**Coles Environmental Consulting, Inc.**

750 South Rosemont Road, West Linn, OR 97068
503-636-3102, Fax: 503-699-1980

5 January 2011

Mr. Christopher Maurer
VCP Site Manager
Toxics Cleanup Program, HQ
Department of Ecology
PO Box 47600
Olympia, WA 98504-7600

RECEIVED

JAN 10 2011

**DEPT OF ECOLOGY
Toxics Cleanup Program**

Dear Mr. Maurer:

Regarding: **Proposal for a Pre-Closure Subsurface Investigation at the Short Stop 1 Site,
6317 California Ave., SW, Seattle, Washington
(Facility ID No.: 92888299; VCP Project No.: NW1610)**

Based on our meeting in Lacey on 30 August 2010, we agreed that two tasks were needed to be completed prior to considering closure of this site. The first was to enter the existing groundwater monitoring data into Ecology's EIM database. That process has been completed, with assistance from Jenna Durkee (Ecology) and Apex Laboratories (David Jack). The other task was to conduct a limited subsurface investigation to fill several data gaps concerning: subsurface conditions at the former gasoline tanks' pit, the current status of vadose-soil contamination near the dry cleaner, and the groundwater conditions off site in the downgradient direction from the dry cleaner. The subsurface investigation can be divided into the following subtasks:

- 1) Determine whether residual gasoline contamination remains near the old tank pit (PP-1 and PP-2);
- 2) Determine whether there is significant residual PCE in the vadose soils near the dry cleaner (PP-3 through PP-5); and
- 3) Determine whether PCE in the groundwater has migrated downgradient, beyond the property line, under Eddy Street (MW-6).

For your convenience, I have included Figures 1-3, which establish the site location and local topography. These figures were from the 9 April 2008 report, which I provided to you. Figure 4 is a site diagram showing the locations of five existing monitoring wells. It also shows the proposed locations for five push probes and a downgradient monitoring well (MW-6). Figures 5-8 display the potentiometric surface maps derived from the four quarterly monitoring rounds conducted in 2007. As they indicate, the groundwater flow is consistent with the local topography. It flows from the north (MW-1) southward toward Eddy Street. Figure 9 shows data flags from samples collected during the six groundwater monitoring rounds conducted to date.

Push probes PP-1 and PP-2 are placed on opposite sides of the former tank pit. Surface features define the location of the pit. These two probes are intended to determine whether any residual gasoline is present near the former tanks' location. No gasoline constituents have been observed in any of the monitoring wells sampled by CEC. PP-1 is upgradient and PP-2 is downgradient of the tanks.

Probes 3-5 are placed around the three accessible sides of the dry cleaner. PP-3 is upgradient and located in the parking lot in front of the dry cleaner. PP-4 is located outside of the back door which can be interpreted as either cross-gradient or downgradient of the facility. PP-5 is located downgradient of the facility near MW-3. Again, the purpose of these borings is to determine whether significant residual chlorinated hydrocarbon contamination is present in the vadose soils.

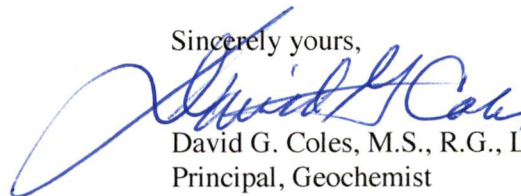
The probes will be advanced to a depth of at least 15 feet below ground surface (bgs). Groundwater depths observed vary minimally with the season and range from 11 feet to 14 feet bgs. The continuous cores obtained from both borings will be field logged for lithology and scanned with a PID. Based on visual, PID, and odor evidence, up to three samples per core will be collected using EPA's soil sampling Method 5035 for VOCs. One sample will be collected from the soil/water interface at each location. Samples from PP-1 and PP-2 will be analyzed for gasoline by Method NWTPH-Gx and for BTEX, naphthalene, and MTBE by Method 8021B. Samples from probes PP-3, PP-4, and PP-5 will be analyzed for chlorinated hydrocarbons by Method 8260B. All samples will be contained in an ice chest and transported to the laboratory (Apex Laboratories, Tigard, OR) under a proper chain-of-custody.

