

**RECEIVED**

2:39 pm, Sep 05, 2007

Alameda County  
Environmental Health

September 4, 2007

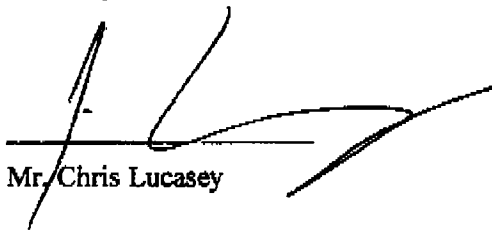
Mr. Jerry Wickham  
Hazardous Materials Specialist  
Alameda County Health Care Services Agency  
Environmental Health Services  
Environmental Protection  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

RE: Lucasey Manufacturing  
2744 East 11<sup>th</sup> Street  
Oakland, California 94601  
SLIC Case RO0002902  
Clearwater Group Project # FB022I

Dear Mr. Wickham,

As the legally authorized representative of the above-referenced project location I have reviewed the *Response to Technical Comments letter*, dated September 4, 2007, prepared by my consultant of record, Clearwater Group. I declare, under penalty of perjury, that the information and/or recommendations contained in this report are true and correct to the best of my knowledge.

Sincerely,



Mr. Chris Lucasey

Perjury Statement



September 4, 2007

Mr. Jerry Wickham  
Hazardous Materials Specialist  
Alameda County Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577  
By FAX: 510-337-9335

**Subject: SLIC Case RO0002902, Lucasey Manufacturing,  
2744 East 11<sup>th</sup> Street, Oakland, California**

Dear Mr. Wickham:

Clearwater Group (Clearwater) on behalf of Lucasey Manufacturing (Client) is writing in response the Alameda County Environmental Health Services (ACEH) letter, dated August 23, 2007.

In the letter ACEH addressed 7 technical comments. Clearwater would like to respond to these comments in this letter.

**1. Gore-Sorber® Survey**

On April 6, 2007, ACEH responded to Clearwater's "Soil and Groundwater Investigation Report" with a letter directing Clearwater to prepare a work plan for the second phase of investigation. In the recommendations section of Clearwater's report, a Gore-Sorber® survey was proposed to define the lateral extent of contamination on and off the site. ACEH questioned the effectiveness of the Gore-Sorber® technology to adequately detect the contamination. In response to this, Clearwater contacted Gore to provide more information on the detection capabilities of the Gore-Sorbers®. Gore responded in an email saying that the modules can detect hydrocarbons up to carbon chain length C-20. On May 10, 2007, Clearwater forwarded this information to ACEH



and requested that they reconsider the use of this technology at the site. ACEH responded to Clearwater in an email dated May 17, 2007 (attached). In this email ACEH wrote that Clearwater may propose the Gore-Sorber® technique as a method for delineation prior to soil and groundwater sampling. Based on this email, Clearwater prepared and submitted a work plan to ACEH proposing a Gore-Sorber® survey preparatory to deciding where to place monitoring wells. In this latest letter of 8-23-07 from ACEH, the previously considered Gore-Sorber® survey has come back under questioning with concerns Clearwater staff had considered previously satisfied; Clearwater is being asked to propose other methods for delineating the contamination.

Please clarify ACEH staff position. Clearwater has had success with delineating diesel contaminants in the subsurface to the satisfaction of regulators in Union City and Moss beach (San Mateo County) and so considers Gore-Sorber® to be an effective tool for delineation of the lateral extents of the contamination. The Gore-Sorber® module can detect hydrocarbons up to C20. Based on the analytical data for TEG Mobile Laboratories from the soil and groundwater investigation conducted on the site in January 2007, the highest concentrations of Total Petroleum Hydrocarbons (TPH) was reported in the C12 - C24 range. This is well within the detection range of the Gore-Sorbers®. Clearwater's intent in using Gore-Sorber® technique is as a first step to efficiently determine the lateral extents of the plume.

## **2. Extent of Free Product South and West of Site**

Clearwater has proposed Gore-Sorber® modules be placed in these locations. The information from the Gore-Sorbers® will allow Clearwater to place soil borings in optimal locations to assess the free product (if it extends to these locations).

