R098

① Need information on Company + author of WP
② Need a H+S plan (Site Sp.)

MYRON ZIMMERMAN INVESTMENTS
1330 BROADWAY, SUITE 1426, OAKLAND, CALIFORNIA 94612
TELEPHONE: (510) 451-5836 FACSIMILE: (510) 834-2635

FACSIMILE COVER SHEET

#2162

DATE: 9-2-94

FROM: Paul Lafontaine

TO: Barney Chan

COMPANY: ACHA

FAX #: 337-9335

TOTAL NUMBER OF PAGES (including this cover sheet): 9

REGARDING:

COMMENTS:

Barney: Here is a copy of the workplan for 5725-E 14 Street Oakland. Please review and let me know how to proceed.

Thanks

Paul Lafontaine

HARD COPY TO FOLLOW: Yes (No)

94-115

WORKPLAN FOR CLOSURE OF UNDERGROUND TANK EXCAVATION

FORMER FORDHAM PROPERTY
5725 EAST 14TH STREET
OAKLAND, CALIFORNIA

Prepared For:

MYRON ZIMMERMAN INVESTMENTS
1330 Broadway Suite 1426
Oakland, CA 94612

Tage
or Dev Sculer
Env. Solutions Dre

September 1994

INNOVATIVE TECHNICAL SOLUTIONS, INC.
1330 BROADWAY, SUITE 1625, OAKLAND, CA 94612
(510) 286-8888

ITSI 286888

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WORKPLAN FOR CLOSURE OF UNDERGROUND TANK EXCAVATION 5725 East 14th Street Oakland, California

1.0 INTRODUCTION AND BACKGROUND

This brief Workplan has been prepared by Innovative Technical Solutions, Inc. (ITSI) on behalf of Myron Zimmerman Investments in response to a request from the Alameda County Department of Health Services (ACDHS). It addresses the closure of an open cavity, resulting from a previous tank removal at the subject property, using remediated soils from the soil stockpile created during the tank removal. The subject property is situated within the industrial area of Oakland at 5725 East 14th Street (See Figure 1). The property is leased to businesses, non-profit agencies and private tenants, and there is some light industrial activity onsite.

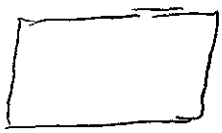
As indicated in the previous site investigation (as reported in a Site Assessment report prepared by RGA, Inc. dated August 1991) there were three underground storage tanks (USTs) located at the property prior to November, 1990. Although no formal records for the USTs are available from the previous site owner, the three tanks apparently included one 1,000 gallon gasoline tank, one 5,000 gallon diesel tank, and one fuel oil tank. In November, 1990, the three USTs were removed from the site. At that time, soil samples surrounding the gasoline tank indicated hydrocarbon contamination (400 ppm total petroleum hydrocarbon as gasoline [TPH-g] and 2,600 ppm total petroleum hydrocarbon as diesel [TPH-d]). Soil beneath and surrounding the diesel tank also indicated hydrocarbon contamination (up to 1,000 ppm TPH-g and up to 420 ppm TPH-d). Non-detectable levels of hydrocarbons as TPH-g and TPH-d were reported for samples taken from the area of the fuel oil tank.

Following removal of the tanks, the cavity was over-excavated and the removed soils were apparently placed on visqueen adjacent to building F (see Figure 2). These soils are still stockpiled in the same location, and the tank cavity is currently open. Apparently confirmation samples from the cavity were not collected after overexcavation.

Alameda County has expressed the need to close the cavity as soon as possible, and Myron Zimmerman Investments, although not a party to the tank installation or removal, is proceeding expeditiously to accomplish this objective.

2.0 PROPOSED CLOSURE ACTIVITIES

The proposed field activities will include: (a) confirmation soil sampling of the existing cavity, (b) over-excavation of the cavity if necessary, (c) bioremediation of the stockpiled soil, and (d) soil sampling of the stockpiled soils. Finally, a brief completion report will be prepared to document the activities undertaken.



