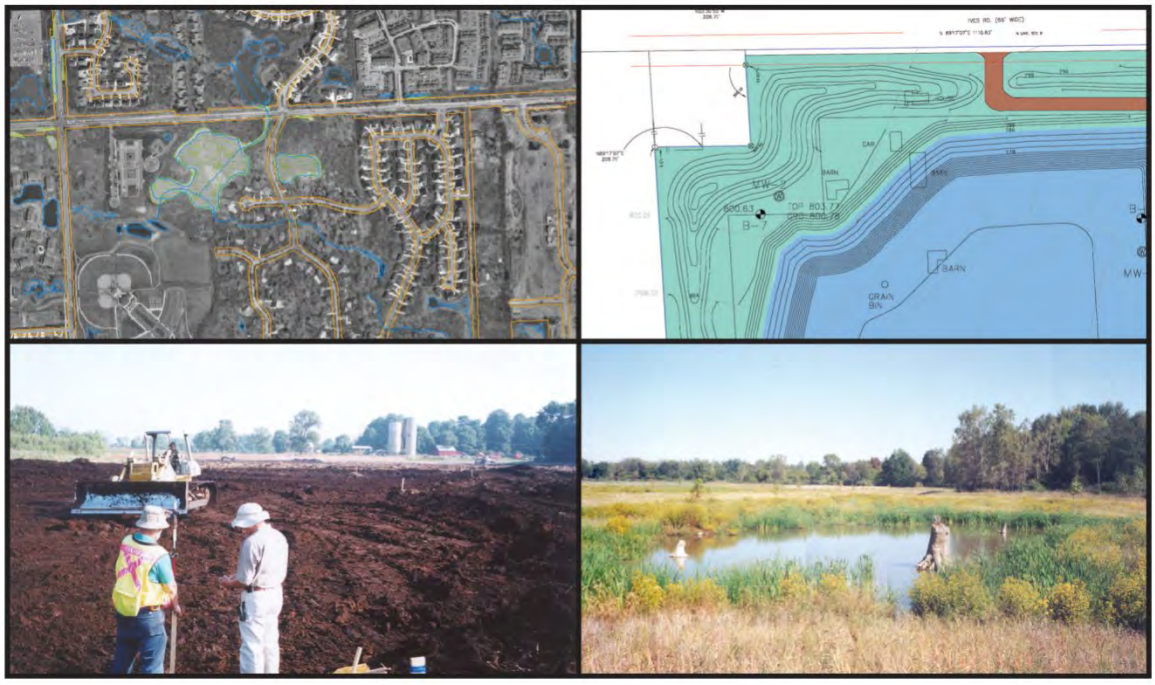
Response Activity Plan – Remedial Action Plan
Of 1994 PA 451, Part 201, as amended

Left Field
2610 Cochrane Street
Detroit, Michigan

Left Field 2020 Limited Dividend Housing Association L.L.C.

August 9, 2021

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Response Activity Plan – Remedial Action Plan
Left Field
2610 Cochrane Street
Detroit, Michigan

August 9, 2021

Prepared For:

Left Field 2020 Limited Dividend Housing Association L.L.C.
20250 Harper Avenue
Detroit, Michigan 48225

And

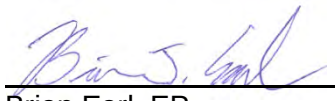
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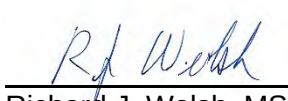
ASTI Project No. 1-11456

Report Prepared by:



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Director

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FIGURES

1 Site Location Map
2 Soil Boring Location Map
3 Soil Analytical Above GRCC Map
4 Proposed Sampling Grid Map

TABLE

1 Summary of Soil Sample Analytical Results

ATTACHMENTS

A Phase I Environmental Site Assessment, April 16, 2020 (portions)
B Phase II Environmental Site Assessment, February 3, 2021
C Checklist – Assessment of the Volatilization to Indoor Air Screening Levels
D Site Development Plans

RESPONSE ACTIVITY PLAN – REMEDIAL ACTION PLAN
Left Field
2610 Cochrane Street
Detroit, Michigan
August 9, 2021

1.0 Introduction

ASTI Environmental (ASTI) has completed this Response Activity Plan to Implement Remedial Actions (RespAP) on behalf of Left Field 2020 Limited Dividend Housing Association L.L.C. for the Left Field project development located at 2610 Cochrane Street in Detroit, Wayne County, Michigan (Subject Property) pursuant to Section 20114b of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 451 of 1994, as amended (NREPA). The objective of the remedial actions proposed in this RespAP are to achieve an unrestricted residential no further action (NFA) for soil on the Subject Property.

A Site Location Map is provided as Figure 1. This RespAP was written based on ASTI's:

- April 16, 2020 Phase I ESA (Attachment A); and
- February 3, 2021 Phase II ESA (Attachment B).

The source of contaminated soil is believed to be from the historical placement of contaminated urban fill materials on the Subject Property in an uncontrolled manner. This RespAP is being submitted to the Michigan Department Environment, Great Lakes, and Energy (EGLE) for review and approval as a requirement for Michigan State Housing Development Authority (MSHDA) funding. Left Field 2020 Limited Dividend Housing Association L.L.C. has completed a Baseline Environmental Assessment (BEA) and submitted the BEA to EGLE as a non-liable party. Left Field 2020 Limited Dividend Housing Association L.L.C. intends to take ownership of the Subject Property by approximately September 1, 2021.

2.0 Detailed Subject Property Description

2.1 Subject Property Description

The Subject Property comprises 1.366-acres on one parcel; Parcel ID 08000580-3. The Subject Property is located on Cochrane Street North of Michigan Avenue in the City of Detroit. A Site Features Map is provided as Figure 2.

The Subject Property is currently vacant and undeveloped. A scaled figure depicting site features is included as Figure 2. Left Field 2020 Limited Dividend Housing Association L.L.C. intends to redevelop the Subject Property to include two multi-story residential buildings with surface parking.

2.2 Subject Property Features

DTE Energy provides electrical and natural gas services to the area with no active lines currently on the Subject Property. The Subject Property's domestic water, sanitary waste, and storm water disposal needs are served by the City of Detroit. No active water or sewer lines are present on the Subject Property. No drinking water wells or septic systems are present on the Subject Property. No underground utilities are known to be present on the Subject Property.

3.0 Subject Property Use

3.1 Current and Intended Subject Property Use

The Subject Property is currently vacant, and undeveloped. The proposed future use includes the construction of two new multi-family residential buildings, one six-story and one four-story, just north of the old tiger stadium ballpark in Detroit. Building A will be six stories tall and approximately 21,500 square-feet constructed slab on grade. Building B will be four stories tall and approximately 30,000 square-feet constructed with a slab on grade and column foundation. Building B will only have a lobby and stair tower on grade with parking present beneath the remainder. The buildings will include approximately 60 new units in each building comprised of studio, one, two, and three-bedroom apartments. Proposed development Plans are provided in Attachment C.

3.2 Historical Subject Property Use and Ownership

Based on the research documented in the Phase I ESA, the Subject Property was developed with an alley, roadway, grocery store, dwellings, and residential outbuildings as early as 1884. The south portion was redeveloped with spectator and concession areas for Tiger Stadium in the 1940s. Developments on the north portion were redeveloped as surface parking lots in the 1950s and 1960s. Tiger Stadium was demolished in 2008 and 2009 but had been vacant since 1999. Since then, the Subject Property appears to have been used as a staging area for nearby, off-site construction activities.

3.3 Historical Hazardous Substance Use

ASTI reviewed the previous environmental reports listed below.

- Phase II ESA – DRAFT, Tiger Stadium, 2121 Trumbull Avenue (A.K.A 1620 Michigan Avenue), Detroit, Michigan dated February 16, 2007
- Due Care Plan, Section 7A Compliance Analysis, Tiger Stadium Property, 2121 Trumbull Avenue, Detroit, Michigan, dated November 5, 2007
- Baseline Environmental Assessment, Detroit PAL – Parcels 1 and 2, 1620 Michigan Avenue, Detroit, Michigan dated July 18, 2016

Phase II ESA and BEA

Results from a previous Phase II ESA were used to complete the 2016 BEA. In the BEA from 2016, the Subject Property corresponds with Parcel 1.

No soil borings were completed on the Subject Property as part of the 2007 Phase II ESA and the identified concerns were offsite and considerably distant in most cases.

The BEA in 2016 was filed based on the results of the Phase II ESA from 2007.

ASTI's April 2020 Phase I ESA identified the following ASTM E1527-13 (*Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*), recognized environmental conditions (RECs) for the Subject Property.

- Although, the Subject Property was included in the BEA conducted July 18, 2016, it was not demonstrated to be a "facility" as defined in Part 201 of NREPA.
- The concern appears to be fill material based on the information reviewed. One pile of apparent fill material (soil with intermixed brick debris) is located on the southwest portion of the Subject Property and it appears to have been placed there during offsite construction activities.

Applicable portions of ASTI's April 16, 2020 Phase I ESA are reproduced as Attachment A. The EDR Radius Map Report and information available at the EGLE are not included in the attached copy of the report. In addition, a reliance letter for Left Field 2020 Limited Dividend Housing Association L.L.C. is provided in Attachment A.

3.4 Subject Property Geology, Hydrology, and Topography

According to the Quaternary Geology of Southern Michigan (W.R. Farrand and D.L. Bell, 1982), the soil in the area of the Subject Property is lacustrine clay and silt. These soils are described as "gray to dark reddish brown, varied in some localities, chiefly underlies extensive, flat, low-lying areas formerly inundated by glacial Great Lakes, but also occurs in separate small lake basins, includes small areas of lacustrine sand and clay-rich till". The lacustrine clay and silt has a typical thickness between 1 and 10 feet. The United States Department of Agriculture online Web Soil Survey indicates near surface soil is the Urban Land-Riverfront Complex.

The subsurface lithology encountered on the Subject Property underlaying surface cover (gravel or topsoil) was generally described as Urban Fill materials (including demolition

debris) underlain by brown and gray mottled silty clay to approximately 15 feet below grade, the maximum depth explored. Similar fill materials were identified in all four Boring logs provided in ASTI's Phase II ESA included as Attachment B. Groundwater was not encountered on the Subject Property to a depth of 15 feet below grade.

Topography of the Subject Property is generally flat. The approximate elevation of the Subject Property is 600 feet above sea level. The regional topographic gradient is to the south.

4.0 Identification of Relevant Exposure Pathways

The following table describes the relevant pathways for the proposed use of the Subject Property.

Pathway	Relevant Pathway	Explanation
Groundwater pathway	No	Groundwater has not been encountered on the Subject Property.
Direct contact pathway	Yes	This pathway is relevant for all residential land uses.
Soil particulate inhalation pathway	Yes	This pathway is relevant for all residential land uses.
Soil volatilization to ambient air pathway	Yes	This pathway is relevant only for hazardous substances that are volatile – volatile hazardous substances have been detected in soils on the subject property.
Volatilization to indoor air pathway	Yes	Volatiles were detected in soils at the property and buildings are proposed to be constructed.
Groundwater-surface water interface pathway	No	The Subject Property is in an area of Detroit serviced by combined sanitary and storm sewers.

The soil direct contact, soil particulate inhalation, volatilization to indoor air inhalation, and soil volatilization to ambient air inhalation exposure pathways are relevant exposure pathways based on the proposed use of the Subject Property.

5.0 Assessment of Applicability of Generic Criteria

The information obtained on the Subject Property was evaluated to determine if the generic criteria are applicable and appropriate for comparison to evaluate the risk for all relevant pathways. For soil the relevant pathways are the direct contact (DC), particulate soil inhalation (PSI), volatile soil inhalation (VSI), and soil volatilization to indoor air.

Based on a review of the available soil data and absence of residual non-aqueous phase liquids, the applicable criteria for the Subject Property are the generic residential criteria (GRCC), under Part 201 of NREPA. The appropriate VSI are the Residential Infinite Source Volatile Soil Inhalation. Based on the size of the Subject Property (1.37-ares), the GRCC for PSI and VSI were adjusted by a modifier of 0.77 for a 2-acre site as required by R299.26(6), the Administrative Rules promulgated pursuant to Part 201 of NREPA.

For the volatilization to indoor air pathway (VIAP) for soil, due to the presence of heterogeneous soils on the Subject Property, the GRCC are not applicable, requiring a site-specific evaluation. ASTI has completed the checklist for the assessment of the applicability of the 2020 VIAP Screening Levels (refer to Attachment C) and as demonstrated by the checklist the proposed building construction characteristics are not consistent with the residential VIAP Screening Levels. Refer to Attachment D for proposed site development plans including building elevations. However, while the VIAP Screening Levels were not developed for the characteristics of the structures proposed for the Subject Property, they are more conservative than criteria that could be developed based on the construction of the proposed buildings. Therefore, this ResAP will rely on the residential VIAP Screening Levels as Part 201 site-specific volatilization to indoor air criteria (SSVIAC). Data for soil samples collected from the Subject Property will be compared the SSVIAC to demonstrate unrestricted residential use of the property. Soils on the Subject Property will be remediated to at or below the SSVIAC.

6.0 Identification of the Category for Applicable Cleanup Criteria

The applicable cleanup category is residential based on the anticipated use of the Subject Property for residential purposes.

7.0 Subsurface Contaminant Information

A Phase II ESA Report was completed for the Subject Property on February 3, 2021 and was based on sampling completed during January 2021. A description of the contaminants discovered during these investigations is discussed in the following sections.

7.1 Locations and Concentrations of Contaminants of Concern

On January 14, 2021, ASTI supervised the advancement of 4 soil borings (SB-1 through SB-4) at the Subject Property. The soil borings were advanced using a direct-push Geoprobe® drill rig. The soil borings were advanced to a depth of either 15 feet below ground surface (bgs) (SB-1) or 10 feet bgs. Two soil samples were collected from borings SB-1, SB-2, and SB-3. Only one soil sample was collected from SB-4.

Soil boring locations are provided on Figure 3. Boring/sample ID, boring/sample locations, and depth were as follows:

Boring/Sample ID	Boring/Sample Location	Depth of Boring
SB-1	Southeast corner of the Subject Property	15 feet
SB-2	Southwest corner of the Subject Property	10 feet
SB-3	Northwest corner of the Subject Property	10 feet
SB-4	Northeast corner of the Subject Property	10 feet

Soil was extracted from the ground in pre-cleaned, 5-foot-long, acetate liners. Soil encountered during field activities was identified by ASTI's field personnel, examined for visual and/or olfactory evidence of impact, and screened using a photoionization detector (PID) with notes recorded in a field logbook. Prior to sampling, the PID was calibrated to manufacturer specifications using 100 parts per million (ppm) isobutylene calibration gas. All down-hole equipment was decontaminated using an Alconox® wash and clean water rinse prior to and between borings to minimize the risk of cross contamination of the samples.

The soil samples were collected directly from the dedicated liner into laboratory certified clean, unpreserved 8-ounce glass jars and 40-ml glass vials preserved in the field with methanol, placed on ice, and submitted to Fibertec Environmental Services (Fibertec) in Holt, Michigan under standard chain-of-custody procedures.

A duplicate soil sample (Dup-1s) was collected from SB-3 (6-7') for quality assurance/quality control (QA/QC) purposes. In addition, a methanol blank was maintained with the samples during sampling and transport. The soil samples were analyzed for volatile organic compounds (VOCs) by US EPA Method 8260D, polynuclear aromatic hydrocarbons (PNAs) by US EPA Method 8270E, and the Michigan 10 metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc) by US EPA Methods 6020A and 7471B.

Sample depth, location rationale, and analysis are provided in the following table.

Boring	Sample Matrix	Sample Depth	Rationale for sample depth	Analysis
SB-1	Soil	0.5-1'	Shallow sub-surface soils	PNAs and MI 10 Metals
		4-4.75'	Bottom of fill materials	VOCs, PNAs, MI 10 Metals
SB-2	Soil	0.5-1'	Shallow sub-surface soils	PNAs and MI 10 Metals
		5-6'	Within a sand layer	VOCs, PNAs, MI 10 Metals
SB-3	Soil	0.5-1'	Shallow sub-surface soils	PNAs and MI 10 Metals
		6-7'	Depth of lithologic interface	VOCs, PNAs, MI 10 Metals
SB-4	Soil	0.5-1'	Shallow sub-surface soils	PNAs and MI 10 Metals

The GRCC used for comparison of the soil analytical for the Subject Property are the direct contact (DC), and particulate soil inhalation (PSI) and volatile soil inhalation (VSI). In addition, to evaluate the VIAP, soil sample results were compared to the SSVIAC.

Soil Analytical

VOCs

The laboratory analytical results for the soil samples reported no VOCs were detected above the laboratory reporting limits in the samples analyzed for VOCs.

PNAs

In soil sample SB-3 (0.5-1'), phenanthrene was detected at a concentration exceeding the SSVIAC for the property. In addition, the PNA benzo(a)pyrene exceeded the GRCC for DC. No other PNAs were detected in SB-3 (0.5-1') at concentrations exceeding the GRCC or SSVIAC or the remainder of the soil samples analyzed.

Metals

Arsenic concentrations in both the shallow fill soils and the underlying clay soils exceed the GRCC DC. The underlying clay soils are native to the Subject Property, and it is therefore appropriate to substitute background levels for Arsenic. Background is the concentration of a hazardous substance which exists in the environment at or regionally proximate to a facility that is not attributable to any release at or regionally proximate to the facility. As allowed under Section 20101(e)(ii) of NREPA, published regional background concentrations can be used to determine compliance. The Subject Property is located within the Huron-Erie Glacial Lobe. Following Section 20101(e)(ii) of NREPA for use of regional background, the regional background concentration for arsenic in the Huron-Erie Glacial Lobe as published in the Michigan Background Soil Survey 2005 (updated 2015) is 22,800 µg/kg in clay.

- Clay soils – Of the samples collected for analysis, SB-1 (4-4.75'), SB-2 (5-6'), and SB-3 (6-7') were collected in the native clay. The arsenic concentrations in SB-1 (4-4.75'), SB-2 (5-6'), and SB-3 (6-7') were 8,000 µg/kg, 8,400 µg/kg, and 8,000 µg/kg, respectively. Therefore, as discussed, for the clay soils the arsenic concentrations reported in these samples fall within the regional background concentration and do not represent exceedances of the GRCC or releases.

Mercury was detected in the samples from SB-1 (0.5-1') and SB-2 (0.5-1') at concentrations exceeding the SSVIAC.

The metal lead was reported at a concentration below the GRCC but above 75,000 µg/kg in soil sample SB-1 (0.5-1') and therefore this sample was additionally analyzed for fine and coarse fraction lead. Results of the fine and coarse fraction lead analysis were below the GRCC.

No other metals were reported above any of the GRCC.

The table below presents the laboratory analytical results for the soil samples which exceeded the SSVIAC or one or more of the GRCC for the relevant pathways at the property. The laboratory analytical reports and chain of custody (COC) records are provided in the Phase II ESA in Attachment B.

Table of Soil Analytical Results in Excess of EGLE criteria for Relevant Pathways

Sample Identification	Chemical Compound	CAS Number	Applicable GRCC (µg/kg)	Analytical Result (µg/kg)
SB-1 (0.5-1')	Mercury	Varies	VIAP – 22 (defaults to TDL of 50)	170
SB-2 (0.5-1')	Arsenic	7440382	DC – 7,600	8,600
	Mercury	Varies	VIAP – 22 (defaults to TDL of 50)	77
SB-3 (0.5-1')	Benzo(a)pyrene	50328	DC – 2,000	4,000
	Phenanthrene	85018	VIAP – 1,700	3,300

SDBL = Statewide Default Background Level

A complete summary of the soil sample analytical results compared to the GRCC and SSVIAC can be found on Table 1. Note that the GRCC for VSI (ambient air) and the GRCC for PSI listed on Table 1 are adjusted values based on source size as required by R299.26(6). ASTI applied a modifier of 0.77 based on a source size of greater than 1-acre and less than 2-acres.

Based on a review of the results of this investigation soil samples collected from the shallow urban fill soils exceeded the generic residential criteria for direct contact pathway and or the VIAP in three of the four soil borings. Comparison of the results to the applicable unrestricted residential criteria and or SSVIAC, has identified the Direct Contact and VIAP for soil as the relevant pathways requiring remedial actions to achieve unrestricted residential use.

All urban fill materials present on the Subject Property should be considered contaminated unless tested. A copy of the Phase II ESA report which includes additional details regarding the sampling is provided as Attachment B.

8.0 Relevant Exposure Pathways and Proposed Remedial Actions

Left Field 2020 Limited Dividend Housing Association L.L.C. intends to purchase the Subject Property and redevelop it with multi-family residential. The land use of the Subject Property falls under the residential use cleanup category. The currently proposed site development plans are provided in Attachment D.

As discussed in Section 7.0, the relevant pathways for which remedial actions are proposed at the Subject Property are the soil VIAP and direct contact pathway. Arsenic and benzo(a)pyrene were detected in the urban fill at levels exceeding the GRCC for DC and present a potential ingestion and dermal risk. The PNA phenanthrene and mercury were detected at concentrations exceeding the VIAP in the fill materials and therefore present a potential volatilization to indoor air risk. Remedial actions will be conducted to address the potential for unacceptable risk as part of the redevelopment of the Subject Property.

8.1 Proposed Remedial Actions

To mitigate the potential for exposure via the direct contact pathway and the VIAP, all obvious urban fill materials (including fill and solid waste), identified visually, will be excavated from the Subject Property and properly disposed off-site.

Based on the soil sampling completed on the Subject Property, the urban fill is expected to be confined to the upper 1 to 2 feet below grade. Fill materials are presumed to be present across the entire Subject Property at a depth of 2' feet below-ground and all identified fill materials will be removed. Based on the dimensions of the Subject Property and removal of the urban fill materials to an average depth of two feet bgs, the estimated volume of soils to be removed is approximately 4,500 cubic yards. Following excavation of the urban fill materials, excavation may be completed deeper in select areas as required for construction activities.

8.2 Confirmation Sampling

Following excavation, confirmation of remediation sampling will be completed in accordance with the guidance provided in the Sampling Strategies and Statistics Training Materials (S3TM) for Part 201 Cleanup Criteria (MDEQ 2002). The dimensions of the Subject Property are approximately 200 feet wide by 305 feet deep for a total of approximately 61,000-square feet or 1.37-acres. Based on the future use for multi-family residential, the Subject Property

will be divided into six approximately 10,160 square-foot exposure units for collection of confirmation of remediation samples. Each of the exposure units will be approximately 50 feet wide by 200 feet deep.

Following the formula provided in section 2.2.1.2 of the S3TM for a small sized remediation areas (defined as less than 0.25-acre), the grid interval for the excavation was calculated to be 28 feet. To allow for the required minimum of nine samples per exposure unit, a 25-foot grid interval was used yielding a sampling grid of 2 by 8 grids within each exposure unit. The grids will be aligned with the zero point near the northeast corner of each exposure unit in such a way as to maximize the number of grids present within each exposure unit. Nine sample locations were randomly selected within each exposure unit. Post excavation, one surface soil sample (0-0.5 feet) will be collected from the floor of the excavation within each selected grid. For QA/QC purposes, six duplicate soil samples will also be collected. All collected soil samples will be analyzed for PNAs and the Michigan 10 metals. Refer to Figure 4 for a scaled map of the six exposure units and the randomly selected sample locations and the grids within each unit.

Use of this systematic random statistical sampling method to confirm the effectiveness of the remediation is appropriate based on the lack of specific source location(s) for identified soil contamination. In addition, contaminated soils are assumed to be present across the entirety of the Subject Property therefore samples collected from the bottom of the excavation in each exposure unit would be from the same population.

Excavation sidewall samples are not anticipated as the excavation is expected to be conducted approximately a foot beyond the property boundaries.

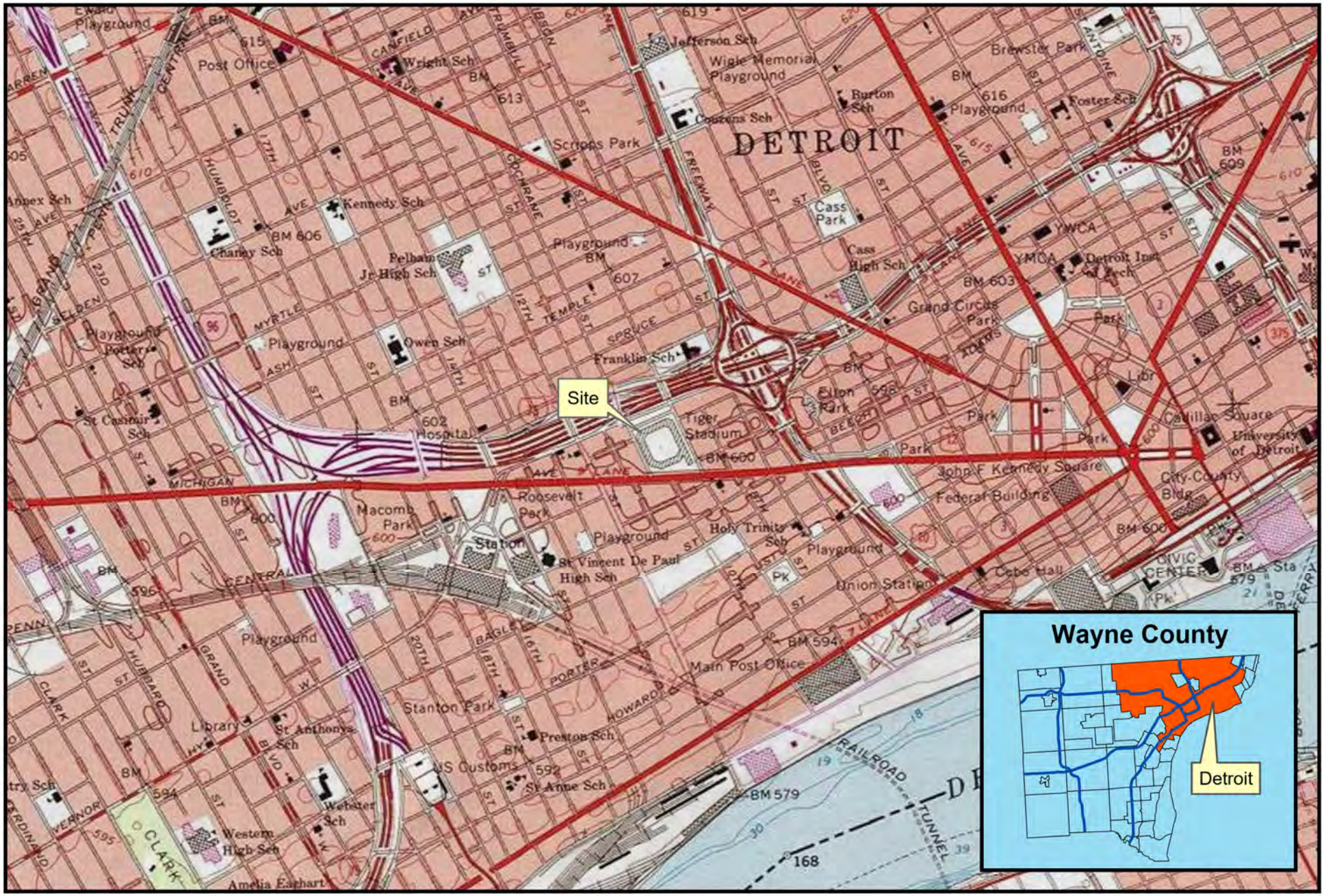
Soils excavated and transported off-site for disposal as part of the response activities will be disposed of in a Type II landfill in compliance with all local, state, and federal laws.

9.0 Conclusion and Objective

Following the completion of the response activities proposed in this RespAP, all contaminated soils exceeding the applicable GRCC for the relevant pathways and or the SSVIAC for the VIAP will have been removed from the Subject Property. Following excavation the soils that remain on the floor of the excavation will be native to the Subject Property and in accordance with Section 20101(e)(ii) of NREPA in place of the GRCC it is appropriate to substitute regional background values for the naturally occurring metals. Therefore, any detected concentrations of these naturally occurring metals will be compared to the regional background concentrations following the procedures for use outlined in the September 2019 Soil Background and Use of the 2005 Michigan Background Soil Survey Resource Materials published by EGLE. Implementation of the activities described in this RespAP will allow for the safe reuse of the Subject Property for residential purposes. The objective of the remedial actions proposed in this RespAP is to allow for an unrestricted residential NFA for soil on the Subject Property.