## **3. Proposed Recovery Well Locations**

Clearwater will adjust the location of the recovery well RW-2 so that it is placed within the "Estimated Free Product Boundary". We believe RW-1 should remain in its current location as it will provide valuable information on the existence of the Underground Storage Tank (UST). Based on your request of August 23, 2007, a third recovery well will be proposed within the "Estimated Free Product Boundary". (Figure 5 attached)



#### **4. Proposed Recovery Well Depth**

The main reason that Clearwater proposed to design the recovery wells with a 15-foot screen was that free product was noted in the soil cores to extend from 11 feet to 25 feet bgs. The free product appears to be distributed throughout this section and has impacted the sandy lenses. Therefore, the concern of contaminating possible preferential pathways is not an issue.

#### **5. Report Figures**

We will ensure that future figures are of a good quality.

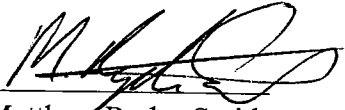
#### **6. Underground Storage Tanks**

Norcal Geophysical (Norcal) of Cotati, California, conducted a Ground Penetrating Radar (GPR) scan around the estimated location of the UST on November 15, 2005. A hand-drawn map showing the area scanned was presented in the Soil and Groundwater Investigation Work Plan as figure 7 and dated April 25, 2006. This information was also presented on page 4 and figure 4 of the Soil and Groundwater Investigation Report, dated March 7, 2007. Norcal did not produce a detailed report for this event, however Clearwater staff was onsite to document the GPR scan. If necessary we could get Norcal to supply a letter stating that they conducted this work. The geophysical utility mapping conducted by Subtronic Corporation (Subtronic) of Concord, California on November 20, 2006, was related to utility location and not UST location. (the Norcal GPR survey map is attached)

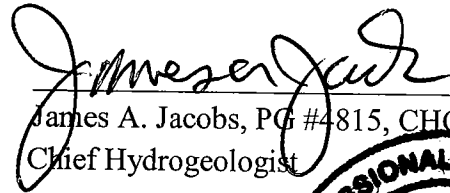
#### **7. Request for Identification of Adjacent Property Owners**

Clearwater provided this information to ACEH in a May 10, 2007 email. This information will be included as an attachment to this letter.

Regards,  
**Clearwater Group**



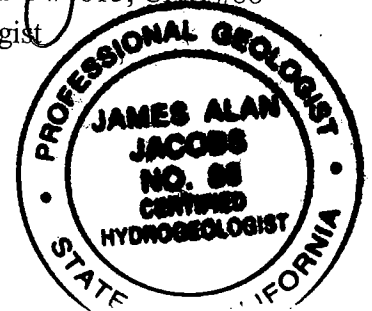
Matthew Ryder-Smith  
Project Manager



James A. Jacobs, PG #4815, CHG #88  
Chief Hydrogeologist

Attachments

May 17, 2007 ACEH email;  
Figure 5 – Proposed Recovery Test Well Locations;  
Norcal GPR Survey Map;  
Adjacent Property Owner Information.



**Matthew Ryder-Smith**

---

**From:** Wickham, Jerry, Env. Health [jerry.wickham@acgov.org]  
**Sent:** Thursday, May 17, 2007 11:40 AM  
**To:** Matthew Ryder-Smith  
**Cc:** Chris Lucasey; Paul Strange; Olivia Jacobs  
**Subject:** RE: 2744 East 11th Street, Oakland / SLIC Case #RO0002902

Matthew,

Based on the information provided, you may propose the Gore Sorber technique as a method for delineation prior to soil or groundwater sampling. With regard to the extension, a 3 month extension is abnormally long in that the typical total response time for a Work Plan is 60 days. The schedule is extended 30 days to July 7, 2007 based upon your request.

Regards,  
*Jerry Wickham*  
Alameda County Environmental Health  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577  
510-567-6791 phone  
510-337-9335 fax  
[jerry.wickham@acgov.org](mailto:jerry.wickham@acgov.org)

---

**From:** Matthew Ryder-Smith [mailto:MRyder-Smith@clearwatergroup.com]  
**Sent:** Thursday, May 10, 2007 3:27 PM  
**To:** Wickham, Jerry, Env. Health  
**Cc:** Chris Lucasey; Paul Strange; oj@clearwatergroup.com  
**Subject:** 2744 East 11th Street, Oakland / SLIC Case #RO0002902

Dear Jerry,

Thank you for your April 6, 2007 letter regarding the Lucasey Manufacturing site at 2744 East 11th Street, Oakland. We are writing to clarify or respond to the four technical comments raised in that letter.

