



THE SALVATION ARMY

USA Western Territory
Adult Rehabilitation Centers Command
180 East Ocean Boulevard, 3rd Floor
Long Beach, CA 90802-4709

WILLIAM BOOTH
Founder

ANDRÉ COX
General

JAMES KNAGGS
Territorial Commander

DOUGLAS TOLLERUD
ARC Commander

RECEIVED

By Alameda County Environmental Health 1:24 pm, May 31, 2016

May 25, 2016

Re: TSA Oakland ARC Warehouse Building's basement's elevation and the configuration of the warehouse's three elevators.
The Salvation Army Adult Rehabilitation Center
601 Webster Street
Oakland, CA 94607

"I declare under penalty of perjury that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge."

Submitted by:

Mark Nelson, Major
ARC Command General Secretary

May 24, 2016

Mr. Keith Nowell, PG, CHG
Hazardous Materials Specialist
Alameda County Health Care Services Agency
Environmental Health Services, Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Subject: Report on Survey of Basement Elevation and Elevator Configuration
The Salvation Army ARC Building
601 Webster Street,
Oakland, California,
ACEH Fuel Leak Case No. RO3084
Geotracker Global ID T10000003428
ATC Project No: Z054000006

Dear Mr. Nowell:

On May 5, 2016 representatives of The Salvation Army (TSA), Alameda County Environmental Health (ACEH), and ATC Group Services LLC (ATC) met to discuss the findings of the draft ATC report titled *Soil and Groundwater Investigation Report, The Salvation Army, 601 Webster Street, Oakland, California*, dated April 26, 2016. The document summarized findings of recent soil and groundwater assessment activities conducted at the site.

Results of assessment activities indicated petroleum hydrocarbons in soil and groundwater appear to encroach beneath the ARC warehouse building (**Figure 1**). Based on reported dissolved benzene concentrations in groundwater, vapor intrusion risks to structures at the site may be present.

During the meeting on May 5, 2016, ACEH requested the following:

- 1.) Determine the elevation of the ARC basement's foundation bottom relative to observed groundwater elevation,
- 2.) Investigate the structure of the ARC building elevators, including determination of elevator shaft bottom elevation and determine the shaft bottomed elevation relative to observed groundwater.
- 3.) Determine whether elevator shaft dewatering is occurring or if water collecting in sumps consists of groundwater, and, if so, whether dewatering discharge is properly permitted considering the potential for the presence of petroleum hydrocarbons in dewatering discharge.

This letter report details the findings of the investigative activities performed to comply with these requests.



FIELD ACTIVITIES

BASEMENT FLOOR ELEVATION SURVEY

On May 11, 2016, ATC performed a basic level survey to determine the elevation of the basement floor. ATC used an optical level survey instrument to perform the survey using the top of well casing of MW1 as the base elevation. The elevation of the basement floor surface was determined to be approximately 16.25 feet lower than the top of casing of MW1. When measured on May 11, 2016, the depth to groundwater in MW1 was approximately 19.45 feet below the top of the casing. Assuming a basement slab thickness of one foot, groundwater is expected to be approximately 2.2 feet below the basement foundation bottom.

A foot print of the ARC building is included as **Figure 1**. A simple representation of the building profile is represented by **Figure 2**. A depiction of the line of site used to obtain the elevation is represented by **Figure 3**. The ARC Building Warehouse Basement Footprint with Elevator locations is represented by **Figure 4**.

A photo of the basement floor survey operation is included in **Photos 1-4**.

A copy of the field survey notes are included in **Attachment A**.

SURVEY OF ELEVATOR CONFIGURATION

On May 11, 2016, ATC investigated the elevators in operation at the ARC building. According to Salvation Army personnel, three elevators exist in the ARC building designated as the freight elevator, the donation elevator and the kitchen elevator. Details of their type and construction are included in the table below:

