WORK PLAN FOR ADDITIONAL PH-II ASSESSMENT

Rydell Chevrolet
1325 East San Marnan Drive
Waterloo, IA 50702
GZA Project #: 28.0240223.30
Contaminated Sites Database Site: 2623

Prepared for:
Rydell Chevrolet
1325 East San Marnan Drive
Waterloo, IA 50702

Prepared by:
GZA GeoEnvironmental, Inc.
7505 Metro Boulevard, Suite 300
Edina, MN 55439

October 17, 2024

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Contaminated Sites Database Site: 2623

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Prepared for:

Rydell Chevrolet
1325 East San Marnan Drive
Waterloo, IA 50702

and

Iowa Department of Natural Resources
6200 Park Avenue, Suite 200
Des Moines, IA 50321

Prepared by:

GZA GeoEnvironmental, Inc.
7505 Metro Boulevard, Suite 300
Edina, MN 55439

GZA Project No. 28.0240223.30

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1. INTRODUCTION

GZA GeoEnvironmental, Inc. (GZA) was retained by Rydell Chevrolet to assist in completing additional assessment at the Rydell Chevrolet property at 1325 E. Marnan Dr. in Waterloo, Iowa. Rydell Holdings, LLP is the current owner of the property.

1.1 Site Location

The property is located in the SW ¼ of Section 2, Township 88, Range 13 as depicted on Figure 1. The property consists of one Black Hawk County tax parcel number 881302326008 totaling approximately 8.44 acres.

1.2 Contacts

Owner Representative:	Teron Meinders Rydell Holdings, LLC 1325 E. San Marnan Drive Waterloo, Iowa 50702 319-874-7966 teron.meinders@rydellauto.com
Environmental Consultant:	Jeremy Pavlish, PG GZA GeoEnvironmental, Inc. 7505 Metro Boulevard, Suite 300 Edina, Minnesota 55439 952-595-5315 (office) jeremy.pavlish@gza.com
DNR Representative:	Andrew Carver Iowa Department of Natural Resources (DNR) 6200 Park Avenue, Suite 200 Des Moines, Iowa 50321 515-721-7024 andrew.carver@dnr.iowa.gov

1.3 Purpose

The purpose of this work plan is to propose a scope of work that satisfies the requirements for additional assessment outlined in the DNR letter dated July 15, 2024.

2. HISTORICAL SUMMARY

The property was developed as cultivated agricultural land until the current automotive dealership was constructed in 1970. The main sales and service building was expanded in 1990 and 2004 and two warehouses were constructed in 2007-2008. The southeast corner of the property featured a car wash building from 1970 through the early 1990s. The property has operated as an automotive sales and service dealership since development and has been occupied by Rydell Chevrolet since 1984.

3. BACKGROUND INFORMATION

The following reports have been prepared for environmental assessments completed on the subject property:

- *Phase I Environmental Site Assessment*, dated July 8, 2020, prepared for JPMorgan Chase Bank, NA, prepared by Vieau Associates, a Division of GZA GeoEnvironmental, Inc.

- *Phase II Investigation*, dated September 3, 2020, prepared for Rydell Holdings, LLC., prepared by Vieau Associates, a Division of GZA GeoEnvironmental, Inc.

- *Request for Additional Assessment*, dated September 25, 2020, prepared for Rydell Chevrolet, prepared by Iowa Department of Natural Resources.

- *Additional Phase II Investigation*, dated March 29, 2024, prepared for Rydell Chevrolet, prepared by GZA GeoEnvironmental, Inc.

- *Review of Additional Site Assessment Report,* dated July 15, 2024, prepared for Rydell Chevrolet, prepared by Iowa Department of Natural Resources.

4. PHYSICAL SETTING

Based on the USGS topographic map and Google Earth, the surface elevation of the property is at approximately 900 feet above Mean Sea Level. No surface water bodies are on the property.

The surficial geology in the vicinity of the subject property consists of clayey glacial till. The United States Geologic Survey's (USGS) Iowa Geologic Map data indicates bedrock consists of limestone and dolomite, and is relatively shallow, within 50 feet of the surface.

The water table (shallow groundwater) is estimated to be approximately 30 to 40 feet below ground surface (bgs), although shallower perched water table conditions exist in the till at depths between eight and 15 feet bgs. The water table gradient (direction of groundwater flow) is estimated to be generally to the southeast. The depth and gradient of the water table likely varies seasonally with changes in precipitation and may change significantly over time in response to development, including impervious surfaces, storm water controls, and pumping wells (domestic, industrial, or irrigation).