The push probe system also will be used to install monitoring well MW-6 in the center of Eddy Street, downgradient from MW-3. The purpose of this well is to establish whether significant groundwater contamination is present off site and potentially migrating farther downgradient from the dry cleaner source. The probe will be advanced to a total depth of 20 feet bgs. A soil sample at the soil/groundwater interface will be collected and shipped in the same manner described above for the other probe soil samples. It also will be analyzed for chlorinated hydrocarbons by Method 8260B. The well will be constructed using a prepacked screen and screened from five feet bgs to total depth. The surface completion will be a flush-mount well vault. Please note that because this well is located within a City street (albeit not one with traffic), the City of Seattle will have to approve access to the site.

After the new well is installed, developed, and the groundwater allowed to equilibrate with the aquifer for one week, a full groundwater monitoring round will be completed for all six wells. Data from this round, as well as the results from the probe soil samples, will be provided to you in a technical report. The report will recommend what additional activities, if any, are needed to close the site.

The schedule for this work is early Spring 2011, pending your approval of this brief work plan. Please call or email me with any comments or questions on this proposed work plan (503-636-3102; dcolescec@comcast.net).

Sincerely yours,



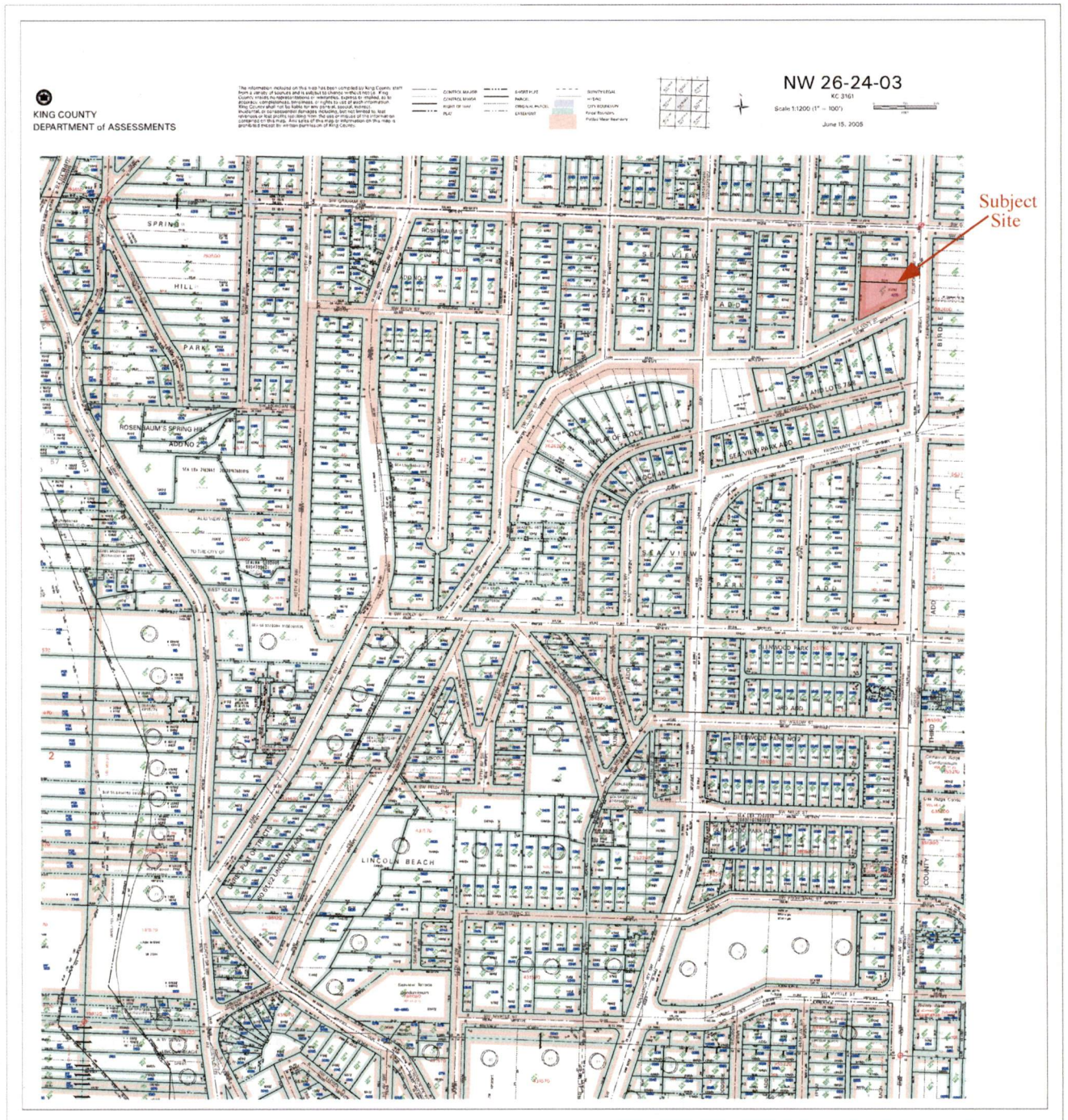
David G. Coles, M.S., R.G., L.G.
Principal, Geochemist

