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July 19, 2017

RECEIVED
By Alameda County Environmental Health 9:37 am, Aug 04, 2017

Alameda County Environmental Health

1131 Harbor Bay Parkway

Alameda, CA 94502-6577

Re: American Reprographics Company, L.L.C. (f/k/a City Blue Print)

ACEH LOP RO#151

1700 Jefferson Street Oakland, CA 94612

I have read and acknowledge the content, recommendations and/or conclusions contained in the attached document or report submitted on my behalf to ACDEH's FTP server and the SWRCB's GeoTracker website.

Sincerely,

D. Jeffery Grimes, Vice President, Senior Corporate Counsel & Corporate Secretary

Authorized Representative

Attachment: Report

APPLIED WATER RESOURCES
CORPORATION

2363 Mariner Square Drive, Suite 245, Alameda, California 94501

July 18, 2017

Mark Detterman, PG, CEG
Senior Hazardous Materials Specialist
Alameda County Department of Environmental Health
Local Oversight Program (LOP)
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

Subject: Response to Conditional Work Plan Approval (ACDEH, July 7, 2017)
City Blue Print, 1700 Jefferson St., Oakland, CA 94612
Fuel Leak Case RO0000151 and Geotracker Global ID T0600100196

Dear Mr. Detterman,

AWR prepared this letter on behalf of ARC to respond to ACDEH's "Conditional Work Plan Approval", July 7, 2017, which commented on AWR's "Additional Investigation Work Plan for 581 18th Street, Oakland, California", July 7, 2017 (hereinafter referred to as "Work Plan"). To aid the reader, this letter incorporates verbatim, and in smaller blue font, the key text from the ACDEH Conditional Work Plan Approval and our responses are indented below each comment.

On July 13, 2017, representatives from Terraphase and AWR, accompanied by Mr. Lance Lo (representing property/building owner Jefferson Court Commercial Ventures, LLC), inspected the building at 581 18th Street, Oakland to develop a floorplan of the building's courtyard level, identify potential preferential pathways from the sub-slab to the interior space, evaluate the ventilation system, and adjust the sampling locations proposed in the Work Plan based on information collected during the inspection. The responses provided herein are informed by observations and conversations during this inspection. Our observations of the building interior include the following:

- the concrete slab was observed to be intact and without obvious cracks,
- there are no elevator pits that extend below the courtyard level concrete slab floor,
- stairs connect the various building levels,
- a small steel plate is bolted to the concrete floor directly beneath the yellow sidewalk access doors on the south side of 18th Street, which may have been part of a former lift,
- there is no central HVAC system serving the building,
- about half of each courtyard level residential unit is elevated about 3.5 feet above the slab,
- the courtyard level common areas are open to atmosphere,

- no sewer lines or other major utilities were observed to penetrate the concrete slab,
- two 1-inch diameter galvanized pipes penetrate the slab in the common area behind the residential units,
- one 0.5-inch diameter grounding rod penetrates the slab near the two galvanized pipes,
- steel columns that support the building extend below the concrete slab; the bottom of one of the five columns that were observed was substantially corroded at its base, which exposed an opening approximately 9-inches below the top of the slab; the remaining steel columns were not accessible during the site visit,
- a PID with a detection limit of 1 ppb was used to screen the air throughout the area of the building's courtyard level that we inspected, including adjacent to the grounding rod penetration and compromised steel column, and revealed no measurable concentrations of volatile organic compounds or other contaminants in air.

The responses provided herein are informed by observations and conversations during this inspection.

Responses to ACDEH's "Conditional Work Plan Approval", July 7, 2017

Vapor Analysis - In addition to analysis for fixed gases (oxygen and carbon dioxide), please additionally include methane, and the tracer concentration in the shroud.

The sample will be analyzed for the following atmospheric gases by ASTM 1946 method: hydrogen, oxygen, nitrogen, carbon monoxide, carbon dioxide, methane, ethane, ethylene, and the leak tracer gas, helium.

Contingency Indoor Air Sampling – In the event that indoor air samples are appropriate, ACDEH is in general agreement with the collection of the proposed samples as described in the work plan (courtyard level and street level common area) as a first step; however, the sampling of additional floors may be necessary. In addition to mapping all levels, please identify stairs and any elevators which may act as conduits between levels.

