RETIA USA

March 12, 2021

Mr. John Feeney
Wisconsin Department of Natural Resources
1155 Pilgrim Road
Plymouth, WI 53073

Subject: **Site Investigation Work Plan**
Arkema Coating Resins/Cook Composite/Freeman Chemical
340 Railroad Street, Saukville, WI
BRRTS #: 02-46-000767, FID #: 246004330

Dear Mr. Feeney:

Please find enclosed the Site Investigation Work Plan for the Arkema Coating Resins/Cook Composites/Freeman Chemical facility located at 340 Railroad Street in the Village of Saukville, Ozaukee County, Wisconsin (the "Site"). This Work Plan was prepared in accordance with the requirements of Wisconsin Administrative Code (WAC) Chapter NR 716.09(1) as requested in your correspondence dated August 18, 2020.

If you have any questions or comments, please feel free to contact me at keith.linton@total.com or 832-744-8938 or Mr. Bob Cigale at Endpoint Solutions Corp. at bob@endpointcorporation.com or 414-858-1202.

Sincerely,

Keith Linton
Project Coordinator

RETIA, USA
1201 Louisiana St, Suite 1800
Houston, TX 77002
(713) 483-5060

MARCH 12, 2021

SITE INVESTIGATION WORK PLAN

ARKEMA/COOK COMPOSITES/FORMER FREEMAN CHEMICAL
340 SOUTH RAILROAD STREET
SAUKVILLE, WISCONSIN

WDNR BRRTS NO. 02-46-000767
WDNR FID NO. 246004330

PREPARED FOR:

RETIA USA LLC
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SITE INVESTIGATION WORK PLAN

ARKEMA/COOK COMPOSITES/FORMER FREEMAN CHEMICAL

340 SOUTH RAILROAD STREET

SAUKVILLE, WISCONSIN

MARCH 12, 2021

This Site Investigation Workplan was prepared by Endpoint Solutions Corp. for RETIA USA LLC in accordance with NR 716.07, Wisconsin Administrative Code.

Prepared By: _____ March 12, 2021

Robert A. Cigale, P.G.
Principal

Date

Reviewed By: _____ March 12, 2021

Kirk L. Kapfhammer, P.G.
Principal

Date

Endpoint Solutions

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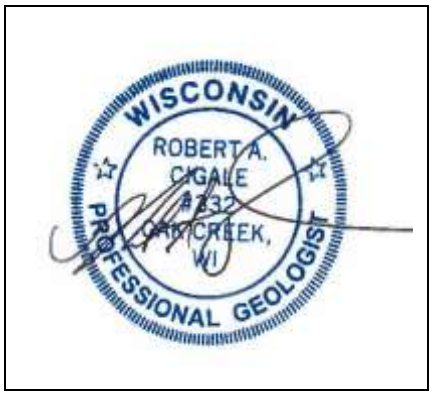
CERTIFICATIONS

HYDROGEOLOGIST

I, Robert A. Cigale, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code.

	332-13	March 12, 2021
Signature	P.G. No.	Date



1.0 PURPOSE

On September 3, 1987, Freeman Chemical Company (Freeman) executed an Administrative Order on Consent (Consent Order) with the Wisconsin Department of Natural Resources (WDNR) and the United States Environmental Protection Agency (USEPA) for the site located at 340 South Railroad Street, in the Village of Saukville, Ozaukee County, Wisconsin (the "Site"). The location of the Site is depicted on **Figure 1**. The Consent Order consists of a Resource Conservation and Recovery Act (RCRA) 3008(h) Corrective Action Order and assigned the Site USEPA Identification No. WI-980615439. The purpose of this Site Investigation Work Plan (SIWP) is to outline the means and methods to further investigate the release(s) of hazardous constituents to the surface as requested in WDNR correspondence dated August 18, 2020.

1.1 SITE LOCATION

Site Address	340 South Rail Road Street Saukville, WI 53080
Cadastral	SW ¼ of the NE ¼ of Section 35, Township 11N, Range 21E
WTM	X: 686424 Y: 324937
Parcel IDs	110500406000 & 110500603014
Acreage	11.52

1.2 INTERESTED PARTIES

Responsible Party	RETIA USA LLC 1201 Louisiana Street, Suite 1800 Houston, TX 77002 ATTN: Mr. Keith Linton 713-483-5060 Keith.linton@total.com
Environmental Consultant	Endpoint Solutions Corp. 6871 South Lovers Lane Road Franklin, WI 53132 ATTN: Mr. Robert Cigale, P.G. 414-858-1202 bob@endpointcorporation.com

2.0 BACKGROUND

2.1 SITE OWNERSHIP HISTORY

The Site was originally operated as a vegetable cannery until circa 1948/1949 when Freeman Chemical Company (Freeman) installed resin manufacturing equipment at the Site. From 1949 until December 31, 2015, alkyd, polyester and urethane synthetic resins were manufactured at the Site. In 1990, Cook Composites and Polymers (CCP, a joint venture involving Total) purchased Freeman Chemicals and took over operation of the Site. In July 2011, Arkema Coating Resins (Arkema) purchased the resins product line from Cook Composites and Polymers and took over ownership and operation of the Site; however, CCP (now effectively Total Petrochemicals) maintained responsibility for remediation of releases that originated prior to Arkema's operation of the Site. The Site facility layout is depicted on **Figure 2**.

As of December 31, 2015, Arkema ceased operations at the Site. Total maintains responsibility for the environmental response at the Site via RETIA USA LLC, an entity established to manage Total's legacy sites throughout the United States.

2.2 SITE OPERATION HISTORY

From 1952 to 1968, condensate produced as part of the chemical reactions (reaction water) was disposed in a dry well formerly located on the western edge of the Site with approval from the Wisconsin Division of Water Pollution Control. In 1968, the dry well method of disposal for the reaction water was replaced with an on-site hazardous waste incinerator located in the northern portion of the Site, south of the existing office. In 1989, a new hazardous waste incinerator, located east of the existing tank farm, was permitted and brought online to replace the original hazardous waste incinerator.

The new incinerator was utilized for the destruction of hazardous waste until 2003 when a macro porous polymer extraction (MPPE) system was added to the waste handling process to remove the hazardous characteristics from the reaction water. The incinerator continued to be operated as a non-hazardous incinerator disposing of the post-MPPE, non-hazardous reaction water until October 2004, when the incinerator was shut down. From October 2004 to December 31, 2015 when Site activities ceased, reaction water was transported offsite by rail for disposal at an out-of-State deep well injection facility.

2.3 SITE INVESTIGATION HISTORY

The history of site investigation and remediation work performed at the site was reviewed and is summarized herein to establish the foundation for the current Site Investigation Work Plan. This review demonstrates that a significant amount of work has been performed at the site to characterize and address impacts associated with past activities. In that regard the current Site Investigation Work Plan is not an initial assessment but is rather intended to update and supplement the historical data.

Beginning in the late 1970s, concerns were raised in the Village of Saukville regarding odors in the public drinking water supply. According to information contained in the Consent Order (USEPA,

1987), the odors noted in the public drinking water were similar to the odors given off by the reaction water generated at the Site. Specifically, the odor was noted primarily in an unused private potable well located on an adjoining property to the west of the Site, as well as the Village of Saukville Municipal Well No. (2) formerly located on the northeast quadrant of the intersection of Church Street and Tower Street approximately 900 feet northwest of the approximate center of the Site. In 1979, groundwater samples collected from the Village municipal wells detected elevated concentrations of benzene, toluene, trichloroethene (TCE) and xylene in MW-2.

Based on these findings, Freeman Chemicals initiated a series of investigative and remedial actions in an effort to define the source and delineate the extent of the apparent impacts. The following subsections provide a summary of the historical activities performed.

2.3.1 Preliminary Hydrogeological Evaluation - 1981

In approximately 1981, a Preliminary Hydrogeological Evaluation report was prepared (Olver, 1981). In general, the Preliminary Hydrogeological Evaluation report discussed the hypothetical geology and hydrogeology at, and in the vicinity of the Site based on regional knowledge. The report summarized the results of laboratory analyses performed on water samples collected from Village water supply wells and other existing wells.

The results of this 1981 sample data indicated that MW-1 did not exhibit elevated concentrations and that the highest concentrations were associated with TCE which was never used at the Site, but instead used at Laubenstein/Northern Signal located adjoining the Site to the west.

The location of the wells (MW-1, MW-2 and Laubenstein/PW-8) are depicted on **Figure 3**. Based on the sampling results, as well as the hydrogeologic information presented, it was recommended to initiate a monitoring well installation and sampling plan.

2.3.2 Preliminary Remedial Investigations Report – 1985

During 1985, Hatcher performed field investigations to acquire additional data needed to select appropriate remedial solutions. The scope of work discussed in this report (Hatcher, 1985) included an electromagnetic (EM) survey of the Site and the surrounding area, a shallow seismic refraction survey, the installation of eight (8) new monitoring wells, including two (2) in the glacial overburden, one (1) in a glacial "sinkhole" and five (5) in the shallow dolomite, test pumping and sampling of the Laubenstein well (PW-08) and the installation of two (2) pilot dewatering methods, including a Ranney Collector and a large diameter extraction well.

The shallow seismic refraction survey provided an indication of a relatively consistent 15- to 20-foot-thick layer of glacial overburden over the shallow dolomite at the Site. However, an approximately 100-ft deep solution "sinkhole" was identified in the shallow dolomite in the northeast corner of the Site.

The Preliminary Remedial Investigations Report also identified potential sources of impacts at the Site, including:

- Barrel storage areas;
- The buried hazardous waste incinerator;
- The old farm well;
- The former dry well;
- Several underground storage tanks (USTs), including gasoline, diesel and caustic;
- The aboveground storage tank (AST) farm;
- Basement sumps;
- The existing incinerator;
- Underground reaction water piping;
- Underground linseed oil piping;
- Truck scale pit;
- Truck washing area;
- Tanker parking areas; and,
- Miscellaneous spill locations.

The approximate locations of the potential sources of impacts are depicted on **Figure 4**.

2.3.3 Corrective Measures Activities - 1988

Based on the recommendations presented in the Preliminary Hydrogeological Evaluation report, Hatcher Incorporated (Hatcher) performed Site investigation (SI) activities, remedial activities and remedial construction at the Site. The results of these activities were reported in a Site Conditions & Construction Report (Hatcher, 1986 [revised 1988]).

Based on groundwater samples collected from numerous monitoring wells completed in the glacial overburden and piezometers completed in the shallow dolomite, three (3) distinct areas of impacted groundwater were identified on the Site. These three (3) areas were located in the northern portion of the Site in the vicinity of the former hazardous waste incinerator and polyurethane laboratory, near the center of the Site in the vicinity of the former and current tank farms and along the western edge of the Site in the vicinity of the former dry well used for the disposal of reaction water. The three (3) areas of groundwater impacts are depicted on **Figure 5**.

Offsite areas of impacts were also identified, including: the adjoining to the east Church Ballfield and the adjoining to the southwest Logemann property. The Church Ballfield impacts appeared to be the result of contaminant migration from the former hazardous waste incinerator/polyurethane laboratory area of impacts on the Site, while the Logemann property impacts was the result of the operation of an air curtain destructor for the disposal of reaction water. Finally, the casing of the

Laubenstein well (PW-08) was determined to be compromised, providing a direct hydraulic connection between PW-08 and municipal well MW-2.

Based on the findings of prior investigative actions, as well as sampling performed as part of the Corrective Measures scope of work, a remedial plan consisting of the following was developed.

1. Dewater the glacial overburden in the vicinity of the areas of affected groundwater;
2. Removal and/or repair of the existing sources of impacts;
3. Repair the casing in the Laubenstein well (PW-08);
4. Recondition the municipal potable wells;
5. Reverse the direction of groundwater flow in the shallow dolomite; and,
6. Direct surface waters at the Site to a holding basin.

The following tasks were performed to implement the remedial plan outlined above.

DEWATER THE GLACIAL OVERBURDEN

In approximately 1986, Ranney Collectors RC-1, RC-2 and RC-3 and glacial overburden extraction wells W-31, W-32, W-33, W-34 and W-35 were installed. The Ranney Collectors consist of trench drains in the glacial overburden which drain by gravity to a central manhole where a pump is located. The Ranney Collectors contain varying number of trench drain "legs".

- The Ranney Collector RC-1 manhole is located to the northwest of the former and current tank farm and contained five (5) legs extending to the north, east, south, southwest and west from the manhole.
- The Ranney Collector RC-2 manhole is located in the southwest corner of the Site and contained three (3) legs extending to the north, east and southwest from the manhole.
- The Ranney Collector RC-3 manhole is located to the south of the former hazardous waste incinerator area and contained four (4) legs extending to the north, northeast, south and west from the manhole.

Due to the presence of aboveground and underground utilities and nearby building foundations, glacial overburden extraction wells W-31, W-32, W-33, W-34 and W-35 were installed along the western edge of the Site to augment the northern leg of Ranney Collector RC-2.

The locations of the Ranney Collectors and the glacial overburden extraction wells are depicted on **Figure 6**.

REMOVAL AND/OR REPAIR OF EXISTING SOURCES

OLD DRY WELL

The old dry well was used from approximately 1952 to approximately 1958 to dispose of reaction water at the Site. The dry well was reported to be located on the west side of Building No. 5 on the western edge of the Site and 19 borings were advanced in the area to identify the location of the

former structure prior to excavation. Following advancement of the soil borings, an 11-foot by 11-foot concrete block structure approximately eight and one-half (8.5) feet deep was delineated. The structure did not contain an impermeable bottom.

Remediation and removal of the old dry well consisted of removing approximately 4,000-gallons of liquids, removing saturated materials (sludge) from the bottom of the structure, removing the block walls and backfilling the resulting excavation. The sludge was allowed to freeze adjacent to the excavation prior to being moved to the onsite spoil storage area. The location of the former dry well is depicted on **Figure 7**.

FARMHOUSE WELL

A farmhouse was formerly located in the southeast corner of the Site and a potable well associated with the farmhouse was reportedly located adjacent to the southwest corner of the farmhouse. To abandon the well, a magnetometer was utilized to located the well casing, debris was removed from the casing and the casing was grouted using a tremie pipe. The location of the former farmhouse well is depicted on **Figure 8**.

CAUSTIC TANK

A caustic UST consisting of a five and one-half (5.5) foot diameter concrete structure with a concrete base approximately five and one-half (5.5) ft bgs was located south of Building No. 55. In order to take this UST out of service, the contents of the UST were diluted and pumped to a tank wagon for disposal. Sediment from the base of the UST was removed and transferred to the onsite spoil storage area. Following inspection, the former caustic tank was filled with four (4) cubic yards of concrete. The location of the former caustic UST is depicted on **Figure 9**.

STYRENE TANKS

Two (2) steel styrene USTs were located to the east of the existing tank farm. As part of their decommissioning, the USTs were uncovered and removed using a crane, rinsed, inspected and transported offsite. Contaminated soils excavated during the removal of the styrene USTs was transferred to the onsite spoil storage area. The approximate location of the former styrene USTs is depicted on **Figure 10**.

BROKEN LINSEED OIL PIPE

A broken linseed oil underground pipe was discovered west of the existing tank farm and south of Building No. 11 when all active underground piping for raw materials or products were taken out of service and moved to new aboveground piping. Contaminated water recovered during this work was incinerated onsite, while the contaminated soils were transferred to the onsite spoil storage area. The approximate location of the broken linseed oil underground piping is depicted on **Figure 11**.

GASOLINE UST AND SUMP

An abandoned gasoline UST is located near the southwest corner of Building No. 9. Apparently, the gasoline UST was abandoned in-place by filling with sand several years prior to the activities discussed in the Site Conditions & Construction Report.

Although the UST was abandoned in-place, a sump associated with a gasoline UST located to the south of Building No. 9 was excavated, removed and discarded. No contaminated soil or groundwater associated with the sump was detected. The approximate location of the gasoline UST and sump are depicted on **Figure 12.**

DIESEL UST

A 1,000-gallon steel UST utilized to store diesel fuel was located on the north side of Building No. 31. During UST removal, no indication of associated contaminated soil and/or groundwater. The resulting excavation was backfilled with concrete. The approximate location of the former diesel UST is depicted on **Figure 10**.

REPAIR LAUBENSTEIN WELL (PW-08) CASING

Due to a washout at the base of the existing well casing, the Laubenstein well (PW-08) appeared to be the source of impacted groundwater migration into the deep dolomite aquifer. Repairs consisted of grouting a new casing inside the existing casing. The bottom of the new casing was set at 104 ft bgs, and the annulus between the existing and new casing was grouted. The location of PW-08 is depicted on **Figure 3**.

RECONDITIONING OF MUNICIPAL WATER SUPPLY WELLS

Since 1979, when odors were first detected in the Saukville drinking water supply, water from Village well MW-2 has been dedicated for use at the Site. It was determined the washout at the base of the PW-08 casing provided a direct conduit from the ground surface to MW-2. While the affected groundwater at the Site was not determined to have entered the area of influence around Village well MW-3, reconditioning of MW-3 was performed as part of this scope of work in an effort to maintain an adequate supply of usable water now that MW-2 was not providing public drinking water. The reconditioning process included the redevelopment of the well to remove accumulated sediment. While the redevelopment process caused taste and odor issues associated with the entrainment of iron and manganese into the water, pilot tests were performed to evaluate whether carbon filtration would actively remove the odors and tastes.

REVERSING THE GROUNDWATER FLOW IN THE SHALLOW DOLOMITE

Four (4) shallow dolomite extraction wells (W-21A, W-24A, W-28 and W-29) were installed on the Site. Shallow dolomite extraction well W-21A was installed to the north of the existing tank farm, shallow dolomite extraction well W-24A was installed in the southwest corner of the Site, shallow dolomite extraction well W-28 was installed to the west of the former hazardous waste incinerator and shallow dolomite extraction well W-29 was installed to the east of the former and existing tank farms. The locations of the shallow dolomite extraction wells are depicted on **Figure 13**.

DIRECTING SURFACE WATER TO AN ONSITE HOLDING BASIN

In an effort to prevent future spills and releases from impacting the soils and groundwater at the Site, the ground surface in the areas surrounding raw material storage areas, production buildings and final product storage areas was covered with concrete or asphalt pavement, depending on the expected level of traffic. In order to capture any impacts associated with precipitation coming into

contact with inadvertent spills or releases, a system of polydrain inlets were installed throughout the paved production areas. The polydrain inlets were connected to new and existing storm sewer conveyance piping which was directed to discharge to a newly constructed storm water retention basin located in the southeast corner of the Site. The storm water retention basin was designed to capture and retain approximately 135,000 gallons of precipitation runoff. The contents of the storm water retention basin could either be discharged to the outfall to the Milwaukee River or the sanitary sewer system via pump, depending on the results of chemical analyses. The locations of the polydrain system and the stormwater retention basin are depicted on **Figure 14**.

EXCAVATED SOIL MANAGEMENT

Soils excavated as part of the installation of the Ranney Collectors, installation of the glacial overburden and shallow dolomite extraction wells and conveyance piping, remediation of the existing sources and installation of the storm water retention basin were transported to the eastern portion of the Site and segregated by photoionization detector (PID) response measured at the time of excavation, based on the approved Soil Handling Plan. This area was previously used for tanker parking and was later paved as part of the expansion of the impermeable surface at the Site. All soils measured to have a PID response greater than 10 parts per million (ppm) to 10,000 ppm were treated onsite, while soils exhibiting PID responses greater than 10,000 ppm were to be transported offsite as hazardous waste; however, the highest PID response measured was approximately 6,500 ppm.

Over time, the excavated soils were spread in a layer between ten (10) and 20 inches thick to allow for volatilization. The soils were monitored with a PID and turned to enhance the volatilization process. Once PID responses were consistently below 10 ppm, laboratory analyses were performed to confirm the PID measurements.

Once confirmed "clean", approximately 8,500 cubic yards of soil were transported offsite to two (2) local landfills. The remainder of the soils were utilized to construct screening berms on the south and east sides of the Site. The locations where excavated soils were stored and treated onsite and the locations of the screening berms are depicted on **Figure 15**.

2.3.4 ADMINISTRATIVE ORDER ON CONSENT – SEPTEMBER 3, 1987

On September 3, 1987, Freeman executed a Consent Order with the WDNR and the USEPA. The objective of the Consent Order was to protect the public health and the environment through the prevention or reduction of the release or migration of hazardous waste or hazardous constituents to the groundwater, surface water and soil in and around the Site. The Consent Order identified the following releases at the Site: spills at the incinerator site; a pipeline leak; the railroad siding; UST sites; barrel storage areas; and, the tanker parking area. Furthermore, the Consent Order identified the highest levels of soil impacts which was determined to be at the following locations: the tank farm; the adjoining church ballfield; a barrel storage area along the southwest property line; the former dry well; and, the solvent storage area north of the scales. Potential sources of impacts described in the Consent Order are depicted on **Figure 16**.