Attachments: Figures 1-9

c: Bud Pontius
CEC Project File



**TAX LOT MAP SHOWING THE LOCATION OF THE SHORT STOP 1 SITE
6317 CALIFORNIA AVENUE, SW
SEATTLE, WASHINGTON**



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Approx. Scale: 1" = 500'	Approved By	Date/Revision
		02/28/08 Rev. 0

Note: From the King County Department of Assessments' GIS web site.

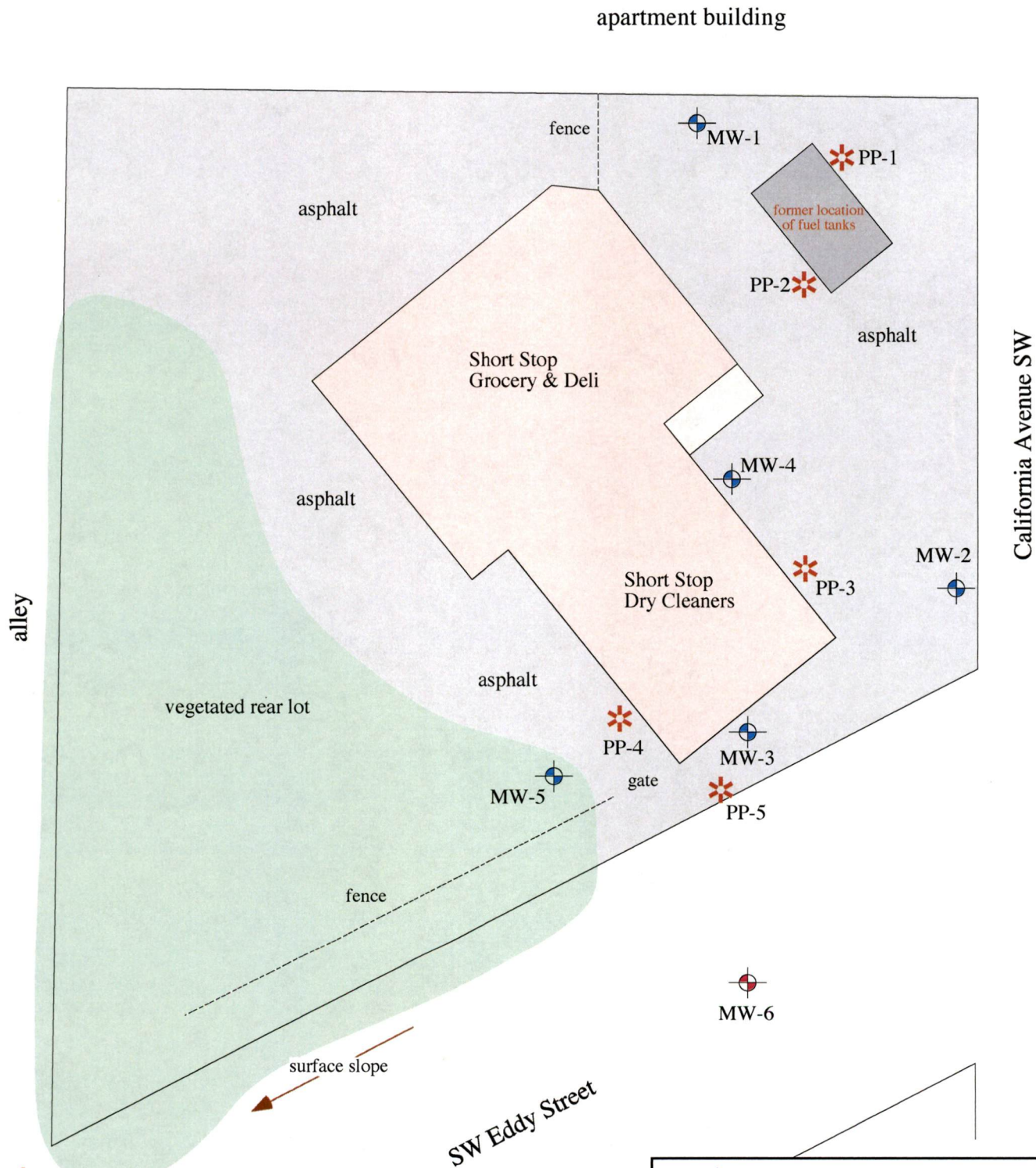
Figure 1. Tax-lot map showing the location of the Short Stop 1 site, 6317 California Avenue, SW, Seattle, WA.



