January 5, 2021

Iowa Department of Natural Resources
502 East 9th Street
Des Moines, Iowa 50319

Attn: Mr. Matt Culp
Contaminated Sites Section
P: 515-725-8337
E: matt.culp@dnr.iowa.gov

Re: **Site Assessment Work Plan**
Former French Way Dry Cleaners
413 Euclid Avenue
Des Moines, Iowa
Contaminated Sites ID: 2629

Dear Mr. Culp:

EcoSource, LLC is pleased to present the enclosed Site Assessment Work Plan for the above referenced site. In an Iowa Department of Natural Resources (IDNR) correspondence letter dated November 12, 2020, a Site Assessment Work Plan was required to be completed in order to further assess and define the extent of chlorinated solvents and the potential for vapor intrusion exposure at the above referenced site and surrounding structures. At this time, we request a review and comment on the provided Work Plan in order to proceed with assessment of the site. Paper copies of the Work Plan can be provided upon request.

If you have any questions or comments, please feel free to contact us at 515-250-6695 or via email.

Sincerely,

EcoSource, LLC

Jordan Lowry
Jordan Lowry
Project Manager/Environmental Specialist
1/5/2021
jordan@ecosourceiowa.com

Darren Fife
Darren Fife
Owner
1/5/2021
darren@ecosourceiowa.com

Site Assessment Work Plan

Former French Way Cleaners
413 Euclid Avenue
Des Moines, Iowa

January 4, 2021

Prepared for:
Euclid Foresight, LLC
2843 Grand Avenue
Des Moines, Iowa 50312

Prepared by:
EcoSource, LLC
6424 University Avenue
Windsor Heights, Iowa

Table Contents

Appendixes

1.0 PROJECT UNDERSTANDING

The purpose of the Site Assessment Work Plan is to assist with the evaluation of chemicals of concerns (COCs) in the soil and groundwater in the subsurface and sub-slab vapor as requested by the Iowa Department of Natural Resources (IDNR) in a correspondence dated November 12, 2020. A Phase 1 Environmental Site Assessment was completed on December 3, 2018. Six (6) Recognized Environmental Conditions (RECs) were identified during the assessment. In an attempt to address the RECs, two Limited Site Investigations (LSIs) were conducted at the subject site. In summary, a total of seven soil samples and four groundwater samples were obtained at the site. A site map indicating soil and groundwater sampling locations is attached in Appendix A as Exhibit C. The soil and groundwater samples were submitted for laboratory analysis of Volatile Organic Compounds (VOCs) via EPA Method 8260C, Semi-Volatile Organic compounds (SVOCs) via EPA Method 8270D, and Total Extractable Hydrocarbons (TEHs) via Iowa Method OA-2. Analytical results indicated concentrations in the soil were below Iowa Department on Natural Resources (IDNR) Statewide Standards while the groundwater analytical results indicated concentrations above IDNR Land Recycling Program Statewide Standards for chlorinated solvents (PCE and TCE). The IDNR has requested further evaluation of the site to determine if potential adverse impacts exist. This Work Plan provides the proposed methods and procedures for completion of assessment activities for the site. The site assessment will be prepared for the IDNR Contaminated Site Section for review and approval under Iowa Administrative Code (IAC) 567 Chapter 133 (455B, 455E): Rules of Determining Cleanup Actions and Responsible Parties.

The information obtained from the site assessment will be compared to IDNR Land Recycling Program (LRP) Statewide Standards (SWS) for soil and groundwater to determine the action levels at the above referenced site and also assessed using the IDNR Cumulative Risk Calculator. The Results of the sub-slab vapor samples will be evaluated using the IDNR Cumulative Risk Calculator including an attenuation factor.

2.0 BACKGROUND

The facility is a former dry cleaner and a multi-unit residential building that consists of an approximate 9,742 square foot commercial and multi-unit residential building, one 4,888 square foot commercial retail and apartment building, and one 3,284 square foot warehouse, situated on approximately 0.46 acres of land. The existing structures located on the property were originally constructed circa 1910 and 1986. The site has operated as a dry-cleaning facility with onsite cleaning operations for approximately 73 years. The adjacent properties consist of a residential development to the north, commercial development to the west, a parking lot to the east, and Euclid Avenue to the south.

