Soil Management Plan

23835 Temescal Canyon Road
Corona, California 92883

Submitted to:
Riverside County Department of Environmental Health
4080 Lemon Street, 10th Floor,
Riverside, CA 92501

Stantec

Prepared for:
BBG KRG, Inc.
708 South Temescal Street, Suite 101
Corona, CA 92879

Prepared by:
Stantec Consulting Services, Inc.
735 East Carnegie Dive, Suite 280
San Bernardino, California 92408

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185806668

Stantec Consulting Services Inc.

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Prepared by

Signature

Joshua Sargent, PG

Senior Geologist

PROFESSIONAL GEOLOGIST
Joshua Glenn Sargent
No. 9730
STATE OF CALIFORNIA

Reviewed by

Signature

Dion Monge

Senior Scientist

Approved by

Signature

Kyle Emerson, CEG

Senior Principal Geologist

PROFESSIONAL GEOLOGIST
KYLE EMERSON
No. 1271
CERTIFIED
ENGINEERING
GEOLOGIST
STATE OF CALIFORNIA

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1 Introduction

In its role as the environmental professional, Stantec Consulting Services, Inc. (Stantec) has prepared this Soil Management Plan (SMP) for the property located at 23835 Temescal Canyon Road, unincorporated county of Riverside proximate to the City of Corona, California 92883 (the "Property" or "Site", **Figure 1**) on behalf of the Property owner, BBG KRG, Inc. The Site is identified by Riverside County Assessor's Parcel Numbers (APNs) 283-180-001, 283-180-02, 283-180-020, 283-180-021, and 283-260-020 comprising 28.8 acres of land currently occupied by Mission Clay Products, LLC, a clay pipe manufacturing facility (**Figure 2**).

It is Stantec's understanding that the Site is currently under regulatory oversight of the Riverside County Department of Environmental Health (RCDEH). According to historical documentation, three (3) underground storage tanks (USTs) were removed from the Site in 1993 under the oversight of RCDEH, resulting in the removal of approximately 1,800 cubic yards of petroleum-impacted soil. The impacted soils removed during the remediation process were reportedly placed in several stockpiles in the northeastern portion of the Site. Based on documentation reviewed, the RCDEH issued closure of the UST case in 1996 and allowed the impacted soil to remain on the Property in the stockpiles.

The Site is currently contemplated for redevelopment into a modern clay pipe manufacturing facility. Consequently, RCDEH was re-engaged to oversee the project. A Phase II subsurface investigation workplan was prepared at the request of RCDEH – by Construction Testing and Engineering, Inc. (CTE) *dba* Universal Engineering Sciences (UES). The workplan included a scope of work to investigate soil and soil vapor conditions at the Site, and was dated August 12, 2024 ("Workplan"). The Workplan has been approved by the RCDEH for implementation.

It is understood that a mitigated negative declaration (MND) would be submitted to the County of Riverside, in relation to the redevelopment of the Site, on August 26, 2024. The MND requires that the Workplan be implemented, the results reported RCDEH, and that the results be approved by RCDEH by that same date. Given the shortened timeframe for implementation of the approved Workplan, however, it has been agreed that the work proposed in the RCDEH-approved Workplan be incorporated into this SMP and that the work then be completed prior to any site re-development occurring. Therefore, the intent is for this SMP (which includes the Workplan) be delivered to the RCDEH to meet the deadline of August 26, 2024.

1.1 Purpose of SMP

The purpose of this SMP is to provide protocols for the proper management of unknown impacts to soil or subsurface features potentially encountered at the Property during grading and below grade construction activities in addition to the required assessment approved by RCDEH. The SMP has been developed to facilitate the redevelopment of the Site by outlining those specific procedures that will be used for identifying, testing, handling, and disposing of soil containing elevated levels of regulated constituents – if such soil is encountered during Site redevelopment activities.

Implementing the procedures in this SMP will help to ensure that soil from any encountered Soil Management Area (SMA) – which is any previously-unidentified area of potentially contaminated soil or any subsurface structure containing potential chemical contaminants – is managed in a manner that is protective of human health and the environment and is compliant with applicable federal, state, and local regulations.

A copy of this SMP will be available for reference during future on-Site earthwork activities, and it is the responsibility of the General Contractor and applicable subcontractors to ensure it is followed. In addition, this SMP also includes the scope of work for performing RCDEH-approved Workplan elements to investigate the placement of the historical UST stockpiles in the northeastern portion of the Site and also recently-placed stockpiles in the western portion of the Site, and to evaluate soil vapor conditions proximate to the manufacturing area.

1.2 Property Description

The Property is addressed as 23835 Temescal Canyon Road, Corona, and is developed with multiple buildings, asphalt-paved parking, storage areas, two large kilns, sheds, a septic system, and one inactive water well as part of the Mission Clay Products facility. Additionally, multiple aboveground storage tanks (ASTs) are located within the manufacturing portion of the facility, and in a nearby storage shed, including one 500-gallon diesel fuel AST, two new 240-gallon oil ASTs, one 180-gallon used oil AST, and one 499-gallon propane AST. The surrounding properties are vacant land to the north and south, single-family residences to the southwest, west, and northwest, and commercial facilities to the east (**Figure 2**).

1.3 Background

A Phase I Environmental Site Assessment (ESA) was performed on the Property by Partner Engineering and Science, Inc. (Partner) in 2017. That Phase I ESA identified no recognized environmental conditions (RECs) associated with the Property. However, the following controlled REC (CREC) was identified:

- Three (3) USTs and associated dispenser area was removed from the Property in 1993. One (1) 8,000-gallon gasoline, one (1) 12,000-gallon diesel, one (1) 40,000-gallon diesel UST, and an associated dispenser area were historically located southeast of the on-site manufacturing building (**Figure 2A**), and were removed in 1993 under RCDEH oversight. During that removal process, soil samples collected below the 40,000-gallon UST indicated the presence of petroleum hydrocarbons which required remedial action. No petroleum hydrocarbons were detected in soil samples collected form below the other USTs (*i.e.*, the results were “non-detect”).

  A total of 21 confirmation soil samples collected from within the UST cavity, following the removal of approximately 1,800 cubic yards of impacted soil, were "non-detect" for total petroleum hydrocarbons (TPH) and the volatile organic compounds (VOCs) benzene, ethylbenzene, toluene and xylenes (BTEX). Additionally, 36 soil samples were collected form the resulting 1,800 cubic yard stockpiles temporarily placed in the northeastern portion of the Site (**Figure 2A**). The stockpile soil samples indicated TPH as diesel (TPHd) ranging from nondetectable concentrations up to 13,600 parts per million (ppm) and nondetectable concentrations of BTEX.

  Based on the analysis rating of 49, as determined by the Leaking Underground Fuel Tank Manual Leaching Potential Analysis published by the California Water Quality Control Board at that time, an

acceptable limit in parts per million for TPHd was set at 10,000 ppm. Only one of the 36 samples analyzed exceeded the 10,000 ppm threshold, at a concentration of 13,600 ppm, while the second highest sample had a much lower concentration of only 6,100 ppm, and 24 samples had concentration of TPHd below 1,000 ppm. Therefore, the stockpiled soils was determined to be nonhazardous, and was approved by RCDEH for reuse, and then was spread on-site. Regulatory closure was provided by RCDEH on June 5, 1996. According to the Site owner, the stockpiles soils were spread onto the industrial side of the Site. The placement of petroleum-impacted soils at the Site, as permitted by RCDEH, represents a CREC to the Site.

A Business Environmental Risk (BER) is a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated in this practice. The following was identified during the course of this assessment:

- Partner observed *de minimis* staining on the asphalt near the hydraulic oil dip tank, *de minimis* staining on the asphalt by the sealer dip tank, and a minor leak with staining near the dyed diesel #2 AST. The diesel AST was observed as corroding with damage and chipping.
- Due to the age of the subject property buildings, there is a potential that ACM and/or LBP are present. Overall, all suspect ACMs and painted surfaces were observed in fair to good condition and do not pose a health and safety concern to the occupants of the subject property at this time. Should these materials be replaced or demolished, the identified suspect ACMs and LBP would need to be sampled to confirm the presence or absence of asbestos and/or lead-based paint prior to any renovation or demolition activities to prevent potential exposure to workers and/or building occupants.

