



Subsurface Consultants, Inc.

Ro 106

FAX TRANSMITTAL

Date: May 30, 2001
 Number of pages (including cover sheet): 10

To: Barney Chan
 Phone: 510.567.6765
 Fax: 510.569.4757 337-9335
 cc:

From: Emily Silverman
 Sent From: Lafayette
 SCI Job #: 133.018
 Re: Well Abandonment

REMARKS: Urgent For your review Reply ASAP Please comment
 For your use Original in mail As requested

Barney -

Here are the signed well permit applications for the abandonment, scheduled for tomorrow and Friday. Five of the six wells will be drilled out, the sixth well, SCIMW-5 may be pressure grouted depending on access.

I have enclosed a site plan with the locations marked. Please call with any questions.

3736 Mt. Diablo Boulevard ■ Suite 200 ■ Lafayette, California 94549-3659 ■ (925) 299-7960 ■ Fax (925) 299-7970
 171 12th Street ■ Suite 202 ■ Oakland, California 94607-4911 ■ (510) 268-0461 ■ Fax (510) 268-0137
 870 Market Street ■ Suite 716 ■ San Francisco, California 94102 ■ (415) 352-0900 ■ Fax (415) 352-0901
 301 River Street ■ Suite 9 ■ Napa, California 94559-3416 ■ (707) 257-6993 ■ Fax (707) 257-6995

"DESTRUCTION OF MONITORING WELLS:

DEMOLISH WELLS SHOWN IN PLAN IN ACCORDANCE WITH THE REQUIREMENTS ISSUED BY THE ALAMEDA COUNTY PUBLIC WORKS AGENCY (ACPWA) WATER RESOURCES (WR) SECTION GROUNDWATER PROTECTION ORDINANCE. THE REQUIREMENTS ARE LISTED BELOW. THE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION WITH THE ALAMEDA COUNTY PUBLIC WORKS AGENCY THAT IS REQUIRED FOR PERFORMANCE OF THIS WORK.

DESTRUCTION REQUIREMENTS:

- a. CONTRACTOR TO SUBMIT A COMPLETED DRILLING PERMIT APPLICATION TO THE ALAMEDA COUNTY PUBLIC WORKS AGENCY, WATER RESOURCES SECTION (ACPWA WR SECTION).
- b. UPON RECEIPT OF THE APPROVED APPLICATION, CONTRACTOR TO SCHEDULE THE FIELD WORK AND INFORM THE PORT AND THE ACPWA WR SECTION.
- c. CLEAN OUT ALL BRIDGED OR POORLY COMPACTED MATERIALS TO THE BOTTOM OF THE WELL.
- d. PRESSURE GROUT THE CASING TO TWO FEET BELOW THE FINISHED GRADE OR ORIGINAL GROUND, WHICHEVER IS THE LOWER ELEVATION.
- e. REMOVE THE CASING, SEAL, AND GRAVEL PACK TO TWO FEET BELOW THE FINISHED GRADE OR ORIGINAL GROUND, WHICHEVER IS THE LOWER ELEVATION (OPTIONAL).
- f. AFTER THE SEAL HAS SET, BACKFILL THE REMAINING HOLE WITH COMPACTED MATERIAL (OPTIONAL).

WELL BORING LOGS ARE AVAILABLE FOR INSPECTION IN THE PORT OF OAKLAND ENGINEERING ADMINISTRATION OFFICE, 2ND FLOOR, 530 WATER STREET, OAKLAND, CA 94607. CONTACT DIANE HEINZE AT 510.627.1467.

SOURCE DRAWING FOR WELL LOCATIONS PROVIDED BY THE US NAVY.

T.H. Daniels
Thomas H. Daniels
Chief Engineer

ATTACHMENTS:

Document 00400, Bid Form
Section 01100, Summary of Work

AA-30127103527



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

399 Elmhurst St., HAYWARD, CA 94544
PHONE (510) 670-5554

FAX (510) 779-2222 782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 9th Avenue Terminal
Port of Oakland

California Coordinates Source _____ R. Accuracy ± _____ R.
CCN _____ R. CCZ _____ R.
APN _____

CLIENT
Name Port of Oakland - Dr. Nermal
Address 520 Water Street Phone 510.672.1131
City Oakland CA Zip 94607