Recent Google Earth photograph, date unknown. Property line shown (yellow) is approximate.

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Approx. Scale: 1" = 50'	Approved By	Date/Revision
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Figure 2. Aerial photograph showing site features at the Short Stop 1 site, 6317 California Avenue, SW, Seattle, WA.		

SHORT STOP SITE, SHOWING EXISTING WELLS AND PROPOSED LOCATIONS FOR NEW WELLS AND PROBES



- = proposed probe location
- = proposed monitoring-well location
- = existing monitoring-well locations

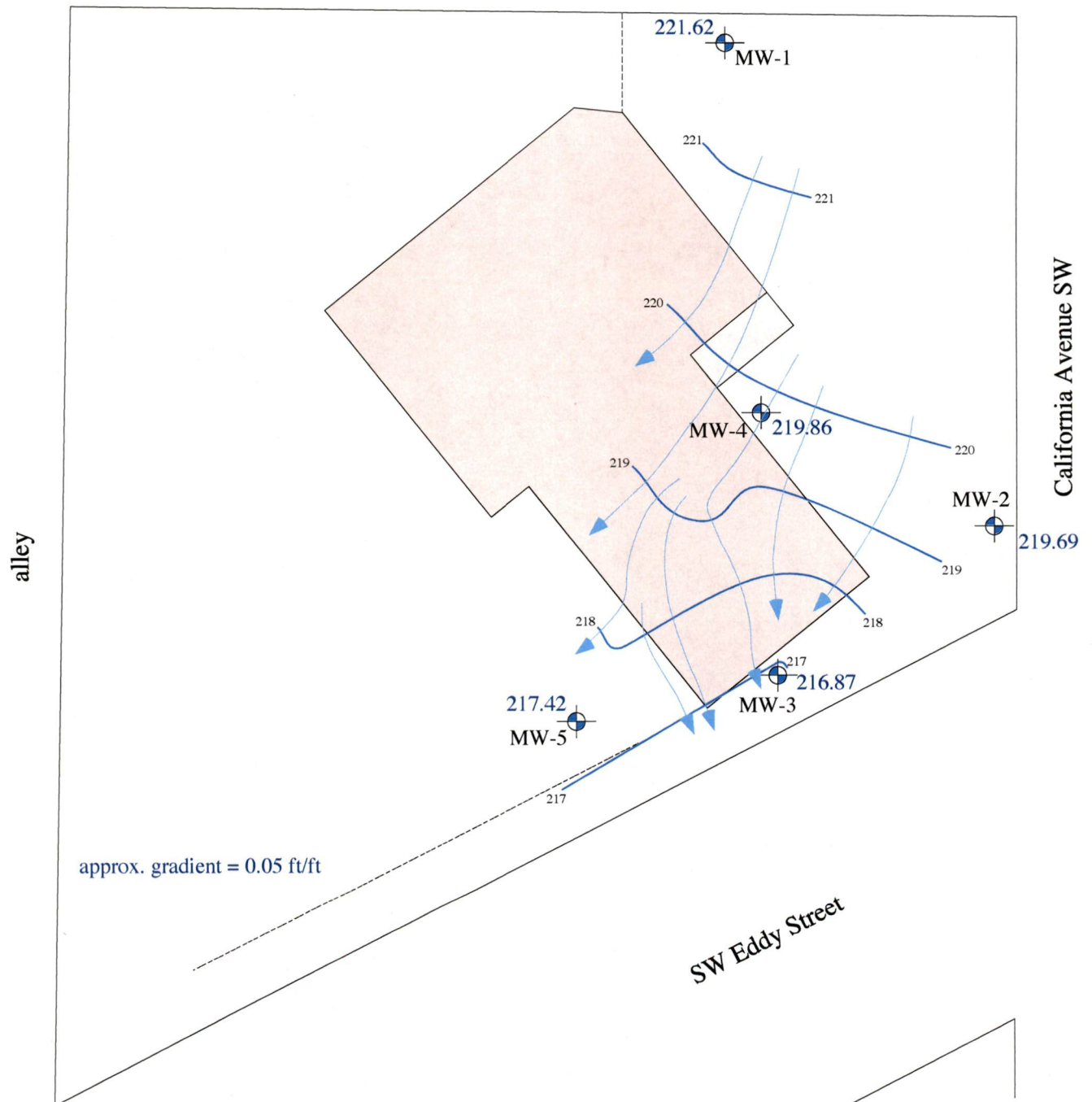
Note: Locations of site features approximate. Well locations based on diagrams from Stemen Environmental, Inc. (15 May 2003). Well designations from stamped numbers on well monuments.

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Approx. Scale: 1" = 25'	

Figure 4. Diagram showing site features and monitoring wells at the Short Stop 1 site, 6317 California Avenue, SW, Seattle, WA.