FIGURES

1 Site Location Map
2 Site Features Map
3 Soil Sample Analytical Results Map
4 Proposed Sampling Grid Map



Left Field

2610 Cochrane,
Detroit, MI

ASTI Environmental

Created for: Left Field 2020 Limited Dividend Housing Association L.L.C.
Created by: RMH, February 16, 2021, ASTI Project 1-11456

Figure 1 - Site Location Map



Service Layer Credits: Google Earth

Left Field

2610 Cochrane,
Detroit, MI

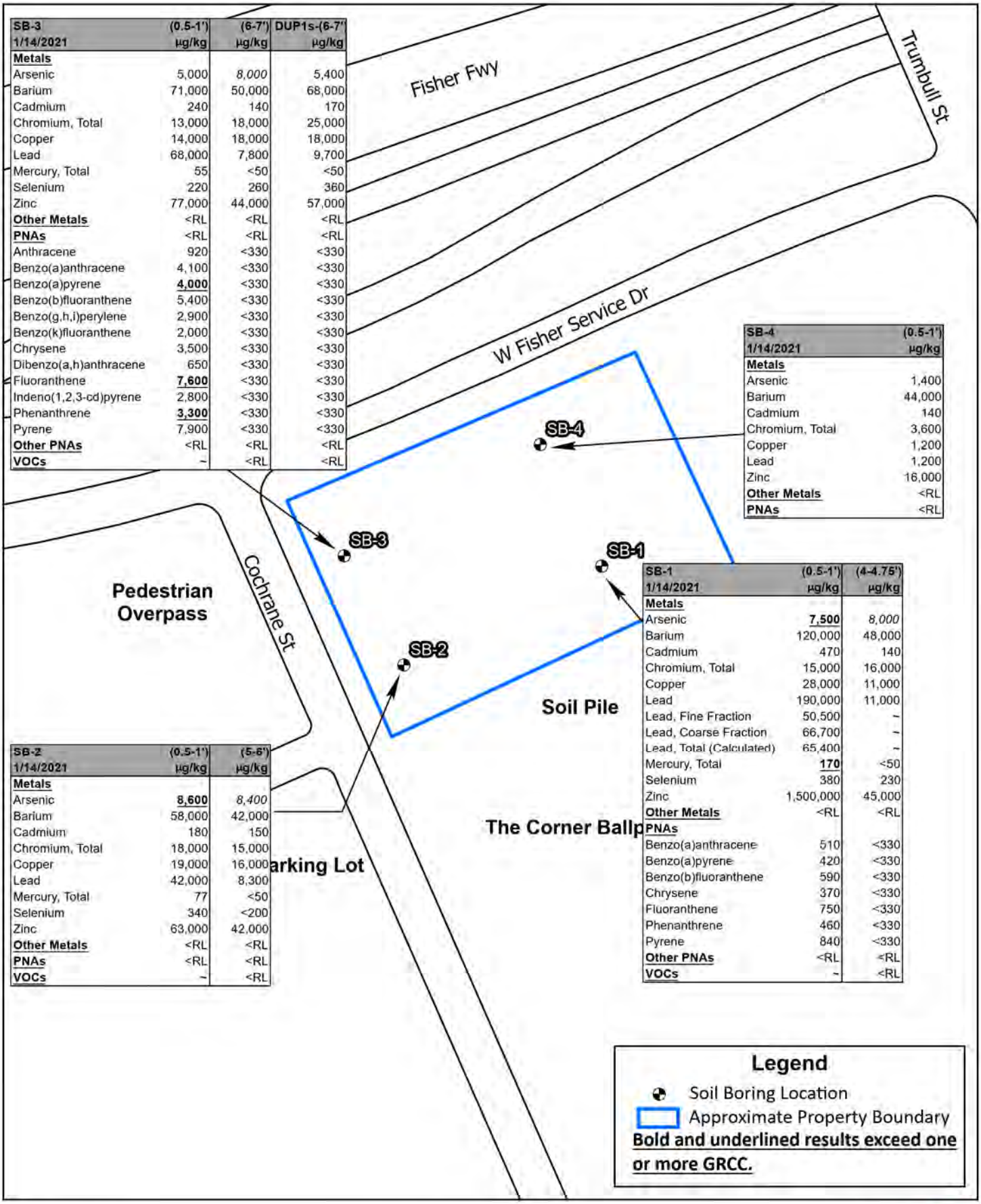
0 37.5 75 150 Feet

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ASTI Environmental

Created for: Left Field 2020 Limited Dividend Housing Association L.L.C.
Created by: RMH, March 25, 2021, ASTI Project 1-11456

Figure 2 - Site Features Map



SB-3 1/14/2021	(0.5-1') µg/kg	(6-7') µg/kg	DUP1s-(6-7' µg/kg
Metals			
Arsenic	5,000	*8,000*	5,400
Barium	71,000	50,000	68,000
Cadmium	240	140	170
Chromium, Total	13,000	18,000	25,000
Copper	14,000	18,000	18,000
Lead	68,000	7,800	9,700
Mercury, Total	55	<50	<50
Selenium	220	260	360
Zinc	77,000	44,000	57,000
Other Metals	<RL	<RL	<RL
PNAs	<RL	<RL	<RL
Anthracene	920	<330	<330
Benzo(a)anthracene	4,100	<330	<330
Benzo(a)pyrene	**4,000**	<330	<330
Benzo(b)fluoranthene	5,400	<330	<330
Benzo(g,h,i)perylene	2,900	<330	<330
Benzo(k)fluoranthene	2,000	<330	<330
Chrysene	3,500	<330	<330
Dibenzo(a,h)anthracene	650	<330	<330
Fluoranthene	**7,600**	<330	<330
Indeno(1,2,3-cd)pyrene	2,800	<330	<330
Phenanthrene	**3,300**	<330	<330
Pyrene	7,900	<330	<330
Other PNAs	<RL	<RL	<RL
VOCs	-	<RL	<RL

SB-4 1/14/2021	(0.5-1') µg/kg
Metals	
Arsenic	1,400
Barium	44,000
Cadmium	140
Chromium, Total	3,600
Copper	1,200
Lead	1,200
Zinc	16,000
Other Metals	<RL
PNAs	<RL

SB-1 1/14/2021	(0.5-1') µg/kg	(4-4.75') µg/kg
Metals		
Arsenic	**7,500**	*8,000*
Barium	120,000	48,000
Cadmium	470	140
Chromium, Total	15,000	16,000
Copper	28,000	11,000
Lead	190,000	11,000
Lead, Fine Fraction	50,500	-
Lead, Coarse Fraction	66,700	-
Lead, Total (Calculated)	65,400	-
Mercury, Total	**170**	<50
Selenium	380	230
Zinc	1,500,000	45,000
Other Metals	<RL	<RL
PNAs		
Benzo(a)anthracene	510	<330
Benzo(a)pyrene	420	<330
Benzo(b)fluoranthene	590	<330
Chrysene	370	<330
Fluoranthene	750	<330
Phenanthrene	460	<330
Pyrene	840	<330
Other PNAs	<RL	<RL
VOCs	-	<RL

SB-2 1/14/2021	(0.5-1') µg/kg	(5-6') µg/kg
Metals		
Arsenic	**8,600**	*8,400*
Barium	58,000	42,000
Cadmium	180	150
Chromium, Total	18,000	15,000
Copper	19,000	16,000
Lead	42,000	8,300
Mercury, Total	77	<50
Selenium	340	<200
Zinc	63,000	42,000
Other Metals	<RL	<RL
PNAs	<RL	<RL
VOCs	-	<RL

Left Field

2610 Cochrane, Detroit, MI

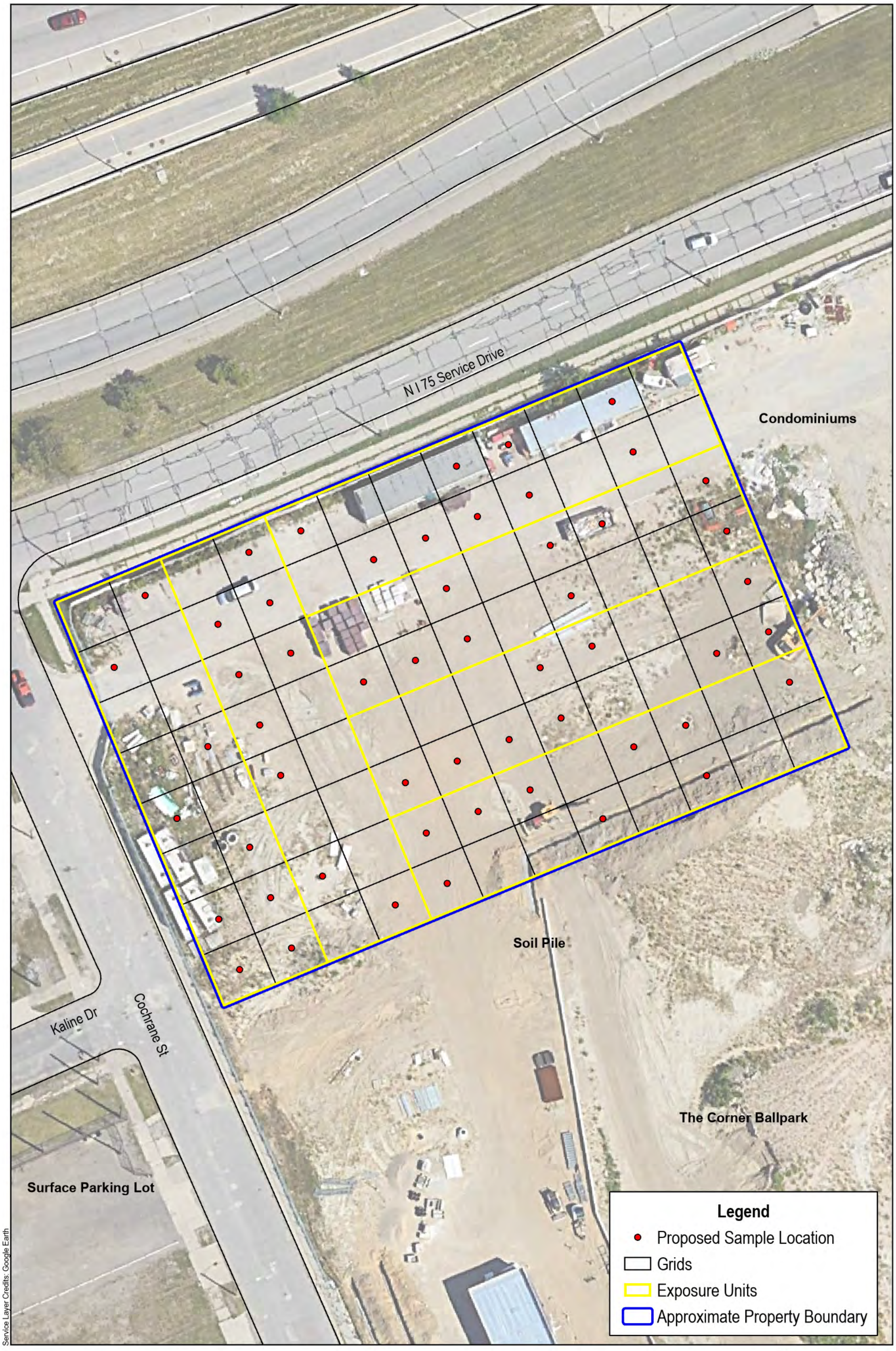
0 37.5 75 150 Feet

N

ASTI Environmental

Created for: Left Field 2020 Limited Dividend Housing Association L.L.C.
Created by: RMH, February 16, 2021. ASTI Project 1-11456

Figure 3 - Soil Sample Analytical Results Map



Left Field

2610 Cochrane,
Detroit, MI

0 20 40 80 Feet

N

ASTI Environmental

Created for: Left Field 2020 Limited Dividend Housing Association L.L.C.
Created by: RMH, July 14, 2021, ASTI Project 1-11456

Figure 4 - Proposed Sampling Grid

TABLE

1 Summary of Soil Sample Analytical Results

Table 1 Summary of Soil Sample Analytical Results
Left Field, 2610 Cochrane Street, Detroit, Michigan
ASTI File No. 1-11456

Parameters (µg/kg)	Statewide Default Background Levels*	Residential Infinite Source Volatile Soil to ambient air Inhalation Criteria* (0.77 Modifier)	Residential Particulate Soil Inhalation Criteria* (0.77 Modifier)	Residential Direct Contact Criteria*	Residential Volatilization to Indoor Air Site Specific Criteria	SB-1 (0.5-1') 1/14/2021 µg/kg	SB-1 (4-4.75') 1/14/2021 µg/kg	SB-2 (0.5-1') 1/14/2021 µg/kg	SB-2 (5-6') 1/14/2021 µg/kg	SB-3 (0.5-1') 1/14/2021 µg/kg	SB-3 (6-7') 1/14/2021 µg/kg	SB-4 (0.5-1') 1/14/2021 µg/kg	Dup-1s SB-3 (6-7') 1/14/2021 µg/kg	Meth Blank 10/29/2020 µg/kg
Metals														
Arsenic	5,800	NLV	554,400	**7,600**	NA	7,500	*8,000*	**8,600**	*8,400*	5,000	*8,000*	1,400	5,400	~
Barium	75,000	NLV	254,100,000	37,000,000	NA	120,000	48,000	58,000	42,000	71,000	50,000	44,000	68,000	~
Cadmium	1,200	NLV	1,309,000	550,000	NA	470	140	180	150	240	140	140	170	~
Chromium, Total	18,000 (total)	NLV	254,100,000	790,000,000	NA	15,000	16,000	18,000	15,000	13,000	18,000	3,600	25,000	~
Copper	32,000	NLV	100,100,000	20,000,000	NA	28,000	11,000	19,000	16,000	14,000	18,000	1,200	18,000	~
Lead	21,000	NLV	77,000,000	400,000	NA	190,000	11,000	42,000	8,300	68,000	7,800	1,200	9,700	~
Lead, Fine Fraction	21,000	NLV	77,000,000	400,000	NA	50,500	~	~	~	~	~	~	~	~
Lead, Coarse Fraction	21,000	NLV	77,000,000	400,000	NA	66,700	~	~	~	~	~	~	~	~
Lead, Total (Calculated)	21,000	NLV	77,000,000	400,000	NA	65,400	~	~	~	~	~	~	~	~
Mercury, Total	130	40,040	15,400,000	160,000	**50 (M)**	**170**	<50	77	<50	55	<50	<50	<50	~
Selenium	410	NLV	100,100,000	2,600,000	NA	380	230	340	<200	220	260	<200	360	~
Silver	1,000	NLV	5,159,000	2,500,000	NA	<100	<100	<100	<100	<100	<100	<100	<100	~
Zinc	47,000	NLV	ID	170,000,000	NA	1,500,000	45,000	63,000	42,000	77,000	44,000	16,000	57,000	~
PNAs														
Anthracene	NA	1,078,000,000	51,590,000,000	230,000,000	13,000,000	<330	<330	<330	<330	920	<330	<330	<330	~
Benzo(a)anthracene	NA	NLV	ID	20,000	160,000	510	<330	<330	<330	4,100	<330	<330	<330	~
Benzo(a)pyrene	NA	NLV	1,155,000	**2,000**	NA	420	<330	<330	<330	**4,000**	<330	<330	<330	~
Benzo(b)fluoranthene	NA	ID	ID	20,000	NA	590	<330	<330	<330	5,400	<330	<330	<330	~
Benzo(g,h,i)perylene	NA	NLV	616,000,000	2,500,000	NA	<330	<330	<330	<330	2,900	<330	<330	<330	~
Benzo(k)fluoranthene	NA	NLV	ID	200,000	NA	<330	<330	<330	<330	2,000	<330	<330	<330	~
Chrysene	NA	ID	ID	2,000,000	NA	370	<330	<330	<330	3,500	<330	<330	<330	~
Dibenzo(a,h)anthracene	NA	NLV	ID	2,000	NA	<330	<330	<330	<330	650	<330	<330	<330	~
Fluoranthene	NA	569,800,000	7,161,000,000	46,000,000	NA	750	<330	<330	<330	7,600	<330	<330	<330	~
Indeno(1,2,3-cd)pyrene	NA	NLV	ID	20,000	NA	<330	<330	<330	<330	2,800	<330	<330	<330	~
Phenanthrene	NA	123,200	5,159,000	1,600,000	**1,700**	460	<330	<330	<330	**3,300**	<330	<330	<330	~
Pyrene	NA	500,500,000	5,159,000,000	29,000,000	25,000,000	840	<330	<330	<330	7,900	<330	<330	<330	~
Remaining PNAs	NA	CS	CS	CS	CS	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	~
VOCs														
All VOCs	NA	CS	CS	CS	CS	~	<RL	~	<RL	~	<RL	~	<RL	<RL

*Per R299.46, June 25, 2018
^Represents the most conservative regional background concentration for the Huron-Erie Lobe from the Michigan Background Soil Survey 2005 (Updated 2015) Tables 1, 3, or 4.
~ Parameter not tested for at his location.
ID-Inadequate data to develop criterion.
NA-Not available.
NLL-Hazardous substance is not likely to leach under most soil conditions.
NLV-Hazardous substance is not likely to volatilize under most conditions.
C-Value presented is a screening level based on the chemical-specific generic soil saturation concentration (Csat)
D-Calculated criterion exceeds 100%, hence it is reduced to 100% or 1.0e+9 ppb.
G-Groundwater Surface Water Interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.
M-Calculated criterion is below the analytical target detection limit, therefore, the criterions defaults to the target detection limit.
X-The Groundwater Surface Water Interface (GSI) criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.
CS-Compound specific
<RL-Below reporting limit
Italicized results were samples collected in native sand or clay and were compared to and found to be below the regional background concentration

ATTACHMENTS

Attachment A

Phase I Environmental Site Assessment, April 16, 2020 (portions)

ASTI ENVIRONMENTAL

Investigation • Remediation
Compliance • Restoration

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February 12, 2021

Left Field 2020 Limited Dividend Housing Association L.L.C.
20250 Harper Avenue
Detroit, Michigan 48225

Subject: Reliance Letter
Left Field
2610 Cochrane Street, Detroit, Michigan
ASTI File No. 11456

Ladies and Gentlemen:

ASTI Environmental (ASTI) conducted a Phase I Environmental Site Assessment (ESA) of the above-referenced property in April 2020 and our Phase I ESA report was issued on April 16, 2020.

The Phase I ESA was conducted in accordance with the United States Environmental Protection Agency (US EPA) Standards and Practices for All Appropriate Inquiries (AAI) and American Society for Testing and Materials (ASTM) Practice E1527-13.

ASTI extends additional third party reliance to **Left Field 2020 Limited Dividend Housing Association L.L.C.** and acknowledges that said party may rely upon the aforementioned report and its conclusions, as of the date of the report. Please note that the Phase I ESA no longer meets the All Appropriate Inquiries/ASTM allowable timeline (180 days for select components) for an acquisition transaction.

If I may be of any further assistance in this matter, please call at (800) 395-ASTI.

Sincerely,
ASTI Environmental (ASTI)

Thomas Wackerman
President

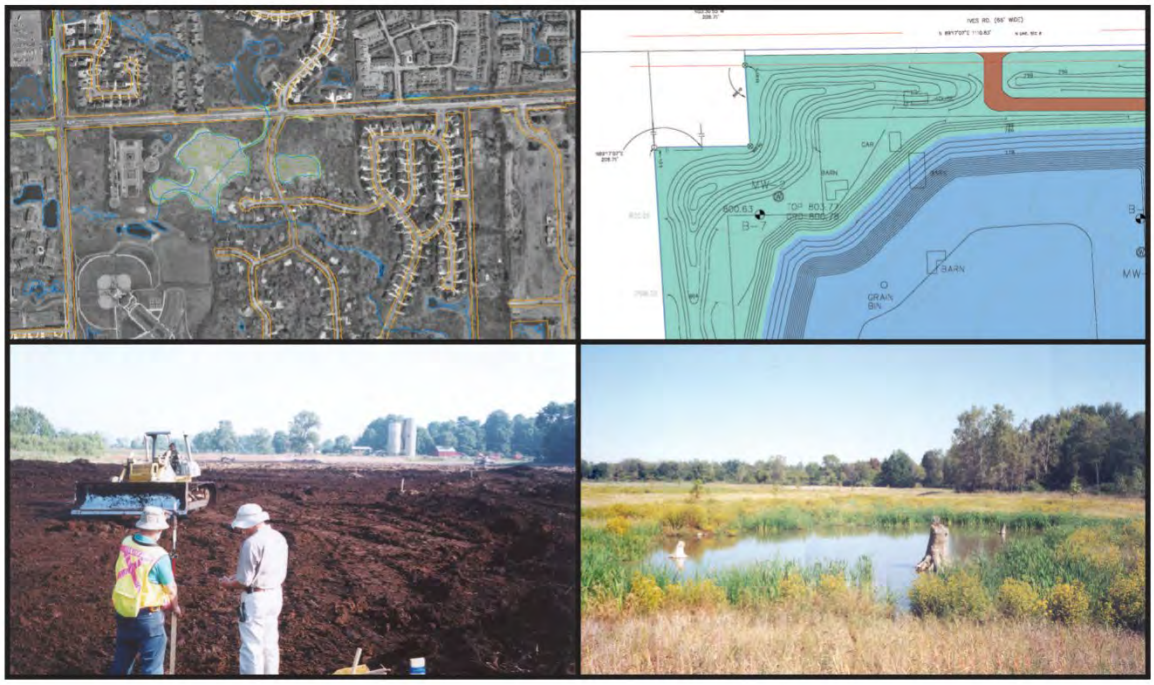
Other Services Offered by ASTI Environmental
Lead-Based Paint and Risk Assessment - Asbestos Containing Material Inspections - Wetlands/Woodlands Assessments - Threatened & Endangered Species Surveys - Habitat Restoration - Development Incentives - Phase II ESAs - Baseline Environmental Assessments - Due Care Plans NEPA Assessments - Certified Radon Inspectors - UST Closures - Site Remediation - Compliance Permitting - Stormwater Management - Indoor Air Quality - Mold Inspections

Phase I Environmental Site Assessment
Left Field
2610 Cochrane Street
Detroit, Michigan

American Community Developers, Inc.

April 16, 2020

ASTI ENVIRONMENTAL



ASTI ENVIRONMENTAL

Phase I Environmental Site Assessment
Left Field
2610 Cochrane Street
Detroit, Michigan

April 16, 2020

Report Prepared For:

Michigan State Housing Development Authority
735 E. Michigan Avenue
Lansing, Michigan 48912

And

American Community Developers, Inc.
20250 Harper Avenue
Detroit, Michigan 48225

Report Prepared By:

ASTI Environmental
10448 Citation Drive, Suite 100
Brighton, Michigan 48116
1-800-395-ASTI

ASTI Project No. 11456

Report Prepared by:

Anthony Spencer, EP
Associate III

Report Reviewed by:

Pamela Chapman, PE, EP
Phase I Group Leader

ASTI ENVIRONMENTAL

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10.6 Interview Documentation: MSHDA User's Questionnaire, Owner's Questionnaire, and Title Commitment
10.7 Special Contractual Conditions Between User and Environmental Professional: FEMA Map, NWI Map, NPMS Map, Noise Assessment, and Acceptable Seperation Distance Calculations
10.8 Qualifications of the Environmental Professional(s)
10.9 MSHDA Phase I Letter of Reliance
10.10 Copy of Environmental Professional Insurance Certificate

ATTACHMENTS
(Adobe's Attachment Panel/Sidebar of Provided Digital Phase I ESA)

- Phase II ESA – DRAFT, Tiger Stadium, 2121 Trumbull Avenue (A.K.A 1620 Michigan Avenue), Detroit, Michigan dated February 16, 2007
- Due Care Plan, Section 7A Compliance Analysis, Tiger Stadium Property, 2121 Trumbull Avenue, Detroit, Michigan, dated November 5, 2007
- Baseline Environmental Assessment, Detroit PAL – Parcels 1 and 2, 1620 Michigan Avenue, Detroit, Michigan dated July 18, 2016

1.0 EXECUTIVE SUMMARY

ASTI Environmental (ASTI) was retained by American Community Developers, Inc. to conduct a Phase I Environmental Site Assessment (ESA) of a site located at 2610 Cochrane Street in Detroit, Wayne County, Michigan (Subject Property). The Phase I ESA was conducted in accordance with American Society for Testing and Materials (ASTM) Practice E1527-13 and the Michigan State Housing Development Authority (MSHDA) Environmental Review Requirements for 2020. The information and opinions rendered in this report are exclusively for reliance by American Community Developers, Inc. and MSHDA, and ASTI will not distribute or publish this report without the consent of American Community Developers, Inc., except as required by law or court order. The services provided by ASTI in completing this assessment have been provided in a manner consistent with the normal standards of the profession. No other warranties, expressed or implied, are made.

The Phase I ESA included (1) a site inspection on March 23, 2020, (2) interviews with knowledgeable site contacts, (3) review of pertinent Michigan Department of Environment, Great Lakes, and Energy (EGLE), Wayne County, and Detroit information, (4) acquisition and review of a federal and Michigan database search, (5) review of historical aerial photographs, Sanborn maps, and city directories, and (6) Federal Emergency Management Agency (FEMA) Map, National Wetland Inventory (NWI) Map, National Pipeline Mapping Sytem (NPMS) Map, Acceptable Seperation Distance Calculations (ASD), and Noise Assessment.

No testing or sampling of materials (for example, soil, water, and air) was included in this assessment. No limiting conditions were identified during the site reconnaissance, except for those described in Section 6.1.

1.1 Summary and Conclusions

A detailed summary of the findings of this Phase I ESA can be found in Section 8.1.

We have performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527-13 and MSHDA requirements of a site located at 2610 Cochrane Street in Detroit, Wayne County, Michigan, referred to as the “Subject Property”. Any exceptions to, or deletions from, this practice are described in Section 5.4 of this report. This assessment

has revealed no evidence of recognized environmental conditions (RECs) in connection with the Subject Property, except for the following.

- Per the findings of the Baseline Environmental Assessment, dated July 18, 2016, the Subject Property is a "facility" as defined in Part 201 of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as Amended (Part 201). The basis of the BEA is concentrations of metals above Part 201 GRCC and the primary exposure pathway is direct contact.

  Results at the Subject Property may vary since the associated Phase II ESA, dated February 16, 2007, did not include sampling locations on the Subject Property. The concern appears to be fill material based on the information reviewed. One pile of apparent fill material (soil with intermixed brick debris) is located on the southwest portion of the Subject Property and it appears to have been placed there during offsite construction activities.

1.2 Data Failure Points

Refer to Section 8.4 for a discussion regarding data failures and/or data gaps encountered during the investigation.

1.3 Identified Liens or Activity Use Limitations

The EGLE Remediation and Redevelopment Division (RRD) maintains a list of properties that have perfected environmental liens on file with the EGLE. The Subject Property was not on the list as of the last update dated October 11, 2019 (Appendix 10.5).

The User provided a Commitment for Title Insurance dated February 6, 2020 (Appendix 10.6). No suspect RECs were identified in the document.

Based on a review of the government records search for the Subject Property provided from EDR and information provided on the User Questionnaire, there are no activity and use limitations (AULs) against the Subject Property.

2.0 INTRODUCTION

ASTI Environmental (ASTI) was retained by American Community Developers, Inc. to conduct a Phase I Environmental Site Assessment (ESA) of a site located at 2610 Cochrane Street in Detroit, Wayne County, Michigan (Subject Property). The Phase I ESA was conducted in accordance with the American Society for Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (E1527-13), 40 CFR Part 312: Standards and Practice for All Appropriate Inquiries; Final Rule (AAI), and the Michigan State Housing Development Authority (MSHDA) Environmental Review Requirements for 2020.