TSA ARC Building Elevator Construction Detail							
<u>Name</u>	<u>Floors Serviced</u>	<u>Location</u>	<u>Type</u>	<u>Penetration beneath basement foundation</u>	<u>Penetration depth beneath basement foundation (estimated)</u>	<u>Shaft bottom relative to groundwater</u>	<u>Water visible in shaft</u>
Freight Elevator	B - 3	Near freight dock /truck enclosure area	Roped hydraulic	Yes	10-15 feet	-8 to -13 feet	Yes
Donation Elevator	B - 3	On the south central side of ARC warehouse building	Traction	Yes	5-7 feet	-3 to -5 feet	No
Kitchen Elevator	1 - 3	On the east side of ARC building	Roped hydraulic	No	None	17	No



Due to safety issues, ATC's investigation of elevator shafts was limited to what could be seen through gaps between the elevator shaft and the elevator car. Should additional investigation be needed, a qualified elevator technician will be enlisted to both grant additional access and to provide additional knowledge as to the mechanisms present in a particular elevator.

The kitchen elevator is outside the footprint of the warehouse building to the east. The kitchen elevator is a roped hydraulic-type elevator. This elevator's vertical service column extends from floors 1 through 3 with its hydraulic cylinder and related equipment located in the basement but it doesn't extend below the basement floor.

The donation elevator is located on the south side of the warehouse building near Sixth Street. This elevator is a traction-type elevator with the entirety of its lifting mechanisms located exclusively on the roof. The shaft for the donation elevator does extend below the plane of the basement floor approximately 5 to 7 feet. The portion of the shaft extending below the plane of the basement floor was visible. This portion of the shaft did not appear to contain any equipment and it was observed to be dry (**Photo 5**).

The freight elevator is located on the north side of the warehouse building near the truck enclosure loading dock. TSA sources say that this elevator is in need of repair so it currently is not operational. The shaft extended well below the basement floor but an exact distance could not be measured due to the limited access issues. The mechanisms for lifting were located in the space below the basement floor and this space was observed to be flooded (**Photos 7-8**). None of the available sources of information at TSA could confirm the existence or provide details about any sumps for this elevator.

ELEVATOR SHAFT DEWATERING

During the elevator assessment, ATC was unable to determine whether dewatering of elevator shafts was occurring, and if so, what the means of disposal of recovered water. Additionally, the Salvation Army has not yet provided information, but is investigating this issue further.

CLOSING

Should you have any questions or require further clarification, please do not hesitate to using the contact information listed below.

Sincerely,

ATC Group Services LLC

A handwritten signature in blue ink that reads 'Mike Sonke'.

Mike Sonke

Project Manager

Phone +1 209 579 2221

email: mike.sonke@atcassociates.com



A handwritten signature in blue ink, appearing to read 'Jim Kundert', is positioned above the contact information.

Jim Kundert
Project Geologist
Phone +1 209 579 2221
email: jim.kundert@atcassociates.com

A handwritten signature in blue ink, appearing to read 'Gabe Stivala', is positioned above the contact information.

Gabe Stivala, P.G.
CA Professional Geologist No. 7780
Phone +1 916 386-3870
email: gabe.stivala@atcassociates.com



