REPORT OF METHANE SOIL GAS INVESTIGATION
PROPOSED REDEVELOPMENT

370 S. FAIRFAX AVE., 6300-6370 W. 3RD ST &
347 S. OGDEN DRIVE.,
LOS ANGELES, CA

Prepared for:

WACTOR & WICK LLP

Los Angeles, California

TERRA-PETRA ENVIRONMENTAL ENGINEERING
700 S Flower Street, Suite 2580
Los Angeles, California

January 31, 2019

January 31, 2019

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Subject: **Report of Methane Soil Gas Testing**
Proposed Redevelopment
370 S. Fairfax Ave., 6300-6370 W. 3rd St and 347 S. Ogden Dr.,
Los Angeles, CA 90036
Tract: TR 215 Block: None Lot(s): PT 12

Terra-Petra is pleased to submit this report to summarize the methane soil gas investigation services conducted at the subject site referenced above. The purpose of this investigation was to determine the methane soil gas mitigation requirements in connection with the proposed redevelopment. The project site has been determined to be located within a City of Los Angeles designated Methane Zone. (See **Exhibit 1, Site Location Map**).

Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by qualified, reputable environmental consultants and professional firms performing similar services and practicing in this or similar localities. No other warranty, expressed or implied, is made as to the professional advice included in this report. This report has been prepared for Wactor & Wick LLP, its clients and any pertinent consultants to be used solely for the design of the proposed project and compliance with CEQA requirements of the lead agency. This report has not been prepared for use by other parties, and may not contain sufficient information for purposes of other parties or other uses.

PROJECT SUMMARY

The Project Site is currently improved with an approximately 214,736 square-foot retail center known as the Town and Country Shopping Center, located on an approximately 327,121 square-foot site. The Proposed Project includes the partial demolition of an existing surface parking lot and commercial buildings, for up to 151,048 square feet of existing

commercial floor area to be demolished (with 63,688 square feet of existing commercial floor area to remain); and the construction of a new mixed-use building containing 331 multi-family residential apartment dwelling units, for approximately 343,000 square feet of new residential floor area, and up to approximately 83,994 square feet of new commercial floor area, all located on the eastern portion of the Project Site.

Existing buildings on the western portion of the Project Site are to remain and are not considered part of the Proposed Project. In totality, all improvements on the Project Site (including the existing buildings to remain and the new buildings proposed) will comply with the applicable Floor Area Ratio (FAR) of 1.5 to 1.

The Proposed Project will consist of a mid-rise, eight-story structure and two levels of subterranean parking, for a maximum height of approximately 100 feet. The residential component will consist of 70 studio units, 162 one-bedroom units, 66 two-bedroom units, and 33 three-bedroom units. The Project Site would provide a maximum of 1,156 automobile parking spaces, comprised of 982 new spaces within the mixed-use building as part of the Proposed Project, and 174 spaces within the existing surface parking lot to remain. Short- and long-term bicycle parking will be provided pursuant to the Los Angeles Municipal Code (LAMC). Vehicular access to the Project Site will be provided via four driveways, which include two new driveways (one residential and one commercial) with access to the parking areas for the new mixed-use building along South Ogden Drive, and two existing driveways along South Fairfax Avenue and West 3rd Street with access to the surface parking lot.

Terra-Petra was contacted to perform a methane soil gas investigation at the above mentioned project site under our LADBS Testing License #10224. Based on the Division of Oil, Gas and Geothermal Resources (DOGGR) records and the Munger Map Book (1987), one plugged and abandoned oil well is present on the property. The well is identified as Salt Lake 99 (API number 037-15229), Lease Salt Lake Well #99 County Los Angeles [037] District 1 Operator Chevron U.S.A. Inc. Well Status: Plugged & Abandoned September 20, 1930. Based on the proximity of this oil well and the location of the site within a previously existing oil well field, the project is expected to be highly susceptible to methane gas intrusion. The investigation was designed to detect the presence of any elevated levels of methane gas in the in-situ soils underlying the foundations of the existing buildings.

SOIL GAS PROBE INSTALLATION & TESTING

The methane soil gas testing at the site was performed based on the procedures conforming to the Los Angeles Department of Building and Safety (LADBS) Information Bulletin Ref. No. 91.71404.1, P/BC 2002-101. City guidelines require that one shallow-depth probe be installed for every 10,000 square feet of site area where the highest concentration of soil gas is most likely to be found, with a minimum of two shallow gas probes regardless of the total area of the site. A total of fifteen (15) shallow probe locations were selected based on the site testing area of 141,818 sq. ft. (See **Exhibit 2, Probe Locations Map**). Predicated on the soil gas testing results at the shallow probes, an additional eight (8) deep gas probe locations were selected for a total of twenty-three (23) sampling points.

On 7/17/18 the shallow and deep borings were drilled using a truck-mounted GeoProbe 5410 direct-push drill rig. Shallow borings were drilled to a depth of 4 feet bsg, with soil gas probes installed at approximately 4 feet. Typically, deep methane probes are required to be installed 20 ft. below the lowest proposed building foundation. However, when groundwater is encountered, the deepest probes must be set a minimum of 12" above the groundwater table to prevent probe flooding. Based on a review of the Krazan & Associates, Inc. Preliminary Summary of Findings Geotechnical Letter dated June 19, 2017, *"Groundwater was encountered at a depth of approximately 18 feet below site grades during drilling activities. Based on a review of the Seismic Hazard Evaluation Report for the area, historic high groundwater depths for the vicinity of the subject site are estimated to be at depths on the order of 15 feet below ground surface."* As such, each of the deep borings was drilled to a maximum depth of 15 ft to avoid groundwater. Nested soil gas probes were installed in each deep boring at depths of 5 ft, 10 ft and 15 ft. Soil gas probes were constructed as shown in **Exhibit 3, Probe Construction Diagrams**.

The current investigation was performed in accordance with the LADBS standards. Soil gas samples were collected during three rounds of monitoring on 7/17/18, 7/18/18 and 7/19/18 from the gas probes. Each sampling period from the deep gas probes was separated by a time period of approximately 24 hours. As required by the LADBS standards, all probes were monitored for detectable combustible gas and soil gas pressures using a calibrated CES/Landtec GEM 5000 portable 4-gas detector with a lower limit for reporting methane levels of 1,000 ppmv (parts per million by volume).