3.0 GENERAL SITE GEOLOGY AND SITE HYDROLOGY

The site has an approximate elevation of 825 feet above sea level (ASL) and is relatively flat with a slight slope to the north/northwest towards Saylor Creek according to the topographic map. Higher elevations are to the south and southeast of the site. Boring logs from the LSI indicate lean clay to lean sandy clay with varying intervals of medium grained sand and gravel.

According to the IDNR Facility Explorer database, no water wells are located within 1,000 feet of the site. The IDNR Facility Explorer well search report is attached as Appendix B. EcoSource reviewed the

IDNR GEOSAM database for additional wells in the area of the site which identified one geothermal well approximately 2,800 feet from the site. Review of the drillers log (Well Log 90802) indicate bedrock consisting of shale at depths of 25 feet below ground surface (bgs) through the completion of the well at 175 feet bgs.

According to the USGS Geological Map of Iowa 1969, the geology in the area consists of cyclic deposits with carbonaceous shale, clay, siltstone and persistent bedrock at depths greater than 25 feet bgs.

Depth to static water level (SWL) at the site is reported at 7-9 feet bgs during the LSI. Groundwater flow direction is assumed to mimic surface topography to the north/northwest in the direction of Saylor Creek. Plume flow direction will be calculated during the assessment.

4.0 MONITORING WELL AND VAPOR PIN INSTALLATION AND GROUNDWATER, SOIL, AND SUB-SLAB VAPOR SAMPLING

4.1 Safety

EcoSource has a 100% commitment to the safety of all its employees. As such, and in accordance with our Incident and Injury Free safety culture, EcoSource will update our project safety plan for use by our personnel during field services. Prior to commencement of on-site activities, EcoSource will hold a meeting to review health and safety needs for this specific project. At this time, we anticipate performing fieldwork in an EPA Level D work uniform consisting of hard hats, safety glasses, protective gloves, and steel-toed boots. It may become necessary to upgrade this level of protection, at additional cost, during sampling activities in the event that petroleum or chemical constituents are encountered in soils or groundwater that present an increased risk for personal exposure.

4.2 Monitoring Well Installation

Eight exploratory borings/monitoring wells will be advanced at the site based on the impacts reported in the LSI to provide further subsurface information with respect to soil and groundwater. The borings/wells will be installed surrounding the assumed source area from the LSI and extend off-site. In addition, a deep well will be installed at the location assumed to be down gradient of SB-7/TWM-7, to explore the deep groundwater aquifer based on the sinking nature of the COCs. The proposed locations will account for documenting triangulated groundwater flow direction (assumed to the north/northeast) and provide definition of impacts in the gradient directions from the assumed source area. The actual placement of borings/wells will be based on utilities, equipment access, and EcoSource personnel discretion. The proposed boring/well locations are presented in Appendix A as Exhibit 3.

4.3 Soil Sampling

Drilling services will be performed by a State of Iowa certified well contractor under the supervision of an EcoSource environmental professional. Installation of soil borings will be conducted utilizing a Geoprobe® drilling rig equipped with a continuous core barrel and disposable poly vinyl chloride (PVC) liners. Drilling equipment will be cleaned using a high-pressure washer prior to beginning the project. Soil sampling equipment will be cleaned using an Alconox wash and potable water rinse prior to

beginning the project and before beginning each boring. The PVC liners are disposable and dedicated to the soil core; therefore, will not require cleaning. The continuous core samplers will be cleaned using an Alconox wash and potable water rinse between soil cores for each boring. Additional field decontamination and cleaning of the drilling equipment (clean augers and drill rods), drill rig, and other equipment will be conducted as needed between borings to prevent cross contamination between locations.

Soil cores from the shallow borings will be continuously logged and field screened for organic vapors using a photoionization detector (PID). This device provides a direct reading in parts per million (ppm) of volatile organic vapors. The PID is a nonspecific total vapor detector and cannot be used to identify unknown substances; it can only roughly quantify them. The PID will be calibrated in accordance with the manufacturer's recommendations before and after the field activities with 100 ppm isobutylene. Upon removal of the sampler from the borehole, EcoSource will cut a portion of the sample and seal it in a clear plastic soil bag. After a stabilization period, EcoSource will screen the headspace above the soil using the PID equipped with a 10.6 eV lamp source.