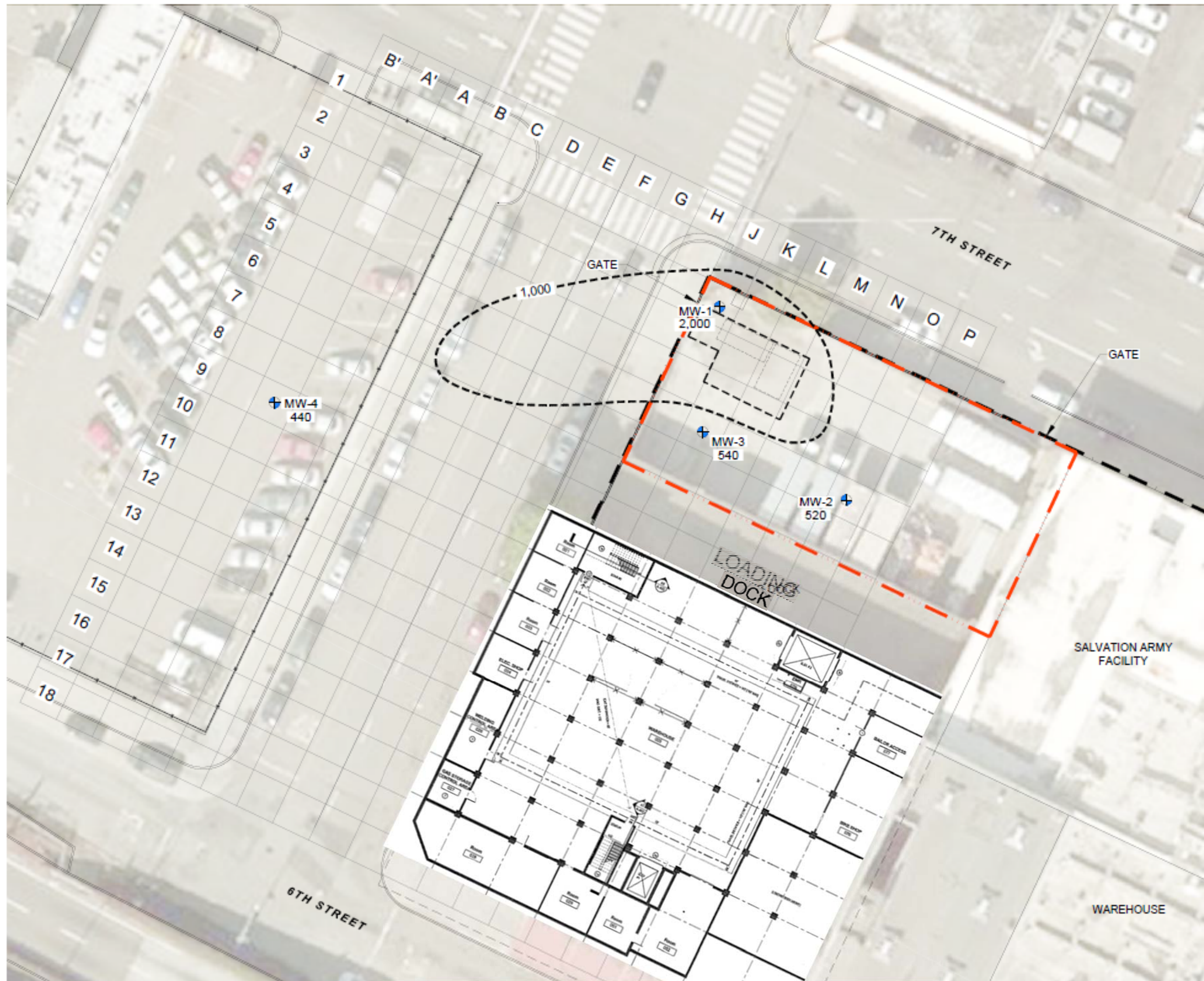
cc via email:

Major LeAnn Trimmer, Secretary for Business, The Salvation Army ARC Command
Major Jack Phillips, Bay Area ARC Coordinator, The Salvation Army
Captain Tim Rocky, Business Administrator, Oakland ARC, The Salvation Army

Attachments



FIGURES



- LEGEND**
- APPROXIMATE FACILITY BOUNDARY
 - FORMER UST
 - FORMER EXCAVATION
 - TRUCK ENCLOSURE AREA
 - + MONITORING WELL LOCATION
 - 540 BENZENE ISOCONCENTRATION ($\mu\text{g/L}$)
 - BENZENE ISOCONCENTRATION LINE

0 30' 60'