Identification of Adjacent Property Owners (Technical Comment #4). In response to this request, we have identified those three properties which are directly adjacent to the recent soil borings which contained the contaminants of concern. Each of these properties is located across the street/intersection from the subject property. For these three properties, we have supplied the owner name(s), the parcel number and the owner contact address (all of these parcels are owner occupied).

In Technical Comment #3, concurrence with Clearwater Group's recommendation to conduct a soil vapor survey using Gore-Sorbers was denied. Subsurface site conditions and the nature of the heavy oil were the reasons given for rejection of this technique for subsurface investigation. To confirm that these reasons would be sufficient to reject the technique, Clearwater staff contacted Gore Laboratory staff to discuss the site and to provide them site specific information about the site geology and the type of oil at the site (crude / bunker oil). Gore staff responded that the Gore-Sorber modules can detect hydrocarbons up to C20 (see attached emails). C20 is within the carbon range of crude / bunker oil.

8/30/2007

We would appreciate your reconsideration of the Gore method for further delineating the plume. The main reasons that we would like to use Gore-Sorber modules at the site are as follows:

- The extents of the oil contamination can be assessed on a large scale, more rapidly and for lower costs;
- Remote access areas, that would otherwise be difficult to access with a rig (inside buildings), can be easily screened for contamination;
- Source areas, narrow contaminant pathways and migration patterns, which could be missed with single borings on wide centers, are frequently easier to identify with this method.

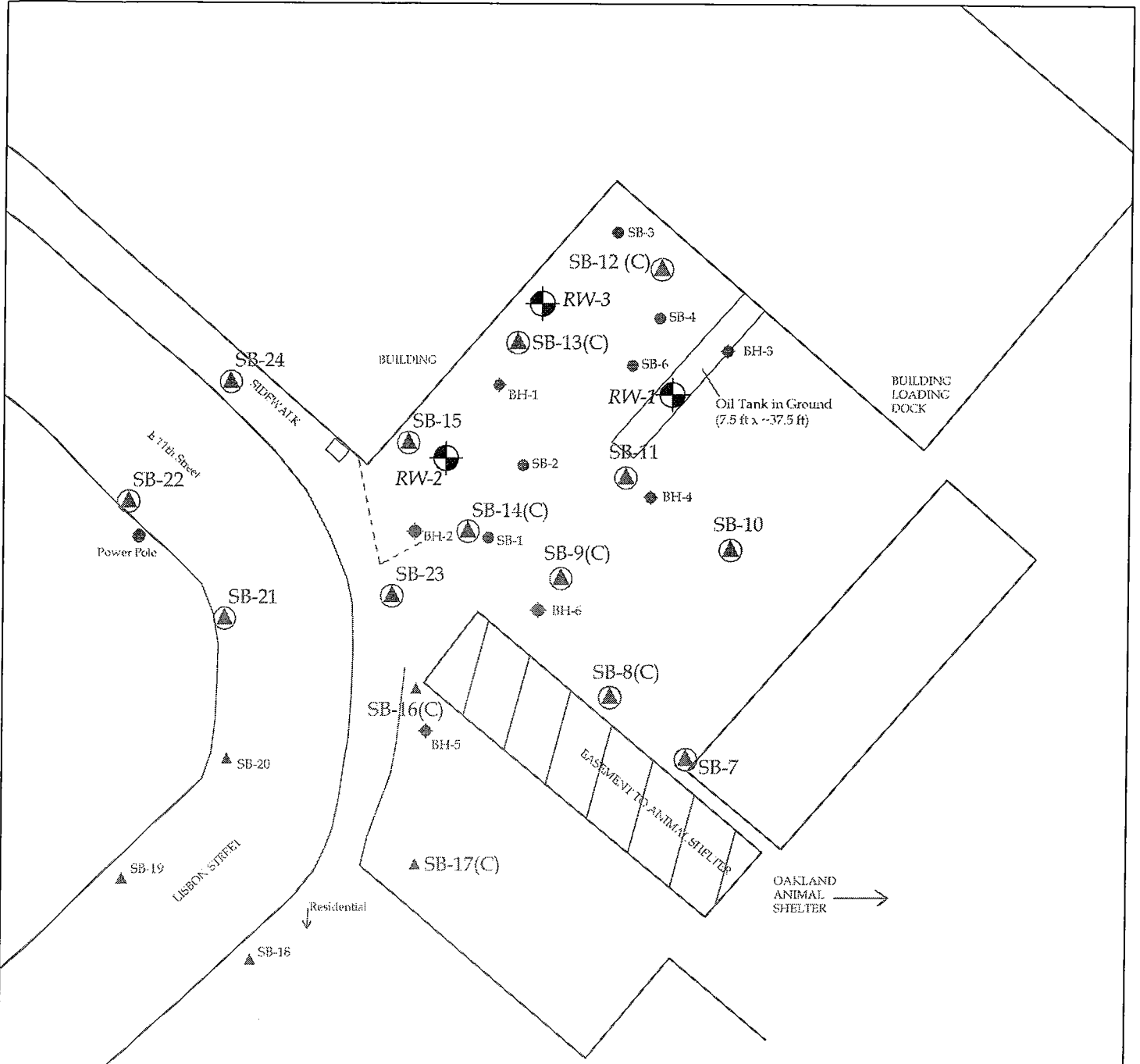
We understand that soil samples, collected after acquisition of a Gore-Sorber survey, would be required to validate the findings.