Soil samples for laboratory chemical analyses will be collected from each shallow boring from the interval of highest field screening or at the capillary fringe zone as determined during drilling if field screening readings are below background readings (0.0 ppm). The shallow borings will be advanced five feet into groundwater or until PID readings are <10 ppm not to exceed 10 feet into groundwater. EcoSource anticipates the shallow borings will extend· to 15 feet bgs. Continuous sampling of the deep boring is not proposed; however, the drill cuttings will be logged throughout and periodically screened with the PID for inclusion on the boring log. Additionally, laboratory analysis of soil from the deep boring is not proposed. EcoSource anticipates that the deep boring will extend to the shallowest of 25 feet bgs or to the top of first bedrock.

Soil samples submitted for analysis will be collected and placed in laboratory provided and prepared glassware and placed on ice in a cooler. The sample cooler(s) will contain completed chain-of-custody forms, be secured with a custody seal, and be relinquished to a State of Iowa certified analytical laboratory for standard turnaround.

4.4 Monitoring Well Construction

Monitoring well construction services will be performed following boring installation by a State of Iowa certified well contractor using hollow stem or continuous flight augers under the supervision of an EcoSource environmental professional. Drilling equipment will be cleaned using a high-pressure wash prior to beginning the project. Additional field decontamination and cleaning of the drilling equipment (clean augers and drill rods), drill rig, and other equipment will be conducted as needed between wells to prevent cross contamination between locations.

The shallow monitoring wells will be constructed with 10 feet of 1-inch diameter 0.010 machine slotted PVC well screen at the bottom of the well with a threaded bottom plug. The screen will be installed with 1-inch diameter PVC riser pipe extending to slightly below the surface. The screen will be placed with an annular graded silica sand pack around the well screen from the bottom of the well to approximately one foot above the top of the screen. Medium chip bentonite will be placed in the borehole annulus

from the top of the sand pack to within approximately one foot of the ground surface. The monitoring wells will have flush mount protective covers encased in concrete and have an expandable cap installed at the top of the riser. The deep monitoring well will be constructed using the same method with the exception of utilizing five feet of 1-inch diameter 0.010 machine slotted PVC well screen.

The ground surface and top of casing elevations will be measured for the monitoring wells. The wells will be surveyed to a known reference point benchmark in feet converted to the United States Geological Survey (USGS) elevation above sea level (ASL), if available. Otherwise, an arbitrary benchmark of 100 feet ASL will be utilized. The ground surface elevations will be surveyed to an accuracy of +/- 0.01 feet and the horizontal location will be determined by measuring to the existing structures and/or with global positioning· system (GPS) satellite location data.

The monitoring wells will be developed following installation utilizing a peristaltic pump and disposable polyethylene tubing or disposable polyethylene bailers until the removed purge water is relatively free of fine-grained sediment or until the well dries. The wells will be allowed to stabilize to static conditions following development approximately 24 hours after installation.

4.5 Groundwater Sampling

Prior to groundwater sampling, the depth to water level measurements will be collected from each monitoring well using a Geotech® or Solinst® water meter probe that is accurate to +/- 0.1 feet according to the manufacturer. The wells will be purged according to low-flow procedures at a rate of 200-400 minute utilizing a peristaltic pump and disposable polyethylene tubing dedicated to each well until purged groundwater dissolved oxygen (DO), temperature, and pH exhibit stable readings (10% consistency for DO, 3% consistency for temperature, and +/- 0.1 for pH) for three consecutive readings using a YSI multi-parameter meter. Once stabilizations are obtained, a groundwater sample will be collected from each well. If a well does not stabilize during low flow procedures, five saturated well casing volumes will be removed and the well will be sampled. If a well dries before low flow stabilization, the well will be allowed to return to static conditions and a groundwater sample will be collected. Non-dedicated sampling equipment will be cleaned before and after each use and between wells-using an Alconox® and water rinse.

One blind duplicate groundwater sample will be collected for every 10 monitoring wells sampled according to Quality Assurance and Quality Control (QA/QC) protocols. In addition, one trip blank will accompany each cooler submitted to document sample integrity according to QA/QC protocols.

Groundwater samples, including blind duplicate, and trip blank(s) will be collected and placed in laboratory provided and prepared glassware and placed on ice in a cooler. The sample cooler(s) will contain completed chain-of-custody forms, be secured with a custody seal, and be relinquished to a State of Iowa certified analytical laboratory for standard turnaround.

