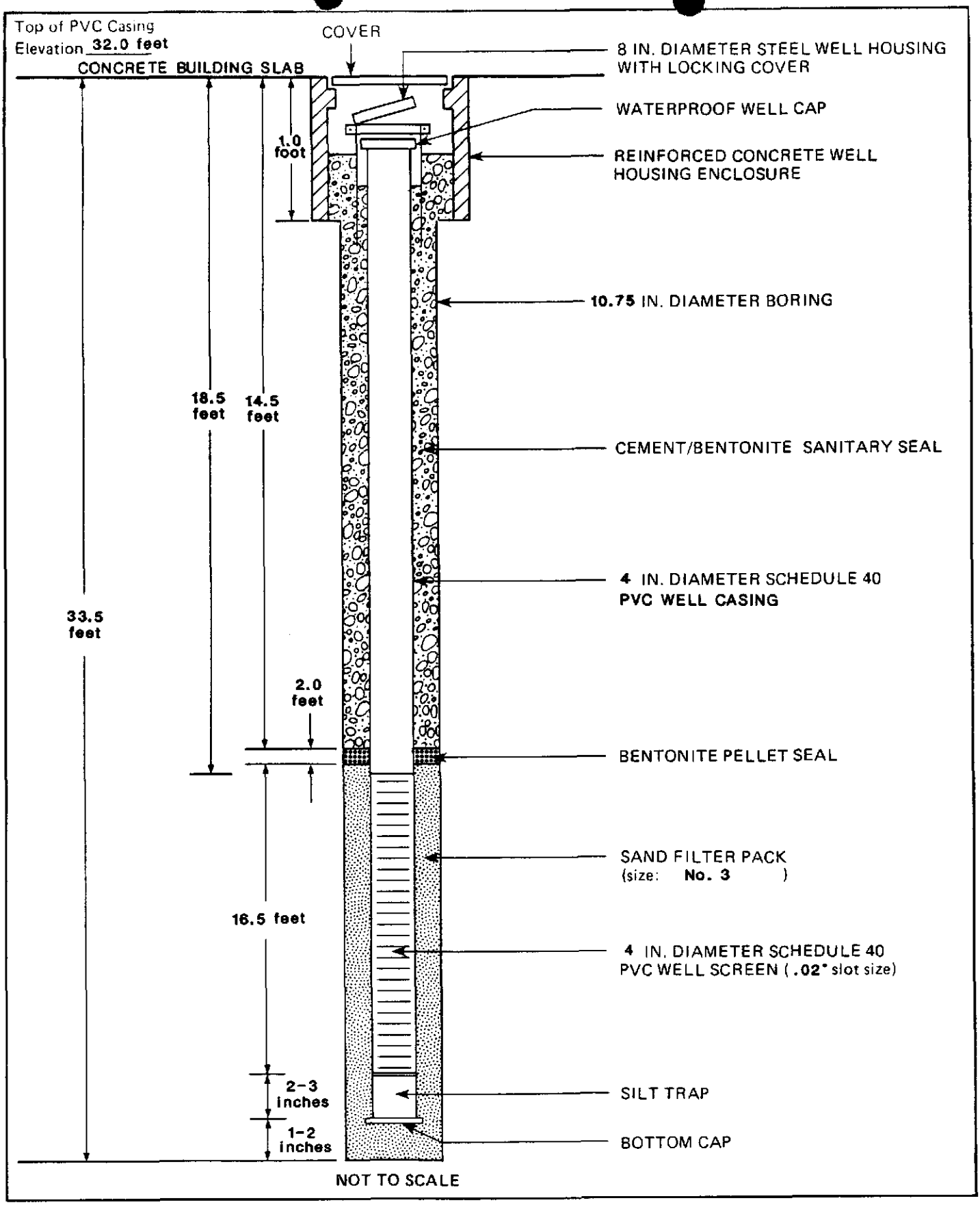
MW-1A Well Completion Detail

City Blue Production Facility
Oakland, California

PLATE **4**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
RS	18106,004.04		1/88		

FORM GW1



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MW-4 Well Completion Detail

City Blue Production Facility
Oakland, California

PLATE **5**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
RS	18106,004.04		1/88		

FORM GW3

MAJOR DIVISIONS					TYPICAL NAMES
COARSE-GRAINED SOILS MORE THAN HALF IS COARSER THAN NO. 200 SIEVE	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN No. 4 SIEVE SIZE	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW		WELL GRADED GRAVELS WITH OR WITHOUT SAND, LITTLE OR NO FINES
			GP		POORLY GRADED GRAVELS WITH OR WITHOUT SAND, LITTLE OR NO FINES
		GRAVELS WITH OVER 12% FINES	GM		SILTY GRAVELS, SILTY GRAVELS WITH SAND
			GC		CLAYEY GRAVELS, CLAYEY GRAVELS WITH SAND
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE SIZE	CLEAN SANDS WITH LITTLE OR NO FINES	SW		WELL GRADED SANDS WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
			SP		POORLY GRADED SANDS WITH OR WITHOUT GRAVEL, LITTLE OR NO FINES
		SANDS WITH OVER 12% FINES	SM		SILTY SANDS WITH OR WITHOUT GRAVEL
			SC		CLAYEY SANDS WITH OR WITHOUT GRAVEL
FINE-GRAINED SOILS MORE THAN HALF IS FINER THAN NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT 50% OR LESS		ML		INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTS WITH SANDS AND GRAVELS
			CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, CLAYS WITH SANDS AND GRAVELS, LEAN CLAYS
			OL		ORGANIC SILTS OR CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50%		MH		INORGANIC SILTS, MICACEOUS OR DIATOMACIOUS, FINE SANDY OR SILTY SOILS, ELASTIC SILTS
			CH		INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH		ORGANIC SILTS OR CLAYS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS			Pt		PEAT AND OTHER HIGHLY ORGANIC SOILS

UNIFIED SOIL CLASSIFICATION - ASTM D2487-85

Perm	—	Permeability
Consol	—	Consolidation
LL	—	Liquid Limit (%)
PI	—	Plastic Index (%)
G_s	—	Specific Gravity
MA	—	Particle Size Analysis
■	—	"Undisturbed" Sample
⊠	—	Bulk or Classification Sample

Shear Strength (psf) ↓		Confining Pressure ↓		
TxUU (FM) or (S)	3200	(2600)	—	Unconsolidated Undrained Triaxial Shear (field moisture or saturated)
TxCU (P)	3200	(2600)	—	Consolidated Undrained Triaxial Shear (with or without pore pressure measurement)
TxCD	3200	(2600)	—	Consolidated Drained Triaxial Shear
SSCU (P)	3200	(2600)	—	Simple Shear Consolidated Undrained (with or without pore pressure measurement)
SSCD	3200	(2600)	—	Simple Shear Consolidated Drained
DSCD	2700	(2000)	—	Consolidated Drained Direct Shear
UC	470		—	Unconfined Compression
LVS	700		—	Laboratory Vane Shear

KEY TO TEST DATA

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Soil Classification Chart and Key to Test Data

City Blue Production Facility
Oakland, California

PLATE **6**

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
RS	18106,004.04		1/88		