Partner prepared a Phase I ESA for the Property in 2023, and identified the CREC and BER consistent with the 2017 Phase I ESA as described above. However, the 2023 Phase I ESA prepared by Partner also identified the following REC:

- A septic system was reportedly located to the north exterior of the maintenance shop. The maintenance shop was observed with cut plumbing and signs of former restrooms. The septic system was presumably installed at the time of original construction in the 1960s. The subject property has been utilized for industrial and manufacturing purposes since construction. The onsite septic system connected to the maintenance shop would act as a direct conduit to the subsurface of the subject property for any materials discharged to the system from industrial operations. The potential exists for the industrial operations to impact the subsurface of the subject property via the septic system. The industrial use coupled with the former septic system is considered a REC.

At the request of RCDEH, Construction Testing and Engineering, Inc. (CTE) *dba* Universal Engineering Sciences (UES) prepared a workplan to investigate soil and soil vapor conditions at the Site, dated August 8, 2024 (“Workplan”). The Workplan was prepared in coordination with RCDEH, and utilizing RCDEH institutional knowledge of previous Site history. The Workplan was conditionally approved by RCDEH on August 9, 2024. UES prepared a final Workplan including comments from the RCDEH and issued the final workplan on August 12, 2024.

It is understood that a mitigated negative declaration (MND) would be submitted in relation to the redevelopment of the Site to the County of Riverside on August 26, 2024, which requires that the Workplan be implemented, the results reported, and approved by RCDEH. Given the shortened

timeframe, the RCDEH-approved Workplan components have been incorporated into this SMP, and will be submitted to RCDEH to meet the August 26, 2024, deadline. Components of the Workplan are detailed in subsequent sections of this document.

2 Known or Suspected Environmental Conditions

The Property has been used for commercial and industrial uses since at least 1947, including the present-day clay pipe manufacturing facility since circa 1960, which utilizes large kilns and hydraulic oil powered machinery. Additionally, as discussed in **Section 1.3**, multiple ASTs containing hydraulic fluid were recently observed at the Site, multiple USTs containing gasoline and diesel fuel were removed in 1993, and approximately 1,800 cubic yards of petroleum-containing soils were reportedly spread in the northeastern portion of the facility where heavy equipment and supplies are currently stored. No soil sampling has been performed in the northeastern portion of the site to quantity or characterize the extent of the petroleum-impacted soil spreading in this area. Additionally, although no soil impacts have been identified proximate to the manufacturing building to-date, there is potential that soil impacts may be identified during the contemplated redevelopment of the Site.

2.1 Constituents of Potential Concern (COPCs)

Multiple USTs were formerly located proximate to the southeast of the on-Site commercial manufacturing building and contained gasoline and diesel fuel. These USTs were removed, and the resulting petroleum-containing soils were reportedly spread in the northeastern portion of the Site, as described in **Section 1.3**. Therefore, COPCs related to these former USTs would include TPH and VOCs.

The clay pipe manufacturing facility currently operating at the Site utilizes machinery that uses hydraulic oil. Multiple ASTs containing hydraulic fluid were observed by Partner during the Phase I ESAs and were observed to have leaked on the surrounding pavement. Hydraulic oil contains heavy-end hydrocarbons, commonly referred to as TPH as oil (TPHo), which may include polychlorinated biphenyls (PCBs) and/or semi-volatile organic compounds (SVOCs).

A septic system was reported during the Partner Phase I ESA, proximate to the maintenance shop. This maintenance shop has operated at the site since circa 1960. Given the long history of the maintenance shop operations, and potential discharges from the maintenance shop into the nearby septic system, COPCs in connection with the feature include TPH, VOCs, and metals.

Additionally, as a condition of approving the Workplan, RCDEH requested analysis or organochlorine pesticides (OCPs) from the stockpiled areas, as described in **Section 3.4**.

2.2 Exposure Assessment

Given the historical Site usage, the primary features of concern are unknown underground structures, unknown hazardous materials storage areas, or unknown release locations. Additionally, limited soil impacts may be encountered during the removal of the Site structures (*i.e.*, hydraulic equipment removals and oil water separators [OWS]) during demolition. Additional unknown subsurface structures such as clarifiers, sumps, septic systems, or lifts may potentially be identified during the Site demolition activities, and also be sources of potential impact. TPH-, VOC-, or oil-contaminated soil may be identified by the

visual presence of staining and/or odor. Metal impacts are not readily apparent; however, these impacts are typically coincident with petroleum impacts, or soil laden with crushed rubble/debris such as brick or concrete, metals debris or refuse piping, tile, or other debris. Metals would only be considered a COPC if potential oil impacted soils or soil laden with debris is encountered. The primary mode of encountering these structures or impacts to soil is through earth-moving operations during grading. Therefore, identification of potentially impacted soil and stopping earth moving activities is key in avoiding the inadvertent spread of impacted soils.

The main human health concern during redevelopment activities at the Site is the direct exposure to TPH- and VOC-impacted soil by construction workers through ingestion, inhalation, and/or dermal contact. Activities that involve the handling of impacted soil, such as any improvements that involve excavation/grading work, may result in exposure to hydrocarbon or VOC-impacted soil or soil vapors. Inhalation of airborne dust is another route for exposure to contaminants. Therefore, procedures should be put in place to minimize dust generation and migration during excavation/grading activities (*see* **Section 3.5**). Additionally, vapor monitoring should be performed using a handheld photoionization detector (PID) if evidence of impacted soil is encountered to evaluate whether additional safety measures are required such as use of a respirator or pressurized equipment cabs to limit inhalation of chemicals of concern (*see* **Section 3.10.2.2**).

The primary receptor that will be exposed during redevelopment actions is the construction worker. Addressing exposure to the construction worker will also address potential exposure to the off-site general public. The primary pathways of exposure to COPCs in soil is ingestion, inhalation (dust and vapors), and/or dermal contact. Activities that involve the handling of impacted soil, such as any improvements that involve excavation/grading work, may result in exposure to contaminated soil. Procedures should be put in place to minimize exposure, particularly to dust generated during excavation/grading activities. Dust suppression and appropriate personal hygiene (e.g., washing hands, no eating, drinking or smoking in the exclusion zone[1], etc.) will significantly reduce exposure during remediation.

While elevated VOCs were reported in soil vapor above screening levels for vapor intrusion into buildings, they are not expected to be a concern to construction workers or the general public as a result of shallow soil excavation due to dilution in ambient air. However, if below grade entry is required such that construction worker breathing zone will be below ground surface, air monitoring should be conducted to demonstrate that worker protection thresholds are not exceeded.

[1] For the purposes of this SMP the exclusion zone is the boundary of the SMA inclusive of stockpile and staging areas for contaminated soil.

3 Soil Management

Based on the historical usage of the Site, soils or unknown structures impacts by COPCs could potentially be encountered by construction workers during below-grade Site development and/or post-development maintenance activities. As a result, this SMP has been prepared to ensure the Site is redeveloped and maintained in accordance with any applicable agency regulations and permitting requirements.

Contingency plans are provided in **Section 4.5** to address potential conditions discovered during below grade demolition, grading and construction.

3.1 SMP Objectives

This SMP was prepared to:

- Summarize the scope of work to implement the RCDEH-approved Workplan, including soil and soil vapor sampling at the Site;
- Describe procedures for reducing the potential for exposure of workers to COPCs during below grade demolition, grading, and construction;
- Identify decision criteria for evaluating soil for onsite reuse, offsite reuse, or disposition; and,
- Establish protocols for evaluating import soil for suitability for use at the Property.

3.2 Soil Management

Construction, utility, and landscape workers may disturb the subsurface through digging, grading, trenching and/or excavation in the soil at the Site and, therefore, may discover previously-unknown structures or areas of chemically impacted soil. During construction activities, workers who may directly contact chemically impacted soil should conduct the work in accordance with Occupational Safety and Health Administration (OSHA) training and worker protection rules and regulations and their company's Health & Safety procedures; and the company Health & Safety procedures must meet all the minimum requirements of all applicable OSHA requirements.