APPLICANT
Name Subsurface Consultants Inc
Address 2776 Mt Diablo Blvd Phone 925.249.7460
City Lafayette CA Zip 94549

TYPE OF PROJECT

Well Construction	<input type="checkbox"/>	Geotechnical Investigation	<input type="checkbox"/>
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Consolidation	<input type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Destruction	<input checked="" type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other _____	<input type="checkbox"/>

DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S LICENSE NO. C-57-522-125

WELL PROJECTS

Drill Hole Diameter _____ in.	Maximum
Casing Diameter _____ in.	Depth <u>25</u> ft.
Surface Seal Depth _____ ft.	Number <u>100-2?</u>

GEOTECHNICAL PROJECTS

Number of Borings _____	Maximum
Hole Diameter _____ in.	Depth _____ ft.

ESTIMATED STARTING DATE 5/30/01

ESTIMATED COMPLETION DATE 5/31/01

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [Signature] DATE 5/21/01

FOR OFFICE USE

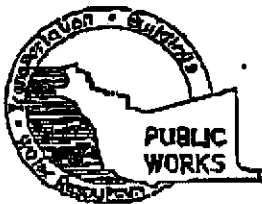
PERMIT NUMBER W01-366
WELL NUMBER _____
APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

- (A) GENERAL**
 1. A permit application should be submitted to ACPWA arrive at the ACPWA office five days prior to proposed starting date.
 2. Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
 3. Permit is void if project not begun within 90 days of approval date.
- (B) WATER SUPPLY WELLS**
 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
- (C) GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**
 1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
- (D) GEOTECHNICAL**
Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with waterproof material. In areas of known or suspected contamination, tamped cement grout shall be used in place of compacted cuttings.
- (E) CATHODIC**
Fill hole above anode zone with concrete placed by tremie.
- (F) WELL DESTRUCTION**
See attached.
- (G) SPECIAL CONDITIONS**
See Attached Port of Oakland Addendum #9

APPROVED [Signature] DATE 5-23-01



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

779 Blimhurst St, HAYWARD, CA 94544
PHONE (510) 670-5554 FAX (510) 821-9339

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 9th Avenue Terminal
Port of Oakland

PERMIT NUMBER W01-367
WELL NUMBER _____
APN _____

California Coordinates Source _____ ft. Accuracy ± _____ ft.
CCN _____ R. CCE _____ R.
APN _____

PERMIT CONDITIONS

Classified Permit Requirements Apply

CLIENT
Name Port of Oakland - Di. Hermal
Address 250 Water Street Phone 510-627-1184
City Oakland CA Zip 94602

- A. GENERAL**
 1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
 2. Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sheets for geotechnical projects.
 3. Permits to void if project not begun within 90 days of approval date.

APPLICANT
Name Subsurface Consultants Inc Fax 925-248-7430
Address 3736 Mt Diablo Blvd Phone 925-248-7460
City La Brea CA Zip 94549

B. WATER SUPPLY WELLS

Well Construction		Geotechnical Investigation	
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contaminated	<input type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Destruction	<input checked="" type="checkbox"/>

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS

DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL

DRILLER'S LICENSE NO. C 57-527-125
Bay Area Exploration Inc. exp. 2-25-03

Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, grouted cement grout shall be used in place of compacted cuttings.

WELL PROJECTS

Drill Hole Diameter	_____ in.	Maximum	
Casing Diameter	_____ in.	Depth	<u>25 ft</u>
Surface Seal Depth	_____ ft.	Number	<u>MW-3?</u>

E. CATHODIC

GEOTECHNICAL PROJECTS

Number of Borings	_____	Maximum	
Hole Diameter	_____ in.	Depth	_____ ft.

F. WELL DESTRUCTION

G. SPECIAL CONDITIONS

ESTIMATED STARTING DATE 5/30/01
ESTIMATED COMPLETION DATE 5/31/01

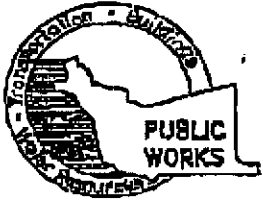
APPROVED

DATE 5-23-01

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-63.