4.6 Free Product Inspection

During drilling activities, observation of gross contamination and free product will be noted, if applicable. Measurement of free product would occur utilizing a Geotech® or Solinst® interface probe

that is accurate to +/- 0.01 feet according to the manufacturer. Depth to water, depth to free product, and free product thickness would be recorded for submittal to the IDNR. Measurable free product would be recovered using disposable polyethylene bailers and containerized for offsite disposal. If applicable, the volume of free product and groundwater removed would be recorded for submittal to the IDNR.

4.7 Investigation-Derived Waste

The soil cuttings will be containerized onsite pending the results of the laboratory analysis of discrete soil samples. Due to the anticipated volume of cuttings, offsite disposal following federal, state, and local regulations and permitting is anticipated. One composite sample comprised of five equal aliquots will be collected from the soil cuttings and submitted for laboratory analysis to meet disposal requirements. This would include analysis of the COCs discussed in Section 5.1 as well as Resource Conservation and Recovery Act (RCRA) metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver).

Decontamination, development, purge, and excess sampling water will be temporarily containerized onsite pending the results of the laboratory analysis of groundwater samples. In addition, one sample will be collected from each container used and submitted to the laboratory on a hold for analysis of the COCs discussed in Section 5.1. If the groundwater concentrations exceed the SWS, the container sample(s) will be analyzed. If the groundwater samples and/or container sample(s) do not exceed the SWS, the generated water will be discharged to the surface. If offsite disposal is necessary, the generated water would be transported for disposal following federal, state, and local regulations and permitting.

4.8 Vapor Pin Installation

During the LSI activities, sub-slab vapor sampling was not conducted. Four sub-slab vapor samples are proposed. One sample will be collected from the southern portion of the facility, one from the center of the facility, one from the northeast corner of the facility and one from the northwest corner of the facility. A site map indicating proposed sub-slab sampling locations is attached in Appendix A as Exhibit 3.

An approximate 5/8-inch diameter hole will be drilled utilizing a handheld rotary hammer drill through the floor and approximately 1-inch into the underlying soil to create a void for installation of Cox-Colvin & Associates, Inc.'s Vapor Pins® (Vapor Pins). The actual Vapor Pin locations will be determined by EcoSource personnel based on building construction, safe access, and proximity to the shared wall. The Vapor Pins will be installed slightly above grade with a protective vapor cap to prevent vapor loss prior to sampling and marked with cones. After conducting leak detection procedures at each Vapor Pin, a stabilization period of approximately 12 to 24 hours will be allowed prior to collecting vapor samples. The Vapor Pin installation procedures will adhere to ''Cox-Colvin & Associates, Inc's. Soil Gas Investigation Guidance Document Version 1.0" dated August 7, 2018.

4.9 Sub-Slab Vapor Sampling

The sub-slab vapor samples will be collected using batch-certified, laboratory-supplied 6-Liter Summa canisters with flow regulators. The flow regulators will be set with a flow rate not exceeding approximately 200 milliliters per minute. Connections to the Summa canisters will be completed using Teflon and silicon tubing dedicated to each Vapor Pin. Prior to sample collection, the tubing will be purged. As part of QA/QC protocols, an ambient air sample will be collected from the exterior of the site building during the vapor sampling utilizing the same setup and supplies/materials. The vapor samples will be secured with a custody seal and shipped in an appropriate container to a State of Iowa certified analytical laboratory under standard chain-of-custody procedures.

The Vapor Pins will be removed from the slab and the concrete surface will be patched following sample collection.

5.0 LABORATORY ANALYSIS

5.1 Soil Analysis

The soil samples submitted to the laboratory will be analyzed for VOCs according to EPA Method 8260B. The composite sample collected from the cuttings will be analyzed for VOCs according to EPA Method 8260B and RCRA metals according to EPA Method 6010B/7471A. Additional analysis of toxicity characteristic leaching procedure (TCLP), flash point, and paint filter may be requested by the offsite disposal location.

5.2 Groundwater Analysis

The groundwater samples, including blind duplicate, will be analyzed for VOCs according to EPA Method 8260B. The trip blank sample(s) will also be analyzed for VOCs according to EPA Method 8260B. If necessary, as discussed in Section 4.6, the generated water samples collected from each container used would be analyzed for VOCs according to EPA Method 8260B.

5.3 Sub-Slab Vapor Analysis

The sub-slab vapor samples and ambient air sample submitted to the laboratory will be analyzed for PCE, TCE, cis-DCE, trans-1,2-Dichloroethene (trans-DCE), and Vinyl Chloride by EPA Method TO-15. Summa canister vacuums will be recorded upon initiation of sample collection, after sample collection, and after receipt at the laboratory. In addition, the start and end time of the samples will be recorded.