The information provided in this SMP should be used to address proper handling, assessment, and disposal of chemically-impacted soil or subsurface features that are encountered during grading, Site excavation, and post-development maintenance activities. All contaminated soil that will be transported offsite must be adequately profiled and disposed at a facility that is permitted and approved by the disposal contractor to receive such material. Likewise, any soil imported to the Property must be either from a virgin quarry, or certified or determined by sampling and laboratory analysis to be "clean" in accordance with applicable state screening levels and sampling processes (*e.g.,* Department of Toxic Substances Control [DTSC] *Information Advisory: Clean Imported Fill Material* [2001]) prior to arriving at the Site.

At present, import soil is not planned for redevelopment of the Site, as on-site spoils from building footing and utilities trenches should be sufficient to achieve the planned grade. Should imported soil be needed, the soil should be sampled in accordance with the procedures outlined in **Section 3.9**. Such sampling activities should be conducted at the import site (*i.e.,* before importing it to the Property).

3.3 Potential Soil Disturbance Areas

Activities that may cause soil disturbance and uncover potential contaminated media include building demolition; site grading; grubbing; removal of soil; removing/installing underground utilities and utility pipeline repair activities; planting trees/landscaping; excavating elevator shaft pits; installing foundations, underground shelters, garages, retention ponds, or basements; and performing other construction activities. This SMP addresses all activities involving ground disturbance. All personnel involved with soil disturbance should be aware of the potential existence of soil contamination and how to identify potential evidence of contamination (staining, odors, *etc.*). Those working with contaminated soil will be Cal-OSHA 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) trained with a current to annual refresher certification.

3.4 RCDEH Workplan

To evaluate Site soil vapor conditions, and potential soil impacts related to the spreading of former UST stockpiles materials and recently-placed stockpiles on the Site, UES prepared a Workplan in August 2024 to address these concerns from RCDEH. Components of the Workplan to evaluate Site media include:

- Soil assessment at the following locations:
  - » (1) soil boring advanced in the approximate area of the former UST stockpile area in the northeastern portion of the Site; and,
  - » (1) soil boring advanced in the approximate area of the recently-placed stockpile area in the western portion of the Site.
  - » Soil samples will be collected at approximately 5 feet, and at a shallow depth, based on evidence of fill placement and soil characteristics.
- Soil vapor assessment at the following locations:
  - » (6) five-foot soil vapor monitoring points installed proximate to the manufacturing boiling located in the central portion of the Site;
  - » (1) five-foot soil vapor monitoring point located near the maintenance shed, west of the manufacturing building;
  - » (1) five-foot soil vapor monitoring point located in the approximate area of the former UST stockpile area in the northeastern portion of the Site; and,
  - » (1) five-foot soil vapor monitoring point located in the approximate area of the recently-placed stockpile area in the western portion of the Site.

Proposed sampling locations are depicted on **Figure 3**. All soil samples collected from the stockpile areas are to be analyzed for the following constituents by the appropriate United States Environmental Protection Agency (USEPA) test methods:

- California Code of Regulations (CCR) Title 22 Metals by USEPA method 6010B and 7471A;
- TPH by method USEPA Method 1664;
- VOCs by method USEPA 8260B;
- OCPs by method USEPA method 8081A.

All soil vapor samples collected during this investigation the stockpile areas are to be analyzed for the following constituents by the appropriate United States Environmental Protection Agency (USEPA) test methods:

- VOCs by method USEPA 8260B.

Soil and soil vapor samples procedures are outlined and discussed in the UES Workplan, attached as **Appendix A**. All soil samples will be containerized in laboratory-provided bottleware, and placed in a receptacle at a temperature not exceeding 10° Celsius. All soil vapor sampling will be performed in accordance with the Department of Toxic Substances Control (DTSC) *Advisory – Active Soil Gas Investigations*, dated July 2015.

All soil and soil vapor samples will be submitted under chain of custody to a California Environmental Laboratory Accreditation Program (ELAP) -certified laboratory for analysis. ELAP is part of the Division of Drinking Water at the State Water Resources Control Board.

Notification of implementation of the Workplan will be provided to RCDEH a minimum of five days prior to field activities.

Following completion of the investigation set forth in the Workplan, a report will be submitted to RCDEH presenting the findings of the investigation, and comparing the results to screening levels for future commercial/industrial Site usage, and will include recommendations on further investigation, mitigation, or remedial action, if deemed appropriate.

This work plan scope of work will be implemented prior to any site development activities, including any soil disturbance, and the findings incorporated into the planned Site development activities. Such proposed remedies may include soil removal through excavation, soil vapor extraction, and/or vapor protection, based on the results of this investigation. Should remedies be incorporated into Site development activities, those remedies will be approved RCDEH prior to implementation.

3.5 Dust Control

Prior to starting grading, Rule 403 notification will be made to South Coast Air Quality Management District (SCAQMD) by the grading contractor or client. Prior to remedial excavation activities at any discovered SMAs, Rule 1166 and/or 1466 notifications will be made to SCAQMD by Stantec or the remediation contractor, as necessary. During soil grading and excavation activities, the contractor should use control measures for fugitive dust and odor. Dust and odor control measures should be used such that no visible dust migration or offensive odors are observed. Typically, misting with water can be used

to control dust emissions and odors, or temporary suspension of work, to allow odors to dissipate. OSHA worker safety requirements should be followed.

During grading activities, water must be applied to the soil in order to suppress dust particles from becoming airborne. In the event that impacted soil is encountered, it will be separately stockpiled. Additionally, impacted soil should not be disturbed if winds exceed 13 mph, sustained. Any impacted stockpiled soils must be covered with heavy grade plastic sheets as required by permit while water suppression is not employed, particularly during non-working hours. Additional control measures, if necessary, include the following:

- All active construction areas shall be watered at least twice daily or as necessary to prevent visible dust plumes from migrating outside Site limits;
- Water should be misted or sprayed while loading transportation vehicles;
- Drop heights should be minimized while loading transportation vehicles;
- Covers such as tarpaulins should be used for trucks carrying soils, if traveling on public roadways;
- Access roads, parking areas, and staging areas should be paved, watered, or covered with non-toxic soil stabilizers and swept daily, as needed; and
- Streets should be swept daily if visible soil material is carried onto public roadways from the Site.

In the event that chemically impacted soil is encountered at the Property, monitoring and control of off-site fugitive dust emissions containing toxic air contaminants will be in accordance with SCAQMD Rules 1166 or 1466, is applicable. If compliance with SCAQMD Rules 1166 or 1466 is required, properly trained and SCAQMD certified inspectors will be required to implement the inspections and monitoring.

3.6 Stockpile Management

If soil stockpiles are created during Site construction activities, they must be managed in accordance with the project Stormwater Pollution Prevention Plan (SWPPP) and, if required, SCAQMD Rule 1466, and appropriate erosion and sediment control measures. All soil stockpiled soil will be placed on 6 mil or thicker plastic sheeting with containment berms constructed from soil, wattles or sand bags under the plastic and around the perimeter of the stockpile containment area. When earth movement activities are not ongoing at the Site, contaminated soil stockpiles will be covered with plastic sheeting and weighted to preclude plastic covers from blowing off.

Stockpiles will be characterized/profiled to ensure proper management and disposal using standard US EPA testing methods. Stockpiled soil that is to be disposed will be sampled according to the requirements of the licensed waste disposal facility potentially receiving the material. Samples will be submitted to a laboratory certified to perform hazardous waste testing by the State of California Department of Health Services, Environmental Laboratory Accreditation Program.

An approved manifest system will be used to track waste streams from generation to disposal. Manifests will comply with all provisions of appropriate transportation and disposal regulations. Appropriate

measures and practices will be employed to prevent spills or leaks of materials from occurring on-Site or en-route to the designated facility.