2.3.5 Closure Plan Modification – April 1992

The former hazardous waste incinerator located in the northeast portion of the Site consisted on a licensed solid waste management unit (SWMU) under the auspices of Wisconsin Administrative Code (WAC) NR 600 series. While the closure of a licensed SWMU typically requires complete closure of the unit, including any contaminated media associated with the unit. However, as the contaminated soil and groundwater beneath the former hazardous waste incinerator are also subject to the Consent Order, CCP and their environmental consultant, RMT, Inc. (RMT) requested the WDNR to consider an alternate closure methodology for the remediation of the soil and groundwater beneath the unit.

Due to the presence of an operating solid waste incinerator, numerous underground and aboveground active utilities and nearby structures, the removal of the contaminated soils from beneath the former hazardous waste incinerator was deemed to be cost prohibitive. As such, RMT recommended the use of a soil vapor extraction (SVE) system to address the unsaturated soils beneath the former hazardous waste incinerator. The former SWMU was defined as an area measuring 60-feet by 100-feet. A depiction of the former SWMU is depicted on **Figure 17**.

The Closure Modification Plan also established closure performance standards for the former SWMU soils. Utilizing soil samples collected from the area surrounding the former SWMU, a background concentration was established as a target for remediation. A total concentration of combined benzene, toluene, ethylbenzene and xylene (BTEX) of 530 milligrams per kilogram (mg/kg) was established.

2.3.6 Regulatory Design Report / Sampling for a Soil Remediation System – March 1995

This 1995 report contains the design documentation for the SVE system discussed in the Closure Plan Modification for the former SWMU. Also, according to this report, the closure sampling plan indicates the SVE system is intended to be operated until the level of performance achievable has been obtained via the concentrations contained in the exhaust indicate contaminant removal is no longer occurring.

Once the effectiveness of the SVE system is achieved, soil samples were to be collected and analyzed to verify the closure performance standards have been achieved. Three (3) soil borings were to be advanced and sampled continuously to a maximum depth of 11.5 ft bgs. The samples were to be analyzed for total BTEX concentration and compared to the established background concentration of 530 mg/kg. The location of the three (3) closure performance standard soil borings are depicted on **Figure 18**.

2.3.7 RCRA Facility Investigation Additional Studies Report – October 1995

The scope of the RCRA Facility Investigation (RFI) included soil sampling at three (3) onsite locations:

- Area 1 – former urethane laboratory/former liquids incinerator;
- Area 2 – former dry well; and,

- Area 3 – former tank farm storage area.

The location of the three (3) onsite areas are depicted on **Figure 2**.

Two (2) offsite locations, Area 4 – the Logeman property and Area 5 – the Churchyard, were also investigated; however, the offsite areas have been addressed separately and are not discussed further herein.

Initially, 18 solid waste management units were proposed for investigation; however, the USEPA and the WDNR agreed that 13 of the 18 identified solid waste management units were not significant enough to warrant further investigation. The scope of investigation completed on the onsite Areas of Concern (AOC) included:

- One (1) soil boring was advanced to the bedrock surface within AOC 1. Soil samples from each two (2) ft interval were submitted for Appendix IV volatile organic compounds (VOCs) and Appendix IX semi-volatile organic compounds (SVOCs);
- One (1) soil boring was advanced to the bedrock surface within AOC 2. Soil samples from each two (2) ft interval were submitted for Appendix IV VOCs and Appendix IX SVOCs; and,
- Three (3) soil borings were advanced to the bedrock surface within AOC 3. Soil samples from each two (2) ft interval were submitted for Appendix IV VOCs and Appendix IX SVOCs.

Results of the soil sampling detailed above were as follows:

- BTEX constituents were detected at concentrations as high as 10^6 µg/kg from the ground surface to approximately eight (8) feet below the ground surface (ft bgs) in AOC 1;
- BTEX constituents were detected at concentrations as high as 10^6 µg/kg from the ground surface to approximately eight (8) ft bgs in AOC 2; and,
- BTEX constituents were detected at concentrations as high as 10^5 µg/kg from the ground surface to approximately eight (8) ft bgs in AOC 3.

The locations of the soil borings and concentrations of BTEX constituents in the soil in AOC 1, AOC 2 and AOC 3 are depicted on **Figures 19, 20 and 21**, respectively.

The RFI report included an exposure assessment for the three (3) onsite AOCs. The constituents of concern in each of the AOCs consist primarily of VOCs. All three (3) of the onsite AOCs are covered with concrete or asphalt pavement; therefore, direct contact exposures were controlled. The RFI report also identified the assessment of methods to prevent migration of VOCs from the soils to the groundwater as a moderate to high priority in the AOCs.

2.3.8 SVE System Emission Calculations – July 20, 2005

Following installation of the SVE system in AOC 1 for the former SWMU, the system was initialized in 1997. By 2004, concentrations of contaminants in the emissions from the SVE system became

asymptotic with benzene not being detected for approximately two (2) years. The results were reported to the WDNR and subsequently, the SVE system was shut-down in May 2005.

As stipulated in the Modified Closure Plan, three (3) soil borings were advanced at the locations stipulated in the Modified Closure Plan with soil samples collected in two (2) ft intervals from one (1) ft bgs to 11 ft bgs. Total BTEX concentrations in the soil samples ranged from 4.11 mg/kg to 15,120 mg/kg, with an average concentration of 2,849.5 mg/kg. Based on these results, the soils within the former SWMU did not meet the modified closure requirements; therefore, the SWMU was not closed and additional evaluation is necessary to meet the requirements of the Modified Closure Plan.

3.0 CURRENT SITE STATUS

On December 31, 2015, manufacturing at the Site ceased, and since then has remained in an idled status. The existing ASTs have been emptied and cleaned and all process equipment and piping has been emptied, rinsed and air-gapped. Per the operating agreement executed between Arkema and Total, Arkema is responsible for the demolition of the above grade portions of the Site structures. Total is continuing to operate the groundwater extraction system and conduct the periodic monitoring described in this section.

3.1 PHYSICAL CONDITION

In preparation for the proposed demolition of the Site structures, and due to the fact that the extraction system had been installed while the Saukville Facility was operational; and therefore, was integrated into the Site electric power grid, RETIA initiated a project in 2019 to segregate the groundwater extraction system from the Facility power grid. In addition, motor controllers for the majority of the extraction wells had been installed in or on structures that were proposed to be demolished. Finally, as the extraction system was originally installed in the mid-1980s, the control components were approaching the end of their useful life; therefore, it was also decided to upgrade the controls at this time. The scope of the upgrades to the extraction system included the following:

- Upgraded all pump controllers to solid state technology with telemetry;
- Moved all controls out of buildings planned for demolition;
- Installed a new WE Energies power feed to the Site strictly for the operation of the extraction system; and,
- Installed new power and communication feeds to remote motor controller panels.

Based on these upgrades, the operation of the extraction system will not be affected by the planned demolition of the Site structures and is equipped to operate reliably into the future.

3.2 SOIL CHEMISTRY

With the exception of the SVE system and pilot ISCO application implemented within AOC 1, the location and character of the contaminants on the Site are relatively unchanged since the most recent Site-wide sampling effort performed in 1995. The main sources of impacts in the unsaturated glacial drift remain within the three (3) identified onsite AOCs.

3.3 GROUNDWATER CHEMISTRY

The groundwater monitoring network at the Site consists of 46 monitoring points which include 21 glacial drift monitoring wells, ten (10) shallow dolomite monitoring wells, four (4) shallow dolomite extraction wells, four (4) deep dolomite wells, three (3) Ranney Collectors and three (3) Publicly Owned Treatment Works (POTW) sampling points.

3.3.1 Monitoring Network Description

The sample points in the monitoring network have also been classified into three (3) monitoring objectives that include receptor monitoring points, perimeter monitoring points and remediation progress points. A discussion of each of these objectives is provided below.

Receptor Monitoring

Receptor points include three (3) municipal water supply wells (**MW-01**, **MW-03**, and **MW-04**); three (3) POTW sampling points including: influent, effluent, and sludge; and the three (3) Ranney Collectors (**RC-1**, **RC-2**, and **RC-3**). The Ranney Collectors are monitored because they discharge to the POTW. The receptor monitoring points are sampled during the April and October sampling events.

Perimeter Monitoring

Perimeter points are both on- and off-site monitoring wells that are located at or beyond the edge of the contaminant plume. These wells are intended to provide the information necessary to characterize the lateral extent of the impacts. The perimeter monitoring points consist of eight (8) glacial drift monitoring wells, eight (8) shallow dolomite piezometers and one (1) deep dolomite piezometer. The perimeter monitoring points are sampled during the April and October sampling events.

Remediation Progress Monitoring

Remediation progress points are monitoring wells that are located within the contaminant plume. These wells provide information concerning the effectiveness of the on-site remedial systems. The remediation progress points consist of six (6) glacial drift monitoring wells, four (4) shallow dolomite extraction wells, one (1) shallow dolomite piezometer, and one (1) deep dolomite pumping well. The remediation progress wells are sampled during the October sampling event.

Groundwater Elevation Measurements

As part of the monitoring program, water levels are measured in all of the wells semi-annually. In addition to the receptor monitoring points, perimeter monitoring points and remediation progress points, seven (7) glacial drift monitoring wells and one (1) shallow dolomite piezometer are utilized primarily for water level measurements.

3.4 Most Recent Results

The most recent groundwater sampling event was an annual sampling event performed between October 19 and 22, 2020. Results of the most recent annual sampling event are summarized below.

3.4.1 Receptor Monitoring Points

- No VOCs were detected above their respective method detection limits (MDLs) in the samples collected from the three (3) Municipal Water Supply Wells MW-1, MW-3 and MW-4, and the POTW-Effluent.

- The POTW-Influent sample contained an estimated concentration of toluene and the POTW-Sludge sample contained a detected concentration of toluene.
- The sample collected from RC-1 contained an estimated concentration of tetrachloroethene (PCE), the sample collected from RC-2 contained detectable concentrations of cis-1,2-dichloroethene, vinyl chloride (VC), trichlorofluoromethane, total xylenes, TCE and benzene and the sample collected from RC-3 contained detectable concentrations of total xylenes, toluene, ethylbenzene, isopropylbenzene, benzene, trimethylbenzenes and TCE.

3.4.2 Perimeter Monitoring Points

No VOCs were detected above their MDLs in the groundwater samples collected from perimeter monitoring points **W**-01A, W-03A, W-03B, W-04A, W-20, W-22, W-40, W-49, W-50, W-51 and PW-08. As observed during previous sampling events, downgradient perimeter monitoring points were generally free of impacts while upgradient perimeter monitoring points contained elevated concentrations of chlorinated solvent impacts emanating from the former Northern Signal site.

3.4.3 Remediation Progress Points

As observed during previous sampling events, affected groundwater is concentrated primarily within the three (3) onsite AOCs. Higher concentrations of impacts are detected in the glacial drift aquifer as compared to the shallow dolomite aquifer.

3.5 Groundwater Elevations

Based on the groundwater depth measurements collected during the October 2020 groundwater sampling event, the measured depth to water below the ground surface ranged between 3.4-feet and 10.67-feet in the glacial drift aquifer and between 10.73-feet and 19.66-feet in the shallow dolomite aquifer.

4.0 PROPOSED SCOPE OF WORK

Based on the results of the historical investigative activities and the results of the most recent annual groundwater sampling event, the majority of the affected groundwater detected on the Site appears to be contained in unsaturated and saturated glacial drift soils located within the three (3) previously identified AOCs.

- AOC 1 – the former urethane laboratory and former liquids incinerator, also the location of the former hazardous waste management unit subject to the Modified Closure Plan (RMT, 1992);
- AOC 2 – the former dry well located along the west boundary of the Site; and,
- AOC 3 – the former tank farm storage area located near the center of the Site.

With the exception of AOC 1 where a significant amount of soil data has historically been generated to support the installation of the SVE system in 1996, the shutdown of the SVE system in 2004 and a pilot-scale ISCO injection in 2006, minimal soil data has been collected from AOCs 2 and 3. The collection of additional soil analytical data in AOCs 2 and 3 have historically been limited due to the presence of active above ground and underground utilities, structures and Site traffic which acted as impediments to further investigation. However, following demolition of the Site structures, all aboveground utilities and the majority of underground utilities will be inactivated. The only active underground utilities remaining on the Site post-building demolition will include:

- Power, communications and discharge utilities associated with the groundwater extraction wells;
- Polydrain system; and,
- Site stormwater conveyance piping.

Besides the thee (3) AOCs described above, the Site investigation will also address areas or items identified in the Preliminary Hydrogeological Evaluation report (Hatcher, 1988), including:

- Styrene USTs east of the former tank farm location;
- Gasoline UST south of Building 9;
- Diesel UST north of Building 31;
- Former underground linseed oil and acid water transfer piping;
- Soil handling area;
- Barrel storage areas;
- Tanker wagon parking areas; and,
- Railroad unloading area.

Based on the results of previous soil sampling performed at the Site along with long-term groundwater monitoring data, the primary constituents of concern consist primarily of VOCs.

While historic sampling has also included semi-volatile organic compounds (SVOCs), metals (primarily arsenic and barium) and polychlorinated biphenyls have been detected at the Site, in general, the concentrations that these constituents have been detected are significantly less than the concentration of VOCs. Therefore, we propose to limit our sampling during the scope of this work plan primarily to VOCs, unless in the specific locations, such as the former diesel UST, where SVOC analysis may be more applicable.

Details regarding the proposed investigative activities in each of the areas identified above are provided in the following subsections.

4.1 AOC 1

As previously discussed, AOC 1 includes the former liquids incinerator which is subject to the SWMU closure requirements. Based on the location of AOC 1 away from production areas and due to the closure requirements associated with the SWMU, extensive investigative activities have occurred within AOC 1. In general, an area of affected groundwater has been delineated as extending to the north from the SWMU.

Significant BTEX concentrations were detected in samples collected from soil borings I-01, I-03, I-04, I-05, I-07, SVE-2, SVE-3, SVE-4, SP-1, SP-2, SP-3 and A1-1. Groundwater typically ranges between six (6) feet below the ground surface (ft bgs) and eight (8) ft bgs within AOC 1. As such, the highest concentration of contaminants is generally found within eight (8) ft bgs.

In general, the investigation activities performed to-date have adequately delineated the western and southwestern extent of the area of affected groundwater. However, additional delineation is needed to the north of soil boring I-07, to the east of soil borings I-07, I-05, A1-1, I-04, SVE-2 and SVE-4 and to the south of soil boring SVE-4. It should be noted, an approximately 100-foot by 210-foot area on the adjoining to the east Church Yard was remediated by excavating unsaturated soils for offsite disposal. The excavation extended to approximately five and one-half (5.5) to six and one-half (6.5) ft bgs. The northern edge of the excavation coincided approximately with the soil boring I-05 location on Site. The offsite remedial actions were documented in the Construction Documentation Report for the Immaculate Conception Church Property (AOC 5) (RMT, October 1996).

We propose to advance a total of six (6) soil borings to the north, east and south of the area of previous investigation activities. These soil borings will be advanced to a maximum depth of eight (8) ft bgs. Discrete samples will be collected in two (2) ft intervals from the ground surface to the termination depth of the soil borings and will be submitted for VOC analysis using USPEA Method SW846 8260B. As the area to the east of the area of previous investigative activities contains a screening berm, the soil borings will be sampled starting at the approximate ground surface elevation of the surrounding area and continue eight (8) feet from that starting depth.

Note, the samples submitted from the soil boring I-04 location were the only samples previously submitted to contain elevated concentrations of SVOCs. Therefore, we propose to submit the samples collected from the soil borings to be advanced to the northeast and southeast of the soil boring I-04 location for VOCs and SVOCs.

The proposed location s of the soil borings in AOC 1 are depicted on **Figure 22**.

4.2 AOC 2

As shown on **Figure 7**, the former dry well was located adjacent to the southwest corner of Building 1. While soil borings were utilized to identify the location of the former dry well structure, no soil samples were submitted for analysis. The "remediation" of the dry well included removing liquids and saturated materials from the base of the dry well structure, as well as removing the concrete block walls of the former dry well structure.

Due to the prevalence of underground utilities, as well as the proximity of the former dry well to Site structures, a raw material AST and an electrical substation, extensive investigation of AOC 2 was previously limited. Underground utilities in the vicinity of AOC 2 include the following:

- North leg of RC-2;
- Two (2) groundwater discharge pipes associated with shallow dolomite and glacial drift extraction points;
- Sanitary sewer associated with the boilers in Buildings 53 and 54;
- Power and control conduits for a shallow dolomite extraction well (W-24), RC-2 and five (5) glacial drift extraction wells (W-31, W-32, W-33, W-34 and W-35); and,
- An abandoned storm sewer.

As such, only one (1) soil boring (A2-1) was historically advanced within AOC 2. While all of the BTEX constituents were detected in the soil samples submitted, xylene was detected at significantly higher concentrations than benzene, ethylbenzene and toluene. In addition, the highest overall BTEX concentrations were detected in the sample collected from the two (2) to four (4) ft bgs interval.

According to the depth to groundwater measurement collected in October 2020 from glacial drift monitoring well W-06A located in the west portion of AOC 2, groundwater is present approximately three and one-half (3.5) ft bgs in the area. The groundwater samples collected from remediation progress point W-06A generally contains the highest concentrations of total VOCs of all samples collected, including the highest concentrations of total xylenes, toluene and ethylbenzene.

We propose to advance a total of seven (7) soil borings within AOC 2. Based on the shallow depth of groundwater in the area, we propose the soil borings be advanced to a maximum depth of four (4) ft bgs with discrete samples from two (2) ft intervals from the ground surface to the termination depth of the borings submitted for VOC analysis. As Building 1 is one (1) of the two (2) buildings on the Site which contain basements, we propose the eastern extent of the impacts be evaluated with a soil boring advanced on the east side of Building 1. The locations of the proposed soil borings in AOC 2 are depicted on **Figure 23**.

4.3 AOC 3 / Former Styrene USTs

AOC 3 is located near the center of the Site encompassing the existing liquids incinerator building, the tank farm unloading bay along with an area to the south and east (see **Figure 24**). According to information obtained from long-term employees, the styrene USTs discussed in **Section 2.2.3** and depicted on **Figure 10** were historically located beneath the existing liquids incinerator. Therefore, we propose investigation activities for the former styrene tanks as part of the investigation of AOC 3.

A total of three (3) soil borings (A3-1, A3-2 and A3-3) were previously advanced within the general vicinity of AOC 3. Soil boring A3-1 was advanced to the west of the bounds of AOC 3, while soil borings A3-2 and A3-3 were advanced within the bounds of AOC 3. In general, significantly higher concentrations of BTEX constituents were detected in the samples submitted from A3-2 and A3-3 as compared to the concentrations detected in the samples submitted from A3-1. Furthermore, the highest concentrations were generally detected in the samples collected from the upper six (6) feet of the soil column. Depth to groundwater measurements in monitoring well W-44 located in the southern portion of AOC 3 are approximately seven (7) ft bgs.

We propose to advance a total of nine (9) soil borings within AOC 3. Based on the depth of groundwater measured in monitoring well W-44, we propose the soil borings be advanced to a maximum depth of eight (8) ft bgs with discrete samples from two (2) ft intervals from the ground surface to the termination depth of the borings submitted for VOC analysis. The locations of the proposed soil borings in AOC 3 are depicted on **Figure 24**.

4.4 Gasoline UST

As shown on **Figure 12**, a gasoline UST was abandoned in-place to the south of Building 9. While the sump attached to the UST was removed in the late-1980s, it does not appear as though any evaluation of the soil in the vicinity of the UST was ever performed. Therefore, we propose to advance three (3) soil borings to the north, south and west of the assumed UST location. Glacial drift monitoring well W-42 is located to the east of the UST location. Based on the depth to groundwater measurement in monitoring well W-42 during the October 2020 sampling event, groundwater is present approximately ten (10) ft bgs in the vicinity of the UST. As such, we propose to advance the soil borings to a maximum depth of ten (10) ft bgs. Up to two (2) samples from each boring will be submitted for VOC analysis. The samples submitted for analysis will be chosen based on obvious indications of impacts. In the absence of any obvious indications, one (1) sample from the interval immediately above saturated soils will be submitted along with a second sample from between the ground surface and the obvious water table. The proposed locations of the soil borings are depicted on **Figure 25**.