2.1 Soil Sampling

Confirmation soil sampling of the excavation will consist of the following:

- One soil sample will be collected from the middle of each side wall of the excavation (a total of four samples). The samples will be collected at approximately two-thirds of the depth of the cavity with the assistance of a backhoe bucket, or similar construction equipment (to be operated by Myron Zimmerman Investments staff).
- Similarly, two additional soil samples will be collected from the bottom of the excavation.
- An ACDHS representative will be notified 48 hours in advance of sampling in order to witness the sampling activities, if desired. Sampling will be performed using proper sampling protocols. Samples will be collected in clean brass sleeves, sealed, labeled, and placed in a chilled ice chest.
- Samples will be transported to a California state-certified laboratory, under proper chain-of-custody procedures, and analyzed for TPH-g, TPH-d and benzene, toluene, ethyl benzene, and xylenes (BTEX) using EPA Method 8015.
- If soil samples indicate concentrations of hydrocarbons >100 ppm, over-excavation of the cavity will be performed by Myron Zimmerman Investments. ITSI personnel will be onsite to observe the overexcavation activity. A photo ionization detector will also be used during excavation activities to assist in monitoring the hydrocarbons concentrations in the soil. ITSI personnel will then repeat the above indicated soil sampling in the appropriate areas until soil samples indicate <100 ppm concentrations of hydrocarbons. Any soil removed from the excavation will be added to the already existing soil stockpile.
- Since soil samples will be obtained using construction equipment, workers will not enter the excavation cavity. Additionally, the contractor will implement applicable Federal and state requirements for health and safety.

① na - 1/20 lineal collected above GW level 1/200 sq ft

② BTEX ~~1ppm~~

③ — 1ppm Total VOC should also be used.

2.2 Bioremediation of Stockpiled Soils

Currently, there are approximately 800 tons of soils stockpiled onsite. It is Myron Zimmerman Investments intention to bioremediate these soils in place.

Bioremediation activities will consist of introducing appropriate microorganisms (supplied by International Biochemicals Group, Inc. located in San Diego, California), and nutrients, mixing these with the soils, and installing perforated piping within the pile, using trenching equipment.

④ (where?), permit?

Microorganisms to be used are identified by the supplier to be effective in the biodegradation of diesel and gasoline components. The installation of the perforated piping throughout the pile will allow oxygen to penetrate the soils (oxygen is important in sustaining the biological activity required for bioremediation) ⑤ Unless covered need to contact Air Board.

After piping is installed, the stockpile will be covered with visqueen and left to passively biodegrade. The stockpile will be monitored by Myron Zimmerman Investments. A progress sample will be collected approximately two months following pipe installation and will be analyzed for TPH-g, TPH-d and BTEX. Should laboratory results indicate levels >100ppm of hydrocarbons, the soils will be allowed to continue to further bioremediate.

If ≈600 cy will need to verify # via SW846

Should the progress soil samples indicate levels <100 ppm of hydrocarbons, confirmation soil sampling will be performed by ITSI. Confirmation soil sampling will consist of collecting five soil samples using clean brass sleeves. Sample locations will be randomly selected, unless specifically identified by the ACDHS representative. Samples will be sealed, labeled, placed in a chilled ice chest, and transported to a state-certified laboratory under proper chain-of-custody procedures. Confirmation soil samples will be analyzed for TPH-g, TPH-d and BTEX using EPA Method 8015.

⑦ Suggest systematic random sampling

Upon receipt of analytical data, the ACDHS representative will be informed of the results and, if appropriate, written approval will be requested from ACDHS for the reuse of the soils for backfilling the excavation.