TEST RESULTS

Methane soil gas was detected in all shallow and deep probes with the exception of Shallow Probe #4. Methane concentrations ranged from 3,000 ppmv to 895,000 ppmv, with the highest measurement recorded in Deep Probe #4. The full results of the soil gas testing measurements were recorded in a City Of Los Angeles approved format as presented in the attached **Exhibit 5, Form 1 – Certificate of Compliance for Methane Test Data**.

CONCLUSIONS

Methane gas is combustible with a lower explosive limit (LEL) of approximately 5%,v/v (percent volume) in air. In structures, methane concentrations above 25% of the LEL (above 1.25%, v/v) are considered to be regulatory action levels above which gas concentrations must be mitigated. For buildings to be constructed in a methane zone, the City of Los Angeles Department of Building and Safety considers even non-detectable readings of methane soil gas concentrations (0.0%,v/v) to be the action level at which soil gas concentrations must be mitigated. Thus, methane mitigation is mandatory for any new construction in the methane zone.

Based on the historic ground water table, the elevated methane readings produced on site, and the LADBS action levels presented above, the site is deemed a **Methane Zone – Level V, All Pressures**. As such, we would typically recommend that the mitigation system incorporate all components listed for a Design Level V on the attached **Table 1A**, including: an impervious membrane, dewatering system, perforated horizontal vent pipe system, 4-inch gravel thickness beneath the membrane, vent risers, and mechanical gas extraction (blowers), and a gas detection/alarm system and mechanical ventilation system shall in the lowest occupied level of the building.

Given the historic shallow groundwater conditions at the site, in lieu of the above-mentioned dewatering system and vent pipe system, a "V-Bottom" foundation with a minimum 1% slope towards the building perimeter which is designed to withstand hydrostatic pressures would generally be acceptable to the LADBS. The "V-Bottom" foundation Level V mitigation design shall include all of the following elements to be in compliance with the LADBS:

- Areas with a Mat Foundation will be fitted with an impermeable methane barrier membrane.
- The bottom side of the foundation slab will have a 1% "V" Bottom slope to serve as the pressure relief venting system.
- A minimum 4" thick aggregate layer will be placed beneath the slab to assist in conveying methane gas from beneath the structure.
- An impermeable methane gas/waterproofing/tar barrier will be installed at all below grade walls.
- If an Oil Well is located on the property beneath a new building, it will be fitted with a Vent Cone and Venting System as required by the State of California Division of Oil and Gas.
- Electrical & communications conduit seals that prevent methane gas intrusion will be installed at all dry utility conduits.
- Utility trench dams that prevent methane gas intrusion will be installed at the exterior sides of the building.
- Gas Detection Systems will be installed throughout the lowest level parking garage in the buildings which will continuously monitor the interior space for methane gas and will be capable of activating the building's ventilation system and contacting a central alarm service if methane is detected.

Implementation of the proposed mitigation measures will reduce or eliminate any potential effects of the detected methane concentrations at the Site to the public and the environment. Specifically, the proposed project will not emit hazardous emissions or cause the releases of hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.

The California Code of Regulations defines a "hazardous material" as a substance, material, or mixture which by reason of being explosive, flammable, poisonous, corrosive, oxidizing, an irritant, or otherwise harmful, is likely to cause injury or illness. Hazardous substance includes a hazardous chemical as defined in section 5194(c) and hazardous waste as defined in section 5192(a)(3). Additional definitions for hazardous substances are found in sections 5194(c), for Hazard Communication purposes only, and 5192(a)(3), for Hazardous Waste Operations purposes only.

The Federal Department of Transportation (DOT) defines "hazardous material" and "hazardous substance as follows:

Hazardous material means a substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and has designated as hazardous under section 5103 of Federal hazardous materials transportation law (49 U.S.C. 5103). The term includes hazardous substances, hazardous wastes, marine pollutants, elevated temperature

materials, materials designated as hazardous in the Hazardous Materials Table (see 49 CFR 172.101), and materials that meet the defining criteria for hazard classes and divisions in part 173 of this subchapter.

Hazardous substance for the purposes of this subchapter, means a material, including its mixtures and solutions, that—
(1) Is listed in the appendix A to §172.101 of this subchapter;
(2) Is in a quantity, in one package, which equals or exceeds the reportable quantity (RQ) listed in the appendix A to §172.101 of this subchapter; and
(3) When in a mixture or solution—
(i) For radionuclides, conforms to paragraph 7 of the appendix A to §172.101.
(ii) For other than radionuclides, is in a concentration by weight which equals or exceeds the concentration corresponding to the RQ of the material, as shown in the following table:

	Concentration by Weight	
RQ pounds (kilograms)	**Percent**	**PPM**
5000 (2270)	10	100,000
1000 (454)	2	20,000
100 (45.4)	0.2	2,000
10 (4.54)	0.02	200
1 (0.454)	0.002	20

The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance in Appendix A to §172.101 of this subchapter, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). It should be noted that methane is not listed on the list of hazardous substances in Appendix A to the §172.101.

To further support the conclusions that the on-site methane concentrations will not generate hazardous conditions during any phase of the project, the following facts about methane gas relevant to site excavation and development are provided:

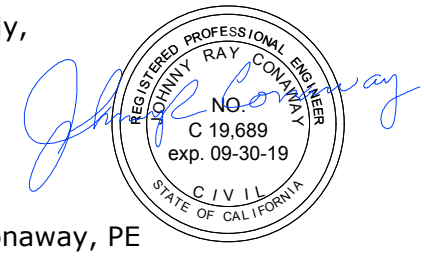
- Methane gas is naturally occurring and widespread in the Los Angeles Basin, colorless (even when it burns), tasteless and odorless.
- In its natural state in soil, methane gas is not combustible, explosive or flammable. Methane gas does not combust below 5% concentration, for there is too little fuel. It does not combust in concentrations over 15% because there is too little oxygen. Methane can accumulate to these concentrations only inside enclosed spaces such as buildings. Excavation of soil containing natural concentrations of methane below the 5% concentration threshold are non-combustible, non-explosive and non-flammable. Excavation of such soil doesn't create a public safety hazard.
- For methane gas to combust, it must not only be in concentrations of 5 to 15 percent, but there must also be an ignition source of 1,000° F. or more.