4.5 Railroad Unloading Area

A railroad spur enters the west side of the Site extending south to the northern extent of Building 13. Over the history of the Site, the railroad unloading area was utilized for the delivery of raw materials. For the last approximately ten (10) years of Site operations, the rail unloading area was utilized for the loading of acid reaction water for offsite disposal.

Based on the historical use of the railroad spur for unloading of raw materials and loading of acid reaction water, the potential exists for impacts to the subsurface to have occurred. As such, we propose to advance two (2) soil borings to a maximum depth of ten (10) ft bgs along the rail spur adjacent to the rail unloading containment area. Discrete samples from two (2) ft intervals from the ground surface to the termination depth of the borings will be submitted for VOC analysis. The locations of the proposed soil borings in AOC 3 are depicted on **Figure 25**.

4.6 Acid Water Transfer Piping

During the time period when the original hazardous waste liquids incinerator was operating in AOC 1, the acid reaction water was transferred from the kettles in the production block adjacent to AOC 2 via underground piping. The transfer pipe reportedly extended north from the production block, through AOC 2, angled to the northeast to the north of Building 52 and then east to the former hazardous liquids incinerator.

We propose to advance three (3) soil borings to a maximum depth of ten (10) ft bgs along the former alignment of the acid water transfer pipe. Discrete samples from two (2) ft intervals from the ground surface to the termination depth of the borings will be submitted for VOC analysis. The locations of the proposed soil borings for the acid water transfer pipe are depicted on **Figure 25**.

4.7 Diesel UST

The approximate location of the former 1,000-gallon diesel UST is depicted on **Figure 10**. According to information provided in the Site Conditions & Construction Report (Hatcher, 1988), the diesel UST was abandoned by removal with no visual indications of impacts; however, no analytical sampling was performed.

We propose to advance two (2) soil borings to a maximum depth of eight (8) ft bgs in the vicinity of the former UST. Discrete samples from two (2) ft intervals from approximately four (4) ft bgs to approximately eight (8) ft bgs will be submitted for SVOC analysis. The locations of the proposed soil borings in AOC 3 are depicted on **Figure 26**.

4.8 Historic Potential Areas of Impacts

The Consent Order executed in 1987 included the identification of several potential areas that could be sources of affected groundwater associated with drum storage, tanker wagon parking and areas of miscellaneous spills and releases. These areas were identified to be located:

- South of AOC 1 – drum storage and tanker wagon parking;
- Southwest corner of the Site – drum storage and miscellaneous spills and releases;
- South-central portion of the Site - miscellaneous spills and releases; and,
- Northeast corner of the Site – tanker wagon parking and soil handling area.

These areas represent areas of the Site located outside of the defined AOCs and outside of areas specifically discussed in previous sections of this work plan. The proposed investigation plan for these areas is described in the following sections.

4.8.1 Area South of AOC 1

The area to the south of AOC 1 was identified as an area where drums and tanker wagons were stored. While the area is now covered with concrete pavement, the area was not paved until the late-1980s. We propose to advance two (2) soil borings to a maximum depth of ten (10) ft bgs in the area to the south of AOC 1. Discrete samples from two (2) ft intervals from the ground surface to the termination depth of the borings will be submitted for VOC analysis. The locations of the proposed soil borings for the area south of AOC 1 are depicted on **Figure 27**.

4.8.2 Southwest Corner of the Site

The southwest corner of the Site was identified as an area where drums were stored and miscellaneous spills occurred. While the area is now covered with concrete pavement, the area was not paved until the late-1980s. We propose to advance two (2) soil borings to a maximum depth of ten (10) ft bgs in the southwest corner of the Site. Discrete samples from two (2) ft intervals from the ground surface to the termination depth of the borings will be submitted for VOC analysis. The locations of the proposed soil borings in the southwest corner of the Site are depicted on **Figure 27**.

4.8.3 South-Central Portion of the Site

The south-central portion of the Site was identified as an area where miscellaneous spills occurred. While the area is now covered with concrete pavement, the area was not paved until the late-1980s. We propose to advance two (2) soil borings to a maximum depth of ten (10) ft bgs in the south-central portion of the Site. Discrete samples from two (2) ft intervals from the ground surface to the termination depth of the borings will be submitted for VOC analysis. The locations of the proposed soil borings in the south-central portion of the Site are depicted on **Figure 27**.

4.8.4 Northeast Portion of the Site

The northeast portion of the Site was identified as an area where tanker wagons were stored and the excavated soils were segregated, sorted and treated during the Corrective Measures activities in the late 1980s prior to paving this portion of the Site. While the area is now covered with asphalt pavement, the area was not paved until the late-1980s. We propose to advance four (4) soil borings to a maximum depth of ten (10) ft bgs in the south-central portion of the Site. Discrete samples from two (2) ft intervals from the ground surface to the termination depth of the borings will be submitted for VOC analysis. The locations of the proposed soil borings in the northeast portion of the Site are depicted on **Figure 27**.

In addition, a portion of the excavated soils that were segregated by concentration and treated were utilized to construct the screening berms along the fence line separating the church ballfield from the Site and along the eastern fence line separating the adjoining residential properties from the Site. As the character of these soils may be suspect, we propose to advance a total of six (6) soil borings through the screening berms in the northeast and southeast corners of the Site. The approximate locations of the screening berm soil borings are depicted on **Figure 27**.

The screening berms range in height from approximately five (5) to eight (8) feet above the surrounding ground surface elevation; therefore, we propose to advance the borings six (6) to eight

(8) feet to limit our sampling to the soils within the berms. Depending on the character of the retrieved soils, we propose either a composite sample be created from each boring location, or if obvious indications of impacts are noted, discrete samples from each two (2) ft interval be submitted for VOC analysis.

An overview of all of the soil boring locations discussed in this Work Plan are depicted on **Figure 28**.

4.9 GROUNDWATER

Based on the extensive groundwater monitoring network on and off the Site which is actively sampled on a semi-annual basis, the installation of additional groundwater monitoring points and collection of grab groundwater samples is not warranted for this phase of the investigation. Should the data gathered during this phase of Site investigation activities indicate the need for additional groundwater monitoring points, additional monitoring well installations will be proposed under a separate work plan.

5.0 MEANS AND METHODS

5.1 PRE-INVESTIGATION

This section provides a description of pre-investigation activities that will be conducted prior to implementing the additional SI activities.

5.1.1 HEALTH AND SAFETY PLAN

The SI activities will be conducted pursuant to a Site-specific, work-specific Health and Safety Plan (HASP) prepared in accordance with applicable Occupational Safety and Health Standards (OSHA) regulations.

5.1.2 UTILITY ASSESSMENT

An assessment of proximate subsurface utilities will be performed. This assessment will include scanning of boring locations with ground penetrating radar (GPR) and a magnetometer.

5.1.3 BORING LAYOUT

All soil boring locations will be located using survey-grade GPS-based equipment. Sample locations will be located based on State Plane coordinates, and the ground surface elevation at each boring location will be surveyed to the North American Vertical Datum of 1988 (NAVD88).

5.2 PROCEDURES

5.2.1 SOIL BORINGS

We propose to perform the soil sampling described in this work plan using a direct push (GeoProbe™) drill rig. Each soil sample will be classified in accordance with the Unified Soil Classification System (USCS) and field screened for VOCs with a photo-ionization detector (PID). A soil boring log (WDNR Form 4400-122) will be completed for each soil boring.

Representative samples will be submitted to Eurofins Test America for analysis using laboratory-supplied glassware, pre-preserved when necessary, under standard chain-of-custody conditions.

Following completion of the soil borings, the surface cover will be patched with similar material (quickset concrete, asphalt cold-patch or soil in non-paved areas).

5.2.2 INVESTIGATION-DERIVED WASTE MANAGEMENT

While the use of a direct-push drill rig will minimize the volume of soil cuttings created, excess soils retrieved from the soil borings not needed for laboratory analysis will be containerized in steel 55-gallon drums for disposal at a later date. A composite sample will be created and submitted for waste characterization analysis.

5.2.3 QUALITY ASSURANCE/QUALITY CONTROL

Sampling and analysis quality assurance and quality control (QA/QC) procedures will be conducted in general accordance with NR 716.13(6) and include the following:

- One (1) duplicate sample for every ten (10) or less samples;
- One (1) equipment blank for every ten (10) or less samples, unless dedicated sampling equipment is used; and,
- One (1) trip blank for each shipping container containing samples for VOC analysis.

Decontamination of sampling equipment will be performed between each sampling location, unless dedicated or disposable sampling equipment is used. Field instruments will be checked and calibrated on a daily basis in accordance with manufacturer's instructions.

5.2.4 DATA EVALUATION

The quality of the laboratory analytical data will be evaluated by reviewing the chain-of-custody forms, holding times, analytical detection limits, results of field QA/QC sample analyses, and laboratory QA/QC results (method blanks, surrogates, and laboratory control samples).

The validated data will be compared to soil-to-groundwater pathway, non-industrial direct contact and industrial direct contact residual contaminant levels (RCLs) currently published by the WDNR via the RCL spreadsheet last updated in December 2018, or the current version if subsequently updated.

The additional SI findings and conclusions will be documented in a Supplemental Site Investigation Report prepared in accordance with NR 716.15.

6.0 SCHEDULE

Historically, the presence of the Site buildings and active manufacturing on the Site acted as impediments to the performance of additional Site investigation activities. While the plan is to raze the above-grade portions of the Site buildings, the demolition process is the responsibility of Arkema to complete. As such, Retia has no control over the schedule of the demolition.

While further investigation of three (3) AOCs are dependent on the removal of the above-grade structures and abandonment of underground utilities, additional investigation in the following areas could be performed regardless of the performance of the Site demolition.

- Gasoline UST;
- Railroad Spur;
- Acid Water Transfer Piping;
- Diesel UST;
- Area South of AOC 1;
- Southwest Corner of the Site;
- South-Central Portion of the Site; and,
- Northeast Portion of the Site.

Therefore, we recommend the Site investigation activities proposed in these areas be performed during calendar year 2021 regardless of whether the building demolition activities occur. Subsequently, the investigation activities in the three (3) onsite AOCs will be performed following the completion of building demolition activities.

7.0 REFERENCES

ELM, SVE System Emission Calculations – July 20, 2005

ELM, Underground Injection Control Approval Request – June 28, 2006

Hatcher, Preliminary Remedial Investigations Report – December 9, 1985

Hatcher, Site Conditions & Construction Report – February 15, 1988 revision

Olver, Preliminary Hydrogeological Report – circa 1981

RMT, Closure Plan Modification – April 1992

RMT, Regulatory Design Report and Sampling for a Soil Remediation System – March 1995

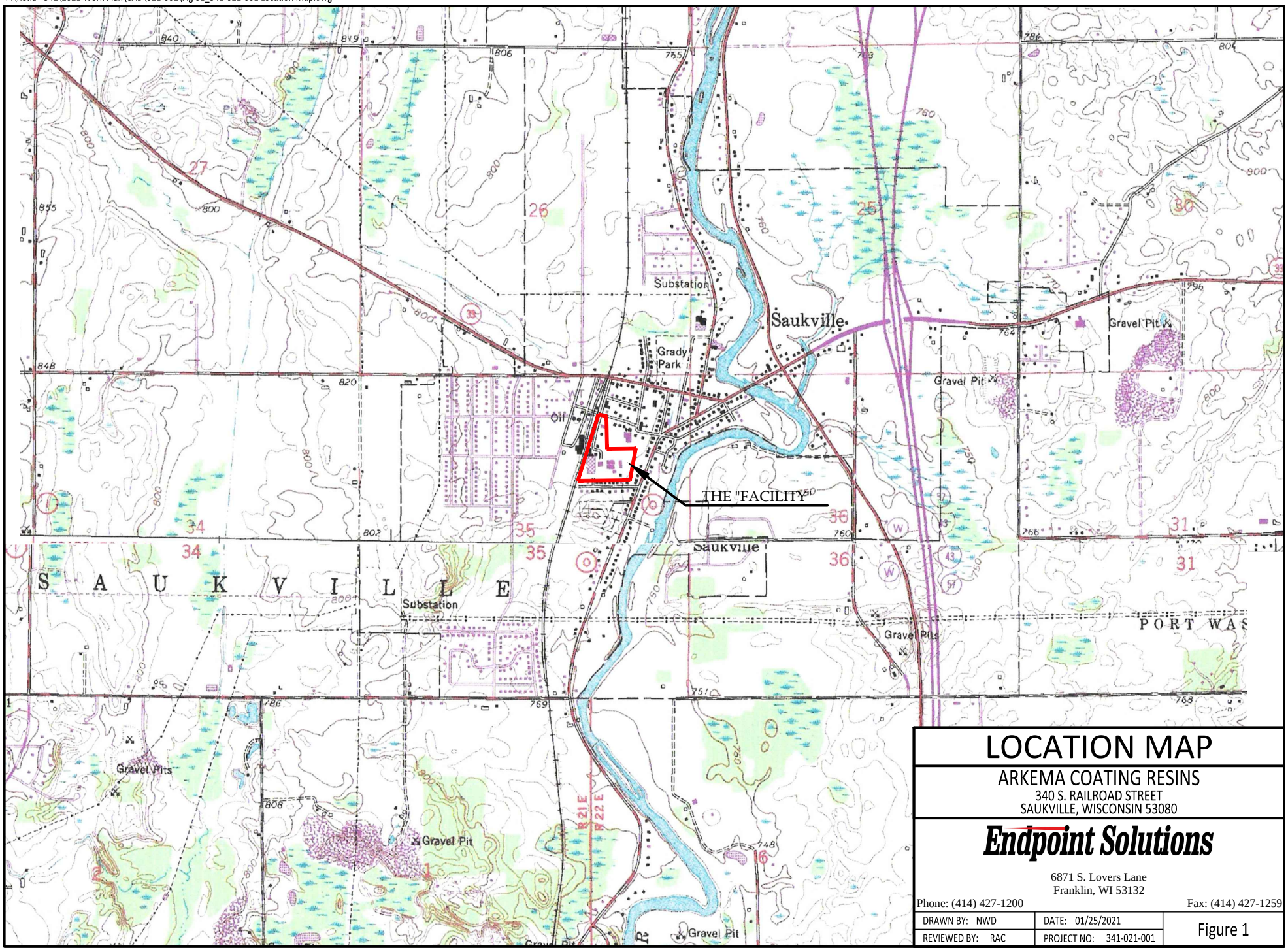
RMT, RCRA Facility Investigation Additional Studies Report – October 1995

RMT, Construction Documentation Report for the Immaculate Conception Church Property (AOC 5) – October 1996

USEPA, Administrative Order on Consent – September 3, 1987

FIGURES

P:\Retia - 341\2021 Work Plan\CAD\021-001\Fig 01_341-021-001 Location Map.dwg



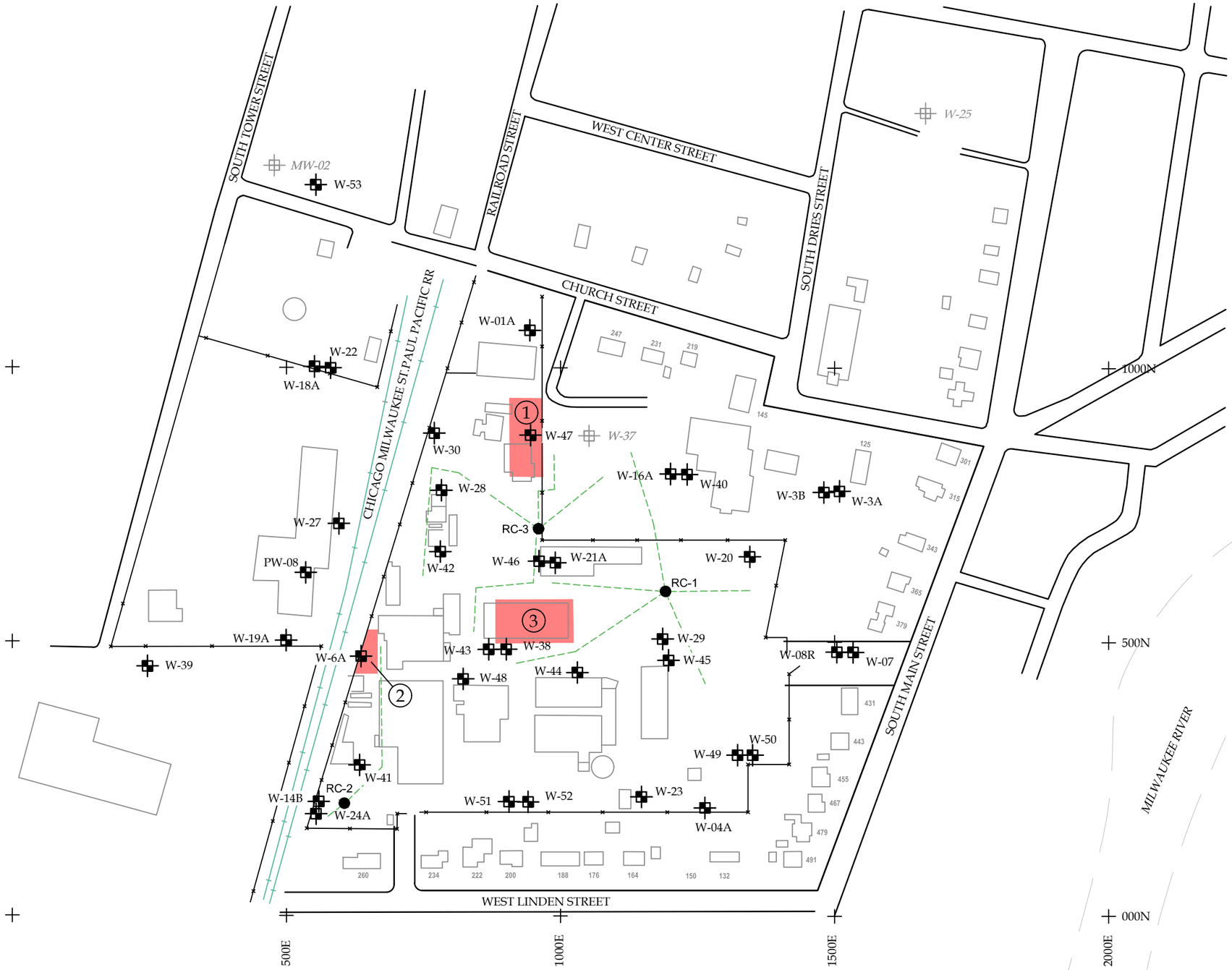
LOCATION MAP

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

Endpoint Solutions

6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: NWD	DATE: 01/25/2021	Figure 1
REVIEWED BY: RAC	PROJECT NO: 341-021-001	



LEGEND

- BUILDING
- ROAD
- FENCE
- RAILROAD
- W-18A — MONITORING WELL LOCATION AND NUMBER
- W-25 — ABANDONED WELL LOCATION AND NUMBER
- RANNEY COLLECTOR
- (1) AREA OF CONCERN

NOTES

1. BASE MAP WAS DEVELOPED FROM DRAWINGS PROVIDED BY RMT, INC.
2. W-37 WAS ABANDONED AUGUST 2, 1996.
3. W-25 WAS ABANDONED JULY 29, 1997.
4. MW-02 WAS ABANDONED NOVEMBER 2004.