GROUNDWATER FLOW FOR 19 FEBRUARY 2007



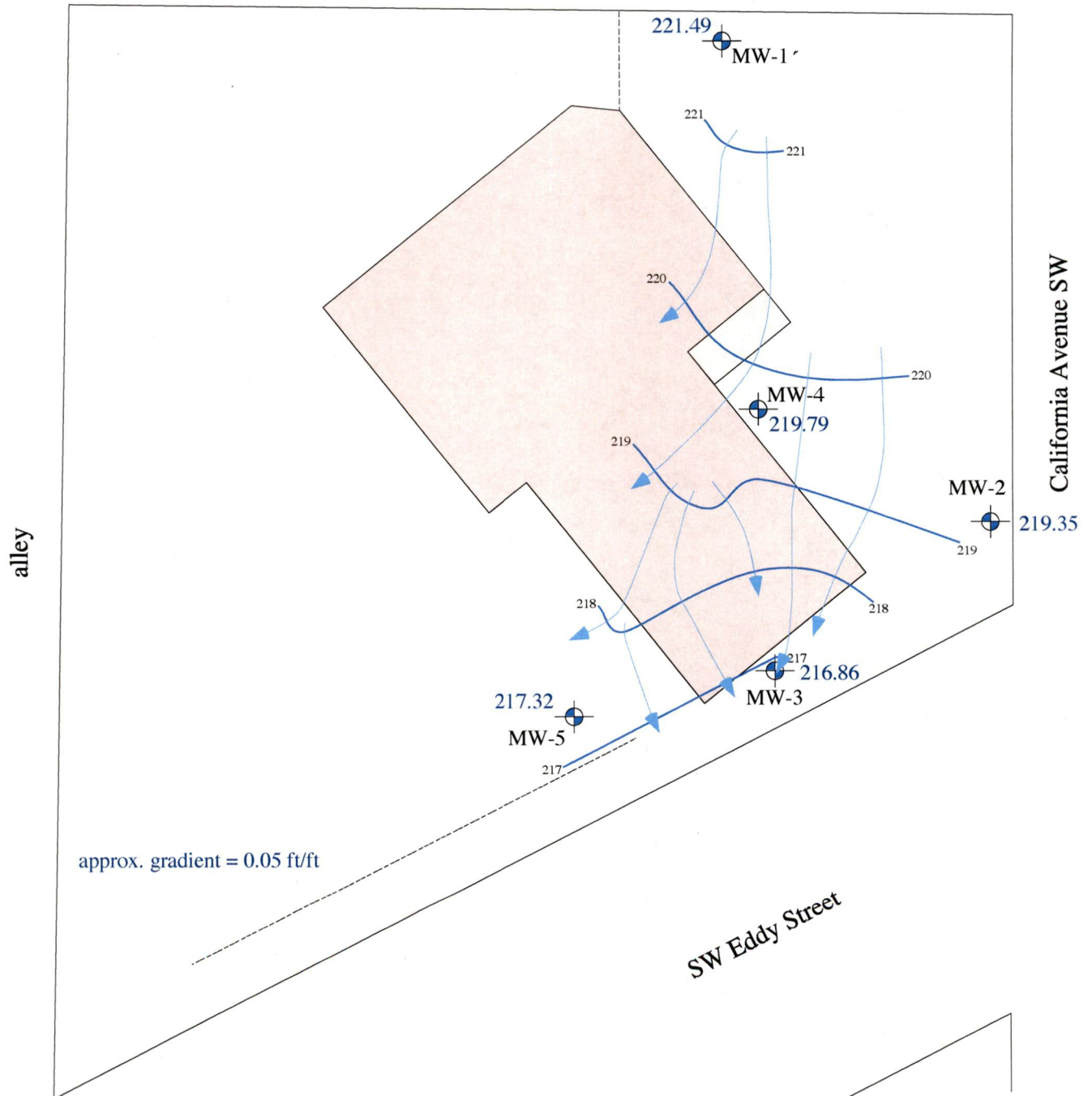
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Figure 5. Diagram showing CEC's interpretation of the groundwater flow based on measurements taken during the 2/19/07 monitoring round.



GROUNDWATER FLOW FOR 21 MAY 2007



Note: Locations of site features approximate. Well locations based on diagrams from Stemen Environmental, Inc. (15 May 2003). Well designations from stamped numbers on well monuments.