Clearwater staff also requests an extension for the submittal of the Work Plan, which, is currently due on June 7, 2007. Pending receipt of your response on this issue, we would appreciate an extension of 3 months.

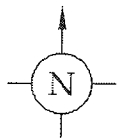
Regards,

Matthew Ryder-Smith  
Clearwater Group  
Project Manager  
229 Tewksbury Ave  
Point Richmond, CA 94801  
510-307-9943 x222  
510-590-1097 (cell)

<<gore\_emails.pdf>> <<0190092\_parcel map.pdf>> <<Adjacent\_property.pdf>>



LEGEND	
	Proposed 4" Recovery Test Wells
	Clearwater Soil Boring Locations
	Proposed Soil Boring Locations (Not Drilled and Sampled)
	Soil Electrical Conductivity Logs Performed
	Terra Firma Soil Borings 7/9/2005
	AEI Soil Borings 8/31/2004
BH-5	
SB-1	



**PROPOSED RECOVERY TEST WELL LOCATIONS**

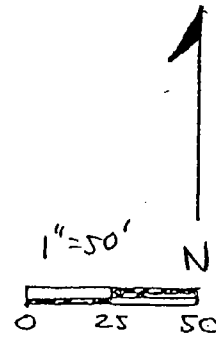
Lucasey Manufacturing  
 2744 East 11th Street  
 Oakland, California