0 200' 400' 600'

SITE LAYOUT

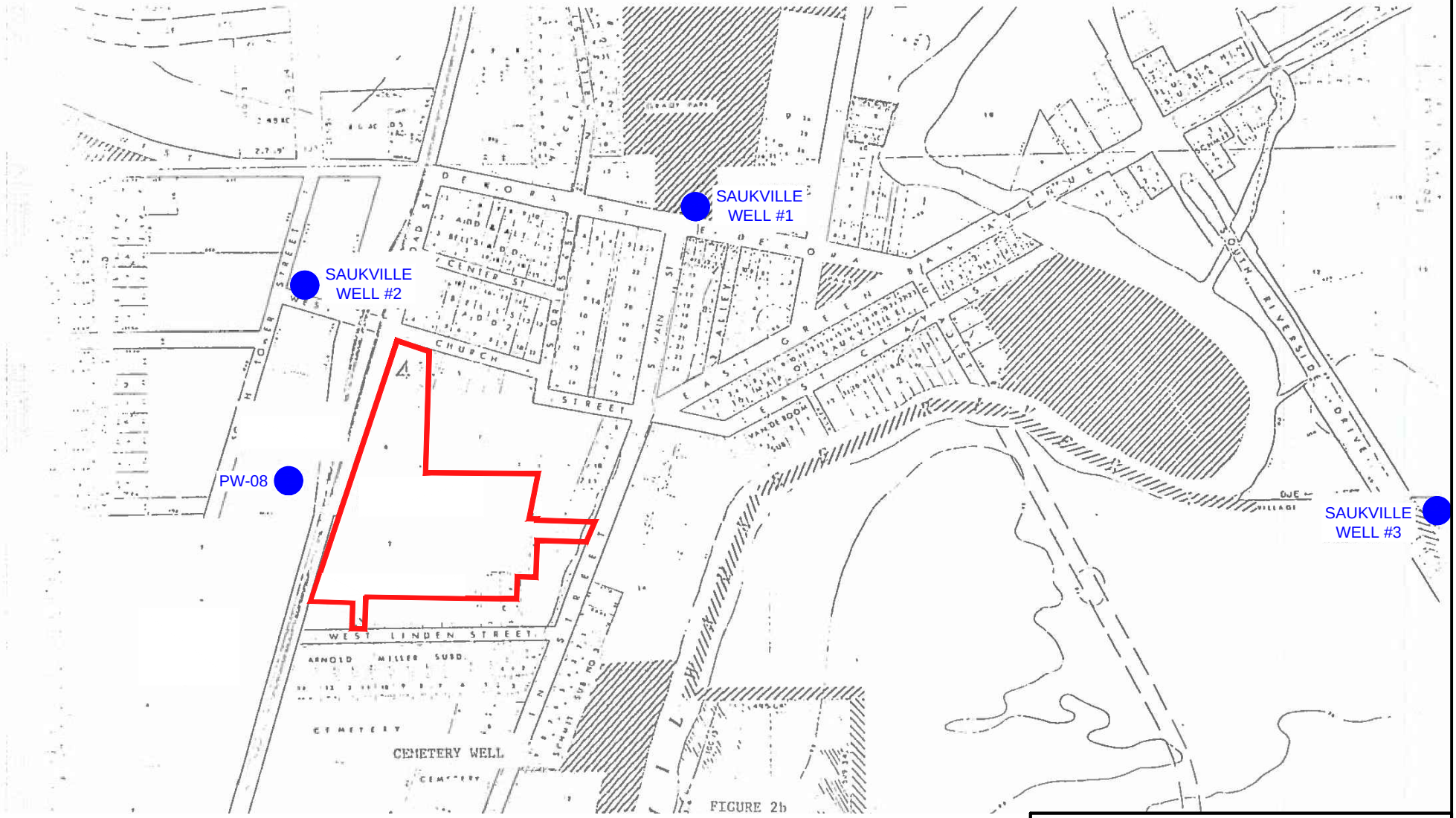
ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

Endpoint Solutions
6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: NWD	DATE: 01/25/2021	Figure 2
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Retia - 341\2021 Work Plan\CAD\021-001\Fig 02_341-021-001 Site Layout.dwg

P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 03_341-021-001 Deep Dolomite Wells.dwg



SUBJECT PROPERTY

DEEP DOLOMITE WELL

N

NOT TO SCALE

DEEP DOLOMITE WELLS - 1981

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

Endpoint Solutions

6871 S. Lovers Lane
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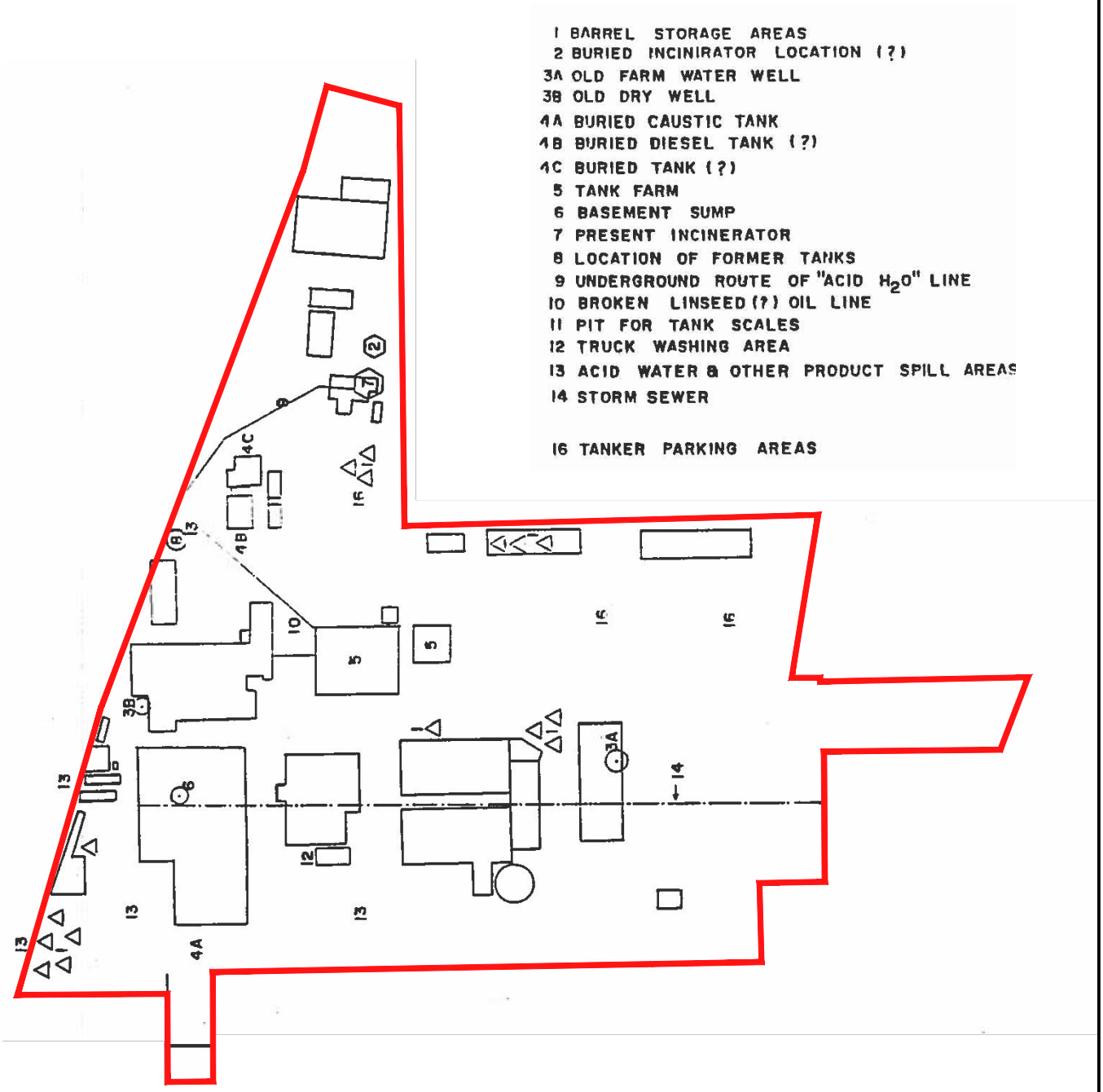
DRAWN BY: NWD	DATE: 02/01/2021	Figure 3
REVIEWED BY: RAC	PROJECT NO: 341-021-001	



SUBJECT PROPERTY

N

NOT TO SCALE

POTENTIAL SOURCES OF IMPACTS - 1985

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

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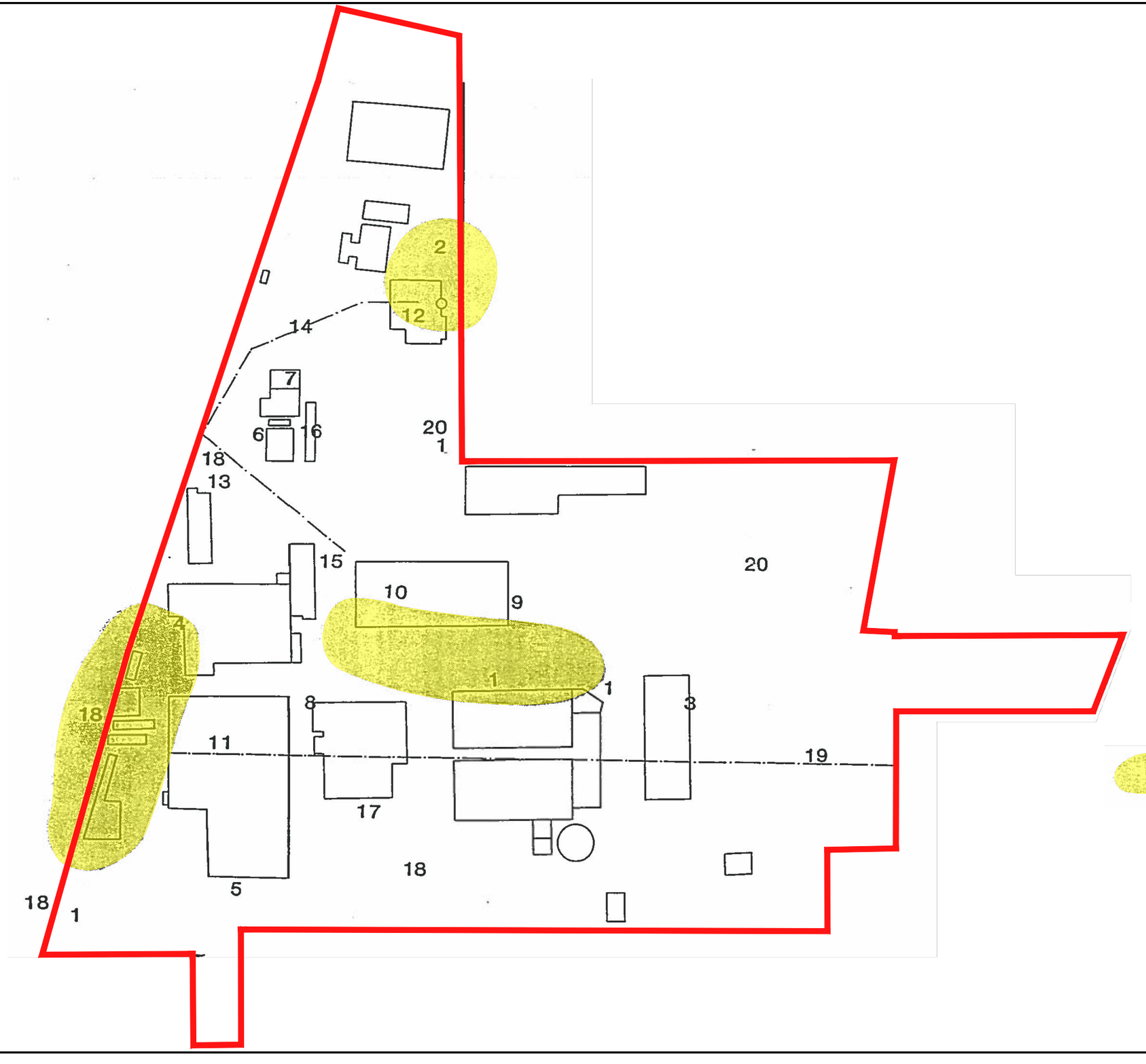
DRAWN BY: NWD	DATE: 03/11/2021	Figure 4
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 04_341-021-001 Potential Sources of Contamination.dwg



SUBJECT PROPERTY

1 Barrel Storage Areas
2 Buried Incinerator Location (?)
3 Old Farm Water Well (Decommissioned)
* 4 Old Dry Well (Decommissioned)
5 Buried Caustic Tank (Filled With Concrete)
6 Buried Diesel Tank (Filled With Sand)
7 Buried Tank (?)
8 Buried Tank (Removed)
9 Buried Styrene Tanks (Removed)
10 Tank Farm
11 Basement Sump
* * 12 Present Incinerator
13 Location of Former Tanks
14 Underground Route of "Acid Water" Line
15 Broken Linseed (?) Oil Line (Removed)
16 Pit for Tank Scales
17 Truck Washing Area
18 Acid Water & Other Product Spill Areas
19 Storm Sewer
20 Tanker Parking Areas
* Former Hazardous WasteTreatment / Disposal Areas
* * Current Hazardous Waste Treatment Area (Since 1972)

Approximate Locations of Highest Groundwater Contamination Within the Glacial Sediments

N

NOT TO SCALE

GLACIAL DRIFT GROUNDWATER IMPACTS - 1988

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

Endpoint Solutions
6871 S. Lovers Lane
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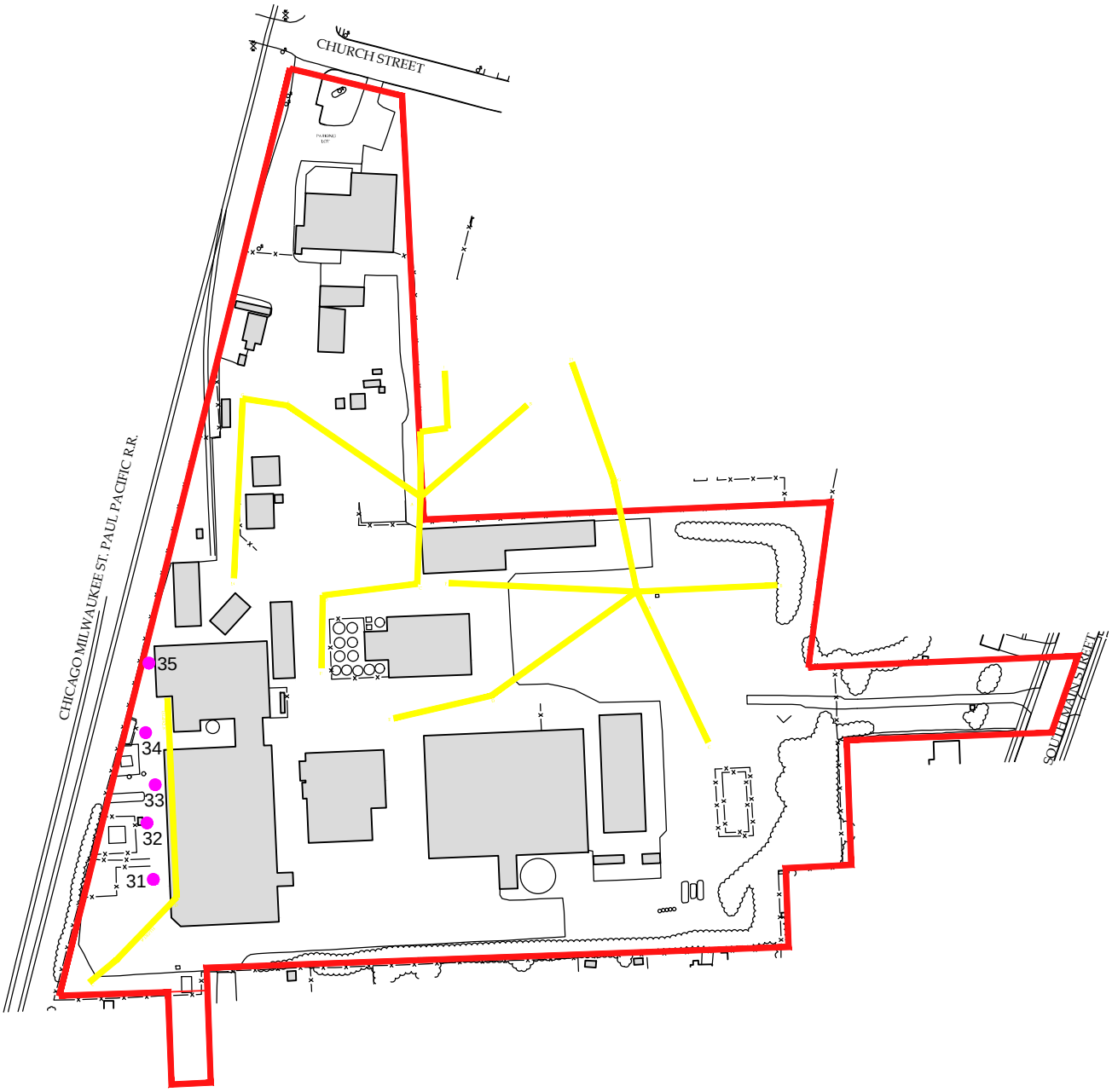
Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: NWD	DATE: 03/11/2021	Figure 5
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Reks - 341\2021 Work Plan\CAD\021-001\FIG 05_341-021-001 Glacial Drift Groundwater Contamination.dwg



SUBJECT PROPERTY

RANNEY COLLECTORS

●## OVERBURDEN EXTRACTION WELL

N

NOT TO SCALE

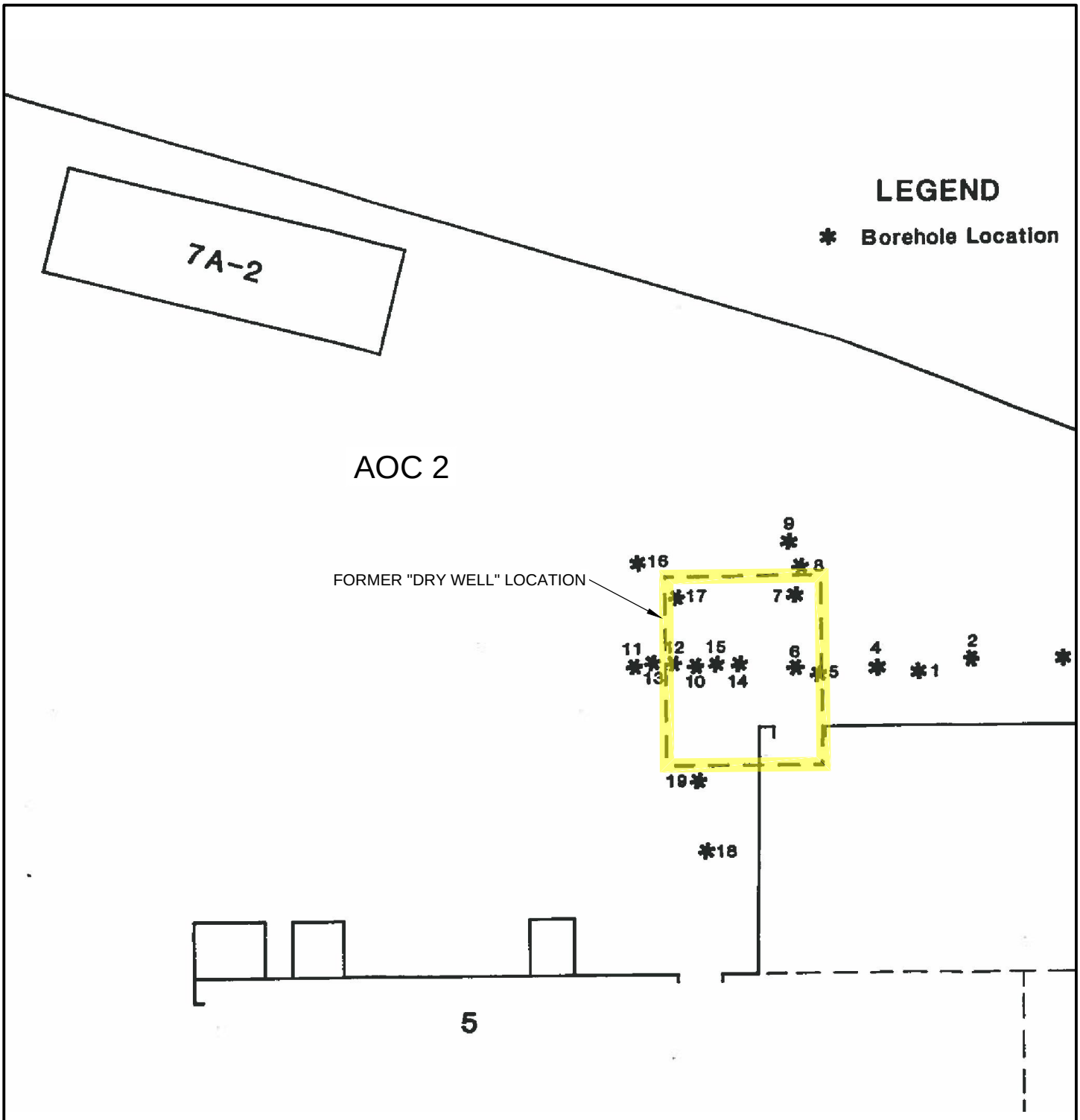
RANNEY COLLECTORS & GLACIAL OVERBURDEN EXTRACTION WELLS

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

Endpoint Solutions
6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: NWD	DATE: 02/01/2021	Figure 6
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 06_341-021-001 Ranney Collectors and Glacial Overburden Extraction Wells.dwg