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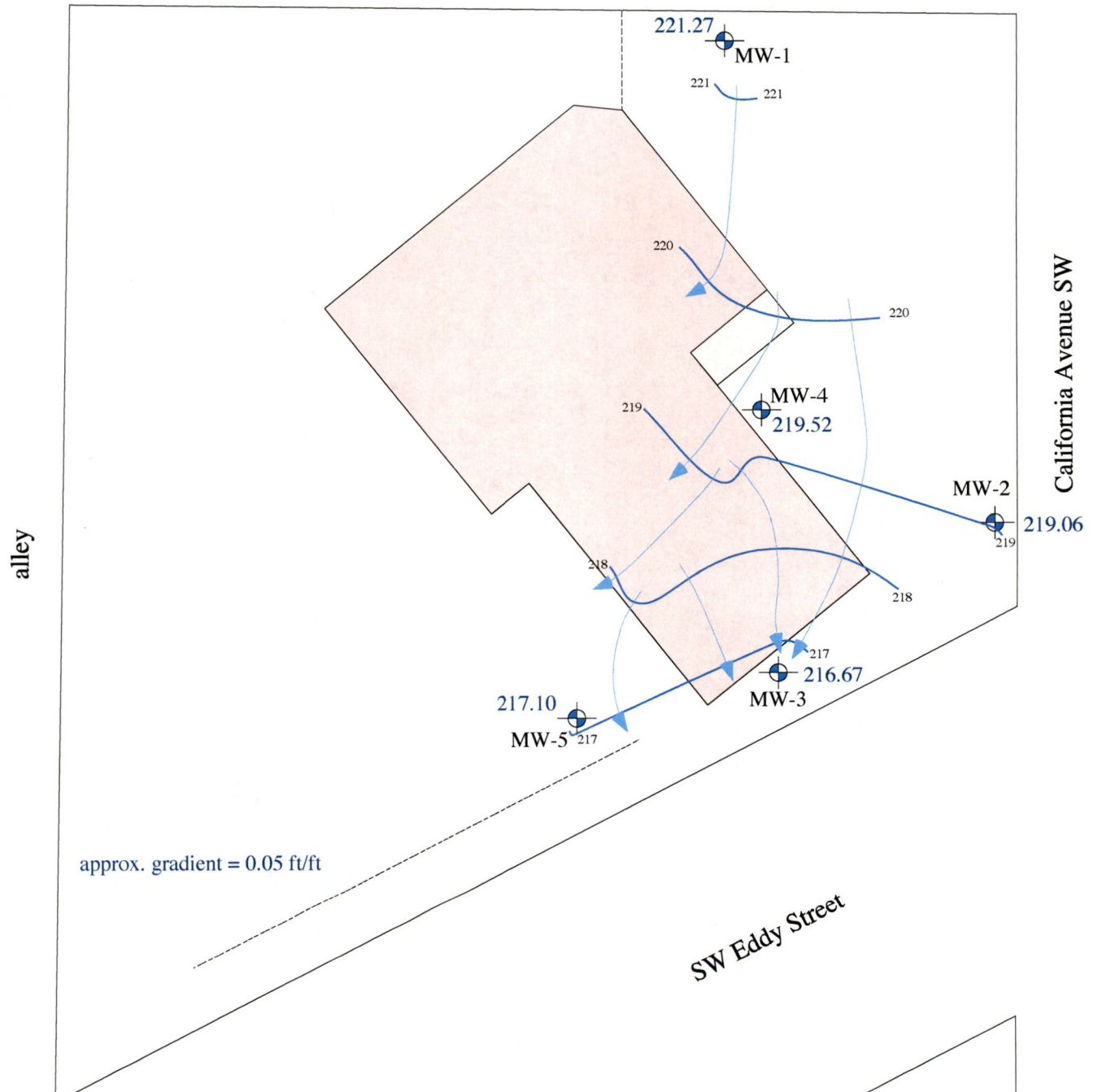
Approx. Scale: 1" = 25'

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	03/24/08
	Rev. 0

Figure 6. Diagram showing CEC's interpretation of the groundwater flow based on measurements taken during the 5/21/07 monitoring round.