3.6.1 Stockpiled Soil Sampling

Where stockpiled soil has not been adequately characterized based on in-situ sampling, representative samples will be collected to support profiling and disposition. To ensure the analytical results are representative of the entire stockpile, samples should be collected at multiple locations and at different depths into the stockpile. Samples should not be collected less than 12 inches in the stockpile to prevent underestimating VOC concentrations. The specific profiling, handling, and disposal requirements depend on the nature of the potentially contaminated material, and the specific disposal facility, or location planned for disposition of the material. In the event that stockpiled soil is planned for re-use on Site, the following sampling requirements should be implemented:

- A minimum of one discrete sample for every 50 cubic yards in stockpiles up to the maximum recommended volume of 400 cubic yards.
- Analysis of each of the discrete stockpile samples for TPH, following modified USEPA method 8015B and VOCs, including fuel oxygenates, using EPA Method 8260B (EPA 5035 sample preservation).
- If the stockpiled material appears to be uniform, the discrete stockpile samples may be combined into a single composite sample for analysis for Title 22 metals, using EPA Method 6010B/7471A; however, the discrete samples should be composited by the analytical laboratory, as opposed to in the field. Unused portions of the discrete samples should be held at the laboratory until the results of the composite sample analyses have been received and evaluated so that the discrete samples can be analyzed individually, if warranted.

Additional analysis, such as SVOCs, may be warranted based on the conditions observed at the Site and the results of the analyses listed above.

The results of the stockpile sample analyses should be compared to the screening levels specified in **Section 4.5.1** In the event that COPC concentrations exceed commercial screening levels, the stockpiled soil should be transported off-Site for disposal. However, if the screening process indicates that a large volume of soil must be transported off-Site for disposal, it may be appropriate to develop less conservative, Site-specific, risk-based screening levels for regulatory agency approval.

3.7 Transportation

Potential transport of soil will be performed by properly-licensed and permitted haulers in accordance with appropriate local, state, and federal regulations. Loaded transport vehicles leaving the Site will be appropriately lined, securely covered, cleaned, manifested, and placarded in accordance with appropriate local, state, and federal requirements.

3.8 Disposal Facilities

Soil transported off-site must be disposed at facilities that are pre-authorized by Stantec, or the selected environmental consultant, and permitted by the applicable regulatory authorities to receive such material.

3.9 Replacement Imported Fill

At present, import is not planned for the Site as onsite spoils from building footing and utilities trenches should be sufficient to achieve the planned grade. Should imported soil be needed, the soil should be sampled and tested to confirm suitability for use on Site. Sampling of import will follow DTSC guidelines for stockpile sampling per the *Information Advisory: Clean Imported Fill Material* dated October 2001. Characterization may be based on knowledge of the source (*e.g.*, material directly from a quarry) or sample analysis results.

If required, sample analysis should be conducted in accordance with the DTSC *Information Advisory: Clean Imported Fill Material* (2001) guidance. With the exception of metals, any tested import soil sample results will be compared to DTSC Human and Ecological Risk Office (HERO) Note 3 commercial screening levels, to determine whether the soil at issue is acceptable for import to the Site. Metal concentrations will be compared to the HERO Note 3 commercial screening levels, HERO Note 11, other HERO Note documents as appropriate, and USEPA Regional Screening Levels (RSLs).

Import soil documentation will be reviewed and approved by a State of California Registered Geologist or Engineer to confirm soil is acceptable prior to import.

3.10 Contingency Procedures

The following contingency procedures will be followed upon discovery of features that are potentially a source of contamination (such as unknown USTs, stained soil, drums, belowground hoists, clarifiers, *etc.*) or contaminated soil.

- If a previously unidentified structural source (*e.g.*, clarifier, sump, drum, below ground lift, *etc.*), or potentially-contaminated soil are discovered or suspected during construction, grading, or excavation, activities will be suspended in that area and the environmental consultant will be immediately notified of the discovery. Activities will be suspended until an evaluation, appropriate permitting, and/or sampling can be performed by the environmental consultant. Any subsurface structure or potentially contaminated soil encountered should not be removed or graded through.
- Sampling will be performed on the material, soil, and surrounding soils, *etc.*, as necessary to evaluate the extent of the SMA, including the nature and extent of any environmental impacts. The appropriate chemical analysis will be performed by the environmental consultant consistent with the concern identified.
- Identification of unknown or unexpected conditions will be promptly communicated by telephone to the property owner. Reportable quantities of petroleum product or hazardous substances may require notification to the applicable regulatory agencies (*i.e.*, RCDEH). Similarly, the responsible party will notify RCDEH in the event that UST(s) (registered or unregistered) is discovered.

- Once permits are obtained, proper notification will be made to the permitting agency for removal, and the SMA is properly characterized, the structures and/or impacted soil will be excavated and stored/stockpiled onsite on plastic and covered in advance of further characterization, as discussed in **Section 3.6**.
- Confirmation sampling within the SMA, following excavation will be performed according to the steps outlined in **Section 3.10.3**.

The following subsections describe the procedures that will be implemented during assessment and removal activities.

3.10.1 Potential Subsurface Removal Requirements

Below grade chemical-containing structures (USTs, clarifiers, *etc.*) discovered during the site demolition activities may require permits from the RCDEH prior to removal. Similarly, the discovery of contaminated media may require notification to appropriate regulatory agencies. If such structures of evidence of contaminated media are encountered, work in that area should be suspended and the environmental consultant immediately notified. DO NOT remove such structures or contaminated media until approved to do so by the environmental consultant.

The environmental consultant will conduct appropriate investigations and determine whether removal will require permitting or regulatory agency approval. Following removal, confirmation soil sampling will be performed by the environmental consultant, and submitted for laboratory analyses, as stipulated by the permit or agency guidance.

All soil sampling and technical reports will be prepared under the supervision of and signed by a California professional geologist, a California certified engineering geologist, or a California registered civil engineer.

3.10.2 Soil Screening Methods

Visual and instrument-based soil screening will be performed by the environmental consultant. Field screening of disturbed soil for indications of contamination involves visual screening for staining and the use of field screening instruments for contaminated media (e.g., photoionization detectors (PID), flame ionization detectors (FID), x-ray fluorescence detectors (XRFs)) that have been properly calibrated per manufacturer instructions. Indications of potential contamination might include, but are not limited to, the following:

- Soil discoloration or staining when compared to the natural color of soil exposed elsewhere within the project limits, especially discoloration or staining in proximity to a potential contaminant source, such as subsurface structure;
- Saturated or excessively moist soils when compared to the natural moisture content of soil exposed elsewhere at the Site;
- Oily sheen;
- Chemical odors;

- Elevated field instrument readings above background measurements.
- Soils containing crushed rubble/ debris such as brick or concrete rubble, metal debris or refuse pipe, tile, or other debris that may be asbestos-containing material.

This SMP recommends that if any of the above conditions are encountered, the construction activity in the vicinity of the impacted soil should be suspended and the contractor personnel should immediately notify the environmental consultant.

3.10.2.1 Air Monitoring

The following meteorological, particulate matter, air contaminant monitoring, and communication of chemical hazards will be implemented during any removal action to achieve the following goals and to comply with SCAQMD Rules 403, 1166, and 1466, as applicable:

- Identify and measure the air contaminants generated during any soil removal and decontamination activities to assign the appropriate personal protective equipment and safety measures specified for those activities.
- Provide feedback to site personnel regarding potential hazards from exposure to hazardous air contaminants generated through excavation activities.
- Identify and measure air contaminants at points outside of the soil removal and decontamination exclusion zones. Air monitoring will be conducted during work activities to measure potential exposure of nearby residents and other sensitive receptors to site COPCs, resulting from removal activities and to monitor the dust control measures implemented.