NOT TO SCALE

FORMER "DRY WELL" LOCATION

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

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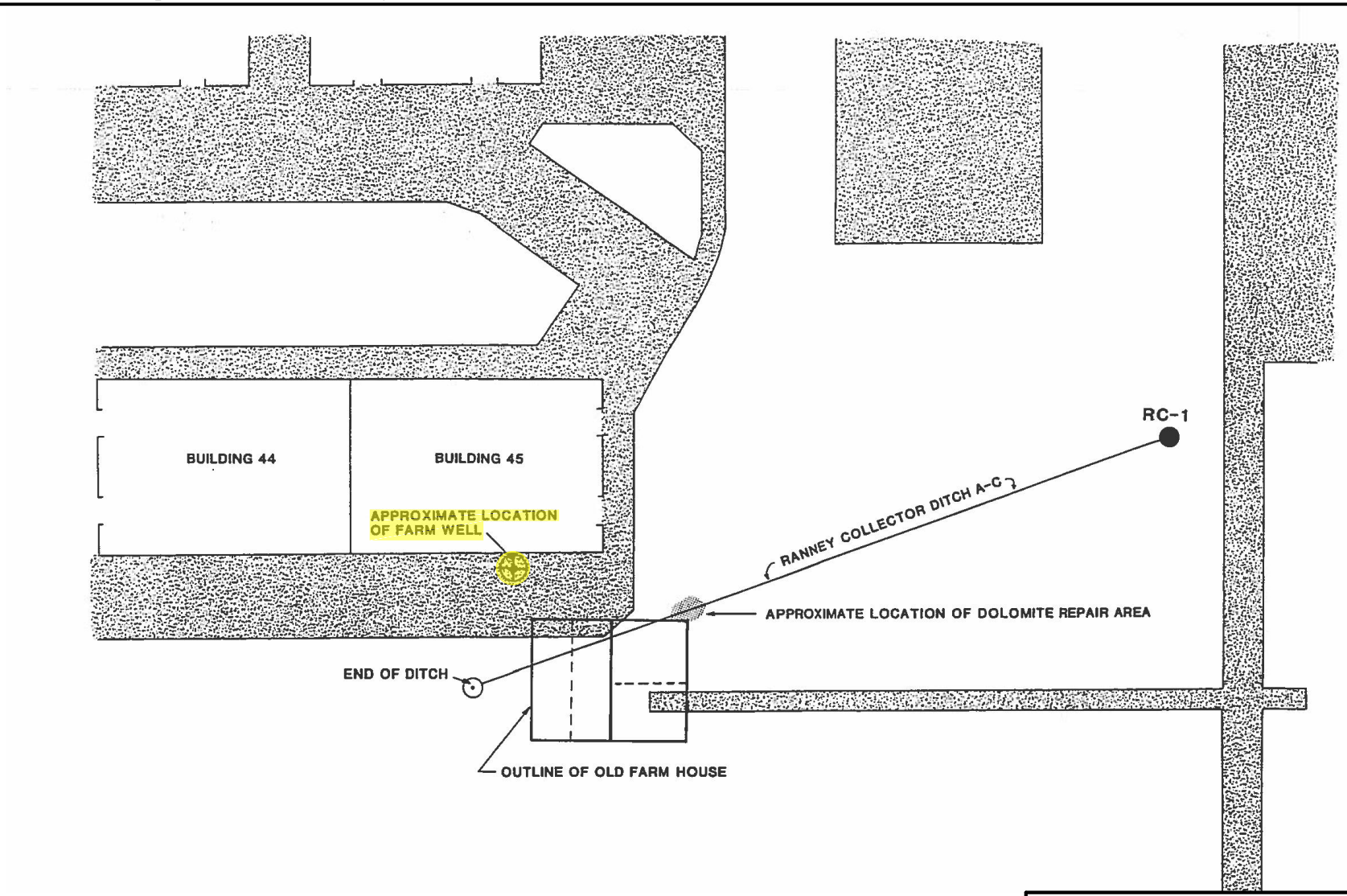
P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 07_341-021-001 Former Dry Well Location.dwg

P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 08_341-021-001 Old Farmhouse Well Location.dwg



N

NOT TO SCALE

OLD FARMHOUSE WELL LOCATION

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

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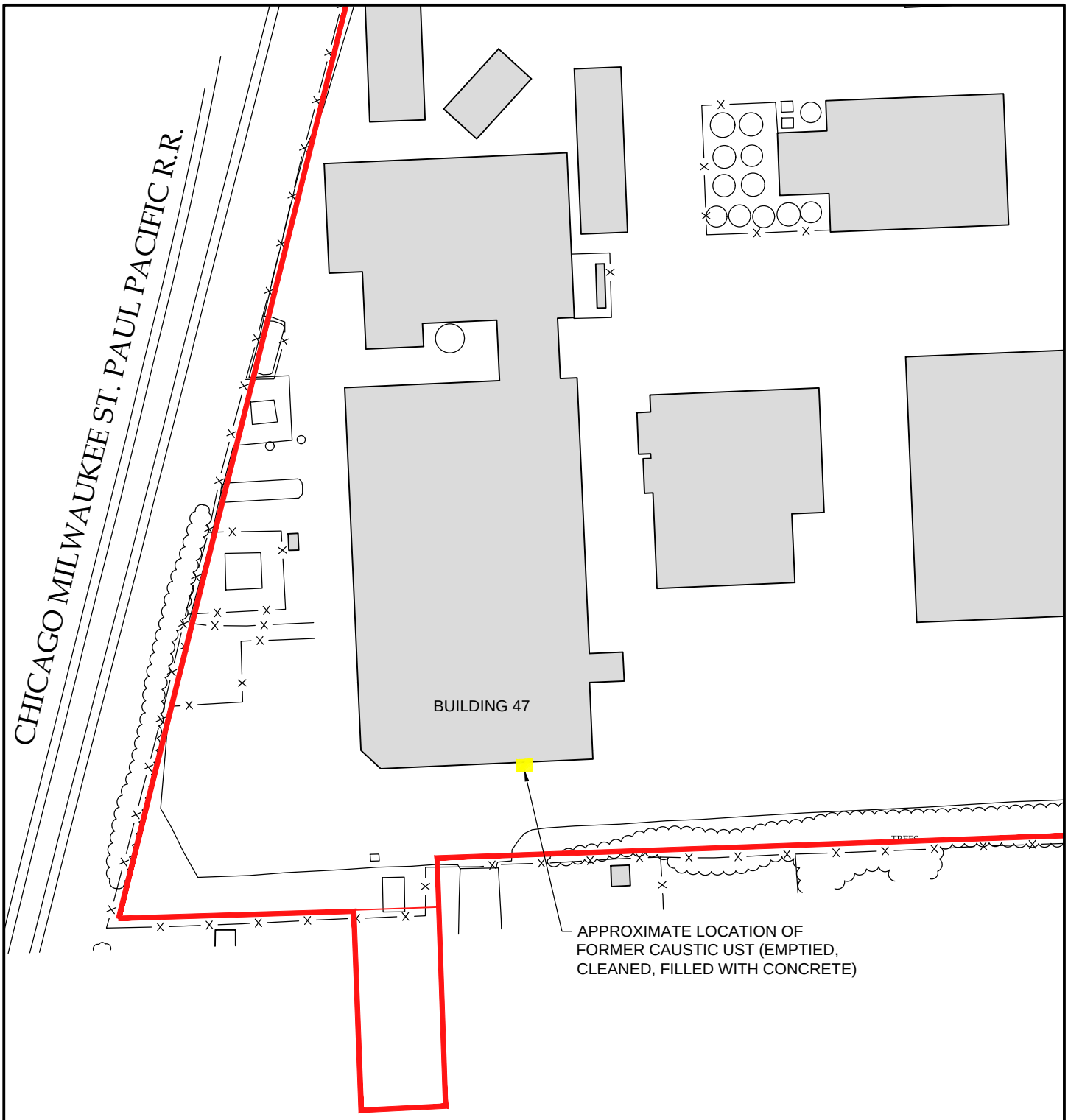
DRAWN BY: NWD	DATE: 01/25/2021	Figure 8
REVIEWED BY: RAC	PROJECT NO: 341-021-001	



FORMER CAUSTIC UST LOCATION

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

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Franklin, WI 53132
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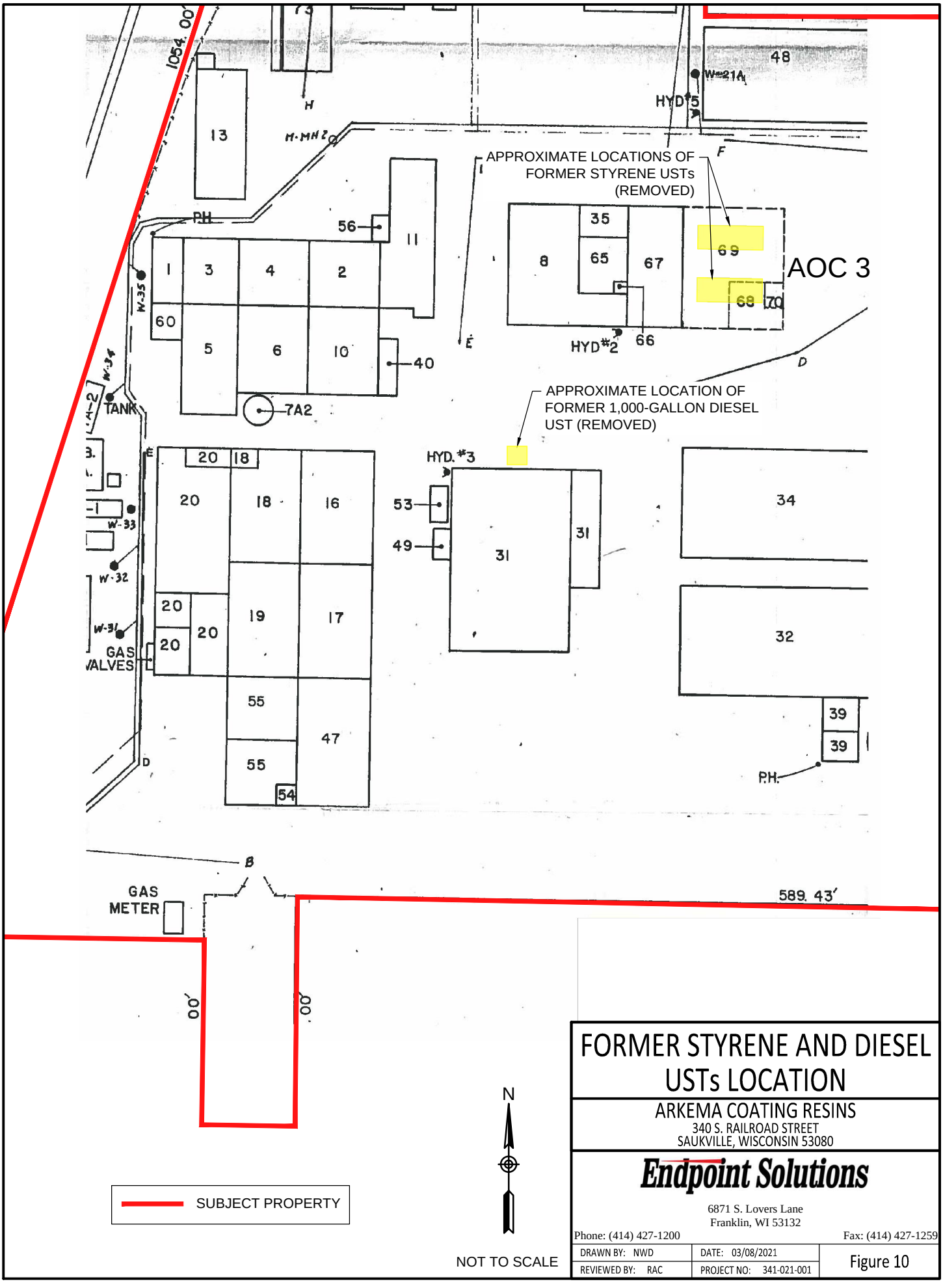
DRAWN BY: NWD	DATE: 02/01/2021	Figure 9
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 09_341-021-001 Former Caustic UST Location.dwg



FORMER STYRENE AND DIESEL USTs LOCATION

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

Endpoint Solutions
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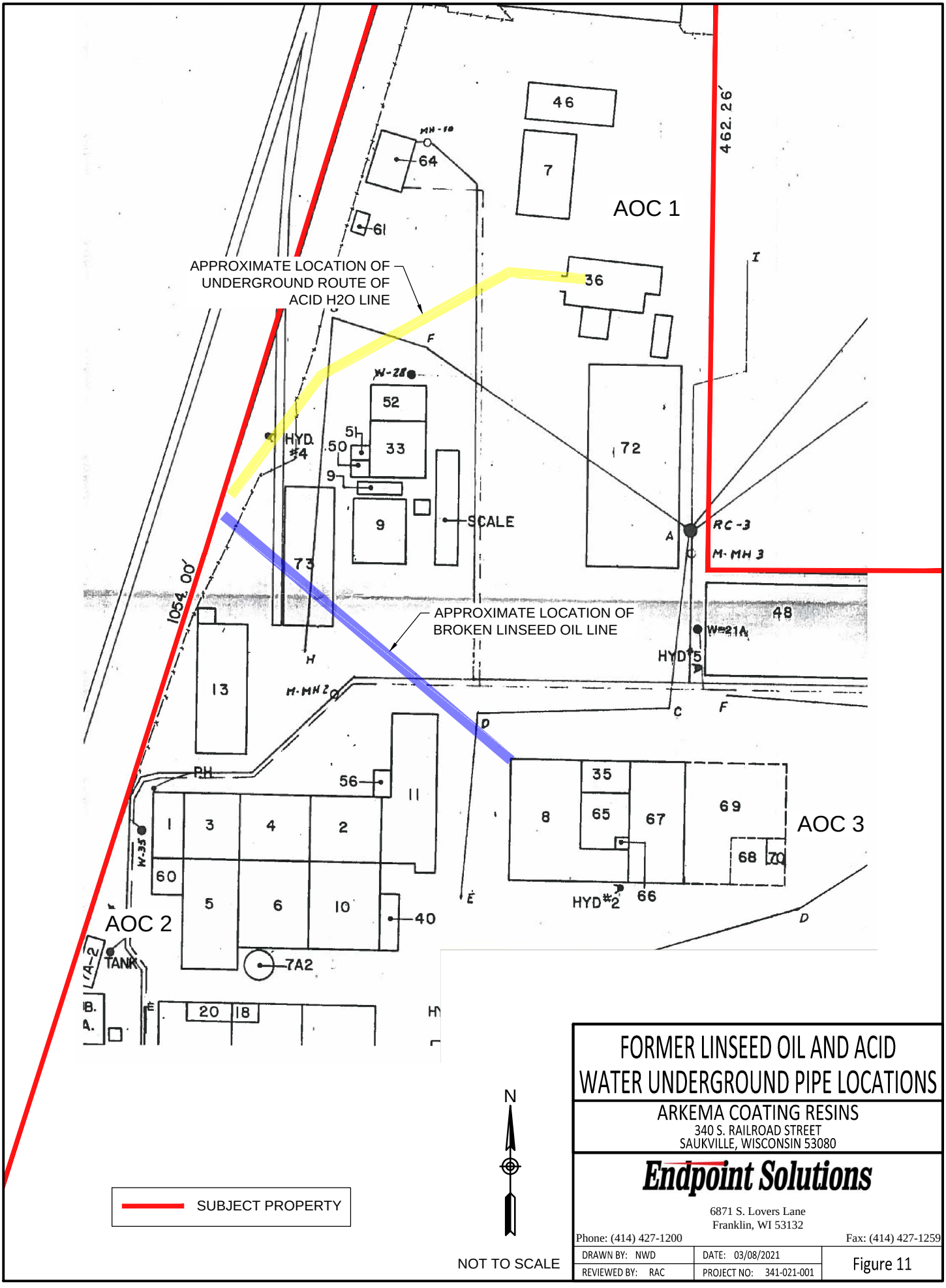
DRAWN BY: NWD	DATE: 03/08/2021	Figure 10
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 10_341-021-001 Former Styrene and Diesel USTs Location.dwg



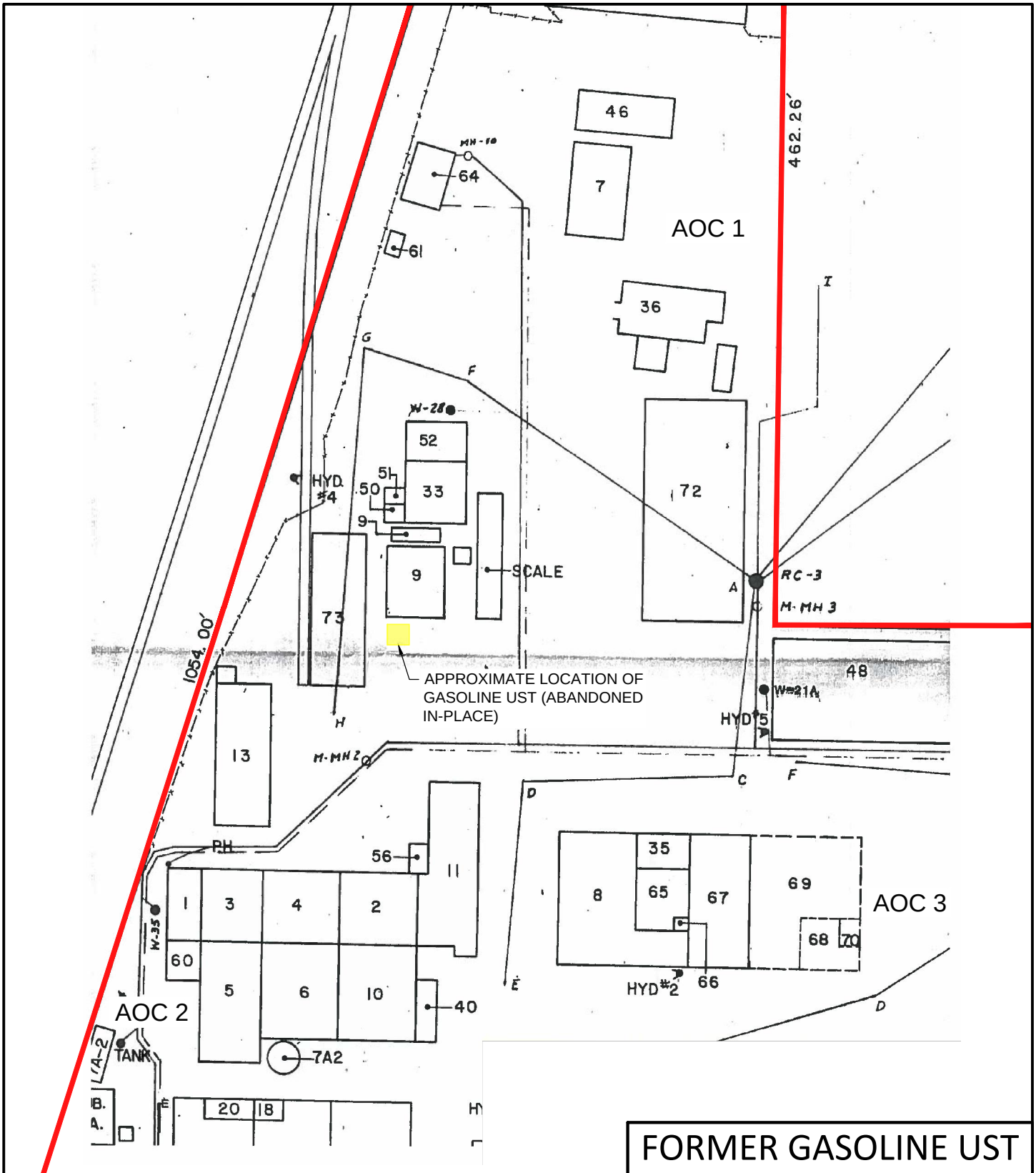
FORMER LINSEED OIL AND ACID WATER UNDERGROUND PIPE LOCATIONS

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

Endpoint Solutions
6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200
Fax: (414) 427-1259

DRAWN BY: NWD	DATE: 03/08/2021	Figure 11
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 11_341-021-001 Former Linseed Oil and Acid Water Underground Pipe Locations.dwg