**CLEARWATER GROUP**

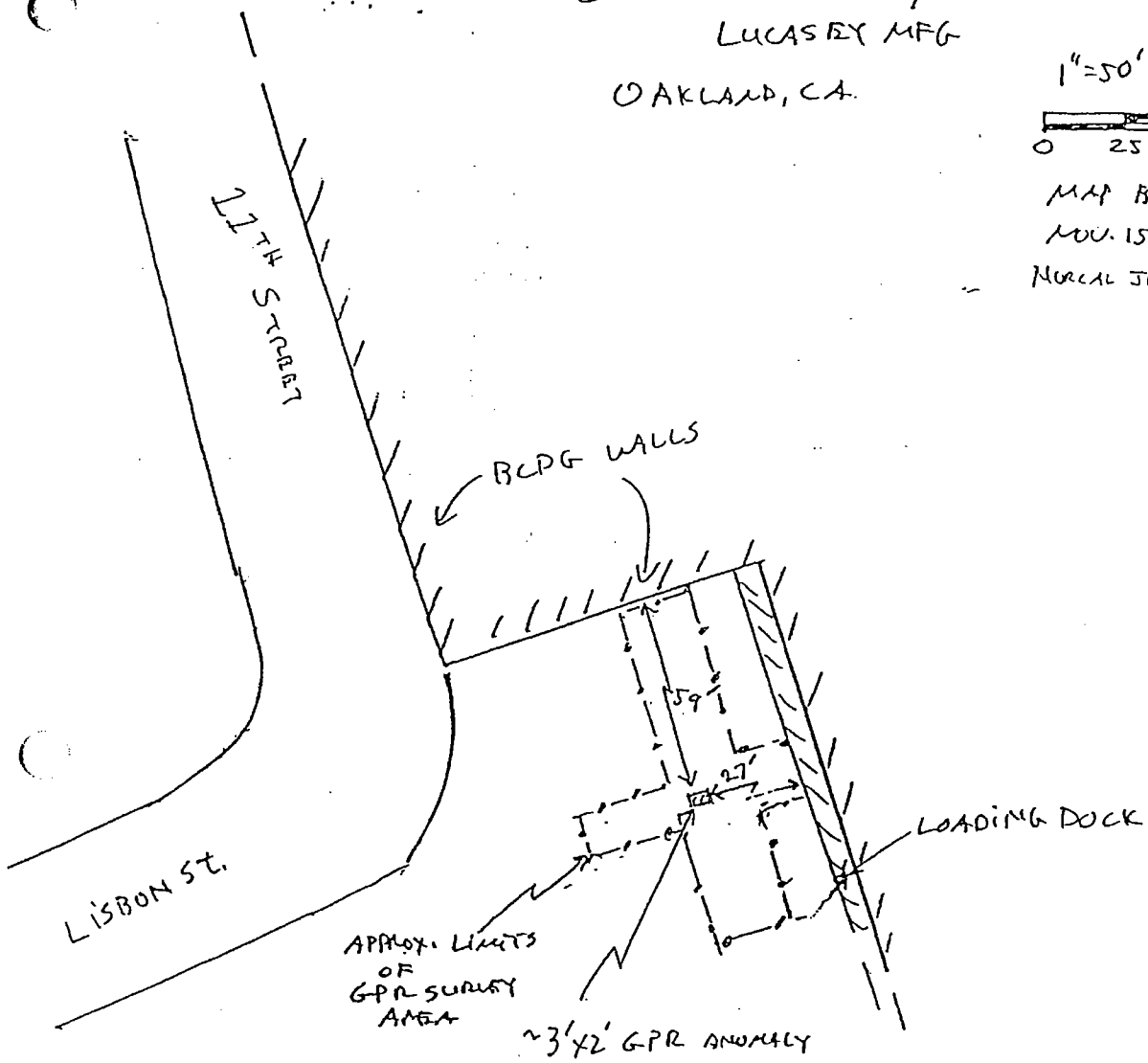
Project No. <b>FB022I</b>	Figure Date <b>6/07</b>	Figure <b>5</b>
------------------------------	----------------------------	--------------------



CLEARWATER GROUP/  
 LUCASEY MFG  
 OAKLAND, CA.



MAP BY: D. BISSINI  
 NOV. 15, 2005  
 MURAL JOB - 05-826-01b



<b>GEOPHYSICAL SCREENING MAP</b> Lucasey Manufacturing 2744 E 11th Street Oakland, California	<b>CLEARWATER GROUP</b>		
	Project No. <b>FB022E</b>	Figure Date <b>4/06</b>	Figure <b>7</b>



**Lucasey Manufacturing Corporation**  
**2744 East 11th Street, Oakland CA 94601**

**ADJACENT PROPERTY OWNERSHIP DETAILS**

<b>Street Address</b>	<b>Parcel Number</b>	<b>Property Owners Name(s)</b>	<b>Map Reference</b>
2743 E 11th Street	019-0092-008	Maria Navarro	8 (circled)
2739 E 11th Street	019-0092-007	Martin & Juventina Quintero	7 (circled)
2735 E 11th Street	019-0092-006	Jose L III & Sophia Lupian	6 (circled)