Given limited historical soil analytical data has been collected, and the RCDEH-approved Workplan has yet to be implemented as of the date of this report, the following measures are provided in the event that SCAQMD Rule 1166 will be implemented to address VOC impacts, and/or Rule 1466 will be implemented to address contaminants listed in Table I of Rule 1466 (which, as stated above, could occur if soil impacts are discovered). The goals stated above will be achieved by the following measures in instances where SCAQMD Rules 403, 1166, and 1466 would apply:

- Prior to starting grading, Rule 403 notification will be made to SCAQMD by the grading contractor or client. Prior to remedial excavation activities at any discovered SMAs, 1466 notifications will be made to SCAQMD by Stantec or the remediation contractor. In each case the wetted to minimize dust generation during excavation. During remedial excavation and stockpiling activities associated with any SMAs, water will be aggressively applied to the soil prior to and during excavation, treatment, and loading in order to suppress dust particles from becoming airborne. Additionally, impacted soil will not be disturbed if winds exceed 13 miles per hour (mph). All stockpiled soils will be covered with heavy grade, 6-millinch plastic sheeting while water suppression is not employed, particularly during non-working hours.
- Perimeter air monitoring will be conducted during excavation activities related to contaminated soils that fall under Ruler 1466. Stantec will employ dust monitor at a minimum of one upwind location to determine background levels of dust entering the Site daily prior to start of excavation and periodically thereafter and, one downwind sampling location as follows:
    - » During excavation and soil loading operations, Stantec will collect readings at the direct-reading particulate monitors (e.g., TSI DustTrac Environmental PM10 Model No. 8540-1466, Aeroqual

Dust Sentry, or equivalent device also approved by the SCAQMD) with data logging capabilities for measuring PM10 every 1-minutes during earthwork operations. Given only limited contaminants have been identified in soil to-date, no health-based dust action levels (DAL) have been determined. As a result, the SCAQMD PM10 screening level of 25 ug/m^3 will be used for screening in lieu of the DAL. The contribution from background dust levels will be considered by subtracting the dust concentration from the upwind dust monitor from the on-Site readings and then compared to SCAQMD screening level of 25 ug/m^3.

  - » The locations of the dust meters, the time of sampling, and range of measured concentrations will be recorded in a daily log by Stantec field personnel. If total dust readings exceed the DAL in the downwind sample, dust suppression efforts at the Site will be increased or construction operations will be stopped.
  - » During excavation activities, if collected data indicates concern, immediate notification to the Site contractor will occur and steps to correct the issue will be employed.
  - » To supplement perimeter monitoring with regard to any Rule 1466 soils, meteorological data (average wind speed and direction) will be obtained from the nearest available weather station. This information will be used to initially place the dust monitoring equipment and determine if termination of remedial grading is necessary due to wind conditions.
- With regard to any Rule 1166 soils, a PID calibrated daily to 50 parts per million by volume (ppmV) hexane will be used to measure ambient air and baseline VOC levels prior to and during excavation activities. Although unexpected based on historical Site data, notification to SCAQMD will be made in the event that sustained VOC measurements in excess of 50 ppmV are reported, in accordance with SCAQMD rule 1166.

To reduce worker exposure to contaminated dust, all heavy equipment should have closed cabs with positive pressure fans. If open air cabs are used, then full-face respirators with NIOSH N100, R100, or P100 filter cartridges should be used in accordance with SCAQMD rules.

3.10.2.2 Respiratory Protection

In the event new SMAs are encountered, VOC concentrations continuously exceeding 50 ppmV will require the use of respiratory protection (via a respirator or pressurized equipment cabins) for the duration of elevated PID readings. All staff present on the project should have available properly-fitted respirators for use, if needed. The respirators should contain the appropriate filter cartridges and be recently tested to ensure effectiveness. All personnel who require the use of a respirator will need to be properly trained in the use of that respirator.

If pressurized cabins are to be used by earthwork machinery, it is necessary to maintain the necessary training listed above for work in the impacted zones. Operators should have appropriate respirators with them at all times should it be necessary to exit the equipment cabs during a time period when vapor concentrations exceed levels of concern listed above.

3.10.3 Soil Sampling

At a minimum, if found to be necessary, based upon Stantec's field evaluation of potential sources of contamination, soil samples will be collected and analyzed in accordance with sampling methods and

protocol conducted during Site assessment activities for contaminants previously detected or suspected at the Site, as follows:

- TPH by USEPA Method 8015;
- VOCs by USEPA Method 8260b, preserved by USEPA Method 5035; and,
- Title 22 metals by USEPA Method 6010b/7471a.

Additional analysis may be warranted based on the feature or potential contamination encountered. (*i.e.,* polychlorinated biphenyls [PCBs] by USEPA Method 8082, semi volatile organic compounds [SVOCs] and polycyclic aromatic hydrocarbons [PAHs], if waste oil is a suspected contaminant). Soil samples will be collected and delivered to an offsite laboratory for 24-hour analysis.

If the results of soil sampling indicate that remediation through excavation and disposal is necessary, the Client will be informed of the planned soil removal. Following excavation and disposal of any impacted soil, confirmation samples will be collected within the excavation on 25-foot centers from both the bottom and sidewalls of an excavation per typical regulatory requirements. The analytical results will be compared to the cleanup thresholds as outlined below:

- Arsenic: 12 mg/kg (upper-bound regional background concentration, Determination of a Southern California Regional Background Arsenic Concentration in Soil, DTSC 2008);
- TPH as GRO: 2,000 mg/kg (SFBRWQCB ESL for commercial sites, 2019);
- TPH as DRO: 500 mg/kg (DTSC SL for commercial sites, 2022);
- TPH as ORO: 18,000 mg/kg (DTSC SL for commercial sites, 2022);
- VOCs, metals, or other potential contaminants of concern: The more conservative commercial threshold between the DTSC Note 3 and USEPA Regional Screening Level (RSL) documents.

3.11 Vapor Mitigation System

The presence of VOCs within soil vapor presents a potential for vapor intrusion (VI) to future on-Site structures. Following implementation of the RCDEH-Workplan, as discussed in **Section 3.4**, an evaluation of potential VI to future site occupants will be performed. Based on those soil vapor results, engineering controls in the form of a vapor intrusion mitigation system (VIMS) may be warranted below future on-Site occupied structures. The determination of VIMS will be made following collection of soil vapor data through implementation of the RCDEH-approved Workplan.

A VIMS is protective of human health as it will impede vapor intrusion into and mitigate the potential for accumulation of COPCs in the vapor phase beneath the future on-Site structures through design and construction of the VIMS. The VIMS will be constructed in such a way to operate in a passive manner, creating a preferential pathway for soil vapor to vent and not accumulate below the structure, with the ability to become active by mechanically extracting vapors using a blower. The passive VIMS system can be converted to an active system if required in the future. The construction of the VIMS will occur as part of construction of future on-site structures and would have little to no impact on future commercial activities on the Property. Therefore, installation and operation of a VIMS as a mitigation control

addressing soil vapor conditions on the Property is a feasible and effective short- and long-term mitigation strategy. This proposed mitigation strategy, should it need to be implemented, will effectively provide a high level of protection for human health.

The VIMS design will be submitted to the County of Riverside for review and final approval prior to placement. During that review, RCDEH may require additional monitoring, or institutional measures to ensure protection of Site occupants, including long term monitoring, and/or recordation of land use restrictions with the Riverside County Assessor (*i.e.*, Land Use Covenant [LUC]). All utility and structural penetrations of the membrane will be sealed, and the membrane will be tested for intactness following installation. No penetrations or modifications will be permitted without notification and re-inspection. Documentation confirming the installation and testing of the VIMS will include written documents and photos. This documentation will be provided to the Property owner following installation.

4 Health and Safety

All work associated with the management of impacted soil shall be performed in accordance with all applicable OSHA standards as a minimum. If encountered and determined that impacted soils exist, site workers will wear the appropriate level of Personal Protective Equipment (PPE), as described in their Health and Safety Plan and in accordance their company policies and procedures. Levels of PPE should be reconsidered and modified depending on the conditions encountered as the project progresses. The General Contractor is responsible for workers adhering to all applicable OSHA requirements at a minimum and all the Health and Safety policies and procedures.

The designated project superintendent chosen by the selected contractor will serve as the Site Safety Officer (SSO), or will designate the SSO. Stantec will assist the SSO in areas where they are unfamiliar with site safety. The job of the SSO will be to monitor dust control and ensure that the Site is only accessed by authorized personnel. In the event of an emergency, the SSO will have the authority to shut down Site activities and the knowledge to notify the appropriate emergency responders.

4.1 Emergency Planning

Petroleum hydrocarbons and some VOCs are flammable at high concentrations. In the event of an emergency where Site activities are halted, necessary measures must be taken to ensure that contaminated soil does not leave the Site and that all stockpiles are covered when not in use.