SUBJECT PROPERTY

N

NOT TO SCALE

FORMER GASOLINE UST AND SUMP LOCATION

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

Endpoint Solutions
6871 S. Lovers Lane
Franklin, WI 53132
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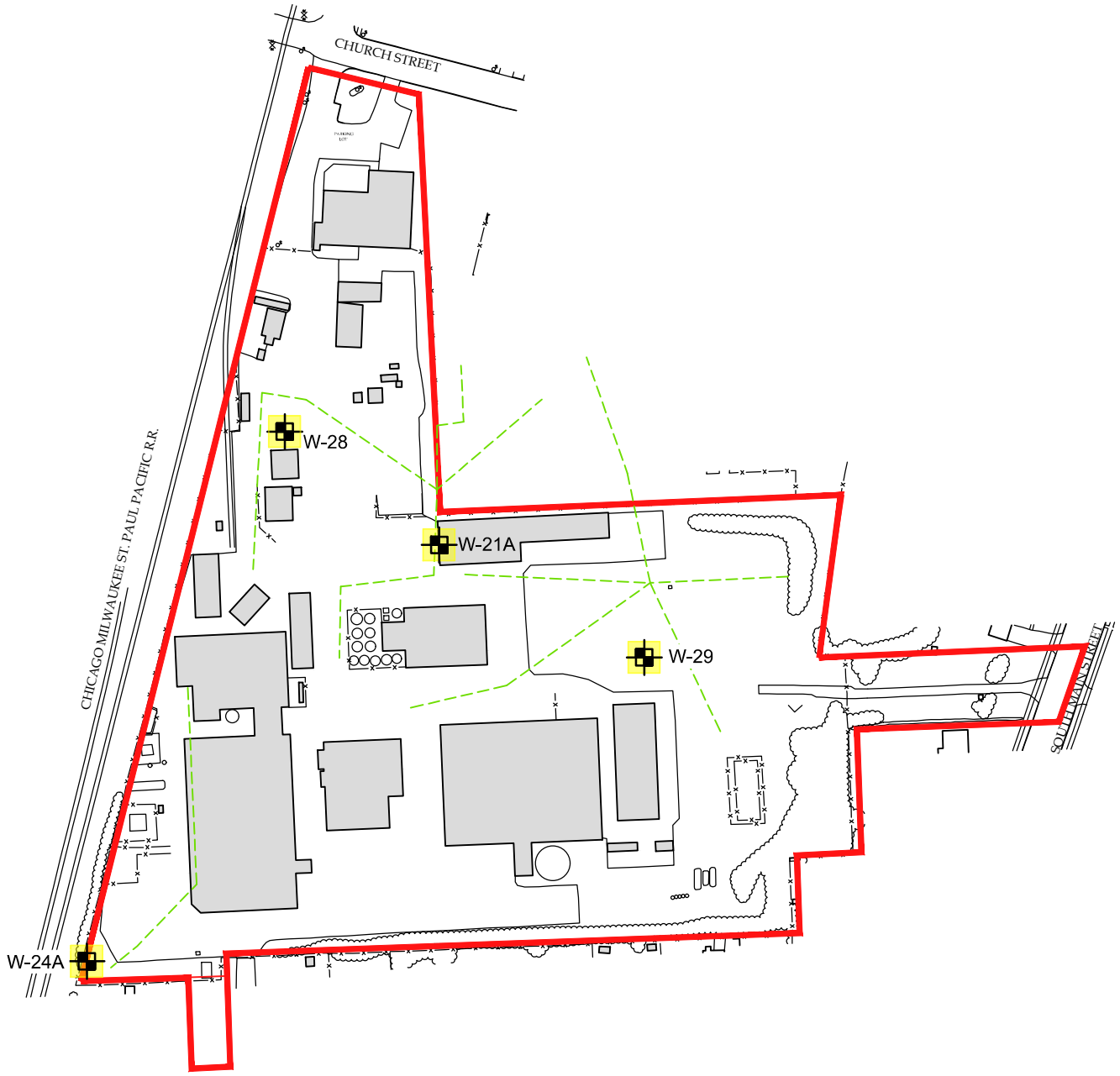
Fax: (414) 427-1259

DRAWN BY: NWD	DATE: 03/08/2021	Figure 12
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 12_341-021-001 Former Gasoline UST and Sump Location.dwg



SUBJECT PROPERTY

RANNEY COLLECTORS

SHALLOW DOLOMITE EXTRACTION WELL

N

NOT TO SCALE

SHALLOW DOLOMITE EXTRACTION WELLS

ARKEMA COATING RESINS
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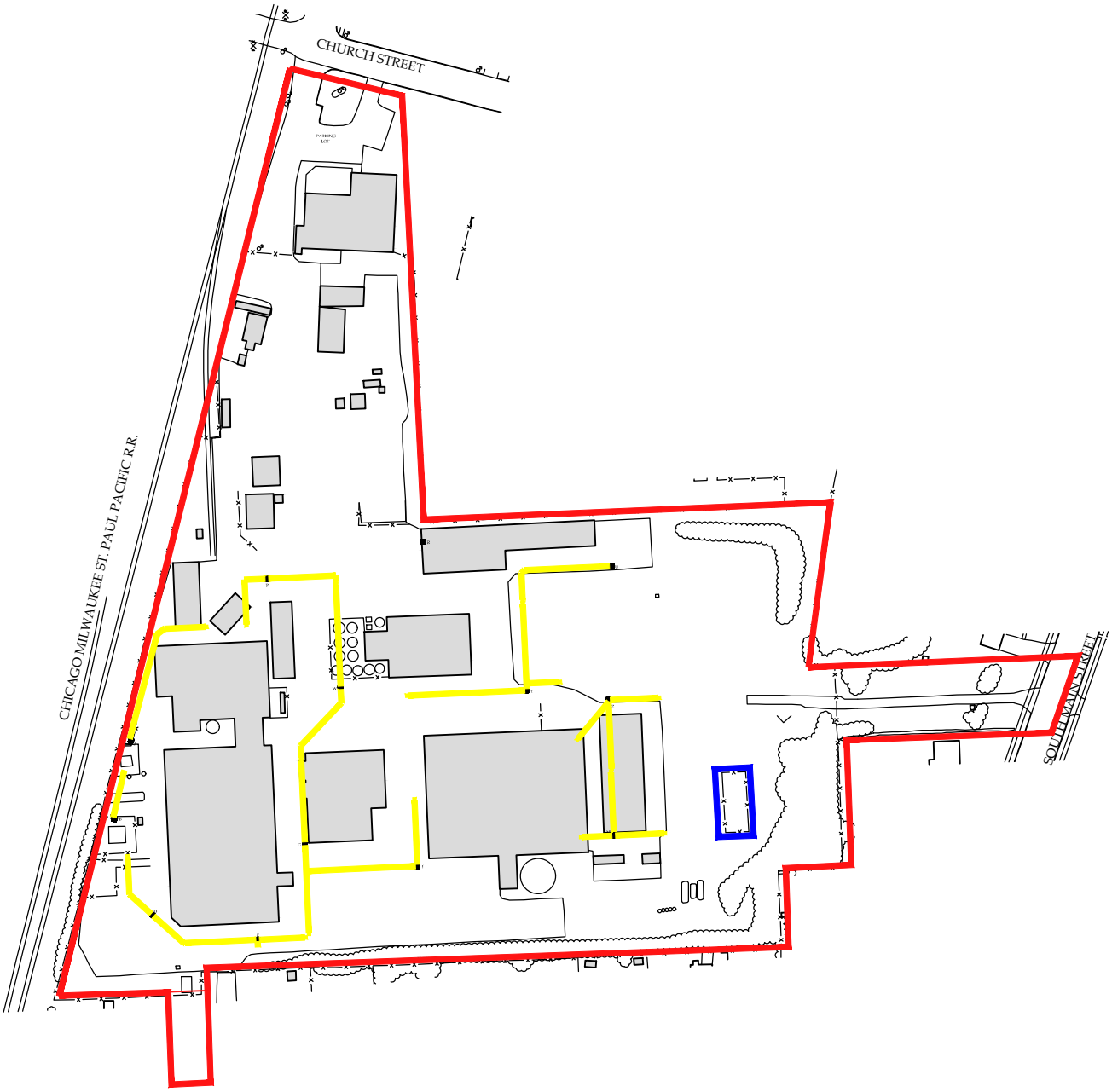
DRAWN BY: NWD	DATE: 02/01/2021	Figure 13
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Retia - 341\2021 Work Plan\CAD\021-001\Fig 13_341-021-001 Shallow Dolomite Extraction Wells.dwg



SUBJECT PROPERTY
POLYDRAIN
RETENTION BASIN

N

NOT TO SCALE

POLYDRAIN AND RETENTION BASIN LOCATION

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

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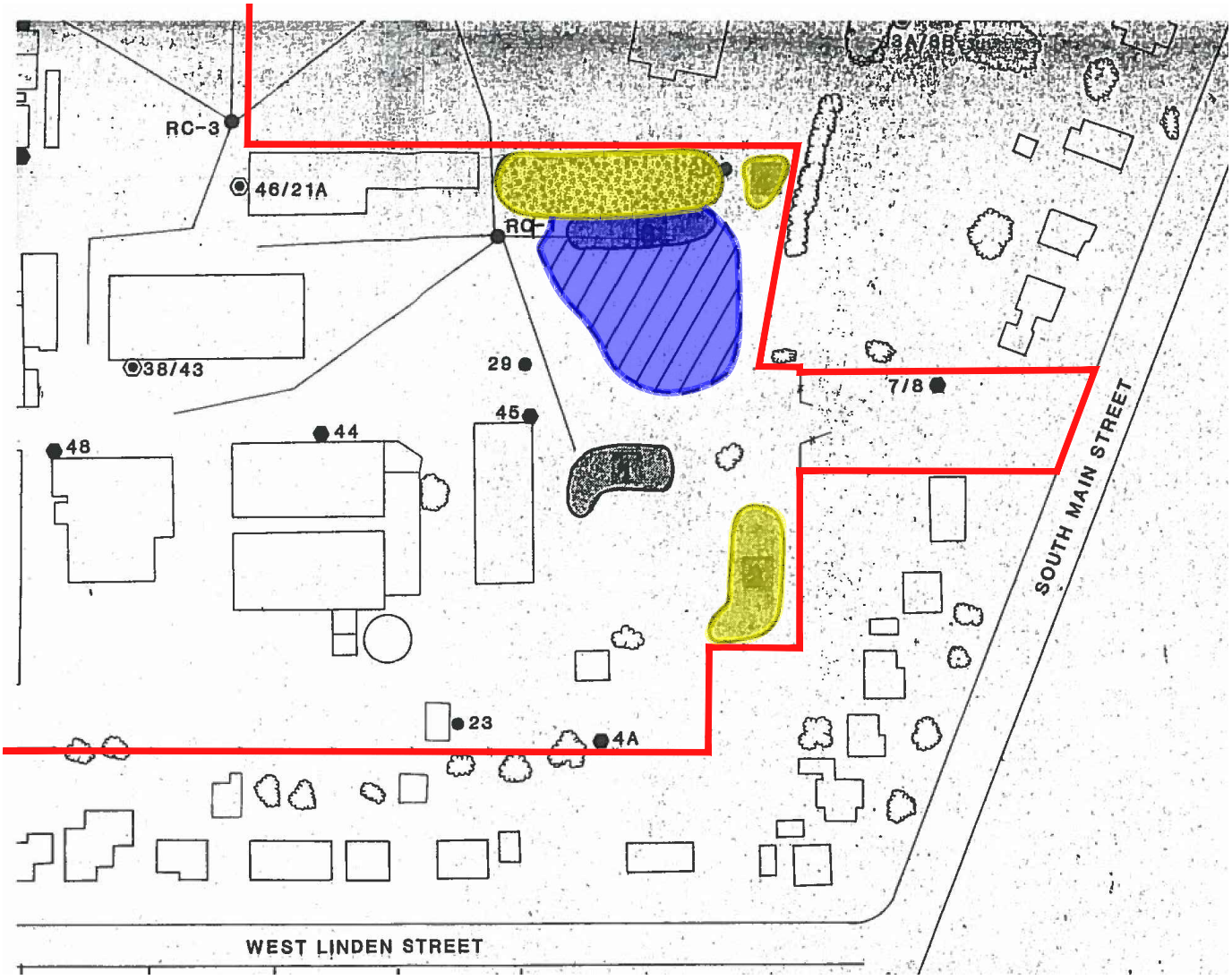
DRAWN BY: NWD	DATE: 02/01/2021	Figure 14
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 14_341-021-001 Polydrain and Retention Basin Location.dwg



SUBJECT PROPERTY
SPOIL TREATMENT AREA
SCREENING BERM

N

NOT TO SCALE

ONSITE SOIL TREATMENT AREAS AND SCREENING BERMS

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

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Franklin, WI 53132
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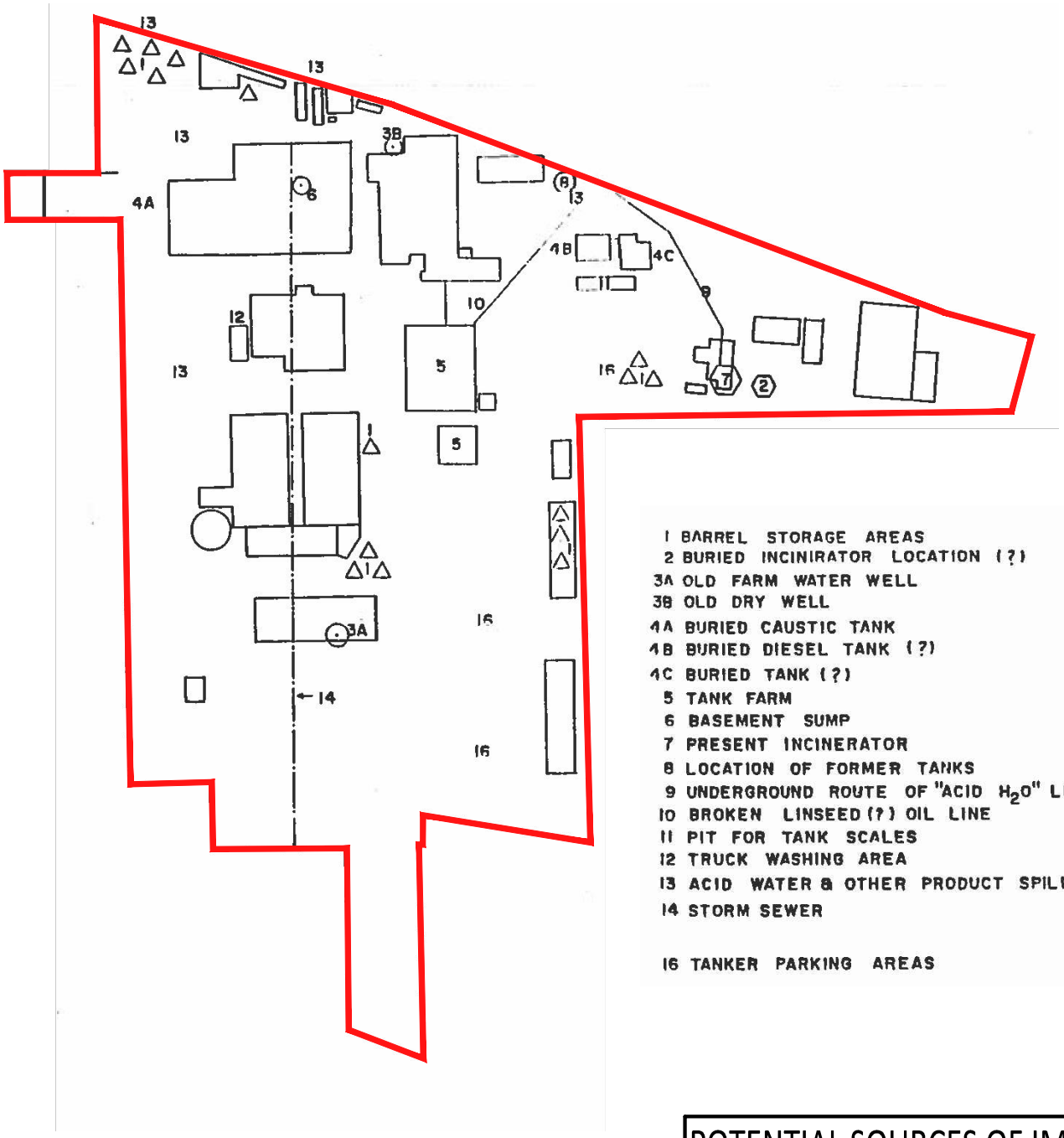
DRAWN BY: NWD	DATE: 01/25/2021	Figure 15
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 15_341-021-001 Onsite Soil Treatment Areas and Screening Berms.dwg



1 BARREL STORAGE AREAS
2 BURIED INCINIRATOR LOCATION (?)
3A OLD FARM WATER WELL
3B OLD DRY WELL
4A BURIED CAUSTIC TANK
4B BURIED DIESEL TANK (?)
4C BURIED TANK (?)
5 TANK FARM
6 BASEMENT SUMP
7 PRESENT INCINERATOR
8 LOCATION OF FORMER TANKS
9 UNDERGROUND ROUTE OF "ACID H_2O" LINE
10 BROKEN LINSEED (?) OIL LINE
11 PIT FOR TANK SCALES
12 TRUCK WASHING AREA
13 ACID WATER & OTHER PRODUCT SPILL AREAS
14 STORM SEWER

16 TANKER PARKING AREAS

SUBJECT PROPERTY

N

NOT TO SCALE

POTENTIAL SOURCES OF IMPACTS CONSENT ORDER

ARKEMA COATING RESINS
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SAUKVILLE, WISCONSIN 53080

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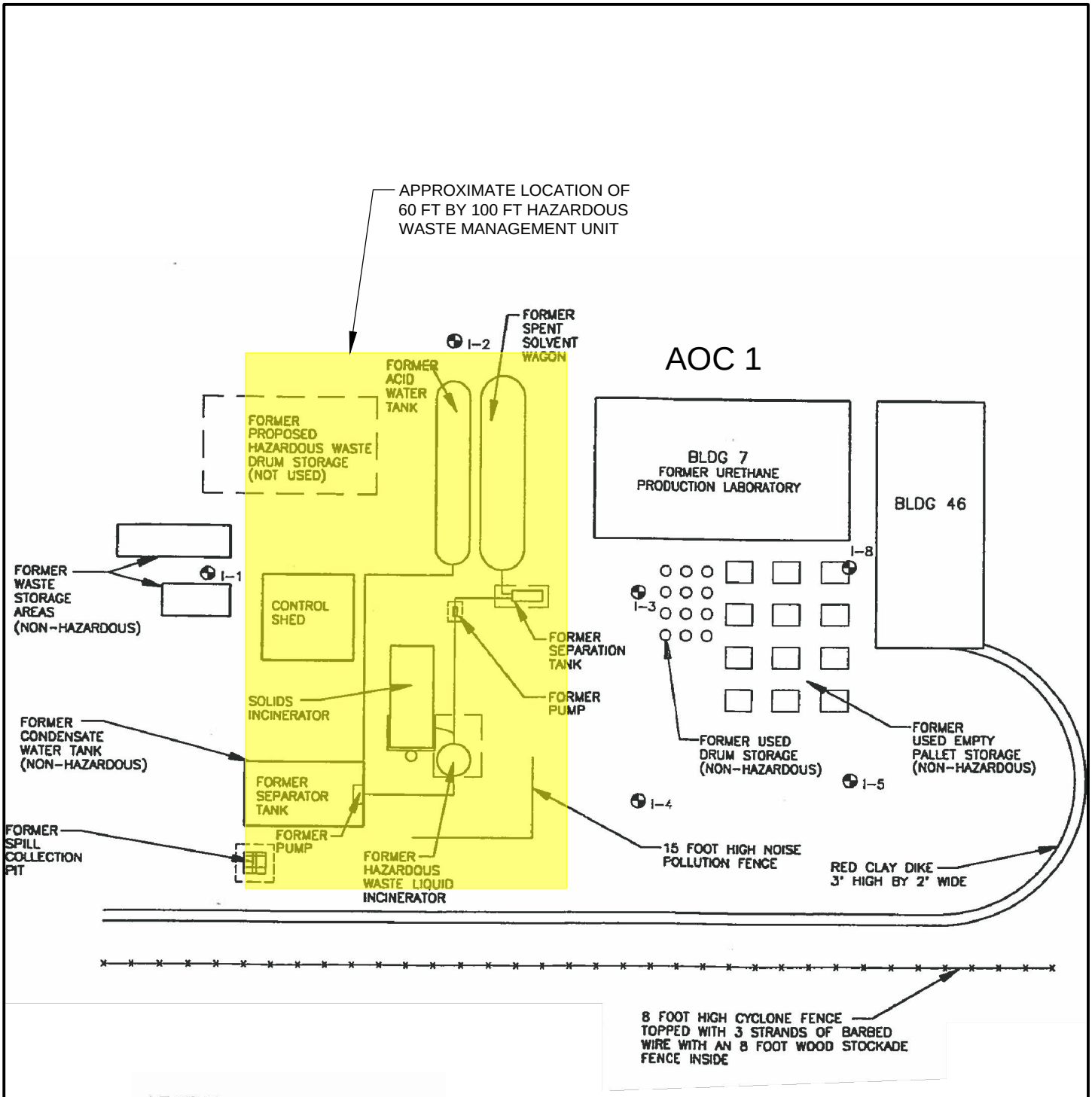
DRAWN BY: NWD	DATE: 03/11/2021	Figure 16
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 16_341-021-001 Potential Sources of Contamination - Consent Order.dwg