APPLICANT'S SIGNATURE Deini DATE 5/21/01

SEE ATTACHED PERMIT Oakland Addition #4



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

779 Elmhurst St
Hayward, CA 94544
PHONE (510) 670-5554

HAYWARD, CA 94544

FAX (510) 670-5222 782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 9th Avenue Terminal
Part of Oakland

California Coordinates Source _____ ft Accuracy ± _____ ft
GEN _____ ft CCE _____ ft
APN _____

CLIENT Name Part of Oakland - Di. Hermal
Address 550 Water Street Phone 510-427-1154
City Oakland CA Zip 94607

APPLICANT Name Subsurface Consultants Inc
Address 3736 Mt Diablo Blvd Phone 925-268-3490
City La Brea CA Zip 94549

TYPE OF PROJECT	
Well Construction	Geotechnical Investigation
Cathodic Protection <input type="checkbox"/>	General <input type="checkbox"/>
Water Supply <input type="checkbox"/>	Construction <input type="checkbox"/>
Monitoring <input type="checkbox"/>	Well Description <input checked="" type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE	
New Domestic <input type="checkbox"/>	Replacement Domestic <input type="checkbox"/>
Municipal <input type="checkbox"/>	Irrigation <input type="checkbox"/>
Industrial <input type="checkbox"/>	Other _____ <input type="checkbox"/>

DRILLING METHOD:		
Mud Rotary <input type="checkbox"/>	Air Rotary <input type="checkbox"/>	Auger <input checked="" type="checkbox"/>
Cable <input type="checkbox"/>	Other <input type="checkbox"/>	

DRILLER'S LICENSE NO. C 57-522-125

WELL PROJECTS Buy Area Exploration Inc. exp. 2-24-03
Drill Hole Diameter _____ in. Maximum _____
Casing Diameter _____ in. Depth 25 ft
Surface Seal Depth _____ ft Number MW 4?

GEOTECHNICAL PROJECTS
Number of Borings _____ Maximum
Hole Diameter _____ in. Depth _____ ft

ESTIMATED STARTING DATE 5/30/01
ESTIMATED COMPLETION DATE 5/31/01

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [Signature] DATE 5/21/01

FOR OFFICE USE

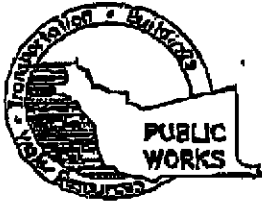
PERMIT NUMBER WD1-368
WELL NUMBER _____
APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

- A. GENERAL**
 1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
 2. Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
 3. Permit is void if project not begun within 90 days of approval date.
- B. WATER SUPPLY WELLS**
 1. Minimum surface seal thickness is two inches of cement grout placed by trowel.
 2. Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
- C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS.**
 1. Minimum surface seal thickness is two inches of cement grout placed by trowel.
 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
- D. GEOTECHNICAL**
Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material in areas of known or suspected contamination. Varied cement grout shall be used in place of compacted cuttings.
- E. CATHODIC**
Fill hole above anode zone with concrete placed by trowel.
- F. WELL DESTRUCTION**
See attached.
- G. SPECIAL CONDITIONS**
See Attached Permit Oakland Addition #4

APPROVED [Signature] DATE 5-23-01



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

779 Elmhurst St
FAYWARD, CA 94544
PHONE (510) 670-5554

FAYWARD, CA 94544

FAX (510) 670-5554

782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 9th Avenue Terminal
Part of Oakland

PERMIT NUMBER W01-369
WELL NUMBER _____
APN _____

California Coordinates Source _____ R. Accuracy to _____ R.
CCN _____ R. CCE _____ R.
APN _____

PERMIT CONDITIONS

Cited Permit Requirements Apply

CLIENT
Name Part of Oakland - Di. Hermal
Address 250 Water Street Phone 510.627.1124
City Oakland CA Zip 94602

A. GENERAL

1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Drilling Report or equivalent for well projects, or drilling log and location sketch for geotechnical projects.
3. Permit is void if project not begun within 90 days of approval date.

APPLICANT
Name Subsurface Consultants Inc
Address 2336 Mt Diablo Blvd Phone 925.249.2960
City La Brea CA Zip 91549

B. WATER SUPPLY WELLS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

TYPE OF PROJECT

Well Construction	<input type="checkbox"/>	Geotechnical Investigation	<input type="checkbox"/>
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Destruction	<input checked="" type="checkbox"/>

C. GROUND WATER MONITORING WELLS INCLUDING PIEZOMETERS

1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

D. GEOTECHNICAL

Backfill hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, bentonite cement grout shall be used in place of compacted cuttings.

DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

E. CATHODIC

Fill hole above anode zone with concrete placed by tremie.

DRILLER'S LICENSE NO. C 57-522-125

WELL PROJECTS

Drill Hole Diameter	_____ in.	Maximum	
Casing Diameter	_____ in.	Depth	<u>25 ft</u>
Surface Seal Depth	_____ ft	Number	<u>MW-5?</u>

See Attached Part of Oakland Address #4

GEOTECHNICAL PROJECTS

Number of Borings	_____	Maximum	
Hole Diameter	_____ in.	Depth	_____ ft

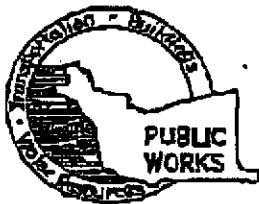
ESTIMATED STARTING DATE 5/30/01
ESTIMATED COMPLETION DATE 5/31/01

APPROVED

DATE 5-23-01

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 72-63.

APPLICANT'S SIGNATURE [Signature] DATE 5/21/01



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

399 Birchurst St, HAYWARD, CA 94544
PHONE (510) 670-5554

FAX (510) 440-2222 782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 9th Avenue Terminal
Part of Oakland

California Coordinates Source _____ ft. Accuracy A
CCN _____ R. CCE _____ R.
APN _____

CLIENT Name Part of Oakland - D. Hermal
Address 550 Webster Street Phone 510-622-1154
City Oakland CA Zip 94602

APPLICANT Name Subsurface Consultants Inc
Address 2226 Mt Diablo Blvd Phone 925-248-7430
City Lafayette CA Zip 94549

TYPE OF PROJECT

Well Construction		Geotechnical Investigation	
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Destruction	<input checked="" type="checkbox"/>

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

DRILLING METHOD:

Mud Rotary	<input type="checkbox"/>	Air Rotary	<input type="checkbox"/>	Auger	<input checked="" type="checkbox"/>
Cable	<input type="checkbox"/>	Other	<input type="checkbox"/>		

DRILLER'S LICENSE NO. C 57-522-125

Bay Area Excavation Inc. exp. 2-28-03

WELL PROJECTS

Drill Hole Diameter	_____ in.	Maximum	
Casing Diameter	_____ in.	Depth	<u>25 ft</u>
Surface Seal Depth	_____ ft.	Number	<u>AW-6?</u>

GEOTECHNICAL PROJECTS

Number of Borings	_____	Maximum	
Hole Diameter	_____ in.	Depth	_____ ft.

ESTIMATED STARTING DATE 5/30/01

ESTIMATED COMPLETION DATE 5/31/01

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-63.

APPLICANT'S SIGNATURE [Signature] DATE 5/21/01

FOR OFFICE USE

PERMIT NUMBER W101-370
WELL NUMBER _____
APN _____

PERMIT CONDITIONS

Circled Permit Requirements Apply

- (A) GENERAL**
 - A permit application should be submitted to us to arrive at the ACPWA office five days prior to proposed starting date.
 - Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Driller Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
 - Permit is void if project not begun within 90 days of approval date.
- (B) WATER SUPPLY WELLS**
 - Minimum surface seal thickness is two inches of cement grout placed by tremie.
 - Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
- (C) GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**
 - Minimum surface seal thickness is two inches of cement grout placed by tremie.
 - Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.
- (D) GEOTECHNICAL**
Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, grained cement grout shall be used in place of compacted cuttings.
- (E) CATHODIC**
Fill hole above anode zone with concrete placed by tremie.
- (F) WELL DESTRUCTION**
See attached.
- (G) SPECIAL CONDITIONS**
→ See Attached Part of Oakland Addition #4

APPROVED [Signature] DATE 5-23-01

Post-it Fax Note	7871	Date	9/11/00	# of pages	1
To	Samuel	From	Diane Heinz		
Co./Dept.	Alameda County	Co.	Port of Oakland		
Phone #		Phone #	627-1467		
Fax #	782-1939	Fax #	627-1467 451-5916		

August 2, 1999
 prepared by
 Wynne Hoy, Zone 7

**Zone 7
 Water Resources Engineering
 Groundwater Protection Ordinance**

Port of Oakland
 1750 Middle Harbor Road
 Oakland
 7 Wells Total
 Permit W01-365-371

Destruction Requirements:

1. Clean out all bridged or poorly compacted materials to the bottom of the well.
2. Pressure grout the casing to two feet below the finished grade or original ground, whichever is the lower elevation.
3. Remove the casing, seal, and gravel pack to two feet below the finished grade or original ground, whichever is the lower elevation (optional).
4. After the seal has set, backfill the remaining hole with compacted material (optional).