In the event of an emergency, the SSO must notify the following agencies or individuals:

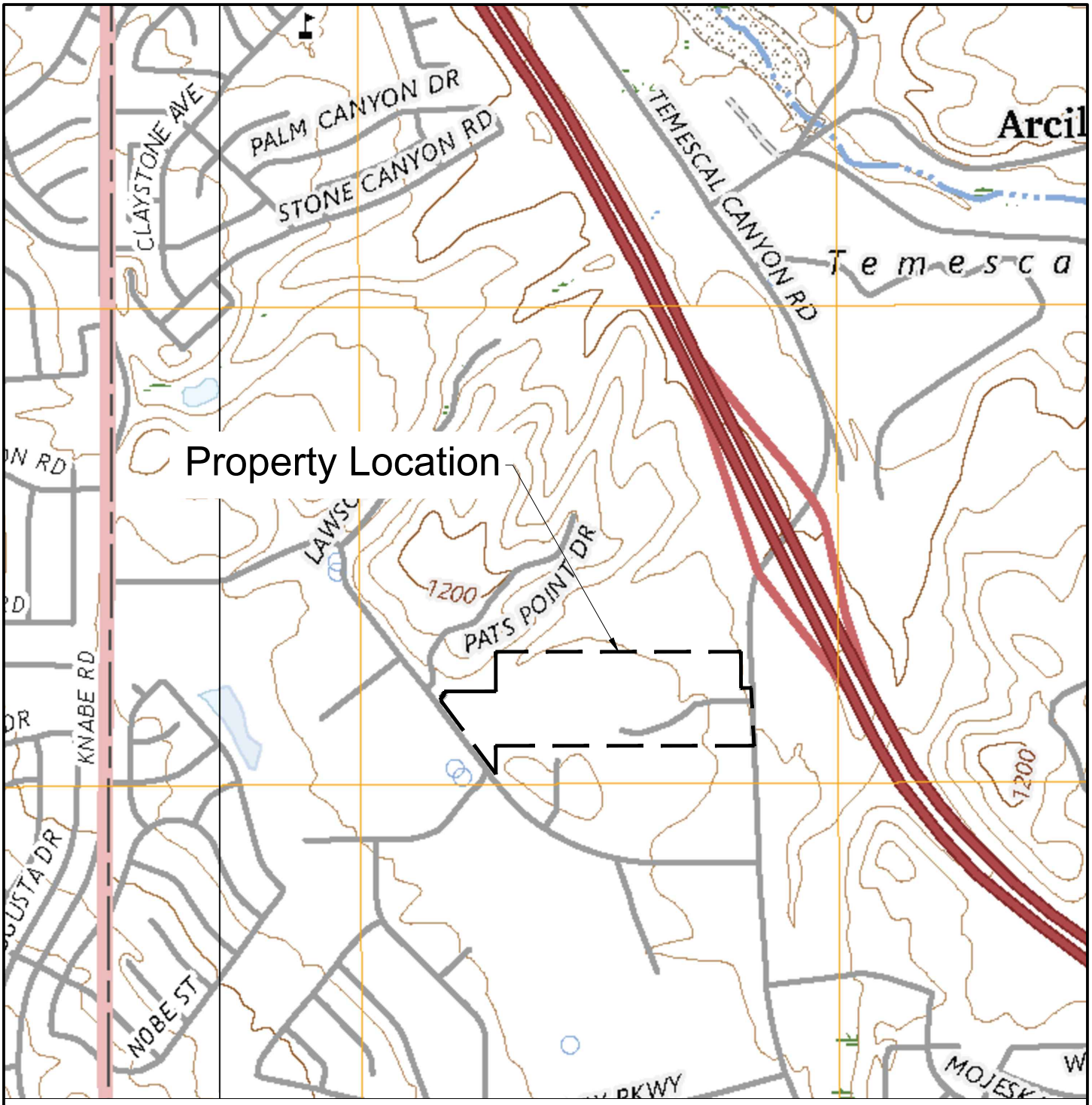
- Riverside County Fire Department: 911, or (951) 277-1182;
- Riverside County Department of Environmental Health: (951) 955-8980; and,
- South Coast Air Quality Management District: (909) 396-2326.

5 Reporting

Prior to initiating Site re-development, a report of findings for the RCDEH-approved work plan will be submitted to the RCDEH. Any impacts identified by that assessment will be addressed in that report with a planned remedy. Remedies will be recommended based on the findings of the implemented workplan, and may include soil removal via excavation, soil vapor remediation via vapor extraction, vapor protection by placement of a VIMS, and/or institutional controls (*i.e.*, land use restrictions). The recommended remedy will be submitted to RCDEH for review and final approval prior to implementation of any planned/recommended remedy at the Site. Should a remedy be warranted for implementation prior to Site development, those remedies will be approved by RCDEH, and those activities will be completed as a condition to approval of site development. Should recommended remedies include soil gas investigation or remediation, soils in these identified areas will remain undisturbed prior to implementation of the selected RCDEH-approved remedy.

Following completion of any remedial action or investigation performed under this SMP during site development, a technical report will be prepared to document the completed action and waste disposal documentation. Technical reports will include a description of the completed work, a summary of the results, tabulated analytical results, laboratory analytical reports including associated quality assurance/quality control (QA/QC) documentation, figures depicting areas of work, and any waste disposal documentation.

Figures



Legend

Approximate Property Boundary

Reference: Lake Mathews Quadrangle, California 2023 and Corona South Quadrangle, California 2022, United States Geological Survey.

N

0 1000' 2000'

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Stantec

Stantec Consulting Services Inc.
735 East Carnegei Drive, Suite 280
San Bernardino, California 92408
Tel: (909) 335-6116
www.stantec.com

Client/Project
BBG KRG, Inc.

23835 Temescal Canyon Road, Corona, CA

Project No.
185806668

Title
Site Location Map

Revision	Date
JS	2024.08.21
Reference Sheet	Figure No.
KE	1

Legend
- Approximate Property Boundary
- Approximate Parcel Boundary
- 283-260-020 Assessor Parcel Number

N

0 250' 500'

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Stantec

Stantec Consulting Services Inc.
735 East Carnegei Drive, Suite 280
San Bernardino, California 92408
Tel: (909) 335-6116
www.stantec.com

Notes

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Project No.
185806668

Title
Site Map

Revision
JS

Date
2024.08.21

Reference Sheet
KE

Figure No.
2

Legend

- Approximate Property Boundary
- Approximate Area of UST Soil Stockpile Placement
- Approximate Area of Recent Stockpile Placement
- Approximate Location of of Former USTs

N

0 250' 500'

Stantec

Stantec Consulting Services Inc.
735 East Carnegei Drive, Suite 280
San Bernardino, California 92408
Tel: (909) 335-6116
www.stantec.com

Notes

Historical soil stockpile placement and UST locations as reported by Reyes Consultants, 1996.
Recent soil stockpile placement area as reported by Universal Engineering Sciences, 2024.
Proposed Soil Vapor Boring Area as reported by Universal Engineering Sciences, 2024.

Client/Project
BBG KRG, Inc.

23835 Temescal Canyon Road, Corona, CA

Project No.
185806668

Title
Site Map

Revision
JS

Date
2024.08.21

Reference Sheet
KE

Figure No.
2A

Legend

- Approximate Property Boundary
- Approximate Area of UST Soil Stockpile Placement
- Approximate Area of Recent Stockpile Placement
- Proposed Soil Vapor Boring Locations
- Proposed Stockpile Sample Locations

N

0 250' 500'

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Stantec

Stantec Consulting Services Inc.
735 East Carnegei Drive, Suite 280
San Bernardino, California 92408
Tel: (909) 335-6116
www.stantec.com

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Project No.
185806668

Title
Site Map

Revision
JS

Date
2024.08.21

Reference Sheet
KE

Figure No.
3

Appendix

Appendix A Universal Engineering Services Workplan

Workplan for Phase II Environmental Site Assessment
23835 Temescal Canyon Road
Corona, California

Prepared for:

MCP Industries, Inc.
c/o Axxcess Realty Advisors, LLC
4350 Von Karmen Avenue, Suite 200
Newport Beach, California 92660

Prepared by:

Universal Engineering Sciences
14538 Meridian Pkwy A
March Air Reserve Base, California 92518

UES Project No.: 4230.2400025.0000
Original Submission Date: August 8, 2024
Submission Date with Revisions: August 12, 2024

Workplan for Phase II Environmental Site Assessment
23835 Temescal Canyon Road
Corona, California
August 12, 2024

Construction Testing and Engineering, Inc. (CTE) dba Universal Engineering Sciences (UES) has prepared this Work Plan for a Phase II Environmental Site Assessment (ESA) for the property at 23835 Temescal Canyon Road in Corona, California. This work plan has been prepared in a manner consistent with the level of care and skill ordinarily exercised by professional engineers and environmental scientists by the undersigned, a California Registered Professional Engineer.