2.1 Purpose

The assessment was conducted to identify *recognized environmental conditions,* (RECs), *historical recognized environmental conditions* (HRECs), and *controlled recognized environmental condition*s (CRECs) associated with the historical uses of the Subject Property, current site operations, and the condition of surrounding properties. ASTI understands that the findings of this study will be used for a LIHTC submittal to MSHDA. This Phase I ESA can be used to qualify for one of three landowner liability protections (contiguous property owner, innocent landowner, or bona fide prospective purchaser) available under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 as amended, and may also be used to qualify for State of Michigan liability defenses and exemption that may be available under Part 201 of the Natural Resources and Environmental Protection Act.

According to ASTM Practice E1527-13, the term *recognized environmental condition* is defined as the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

2.2 Detailed Scope of Services

Information required to complete the ESA was obtained from personal interviews and review of practically reviewable and reasonably ascertainable records. Informational sources include the following:

- User's Environmental Questionnaire;
- Key Site Manager;
- Department of Environment, Great Lakes, and Energy (EGLE);
- EGLE Perfected Environmental Liens;
- Department of Licensing and Regulatory Affairs (LARA);
- Available records maintained by the City of Detroit and Wayne County;
- The EDR Radius Map Report with GeoCheck;
- Previous environmental reports;
- Aerial photographs;
- Sanborn maps;
- City directories;
- FEMA;
- U.S. Fish and Wildlife Service NWI;
- NPMS;
- Noise Assessment; and
- Assessment of Acceptable Separation Distance

Mr. Anthony Spencer, Environmental Professional, inspected the Subject Property on March 23, 2020 and completed report preparation. Copies of resumes are provided in Appendix 10.8.

2.3 Significant Assumptions

Information obtained during this assessment, to the extent it was relied on to form our opinion, was assumed to be complete and accurate. ASTI cannot be held responsible for the quality or content of information obtained from interviews and standard sources. Since ASTI cannot warrant or guarantee that the information provided by interviews and standard sources is accurate or complete, the intention of this Phase I ESA is to reduce, but not eliminate, uncertainty for the potential for RECs, HRECs, and CRECs on the Subject Property.

2.4 Limitations and Exceptions

The information and opinions included in this report were given in response to a limited scope of work being a Phase I ESA per ASTM Practice E1527-13 and MSHDA Environmental Review Requirements for 2020, and should be considered and implemented only in light of that particular scope of work. The services provided by ASTI in completing this assessment have been provided in a manner consistent with the normal standards of the profession. No other warranties, expressed or implied, are made.

No testing or sampling of materials (for example, soil, water, and air) was included in this assessment. No limiting conditions were identified during the site reconnaissance, except for those described in Section 6.1.

Responses received from regulatory agencies or other secondary sources of information after the issuance of this report may alter the facts, findings, conclusions, or recommendations to this ESA.

2.5 Special Terms and Conditions

The Phase I ESA was performed in conformance with the scope and limitations of ASTM Practice E1527-13, AAI, and MSHDA Environmental Review Requirements for 2020. No special terms and conditions outside ASTM Practice E1527-13, AAI, and MSHDA Requirements have been addressed. Under the AAI Rule and ASTM Practice E1527-13, all appropriate inquiries must be conducted within one year prior to the date of transaction of the Subject Property. However, certain components of the all appropriate inquiries (interviews, liens searches, records review, and visual inspections) must be conducted or updated within 180 days prior to the date of the Subject Property transaction.

2.6 User Reliance

The Phase I ESA was performed for the benefit of American Community Developers, Inc. and MSHDA, and ASTI acknowledges that said parties may rely on the contents and conclusions presented in this report. ASTI acknowledges the fact that the scope of work was sufficient in ASTI's opinion to uncover, to the extent of ASTI's services, potential environmental liabilities at the Subject Property.

This effort was performed per authorization of American Community Developers, Inc. on March 5, 2020. The information and opinions rendered in this report are exclusively for use

by American Community Developers, Inc. and MSHDA. ASTI will not distribute or publish this report without the consent of American Community Developers, Inc., except as required by law or court order.

Any use a third party makes of this report, or any reliance upon it, or any decisions based on it, is the sole responsibility of the third party. A third party is not afforded the status of a third party beneficiary unless ASTI expressly agrees to such status in writing. ASTI has no responsibility for any damages that may be suffered by a third party as a result of any decision made, or action taken by a third party, based on this report.

3.0 SITE DESCRIPTION

3.1 Location and Legal Description

General Location	A Site Location Map is provided in Appendix 10.1.	
Section, Township and Range	Section 18, T02S, R12E	
City/Township, County, State Zip Code	City of Detroit, Wayne County, State of Michigan, 48216	
Parcel Information	**Street Address** 2610 Cochrane	**Parcel Tax Number** 0800580-3

The current assessing record with parcel legal descriptions are included in Appendix 10.5.

3.2 Site and Vicinity General Characteristics

Subject Property Zoning	General Business (B4)
Local Development Utilization	Freeway, residential, recreation

A Site Features Map is included in Appendix 10.2. Photographs of the Subject Property and adjoining properties were taken during the site inspection and are provided as Appendix 10.3.

3.3 Current Use of the Subject Property

The Subject Property is primarily vacant land, but some construction materials are being staged on the east portion.

3.4 Descriptions of Structures, Roads, Other Improvements on the Site

Below is summary of the Subject Property improvements.

Roads and Other Improvements	
Access	Gated, but access by nearby roadways
Paved Areas	Sidewalks
Maintained Lawn	None present
Landscaped Areas	None present
Surface Water	None present

Municipal Services and Utilities			
Service or Utility	**Present**	**Provider**	**Comments**
Potable Water Source	Available	Detroit	
Irrigation Well	No		
Sewage	Available	Detroit	
Storm Sewer	Available	Detroit	
Electrical	Available	DTE	
Natural Gas	Available	DTE	
Solid Waste Disposal	Available		
Heating & Cooling	No		

There was no indication or evidence of the former presence of potable wells or septic systems on the Subject Property.

A current or prior heating source other than natural gas has not been identified through a review of reasonably ascertainable records.

3.5 Current Uses of Adjoining Properties

ASTI observed adjoining properties during the inspection to evaluate the potential risk these properties may pose to the Subject Property.

Adjoining Property Use			
Direction	**Occupant & Address**	**Use**	**Potential Concerns Observed During Site Reconnaissance**
North	Roads and freeways	Service drive, exit and entry tramps, freeway	None
East	Condominiums	Residential	None
South	The Corner Ballpark, 1620 Michigan	Event space	None
West	Parking lot	Surface parking	None
	Pedestrian Overpass	Pedestrian right-of-way	

4.0 USER PROVIDED INFORMATION

In order to qualify for one of the landowner liability protections offered by the Small Business Liability Relief and Brownfield's Revitalization Act of 2002, the User, defined by ASTM as *the party seeking to use Practice E1527 to complete an environmental site assessment of the Subject Property*, has specific obligations for completing a successful application of this practice as outlined in Section 6 of ASTM E1527-13 Failure to provide information regarding the obligations outlined to the Environmental Professional may result in a determination that AAI is not complete.

Mr. Michael D. Essian II, representing the User, completed a User's Environmental Questionnaire and Disclosure Statement. A copy of the User's Questionnaire is provided in Appendix 10.6.

4.1 Title Records

A title search was not included in the scope of this Phase I ESA, except for the Commitment for Title Insurance discussed in Section 1.3..

4.2 Environmental Liens or Activity and Use Limitations

The User representative was not aware of any environmental liens or activity and land use limitations.

4.3 Specialized Knowledge

The User representative does not have any specialized knowledge or experience related to the Subject Property or nearby properties that might help ASTI identify a potential REC.

4.4 Commonly Known or Reasonably Ascertainable Information

The User representative does not have any commonly known or reasonably ascertainable information indicative of releases or threatened releases on the Subject Property.

4.5 Valuation Reduction for Environmental Issues

According to the User representative, the purchase price represents the fair market value.

4.6 Owner, Property Manager, and Occupant Information

The Subject Property is owned by The Economic Development Corporation of the City of Detroit. Refer to Sections 5.4.5 and 7.0 for information provided by the owner.

4.7 Reason for Performing Phase I ESA

ASTI understands that the findings of this study will be used for a LIHTC submittal to MSHDA. This Phase I ESA can be also used by American Community Developers, Inc. to qualify for one of three landowner liability protections (contiguous property owner, innocent landowner, or bona fide prospective purchaser) available under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 as amended, and may also be used to qualify for State of Michigan liability defenses and exemption that may be available under Part 201 of the Natural Resources and Environmental Protection Act.

4.8 Other

No other information was provided by except for the previous environmental report discussed in Section 5.4.5.

5.0 RECORDS REVIEW

5.1 Standard Environmental Record Sources

ASTI ordered a government records search for the Subject Property from Environmental Data Resources, Inc. (EDR) in Shelton, Connecticut. A copy of The EDR Radius Map Report with GeoCheck dated March 9, 2020, is included in Appendix 10.5. A description of the databases, search distances, and results are presented in the report.

ASTM-Required Databases			
Database List (ASTM Required Search Distance)	**Subject Property Listing**	**Adjoining Property Listing**	**Total Applicable ASTM Listings**
Federal NPL/State Hazardous Waste Site (1 mile)	No	No	0
Delisted NPL (0.5 mile)	No	No	0
Federal/State/Tribal Equivalent SEMS (0.5 mile)	No	No	0
Federal SEMS Archive (0.5 mile)	No	No	0
Federal RCRA CORRACTS (1 mile)	No	No	0
Federal TSD Facility (0.5 mile)	No	No	0
Federal RCRA Generator (Subject Property/Adjoining)	No	No	0
Federal Inst./Eng. Controls (Subject Property only)	No	No	0
Federal ERNS (Subject Property Only)	No	N/A	0
State/Tribal Landfill or Solid Waste Facility (0.5 mile)	No	No	0
State/Tribal LUST (0.5 mile)	No	No	25
State/Tribal Registered UST (Subject Property/Adjoining Properties)	No	No	0
State/Tribal Inst./Eng. Controls (Subject Property only)	No	N/A	0
State/Tribal Voluntary Cleanup Sites (0.5 mile)	No	No	0
State/Tribal Brownfield Sites (0.5 mile)	No	No	1

Refer to the EDR report Executive Summary for abbreviation descriptions.

Supplemental Databases Selected by Environmental Professional			
Supplemental Database List Name (ASTI Search Distance)	**Subject Property Listing**	**Adjoining Property Listing**	**Listings in Search Distance**
State/Tribal - Part 201 (1 mile)	No	No	4
Michigan Baseline Environmental Assessment (BEA) Sites ($^1/_{10}$ mile)	Yes	Yes	5
Historical Auto Stations ($^1/_{10}$ mile)	No	Yes	4
Dry Cleaners/Historical Cleaners ($^1/_{10}$ mile)	No	No	3
Additional Non-ASTM Databases (Subject Property or Adjoining Property)	Yes	Yes	N/A
Orphans	No	No	4

Discussion of Subject Property Listings

Site Name	Tiger Stadium Partners 2, LLC, Tiger Stadium, 2121 Trumbull, Tiger Stadium Partners, LLC, Detroit Pal
Databases Listing(s)	Inventory, RCRA NonGen/NLR
Location	2121 & 2225 Trumbull, Detroit 1620 Michigan, Detroit
Documentation Requested	• *RRD*: Remediation and Redevelopment Division of the EGLE • *MMD:* Materials Management Division of the EGLE
Summary of Findings	No RCRA-related violations have been reported. This listing likely relates to demolition of Tiger Stadium, which was present on the Subject Property and offsite areas to the east and south. A BEA was completed for an area that included the Subject Property in 2016. The BEA is discussed in Section 5.4.5.

Discussion of Off-Site Listings of Environmental Concern

Adjoining property listings are discussed below.

For the remaining listings, ASTI considers select criteria to determine which listings represent an environmental concern to the Subject Property. The criteria include but are not limited to the following.

- Database type
- Topography relative to the Subject Property
- Direction and distance
- Soil profile identified in available sources
- Known or inferred groundwater depth and flow direction

- Status of applicable investigation
- Surface and subsurface conditions including but not limited to buildings, pavement, utility corridors, and surface water features
- Potable water source (well or municipal)

An evaluation of these criteria is completed to determine the level of risk associated with each listing. Listings with likely releases that are found to have the potential to represent an elevated or high risk are requested through FOIA to applicable agencies.

Using the referenced criteria and based upon the information contained within the EDR report, ASTI did identify additional listings beyond adjoining properties that were considered to represent the potential to be an elevated or high risk to the Subject Property. Adjoining listings and these sites are discussed below.

Site Name	Varies by site
Databases Listing(s)	EDR Historical Auto
Location	Varies by site
Distance and Direction	Varies by site
Documentation Requested	• None
Summary of Findings	**Site Name** / **Location** / **Dist./Direction** Stadium Service Station / 1725 W. Vernor / ± 182'/NW Stevens Mack D / 1522 Cherry / ± 170'/E Shea Michael W / 2345 Trumbull / ± 170'/ENE Stadium Service Station was located to the north, in what has since been redeveloped as the below grade Fisher/I-75 freeway right-of-way. It is likely that any potentially impacted soil and groundwater was removed during redevelopment. Stevens Mack D was identified as an automobile garage in 1926 and 1931. The distance and direction are based on reviewed Sanborn maps. The area was investigated as part of the previous environmental reports that are discussed below (Tiger Stadium Partners/BEA 2018). Shea Michael W was identified as a gasoline and oil service station from 1931 to 1940. The area was investigated as part of the previous environmental reports that are discussed below (Tiger Stadium Partners/BEA 2018).

Site Name	Tiger Stadium Partners 2, LLC, Tiger Stadium, 2121 Trumbull,

	Tiger Stadium Partners, LLC, Detroit Pal
Databases Listing(s)	Inventory, RCRA NonGen/NLR
Location	2121 & 2225 Trumbull, Detroit 1620 Michigan, Detroit
Documentation Requested	• *RRD*: Remediation and Redevelopment Division of the EGLE • *MMD:* Materials Management Division of the EGLE
Summary of Findings	No RCRA-related violations have been reported. This listing likely relates to demolition of Tiger Stadium, which was present on the Subject Property and offsite areas to the east and south. BEAs were completed for the south and east adjoining sites in 2016 and 2018. Another BEA was completed in 2017 for a more distant portion of the former stadium. <u>BEA, 2016</u> Since this BEA contains the Subject Property, it is discussed in Section 5.4.5. <u>BEA, 2017</u> The associated parcel is ± 450' to the south-southeast. A total of 8 soil borings were advanced on the site. The geophysical survey discussed in Section 5.4.5, in the BEA from 2016, was completed on this parcel. Collected soil samples were analyzed for VOCs, PNAs, metals, and/or PCBs. The BEA stated that concentrations of the metals arsenic and silver were above Part 201 GRCC in soil at the time. Fill material depth ranged from 3.5' to 7' bgs and included brick and concrete debris, slag, and coal cinders. Perched groundwater was identified at times on top of the native clay. Metals have low migration potential in the subsurface. Based on reviewed information, the database listing is not considered to be representative of a REC. <u>BEA, 2018</u> The parcel adjoins the Subject Property to the east. The associated Phase I ESA identified fill material and three underground storage tanks as RECs. The Phase II ESA consisted of advancing three soils borings along Trumbull, including in the previously discussed area of a former service station and auto repair (Shea Michael W at 2345 Trumbull & Stevens Mack D at 1522 Cherry). The subsurface conditions consisted of fill material to 3.8' to 6' bgs, underlain by clay to 8' or 10' bgs. Perched groundwater was present, but the volumes were insufficient for sampling.

	Collected samples were analyzed for VOCs, PNAs, PCBs, and metals. The BEA stated that concentrations of the metals arsenic and mercury were above Part 201 GRCC in soil at the time. Based on reviewed information and distance, the database listing is not considered to be representative of a REC.

Site Name	2332 Harrison
Databases Liting(s)	Inventory
Location	2332 Harrison, Detroit
Distance and Direction	± 186' to the west
Documentation Requested	• *RRD:* Remediation and Redevelopment Division of the EGLE
Summary of Findings	A BEA was filed for this site in 2018. The associated Phase I ESA identified former onsite buildings and adjoining and nearby filling stations as environmental concerns. The Phase II ESA consisted of advancing 2 soil borings to 20' bgs. Subsurface soil was reported as fill underlain by clay. No groundwater was reported. Collected samples were analyzed for VOCs, PNAs, metals, and PCBs. PNAs and metals were identified in soil above Part 201 GRCC at the time. Based on reviewed information and distance, the database listing is not considered to be representative of a REC.

5.2 Additional Environmental Record Sources

Michigan Oil and Gas Wells

Based on a review of the EGLE GeoWebFace search system and EDR report, no oil or gas wells were identified on or adjoining to the Subject Property.

County and Local Records Review

ASTI requested information for the Subject Property from the Wayne County Department of Public Services on March 8, 2020. No response was received during the completion of this Phase I ESA.

ASTI requested information for the Subject Property from the Detroit Fire Department on March 10, 2020. No response was received during the completion of this Phase I ESA.

ASTI reviewed information for the Subject Property provided by the Detroit Assessing Department (Appendix 10.5). The records described the current vacant parcel.

ASTI has been unable review information for the Subject Property from the City of Detroit, Safety Engineering and Environmental Department (BSEED) permit index cards. These records consist of index cards that include information about construction, storage tanks, flammable materials, and boilers.

5.3 Physical Setting Sources

A Physical Setting Sources Map, which includes an overlay of the United States Geological Survey (USGS) topographic map (7.5-minute series) for the Detroit, Michigan, quadrangle, which includes the Subject Property, is provided in the EDR report in Appendix 10.5. The USGS map is also the basis of the Site Location Map in Appendix 10.1.

Average Elevation (feet above mean sea level)	600
Local Gradient	Declines sharply to the north into the below-grade freeway
Regional Gradient	Declines to the south-southwest
Nearest Surface Water Body	Detroit River: ±4/5 of a mile south
Groundwater Depth	Over 20' bgs based on information presented in Section 5.4.5.
Groundwater Flow Direction	Inferred to be south based on gradient

Soil composition information for the Subject Property is included in the EDR report (Appendix 10.5). The soil component for the Subject Property is described as follows.

Soil Component	Soil Texture	Infiltration Rate	Drainage	Hydric
Urbanland	Variable	Not reported	Not reported	No

Per Section 5.4.5, the general subsurface lithology underlying surface cover (asphalt or concrete) consisted of fill to depths ranging from 1' to 6.5' bgs and was underlain by clay. Fill material disclosed by a Draft Geotechnical Report identified brick, asphalt, and concrete fragments in shallow fill and the absence of suspect fill was noted (e.g., slag, cinders, glass).

Perched groundwater has been encountered. The groundwater was observed to be within the fill material and appears to be discontinuous.

5.4 Historical Use Information on the Subject Property

Reasonably ascertainable standard historical sources as found in Section 8.3.4 of ASTM Practice E1527-13 were used to determine the previous use of the Subject Property and surrounding area. A chronological summary of the sources used may include, but is not limited to aerial photographs, Sanborn maps, city directories, agency records, and prior environmental assessments. ASTI made a *good faith* effort to identify the obvious uses of the Subject Property from the present back to the Subject Property's first developed use, or back to 1940, whichever is earlier. *Data Failures* were encountered as part this assessment and are discussed as data gaps in Section 8.4.

5.4.1 Aerial Photographs

ASTI reviewed available aerial photographs of the Subject Property area provided by EDR. Copies of the aerial photographs are included in Appendix 10.4. The aerial photographs are summarized as follows.

Year	Observations
1937	Subject Property: Multiple buildings are evident.
	North adjoining: Multiple buildings are evident.
	East adjoining: Multiple buildings are evident.
	South adjoining: A baseball field is evident.
	West adjoining: Multiple buildings are evident.
1949	Subject Property: The baseball field has expanded north onto the site. The onsite portion appears to be part of the stadium, but not the playing field itself.
	East adjoining: The baseball field has expanded onto the site.
	West adjoining: Some buildings have been removed and the areas are now used as surface parking lots.
	Other adjoining: No significant changes are identified.
1952	No significant changes are identified, except for building removal and redevelopment as surface parking lots for the baseball field.
1956	
1961	
1966	
1972	Subject Property: The last of the remaining developments has been removed from the north portion and the area is now exclusively used for surface parking. The baseball field remains on the south portion.
	North adjoining: The current freeway and service drive are evident.
	Other adjoining: No significant changes are identified.
1981	No significant changes are identified.
1983	
1997	Subject Property: The surface parking lot has been paved. The baseball field remains on the south portion.
1999	No significant changes are identified.

Year	Observations
2005	No significant changes are identified.
2009	Subject Property: The previous developments have been removed. The site is vacant.
	East adjoining: The previous developments have been removed. The site is vacant.
	South adjoining: The previous developments have been removed. The site is vacant.
	Other adjoining: No significant changes are identified.
2012	No significant changes are identified.
2016	Subject Property: Construction activities are evident. These include parked autos, equipment, and mobile offices.
	East adjoining: Construction activities are evident.
	South adjoining: Construction activities are evident.
	Other adjoining: No significant changes are identified.

5.4.2 Sanborn Maps

ASTI reviewed available Sanborn maps of the Subject Property area provided by EDR. Copies of the Sanborn maps are included in Appendix 10.4. The maps are summarized as follows.

Year	Observations
1884	Subject Property: Roadways, alleys, dwellings, and outbuildings are evident.
	North adjoining: Multiple dwellings are evident.
	East adjoining: Vacant land is evident.
	South adjoining: A lumber mill and hay storage are evident.
	West adjoining: Multiple dwellings are evident.
1897	Subject Property: There are additional residential buildings. One of the dwellings has a store as well.
	East adjoining: Multiple dwellings are evident.
	West adjoining: One of the dwellings appears to be a store as well.
	Other adjoining: No significant changes are identified.
1919	Subject Property: No significant changes are identified.
	South adjoining: Navin Field Base Ball Grounds for the American League is evident.
	Other adjoining: No significant changes are identified.
1921	Subject Property: No significant changes are identified.
	East adjoining: One of the residential developments has been converted to an office, chapel, and undertaker garage.
	Other adjoining: No significant changes are identified.
1950	Subject Property: The baseball field has been expanded north and has displaced many former developments. The onsite portion appears to be part of the stadium, but not the playing field itself. All that remains are a dwelling, outbuildings, and an alley/roadway along the northern boundary.

Year	Observations
1950	East adjoining: The baseball field has expanded north into the area.
	West adjoining: Fewer buildings are evident, including removal of the previous store, office, chapel, and undertaker garage. The areas appear to be surface parking lots.
	Other adjoining: No significant changes are identified.
1953	No significant changes are identified.
1957	Subject Property: No significant changes are identified.
	West adjoining: Surface parking lots have expanded.
	Other adjoining: No significant changes are identified.
1961	No significant changes are identified.
1977	Subject Property: The remaining buildings have been removed.
	North adjoining: The current freeway and service drive are evident.
	East adjoining: The remaining buildings have been removed.
	South adjoining: No significant changes are identified.
	West adjoining: The remaining building have been removed.
1988	No significant changes are identified.
1991	
1996	
2002	

5.4.3 City Directories

City directory research was conducted by EDR (Appendix 10.4). The table below summarizes non-residential use information about the Subject Property and adjoining sites. The bolded address numbers correspond to the Subject Property.

Cherry/Kaline: 1544-1620, **1556-1588** **National/Cochrane:** 2286-2343, **2300-2326** **High/W. Vernor:** 1543-1599 (odd)	
Year	**Observations**
1911	Subject Property: Grocery
	North adjoining: Undertaker
	South adjoining: Horseshoer
	West adjoining: Undertaker
1916	Subject Property: Grocery
	West adjoining: Undertaker (2301), garage (2309), grocery
1921	Subject Property: Grocery
	West adjoining: Undertaker, grocery
1926	No significant changes are identified.
1931	Subject Property: Grocery
	West adjoining: Undertaker
1935	No significant changes are identified.
1940	No relevant listings
1957	
1962	

Cherry/Kaline: 1544-1620, **1556-1588** **National/Cochrane:** 2286-2343, **2300-2326** **High/W. Vernor:** 1543-1599 (odd)	
Year	**Observations**
1967	No relevant listings
1972	
1977	
1982	
1987	
1992	
1995	
2000	
2005	
2010	
2014	
2017	

5.4.4 Title Search

A title search was not included in the scope of this Phase I ESA.

5.4.5 Prior Environmental Investigations

ASTI reviewed the previous environmental reports listed below. Select copies are included as an attachment to this report (Adobe's Attachment Panel/Sidebar).

- Phase II ESA – DRAFT, Tiger Stadium, 2121 Trumbull Avenue (A.K.A 1620 Michigan Avenue), Detroit, Michigan dated February 16, 2007
- Due Care Plan, Section 7A Compliance Analysis, Tiger Stadium Property, 2121 Trumbull Avenue, Detroit, Michigan, dated November 5, 2007
- Baseline Environmental Assessment, Detroit PAL – Parcels 1 and 2, 1620 Michigan Avenue, Detroit, Michigan dated July 18, 2016

Phase II ESA and BEA

Results from a previous Phase II ESA were used to complete the BEA. In the BEA, the Subject Property corresponds with Parcel 1.

The Phase II ESA consisted of completing a geophysical survey and 10 soil borings across the entire area of the former Tiger Stadium. The scope of work was developed in response to environmental concerns related to maintenance of a baseball field (i.e., fertilizer, herbicide, and/or pesticide applications), a former lumber yard, and a gas station.

Additionally, it addressed offsite environmental concerns related to gas stations, auto repair, car washing, cement and sewer pipe services, taxi cab service, and manufacturing.

No soil borings were completed on the Subject Property and the identified concerns were offsite and considerably distant in most cases.

The geophysical survey revealed one potential UST anomaly on the southeast portion of the broader Tiger Stadium site (± 450' distant). Investigations related to this area are discussed in Section 5.1 (Tiger Stadium Partners/BEA 2017). The area is not a likely source of a release at the Subject Property.

The soil borings in the Phase II ESA from 2007 were advanced from 14' to 20' bgs. Fill depth ranged from 1' to 6.5' bgs and was underlain by clay. Perched groundwater was encountered at 5 locations. Fill material disclosed by a Draft Geotechnical Report identified brick, asphalt, and concrete fragments in shallow fill and the absence of suspect fill was noted (e.g., slag, cinders, glass).

Collected samples were analyzed for VOCs, SVOCs, pesticides, and metals. Soil concentrations of arsenic, chromium, lead, mercury, and silver were identified above Part 201 GRCC at the time. Groundwater concentrations of arsenic barium, cadmium, chromium, lead, silver, and zinc were identified above Part 201 GRCC at the time.

The soil boring located nearest to the Subject Property was GP-10. Discontinuous groundwater was encountered around 7' or 8' bgs. The arsenic concentration in soil (4'-5') was 8,000 ppb. The lead concentration in soil (0'-2') was 140 ppm (total concentration), 220 ppm (fine fraction) and 120 ppm (coarse fraction). Both soil samples appear to have been collected from native clay. Multiple metals were detected in the groundwater above Part 201GRCC at the time. Mercury was non detect in groundwater and the deeper soil sample and it was not requested for analysis in the shallow soil sample. No VOCs or pesticides were identified in the samples.

The BEA in 2016 was filed based on the results of a Phase II ESA from 2007.

Due Care Plan

The applicable cleanup criteria were stated to be soil direct contact. The Due Care Plan

outlined necessary steps to manage the site in an unused and mothballed state with a long-term activity involving demolition of Tiger Stadium. This plan contains sampling results described above; however, their application regarding use is irrelevant given the proposed future use of the Subject Property for residential use.

5.4.6 Summary of Historical Uses on the Subject Property

Based on review of the obtained historical sources, the historic use(s) of the Subject Property is summarized as follows.

The Subject Property was developed with an alley, roadway, grocery store, dwellings, and residential outbuildings as early as 1884. The south portion was redeveloped with spectator and concession areas for Tiger Stadium in the 1940s. Developments on the north portion were redeveloped as surface parking lots in the 1950s and 1960s. Tiger Stadium was demolished in 2008 and 2009 but had been vacant since 1999. Since then, the Subject Property has only been used as a staging area for nearby construction activities.

5.5 Historical Use Information on Adjoining Properties

Based on review of the obtained historical sources, the historic uses of adjoining properties are summarized as follows.