- Because methane is lighter than air, it tends to move upward, and diffuses rapidly in the atmosphere. The South Coast Air Quality Management District which closely regulates the emission of air contaminants in the Los Angeles area does not regulate methane emissions from construction sites.
- Methane is non-corrosive. It is non-toxic. It is non-carcinogenic.
- Methane gas does not manufacture more methane gas. Concentrations can never exceed those intruding into an occupied space from the soil; they can only be depleted via atmospheric diffusion.
- During the demolition process the existing buildings will be deconstructed in a manner that would support safe conditions at the site. The removal of existing roofs and walls will allow enclosed spaces to naturally ventilate to the atmosphere. This process eliminates the potential for a methane explosion.
- The site redevelopment will not create or exacerbate a methane gas emission or combustion hazard. Additionally the in-building methane mitigation measures required by the City will protect building users from any methane gas underlying the development.

In conclusion, the proposed site development will not create or exacerbate a significant hazard through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment during construction and once the recommended Methane Zone Level V system is in place.

I am a registered California civil engineer with experience in methane gas mitigation systems. Should you have any questions regarding this report, please contact Justin Conaway at 213-458-0494. We appreciate the opportunity to assist you with your project.

Sincerely,



John Conaway, PE
Terra-Petra
LADBS License #10224

Attachments
Exhibit 1: Site Location Map
Exhibit 2: Probe Locations Map
Exhibit 3: Probe Construction Diagrams
Exhibit 4: Field Data Sheets
Exhibit 5: Form 1 – Certificate of Compliance for Methane Test Data

Exhibit 1:
Site Location Map

NavigateLA Map

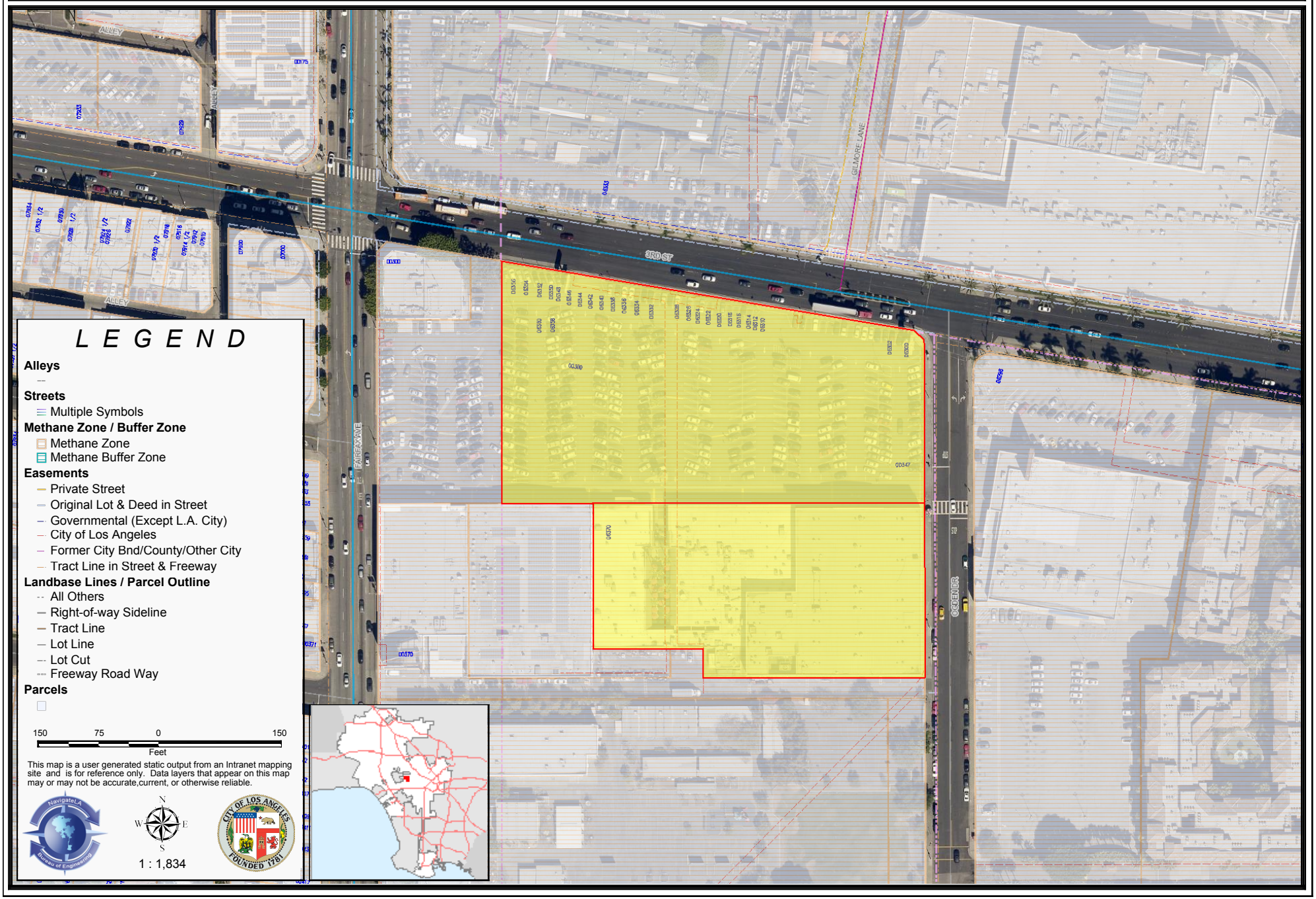
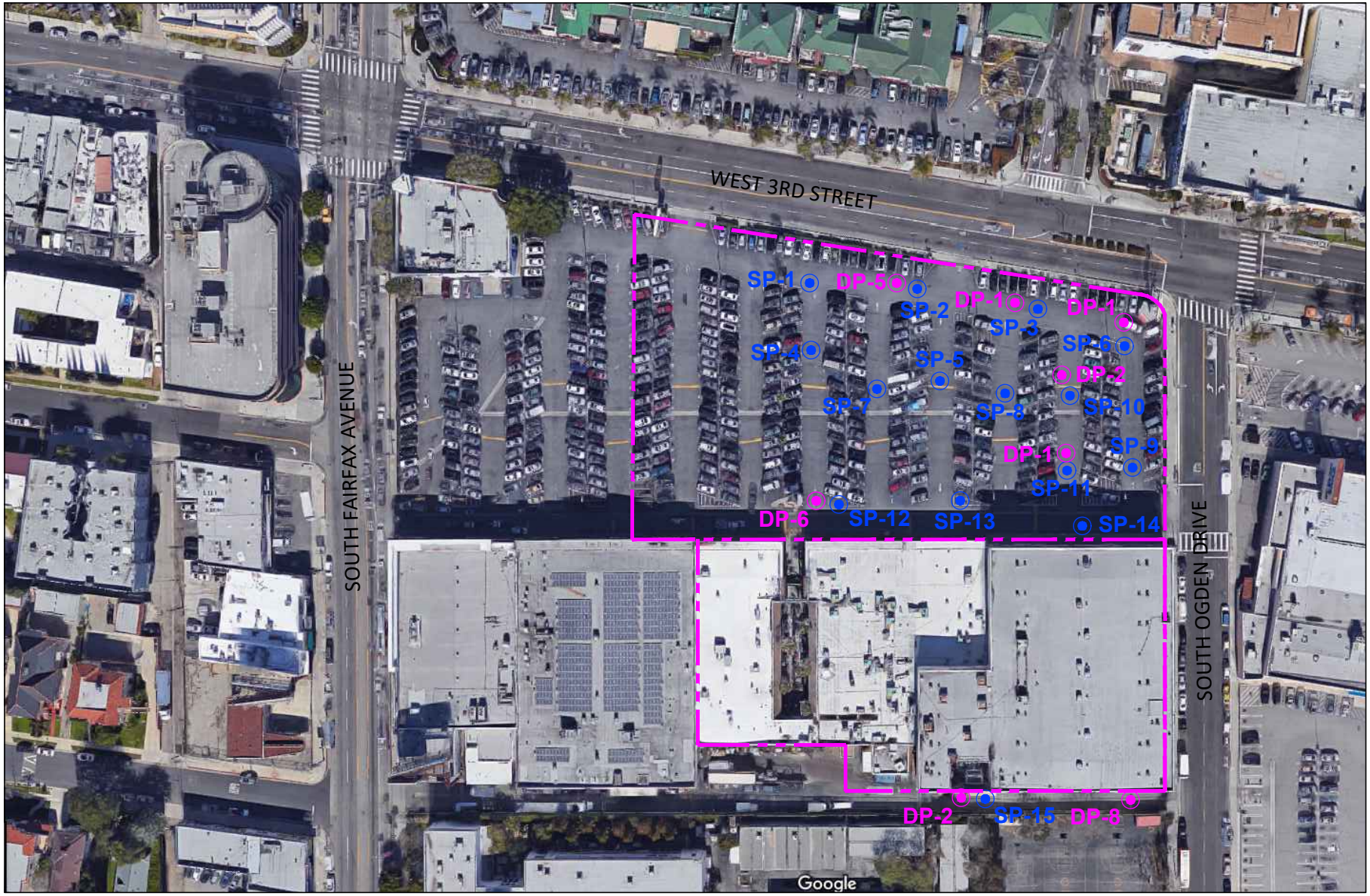