6.0 DATA EVALUATION

Collected data will be reviewed and compiled to depict current environmental conditions in the subsurface in and around the site. The data will be tabled and compared to the SWS, taking into consideration hydrogeologic characteristics and potentially affected receptors. Isoconcentration maps depicting estimated concentrations of individual COCs plume(s) will be developed and presented.

The IDNR has established SWS for use in the Iowa LRP and will be utilized as action levels for comparison to the soil and groundwater analytical results. Site specific SWS can be developed for soil according to

the use and access restrictions; however, is not anticipated based on previous site data. For site evaluation and monitoring, EcoSource will compare collected samples to the SWS for the applicable groundwater source.

EcoSource will perform a risk evaluation to identify actual and potential pathways of exposure. Laboratory results will be entered into the Cumulative Risk Calculator for preliminary risk evaluation for site resident, site worker, and construction worker for the COCs in soil and site resident and site worker for the COCs in groundwater. Risk evaluation of the sub-slab vapor will be conducted using the IDNR Cumulative Risk Calculator and an attenuation factor applicable to the site. A factor of 0.03 will be applied if the concrete floor is in satisfactory condition with limited cracking. A factor of 0.1 will be applied if the concrete floor has significant and wide spread cracks. EcoSource assumes a factor of 0.03 will appropriate.

7.0 HYDROGEOLIC EVALUATION

Following development stabilization of the shallow monitoring wells, depth to water levels will be measured from each location. Depth to water measurements will be converted into elevations and a piezometric map will be developed indicating the estimated groundwater flow direction. The elevation at the deep well will not be utilized for flow direction development.

8.0 RECEPTOR SURVEY

EcoSource will contact the City of Des Moines for sanitary sewer and water main locations and construction details. Changes to those locations based on field observations, if applicable, and additional utilities located during public and/or private utility locate clearance will be added to future maps. EcoSource will attempt to verify the sewer main and service locations to the properties within the site vicinity during field activities. EcoSource will attempt to verify the water main and service locations to the properties within the site vicinity during field activities.

As noted previously, a water well search was conducted via the IDNR Facility Explorer database and the well search report is presented in Appendix B. Water wells were not identified within 1,000 feet. Several geothermal wells were identified on the IDNR GEOSAM database within 4,500 feet of the site.

The nearest surface water feature appears to be two unnamed ponds at Riverview Park located approximately 1,900 feet south/southwest of the site. Other surface water features include the Des Moines River located approximately 3,000 feet south/southwest and an unnamed tributary of Saylor Creek approximately 4,700 feet northwest of the site.

EcoSource will further refine the receptor survey during the field activities and data will be included in the Site Assessment Report (SAR). This will include, but not be limited to, public and private utility locations, enclosed subgrade spaces, and zoning restrictions. A pedestrian survey will be conducted to visually inspect for water wells and surface water bodies within 300 to 500 feet of the site. The wells and surface water bodies identified will be added to future maps.

9.0 REPORTING

Once field activities are complete and laboratory results have been received, a SAR will be prepared to present the obtained data. The report will include the following information and be submitted to the IDNR Contaminated Sites Section for review:

- Description of field activities and techniques
- Scaled site diagram with investigatory sampling locations
- Tabled analytical results
- Plume maps for elevated COCs in soil and groundwater
- Boring logs and laboratory reports
- Risk Assessment (Cumulative Risk Calculator) and Pathway Discussions
- Conclusions and Recommendations

10.0 SCHEDULE

The following is a tentative schedule for implementing the Work Plan assuming IDNR approval by January 30, 2021; budget approval and obtaining an access agreement with the current property owner by February 15, 2021, and working with Euclid Foresight on a schedule for best days and times to complete drilling and field work:

- Complete field activities - March 2021
- Submit SAR – June 2021

Please note that this schedule is tentative and will be dependent upon EcoSource drill rig and personnel availability, subcontractor availability, timing of laboratory results, weather, etc. EcoSource will provide updates during the activities and update the schedule for the IDNR and Euclid Foresight as necessary.

11.0 GENERAL COMMENTS

11.1 Standard of Care

EcoSource's services will be performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time period. EcoSource makes no warranties, either express or implied, regarding the findings, conclusions or recommendations. Please note that EcoSource does not warrant the work of laboratories, regulatory agencies or other third parties supplying information used in the preparation of the report. These services will be performed in accordance with the scope of work agreed upon with you, our client, as reflected in our proposal.