Based on the data and the evaluation of potential risk to the quality of indoor air, additional samples of indoor air will be collected in locations based on the layout of the building, as required to further assess potential risks to indoor air.

Indoor Air Vapor Sampling HVAC on / HVAC off

The building inspection revealed that there is no central HVAC system within the building. Each unit may, or may not, be heated locally within the unit by electric or gas heat. Cooling and ventilation is performed by opening and closing windows within the units. In addition, on each level, doors and/or operating windows to the outside allow ventilation to atmosphere.

Soil Sampling and Analysis – In an effort to define the extent of soil contamination, ACDEH requests the collection of intact soil samples from the proposed ground water monitoring wells and soil vapor wells. The collection of data within the 0 to 5 and 5 to 10 foot intervals may provide alternative means to understand the site; however, representative soil samples should be collected at major lithologic changes and signs of contamination (PID

response, odor, discoloration, etc.). Please analyze the samples for the chemicals of concern at the site, including naphthalene.

Physical access to the courtyard level with powered drilling equipment is problematic, because access is only by stairs and it is 13 feet below street level. Consequently, all drilling and sampling will be performed using manually operated equipment, similar to the recent courtyard sampling. As possible, we will collect soil samples using a manually powered piston driven core sampler as follows:

- Borings for the soil vapor wells:
  - Collect a soil sample immediately below gravel or sand fill (if present) underlying the building's concrete slab floor.
  - Collect soil samples from 4.5 to 5 feet below the bottom of the concrete slab. Based on prior investigations, this depth is expected to consist of silty sand, and is likely located just above the transition to the sand layer that contains the ground water table. The top of sand layer is expected to be from about 5.5 to 6 feet below the bottom of the slab. We note that the building slab appears to be at least 10 inches thick.
- Borings for the ground water samples:
  - Collect unsaturated soil samples between 5 and 10 feet below the bottom of the concrete slab, and within the sandy ground water bearing layer.

In addition to the above, soil samples will be collected where contamination is visually observed and/or indicated by the PID. All soil samples will be collected into USEPA method 5035 compliant Terracore containers and analyzed for total petroleum hydrocarbons as gasoline (TPHg), benzene, toluene, ethylbenzene, xylenes (BTEX), methyl tert-butyl ether (MTBE), and naphthalene by EPA method 8015/8260.

Well Survey – In order to meet state requirements for the collection of data from "permanent" data points, please survey all groundwater monitoring, soil vapor, and sub-slab vapor wells to Geotracker survey requirements.

During the building inspection, we requested and obtained verbal approval from Mr. Lo to perform the required well survey.

In addition to the above discussion, we request that ACDEH respond to Terraphase's "Memorandum of Comments (July 11, 2017) and our response to that same Memorandum regarding the following items:

- Location of the sub-slab samples, and possible subsequent indoor air samples, within the courtyard level residential units as described in the Work Plan, or outside the residential units as requested in the Terraphase Memorandum;

- Depth of the soil vapor samples within the deeper sandy zone that contains the water table, as described in the Work Plan, or within the overlying silty sand layer as requested in the Terraphase Memorandum;

- Installation and collection of ground water samples from two new monitor wells installed within the building as described in the Work Plan, or two grab ground water samples as requested in the Terraphase Memorandum;

- Standard laboratory turn-around time for the sub-slab vapor samples as described in the Work Plan, or expedited 24 hour laboratory turn-around as requested in the Terraphase Memorandum.