5. REMEDIAL INVESTIGATION

5.1 Basis for Investigation

As part of a 2020 Phase II Investigation, elevated levels of Total Petroleum Hydrocarbons Diesel Range Organics (TPH-DRO) and Gasoline Range Organics (GRO) were detected in groundwater and/or soil. In addition, 1,1-dichloroethene, ethylbenzene, and trichloroethene (TCE) were detected at concentrations exceeding their respective target sub-slab Vapor Intrusion Screening Levels (VISLs). We provided the report to the DNR with a request for a No Action/No Further Action or equivalent letter and the agency requested additional investigation.

Additional sampling and testing was completed in 2024 which defined the extent of the soil, groundwater, and soil vapor impacts. Following review of the report, in a letter dated July 15, 2024, the DNR requested indoor air sampling and that the impacted soil be addressed.

5.2 Proposed Scope of Assessment

The proposed scope for the additional assessment includes the following tasks:

- Prepare an Environmental Covenant which will detail Activity and Use Limitations for the petroleum impacted soil and groundwater near the northeast corner of the building. A draft copy of the Environmental Covenant will be provided to the DNR for review and approval prior to submitting a final version for signature. Following receipt of all signatures, the Environmental Covenant will be filed with Black Hawk County. A recorded copy of the Environmental Covenant will be provided to the DNR. Unless directed otherwise, the

Environmental Covenant will be based on the model Environmental Covenant provided on the DNR website.

- Collect two seasonal rounds of paired sub-slab and indoor air sampling to evaluate the risk of vapor intrusion. To evaluate for spatial variability, one round of paired samples will be collected during the heating season and one during the cooling season. For the purposes of this work plan, we propose the heating season to be defined as November 1st through March 31st and the cooling season be defined as April 1st through October 31st. Each round of sampling will consist of the following:

    - Install two sub-slab soil vapor pins using the Cox Colvin Vapor Pin ® sampling system at the locations where the highest levels of impacts were previously detected (VP-13 and VP-15) as shown on Figure 2. The sample locations will be cleared with a private utility locator prior to drilling.

    - Collect two sub-slab soil vapor samples in laboratory-supplied summa canisters utilizing 200 mL/min regulators. The samples will be submitted to a fixed base laboratory for chemical analysis of VOCs by EPA method TO-15. The data will be used to evaluate current concentrations and will be compared to indoor air samples to attempt to differentiate between contaminants from vapor intrusion versus indoor sources.

    - Set six summa canisters inside the building in the breathing zone (five to six feet above the ground surface). We anticipate setting three in the service area of the building and three in the adjoining office and showroom areas of the building. A conceptual layout of the indoor air samples is depicted on Figure 3. Actual locations will be determined in the field based on site features. A seventh summa canister will be set outside the building.

    - Collect seven indoor air and ambient air samples in laboratory-supplied summa canisters utilizing 3.5 mL/min regulators which allows sample collection over 24-hours. The 24-hour indoor and ambient air samples will be submitted to a fixed base laboratory for chemical analysis of VOCs by EPA method TO-15.

- The results of the sampling will be compared to the target sub-slab and target indoor air concentrations in the EPA Vapor Intrusion Screening Level (VISL) calculator using a target risk of 10^{-4}, hazard quotient of 1, commercial exposure scenario, default screening level type, 25°C

groundwater temperature, and chronic reference concentration (RfC) and incorporated into a report.

6. SCHEDULE

We will begin working on the Environmental Covenant immediately upon authorization. Our goal is to collect the first round of paired samples in November or December 2024. The second round of samples will be collected after April 1, 2025. If the initial round of samples is not collected until March, 2025 we will wait at least 30 days to collect the second round of samples. A report will be completed and submitted upon receipt of analytical results from the second round of sampling. If indoor air results exceed target indoor air concentrations, we will contact the DNR project manager to discuss.

7. GENERAL REMARKS

The environmental services performed by GZA have been conducted with that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its industry practicing in the same locality under similar budget and time constraints. Our general limitations are attached. No other warranty, expressed or implied, is made. Please do not hesitate to contact us if you have any questions, comments, or require additional information.