Summary of Historic Uses of Adjoining Properties	
Direction	**Historical Use Summary**
North	The area was used for residential purposes and for parking until construction of the freeway in the 1960s.
East	The area was used for residential purposes until expansion of a baseball field in the 1940s. Some residential use continued until it was redeveloped as parking in the 1950s and 1960s. The baseball field was removed in 2008 and 2009 and the site has been redeveloped for residential use. Potential migration of release was considered as part of discussion in Section 5.1 (Tiger Stadium Partners/BEA 2017).
South	The area was used primarily has a lumber yard until it was redeveloped as a baseball field in 1912. Portions of the baseball fileld remain and other portions have been redeveloped for residential use. Potential migration of a release was considered as part of the discussion in Section 5.1 (Tiger Stadium Partners/BEA 2017).
West	The area was primarily used for residential purposes and surface parking lots. A grocer was presented in the 1910s and 1920s. An undertaker/funeral home was present from 1911 to 1935.

6.0 SITE RECONNAISSANCE

6.1 Methodology and Limiting Conditions

Assessor Name and Title	Mr. Anthony Spencer, EP
Date of Inspection	March 23, 2020
Weather Conditions	40º F and cloudy
Methodology	Inspected the Subject Property in a meander and search pattern, including all property boundaries, and adjoining properties from Subject Property and public access areas.
Access Limitations	Snow, storage, parked autos and equipment
Adverse Subject Property Conditions	None identified

6.2 General Site Settings

General Location	A Site Location Map is provided in Appendix 10.1.
City/Township, County, State Zip Code	City of Detroit, Wayne County, State of Michigan, 48216
Acreage	1.367
Local Development Utilization	Baseball field, parking lots, residential

6.3 Exterior Observations

The following table summarizes the site exterior observations. Items observed are discussed further following the table.

Category	Item	Item Observed
Above Ground Hazardous Substances and Petroleum Products	Drums, barrels or containers ≥5 gallons in connection with identified uses	No
	Drums, barrels or containers ≥5 gallons not in connection with identified uses	No
	Unidentified Substance Containers	No
	ASTs	No
Underground Hazardous Substances and Petroleum Products	USTs (fill ports and/or vent pipes)	No
	Fuel dispensers	No
	Natural gas or petroleum pipelines/wells	No
Basic & Specialized Systems (Electrical, Hydraulic, Refrigeration, & PCBs)	Pole-mounted transformers	No
	Pad-mounted transformers	No
	Capacitors	No
	Hydraulic equipment	No
	Emergency generator	No

Category	Item	Item Observed
	High-power transmission lines (EMF)	No
Indications of Releases or Potential Releases	Stained soil or pavement	No
	Stressed vegetation	No
	Pools of liquid	No
	Strong or pungent odors	No
	Filled Land	No
	Unregulated/Unauthorized Waste Disposal	Yes
Drainage & Waste Collection Systems	Pits	No
	Ponds	No
	Lagoons	No
	Sumps	No
	Storm water collection basins	No
	Monitor wells	No
	Dry wells/crocks	No
	Oil-water separators	No
	Regulated/Authorized Waste Removal (Dumpsters)	No
Other Notable Items	None identified	N/A

Items noted as not observed do not fully warrant that these items are not present on the Subject Property as some items may not have been readily observable.

Indications of Releases or Potential Releases

A soil pile was identified on the southwest portion of the site. It was estimated to be about 10 yards in size. The soil pile was partly vegetated and contained some brick debris. The soil pile was likely placed during redevelopment of the former baseball field, which includes the Subject Property. The soil piles may contain soil that has been impacted in a manner that is consistent with the filed BEA discussed in Section 5.3.4.

Construction material is being stored on the east portion of the Subject Property. Amongst the material was a pile of asphalt that was estimated to be 3 yards in size.

6.4 Interior Observations

The are no interior areas; therefore, interior observations do not apply.

7.0 INTERVIEWS

7.1 Interview with Owner

A completed Owner Questionnaire is included in Appendix 10.6. The respondent has been associated with the Subject Property since September 7, 2017. The previous environmental reports discussed in Section 5.4.5 were provided by the Owner. Based on the responses, the owner is otherwise unaware of potential environmental concern.

7.2 Interview with Key Site Manager

Refer to Section 7.1.

7.3 Interview with Occupants

Occupants were not interviewed during this investigation.

7.4 Interviews with Local Government Officials

Conversations with local government officials were limited to requesting records.

7.5 Interviews with Others

No others were interviewed as part of this assessment.

8.0 EVALUATION

8.1 Findings

Subject Property

Uses

The Subject Property was developed with an alley, roadway, grocery store, dwellings, and residential outbuildings as early as 1884. The south portion was redeveloped with spectator and concession areas for Tiger Stadium in the 1940s. Developments on the north portion were redeveloped as surface parking lots in the 1950s and 1960s. Tiger Stadium was demolished in 2008 and 2009 but had been vacant since 1999. Since then, the Subject Property has only been used as a staging area for nearby construction activities.

Based on reviewed information, ASTI has not identified evidence of underground or aboveground storage tanks at the Subject Property.

Subject Property

Previous Environmental Reports

ASTI reviewed the previous environmental reports listed below. Select copies are included as an attachment to this report (Adobe's Attachment Panel/Sidebar).

- Phase II ESA – DRAFT, Tiger Stadium, 2121 Trumbull Avenue (A.K.A 1620 Michigan Avenue), Detroit, Michigan dated February 16, 2007
- Due Care Plan, Section 7A Compliance Analysis, Tiger Stadium Property, 2121 Trumbull Avenue, Detroit, Michigan, dated November 5, 2007
- Baseline Environmental Assessment, Detroit PAL – Parcels 1 and 2, 1620 Michigan Avenue, Detroit, Michigan dated July 18, 2016

Phase II ESA and BEA

Results from a previous Phase II ESA were used to complete the BEA. In the BEA, the Subject Property corresponds with Parcel 1.

The Phase II ESA consisted of completing a geophysical survey and 10 soil borings across the entire area of the former Tiger Stadium. The scope of work was developed in response to environmental concerns related to maintenance of a baseball field (i.e., fertilizer, herbicide, and/or pesticide applications), a former lumber yard, and a gas station.

Additionally, it addressed offsite environmental concerns related to gas stations, auto repair, car washing, cement and sewer pipe services, taxi cab service, and manufacturing.

No soil borings were completed on the Subject Property and the identified concerns were offsite and considerably distant in most cases.

The geophysical survey revealed one potential UST anomaly on the southeast portion of the broader Tiger Stadium site (± 450' distant). Investigations related to this area are discussed in Section 5.1 (Tiger Stadium Partners/BEA 2017). The area is not a likely source of a release at the Subject Property.

The soil borings in the Phase II ESA from 2007 were advanced from 14' to 20' bgs. Fill depth ranged from 1' to 6.5' bgs and was underlain by clay. Perched groundwater was encountered at 5 locations. Fill material disclosed by a Draft Geotechnical Report identified brick, asphalt, and concrete fragments in shallow fill and the absence of suspect fill was noted (e.g., slag, cinders, glass).

Collected samples were analyzed for VOCs, SVOCs, pesticides, and metals. Soil concentrations of arsenic, chromium, lead, mercury, and silver were identified above Part 201 GRCC at the time. Groundwater concentrations of arsenic barium, cadmium, chromium, lead, silver, and zinc were identified above Part 201 GRCC at the time.

The soil boring located nearest to the Subject Property was GP-10. Discontinuous groundwater was encountered around 7' or 8' bgs. The arsenic concentration in soil (4'-5') was 8,000 ppb. The lead concentration in soil (0'-2') was 140 ppm (total concentration), 220 ppm (fine fraction) and 120 ppm (coarse fraction). Both soil samples appear to have been collected from native clay. Multiple metals were detected in the groundwater above Part 201GRCC at the time. Mercury was non detect in groundwater and the deeper soil sample and it was not requested for analysis in the shallow soil sample. No VOCs or pesticides were identified in the samples.

The BEA in 2016 was filed based on the results of a Phase II ESA from 2007.

Due Care Plan

The applicable cleanup criteria were stated to be soil direct contact. The Due Care Plan

outlined necessary steps to manage the site in an unused and mothballed state with a long-term activity involving demolition of Tiger Stadium. This plan contains sampling results described above; however, their application regarding use is irrelevant given the proposed future use of the Subject Property for residential use.

8.2 Opinion

Based on the site inspection, interviews, regulatory and municipal records review, and review of historical documentation, the following is opined by the EP.

- The EP did not identify any de minimis conditions associated with the Subject Property.
- The EP did not identify any HRECs associated with the Subject Property.
- The EP did not identify any CRECs associated with the Subject Property.
- The EP did not identify any RECs associated with the Subject Property, except for the following.
    - Per the findings of the Baseline Environmental Assessment, dated July 18, 2016, the Subject Property is a "facility" as defined in Part 201 of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as Amended (Part 201). The basis of the BEA is concentrations of metals above Part 201 GRCC and the primary exposure pathway is direct contact.

      Results at the Subject Property may vary since the associated Phase II ESA, dated February 16, 2007, did not include sampling locations on the Subject Property. The concern appears to be fill material based on the information reviewed. One pile of apparent fill material (soil with intermixed brick debris) is located on the southwest portion of the Subject Property and it appears to have been placed there during offsite construction activities.

8.3 Additional Investigation

No additional investigation is recommended, except for those listed below.

- ASTI recommends further investigation to determine if the Subject Property is impacted like the other areas in the footprint of the former Tiger Stadium.

- ASTI recommends noise mitigation based on the results of the Noise Assessment discussed in Section 9.8.

8.4 Data Gaps

Data gaps occur when the EP is unable to obtain information required despite a *good faith* effort.

Data failure is one type of data gap. According to ASTM Practice E1527-13, data failure occurs when all of the standard historical sources that are *reasonably ascertainable* and likely to be useful have been reviewed and yet the objectives have not been met. Historical sources are required to document property use back to the Subject Property's first developed use or back to 1940, whichever is earlier. A data failure occurred and is described below.

Data Gap	ASTI was unable to determine the first date of development despite a review of reasonably ascertainable standard historical sources.
Is this a significant data gap?	No
Rationale	The earliest known use is residential with a grocery store. It is likely that the site was undeveloped or farmland prior to the earliest known uses.

No additional data gaps were encountered during this investigation, except for those listed below.

Data Gap	ASTI was unable to review potential Health Department records.
Is this a significant data gap?	No
Rationale	Potential records from the Wayne County Department of Public Services are not likely to yield new information.

Data Gap	ASTI was unable to review potential Building Department records.
Is this a significant data gap?	No
Rationale	Potential Building Department records may provide additional information about developments on the Subject Property prior to their removal in the 1940s, 1950s, and 1960s. Information about potential basements and heating fuel systems may be included in these records. Given the nature of the REC identified by this Phase I ESA, enough information has been reviewed to determine the likelihood of a release.

Data Gap	ASTI was unable to review potential Fire Department records.	
Is this a significant data gap?		No
Rationale	Potential records from the Detroit Fire Department are not likely to yield significant information for residential lots and a small grocery store that were demolished in the 1940s, 1950s, and 1960s.	

8.5 Conclusions

We have performed a Phase I ESA in accordance with the scope and limitations of ASTM Practice E1527-13 of a site located at 2610 Cochrane Street in Detroit, Wayne County, Michigan, the Subject Property. Any exceptions to, or deletions from, this practice are described in Section 5.4 of this report. This assessment has revealed no recognized environmental conditions in connection with the Subject Property, except for the following.

- Per the findings of the Baseline Environmental Assessment, dated July 18, 2016, the Subject Property is a "facility" as defined in Part 201 of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as Amended (Part 201). The basis of the BEA is concentrations of metals above Part 201 GRCC and the primary exposure pathway is direct contact.

  Results at the Subject Property may vary since the associated Phase II ESA, dated February 16, 2007, did not include sampling locations on the Subject Property. The concern appears to be fill material based on the information reviewed. One pile of apparent fill material (soil with intermixed brick debris) is located on the southwest portion of the Subject Property and it appears to have been placed there during offsite construction activities.

8.6 Additional Services

No additional services were performed, except for the Noise Assessment discussed in Section 9.8.

8.7 Deviations

No deletions, deviations, or additions to E1527-13 have occurred during this assessment, except for MSHDA Environmental Review Requirements for 2020.

8.8 References

The following references were used in preparing this Phase I ESA.

- Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E1527-13
- Michigan State Housing Development Authority Environmental Review Requirements for 2020
- Standard Guide for Vapor Encroachment Screening on Subject Property Involved in Real Estate Transactions: ASTM E2600-15
- The EDR Radius Map Report with GeoCheck
- The EDR Aerial Photo Decade Package
- EDR Certified Sanborn Map Report
- The EDR-City Directory Image Report
- Phase II ESA – DRAFT, Tiger Stadium, 2121 Trumbull Avenue (A.K.A 1620 Michigan Avenue), Detroit, Michigan dated February 16, 2007
- Due Care Plan, Section 7A Compliance Analysis, Tiger Stadium Property, 2121 Trumbull Avenue, Detroit, Michigan, dated November 5, 2007
- Baseline Environmental Assessment, Detroit PAL – Parcels 1 and 2, 1620 Michigan Avenue, Detroit, Michigan dated July 18, 2016
- User Questionnaire
- Owner Questionnaire
- Detroit Assessing Department
- Wayne County Department of Public Services
- Detroit Building Safety Engineering & Environmental Department
- Detroit Fire Department
- EGLE Perfected Environmental Liens List
- http://www.deq.state.mi.us/GeoWebFace/
- FEMA;
- U.S. Fish and Wildlife Service NWI;
- NPMS;
- Noise Assessment; and
- Assessment of Acceptable Separation Distance

8.9 Signature(s) of Environmental Professional

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in 312.10 of 40 CFR 312.

I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.



Anthony Spencer, EP
Associate III

8.10 Qualification(s) of Environmental Professional(s)

Mr. Anthony Spencer has been conducting Phase I Environmental Site Assessments for ASTI Environmental for over 8 years and has a bachelor's degree in environmental science from Wayne State University.

9.0 NON-SCOPE SERVICES DISCUSSION

9.1 Asbestos-Containing Materials (ACMs)

There are no buildings on the Subject Property.

9.2 Lead-Based Paint (LBP)

There are no buildings on the Subject Property.

9.3 Radon Gas

Wayne County is not a MSHDA radon mitigation county. Wayne County is located within EPA Radon Zone 3.

9.4 100-Year Floodplain

The Subject Property is not located within a flood hazard zone per FEMA Panel 26163CO280E dated February 2, 2012 (Appendix 10.7).

9.5 Wetlands

A wetland delineation was not included in the scope of this Phase I ESA. No obvious wetland features were observed on the Subject Property parcel. ASTI obtained a National Wetlands Inventory map from the U.S. Fish and Wildlife Service (Appendix 10.7). No NWI wetlands were identified.

9.6 EMF

No EMF lines were observed near the Subject Property.

No cell towers or roof top phone towers, antennas, or arrays were observed.

9.7 High Pressure Buried Gas Lines

The Subject Property is not believed to be located within 1,000 feet of buried high-pressure gas transmission lines. A National Pipeline Mapping System map is included in Appendix 10.7.

9.8 Noise Analysis

ASTI completed a Noise Assessment dated March 26, 2020 (Appendix 10.7). The combined source day-night average sound level (DNL) was calculated at three different

locations based on site layout contributing noise sources. The DNL was determined to be 71.1, 74.2 and 75.7 dB, which were categorized as normally unacceptable and unacceptable.

9.9 Assessment of Potential Vapor Encroachment Conditions, ASTM E 2600-15

The purpose of Tier 1 and Tier 2 Non-Invasive screening is to conduct an initial screen to determine if a vapor encroachment condition (VEC) exists in connection with the Subject Property. The vapor encroachment screen (VES) is conducted in accordance with ASTM E 2600-15.

Screening tests: 1) search distance test to determine if there are any known or suspected contaminated properties in the area of concern (AOC) 2) a chemicals of concern (COC) test to determine for those known or suspect contaminated properties within the AOC whether or not COC are likely to be present. The critical distance is defined as the lineal distance in any direction between the nearest edge of the contaminated plume and the nearest property boundary. For contaminated properties downgradient of the Subject Property the AOC is reduced to the area within the critical distance.

- Critical distance = 30 feet for dissolved petroleum hydrocarbon COC
- Critical distance = 100 feet for COC and petroleum hydrocarbon COC @ LNAPL

The following sites were identified for discussion by the EP in the primary area of concern, which is $^{1}/_{3}$ mile (1,742 feet) for Chemicals of Concern (COC) and $^{1}/_{10}$ mile (528 feet) for petroleum hydrocarbon COC.

The fill material discussed as a REC in Section 8.5 has low potential to result in a VEC. Assessment of the fill can be used to determine the potential for vapor intrusion. No other potential VECs were identified.

The screening process concludes that a VEC cannot be ruled out.

9.10 Assessment of Acceptable Separation Distance

Review of AST licensing information revealed 15 ASTs located within 1-mile of the Subject Property. Some of the listed ASTs were listed as being inactive. The rest are summarized below.

No.	Tank Size (Gallon)	Other Tank Information	Content	Distance (Feet)	ASD
1	8,000	None	Diesel	1,354	Acceptable
2	10,000	None	Unknown	2,119	Acceptable
3	8,000	None	Diesel	2,689	Acceptable
4	6,500	None	Diesel	2,803	Acceptable
5	2,100	None	Diesel	2,943	Acceptable
6	13,500	None	Unknown	2,982	Acceptable
7	6,000	None	Diesel	3,120	Acceptable
8	1,650	None	Diesel	3,246	Acceptable
9	7,000	None	Diesel	3,707	Acceptable
10	4,000	None	Diesel	3,805	Acceptable
11	4,000	None	Diesel	4,947	Acceptable

The largest size diesel tank is 8,000 gallons and the ASD is ± 660' for people and ± 132' for buildings. All the above referenced diesel tanks are located at greater distance; therefore, they have acceptable ASD.

Contents of some tanks have unknown content. Different scenarios were considered to determine the highest potential for a threat to the Subject Property. The largest sized unknown tank is 13,500 gallons and the ASD is ± 818' for people and ± 168' for buildings. All the above referenced unknown tanks are located at a greater distance; therefore, they have acceptable ASD.

The Subject Property is located at an Acceptable Separation Distance (ASD) from any above-ground explosive or flammable fuels or chemicals containers according to 24 CFR 51C.

9.11 Adjoining or Close Proximity Industrial Uses

There are no active or former adjoining or close proximity industrial sites. Therefore, no separate summary document has been prepared.

10.0 APPENDICES

10.1 Site Location Map/USGS 7.5 min. Topographic Map

10.2 Site Features Map and Site Development Plans

10.3 Site Photographs

10.4 Historical Research Documentation: Aerial Photographs, Certified Sanborn Map Report, and City Directory Summary

10.5 Regulatory Records Documentation: The EDR Radius Map Report with GeoCheck, EGLE Records, Health Department FOIA Request, Assessing Department Records, Detroit Fire Department Request, and EGLE Perfected Environmental Liens

10.6 Interview Documentation: MSHDA User's Questionnaire, Owner's Questionnaire, and Title Commitment

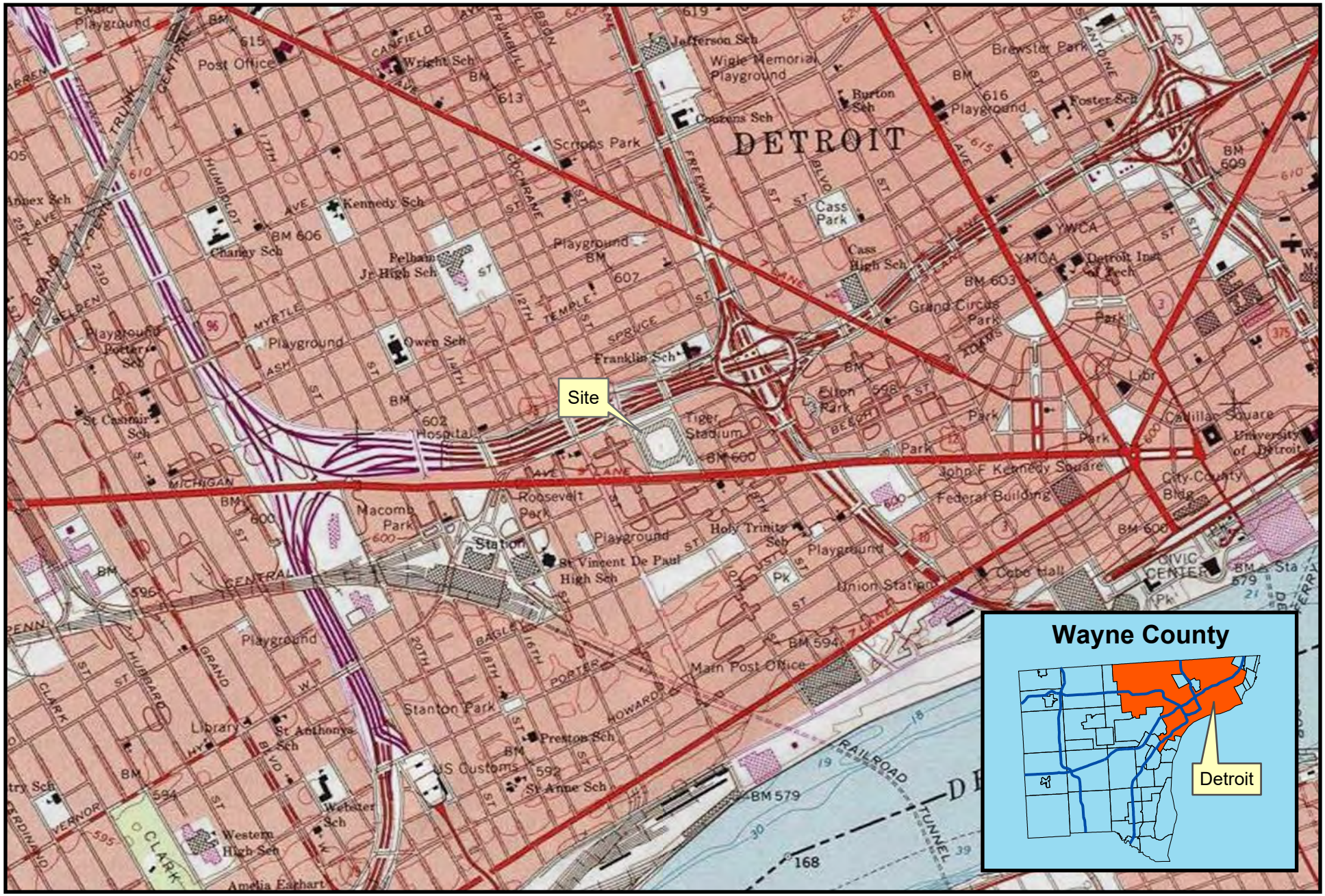
10.7 Special Contractual Conditions Between User and Environmental Professional: FEMA Map, NWI Map, NPMS Map, Noise Assessment, and Acceptable Seperatoin Distance Calculations

10.8 Qualifications of the Environmental Professional(s)

10.9 MSHDA Phase I Letter of Reliance

10.10 Copy of Environmental Professional Insurance Certificate

10.1 Site Location Map/USGS 7.5 min. Topographic Map



Left Field

2610 Cochrane,
Detroit, MI

2,000 1,000 0 2,000 Feet

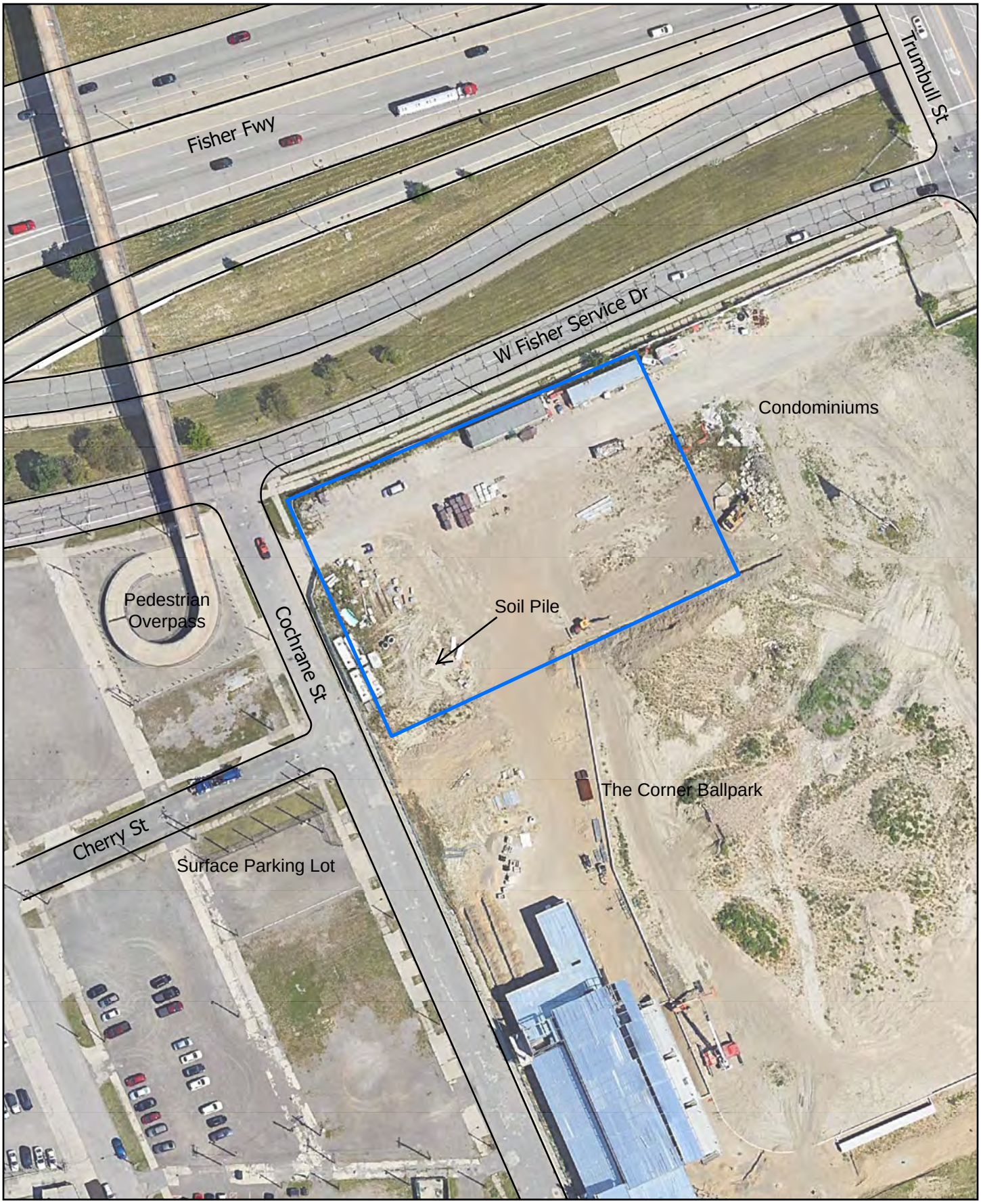
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ASTI Environmental

Created for: American Community Developers
Created by: RMH, March 10 2020, ASTI Project 11456

Site Location Map

10.2 Site Features Map and Site Development Plans



Service Layer Credits:

Left Field

2610 Cochrane,
Detroit, MI

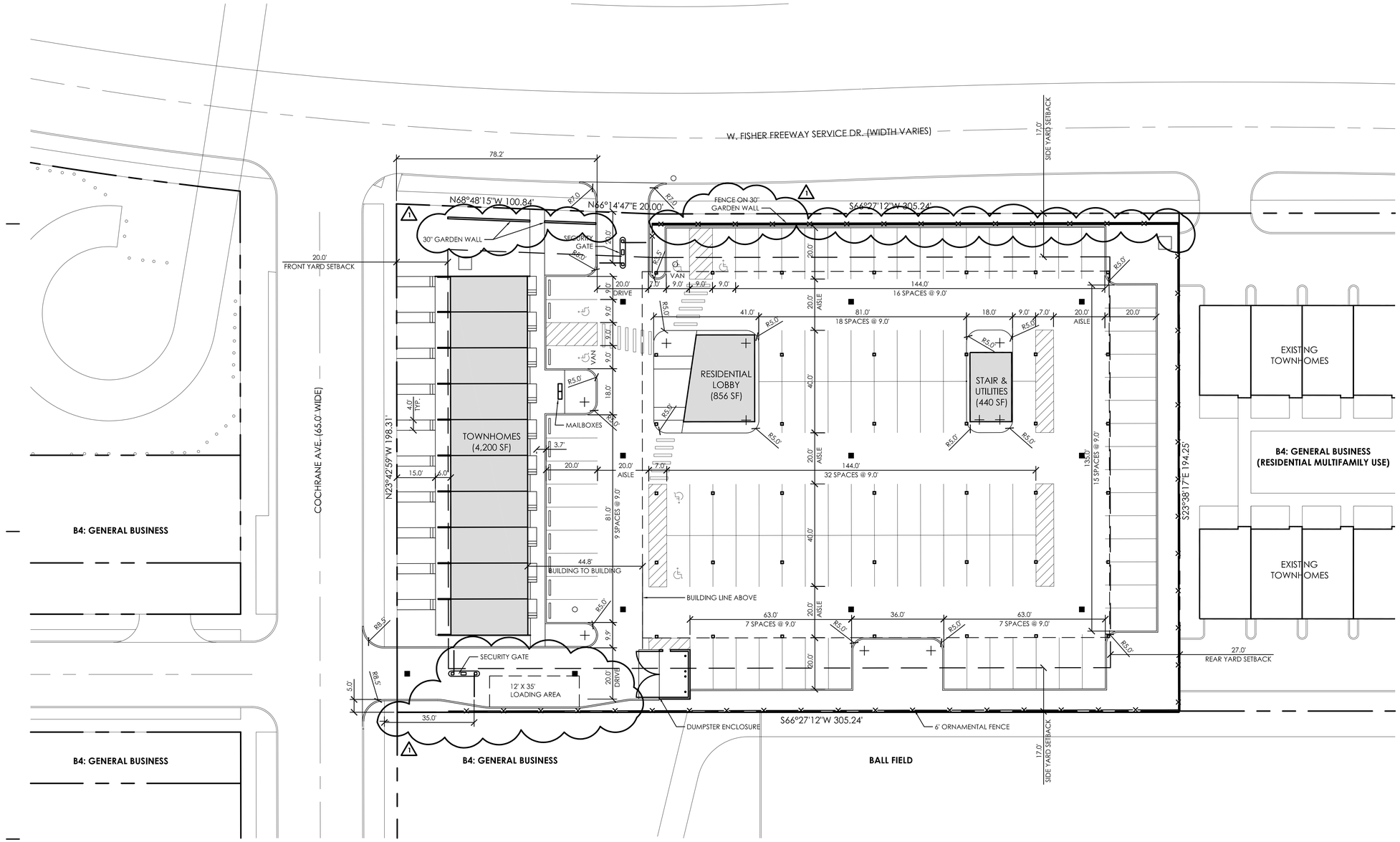
0 37.5 75 150 Feet

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ASTI Environmental

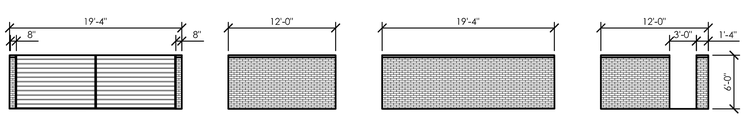
Client: American Community Developers
Created by: RMH, March 10, 2020, ASTI Project 11456

Site Features Map



SITE PLAN
SCALE: 1" = 20'

0' 5' 20' 50' 100'



DUMPSTER ENCLOSURE ELEVATIONS
SCALE: 1/8" = 1'-0"

designwerkz architecture

AMERICAN COMMUNITY DEVELOPERS, INC.
20250 HARPER AVE.
HARPER WOODS, MI 48225

DESIGNWERKS ARCHITECTURE, LLC
1310 E. SHERWOOD RD.
WILLIAMSTON, MI 48895
PH: (517) 388 - 2161
DESIGNWERKS.ARCHITECTURE@GMAIL.COM

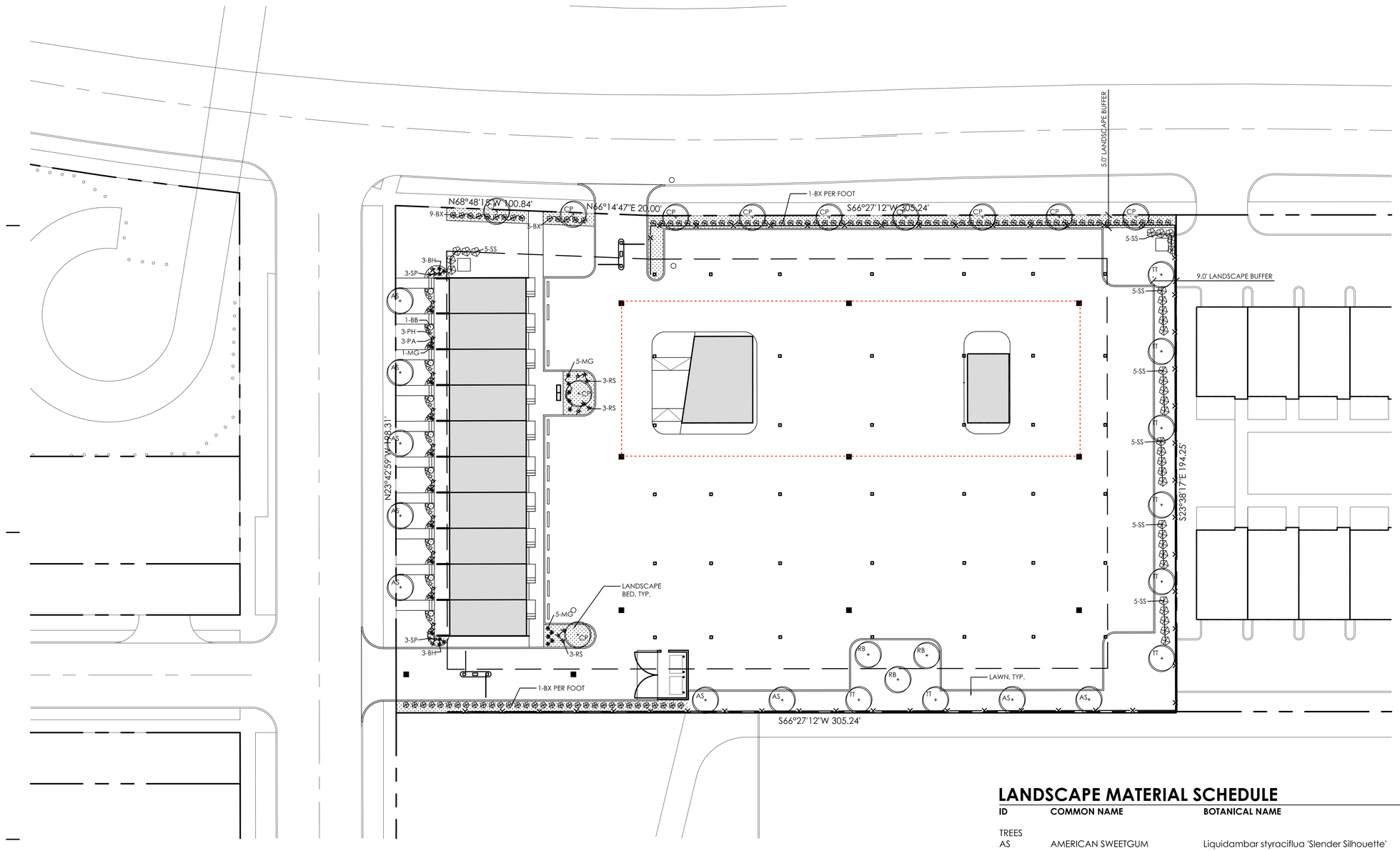
REVISIONS	
1 SITE PLAN REVIEW COMMENTS	3-12-20

ISSUED: SITE PLAN APPROVAL ONLY

C101 SITE PLAN

LEFT FIELD
2610 COCHRANE ST.
DETROIT, MI 48216

3/3/2020



0' 5' 20' 50' 100'

LANDSCAPE PLAN
SCALE: 1" = 20'

LANDSCAPE MATERIAL SCHEDULE

ID	COMMON NAME	BOTANICAL NAME	QTY	SIZE
TREES				
AS	AMERICAN SWEETGUM	Liquidambar styraciflua 'Slender Silhouette'		2"
CP	CALLERY PEAR	Pyrus c. 'Cleveland'		2"
RB	RIVER BIRCH	Betula nigra 'Heritage'		2" BB
SS	SMOOTH SERVICEBERRY	Amelanchier laevis		6' BB
TT	TULIP TREE	Liriodendron tulipifera		2"
SHRUBS				
BX	BOXWOOD, HYBRID	Buxus x 'Green Gem'		15"
SP	BUMALD SPIREA	Spiraea b. 'Magic Carpet'		#3
PERENNIALS				
BB	BLUEBEARD	Caryopteris x 'Dark Knight'		#3
BH	BLEEDING HEART	Dicentra luxuriant		#1
PA	PINK ANEMONE	Anemone pamina		#1
PH	WHITE CREEPING PHLOX	Phlox subulata white		#1.5
RS	RUSSIAN SAGE	Perovskia atrip 'Bue Steel'		#1
GRASSES				
MG	MAIDEN GRASS	Miscanthus gracillimus		#1

APPROVED
ePLAN
PLAN REVIEW
Buildings, Safety Engineering & Environmental Department
Date: 03/25/20
Permit Number: SPR2020-00014

designwerkr architecture

AMERICAN COMMUNITY DEVELOPERS, INC.
20250 HARPER AVE.
HARPER WOODS, MI 48225

DESIGNWERKS ARCHITECTURE, LLC
1310 E. SHERWOOD RD.
WILLIAMSTON, MI 48895
PH: (517) 388 - 2161
DESIGNWERKS.ARCHITECTURE@GMAIL.COM

ISSUED: SITE PLAN APPROVAL ONLY

STATE OF MICHIGAN
PAUL WEBER
ARCHITECT
NO. 1301057848
LICENSED ARCHITECT
03/05/2020 12:28:58 PM

C102 LANDSCAPE PLAN

LEFT FIELD
2610 COCHRANE ST.
DETROIT, MI 48216

3/3/2020

10.3 Site Photographs

PHOTO LOG

2610 Cochrane, Detroit, Michigan

	**Photo 1.** The west portion of the Subject Property, facing southwest
	**Photo 2.** The west portion, facing north
	**Photo 3.** The soil pile located on the southwest portion

ASTI Project No. 11456
March 23, 2020
Photographed By Anthony Spencer

PHOTO LOG

2610 Cochrane, Detroit, Michigan

	**Photo 4.** The east portion, facing west
	**Photo 5.** The east portion, facing north
	**Photo 6.** The north adjoining site

ASTI Project No. 11456
March 23, 2020
Photographed By Anthony Spencer

PHOTO LOG

2610 Cochrane, Detroit, Michigan

	**Photo 7.** The east adjoining site
	**Photo 8.** The south adjoining site
	**Photo 9.** The west adjoining area

ASTI Project No. 11456
March 23, 2020
Photographed By Anthony Spencer

10.4 Historical Research Documentation: Aerial Photographs, Certified Sanborn Maps, and City Directory Summary

2610 Cochrane

2610 Cochrane

Detroit, MI 48216

Inquiry Number: 6000902.8

March 09, 2020

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

03/09/20

Site Name:

2610 Cochrane
2610 Cochrane
Detroit, MI 48216
EDR Inquiry # 6000902.8

Client Name:

Applied Science & Technology
10448 Citation Drive
Brighton, MI 48116
Contact: Laura Gray

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Search Results:

Year	Scale	Details	Source
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1999	1"=500'	Acquisition Date: March 28, 1999	USGS/DOQQ
1997	1"=500'	Flight Date: April 26, 1997	DTE
1983	1"=500'	Flight Date: May 10, 1983	USDA
1981	1"=500'	Flight Date: October 17, 1981	DTE
1972	1"=500'	Flight Date: July 01, 1972	USDA
1966	1"=500'	Flight Date: November 21, 1966	USGS
1961	1"=500'	Flight Date: May 30, 1961	DTE
1956	1"=500'	Flight Date: April 13, 1956	DTE
1952	1"=500'	Flight Date: April 26, 1952	DTE
1949	1"=500'	Flight Date: April 28, 1949	DTE
1937	1"=500'	Flight Date: July 23, 1937	USDA

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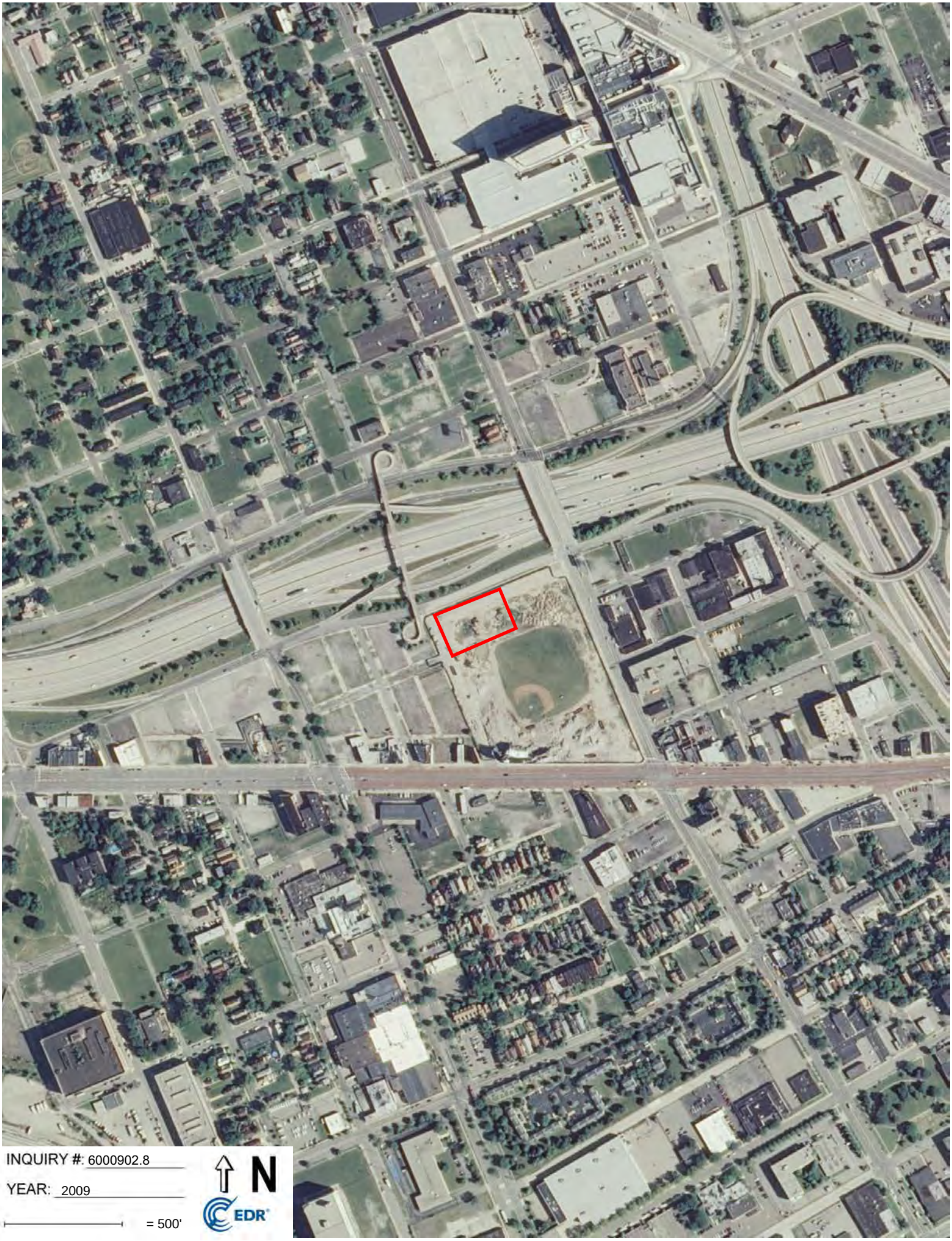
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EDR


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EDR


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EDR

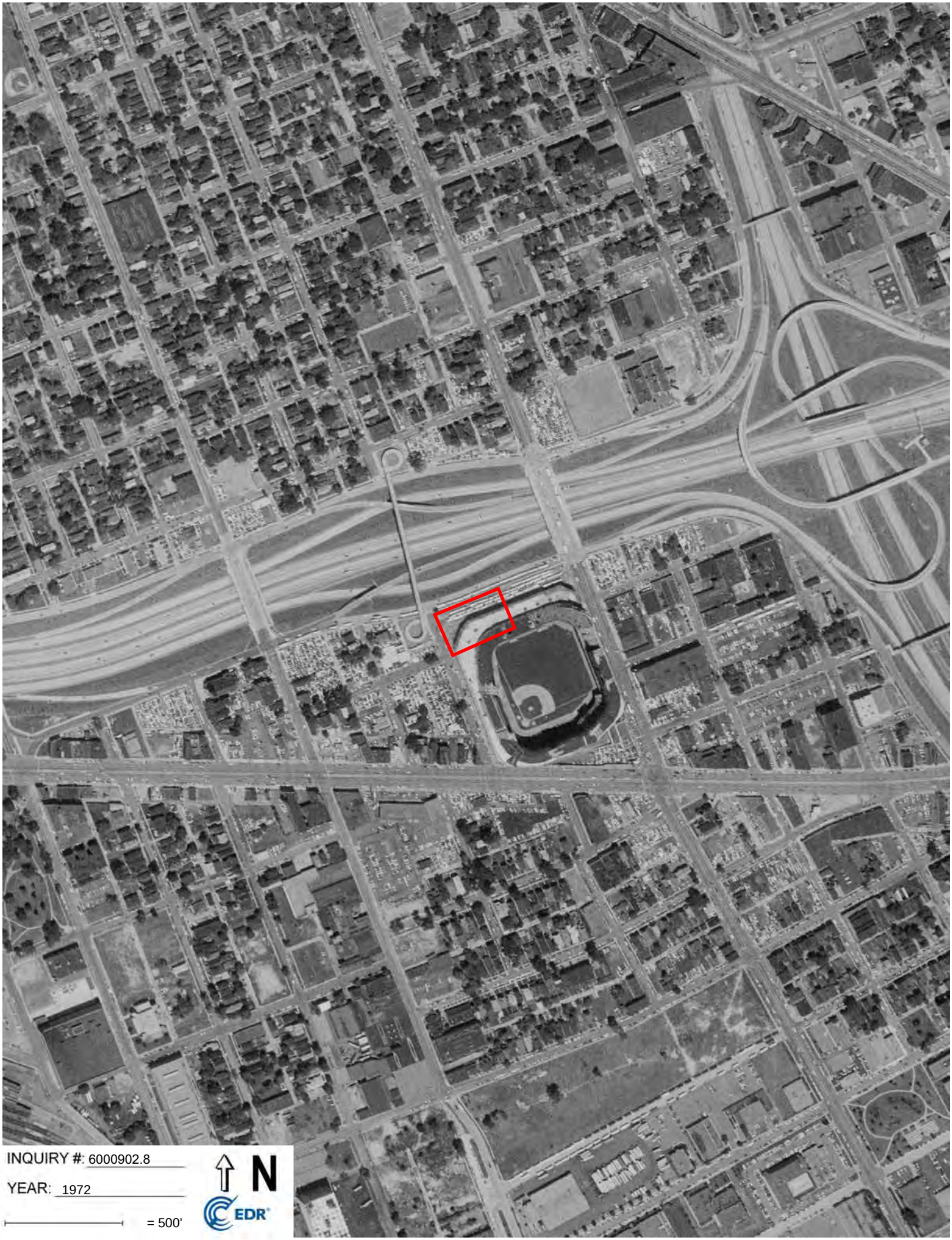

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EDR


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EDR


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YEAR: 1981
= 500'
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EDR



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YEAR: 1972

= 500'

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EDR


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EDR


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EDR


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EDR


INQUIRY #: 6000902.8
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= 500'
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EDR


INQUIRY #: 6000902.8
YEAR: 1937
= 500'
N
EDR

2610 Cochrane

2610 Cochrane

Detroit, MI 48216

Inquiry Number: 6000902.3

March 09, 2020

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

03/09/20

Site Name:

2610 Cochrane
2610 Cochrane
Detroit, MI 48216
EDR Inquiry # 6000902.3

Client Name:

Applied Science & Technology
10448 Citation Drive
Brighton, MI 48116
Contact: Laura Gray

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The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # C6EB-4238-95AB

PO # NA

Project 11456

Maps Provided:

2002	1950
1996	1921
1991	1919
1988	1897
1977	1884
1961	
1957	
1953	

Sanborn® Library search results

Certification #: C6EB-4238-95AB

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- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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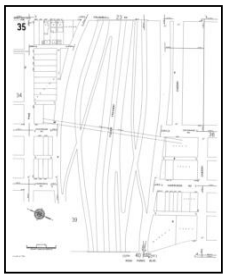
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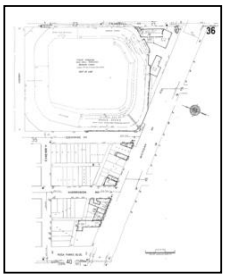
Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

2002 Source Sheets

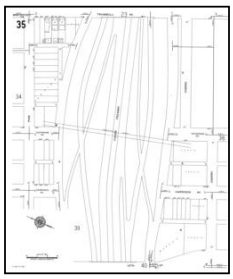


Volume 2, Sheet 35
2002

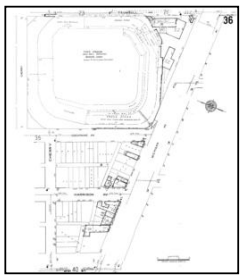


Volume 2, Sheet 36
2002

1996 Source Sheets

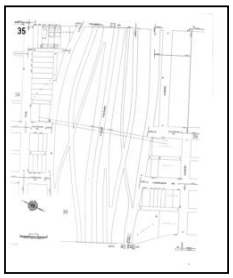


Volume 2, Sheet 35
1996

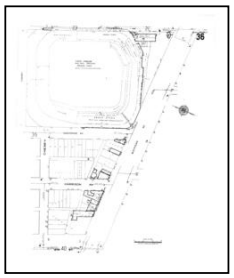


Volume 2, Sheet 36
1996

1991 Source Sheets

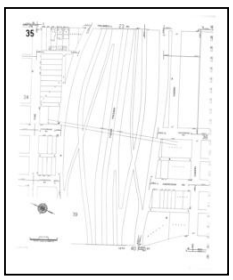


Volume 2, Sheet 35
1991



Volume 2, Sheet 36
1991

1988 Source Sheets



Volume 2, Sheet 35
1988

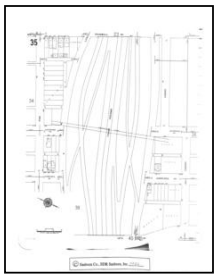


Volume 2, Sheet 36
1988

Sanborn Sheet Key

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1977 Source Sheets

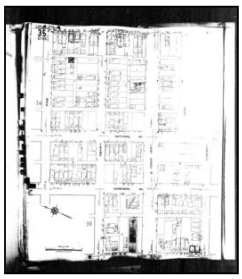


Volume 2, Sheet 35
1977

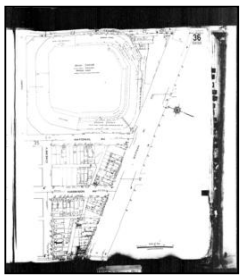


Volume 2, Sheet 36
1977

1961 Source Sheets

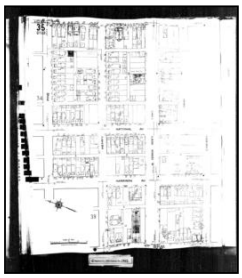


Volume 2, Sheet 35
1961



Volume 2, Sheet 36
1961

1957 Source Sheets

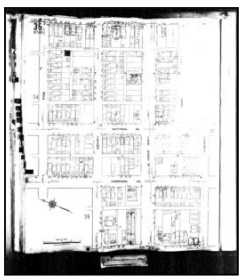


Volume 2, Sheet 35
1957

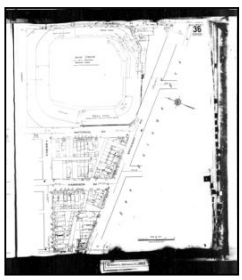


Volume 2, Sheet 36
1957

1953 Source Sheets



Volume 2, Sheet 35
1953

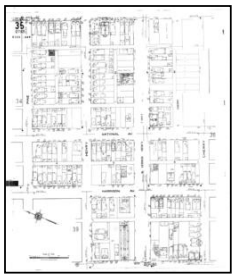


Volume 2, Sheet 36
1953

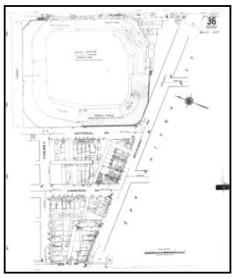
Sanborn Sheet Key

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1950 Source Sheets



Volume 2, Sheet 35
1950

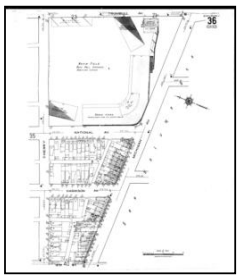


Volume 2, Sheet 36
1950

1921 Source Sheets



Volume 2, Sheet 35
1921



Volume 2, Sheet 36
1921

1919 Source Sheets



Volume 2, Sheet 27
1919



Volume 2, Sheet 28
1919

1897 Source Sheets



Volume 2, Sheet 27
1897



Volume 2, Sheet 28
1897

Sanborn Sheet Key

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1884 Source Sheets



Volume 1, Sheet 16
1884

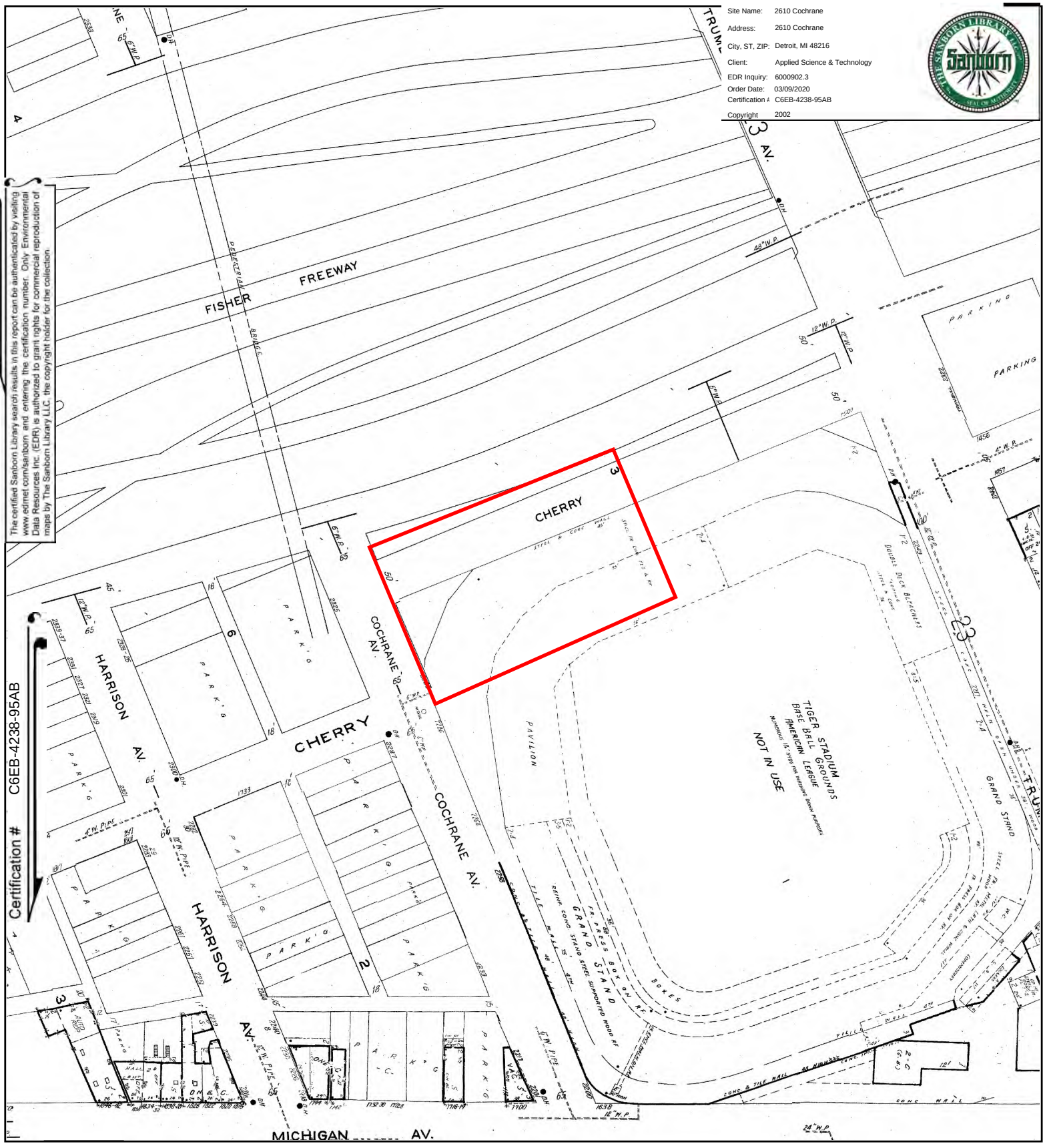


Volume 1, Sheet 17
1884

Certified Sanborn® Map

2002

Site Name: 2610 Cochrane
Address: 2610 Cochrane
City, ST, ZIP: Detroit, MI 48216
Client: Applied Science & Technology
EDR Inquiry: 6000902.3
Order Date: 03/09/2020
Certification #: C6EB-4238-95AB
Copyright 2002