These destruction requirements as proposed by Diane Heinz of the Port of Oakland meet or exceed Alameda County Public Works minimum requirements.



ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION

299 Edmanhurst St., HAYWARD, CA 94544
PHONE (415) 670-5554 FAX (510) 644-8822

FAX 510-644-8822 782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 9th Avenue Terminal
Port of Oakland

PERMIT NUMBER W01-365
WELL NUMBER _____
APN _____

California Coordinates Source _____ R. Accuracy ± _____ ft
CCN _____ R. CCE _____ ft
APN _____

PERMIT CONDITIONS

Checked Permit Requirements Apply

CLIENT
Name Port of Oakland - D. Hermal
Address 250 Water Street Phone 510-627-1154
City Oakland CA Zip 94602

- A. GENERAL**
 1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
 2. Submit to ACPWA within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects, or drilling logs and location sketch for geotechnical projects.
 3. Permit is void if project not begun within 90 days of approval date.

APPLICANT
Name Subsurface Consultants Inc
Address 2726 Mt Diablo Blvd Phone 925-249-7970
City La Brea CA Zip 94549

- B. WATER SUPPLY WELLS**
 1. Minimum surface seal thickness is two inches of cement grout placed by trowel.
 2. Minimum seal depth is 30 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.

TYPE OF PROJECT

Well Construction	<input type="checkbox"/>	Geotechnical Investigation	<input type="checkbox"/>
Cathodic Protection	<input type="checkbox"/>	General	<input type="checkbox"/>
Water Supply	<input type="checkbox"/>	Contamination	<input type="checkbox"/>
Monitoring	<input type="checkbox"/>	Well Destruction	<input checked="" type="checkbox"/>

- C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS**
 1. Minimum surface seal thickness is two inches of cement grout placed by trowel.
 2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

PROPOSED WATER SUPPLY WELL USE

New Domestic	<input type="checkbox"/>	Replacement Domestic	<input type="checkbox"/>
Municipal	<input type="checkbox"/>	Irrigation	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	Other	<input type="checkbox"/>

- D. GEOTECHNICAL**
Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with uncompacted material. In areas of known or suspected contamination, grouted cement grout shall be used in place of compacted cuttings.

DRILLING METHOD:
Mud Rotary Air Rotary Auger
Cable OIMR

- E. CATHODIC**
Fill hole above anode zone with concrete placed by trowel.

DRILLER'S LICENSE NO. C57-522-125
Bay Area Exploration Inc. exp. 2-24-03

- B. WELL DESTRUCTION**
See attached.
- C. SPECIAL CONDITIONS**
→ See attached Port of Oakland Addendum #4

WELL PROJECTS

Drill Hole Diameter	_____ in.	Maximum	_____ in.
Casing Diameter	_____ in.	Depth	<u>15</u> ft
Surface Seal Depth	_____ ft.	Number	<u>1</u>

GEOTECHNICAL PROJECTS

Number of Borings	_____	Maximum	_____ ft.
Hole Diameter	_____ in.	Depth	_____ ft.