Exhibit 2:
Probe Locations Map



LEGEND

SP-14 ◉ SHALLOW PROBE LOCATION

DP-8 ◉ DEEP PROBE LOCATION

— - - — SITE LIMITS

6300 3RD STREET
LOS ANGELES CA 90036

0' 10' 25'

SCALE: 1" = 25'

EXHIBIT: 2

TITLE: PROBE LOCATIONS

DRAWN BY: RICHARD McCLANAHAN

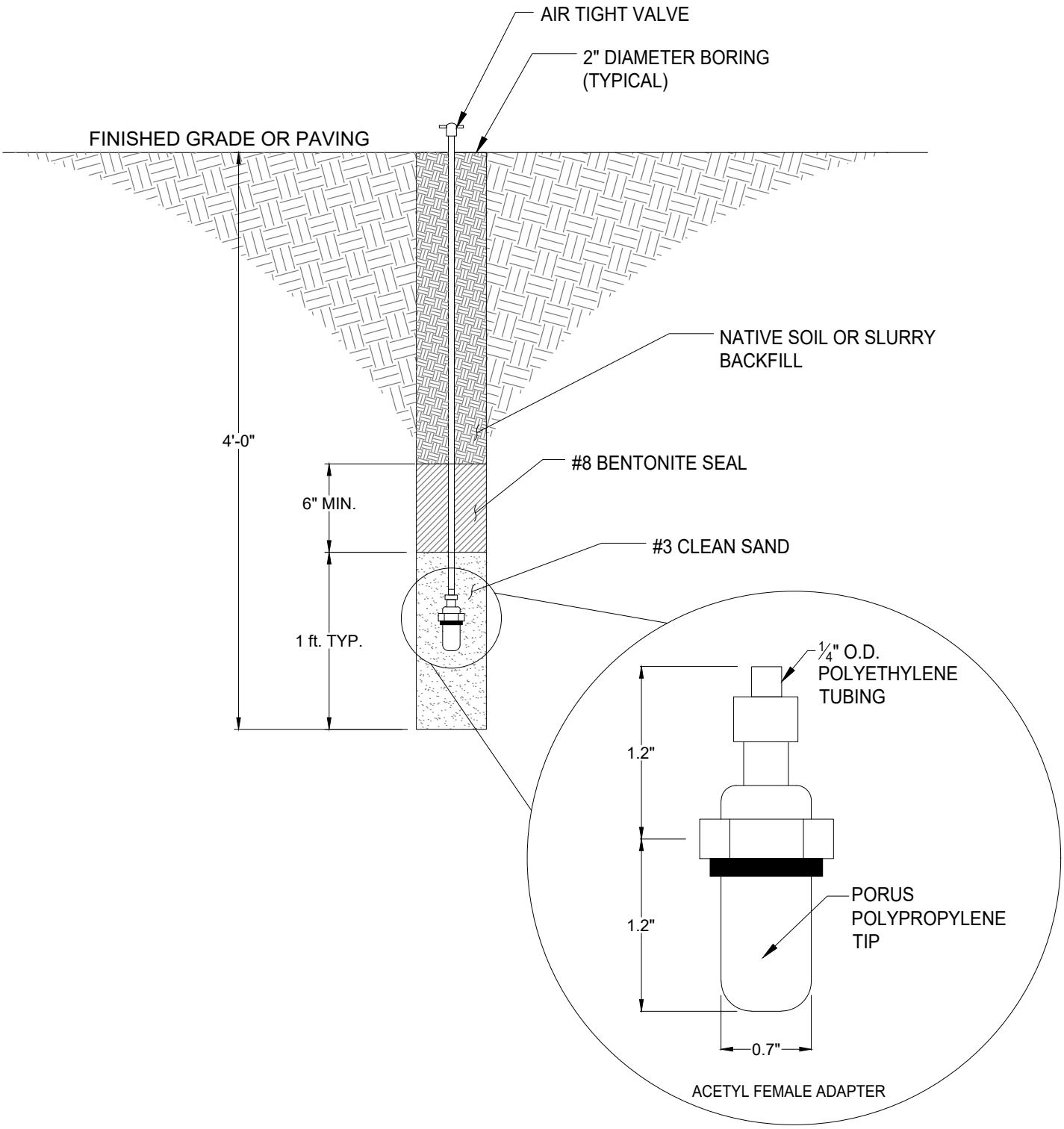
DATE: JULY 20, 2018

CHECKED BY:

ADDRESS: 6300 3RD STREET
LOS ANGELES CA 90036

Terra-Petra
WATERPROOFING DIVISION
700 S. Flower St., Ste. 2580, Los Angeles, CA 90017 213.458.0494
Los Angeles (HQ) · San Francisco · New York · Denver · Tacoma

Exhibit 3:
Probe Construction Diagrams



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Los Angeles (HQ) . San Francisco . New York . Denver . Tacoma

ADDRESS:
6300 3RD STREET
LOS ANGELES CA 90036

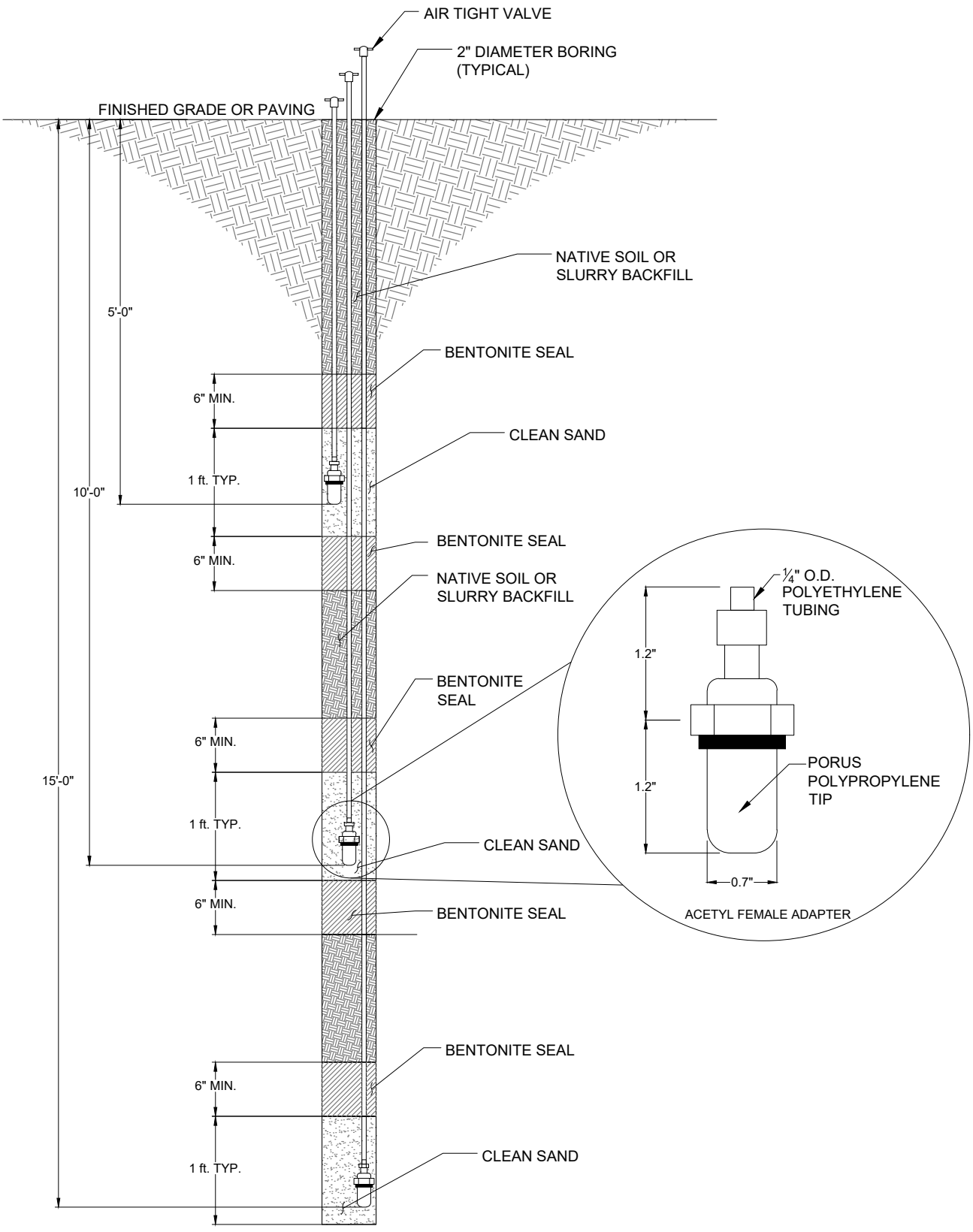
TITLE: CONSTRUCTION DIAGRAM FOR SHALLOW PROBE AT 4'

DRAWN BY: R. McCLANAHAN

CHECKED BY:

DATE: JULY 31, 2018

SHEET: 3



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Los Angeles (HQ) . San Francisco . New York . Denver . Tacoma

ADDRESS:
6300 3RD STREET
LOS ANGELES CA 90036

TITLE: CONSTRUCTION DIAGRAM FOR DEEP PROBE AT 5', 10' AND 15'

DRAWN BY: R. McCLANAHAN

CHECKED BY:

DATE: JULY 20, 2018

SHEET: 3

Exhibit 4:
Field Data Sheets

Soil Gas Investigation Spreadsheet

Site Location:		**6300 W. 3rd St., Los Angeles, CA.**								
Date:		**7/17/18**								
Time:		**2200hr.**								
Weather conditions:		**Clear, cool, still, dry.**								
Instrument:		**Landtec GEM 5000 portable 4-gas detector (I/R for methane).**								
Barometric Pressure:		**29.78-in. Hg**								
Drilling Method:		**Truck-mounted GeoProbe 5410 direct-push drill rig.**								
		Probe Press.	**Methane***		**CO_2**	**O_2**	**N_2**			
Probe No.	**Depth**	**(in-H20)**	**(%v/v)**		**(%v/v)**	**(%v/v)**	**(%v/v)**	**Comments:**		
SP-1	**4.0**	**0.01**	**0.3**		**12.7**	**2.7**	**Bal.**			
SP-2	**4.0**	**0.00**	**10.3**		**7.1**	**9.9**	**Bal.**			
SP-3	**4.0**	**0.00**	**85.5**		**6.6**	**7.4**	**Bal.**			
SP-4	**4.0**									
SP-5	**4.0**									
SP-6	**4.0**	**0.04**	**47.2**		**8.1**	**2.9**	**Bal.**			
SP-7	**4.0**									
SP-8	**4.0**									
SP-9	**4.0**	**0.06**	**2.0**		**2.4**	**15.1**	**Bal.**			
SP-10	**4.0**									
SP-11	**4.0**									
SP-12	**4.0**	**0.01**	**10.5**		**4.9**	**8.5**	**Bal.**			
SP-13	**4.0**	**0.00**	**6.4**		**2.8**	**7.6**	**Bal.**			
SP-14	**4.0**	**0.02**	**27.1**		**4.9**	**11.3**	**Bal.**			
SP-15	**4.0**									
DP-1	**5.0**									
	10.0									
	15.0									
DP-2	**5.0**									
	10.0									
	15.0									
(Note: ND = Not Detected. All gas quality measurements taken with in-line carbon filter.)										

Soil Gas Investigation Spreadsheet

Probe No.	Depth	Probe Press. (in-H20)	Methane* (%v/v)		CO_2 (%v/v)	O_2 (%v/v)	N_2 (%v/v)	Comments:		
DP-3	5.0									
	10.0									
	15.0									
DP-4	5.0									
	10.0									
	15.0									
DP-5	5.0									
	10.0									
	15.0									
DP-6	5.0									
	10.0									
	15.0									
DP-7	5.0									
	10.0									
	15.0									
DP-8	5.0									
	10.0									
	15.0									
(Note: ND = Not Detected. All gas quality measurements taken with in-line carbon filter.)										

Soil Gas Investigation Spreadsheet

Site Location:		**6300 W. 3rd St., Los Angeles, CA.**								
Date:		**7/18/18**								
Time:		**2200hr.**								
Weather conditions:		**Clear, cool, still, dry.**								
Instrument:		**Landtec GEM 5000 portable 4-gas detector (I/R for methane), RKI Eagle 4-gas detector.**								
Barometric Pressure:		**29.84-in. Hg**								
Drilling Method:		**Truck-mounted GeoProbe 5410 direct-push drill rig.**								
		Probe Press.	**Methane***	**H_2S**	**CO_2**	**O_2**	**N_2**			
Probe No.	**Depth**	**(in-H20)**	**(%v/v)**	**(ppmv)**	**(%v/v)**	**(%v/v)**	**(%v/v)**	**Comments:**		
SP-1	**4.0**							**Done.**		
SP-2	**4.0**							**Done.**		
SP-3	**4.0**							**Done.**		
SP-4	**4.0**	**0.01**	**ND**	**ND**	**1.2**	**18.0**	**Bal.**			
SP-5	**4.0**	**0.03**	**0.6**	**ND**	**6.7**	**6.7**	**Bal.**			
SP-6	**4.0**							**Done.**		
SP-7	**4.0**	**0.01**	**ND**	**ND**	**1.7**	**16.2**	**Bal.**			
SP-8	**4.0**	**0.02**	**0.6**	**ND**	**6.8**	**8.3**	**Bal.**			
SP-9	**4.0**							**Done.**		
SP-10	**4.0**	**0.03**	**60.9**	**ND**	**6.6**	**4.7**	**Bal.**			
SP-11	**4.0**	**0.02**	**29.6**	**ND**	**11.8**	**3.3**	**Bal.**			
SP-12	**4.0**							**Done.**		
SP-13	**4.0**							**Done.**		
SP-14	**4.0**							**Done.**		
SP-15	**4.0**	**0.01**	**76.6**	**ND**	**3.9**	**8.9**	**Bal.**			
DP-1	**5.0**	**0.00**	**21.9**	**ND**	**1.2**	**2.7**	**Bal.**			
	10.0	**0.01**	**30.6**	**ND**	**4.7**	**6.7**	**Bal.**			
	15.0	**0.01**	**27.6**	**ND**	**2.4**	**0.2**	**Bal.**			
DP-2	**5.0**	**0.04**	**51.2**	**ND**	**3.3**	**4.5**	**Bal.**			
	10.0	**0.03**	**82.9**	**ND**	**7.8**	**0.0**	**Bal.**			
	15.0	**0.07**	**74.9**	**ND**	**2.2**	**0.0**	**Bal.**			
(Note: ND = Not Detected. All gas quality measurements taken with in-line carbon filter.)										

Soil Gas Investigation Spreadsheet

Probe No.	Depth	Probe Press. (in-H20)	Methane* (%v/v)	H_2S (ppmv)	CO_2 (%v/v)	O_2 (%v/v)	N_2 (%v/v)	Comments:
DP-3	5.0	0.05	20.7	ND	1.6	5.4	Bal.	
	10.0	0.02	28.3	ND	5.5	0.4	Bal.	
	15.0	0.02	26.7	ND	2.6	0.3	Bal.	
DP-4	5.0	0.01	82.3	ND	5.2	1.8	Bal.	
	10.0	0.04	54.1	ND	3.0	1.5	Bal.	
	15.0	0.02	66.4	ND	6.1	0.3	Bal.	
DP-5	5.0	0.00	20.1	ND	4.6	5.9	Bal.	
	10.0	0.10	19.7	ND	2.7	4.4	Bal.	
	15.0	0.02	28.6	ND	5.3	3.0	Bal.	
DP-6	5.0	0.04	2.6	ND	0.7	16.8	Bal.	
	10.0	0.02	15.3	ND	4.0	1.0	Bal.	
	15.0	0.00	18.2	ND	8.2	0.2	Bal.	
DP-7	5.0	0.00	7.4	ND	0.8	16.6	Bal.	
	10.0	0.00	21.6	ND	1.4	13.3	Bal.	
	15.0	0.00	27.6	ND	3.5	12.1	Bal.	
DP-8	5.0	0.02	4.2	ND	2.7	15.1	Bal.	
	10.0	0.03	10.6	ND	5.7	10.1	Bal.	
	15.0	0.01	18	ND	12.6	6.1	Bal.	

(Note: ND = Not Detected. All gas quality measurements taken with in-line carbon filter.)