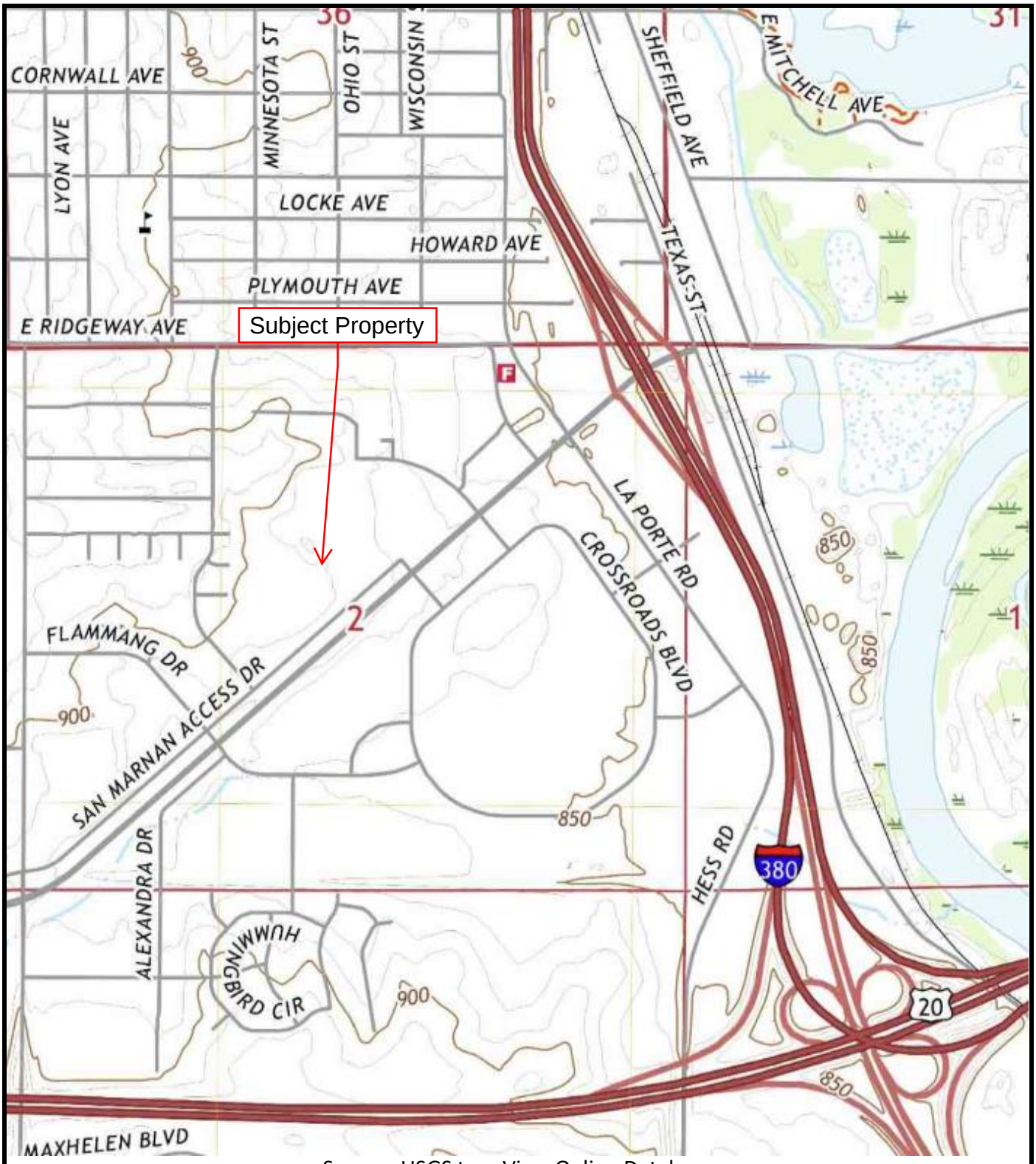
Sincerely,
GZA GeoEnvironmental, Inc.