ASSESSOR'S MAP 19

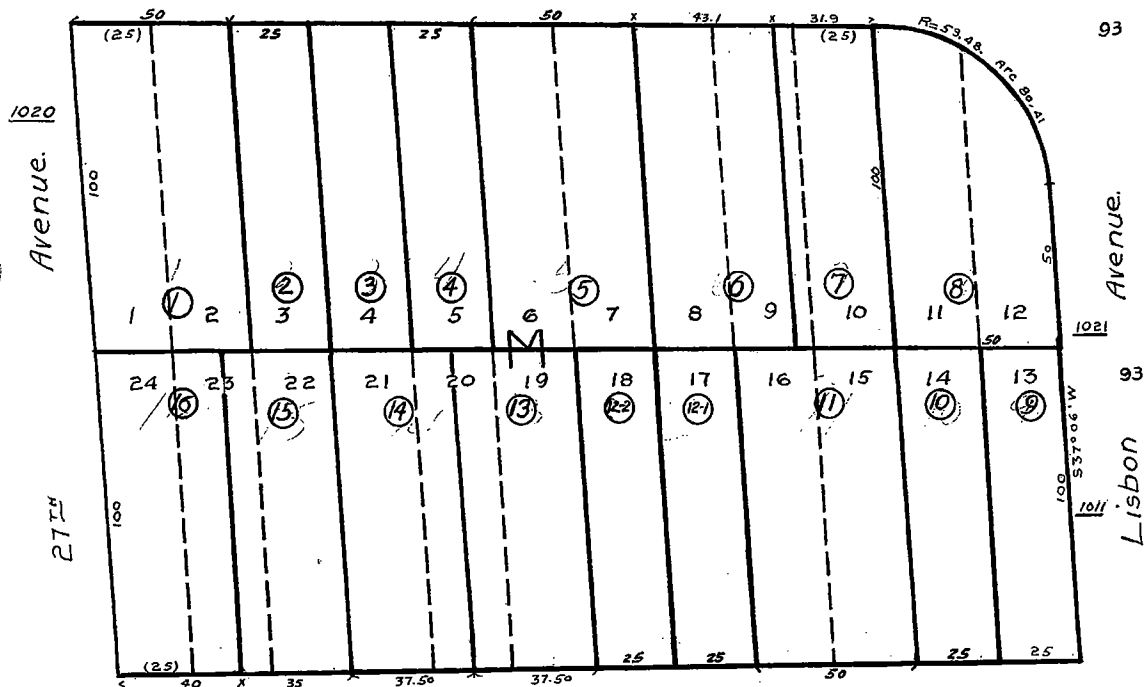
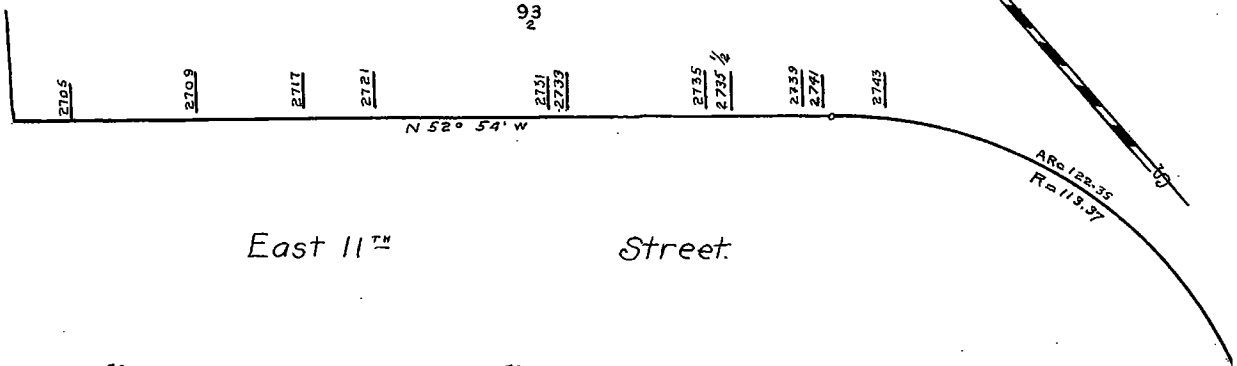
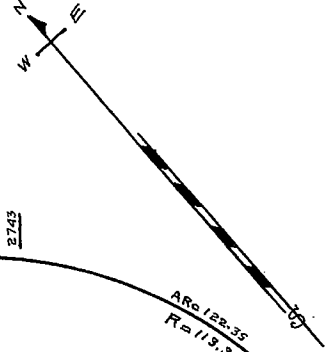
Code Area No. 17-037

92

Knowles and Potter Subdivision of the Kennedy Tract. (BK. 9 Pg. 11)

Scale 1 in = 30 ft.

Rev. 3-18-63 VT  
5-1-98 WL



East 10<sup>th</sup> Street