ESTIMATED STARTING DATE 5/10/01
ESTIMATED COMPLETION DATE 5/31/01

APPROVED _____

DATE 5-23-01

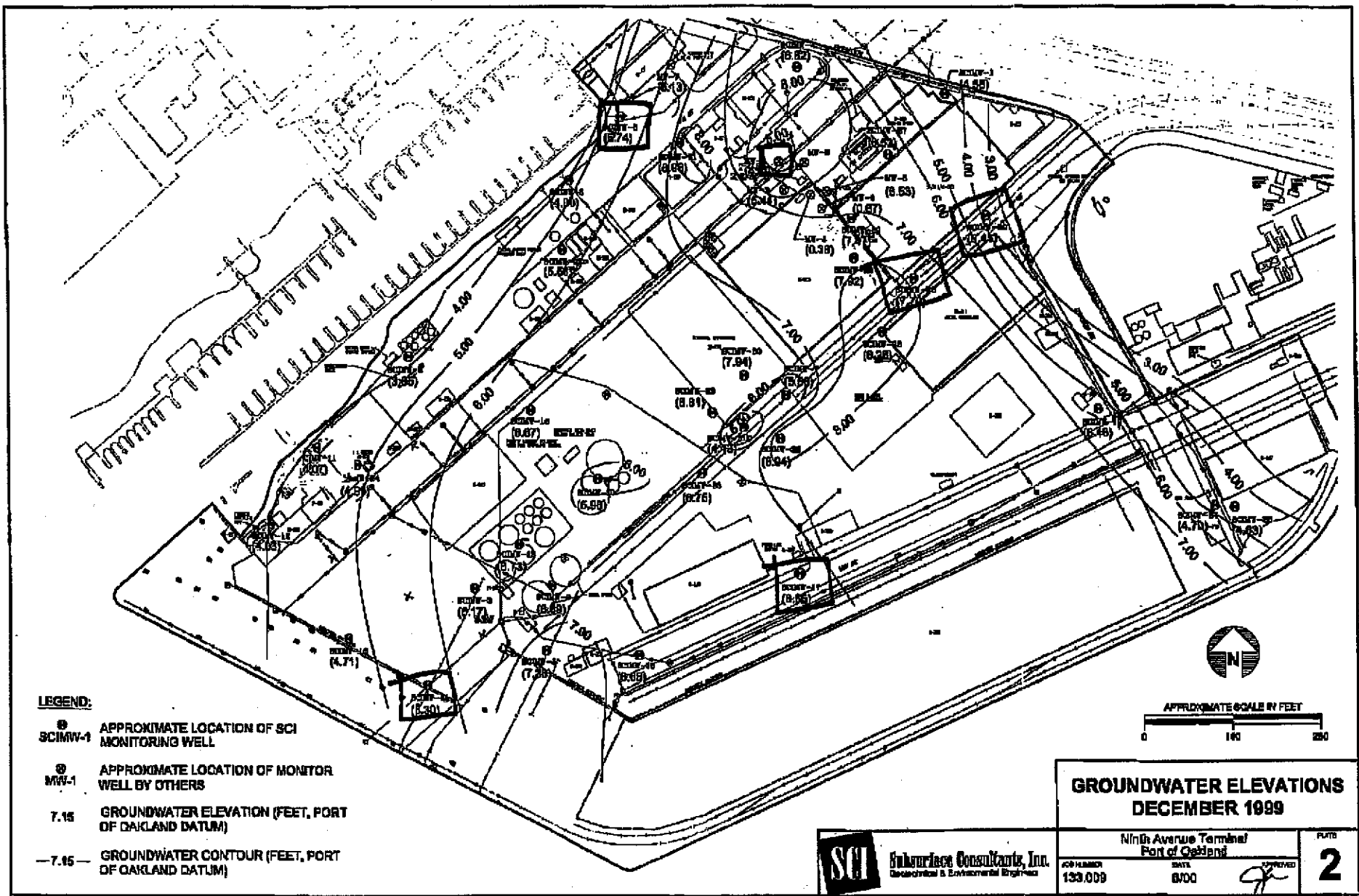
I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 71-68.

APPLICANT'S SIGNATURE Devin DATE 5/21/01

010

05/30/2001 13:28 FAX

□ wells to be abandoned.



LEGEND:

- SCIMW-1 APPROXIMATE LOCATION OF SCI MONITORING WELL
- MW-1 APPROXIMATE LOCATION OF MONITOR WELL BY OTHERS
- 7.15 GROUNDWATER ELEVATION (FEET, PORT OF OAKLAND DATUM)
- 7.15 - GROUNDWATER CONTOUR (FEET, PORT OF OAKLAND DATUM)



APPROXIMATE SCALE IN FEET
0 100 200

GROUNDWATER ELEVATIONS DECEMBER 1999	
Ninth Avenue Terminal Port of Oakland	
JOB NUMBER 133.009	DATE 6/00
SCALE	DATE
APPROVED	DATE
2	

SCH Subsurface Consultants, Inc.
Geotechnical & Environmental Engineers