Jeremy Pavlish
Senior Project Manager

Sean Leary
Associate Principal, VP

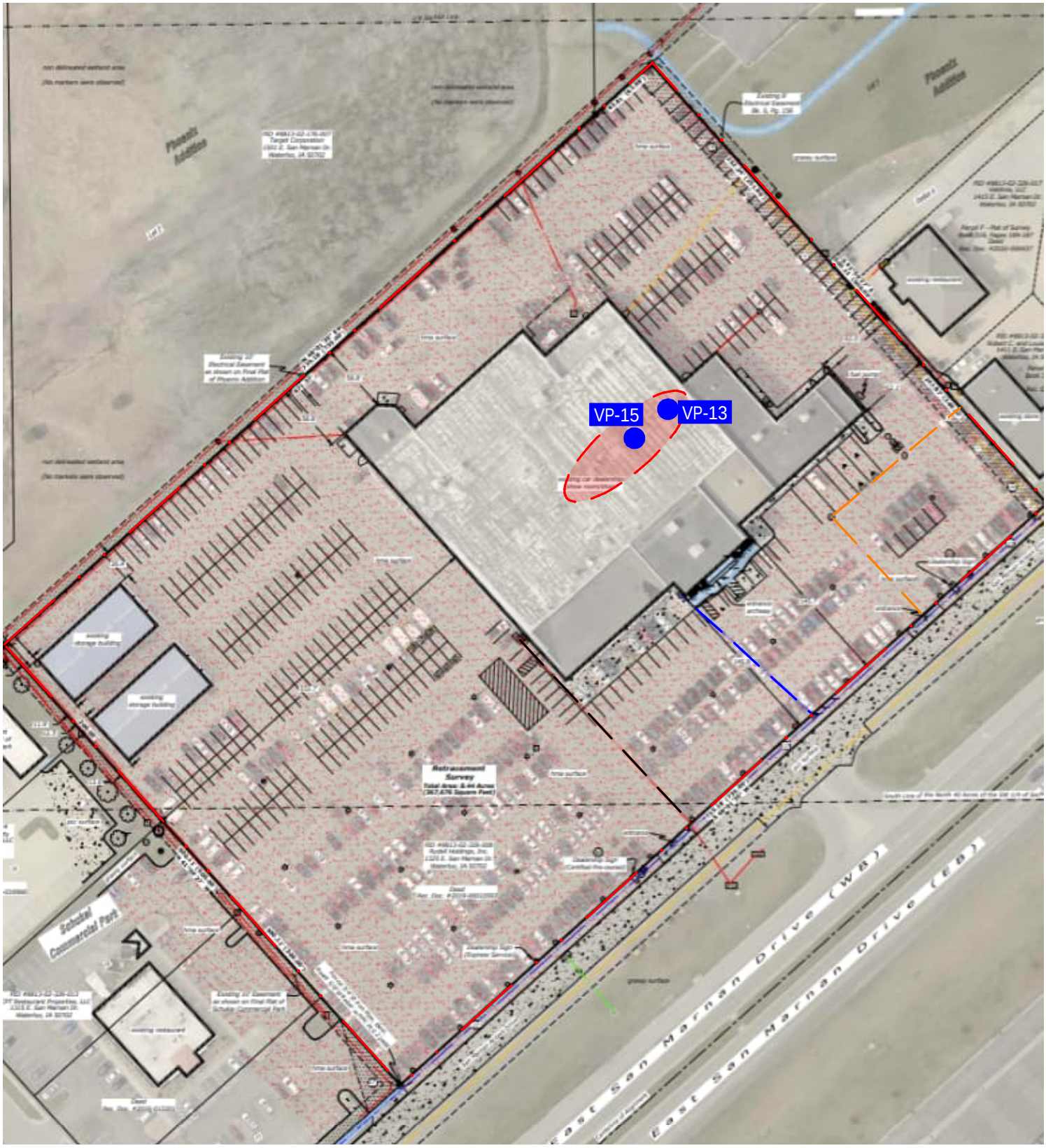
Attachments

FIGURES



Source: USGS topoView Online Database

Figure 1 Property Location
1325 E San Marnan Drive
Waterloo, IA 50702



Legend

- Property Boundary
- Sub-Slab Vapor Locations
- VOCs exceeding VISLs

Est. Direction of Water Table Gradient

Source: Herold-Reicks Surverying - ATLA/NSPS Land Title Survey

Rydell Chevrolet	
Figure 2 Sub-Slab Locations	1325 E San Marnan Drive Waterloo, IA 50702