FORMER HAZARDOUS WASTE MANAGEMENT UNIT

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

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6871 S. Lovers Lane
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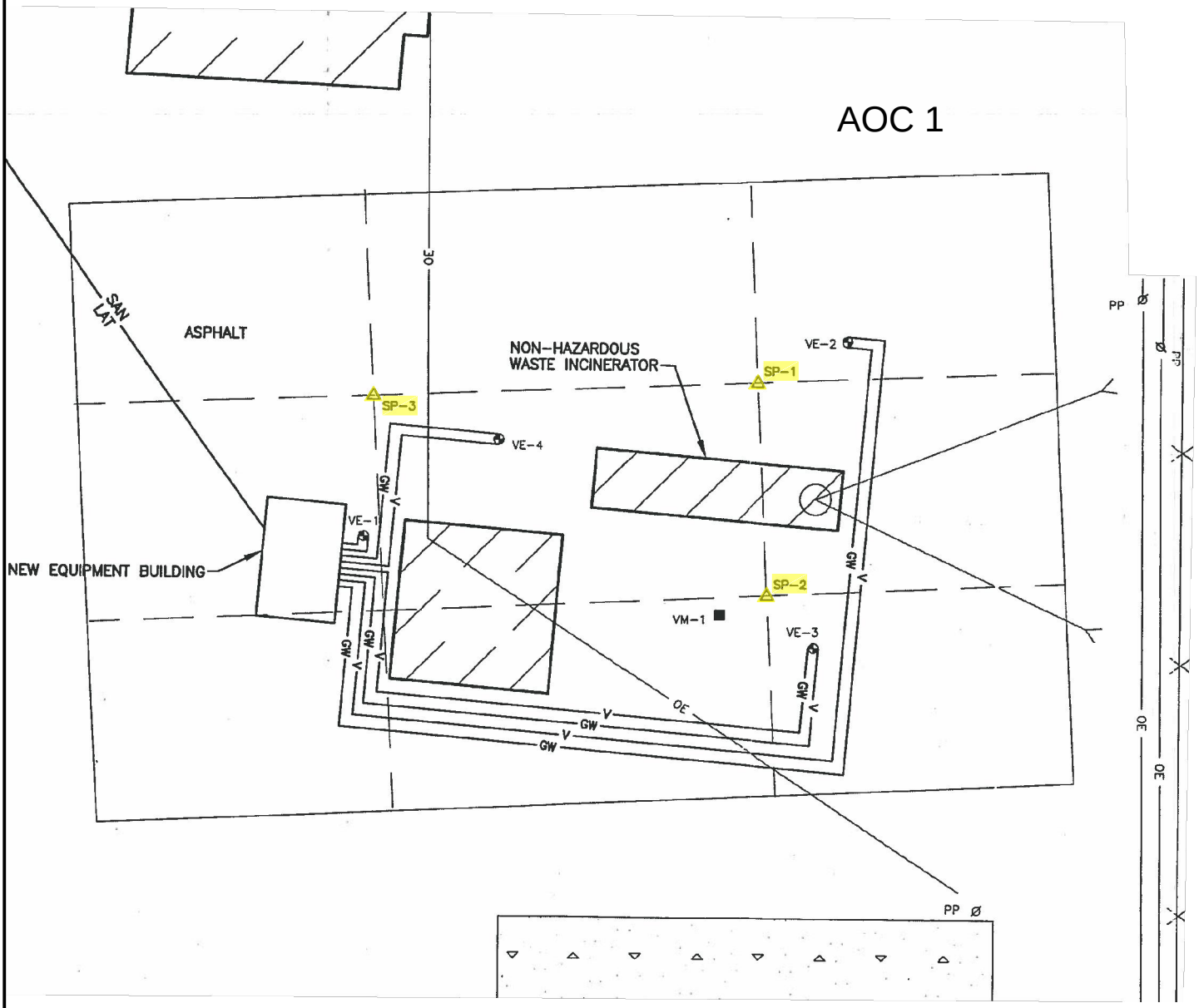
DRAWN BY: NWD	DATE: 03/08/2021	Figure 17
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 17_341-021-001 Former Hazardous Waste Management Unit.dwg



LEGEND

VE-1	EXISTING SOIL VAPOR EXTRACTION WELL
VM-1	EXISTING SOIL VAPOR MONITORING WELL
SP-1	PROPOSED CLOSURE SAMPLING LOCATION
	OVERHEAD GUY WIRE
OE	OVERHEAD ELECTRIC
GW	EXISTING GROUNDWATER
UG	EXISTING UNDERGROUND NATURAL GAS
V	2" PVC, SCH 40 VAPOR EXTRACTION LINE
GW	1" PVC, SCH 80 GROUNDWATER RECOVERY LINE
SAN LAT	4" STL, SCH 40 SANITARY SEWER LATERAL

N

NOT TO SCALE

CLOSURE PERFORMANCE BORING LOCATIONS

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

Endpoint Solutions
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Franklin, WI 53132
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DRAWN BY: NWD	DATE: 03/08/2021	Figure 18
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 18_341-021-001 Closure Performance Boring Locations.dwg

AOC 1 SOIL CHEMISTRY MAP

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

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REVIEWED BY: RAC	PROJECT NO: 341-021-001	

SUBJECT PROPERTY

N

NOT TO SCALE

AREA 1 - FORMER URETHANE LABORATORY

AREA OF FORMER LIQUIDS INCINERATOR

CHICAGO MILWAUKEE ST.PAUL PACIFIC RR

1000N

B1-1 B1-2 B1-3 B1-4 B1-5 B1-6 B1-7 B1-8

I-01 I-02 I-03 I-04 I-05 I-06 I-07 I-08

A1-1

S-1 S-2 S-3 S-4 S-5 S-6 S-7

SVE-1 SVE-2 SVE-3 SVE-4

B1-01	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	ND	ND
4.5-6	ND	ND
7.5-9	ND	ND
9.5-11	ND	ND

B1-02	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	830	ND
4.5-6	280	ND
7.5-9	266	ND
9.5-11	12800	ND

B1-03	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	209	ND
4.5-6	ND	ND
4.5-6	ND	ND
7.5-9	ND	ND
9.5-11	ND	ND

B1-04	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	179	ND
4.5-6	ND	ND
7.5-9	ND	ND

B1-05	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	343	ND
4.5-6	ND	ND
7.5-9	15	ND
9.5-11	ND	ND

B1-06	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	ND	ND
4.5-6	8	ND
7.5-9	8	ND
9.5-11	10	ND

I-02	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	2000	ND
4.5-6	2600	ND
7.5-9	93	ND
9.5-11	10	ND
9.5-11	19	ND

SVE-1	1993	
Depth (ft)	BETX(1)	SVOCs(2)
1-3	11420	ND
3.5-5.5	2080	ND
6-8	209000	ND
8.5-10.5	219000	ND

B1-07	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	ND	ND
4.5-6	333	ND
7.5-9	26700	ND
9.5-11	49800	ND

I-01	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	13100	ND
4.5-6	960000	ND
7.5-9	26100	ND
9.5-11	50400	ND

B1-08	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	181	ND
4.5-6	2200	ND
4.5-6	104200	ND
7.5-9	27700	ND
9.5-11	49300	ND

I-06	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	6	ND
4.5-6	4	ND
7.5-9	20	ND
9.5-11	44	ND

I-07	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	646	ND
4.5-6	0	ND
7.5-9	110000	ND
9.5-11	762000	ND

I-08	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	16	ND
4.5-6	0	ND
7.5-9	6700	ND
9.5-11	6700	ND

I-05	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	310000	ND
4.5-6	940000	ND
7.5-9	70600	ND
9.5-11	51000	ND

A1-1		
Depth (ft)	BETX(1)	SVOCs(2)
0-2	6917000	NA
2-4	22380	NA
4-6	5620000	NA
6-8	5539000	NA
8-10	104400	NA
10-12	37300	NA
12-14	79100	44
14-16	133600	NA

I-04	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	459000	18220
4.5-6	2920000	4730
7.5-9	105800	18640
9.5-11	95500	29270

I-03	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	308000	ND
4.5-6	50000	ND
7.5-9	395000	ND
9.5-11	395000	ND

SVE-2	1993	
Depth (ft)	BETX(1)	SVOCs(2)
1-3	3700000	ND
3.5-5.5	4740000	ND
6-8	1500000	ND

SVE-3	1993	
Depth (ft)	BETX(1)	SVOCs(2)
2.5-4.5	1083000	NA
5-7	7400000	NA

SVE-4	1993	
Depth (ft)	BETX(1)	SVOCs(2)
2.5-4.5	1477000	NA
5-7	110600	NA

P:\Redia - 341\2021 Work Plan\CAD\021-001\FIG 19_341-021-001 AOC 1 Soil Chemistry Map.dwg

SUBJECT PROPERTY

	A2-1	1994
Depth (ft)	BETX(1)	SVOCs(2)
0-2	366240	NA
2-4	6101600	NA
4-6	20030	NA
6-8	70340	NA
10-12	50600	NA
12-14	26660	NA
14-16	8130	ND

A2-1

AREA 2 - FORMER DRY WELL

N

NOT TO SCALE

AOC 2 SOIL CHEMISTRY MAP

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

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Franklin, WI 53132
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P:\Reits - 341\2021 Work Plan\CAD\021-001\FIG 20_341-021-001_AOC 2 Soil Chemistry Map.dwg

AREA 3 - FORMER TANK FARM

EXISTING HAZARDOUS WASTE INCINERATOR

A3-3	1994	
Depth (ft)	BETX(1)	SVOCs(2)
0-2	35193	NA
2-4	2750000	NA
4-6	36100	NA
6-8	71900	NA
8-10	25110	598

A3-3

500N

A3-1	1994	
Depth (ft)	BETX(1)	SVOCs(2)
0-2	1	NA
2-4	18.6	NA
4-6	0.9	NA
6-8	25490	NA
8-10	50960	NA
10-12	7090	NA
12-14	4010	NA
14-16	8840	ND

A3-1

NA

A3-2

A3-2	1994	
Depth (ft)	BETX(1)	SVOCs(2)
0-2	13900	NA
2-4	85650	NA
4-6	127070	NA
6-8	70800	NA
8-10	124000	ND
12-14	336850	NA

1000E

N

NOT TO SCALE

AOC 3 SOIL CHEMISTRY MAP

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

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DRAWN BY: NWD	DATE: 03/08/2021	Figure 21
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Belleia - 341\2021 Work Plan\CAD\021-001\FIG 21_341-021-001 AOC 3 Soil Chemistry Map.dwg

B1-1

B1-01	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	ND	ND
4.5-6	ND	ND
7.5-9	ND	ND
9.5-11	ND	ND

B1-2

B1-02	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	830	ND
4.5-6	280	ND
7.5-9	266	ND
9.5-11	12800	ND

B1-3

B1-03	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	209	ND
4.5-6	ND	ND
4.5-6	ND	ND
7.5-9	ND	ND
9.5-11	ND	ND

B1-4

B1-04	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	179	ND
4.5-6	ND	ND
7.5-9	ND	ND

B1-5

B1-05	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	343	ND
4.5-6	ND	ND
7.5-9	15	ND
9.5-11	ND	ND

B1-6

B1-06	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	ND	ND
4.5-6	8	ND
7.5-9	8	ND
9.5-11	10	ND

B1-7

B1-07	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	ND	ND
4.5-6	333	ND
7.5-9	26700	ND
9.5-11	49800	ND

B1-8

B1-08	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	181	ND
4.5-6	2200	ND
4.5-6	104200	ND
7.5-9	27700	ND
9.5-11	49300	ND

I-01

I-01	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	13100	ND
4.5-6	960000	ND
7.5-9	26100	ND
9.5-11	50400	ND

I-02

I-02	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	2900	ND
4.5-6	2600	ND
7.5-9	93	ND
9.5-11	19	ND
9.5-11	19	ND

SVE-1

SVE-1	1993	
Depth (ft)	BETX(1)	SVOCs(2)
1-3	11420	ND
3.5-5.5	2080	ND
6-8	209000	ND
8.5-10.5	219000	ND

I-03

I-03	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	308000	ND
4.5-6	50000	ND
7.5-9	398000	ND
9.5-11	396000	ND

I-04

I-04	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	459000	18220
4.5-6	2920000	4730
7.5-9	105800	18640
9.5-11	95500	29270

I-05

I-05	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	310000	ND
4.5-6	940000	ND
7.5-9	70600	ND
9.5-11	51000	ND

A1-1

A1-1		
Depth (ft)	BETX(1)	SVOCs(2)
0-2	6917000	NA
2-4	22380	NA
4-6	5620000	NA
6-8	5539000	NA
8-10	104400	NA
10-12	37300	NA
12-14	79100	44
14-16	133600	NA

I-06

I-06	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	6	ND
4.5-6	4	ND
7.5-9	20	ND
9.5-11	44	ND

I-07

I-07	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	646	ND
4.5-6	0	ND
7.5-9	110000	ND
9.5-11	762000	ND

I-08

I-08	1991	
Depth (ft)	BETX(1)	SVOCs(2)
1.5-3	18	ND
4.5-6	0	ND
7.5-9	6700	ND
9.5-11	6700	ND

SVE-2

SVE-2	1993	
Depth (ft)	BETX(1)	SVOCs(2)
1-3	3700000	ND
3.5-5.5	4740000	ND
6-8	1500000	ND

SVE-3

SVE-3	1993	
Depth (ft)	BETX(1)	SVOCs(2)
2.5-4.5	1083000	NA
5-7	7400000	NA

SVE-4

SVE-4	1993	
Depth (ft)	BETX(1)	SVOCs(2)
2.5-4.5	1477000	NA
5-7	110600	NA

AREA 1 - FORMER URETHANE LABORATORY

AREA OF FORMER LIQUIDS INCINERATOR

1000N

S-1 S-2 S-3 S-4 S-5 S-6 S-7

SVE-1 SVE-2 SVE-3 SVE-4

CHICAGO MILWAUKEE ST.PAUL PACIFIC RR

SUBJECT PROPERTY

PROPOSED SOIL BORING

N

NOT TO SCALE

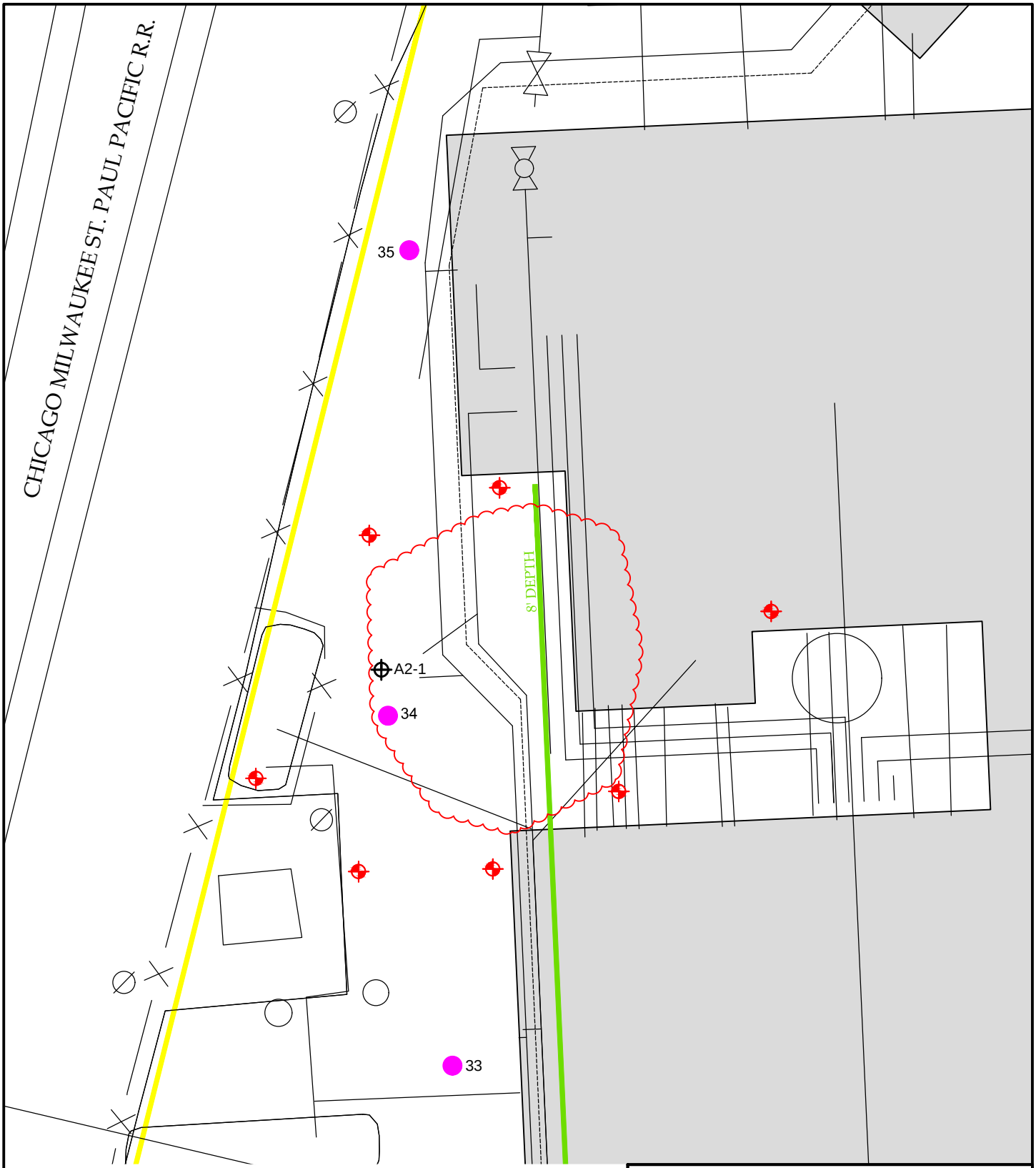
PROPOSED SOIL BORING LOCATIONS - AOC 1

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

Endpoint Solutions
6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200 Fax: (414) 427-1259

DRAWN BY: NWD	DATE: 03/08/2021	Figure 22
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Redia - 341\2021 Work Plan\CAD\0221-0001\FIG 22_341-021-0001 Proposed Soil Boring Locations AOC1.dwg



