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Clayton GROUP SERVICES

October 30, 2002

Donna Drogos
Supervising Hazardous Materials Specialist
ALAMEDA COUNTY ENVIRONMENTAL HEALTH DEPARTMENT
1131 Harbor Bay Parkway
Alameda, CA 94502-6577

Clayton Project No. 70-03365.01

Subject: Workplan for Phase II Environmental Site Assessment of the Former Dunne Paints Facility, 1007 41st Street in Oakland/Emeryville and 4050 Adeline Street in Emeryville, California

Dear Ms. Drogos:

Clayton Group Services, Inc. (Clayton) is pleased to present this workplan to conduct a Phase II Environmental Site Assessment (ESA) of the above-referenced subject property. This workplan is presented in order to facilitate the redevelopment of the subject property and to address the concerns of the Alameda County Environmental Health Department (ACEHD). This workplan is based on the results of our Phase I ESA (dated September 25, 2002), the planned redevelopment, and incorporates the results of our October 18, 2002 meeting with you.

PLANNED REDEVELOPMENT SUMMARY

The subject property will be purchased and redeveloped in the near future with 5 buildings containing 62 loft-style residential condominiums. The height of these buildings will be between 3 and 5 stories. The existing buildings will be demolished and a virtually zero lot-line excavation of the underlying soil will be conducted in order to allow for a half-basement garage structure underneath the future buildings, resulting in approximately 12,000 cubic yards of excavated subsurface material that will be disposed of offsite. In addition, dewatering activities will be conducted, as the planned excavation will encounter groundwater. The basement structure and buildings will be constructed over a bentonite mat foundation, which will prevent groundwater intrusion into the structure. Furthermore, the basement garage will separate the overlying residential buildings from the underlying soil.

SCOPE OF WORK

The scope of work presented herein consists of several Tasks for the Phase II ESA. These Tasks include pre-field activities, field activities, laboratory analysis, health risk assessment, and project management and report preparation. Each Task is described in the following discussion.

TASK 1: PRE-FIELD ACTIVITIES

The purpose of the pre-field activities is to appropriately plan the work and to ensure that onsite personnel are prepared for potential safety hazards at the property. The pre-field activities will include the following:

- Preparing a Site Safety and Health Plan (SSHP) to reflect the work proposed at the subject property. The SSHP would detail the work to be performed, safety precautions, emergency response procedures, nearest hospital information, and onsite personnel responsible for managing emergency situations.

- Marking the site boundaries with white paint and notifying Underground Service Alert (USA) at least 48 hours prior to performing field activities drilling, as required by law.

- Utilizing a private utility locating service prior to conducting field activities.

- Obtaining drilling permit(s), as necessary, from the Alameda County Department of Public Works (ACDPW).

TASK 2: FIELD ACTIVITIES

There are two primary purposes for performing the Phase II ESA. First, Clayton will evaluate soil conditions within the area to be excavated during redevelopment activities in order to appropriately characterize the soil for offsite disposal and for worker health & safety. Through this, soil from areas of concern will be discretely sampled. Second, Clayton will characterize the groundwater conditions at the subject property. A total of 16 borings will be advanced at approximately equidistant spacing throughout the subject property, as depicted on the attached Figure (Attachment 1). The 16 borings will be located in Areas 1 through 4 as follows:

- **Area 1→** Laboratory (B-1), paint mill (B-2 and B-4), solvent mixing room (B-3)

- **Area 2→** Two sumps (B-5 and B-7), varnish kitchen (B-6 and B-8)

- **Area 3→** UST dispenser and piping (B-10 and B-12, respectively), resin ASTs (B-11), latex paint blending room (B-9)

- **Area 4→** Historic outdoor storage area (B-13 and B-14) and downgradient locations (B-15 and B-16)

Composite Soil Sampling

Subsurface borings will be advanced both inside and outside of the current buildings to depths within 15 feet below ground surface (bgs) and soil samples will be collected from these borings. At this time, we anticipate that at least three soil samples will be collected from each of the 16 borings as follows:

- One (1) soil sample will be collected from the fill layer expected to be encountered from the ground surface to between 3 and 4-feet bgs;
- One (1) soil sample will be collected from the vadose zone beneath the fill zone and the groundwater table (which is expected to occur around 7 feet bgs);
- One (1) soil sample will be collected from soil underneath the groundwater table.