SCALE, FT

NOTE: SCALE AND LOCATIONS ARE APPROXIMATE



Warehouse Building Footprint on Benzene in GW Isoconc Map - October 23, 2015

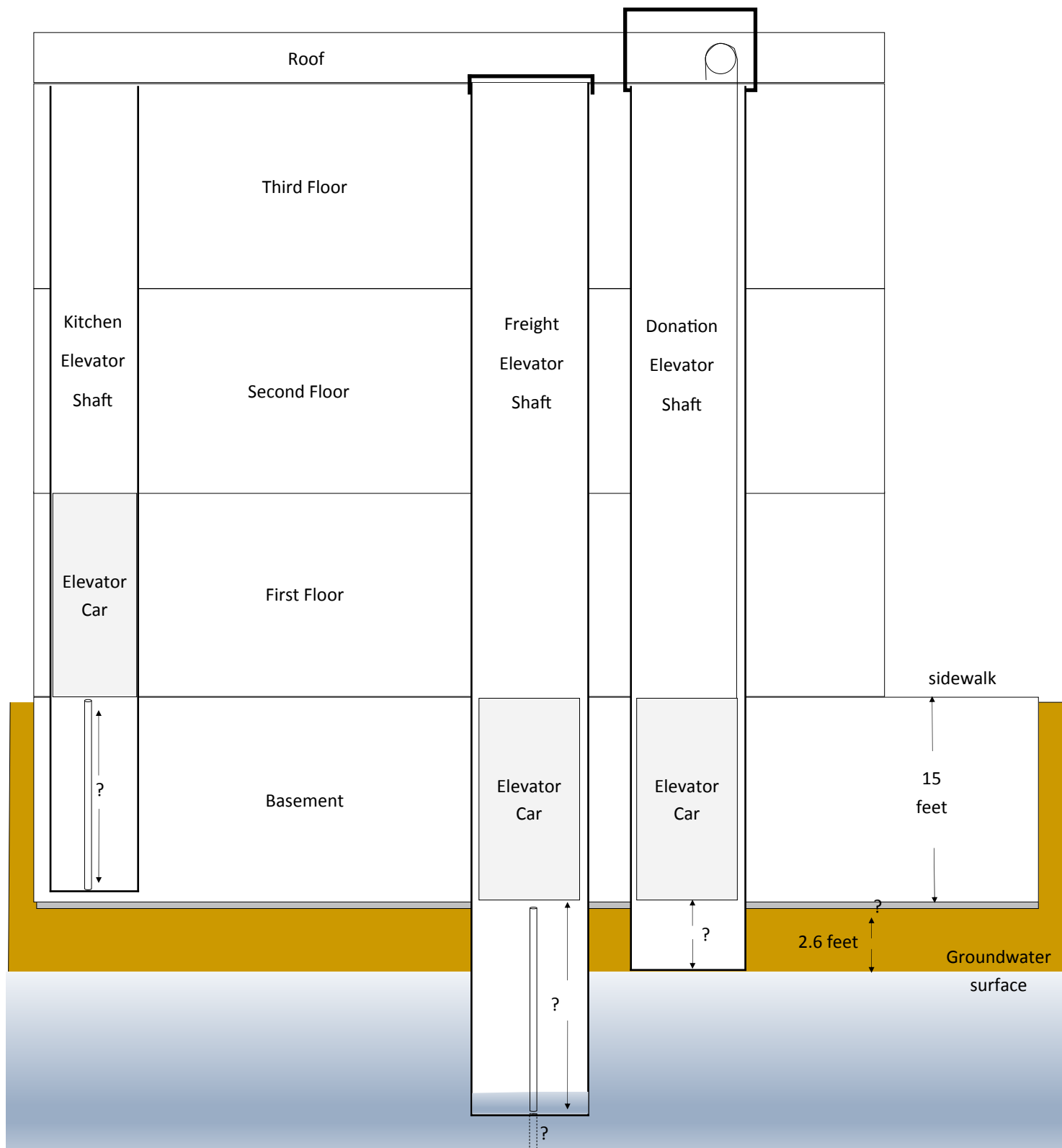
The Salvation Army
Adult Rehabilitation Center (ARC)
601 Webster Street
Oakland, California 94612

PROJECT NUMBER: 2004000006
DATE: 4-13-15
APPROVED BY: M. BONNE
DRAWN BY: TH

Figure 1

1117 Lone Palm Avenue, Ste. 201
Modesto, California 95351
Ph: (209) 579-2221 *** Fax: (209) 579-2225

ATC
Environmental - Technical
Health Sciences - Industrial Hygiene



Not to Scale

**Cross Sectional Representation
of ARC Building Features
Relative to Groundwater**

**The Salvation Army
Adult Rehabilitation Center (ARC)
601 Webster Street
Oakland, California 94612**

PROJECT NUMBER: Z054000006

TASK NO:

REVIEWED BY: GS

DRAWN BY: MDS



1117 Lone Palm Ave. Ste. 201B
Modesto, CA 95351

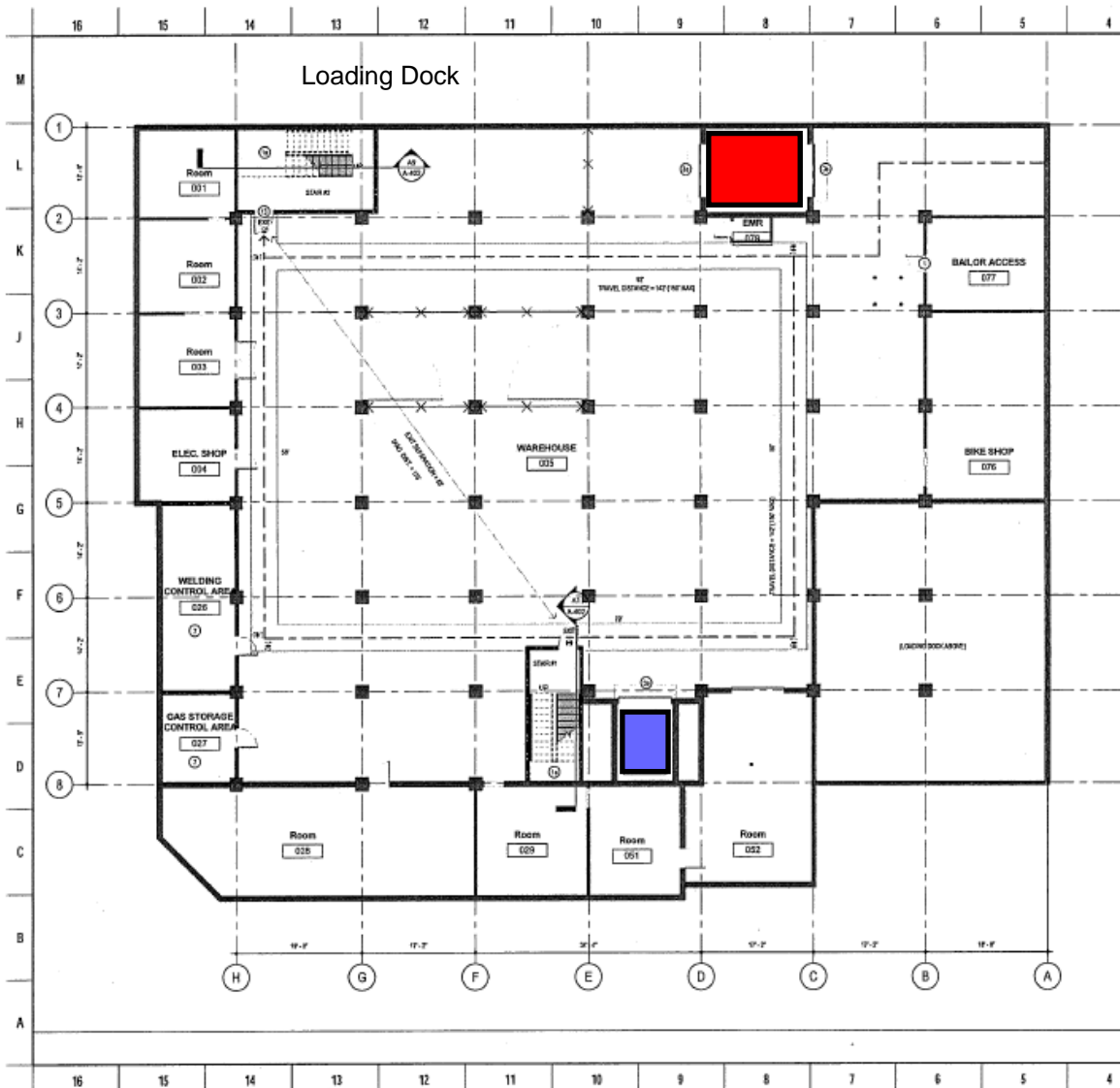
Phone: (209) 579-2221



Fax: (209) 579-2225


**Fig
2**



PROJECT NUMBER: Z054000006	DATE: Spring 2016	ARC Building Warehouse Basement Survey Line of Sight	Figure
APPROVED BY: JH	DRAWN BY: MDS		
ATC	1117 Lone Palm Ave. Suite 201 Modesto, CA 95351 (209) 579-2221	The Salvation Army 601 Webster Oakland, California	3