⑥ — Cleanup stds? vw/ Kevin → 100 ppm + 1 ppm VOC

2.3 Excavation Backfill

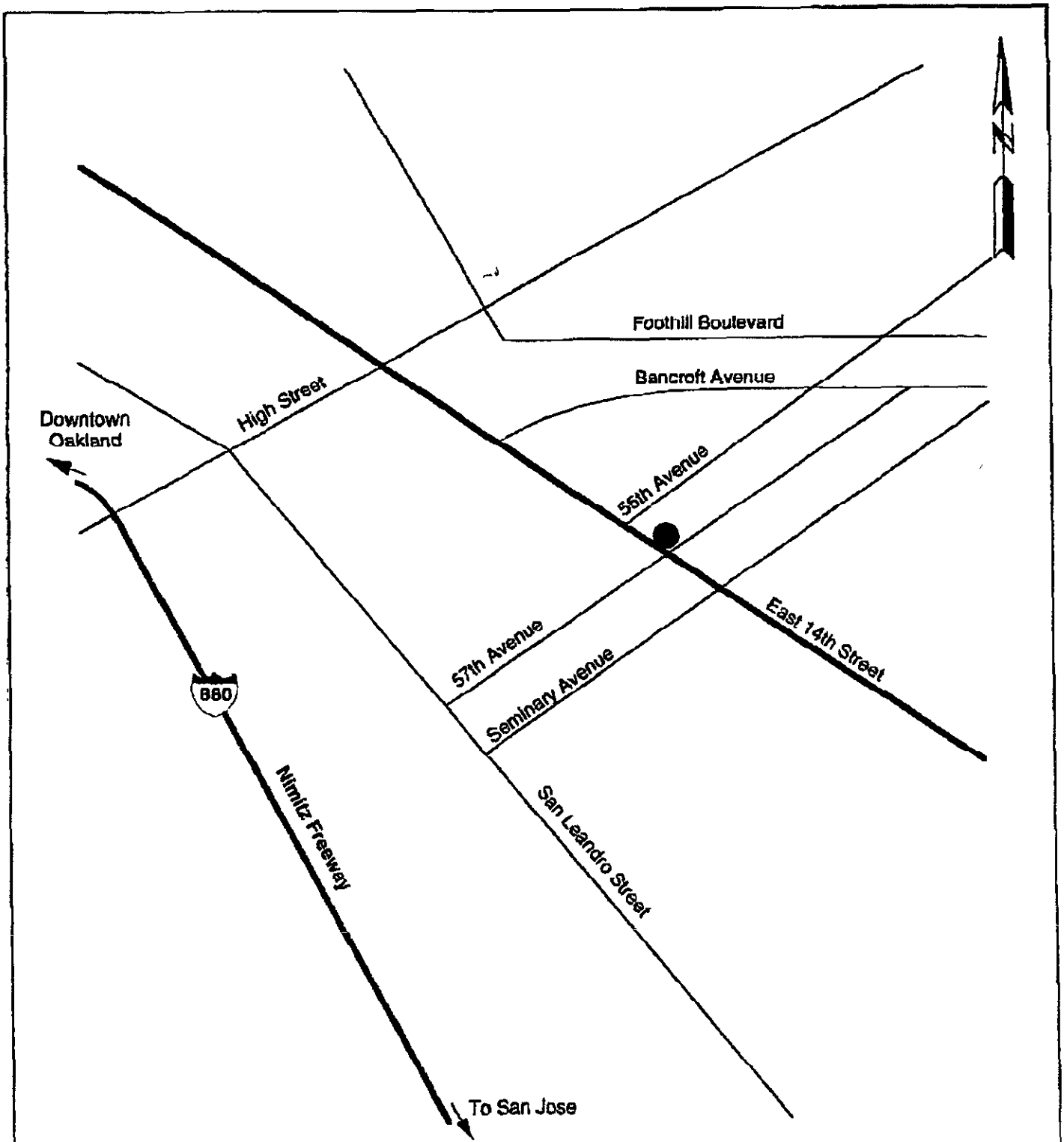
Following approval by ACDHS representative, Myron Zimmerman Investments will proceed to backfill the open excavation with the remediated soils from the stockpiles.

3.0 COMPLETION REPORT

Following the completion of the above described activities and approval from ACDHS, a brief completion report will be prepared. The report will contain a summary of field activities, sample locations and a compilation of analytical data provided by the laboratory.

4.0 SCHEDULE

Upon approval by ACDHS, confirmation sampling and bioremediation activities will commence. The period required for bioremediation is not specifically known, but is expected to be approximately 8 weeks based on previous experience. As the project progresses, updates to the schedule will be supplied to the appropriate ACDHS representatives.