11.1 Additional Scope Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the onsite activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of

hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, non-detectable, or not present during these services, and we cannot represent that the Site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during these investigations. Subsurface conditions may vary from those encountered at specific borings or wells or during other surveys, tests, assessments, investigations, or exploratory services; the data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services. Future site activities may determine the need for additional site work outside of the scope of this Work Plan and/or our proposal and lengthen the project schedule. In addition, following review of the Work Plan and/or SAR the IDNR may require additional site work outside of the scope of these services.

If you have any questions regarding the Work Plan, please contact us at 515.250.6695.

Sincerely,
EcoSource, LLC

Jordan Lowry

Jordan Lowry
Project Manager/Environmental Specialist
jordan@ecosourceiowa.com

Darren Fife

Darren Fife, CGP #2058
Owner
darren@ecosourceiowa.com

APPENDIX A

Site Maps

SITE MAP

JANUARY2021

ATT 1

FORMER FRENCH WAY CLEANERS
413 EUCLID AVENUE
DES MOINES, IOWA

0 SCALE 50 FT.

WATER SUPPLY
GAS LINE
SANITARY SEWER
UNDERGROUND PIPING
PROPERTY BOUNDARY
FLOW DIRECTION

6424 University Avenue
Windsor Heights, IA 50324
Phone: 515.250.6695
www.ecosourceiowa.com

EcoSource

Tuesday, January 05, 2021, 1:08 PM

SITE VICINITY MAP

JANUARY2021

ATT 2

0 SCALE 200 FT.

FORMER FRENCH WAY CLEANERS
413 EUCLID AVENUE
DES MOINES, IOWA

WATER SUPPLY
GAS LINE
SANITARY SEWER
UNDERGROUND PIPING
PROPERTY BOUNDARY
FLOW DIRECTION

6424 University Avenue
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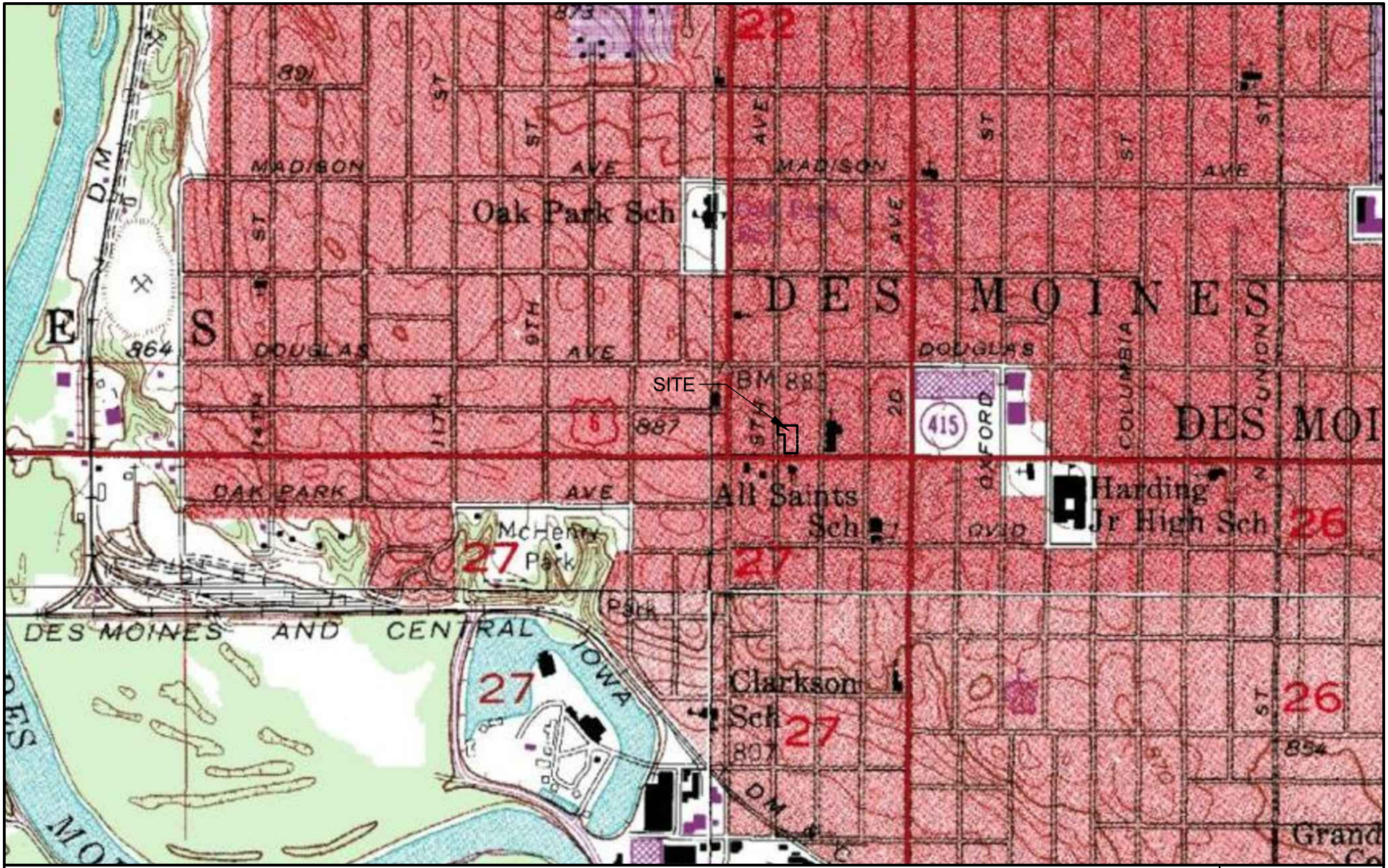
EcoSource