Soil Gas Investigation Spreadsheet

Site Location:		**6300 W. 3rd St., Los Angeles, CA.**								
Date:		**7/19/18**								
Time:		**2200hr.**								
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Probe No.	**Depth**	**(in-H20)**	**(%v/v)**	**(ppmv)**	**(%v/v)**	**(%v/v)**	**(%v/v)**	**Comments:**		
SP-1	**4.0**							**Done.**		
SP-2	**4.0**							**Done.**		
SP-3	**4.0**							**Done.**		
SP-4	**4.0**							**Done.**		
SP-5	**4.0**							**Done.**		
SP-6	**4.0**							**Done.**		
SP-7	**4.0**							**Done.**		
SP-8	**4.0**							**Done.**		
SP-9	**4.0**							**Done.**		
SP-10	**4.0**							**Done.**		
SP-11	**4.0**							**Done.**		
SP-12	**4.0**							**Done.**		
SP-13	**4.0**							**Done.**		
SP-14	**4.0**							**Done.**		
SP-15	**4.0**							**Done.**		
DP-1	**5.0**	**0.02**	**25.3**	**ND**	**4.9**	**1.9**	**Bal.**			
	10.0	**0.00**	**26.1**	**ND**	**6.9**	**1.7**	**Bal.**			
	15.0	**0.00**	**28.9**	**ND**	**6.6**	**1.2**	**Bal.**			
DP-2	**5.0**	**0.01**	**59.7**	**ND**	**6.9**	**4.7**	**Bal.**			
	10.0	**0.00**	**63.6**	**ND**	**8.0**	**2.4**	**Bal.**			
	15.0	**0.00**	**72.6**	**ND**	**6.5**	**1.2**	**Bal.**			
(Note: ND = Not Detected. All gas quality measurements taken with in-line carbon filter.)										

Soil Gas Investigation Spreadsheet

Probe No.	Depth	Probe Press. (in-H20)	Methane* (%v/v)	H_2S (ppmv)	CO_2 (%v/v)	O_2 (%v/v)	N_2 (%v/v)	Comments:
DP-3	5.0	0.01	31.5	ND	7.5	1.7	Bal.	
	10.0	0.02	28.1	ND	8.0	1.0	Bal.	
	15.0	0.01	28.2	ND	7.5	0.6	Bal.	
DP-4	5.0	0.00	52.2	ND	3.7	5.2	Bal.	
	10.0	0.02	89.5	ND	11.4	0.1	Bal.	
	15.0	0.01	47.3	ND	4.9	4.8	Bal.	
DP-5	5.0	0.00	21.7	ND	5.9	4.0	Bal.	
	10.0	0.03	15.3	ND	4.8	3.6	Bal.	
	15.0	0.04	30.9	ND	10.7	1.7	Bal.	
DP-6	5.0	0.01	7.0	ND	3.2	6.8	Bal.	
	10.0	0.00	16.6	ND	6.7	1.0	Bal.	
	15.0	0.01	16.0	ND	7.9	0.5	Bal.	
DP-7	5.0	0.01	47.9	ND	6.8	8.6	Bal.	
	10.0	0.04	0.6	ND	2.3	15.2	Bal.	
	15.0	0.01	0.6	ND	3.0	14.8	Bal.	
DP-8	5.0	0.00	21.8	ND	21.9	0.1	Bal.	
	10.0	0.00	11.5	ND	13.7	5.6	Bal.	
	15.0	0.00	1.6	ND	6.2	15.1	Bal.	

(Note: ND = Not Detected. All gas quality measurements taken with in-line carbon filter.)

Exhibit 5:
Form 01 Certificate of Compliance for Methane Test Data

FORM 1 - CERTIFICATE OF COMPLIANCE FOR METHANE TEST DATA

Part 1: Certification Sheet

Site Address: 370 S. Fairfax Ave., 6300-6370 W. 3rd St. & 347 S. Ogden Dr.

Legal Description: Tract: TR 215 Lot: PT 12 Block: None

Building Use: Residential Mid-Rise Building

Architect's, Engineer's or Geologist's Stamp:

REGISTERED PROFFESIONAL ENGINEER
JOHNNY RAY CONAWAY
NO. C 19,689
exp. 09-30-19
CIVIL
STATE OF CALIFORNIA

Name of Architect, Engineer, or Geologist: John Conaway

Mailing Address: 700 S. Flower St. #2580
Los Angeles, CA 90017

Telephone: 213 458 0494

Name of Testing Laboratory: Terra-Petra

City Test Lab License #: 10224

Telephone: 213 458 0494

I hereby certify that I have tested the above site for the purpose of methane mitigation and that all procedures were conducted by a City of Los Angeles licensed testing agency in conformity with the requirements of the LADBS Information Bulletin P/BC 2014-101. Where the inspection and testing of all or part of the work above is delegated, full responsibility shall be assumed by the architect, engineer or geologist whose signature is affixed thereon.

Signed: [signature] date 7/30/18

Required Data:

- Project is in the (Methane Zone) or (~~Methane Buffer Zone~~).
- Depth of ground water observed during testing: N/A feet below the Impervious Membrane.
- Depth of Historical High Ground Water Table Elevation*: 0 feet below the Impervious Membrane.
- Design Methane Concentration**: > 12,500 parts per million in volume (ppmv).
- Design Methane Pressure***: All Pressures inches of water column.
- Site Design Level: (~~Level I, Level II, Level III, Level IV~~, Level V) with 22 inches of water column.

De-watering:

- De-watering (is) (~~is not~~) required per Section 7104.3.7.
- Pump discharge rate TBD cubic feet per minute per reference geology or soil report: _____ dated _____.

Additional Investigation:

- Additional investigation (~~was~~) (was not) conducted.

Latest Grading on Site:

- Date of last grading on site (was) (~~was not~~) more than 30 days before Site Testing.
- See Attached explanation of the effect on soil gas survey results by grading operations.

Notes:

* Historical High Ground Water Table Elevation shall mean the highest recorded elevation of ground water table based on historical records and field investigations as determined by the engineer for the methane mitigation system.

** Design Methane Concentration shall mean the highest recorded measured methane concentration from either Shallow Soil Gas Test or any Gas Probe Set on the site.