Project Number: 28.0240223.30
Fieldwork Date: 2/20/2024 - 2/22/2024
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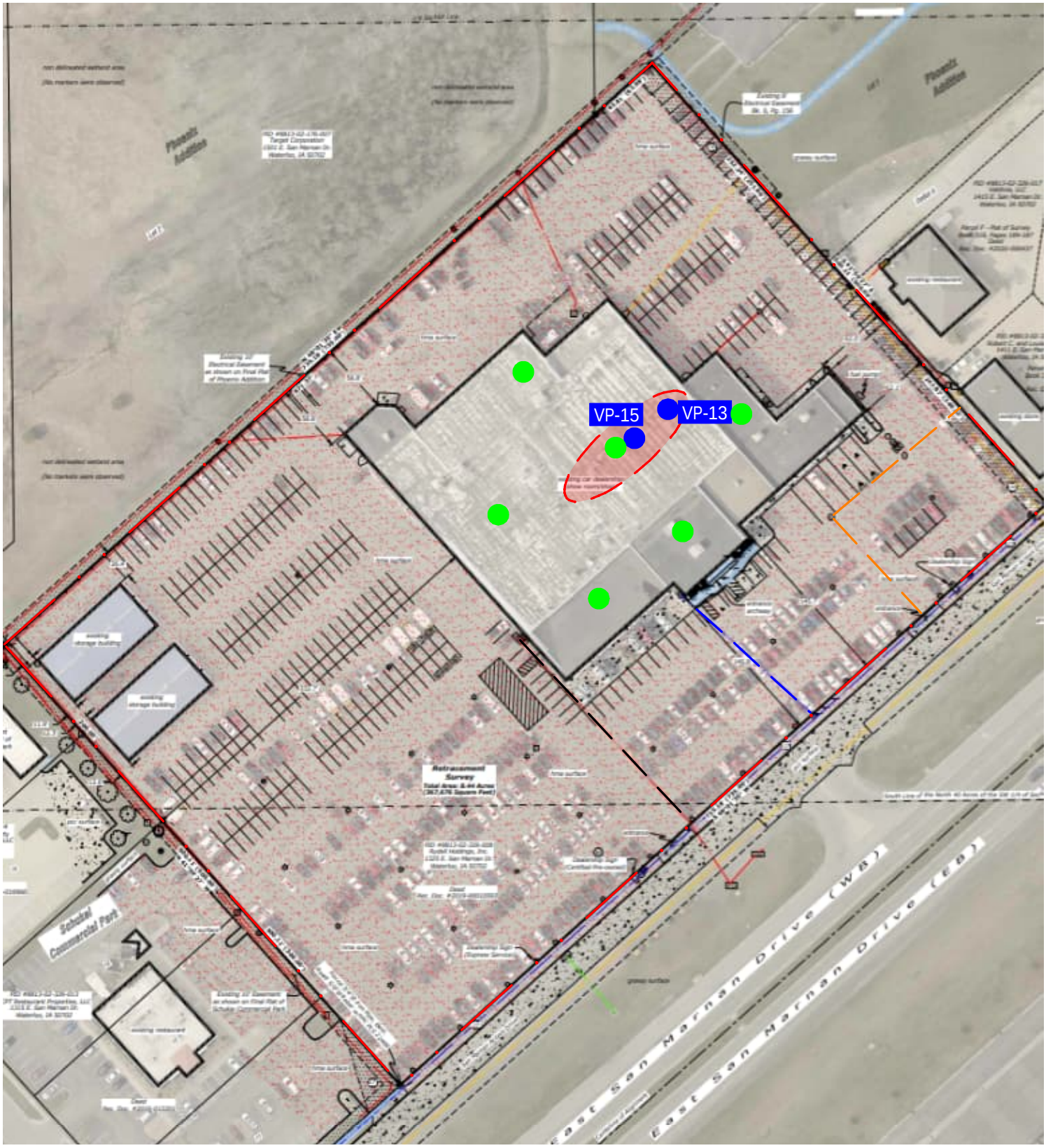
0 100 200
Feet



Legend

- Property Boundary
- Sub-Slab Vapor Locations
- VOCs exceeding VISLs
- Conceptual Indoor Air Locations

Est. Direction of Water Table Gradient

Source: Herold-Reicks Surverying - ATLA/NSPS Land Title Survey

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Figure 3 Indoor Air Locations	1325 E San Marnan Drive Waterloo, IA 50702

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0 100 200
Feet