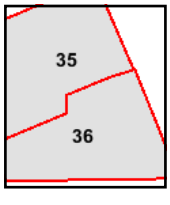
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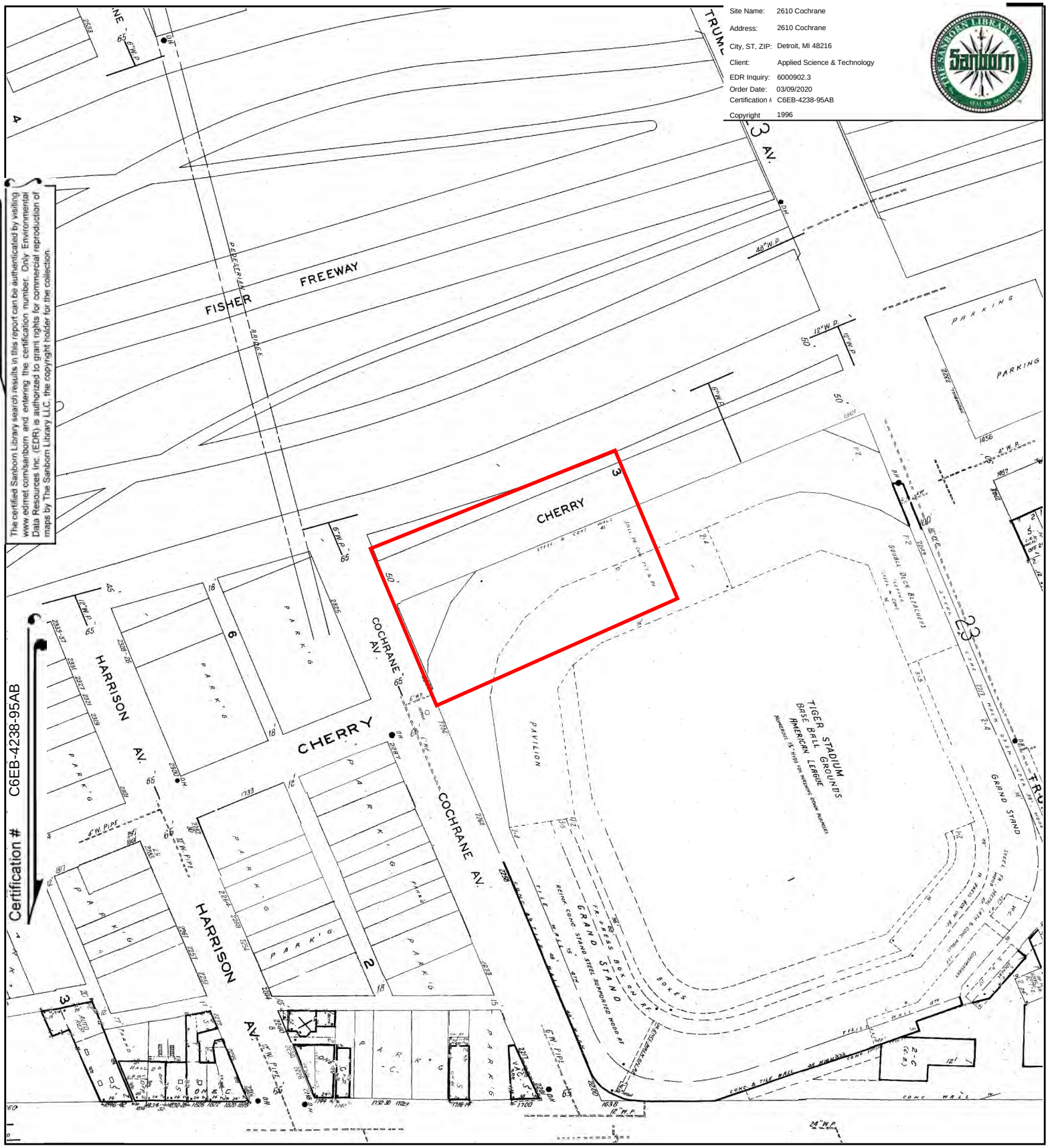
Volume 2, Sheet 36
Volume 2, Sheet 35

N

Site Name: 2610 Cochrane
Address: 2610 Cochrane
City, ST, ZIP: Detroit, MI 48216
Client: Applied Science & Technology
EDR Inquiry: 6000902.3
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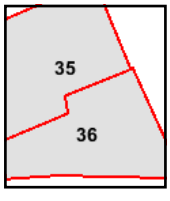
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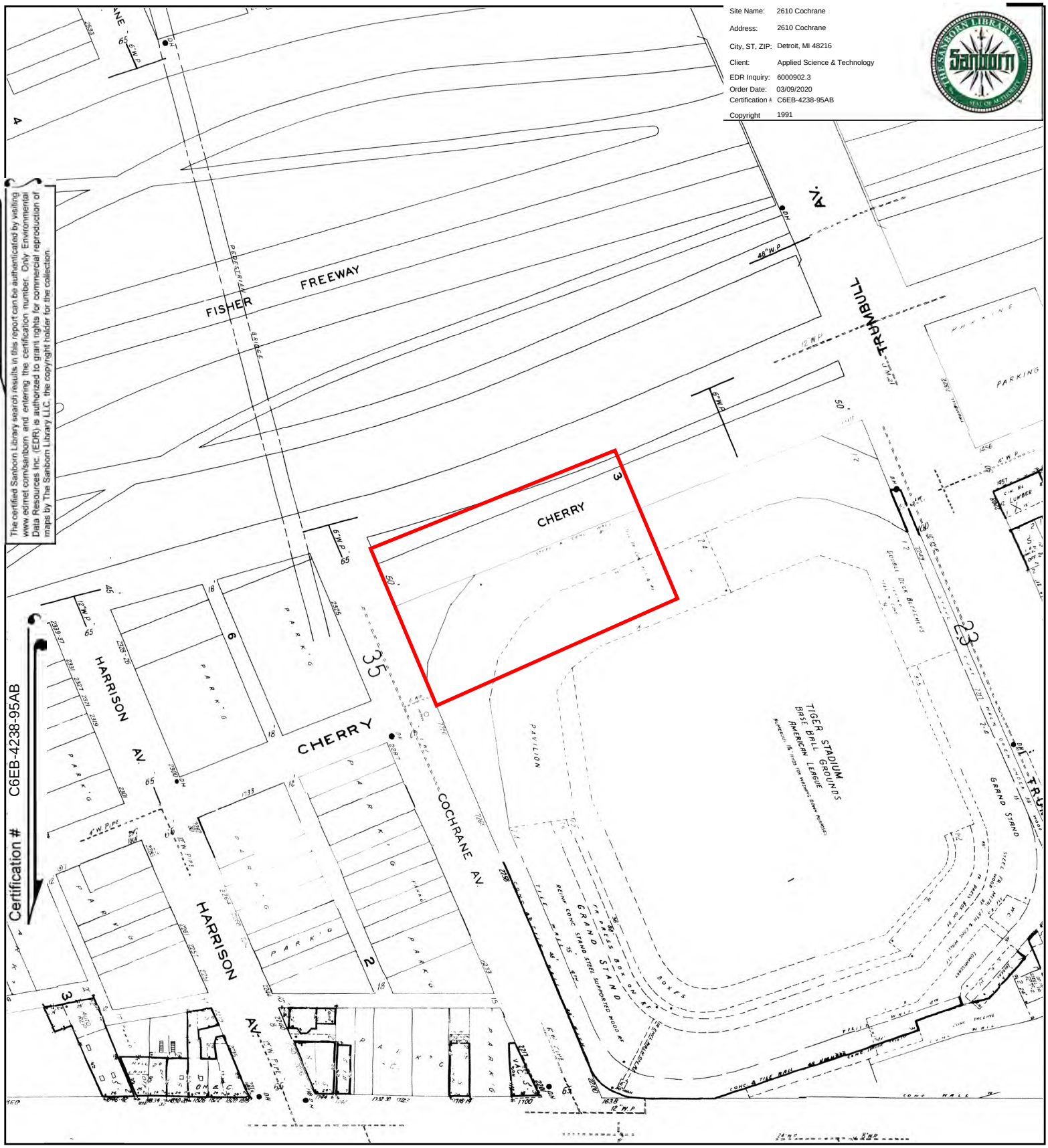
Volume 2, Sheet 36
Volume 2, Sheet 35

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Address: 2610 Cochrane
City, ST, ZIP: Detroit, MI 48216
Client: Applied Science & Technology
EDR Inquiry: 6000902.3
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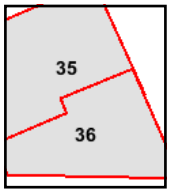
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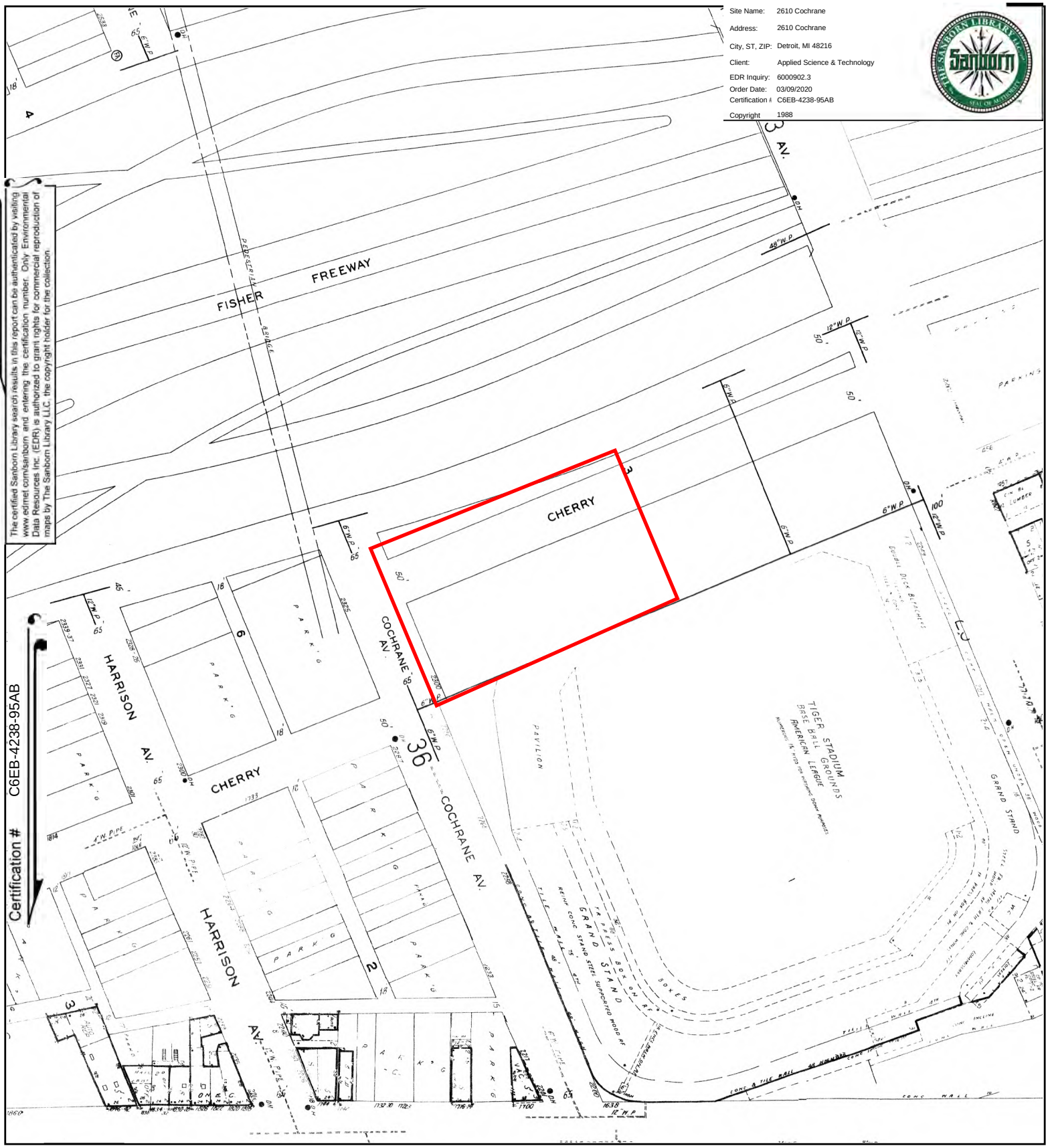
Volume 2, Sheet 36
Volume 2, Sheet 35

N

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Address: 2610 Cochrane
City, ST, ZIP: Detroit, MI 48216
Client: Applied Science & Technology
EDR Inquiry: 6000902.3
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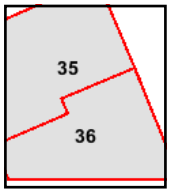
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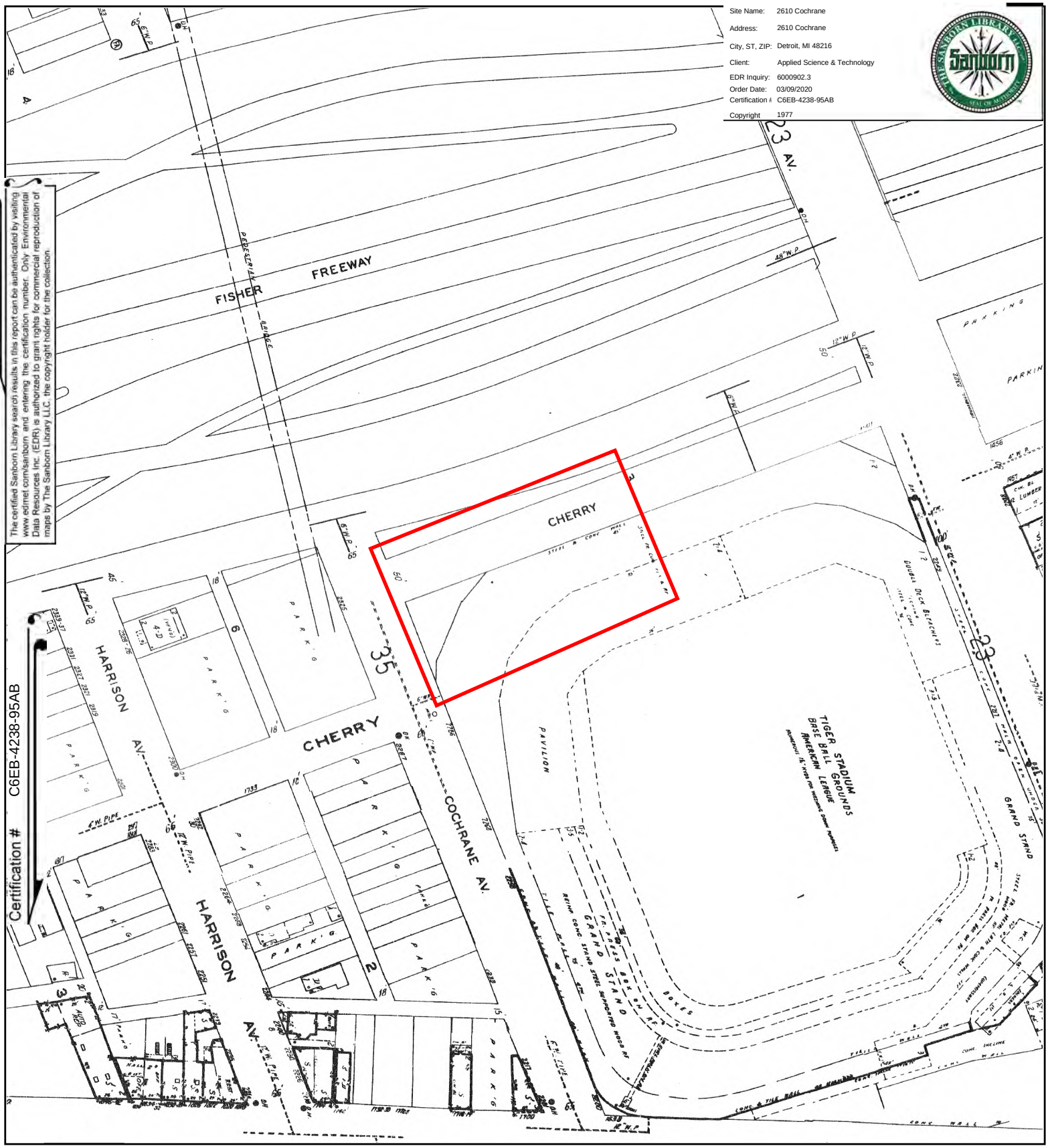
Volume 2, Sheet 36
Volume 2, Sheet 35

N

Site Name: 2610 Cochrane
Address: 2610 Cochrane
City, ST, ZIP: Detroit, MI 48216
Client: Applied Science & Technology
EDR Inquiry: 6000902.3
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Copyright 1977

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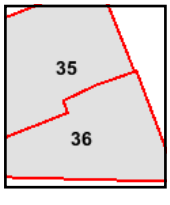
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Volume 2, Sheet 35

N

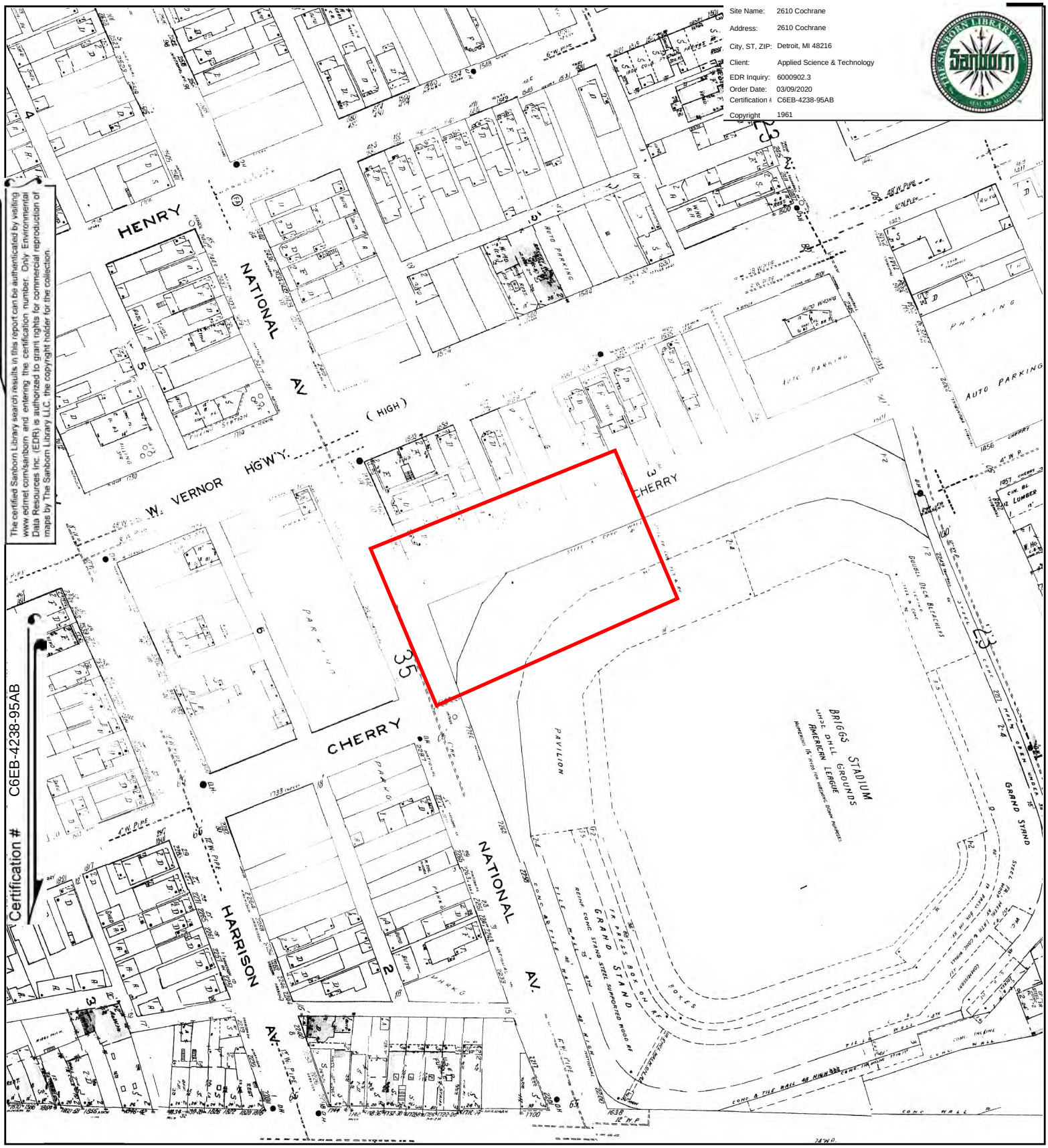
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1961

Site Name: 2610 Cochrane
Address: 2610 Cochrane
City, ST, ZIP: Detroit, MI 48216
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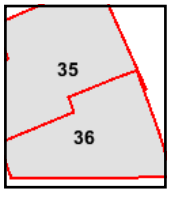
Certification # C6EB-4238-95AB



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Volume 2, Sheet 35

N

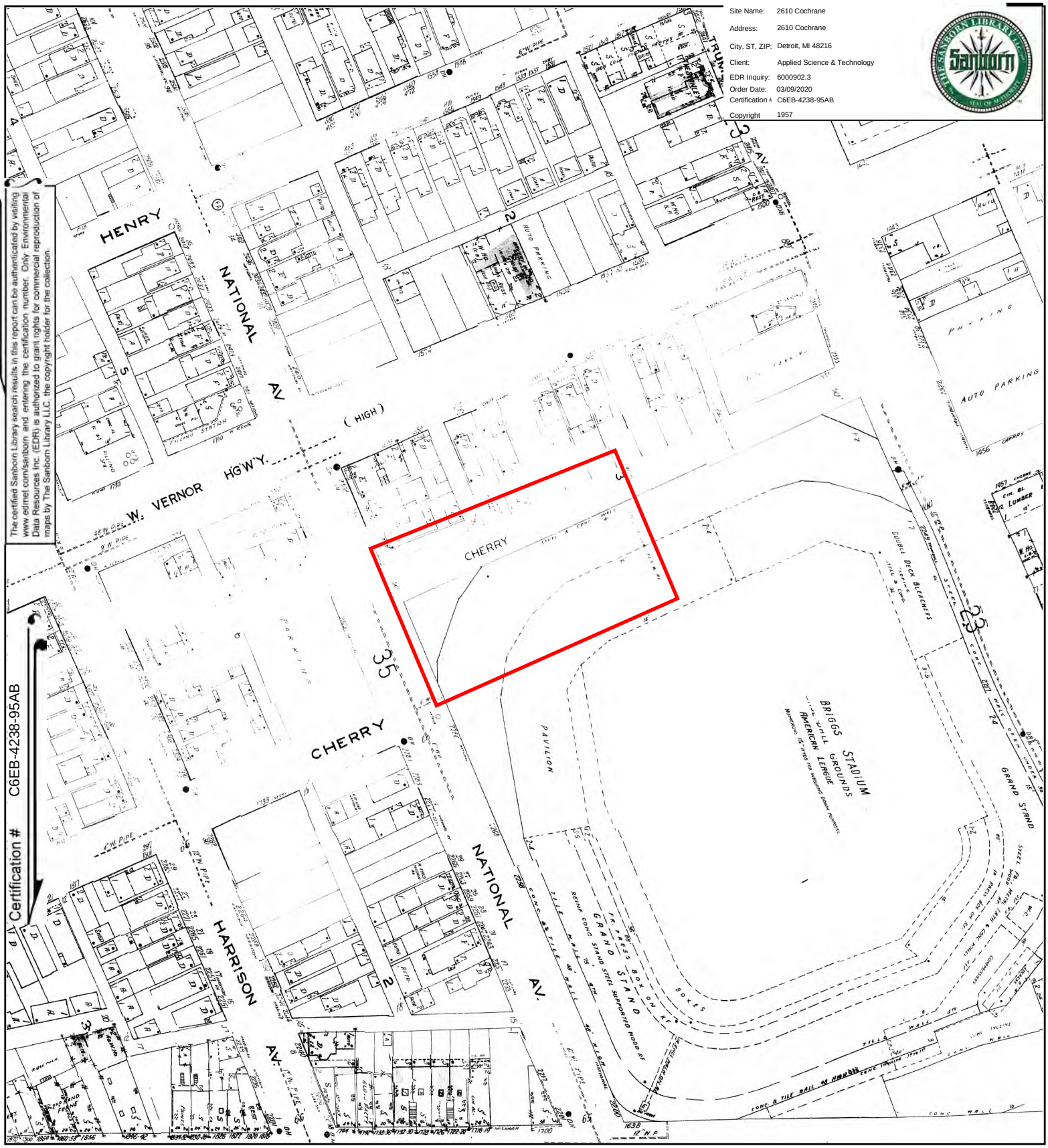
Certified Sanborn® Map

1957

Site Name: 2610 Cochrane
Address: 2610 Cochrane
City, ST, ZIP: Detroit, MI 48216
Client: Applied Science & Technology
EDR Inquiry: 6000902.3
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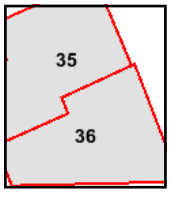
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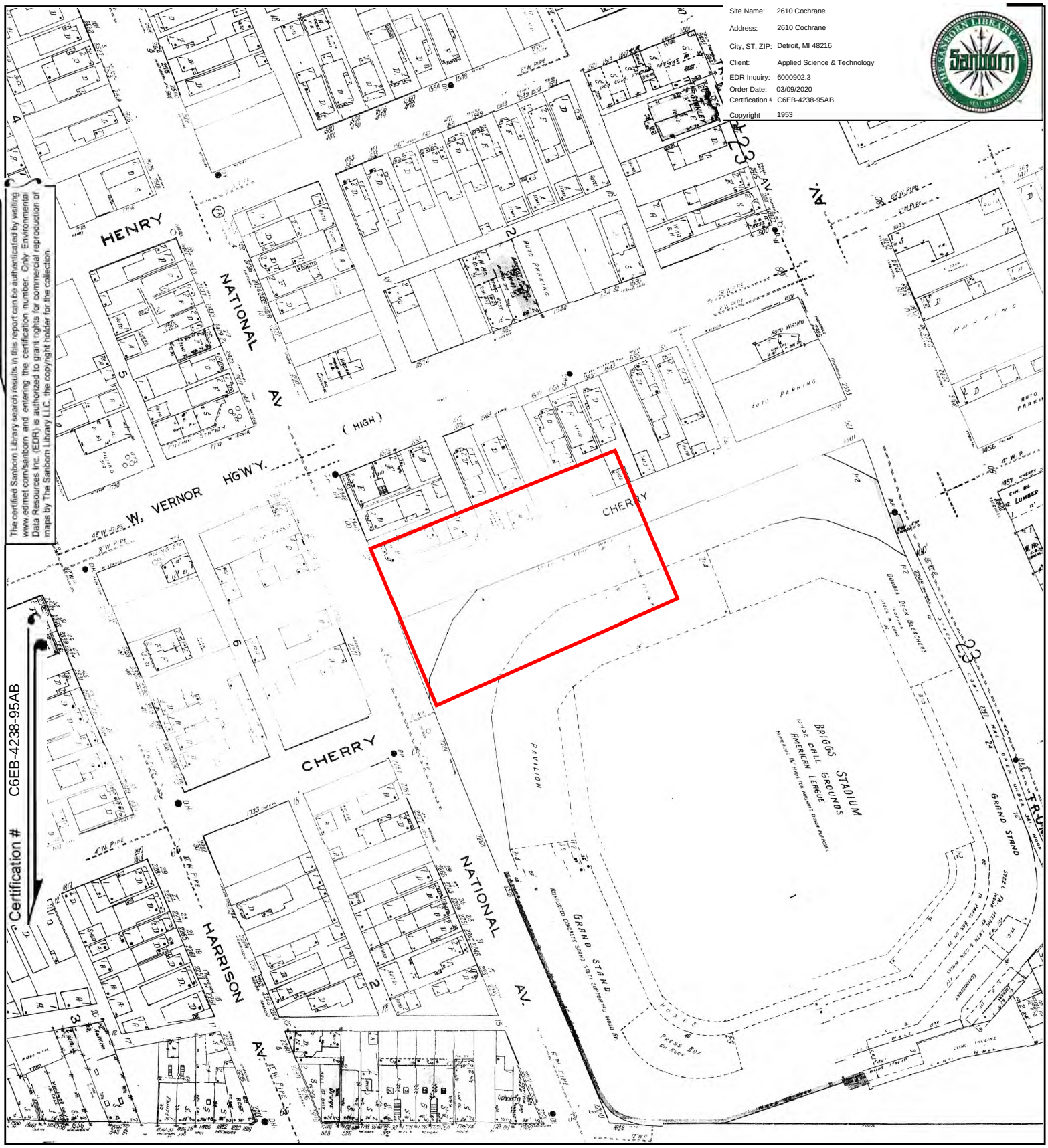
Volume 2, Sheet 36
Volume 2, Sheet 35