Tuesday, January 05, 2021, 1:06 PM



TOPOGRAPHIC MAP | JANUARY2021 | **ATT 3**

0 SCALE 1000 FT.

FORMER FRENCH WAY CLEANERS
413 EUCLID AVENUE
DES MOINES, IOWA

WATER SUPPLY
GAS LINE
SANITARY SEWER
UNDERGROUND PIPING
PROPERTY BOUNDARY
FLOW DIRECTION

6424 University Avenue
Windsor Heights, IA 50324
Phone: 515.250.6695
www.ecosourceiowa.com

EcoSource

Tuesday, January 05, 2021, 1:06 PM

APPENDIX B

IDNR Facility Explorer Well Search Report

Well Search Report

Included in search	No. of wells	Database
X	0	IGS well database General well database maintained by IGS, location accuracy varies 3,730 to 25 ft., last updated 8/2005.
X	0	Public wells Muncipal and nonmunicipal public well databases maintained by IGS, location varies 3,730 to 25 ft., under development.
X	0	SDWIS public wells Public well database developed from the Safe Drinking Water Information System database maintained by IDNR, estimated locational accuracy varies from 15m. to 3300m. Created from 5/2005 data.
X	0	Private well tracking system IDNR database management system for Grants-to-counties-covered wells. Locational accuracy unknown, assumed to be +/- 17 m., Last update 7/2005.
X	0	Wells registered for testing Wells tested under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned.
X	0	Permitted private wells Wells permitted under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned.
X	0	Registered abandoned wells Wells abandoned under Grant-to-Counties program. Locational accuracy varies 1150 to 150 m.; Last update 9/2001, no future updates planned.
X	0	Water use facilities Wells used by facilities permitted to withdraw >25,000 gallons per day, locational accuracy is +/-20m to 1150 m. Created from 7/2005 data.
X	0	Municipal wells and intakes Locational accuracy 220 m., last updated 8/96.
X	0	Ag drainage wells Locational accuracy 100 m., last updated 4/98.

Well Search Detail

Subject: XY UTM Coordinates: 448091/4608653
Search Radius (ft): 1000

IGS Well Database

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/Permittees	Other Information
No records found from this data source								

Public Wells

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/Permittees	Other Information

No records found from this data source

SDWIS public wells

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/Permittees	Other Information

No records found from this data source

Private Well Tracking System

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/Permittees	Other Information

No records found from this data source

Wells Registered For Testing

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/Permittees	Other Information

No records found from this data source

Permitted Private Wells

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/Permittees	Other Information

No records found from this data source

Abandoned Wells (plugged)

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/Permittees	Other Information

No records found from this data source

Water Use Facilities

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/Permittees	Other Information

No records found from this data source

Municipal Wells And Intakes

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/Permittees	Other Information