These 48 soil samples will be composited by the laboratory into 12, 4-point composite samples for analysis from each Area as shown on the attached Figure.

Discrete Soil Sampling

In addition, 10 soil samples will be discretely sampled in the areas of concern (*e.g.*, solvent mixing room, paint mill, latex blending room, varnish kitchen, sumps, UST dispenser and piping, resin ASTs, and historic area of outdoor storage) based on field observations (*e.g.*, odors, discoloration, chemical sheen). If field observations do not reveal the obvious presence of contamination, then a discrete soil sample will be collected from within the vadose zone, below the fill layer.

Please note that the exact soil sampling depths will be determined based on field observations. Clayton will screen soil cores for lithology and physical evidence of contamination (*e.g.*, odors, discoloration, chemical sheen). We would also screen soil at 2.0-foot intervals for ionizable substances using an organic vapor analyzer (OVA) or photo-ionization detector (PID). Additional soil samples may be collected depending on observations, changes in lithology, elevated OVA/PID readings, etc. A 6.0-inch long soil sample will be cut from the acetate sample tube, sealed with Teflon tape, capped, labeled, and placed in a pre-chilled ice chest. Collected soil samples would be transported to a State of California-certified laboratory under formal chain-of-custody documentation.

Clayton will advance borings using direct-push, Geoprobe® drilling equipment. Concrete coring is anticipated since most of the areas to be investigated are capped by concrete building foundations or concrete pavement.

Downhole equipment will be cleaned prior to advancing each boring and prior to collecting samples. The rinseate will be containerized and removed from the property after the field activities are complete.

Groundwater Characterization

The 16 borings will be developed into temporary well points for collecting grab groundwater samples at each boring location. This will result in groundwater characterization within potential source areas and in the upgradient and downgradient locations of the subject property. Grab groundwater sampling points will be advanced into the saturated zone to approximately five feet below the first encountered groundwater. Once the total depth has been achieved, a temporary one-inch outer diameter PVC casing will be placed into the open borehole. The lower five feet of casing will be slotted screen. The grab groundwater samples will be collected using a stainless steel/disposable bailer, and transferred into appropriate laboratory supplied containers. The sample containers will be capped/sealed, labeled with identifying information and placed in a pre-chilled ice chest for transportation to the analytical laboratory under formal chain-of-custody documentation. The grab groundwater samples will also be field measured for pH, conductivity, and temperature.

Once the fieldwork is complete, borings will be filled to the ground surface with cement grout. Waste generation during the fieldwork is expected to consist of soil cuttings. We anticipate leaving one 55-gallon drum containing soil cuttings onsite after field activities are complete, which will be disposed of offsite pending analytical results.

TASK 3: LABORATORY ANALYSES

The 48 soil samples for compositing, 10 discrete soil samples, and 16 grab groundwater samples will be submitted for analysis to a State of California-certified analytical laboratory. The laboratory analyses will be conducted on a standard 5 to 10-day turn-around-time (TAT).

Soil Analyses

Clayton proposes performing initial soil analyses on 4-point composite soil samples, which is typically acceptable for characterizing waste material. The soil sample compositing will be done according to sample depth and material horizon. At this time, Clayton expects to submit three soil samples from each of the 16 borings for analysis (48 soil samples) as well as 10 discrete soil samples (58 soil samples total). The laboratory will be requested to composite and analyze a 4-point composite from samples collected in 1) in the fill layer, 2) in the vadose zone underneath the fill layer, and 3) from underneath the groundwater table. The 4-point composites will be collected from 4 Areas of the subject property as depicted in Attachment 1. This compositing scheme will result in our analyzing 12, 4-point composites collected from 16 boring locations across the subject

property. In addition, 10 soil samples will be discretely analyzed. Therefore, a total of 22 soil samples will be analyzed.