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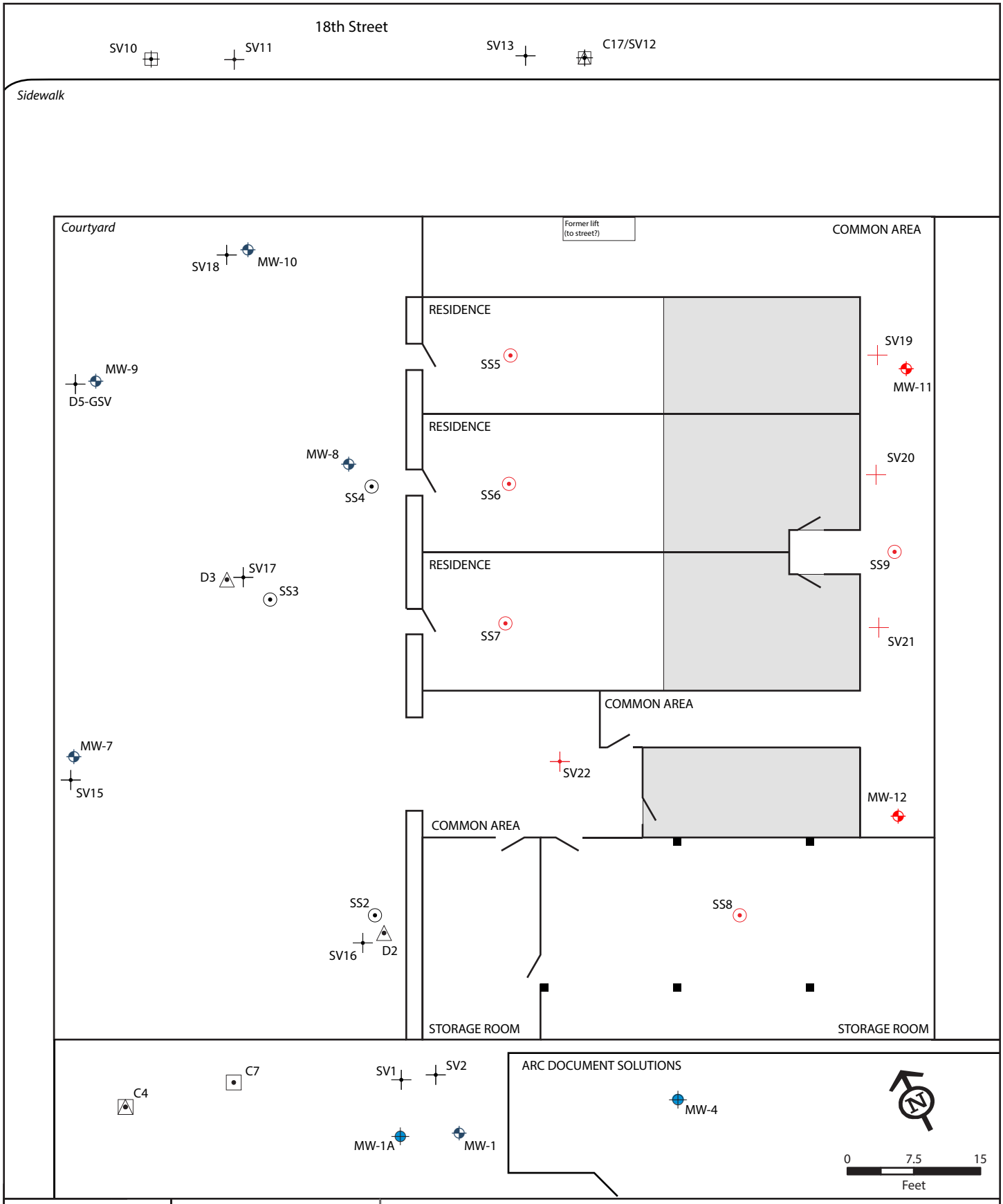
Please call me at 510-671-2085 to discuss any of the above.

Regards,

APPLIED WATER RESOURCES

Steven Michelson
Principal

cc: Andrew Lojo, Terraphase
Jeffery Grimes, ARC
Donald Sobelman, Downey Brand
Jeffrey S. Lawson, Silicon Valley Law Group



APPLIED WATER RESOURCES

Figure 1

Revised Proposed Sampling Locations

07/17/2017

581 18th St, Oakland, CA

- Proposed Monitor Well
- Proposed Soil Vapor Well
- Proposed Subslab Soil Vapor Well
- Elevated Flooring
- Subslab Soil Vapor Well
- Soil Vapor Well
- Monitor Well
- Extraction Well
- Grab Ground Water
- Grab Soil