No records found from this data source

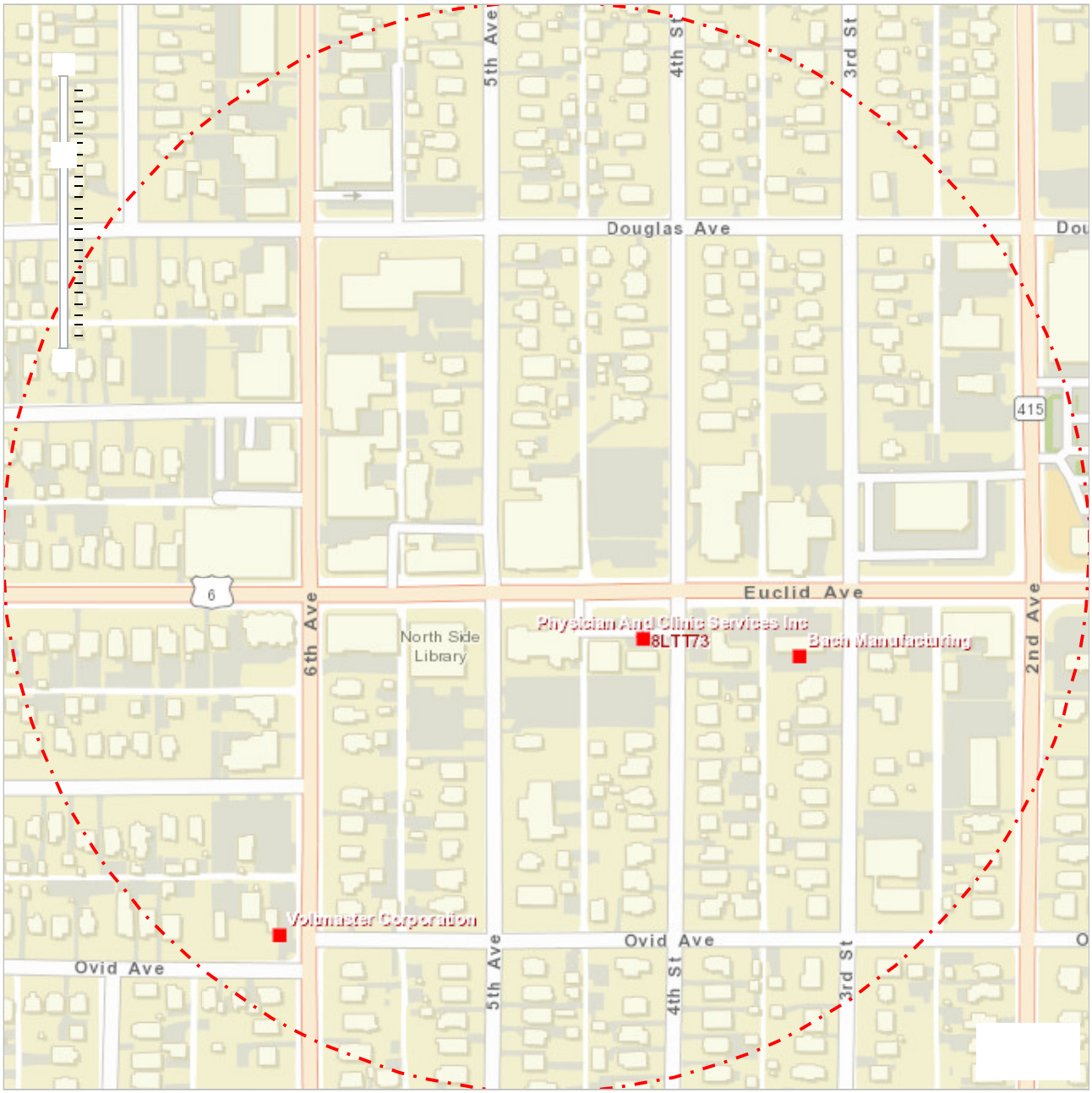
Ag Drainage Wells

Map ID	Well No.	Location	Accuracy	Dist. From Point	Well Depth	Construction/ Permit Date	Owner/Permittees	Other Information

No records found from this data source

Well Search Buffered Map

Subject: XY UTM Coordinates: 448091/4608653
Search Radius (ft): 1000



Map Notes:

- UST
- LUST
- Wells

Please refer to the Accuracy column in Well Search Detail.
Since multiple points can be at the same spot (as those located to the center of a quarter section), points were randomly dispersed within 10 meters around that spot so all points can be seen.