GROUNDWATER FLOW FOR 20 AUGUST 2007

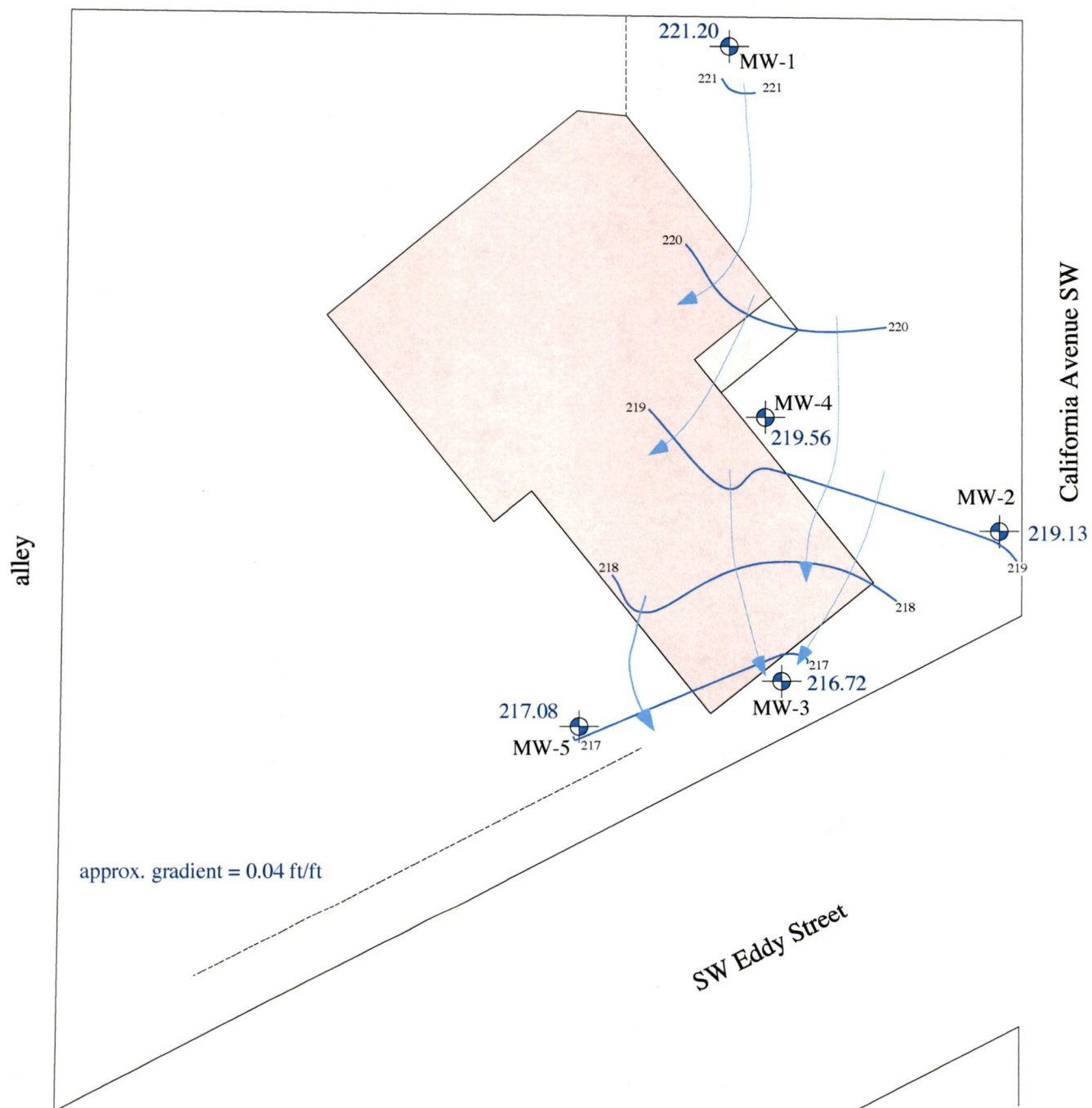


Note: Locations of site features approximate. Well locations based on diagrams from Stemen Environmental, Inc. (15 May 2003). Well designations from stamped numbers on well monuments.

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Figure 7. Diagram showing CEC's interpretation of the groundwater flow based on measurements taken during the 8/20/07 monitoring round.		



GROUNDWATER FLOW FOR 20 NOVEMBER 2007



Note: Locations of site features approximate. Well locations based on diagrams from Stemen Environmental, Inc. (15 May 2003). Well designations from stamped numbers on well monuments.

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Figure 8. Diagram showing CEC's interpretation of the groundwater flow based on measurements taken during the 11/20/07 monitoring round.