LEGEND

● Site Location

NOT TO SCALE

FIGURE 1: SITE LOCATION MAP

5725 East 14th Street.
Oakland, California

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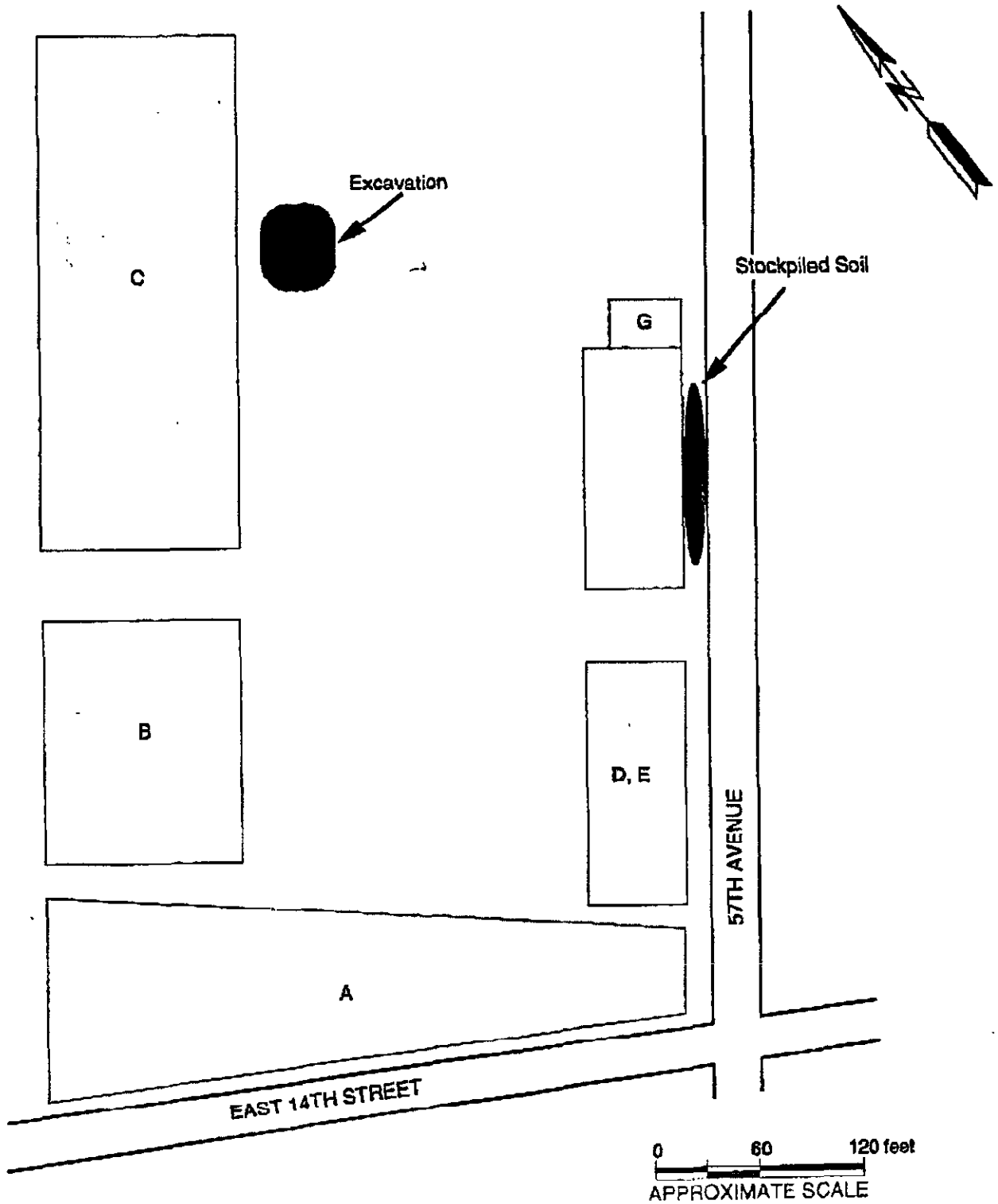

LEGEND

Buildings on the property

Reference: Site Assessment prepared by RGA, Inc., dated August 1991

FIGURE 2: SITE LAYOUT MAP

5725 East 14th Street
Oakland, California

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