The 22 soil samples will be analyzed using United States Environmental Protection Agency (USEPA)-approved methods. Clayton proposes the following analytical suite:

- USEPA Method 8015M for total petroleum hydrocarbons (TPH), quantified for gasoline, diesel, motor oil, mineral spirits, and kerosene-*12 composite and 10 discrete soil samples*

- USEPA Method 8270 for semi-volatile organic compounds (SVOCs)-*4 composite soil samples (one from each Area within the fill zone) and 2 from the vadose zone within Areas 2 and 3 (6 total)*

- USEPA Method 8260 for volatile organic compounds (VOCs), including benzene, toluene, ethylbenzene, and xylenes (BTEX, collectively), and methyl tertiary butyl ether (MTBE)-*12 composite and 10 discrete soil samples*

- USEPA Method 6010 for California Assessment Manual (CAM) 17 total metals (CAM 17)-*12 composite and 10 discrete soil samples*

- USEPA Method 8080 for polychlorinated biphenyls (PCBs)- *4 composite soil samples (one from each Area within the fill zone) and 2 from the vadose zone within Areas 2 and 3 (6 total)*

Depending on the analytical results, analysis for soluble analytes may become necessary. In this event, Soluble Threshold Limit Concentration (STLC), and if warranted, Toxicity Characteristic Leaching Procedure (TCLP) analyses would be run.

Groundwater Analysis

The 16 grab groundwater samples will be analyzed using USEPA-approved methods. Clayton proposes the following analytical suite:

- USEPA Method 8015M for total petroleum hydrocarbons (TPH), quantified for gasoline, diesel, motor oil, mineral spirits, and kerosene (multiscan)

- USEPA Method 8260 for volatile organic compounds (VOCs), including benzene, toluene, ethylbenzene, and xylenes (BTEX, collectively), and methyl tertiary butyl ether (MTBE)

- USEPA Method 6010 for California Assessment Manual (CAM) 17 total metals (CAM 17). Samples will be collected in unpreserved bottles and filtered by the laboratory prior to analysis.

- USEPA Method 160.1 for Total Suspended Solids (TSS)
- USEPA Method 9045/9040 for pH

TASK 4: HEALTH RISK ASSESSMENT

Using the results of the Phase II ESA, a health risk assessment (HRA) will be developed. Since the majority of the soil will be removed from the subject property, the HRA will be predicated on groundwater beneath the foundation of the newly constructed property. Estimation of potential risks and hazards will be associated with the only potential complete pathway, that is, the indoor air pathway under residential conditions. The HRA will use all the available groundwater data collected from within the subject property boundaries. All risk and hazard estimates will be based upon the 95 percent upper confidence limit concentrations of constituents detected in groundwater as input data for the Johnson and Ettinger model. Further, any site-specific information reading building dimensions and groundwater temperature will be incorporated into the model.

TASK 5: PROJECT MANAGEMENT AND REPORT PREPARATION

Upon project completion of Phase II ESA task items, Clayton will prepare a written report summarizing the findings of work performed at the subject property. The report will include a description of the subject property, summary of investigative methodologies, figures depicting the sample locations, findings, conclusions, and recommendations.

If you have any questions, please feel free to contact us at 925.426.2600.