*** Design Methane Pressure shall mean the highest total pressure measured from any Gas Probe Set on the site.

FORM 1 (CONTINUED) - CERTIFICATE OF COMPLIANCE FOR METHANE TEST DATA

Part 2: Test Data - Shallow Soil Gas Test and Gas Probe Test

Site Address: 6300 W. 3rd St., Los Angeles CA
Description of Gas Analysis Instrument(s): Infra Red
Instrument Name and Model: LAND TEC Gem 5000 Instrument Accuracy: ± 1,000 ppmv.
City of Los Angeles Testing License #: 10224

Date	Time	Probe Set #	Concentration (ppmv)	Pressure (inches water column)	Probe Depth (feet)	Description / Probe Location
						SEE SITE PLAN FOR PROBE LOCATIONS
07/17/2018	22:00	SP-1	3000	0.01	4.0	
" "	" "	SP-2	103000	0.00	4.0	
" "	" "	SP-3	855000	0.00	4.0	
07/18/2018	" "	SP-4	*ND	0.01	4.0	
" "	" "	SP-5	6000	0.03	4.0	
07/17/2018	" "	SP-6	472000	0.04	4.0	
07/18/2018	" "	SP-7	*ND	0.01	4.0	
" "	" "	SP-8	6000	0.02	4.0	
07/17/2018	" "	SP-9	20000	0.06	4.0	
07/18/2018	" "	SP-10	60900	0.03	4.0	
" "	" "	SP-11	29600	0.02	4.0	
07/17/2018	" "	SP-12	105000	0.01	4.0	
" "	" "	SP-13	6400	0.00	4.0	
" "	" "	SP-14	271000	0.02	4.0	
07/18/2018	" "	SP-15	766000	0.01	4.0	
" "	" "	DP-1	219000	0.00	5.0	
" "	" "	" "	306000	0.01	10.0	
" "	" "	" "	276000	0.01	15.0	
" "						
" "	" "	DP-2	512000	0.04	5.0	
" "	" "	" "	829000	0.03	10.0	
" "	" "	" "	749000	0.07	15.0	
" "						
" "	" "	DP-3	207000	0.05	5.0	
" "	" "	" "	283000	0.02	10.0	
" "	" "	" "	267000	0.02	15.0	

" "						
" "	" "	DP-4	823000	0.01	5.0	
" "	" "	" "	541000	0.04	10.0	
" "	" "	" "	664000	0.02	15.0	
" "						
" "	" "	DP-5	201000	0.00	5.0	
" "	" "	" "	197000	0.10	10.0	
" "	" "	" "	286000	0.02	15.0	
" "						
" "	" "	DP-6	260000	0.04	5.0	
" "	" "	" "	153000	0.05	10.0	
" "	" "	" "	182000	0.00	15.0	
" "						
" "	" "	DP-7	74000	0.00	5.0	
" "	" "	" "	216000	0.00	10.0	
" "	" "	" "	276000	0.00	15.0	
" "						
" "	" "	DP-8	42000	0.02	5.0	
" "	" "	" "	106000	0.03	10.0	
" "	" "	" "	18000	0.01	15.0	
07/19/2018	" "	DP-1	253000	0.02	5.0	
" "	" "	" "	261000	0.00	10.0	
" "	" "	" "	289000	0.00	15.0	
" "	" "	DP-2	597000	0.01	5.0	
" "	" "	" "	636000	0.00	10.0	
" "	" "	" "	726000	0.00	15.0	
" "	" "	DP-3	315000	0.01	5.0	
" "	" "	" "	281000	0.02	10.0	
" "	" "	" "	282000	0.01	15.0	
" "	" "	DP-4	522000	0.00	5.0	
" "	" "	" "	895000	0.02	10.0	
" "	" "	" "	473000	0.01	15.0	
" "	" "	DP-5	217000	0.00	5.0	
" "	" "	" "	153000	0.03	10.0	
" "	" "	" "	309000	0.04	15.0	

" "	" "	DP-6	70000	0.01	5.0	
" "	" "	" "	166000	0.00	10.0	
" "	" "	" "	160000	0.01	15.0	
" "	" "	DP-7	479000	0.01	5.0	
" "	" "	" "	6000	0.04	10.0	
" "	" "	" "	6000	0.01	15.0	
" "	" "	DP-8	218000	0.00	5.0	
" "	" "	" "	115000	0.00	10.0	
" "	" "	" "	16000	0.00	15.0	

*ND = NON DETECT

Table 1A - MITIGATION REQUIREMENTS FOR METHANE ZONE (See notes)

6300 3RD STREET

Site Design Level			Level I		Level II		Level III		Level IV		Level V
Design Methane Concentration (ppmv)			0 - 100		101 - 1,000		1,001 - 5,000		5,001 - 12,500		> 12,500
Design Methane Pressure (See note 1) (inches of water column)			≤ 2"	> 2"	≤ 2"	> 2"	≤ 2"	> 2"	≤ 2"	> 2"	All Pressure
PASSIVE SYSTEM	De-watering System		X	X	X	X	X	X	X	X	X
	Sub-Slab Vent System	Perforated Horizontal Pipes	X	X	X	X	X	X	X	X	X
		Gravel Blanket Thickness Under Impervious Membrane	2"	2"	2"	3"	2"	3"	2"	4"	4"
		Gravel Thickness Surrounding Perforated Horizontal Pipes	2"	2"	2"	3"	2"	3"	2"	4"	4"
		Vent Risers	X	X	X	X	X	X	X	X	X
	Impervious Membrane		X	X	X	X	X	X	X	X	X
ACTIVE SYSTEM	Sub-Slab System	Mechanical Extraction System (See note 2)								X	X
	Lowest Occupied Space System	Gas Detection System (See note 3)		X		X	X	X	X	X	X
		Mechanical Ventilation (See notes 3, 4, 5)		X		X	X	X	X	X	X
		Alarm System		X		X	X	X	X	X	X
	Control Panel			X		X	X	X	X	X	X
MISC. SYSTEM	Trench Dam		X	X	X	X	X	X	X	X	X
	Conduit or Cable Seal Fitting		X	X	X	X	X	X	X	X	X
	Additional Vent Risers (See note 5)										X

NOTES FOR TABLES 1A AND 1B:

"x" = Indicates a required mitigation component

1. De-watering is not required when the maximum Historical High Ground Water Table Elevation, or projecterd post-construction ground water level, is more than 12 inches below the bottom of the Perforated Horizontal Pipes.
2. The Mechanical Extraction System shall be capabale of providing an equivalent of a complete change of air 20 minutes of the total volume of the Gravel Blanket.
3. The mechanical ventilation system shall be capable of providing an equivalent of one complete change of the lowest occupied space every 15 minutes.
4. Vent openings to comply with Item IV.B.4 on sheet 1 may be used in lieu of mechanical ventilation.
5. The total quantity of the installed Vent Risers shall be increased to twice the rate for the Passive System.