N

Site Name: 2610 Cochrane
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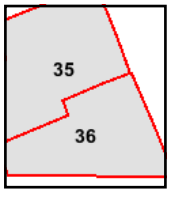
Certification # C6EB-4238-95AB



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Volume 2, Sheet 35

N

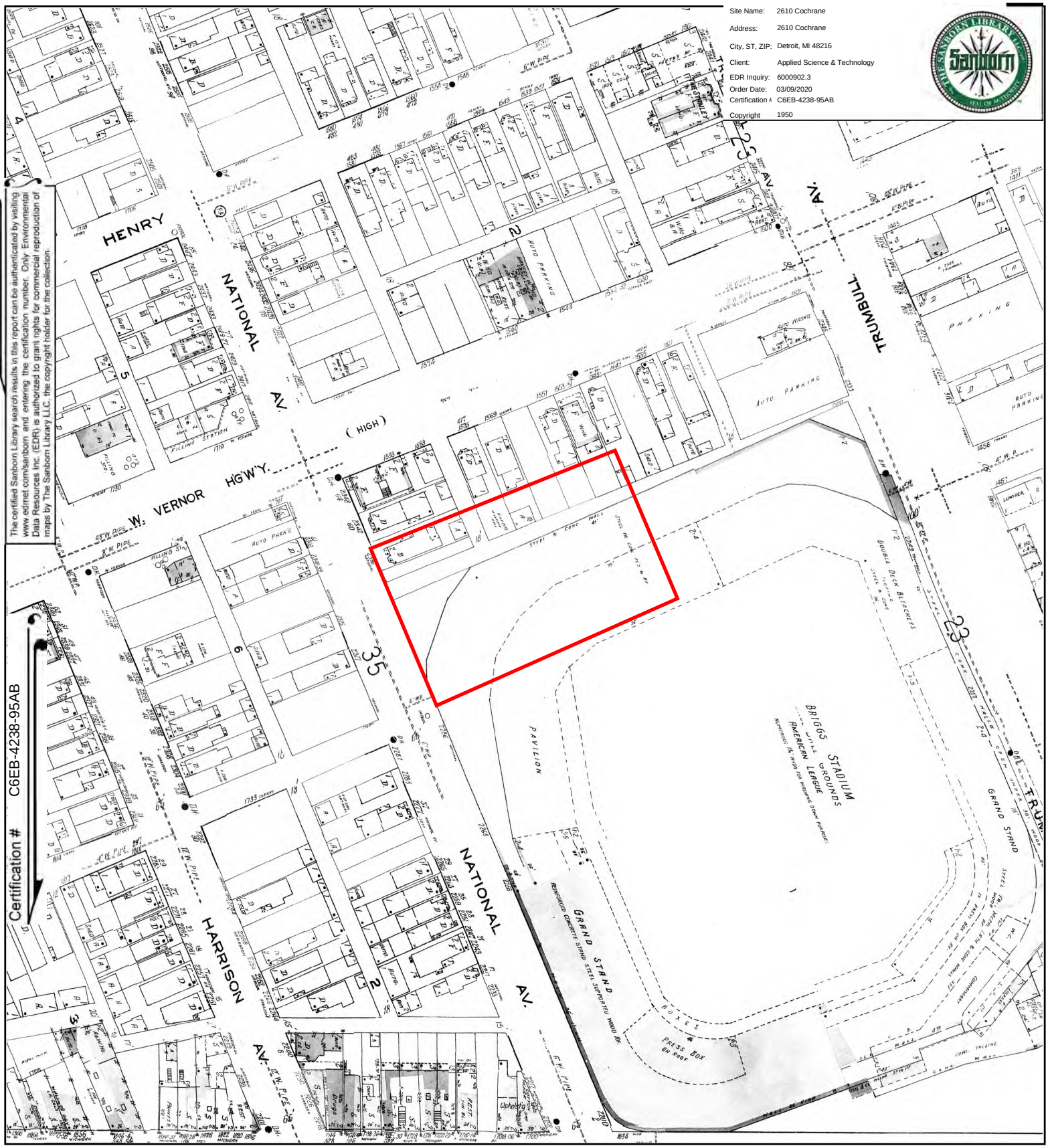
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1950

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Address: 2610 Cochrane
City, ST, ZIP: Detroit, MI 48216
Client: Applied Science & Technology
EDR Inquiry: 6000902.3
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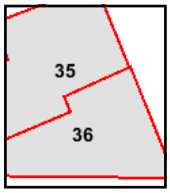
Certification # C6EB-4238-95AB



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Volume 2, Sheet 35

N

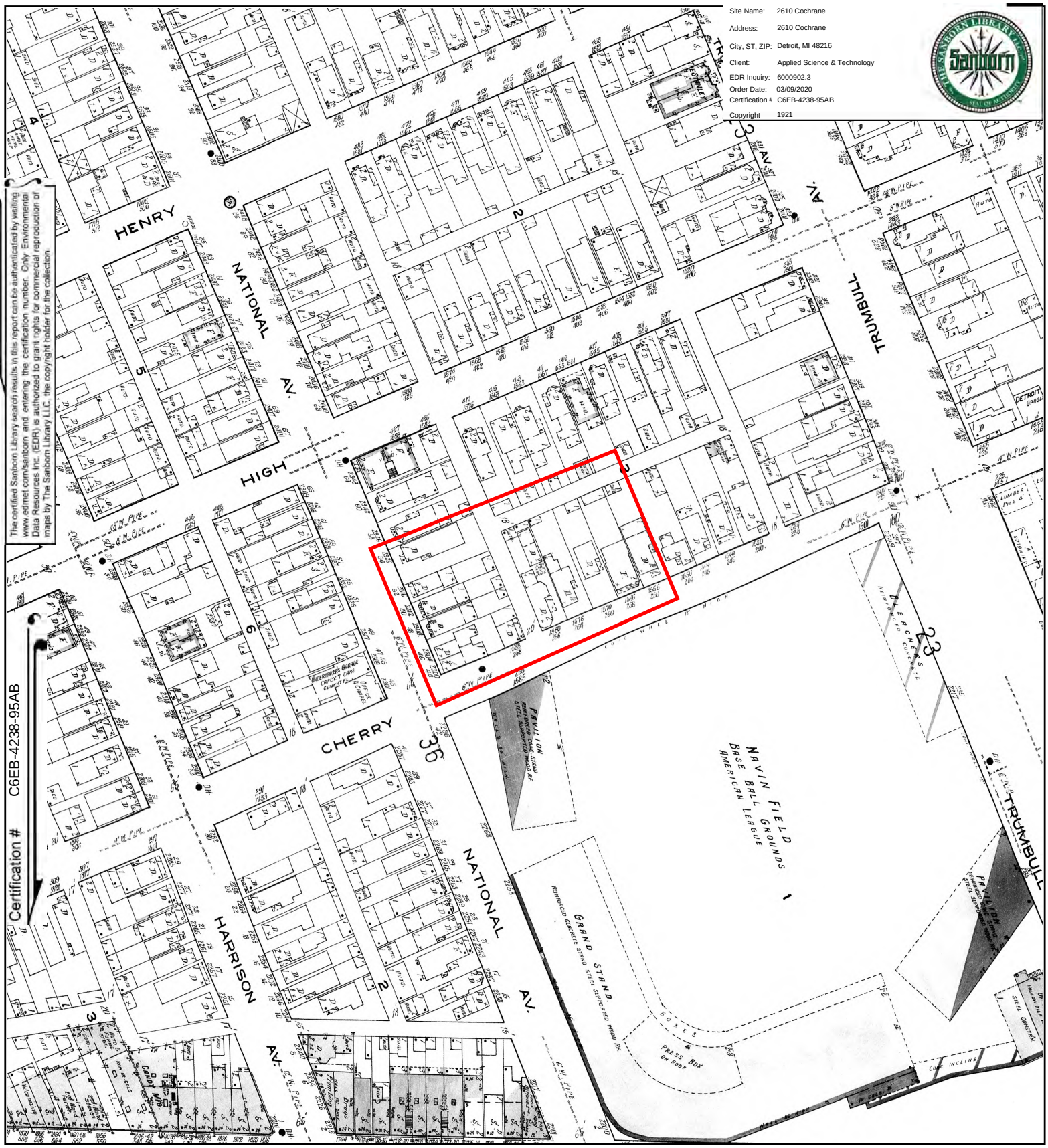
Certified Sanborn® Map

1921

Site Name: 2610 Cochrane
Address: 2610 Cochrane
City, ST, ZIP: Detroit, MI 48216
Client: Applied Science & Technology
EDR Inquiry: 6000902.3
Order Date: 03/09/2020
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Copyright 1921

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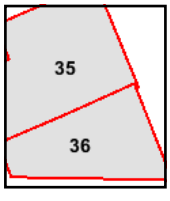
Certification # C6EB-4238-95AB



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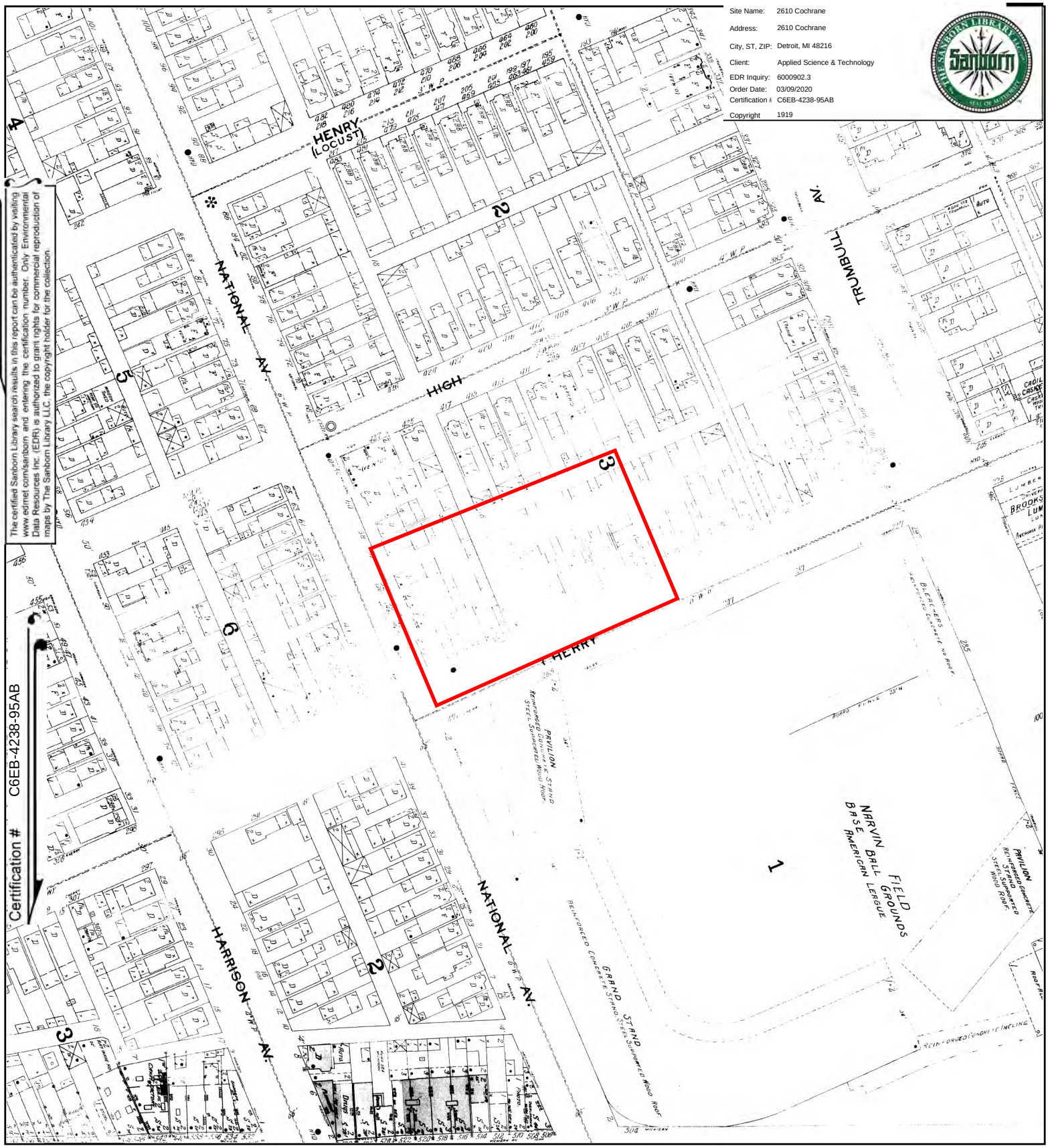
Volume 2, Sheet 36
Volume 2, Sheet 35

N

Certified Sanborn® Map

1919

Site Name: 2610 Cochrane
Address: 2610 Cochrane
City, ST, ZIP: Detroit, MI 48216
Client: Applied Science & Technology
EDR Inquiry: 6000902.3
Order Date: 03/09/2020
Certification #: C6EB-4238-95AB
Copyright 1919



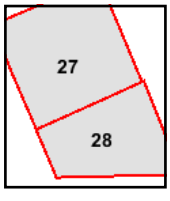
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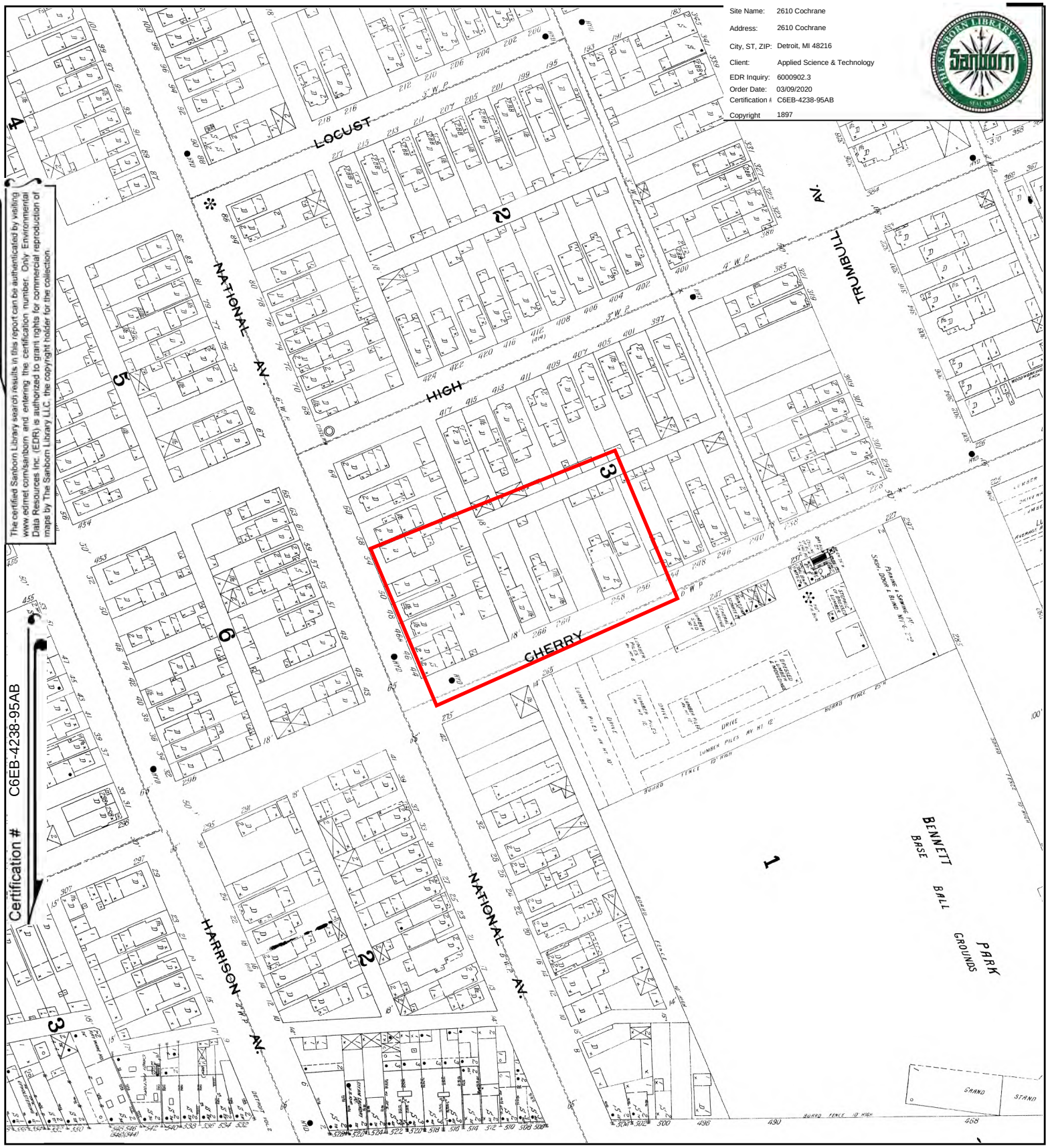
Volume 2, Sheet 28
Volume 2, Sheet 27

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EDR Inquiry: 6000902.3
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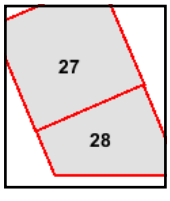
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Volume 2, Sheet 28
Volume 2, Sheet 27

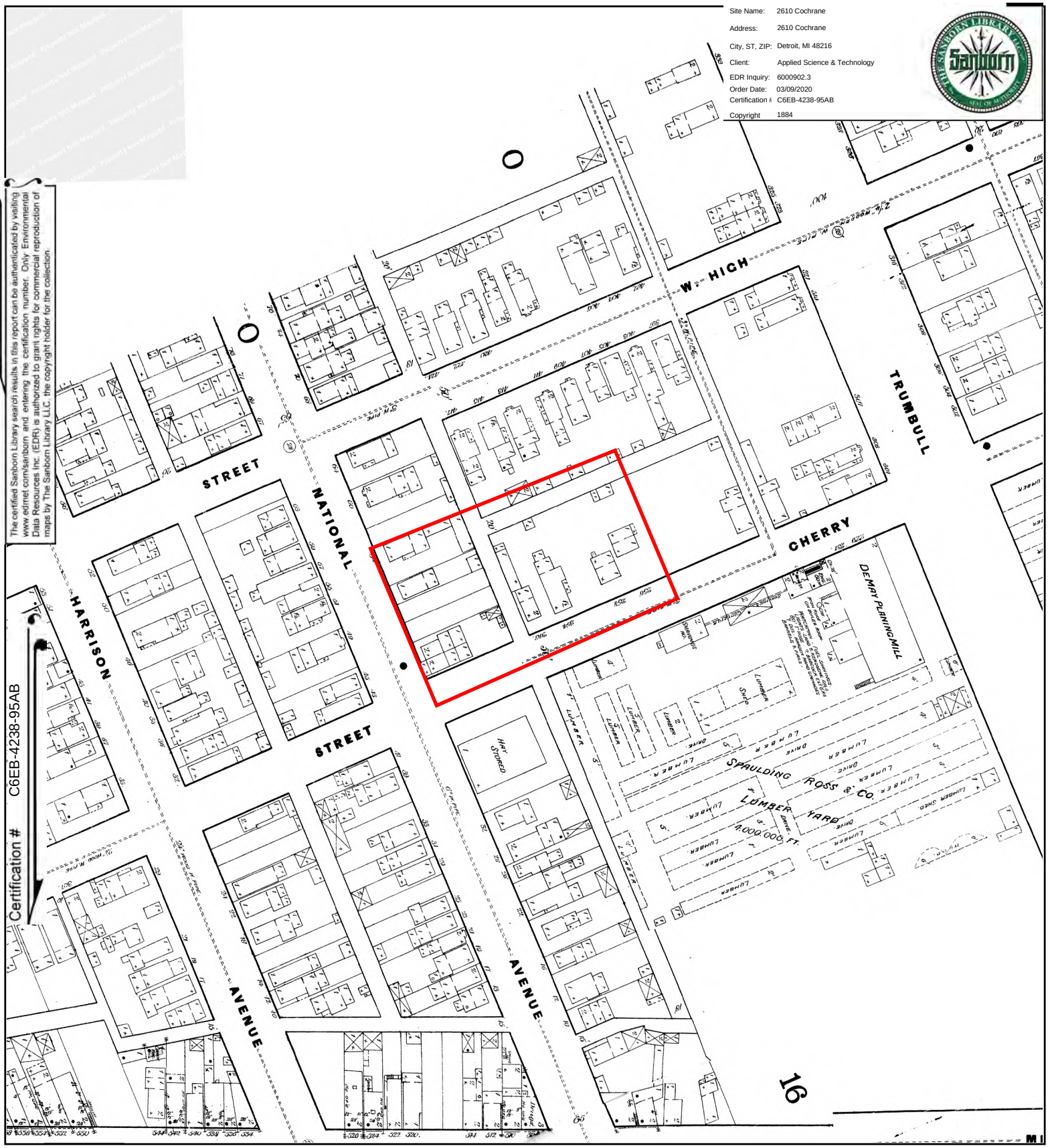
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Client: Applied Science & Technology
EDR Inquiry: 6000902.3
Order Date: 03/09/2020
Certification #: C6EB-4238-95AB

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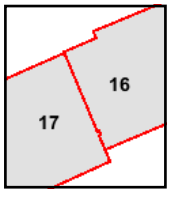
Certification # C6EB-4238-95AB



This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600





Volume 1, Sheet 17
Volume 1, Sheet 16

N

2610 Cochrane
2610 Cochrane
Detroit, MI 48216

Inquiry Number: 6000902.5
March 25, 2020

The EDR-City Directory Image Report

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

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Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2017	☑	☐	EDR Digital Archive
2014	☑	☐	EDR Digital Archive
2010	☑	☐	EDR Digital Archive
2005	☑	☐	EDR Digital Archive
2000	☑	☑	EDR Digital Archive
1995	☑	☑	EDR Digital Archive
1992	☑	☑	EDR Digital Archive
1987	☑	☑	Bresser's Cross-Index Directory Company
1982	☑	☑	Bresser's Cross-Index Directory Company
1977	☑	☑	Bresser's Cross-Index Directory Company
1972	☑	☑	Bresser's Cross-Index Directory Company
1967	☑	☑	Bresser's Cross-Index Directory Company
1962	☑	☑	Bresser's Cross-Index Directory Company
1957	☑	☑	Bresser's Cross-Index Directory Company
1940	☑	☑	Polk's City Directory
1935	☑	☑	Polk's City Directory
1931	☑	☑	Polk's City Directory
1926	☑	☑	Polk's City Directory
1921	☑	☑	Polk's City Directory

EXECUTIVE SUMMARY

Year	Target Street	Cross Street	Source
1916	☑	☑	Polk's City Directory
1911	☑	☑	Polk's City Directory

FINDINGS

TARGET PROPERTY STREET

2610 Cochrane
Detroit, MI 48216

Year	*CD Image*	*Source*
COCHRANE ST		
2017	pg A1	EDR Digital Archive
2014	pg A2	EDR Digital Archive
2010	pg A3	EDR Digital Archive
2005	pg A4	EDR Digital Archive
2000	pg A6	EDR Digital Archive
1995	pg A7	EDR Digital Archive
1992	pg A9	EDR Digital Archive
1987	pg A11	Bresser’s Cross-Index Directory Company
1982	pg A15	Bresser’s Cross-Index Directory Company
1977	pg A19	Bresser’s Cross-Index Directory Company
1972	pg A22	Bresser’s Cross-Index Directory Company
1967	pg A25	Bresser’s Cross-Index Directory Company
1962	pg A28	Bresser’s Cross-Index Directory Company
1957	pg A31	Bresser’s Cross-Index Directory Company
1957	pg A32	Bresser’s Cross-Index Directory Company
1940	pg A36	Polk's City Directory
1940	pg A37	Polk's City Directory
1935	pg A41	Polk's City Directory
1935	pg A42	Polk's City Directory
1931	pg A45	Polk's City Directory
1931	pg A46	Polk's City Directory
1926	pg A50	Polk's City Directory
1921	pg A52	Polk's City Directory
1916	pg A54	Polk's City Directory
1916	pg A55	Polk's City Directory
1911	pg A57	Polk's City Directory
1911	pg A58	Polk's City Directory

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*	
CHERRY ST			
2017	-	EDR Digital Archive	Target and Adjoining not listed in Source
2014	-	EDR Digital Archive	Target and Adjoining not listed in Source
2010	-	EDR Digital Archive	Target and Adjoining not listed in Source
2005	-	EDR Digital Archive	Target and Adjoining not listed in Source
2000	pg. A5	EDR Digital Archive	
KALINE DR			
1995	pg. A8	EDR Digital Archive	
1992	pg. A10	EDR Digital Archive	
1987	pg. A12	Bresser’s Cross-Index Directory Company	
1987	pg. A13	Bresser’s Cross-Index Directory Company	
1982	pg. A16	Bresser’s Cross-Index Directory Company	
1977	pg. A20	Bresser’s Cross-Index Directory Company	
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1957	pg. A33	Bresser’s Cross-Index Directory Company	
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1940	pg. A39	Polk's City Directory	
1935	pg. A43	Polk's City Directory	
1931	pg. A47	Polk's City Directory	
1931	pg. A48	Polk's City Directory	
1926	pg. A51	Polk's City Directory	
1921	pg. A53	Polk's City Directory	
1916	pg. A56	Polk's City Directory	
1911	pg. A59	Polk's City Directory	
VERNOR HWY			
2017	-	EDR Digital Archive	Target and Adjoining not listed in Source
2014	-	EDR Digital Archive	Target and Adjoining not listed in Source
2010	-	EDR Digital Archive	Target and Adjoining not listed in Source