UNIVERSAL ENGINEERING SCIENCES

Dean Stanphill, PE, CEM
California Director of Engineering

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FIGURES

1.0 INTRODUCTION

Construction Testing and Engineering, Inc. (CTE) dba Universal Engineering Sciences (UES) has prepared this Workplan for a Phase II Environmental Site Assessment (ESA) to discuss previous site investigations and describe proposed field activities associated with soil sampling and soil gas sampling at the Mission Clay Products property (herein referred to as the Site) located at 23835 Temescal Canyon Road in Corona, California (Figure 1). The Site is identified by Riverside County Assessor's Parcel Numbers (APNs) 283-180-001, 283-180-02, 283-180-020, 283-180-021, and 283-260-020, comprising 28.8 acres of land developed with multiple buildings, asphalt paved parking, storage areas, two large kilns, sheds, a septic system, one inactive water well and water holding tank, stormwater detention basins, one 500-gallon diesel fuel AST, two 240-gallon new oil ASTs, one 180-gallon used oil AST, and one 499-gallon propane AST.

According to available historical sources, the Site was depicted as developed with a single structure in 1901; unimproved vacant land between 1938 and circa 1947; developed with small structures which were presumably residences between circa 1948 and 1953; and developed for manufacturing in the early 1960s. The current structures were constructed in 1958, 1969, and 1972. According to available historical documentation, tenants on the Site have included clay product manufacturing businesses including Mission Clay Products (early 1960s to Present).

2.0 PREVIOUS SITE CHARACTERIZATION ACTIVITIES

A Phase I Environmental Site Assessment (ESA) was conducted for the Site in December 2023 by Partner Engineering and Science, Inc. The Phase I ESA concluded the following:

Recognized Environmental Condition

A recognized environmental condition (REC) refers to the presence of hazardous substances or petroleum products in, on, or at the subject property due to a release to the environment; the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment. The following was identified during the course of this assessment:

- A septic system was reportedly located to the north exterior of the maintenance shop. The maintenance shop was observed with cut plumbing and signs of former restrooms. The septic system was presumably installed at the time of original construction in the 1960s. The subject property has been utilized for industrial and manufacturing purposes since construction. The onsite septic system connected to the maintenance shop would act as a direct conduit to the subsurface of the subject property for any materials discharged to the system from industrial operations. The potential exists for the industrial operations to impact the subsurface of the subject property via the septic system. The industrial use coupled with the former septic system is considered a REC.

Controlled Recognized Environmental Condition

A controlled recognized environmental condition (CREC) refers to a REC affecting the subject property that has been addressed to the satisfaction of the applicable regulatory authority or authorities with hazardous substances or petroleum products allowed to remain in place subject to implementation of required controls(for example, activity and use limitations or other property use limitations). The following was identified during the course of this assessment:

- Parcel #283-180-021 on the industrial side of the subject property was equipped three underground storage tanks (UST): one, 8,000-gallon gasoline UST, one, 12,000-gallon diesel UST, and one, 40,000-gallon diesel UST, all of which were excavated and removed from the site with oversight from the County of Riverside Department of Environmental Health (RCDEH) in 1993. According to reviewed RCDEH records, three, single-walled, steel USTs that were in use for approximately twenty years were removed. Reporting in the subject property tank closure file contained a valid tank closure permit, tanks that were triple rinsed, a manifest number, a hazardous waste hauler, a destination of rinsate, the dry icing of tanks, and a destination of tanks.

  Nine soil samples collected from beneath the former USTs in 1993 revealed concentrations of total petroleum hydrocarbons–diesel range organics (TPHd) beneath the eastern end of the 40,000-gallon UST. Remedial action included the excavation of approximately 1,800 cubic yards of soil. In 1995, five soil borings were drilled to a depth of 40 feet and soil samples were taken at five-foot intervals. All 21 samples taken from the area of the former UST location were analyzed and revealed nondetectable concentrations of TPHd and gasoline constituents, benzene, toluene, ethylbenzene, and total xylene isomers (BTEX). REYES also collected and analyzed 36 soil samples from the soil stockpiled on Parcel #283-180-020 on the industrial side of the subject property. The analyzed samples from the stockpiled soil indicated concentrations of TPHd ranging from nondetectable to 13,600 parts per million (ppm) and nondetectable concentrations of BTEX. Based on the analysis rating of 49, an acceptable limit in parts per million for TPHd was set at 10,000 ppm. Only one of the 36 samples analyzed exceeded 10,000 ppm.

  Based on these findings, permission was granted to treat the stockpiled soil as nonhazardous and be allowed to spread the soil on the property. According to the owner, the soils were spread onto the industrial side of the subject property.

  RCDEH acknowledged completion of the site investigation and remedial action, and regulatory closure was granted to the subject property on June 5, 1996. While there is a potential that petroleum impacted soils may exist in the near surface soils it is likely that residual petroleum impacted soils (if any) would have likely degraded since the stockpiled soil was spread over a portion of the property. The passage of time reduces any potential for exposure to residual petroleum products.

Based on the UST decommissioning and remediation under agency oversight, the current land use and zoning and regulatory closure, the former release of a diesel UST appears to represent a CREC. Partner concludes that the possible presence of petroleum products in the near surface soils is not expected to represent a significant environmental concern at this time.

Business Environmental Risk

A Business Environmental Risk (BER) is a risk which can have a material environmental or environmentally driven impact on the business associated with the current or planned use of commercial real estate, not necessarily related to those environmental issues required to be investigated in this practice. The following was identified during the course of this assessment:

- Partner observed de minimis staining on the asphalt near the hydraulic oil dip tank, de minimis staining on the asphalt by the sealer dip tank, and a minor leak with staining near the dyed diesel #2 AST. The diesel AST was observed as corroding with damage and chipping.
- Due to the age of the subject property buildings, there is a potential that ACM and/or LBP are present. Overall, all suspect ACMs and painted surfaces were observed in fair to good condition and do not pose a health and safety concern to the occupants of the subject property at this time. Should these materials be replaced or demolished, the identified suspect ACMs and LBP would need to be sampled to confirm the presence or absence of asbestos and/or lead-based paint prior to any renovation or demolition activities to prevent potential exposure to workers and/or building occupants.

Parter Engineering and Science, Inc. recommendations included:

- Though de minimis is nature, spills near dip tanks and the diesel AST should be remediated. Furthermore, the diesel AST should be repaired or/or replaced due to its ongoing corrosion damage.
- Operations & Maintenance (O&M) Programs should be implemented to safely manage the suspect ACMs and LBP located at the subject property.
- Should future redevelopment of the subject property involve residential or sensitive occupancy, a subsurface investigation may be required by regulators to rule out the potential for residual contamination that exceeds residential cleanup levels, land use restrictions or additional issues that might warrant further investigation in association with the former remedial activities.
- A limited subsurface investigation should be conducted near the septic system outfall of the north exterior of the maintenance shop to determine the presence or absence of soil, soil gas, and/or groundwater contamination due to the historical use of the subject property

UES would like to note that the ASTs discussed above have been granted closure under regulatory guidance.

3.0 OBJECTIVE

The purpose of the Phase II ESA is to conduct a surface and subsurface investigation of the Site to determine the presence of soil and/or soil gas contamination due to the historical use of the Site.