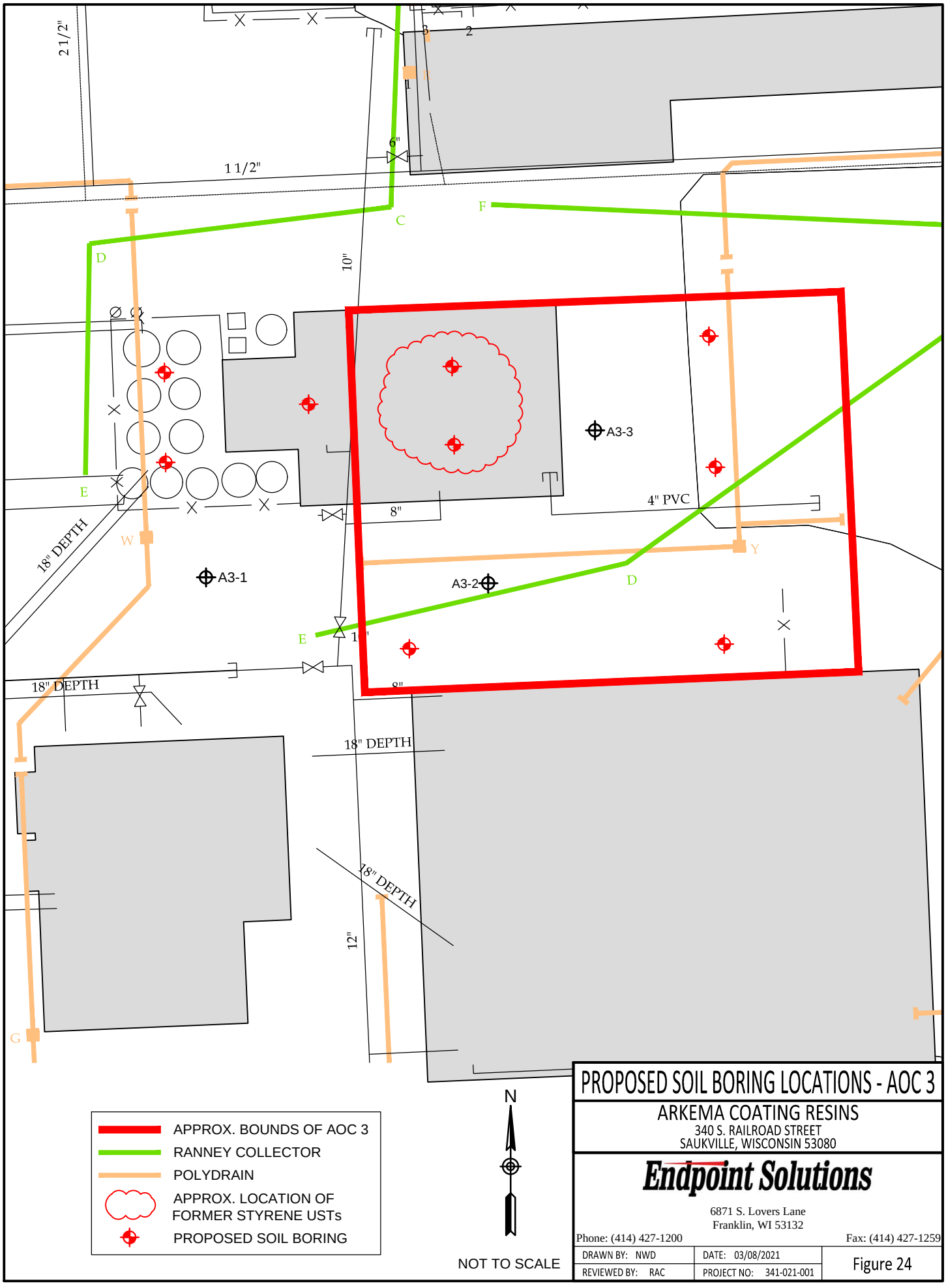
PROPOSED SOIL BORING LOCATIONS - AOC 2

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

Endpoint Solutions
6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200
Fax: (414) 427-1259

DRAWN BY: NWD	DATE: 03/08/2021	Figure 23
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 23_341-021-001 Proposed Soil Boring Locations AOC2.dwg



PROPOSED SOIL BORING LOCATIONS - AOC 3

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

Endpoint Solutions
6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200
Fax: (414) 427-1259

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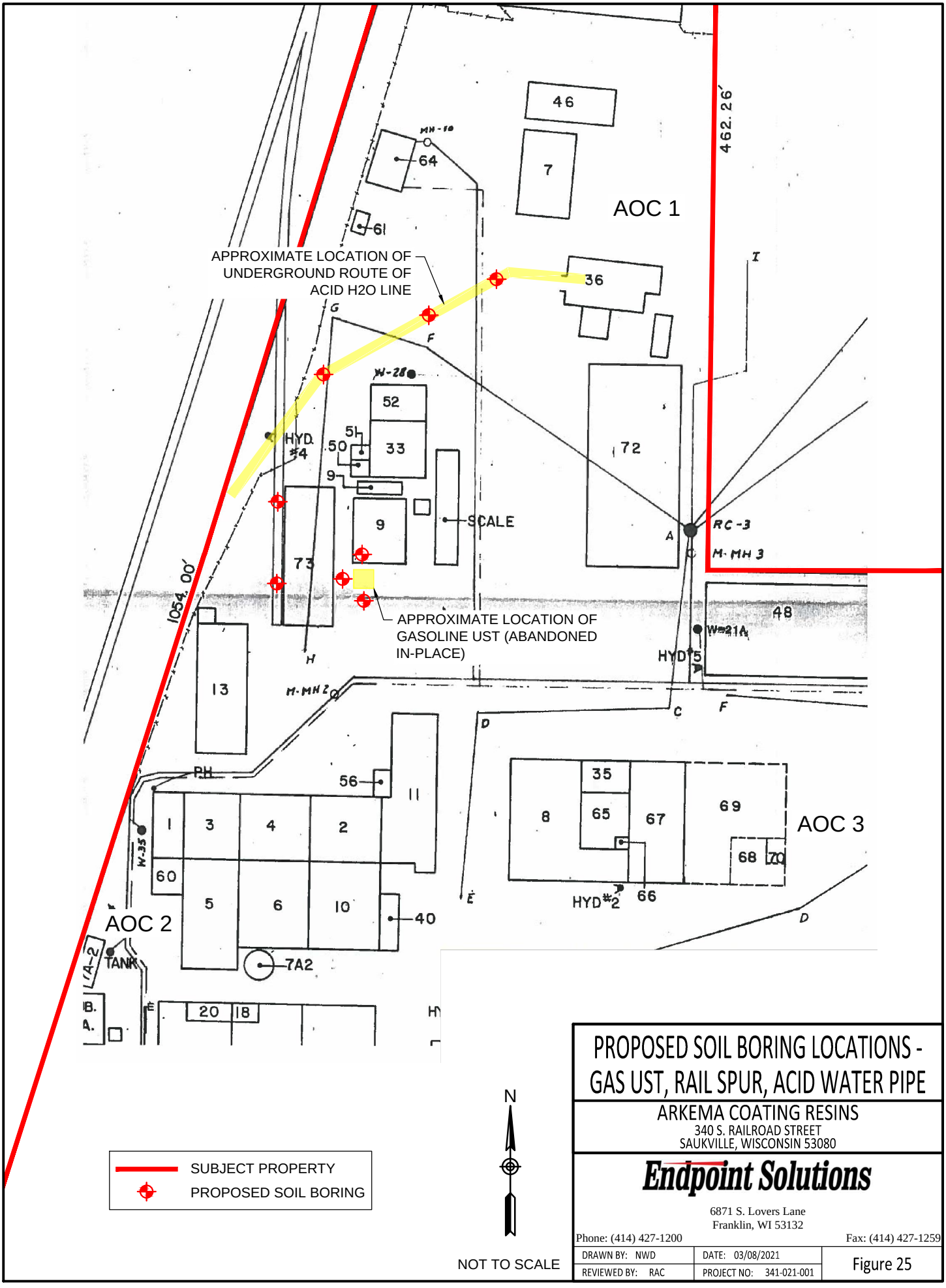
P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 24_341-021-001 Proposed Soil Boring Locations AOC3.dwg



PROPOSED SOIL BORING LOCATIONS - GAS UST, RAIL SPUR, ACID WATER PIPE

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

Endpoint Solutions
6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200
Fax: (414) 427-1259

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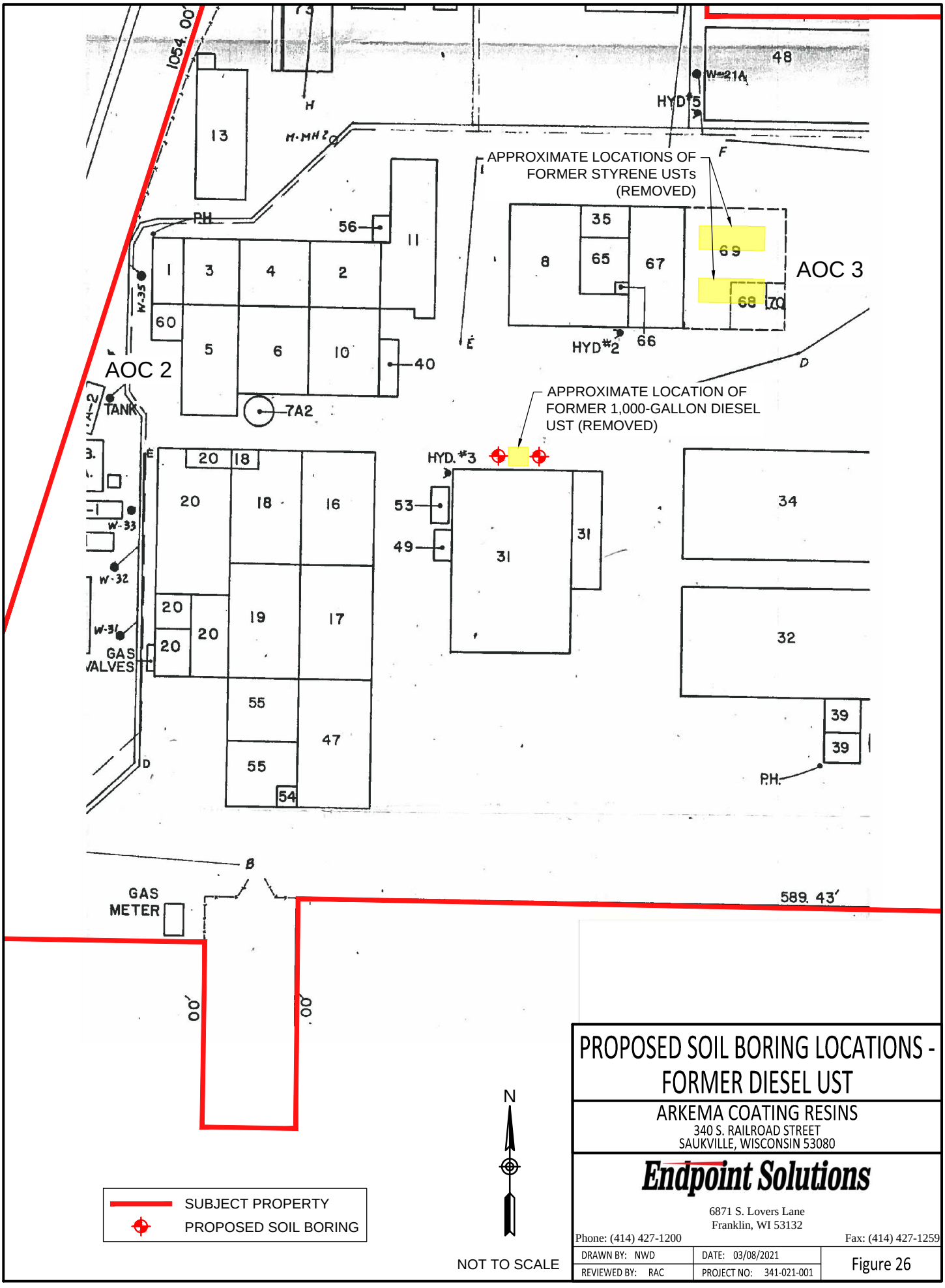
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 25_341-021-001 Proposed Soil Boring Locations Gas UST Railspur Acid Water Pipe.dwg



PROPOSED SOIL BORING LOCATIONS - FORMER DIESEL UST

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

Endpoint Solutions
6871 S. Lovers Lane
Franklin, WI 53132
Phone: (414) 427-1200
Fax: (414) 427-1259

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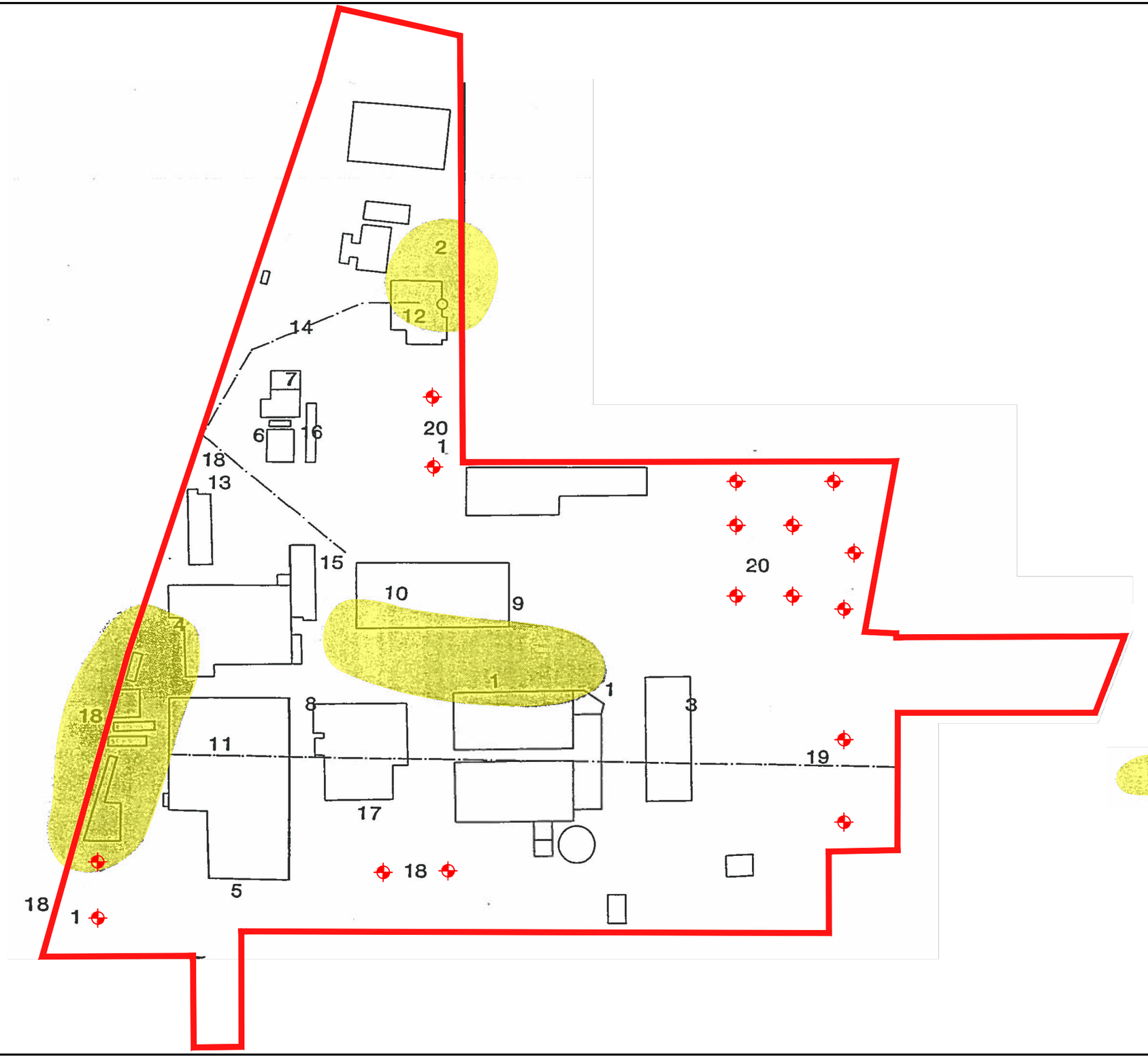
P:\Retia - 341\2021 Work Plan\CAD\021-001\FIG 26_341-021-001 Proposed Soil Boring Locations - Former Diesel UST.dwg



SUBJECT PROPERTY

PROPOSED SOIL BORING

1 Barrel Storage Areas
2 Buried Incinerator Location (?)
3 Old Farm Water Well (Decommissioned)
* 4 Old Dry Well (Decommissioned)
5 Buried Caustic Tank (Filled With Concrete)
6 Buried Diesel Tank (Filled With Sand)
7 Buried Tank (?)
8 Buried Tank (Removed)
9 Buried Styrene Tanks (Removed)
10 Tank Farm
11 Basement Sump
* * 12 Present Incinerator
13 Location of Former Tanks
14 Underground Route of "Acid Water" Line
15 Broken Linseed (?) Oil Line (Removed)
16 Pit for Tank Scales
17 Truck Washing Area
18 Acid Water & Other Product Spill Areas
19 Storm Sewer
20 Tanker Parking Areas
* Former Hazardous WasteTreatment / Disposal Areas
* * Current Hazardous Waste Treatment Area (Since 1972)

Approximate Locations of Highest Groundwater Contamination Within the Glacial Sediments

N

NOT TO SCALE

PROPOSED SOIL BORING LOCATIONS - HISTORIC POTENTIAL AREAS OF IMPACTS

ARKEMA COATING RESINS
340 S. RAILROAD STREET
SAUKVILLE, WISCONSIN 53080

Endpoint Solutions
6871 S. Lovers Lane
Franklin, WI 53132
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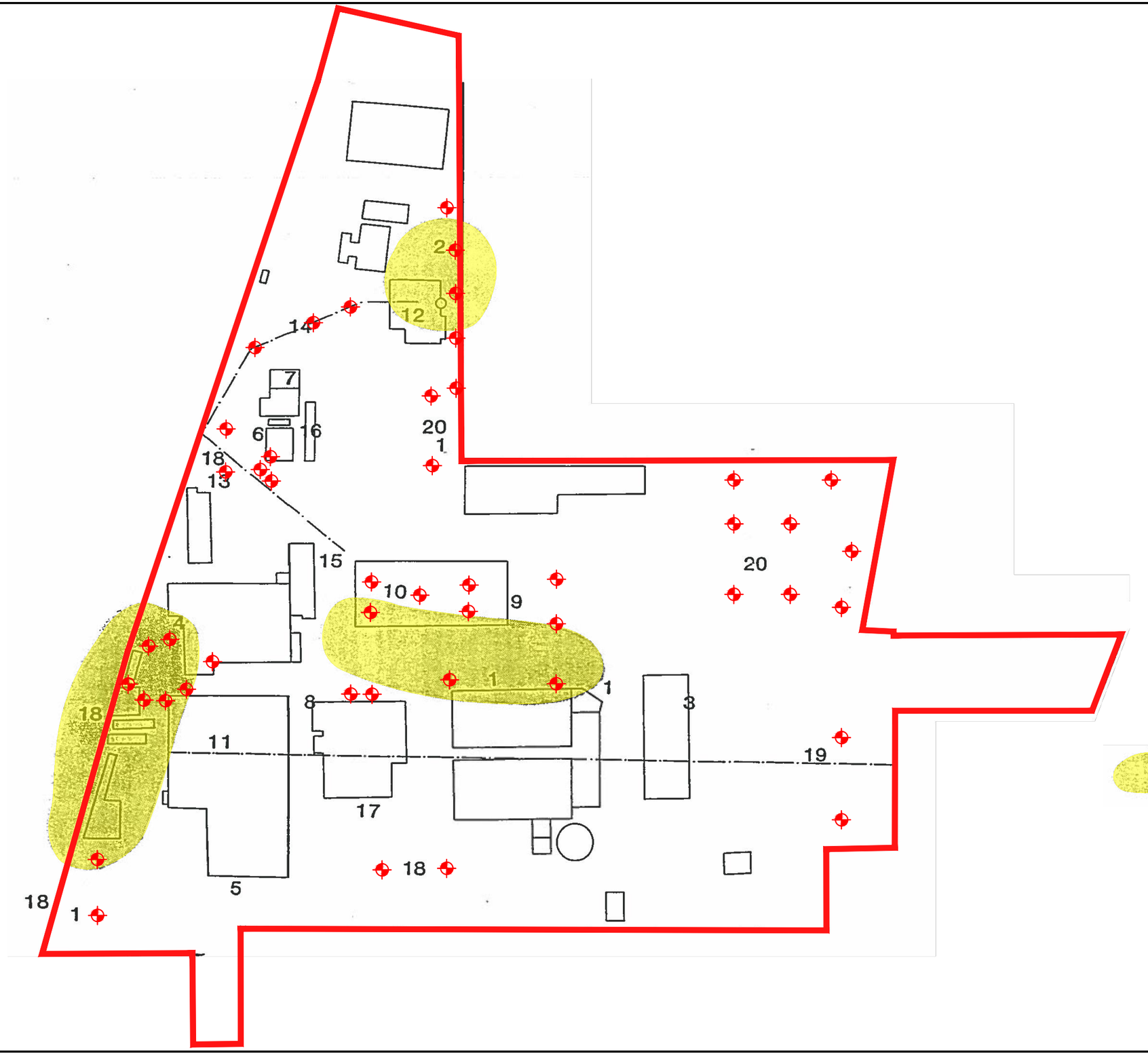
REVIEWED BY: RAC	PROJECT NO: 341-021-001	

P:\Arkema - 341\2021 Work Plan\CAD\021-001\FIG 27_341-021-001 Proposed Soil Boring Locations Historic Potential Areas of Impacts.dwg



PROPOSED SOIL BORING LOCATIONS OVERVIEW

ARKEMA COATING RESINS
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Endpoint Solutions
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P:\Arkia - 341\2021 Work Plan\CAD\021-001\FIG 28_341-021-001 Proposed Soil Boring Locations Overview.dwg

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