Sincerely,

Jesse D. Edmands
Supervisor
Environmental Assessments
Environmental Services

Jon A. Rosso, P.E.
Director
Environmental Services

REGISTERED PROFESSIONAL ENGINEER
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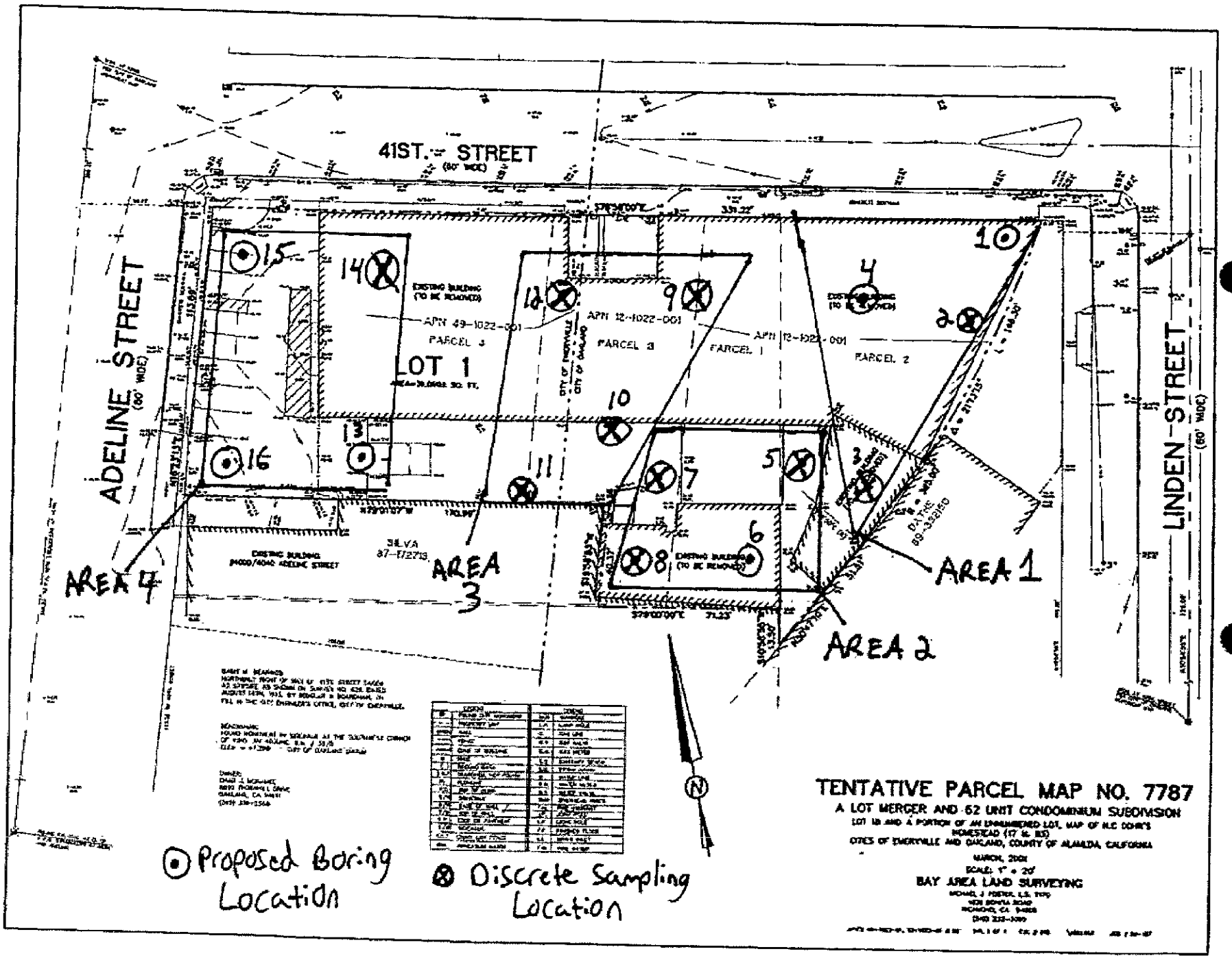
cc: Martin Samuels – Green City Lofts, LLC

Clayton GROUP SERVICES

ATTACHMENT 1

PROPOSED BORING LOCATIONS


41ST. STREET
ADELINE STREET
LINDEN STREET
LOT 1
PARCEL 3
PARCEL 1
PARCEL 2
APN 49-1022-001
APN 12-1022-001
APN 12-1022-001
EXISTING BUILDING (TO BE REMOVED)
EXISTING BUILDING (TO BE REMOVED)
EXISTING BUILDING (TO BE REMOVED)
DISTING BUILDING 4000/4040 ADELINE STREET
SILVA 87-172713
DAVIS 89-322150
AREA 4
AREA 3
AREA 1
AREA 2
N
TENTATIVE PARCEL MAP NO. 7787
A LOT MERGER AND 62 UNIT CONDOMINIUM SUBDIVISION
LOT 1B AND A PORTION OF AN UNNUMBERED LOT, MAP OF KLC COHN'S HOMESTEAD (17 M. 83)
CITIES OF EMERYVILLE AND OAKLAND, COUNTY OF ALAMEDA, CALIFORNIA
MARCH, 2001
SCALE: 1" = 20'
BAY AREA LAND SURVEYING
Proposed Boring Location
Discrete Sampling Location