4.0 RIVERSIDE COUNTY REQUIREMENTS FOR THE PHASE II ESA

Based on the results of the Phase I ESA conducted by Partner Engineering and Science, Inc. and institutional knowledge of Riverside County, there has been extensive communication with UES and Riverside County and the following are the County's requirements for the Phase II ESA:

- Two soil samples at each of the stockpiled soil areas.
- A soil gas survey consisting of seven probes, six around the main manufacturing building and one near the shop area.

5.0 PROPOSED SOIL AND SOIL GAS SAMPLING ACTIVIES

UES has prepared the following scope of work to collect soil and soil gas data from the Site. In preparation for environmental field sampling activities, UES will:

- Prepare a Site-Specific Health and Safety Plan and a Community Health Plan.
- Conduct site reconnaissance.
- Mark the proposed soil gas boring locations with white paint/stakes/flagging and notify Underground Service Alert (USA) Dig Alert to request a Dig Permit. UES will begin sampling activities after receiving clearance notification from the responding utilities, which will happen no sooner than 72 hours after notifying USA.

5.1 Soil Sampling

UES will sample soils located within the two identified stockpiled areas at the site to assess whether contaminants of concern (COCs) are present in subsurface soil beneath the Subject Property at concentrations exceeding environmental screening levels. Two samples will be taken from each stockpile area, for a total of four samples. Samples will be taken using a hand auger at a depth of maximum 5 feet below ground surface (fbgs). The exact depth of the stockpiled material is not known, therefore the soil samples may be taken at depths closer to the surface. UES will attempt to get two samples from each location of the fill material in the stockpile areas. Subsurface soil conditions will be described using the Unified Soil Classification System (USCS).

UES will label each sample container to indicate a unique sample identification and the time and date collected. Nitrile gloves will be worn during sample collection and replaced with a new pair between sample locations. Sample collection equipment will be decontaminated between samples by washing in a solution of distilled water and surfactant, then rinsed three times with distilled water. UES will preserve samples in a chilled, thermally insulated container during transport to a NELAP-certified analytical laboratory with completed chain-of-custody forms. After sampling, the remaining soil will be placed back in the stockpile area.

5.2 Soil Gas Sampling

UES will utilize the services of Optimal Technology (Optimal), a mobile lab specializing in soil gas testing, to install seven soil gas sampling probes at a depth of 5 feet and to collect the soil gas samples at the Site. The soil gas sampling probe locations will be uploaded to a high accuracy global positioning system receiver (GPSr), which will then be used to navigate to the sample locations in the field. Additionally, the actual position of each soil gas sampling probe location will be recorded using the GPSr. Soil gas sampling activities will be driven by the California Department of Toxic Substances Control (DTSC) guidance documents.

Below is a summary of Optimal's sampling procedure:

Sampling is performed by hydraulically pushing soil gas probes to a depth of 10.0 to 15.0 feet bgs. An electric rotary hammer drill is used to drill a 1.0-inch hole through any overlying concrete/asphalt to allow probe placement when required. The same electric hammer drill can be used to push probes in areas of resistance during placement.

At each sampling location an electric vacuum pump (set to draw 0.2 liters/min of soil gas at a maximum vacuum of 100" of water) is attached to the probe and purged prior to sample collection. Gas samples are obtained by drawing the sample through a luer-lock connection which connects the sampling probe and the vacuum pump or puncturing tubing which connects the sampling probe and the vacuum pump. New tubing is used at each sampling point to prevent cross contamination.

Samples are immediately injected into the gas chromatograph/purge and trap after collection. All analyses are performed on a laboratory grade Agilent model 6890N gas chromatograph equipped with an Agilent model 5973N Mass Spectra Detector and Tekmar LSC 3100 Purge and Trap and a Flame Ionization Detector (FID). Capillary columns using helium as the carrier gas is used to perform all analysis. All results are collected on a personal computer utilizing Agilent's PC based chromatographic data collection and handling system.

The samples will be analyzed in Optimal's mobile lab that will be present at the Site. Once results have been received, the probe holes will be decommissioned. The approximate location of the soil gas probes are shown in Figure 3. The probes will be located in the two stockpile areas on the Site.

6.0 LABORATORY ANALYSES

The soil samples will be submitted with completed chain-of-custody forms to a NELAP-certified laboratory and will be analyzed using the following methods:

- Title 22 Metals on the 2.5 fbgs and 5 fbgs samples
- EPA Method 1664 for Total Petroleum Hydrocarbons (TPH) in all samples
- EPA Method 8260B for Volatile Organic Compounds (VOCs) in all samples
- EPA Method 8081B for Organochlorine Pesticides (OCPs) in all samples

The soil gas samples will be analyzed by Optimal, a State Water Resources Control Board-certified laboratory, onsite in their mobile lab using the following method:

- Modified EPA Method 8260B for Volatile Organic Compounds (VOCs)

7.0 REPORTING

Following approval of this work plan by Riverside County, UES staff will schedule the fieldwork. Fieldwork activities will be dependent on the Client's schedule and receipt of written authorization to proceed. Fieldwork is contingent upon site access and weather conditions. After the completion of field and laboratory activities, a Limited Phase II ESA Report with findings and recommendations will be provided to the Client in PDF format within 10 business days after laboratory analytical results are received. This report will detail the results of this sampling event, based upon the scope of work described herein.

8.0 SCHEDULE

UES estimates that field sampling activities will be implemented within 15 business days of Riverside County's workplan approval. UES will notify Riverside County as soon as possible prior to implementing field sampling activities. UES estimates that the soil sampling will take up to one day to complete. UES estimates the installation of the soil gas sampling probes will take up one day to complete and soil gas sample collection will take up to up to two days to complete after soil gas sample probe equalization time of 72 hours has expired. UES anticipates submitting the Phase II ESA report within 15 days of receipt of final laboratory reports.

All work will be performed under the supervision of a California Professional Engineer, in accordance with current state and local guidelines. All work will be performed using a degree of skill consistent with that of competent environmental consulting firms performing similar work in the area. Additional research or receipt of information regarding the Site that was not disclosed or available to us during our assessment may result in a revision of this Work Plan.

FIGURES

Feet
0 120 240 480 720 960

Legend

Approx. Site Boundary

The presented layers were obtained from various sources including ESRI, USGS, USDA, CCBD GISMO, CCFCD, GIS User Community among others. The GIS information is presented for reference only. No warranties, either expressed or implied, are intended or made. If you have any questions regarding this information, please contact NOVA.

UNIVERSAL ENGINEERING SCIENCES

PROJECT:	**23825 Temescal Canyon Road Corona, CA Phase II ESA Workplan**	**SAMPLE LOCATION MAP**	
CLIENT:	**MCP Industries**	PROJECT NO: **4230.2400025.0000**	FIGURE NO: **1**

Legend

- Approx. Soil Sample Location
- Approx. Site Boundary

0 120 240 480 720 960 Feet

The presented layers were obtained from various sources including ESRI, USGS, USDA, CCBD GISMO, CCFCD, GIS User Community among others. The GIS information is presented for reference only. No warranties, either expressed or implied, are intended or made. If you have any questions regarding this information, please contact NOVA.

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PROJECT:	**23825 Temescal Canyon Road Corona, CA Phase II ESA Workplan**	**SAMPLE LOCATION MAP**	
CLIENT:	**MCP Industries**	PROJECT NO: **4230.2400025.0000**	FIGURE NO: **2**

Legend

- Approx. Soil Gas Sample Location
- Approx. Site Boundary

0 120 240 480 720 960 Feet

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PROJECT: **23825 Temescal Canyon Road Corona, CA Phase II ESA Workplan**

CLIENT: **MCP Industries**

SAMPLE LOCATION MAP

PROJECT NO: **4230.2400025.0000**

FIGURE NO: **3**

Stantec

Stantec is a global leader in sustainable architecture, engineering, and environmental consulting. The diverse perspectives of our partners and interested parties drive us to think beyond what's previously been done on critical issues like climate change, digital transformation, and future-proofing our cities and infrastructure. We innovate at the intersection of community, creativity, and client relationships to advance communities everywhere, so that together we can redefine what's possible.