	Freight Elevator
	Donations Elevator

PROJECT NUMBER: Z054000006	DATE: Spring 2016	ARC Building Warehouse Basement Footprint with Elevator locations	Figure
APPROVED BY: JH	DRAWN BY: MDS		
	1117 Lone Palm Ave. Suite 201 Modesto, CA 95351 (209) 579-2221	The Salvation Army 601 Webster Oakland, California	4



ATTACHMENTS

Field Report

FLD-100

Revision 0.0

Jul-08

ATC Branch: Modesto, CA		Date: 5-11-16	Page 1 of 1
ATC Representative(s): JK, MS		Project: The Salvation Army - Oakland	
Role: Technician		Location: 601 Webster, Oakland, CA	
Contact Information:		Project No: 2054000006	Task No: 06054
Scope of Work:		Weather: Partly Cloudy	Temperature:
<input checked="" type="checkbox"/> Monitoring <input checked="" type="checkbox"/> Assessment <input type="checkbox"/> Remediation <input type="checkbox"/> Closure		Contractor: —	

Time:	Comments:																														
1030	ATC onsite; check in w/ lot & dock managers																														
	open MW 1, check skylights in sidewalk for opening to directly measure floor of basement, and check against side of survey rod.																														
	Enter basement and deploy extendable 35' rod through skylight hole, using cone and rod man to protect rd on sidewalk																														
	set up level on sidewalk between MW-1 & skylight; set feet and level instrument w/ bubble																														
	<table border="1"> <thead> <tr> <th>Station</th> <th>Sight</th> <th>HI</th> <th>Sight</th> <th>Elev.</th> <th></th> </tr> </thead> <tbody> <tr> <td>MW 1</td> <td>HI</td> <td></td> <td></td> <td>32.08</td> <td>per Morrow Surveying 10-23-15</td> </tr> <tr> <td></td> <td>4.71</td> <td>36.79</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Floor</td> <td></td> <td>20.96</td> <td>15.83</td> <td></td> <td>floor of basement beneath sidewalk</td> </tr> <tr> <td></td> <td></td> <td></td> <td>16.25</td> <td></td> <td>Elevation difference</td> </tr> </tbody> </table>	Station	Sight	HI	Sight	Elev.		MW 1	HI			32.08	per Morrow Surveying 10-23-15		4.71	36.79				Floor		20.96	15.83		floor of basement beneath sidewalk				16.25		Elevation difference
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			16.25		Elevation difference																										
	Measured depth to groundwater in MW-1 : 19.45'																														

Equipment Used:		
Contractor Hours (per Person):	Staff / Technician Hours:	Mileage:
Copies To:	Project Manager:	
	Reviewed By:	



PHOTOS



PHOTO 1:

Grid of sidewalk skylight used to access basement from sidewalk



PHOTO 2:

Telescoping survey rod extending through void resulting from missing glass block used as part of sidewalk skylight



PHOTO 3:

Survey instrument set up on sidewalk along Franklin Street adjacent to the TSA ARC Warehouse Building



PHOTO 4:

View to survey instrument from where the survey rod is set up on MW1 being used as the benchmark.



1117 Lone Palm Avenue
Suite 201
Modesto, CA 95351
(209) 579-2221

PHOTOS - Elevation Survey of Basement

Project Number: Z054000006

Designed by: MDS

File Photos

Reviewed by: GS

Drawn by: MDS

Date: May 2016

The Salvation Army
601 Webster
Oakland, California



PHOTO 5:

View of the Donation elevator shaft that extends below the floor of the TSA ARC Building basement. No water is visible.



PHOTO 6:

Access door to Freight elevator in TSA ARC Building basement.



PHOTO 7:

Gap between the Freight elevator car and its shaft used to view Freight elevator shaft extending below basement floor. Note flash reflection off standing water in elevator shaft.



PHOTO 8:

Similar but slightly different view of the Freight elevator shaft extending below basement floor. Note flash reflection off standing water in elevator shaft.



1117 Lone Palm Avenue
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PHOTOS - Elevators in ARC Building

Project Number: Z054000006

Designed by: MDS

File Photos

Reviewed by: GS

Drawn by: MDS

Date: May 2016

The Salvation Army
601 Webster
Oakland, California