FINDINGS

Year	***CD Image***	***Source***	
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1995	-	EDR Digital Archive	Target and Adjoining not listed in Source
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1987	pg. A14	Bresser’s Cross-Index Directory Company	
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1935	pg. A44	Polk's City Directory	
1931	pg. A49	Polk's City Directory	
1926	-	Polk's City Directory	Street not listed in Source
1921	-	Polk's City Directory	Street not listed in Source
1916	-	Polk's City Directory	Street not listed in Source
1911	-	Polk's City Directory	Street not listed in Source

City Directory Images

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

COCHRANE ST 2017

2600	SCREEN MACHINE
2723	RAMOS, JUAN J
2725	RAMOS, CARMEN J
2735	FORD, RICHARD W
2812	JONES, MICHAEL
2816	JENKINS, PAUL A
2825	WRAY, ROBERT C
2834	ADAMS, DOMINGO
2902	LANE, DIANNE K
2917	JACKSON, DEBORAH J
2927	ESTERS, BENNIE J
2930	CRUZ, MICHAEL D
2942	CLARK, HANNAH
3001	JACKSON, TERRY D
3008	HARRIS, ANGELA D
3014	SHIVERS, MARISA K
3024	THOMAS, NORWANDA L
3034	OBRIEN, SHEILA P
3038	STEWART, BEN L
3039	ZEIGLER, KEVIN D
3044	KENDRICKS, LANCE
3049	MISTOR, TODD C
3113	GOMEZ, GEORGE A
3127	MCCLINTOCK, TINA M

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

COCHRANE ST 2014

2600	SCREEN MACHINE
2727	OCCUPANT UNKNOWN,
2735	FORD, RICHARD W
2811	COUNTERMAN, CHRISTY A
2812	MARSHALL, HEATHER J
2816	JENKINS, PAUL A
2825	WRAY, ROBERT C
2834	ADAMS, DOMINGO
2902	OCCUPANT UNKNOWN,
2917	SMITH, ANTOINE L
2927	ESTERS, BENNIE J
2930	CRUZ, AUGUSTIN A
2942	OCCUPANT UNKNOWN,
3003	OCCUPANT UNKNOWN,
3008	HARRIS, ANGELA D
3014	PENNINGTON, KELLI M
3018	BAISE, GREGORY J
3023	WRIGHT, ALEXANDER M
3024	THOMAS, NORWANDA L
3034	OBRIEN, SHEILA P
3038	STEWART, BEN L
3039	ZEIGLER, KEVIN D
3044	OCCUPANT UNKNOWN,
3049	MISTOR, TODD C
3103	MENDEZ, RAQUEL
3113	CHRISTENSEN, BENJAMIN P
3127	MCCLINTOCK, TINA M
3128	OCCUPANT UNKNOWN,

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

COCHRANE ST 2010

2600	PATRIZE MICROSCOPE INC
	SCREEN MACHINE
2709	DIXON, DOWING B
2723	DAVID, VICTOR M
2725	RAMOS, JUAN J
2727	KEENS, LUTHER C
2735	WILLIAMS, VICTORIA
2811	COUNTERMAN, CHRISTY A
2812	MARSHALL, HEATHER J
2816	JENKINS, SHERRON A
2825	WRAY, ROBERT C
2834	ADAMS, DOMINGO
2841	1 SPIRITS & LIQUOR LLC
2902	DODY, ESTERINE
	FOCUS INC ADULT CTR
2916	PAULUS, DARYL L
2917	SMITH, CORINA
2927	HILL, J
2930	CRUZ, AUGUSTIN C
3001	JACKSON, WILLIE J
3008	HARRIS, SHASHU M
3014	PENNINGTON, KELLI M
3018	GRANAHAN, NANCY
3024	THOMAS, NORWANDA L
3034	OBRIEN, SHEILA P
3038	STEWART, D
3039	WOHL, JOHN H
3049	MISTOR, TODD C
3113	GOMEZ, HOLLIE A
3127	MCCLINTOCK, ROBERT A
3128	IDZIAK, JOHN F
3147	KRISKAT NICKAL LLC

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

COCHRANE ST 2005

2709	DIXON, DOWING B
2723	DAVID, VICTOR
2725	RAMOS, JUAN J
2733	KEENS, LUTHER C
2735	WILLIAMS, VICTORIA
2800	HALL, GAYLORD
2806	LASLEY, NAGIRA
2811	LOTTNER, ANTHONY
2812	MARSHALL, HEATHER J
2816	JENKINS, SHERRON A
2834	ADAMS, DOMINGO
2902	DODY, LISA E
2930	CRUZ, AUGUSTIN C
3001	JACKSON, WILLIE J
3003	JACKSON, TERRY D
3127	MCCLINTOCK, TINA M
3128	HOLMES, JIMMY A
3147	NICKAL KRISKAT LLC

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

CHERRY ST 2000

1426 IRISH SALOON OF CORKTOWN THE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

COCHRANE ST 2000

2709	DIXON, DOWING B
2735	WILLIAMS, V
2806	BAKSIK, THOMAS
2811	WALLACE, M
2816	NEMETH, E
2841	TIGERS VILLAGE LIQUOR SHOPE
2902	DODY, LISA
2908	DELIVERANCE TEMPLE
2917	JACKSON, FANNIE R
3003	SMITH, COREY
3127	MCCLINTOCK, TINA
3128	HOLMES, LINDA
3147	PARSONS LORRAINE

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

COCHRANE ST 1995

2616	LIPE, E
2703	OCCUPANT UNKNOWNN
2723	TORRES, LARRY
2727	KEENS, BILLY
2735	OCCUPANT UNKNOWNN
2811	WALLACE, M
2812	MARSHALL, JAMES E
2825	WRAY, ROBERT
2826	OCCUPANT UNKNOWNN
2831	LANZON, THERESA
2833	REID, V
2841	TIGERS VILLAGE LIQUOR SHOPE
2902	FOCUS INC ADULT CTR
2916	JIMERSON, P
2930	DEJESUS, JOSE
2942	LAKE, THERESA
3103	OCCUPANT UNKNOWNN
3109	OCCUPANT UNKNOWNN
3116	OCCUPANT UNKNOWNN
3117	OCCUPANT UNKNOWNN
3127	MCLINTOCK, DIXIE
3128	HOLMES, LINDA
3145	SLONE, GENEVA
3147	LORRAINE PARSONS
	PARSONS, L

Target Street	Cross Street	Source
-	✓	EDR Digital Archive

KALINE DR 1995

1426 IRISH SALOON OF CORKTOWN

Target Street	Cross Street	Source
✓	-	EDR Digital Archive

COCHRANE ST 1992

2735	BRADLEY, CARA
2811	WALLACE, M
2831	LANZON, THERESA
2841	TIGERS VLG LIQUOR
2902	FOCUS INC ADLT CTR
2916	JIMERSON, P
3001	JACKSON, FANNIE R
3116	JONES, EFFIE
3127	MCCLITOCK, D
3147	LORRAINE PARSONS
	PARSONS, L

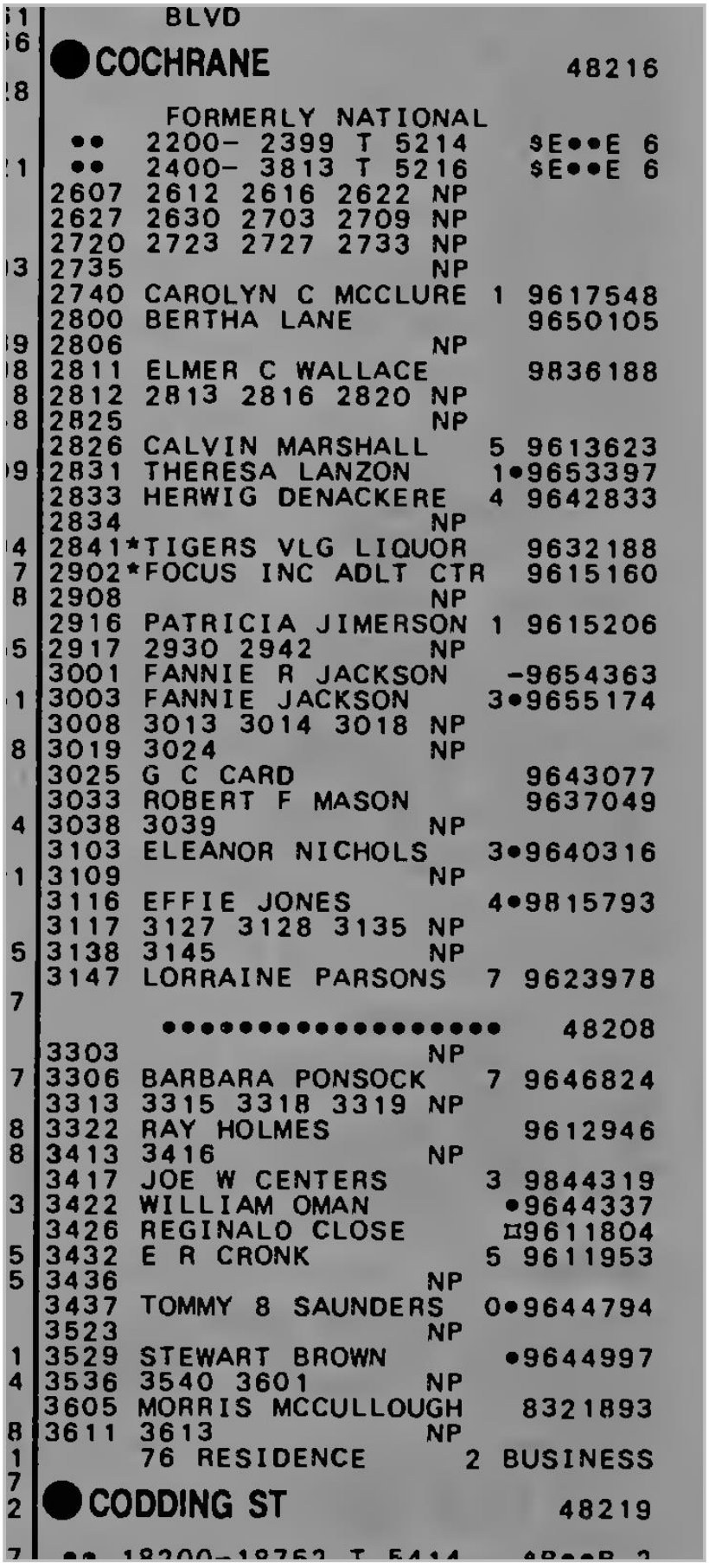
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KALINE DR 1992

1426 THE IRISH SALOON

Target Street	Cross Street	Source
✓	-	Bresser's Cross-Index Directory

COCHRANE ST 1987



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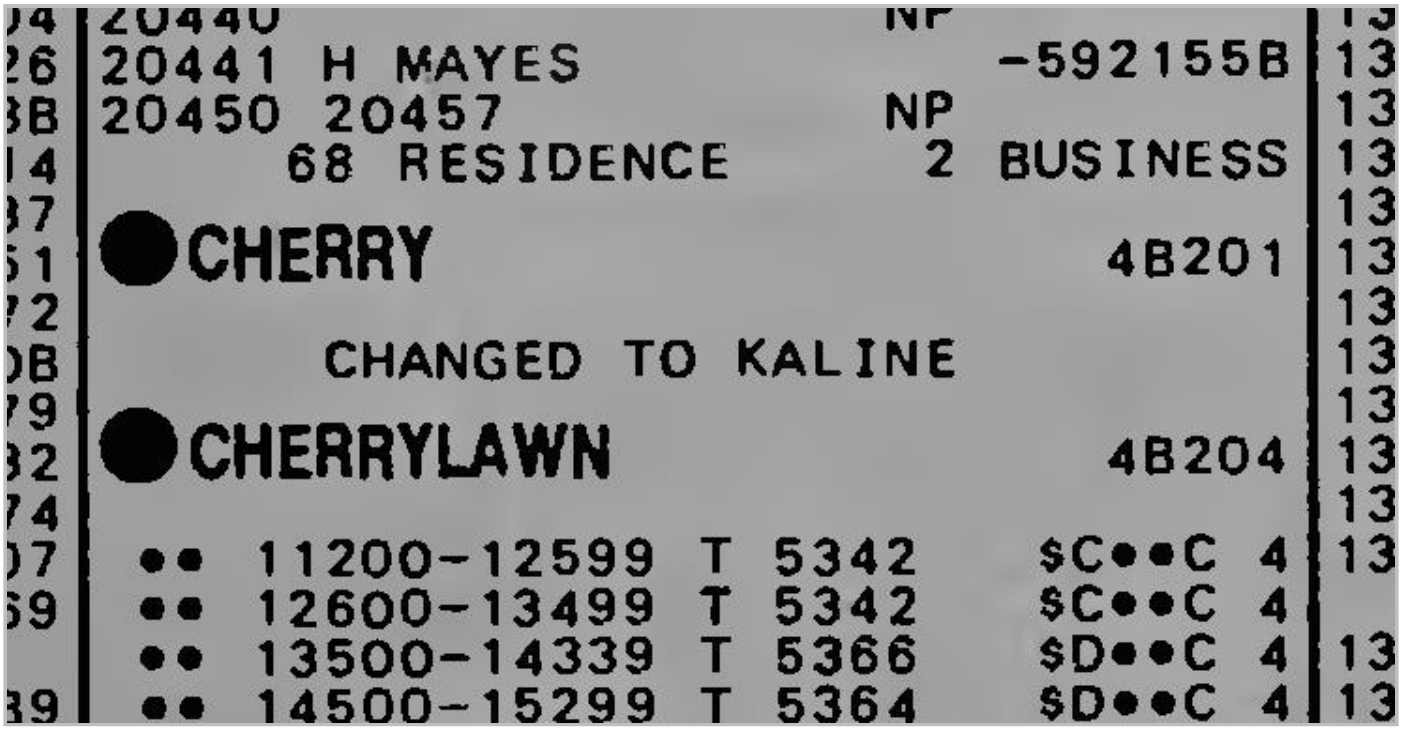
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2720  2723 2727 2733 NP
2735                NP
2740  CAROLYN C MCCLURE  1 9617548
2800  BERTHA LANE          9650105
2806                NP
2811  ELMER C WALLACE      9836188
2812  2813 2816 2820 NP
2825                NP
2826  CALVIN MARSHALL    5 9613623
2831  THERESA LANZON     1•9653397
2833  HERWIG DENACKERE   4 9642833
2834                NP
2841*TIGERS VLG LIQUOR     9632188
2902*FOCUS INC ADLT CTR    9615160
2908                NP
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2917  2930 2942     NP
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3003  FANNIE JACKSON     3•9655174
3008  3013 3014 3018 NP
3019  3024          NP
3025  G C CARD             9643077
3033  ROBERT F MASON       9637049
3038  3039          NP
3103  ELEANOR NICHOLS    3•9640316
3109                NP
3116  EFFIE JONES        4•9815793
3117  3127 3128 3135 NP
3138  3145          NP
3147  LORRAINE PARSONS   7 9623978

      ••••••••••••••••••      48208
3303                NP
3306  BARBARA PONSOCK    7 9646824
3313  3315 3318 3319 NP
3322  RAY HOLMES           9612946
3413  3416          NP
3417  JOE W CENTERS      3 9844319
3422  WILLIAM OMAN        •9644337
3426  REGINALO CLOSE      ¤9611804
3432  E R CRONK          5 9611953
3436                NP
3437  TOMMY 8 SAUNDERS   0•9644794
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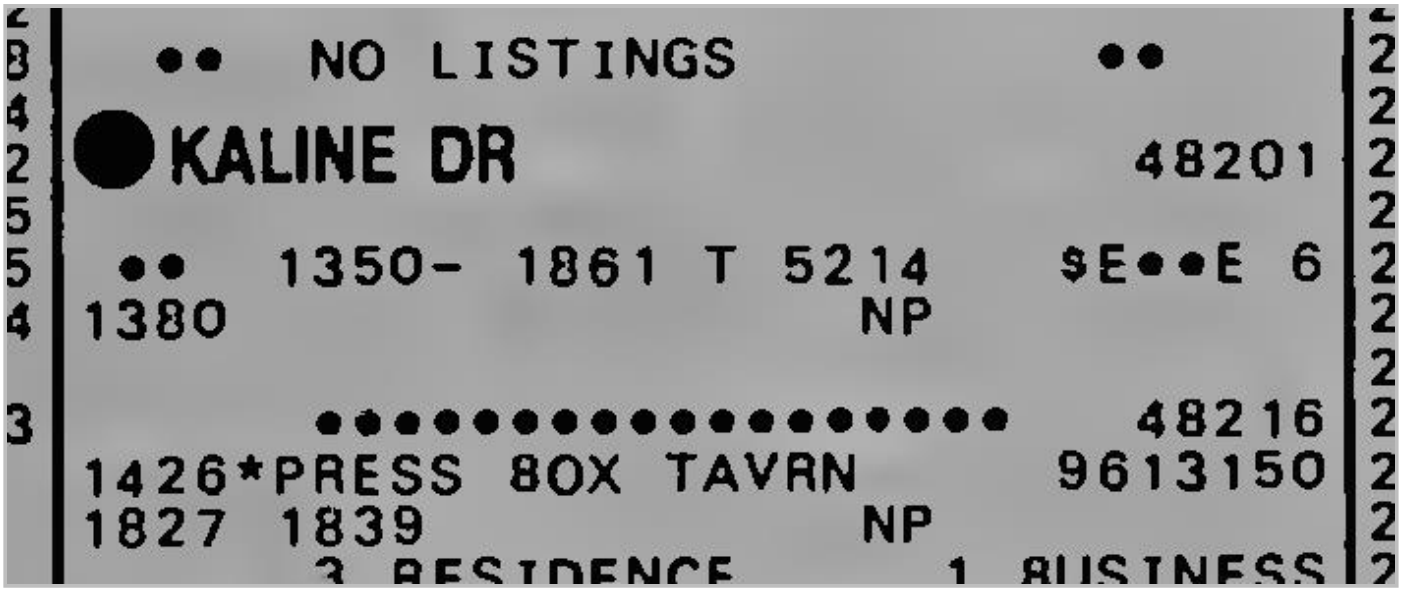
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KALINE DR 1987



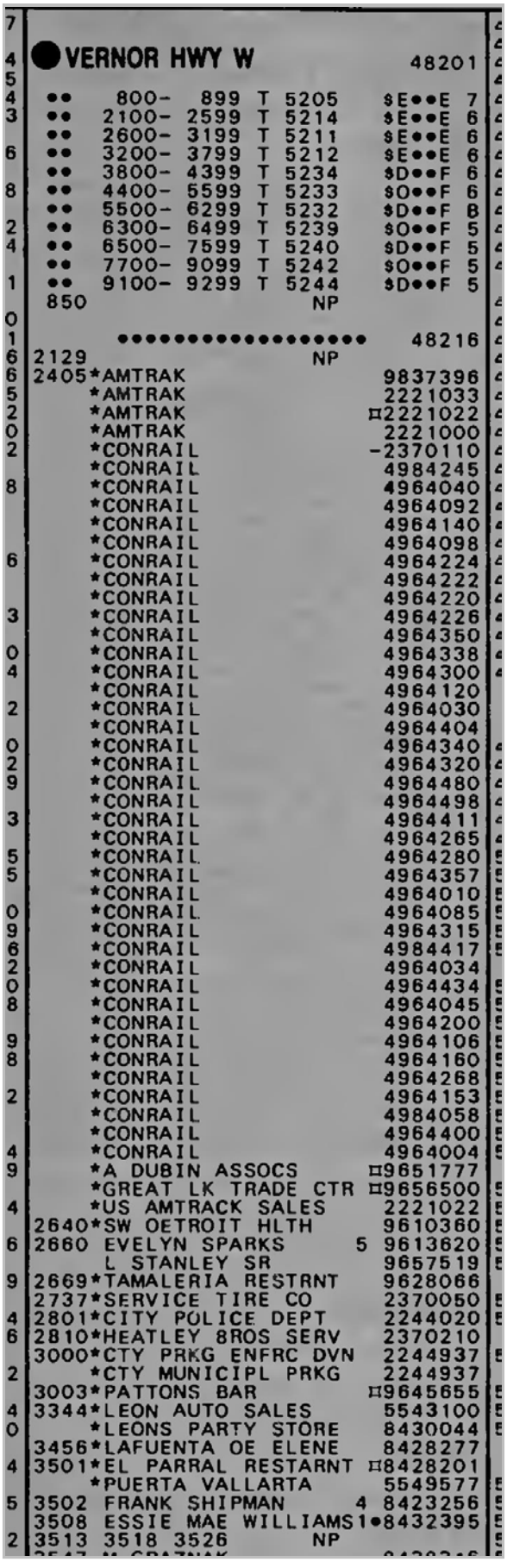
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-	✓	Bresser's Cross-Index Directory

KALINE DR 1987



Target Street	Cross Street	Source
-	✓	Bresser's Cross-Index Directory

VERNOR HWY 1987



VERNOR HWY W 48201

800- 899 T 5205 $E••E 7
2100- 2599 T 5214 $E••E 6
2600- 3199 T 5211 $E••E 6
3200- 3799 T 5212 $E••E 6
3800- 4399 T 5234 $D••F 6
4400- 5599 T 5233 $O••F 6
5500- 6299 T 5232 $D••F 8
6300- 6499 T 5239 $O••F 5
6500- 7599 T 5240 $D••F 5
7700- 9099 T 5242 $O••F 5
9100- 9299 T 5244 $D••F 5
850 NP

•••••••••••••••••• 48216
2129 NP
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*AMTRAK 2221033
*AMTRAK ¤2221022
*AMTRAK 2221000
*CONRAIL -2370110
*CONRAIL 4984245
*CONRAIL 4964040
*CONRAIL 4964092
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*CONRAIL 4964106
*CONRAIL 4964160
*CONRAIL 4964268
*CONRAIL 4964153
*CONRAIL 4984058
*CONRAIL 4964400
*CONRAIL 4964004
*A DUBIN ASSOCS ¤9651777
*GREAT LK TRADE CTR ¤9656500
*US AMTRACK SALES 2221022
2640 *SW DETROIT HLTH 9610360
2660 EVELYN SPARKS 5 9613620
L STANLEY SR 9657519
2669 *TAMALERIA RESTRNT 9628066
2737 *SERVICE TIRE CO 2370050
2801 *CITY POLICE DEPT 2244020
2810 *HEATLEY BROS SERV 2370210
3000 *CTY PRKG ENFRC DVN 2244937
*CTY MUNICIPL PRKG 2244937
3003 *PATTONS BAR ¤9645655
3344 *LEON AUTO SALES 5543100
*LEONS PARTY STORE 8430044
3456 *LAFUENTA DE ELENE 8428277
3501 *EL PARRAL RESTARNT ¤8428201
*PUERTA VALLARTA 5549577
3502 FRANK SHIPMAN 4 8423256
3508 ESSIE MAE WILLIAMS 1• 8432395
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Target Street	Cross Street	Source
✓	-	Bresser's Cross-Index Directory

COCHRANE ST 1982

8LVU

COCHRANE 48216

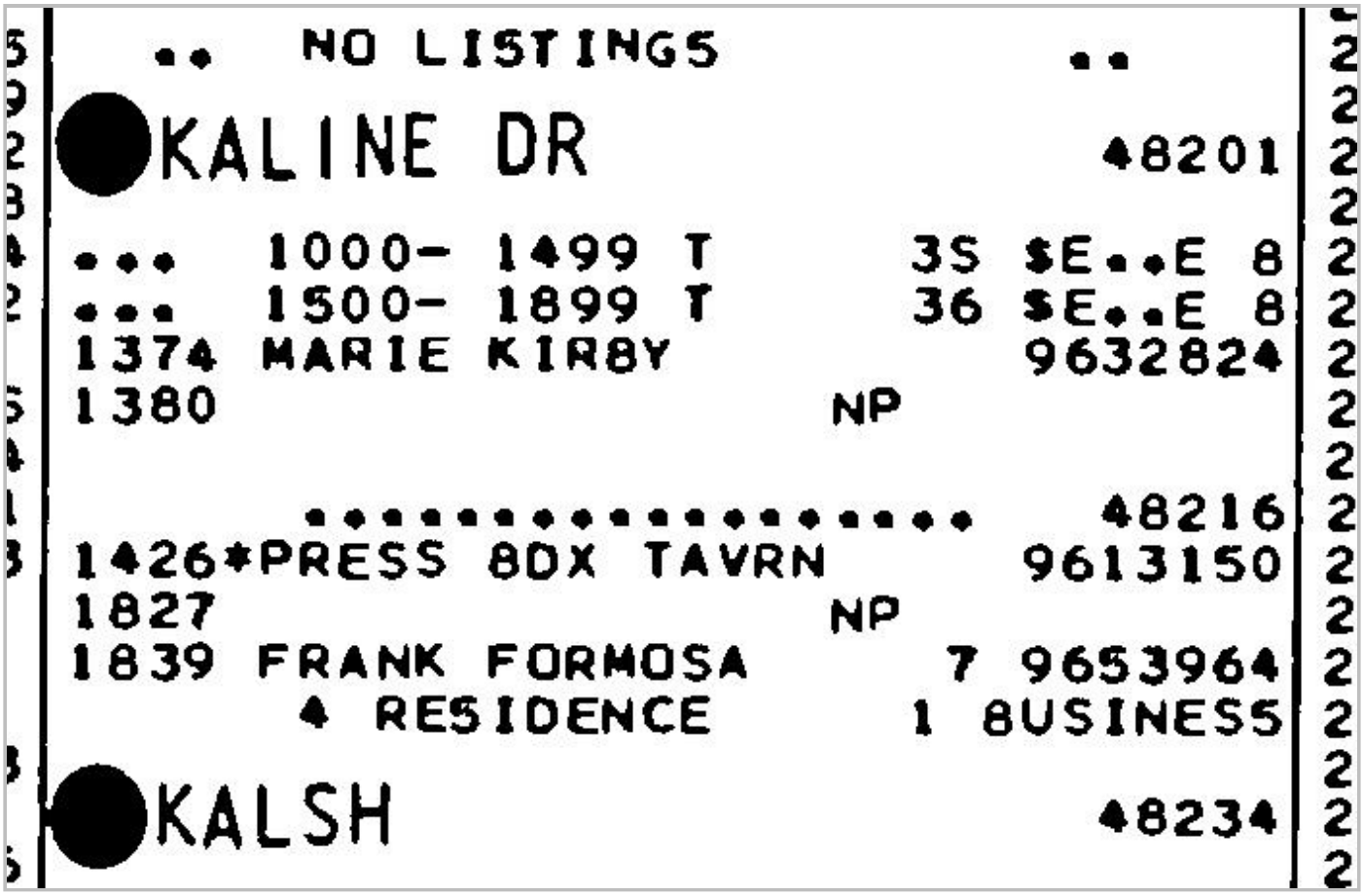
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... 2900- 3799 T 39 $E..E 8
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2709 2720 NP
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2727 EDWARD J SCOTT -9635756
2733 2735 NP
2740 CARDLYN C MCCLURE -9617548
2800 BERTHA LANE 9650105
2806 INOCENCIA CALICA -9619620
2811 ELMER C WALLACE 9636186
2812 NP
2813 ELSIE GUYER ¤9614362
2816 2820 NP
2825 JOSEPH SAID 3.9639129
2826 R MARSHALL ¤9653747
2831 THERESA LANZON ¤9653397
2833 BERNARD J AUDIGIER2 9642833
2834 LORENZO G ORTIZ 7.9633091
2841*TIGERS VLG LIQUOR ¤9632188
2902 2908 NP
2916 PATRICIA JIMERSON ¤9615206
2917 JESSE W GLENN .9644375
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3001 ERNEST L JACKSON .9642835
3003 NP
3008 W T JORDAN .9644448
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3014 IVA J HUFF ¤9652283
ANDREW A SHAW 0 9628014
3018 3019 3024 NP
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3103 JUAN RAMIREZ 8 9621856
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..... 48208
3303 NP
3306 BARBARA PONSOCK 7 9646824
3313 NP
3315 JOHNNY JACKSON 9.9631565
3318 3319 NP
3322 RAY HOLMES 5 9612946
3408 3413 NP
3416 JERRY BROOKS 9 9622879
3417 NP
3422 WILLIAM DMAN .9644337
3426 3432 NP
3436 ROY FLEMING 3 9633213

AS AUTHORIZED IN WRITING BY THE PUBLISHER

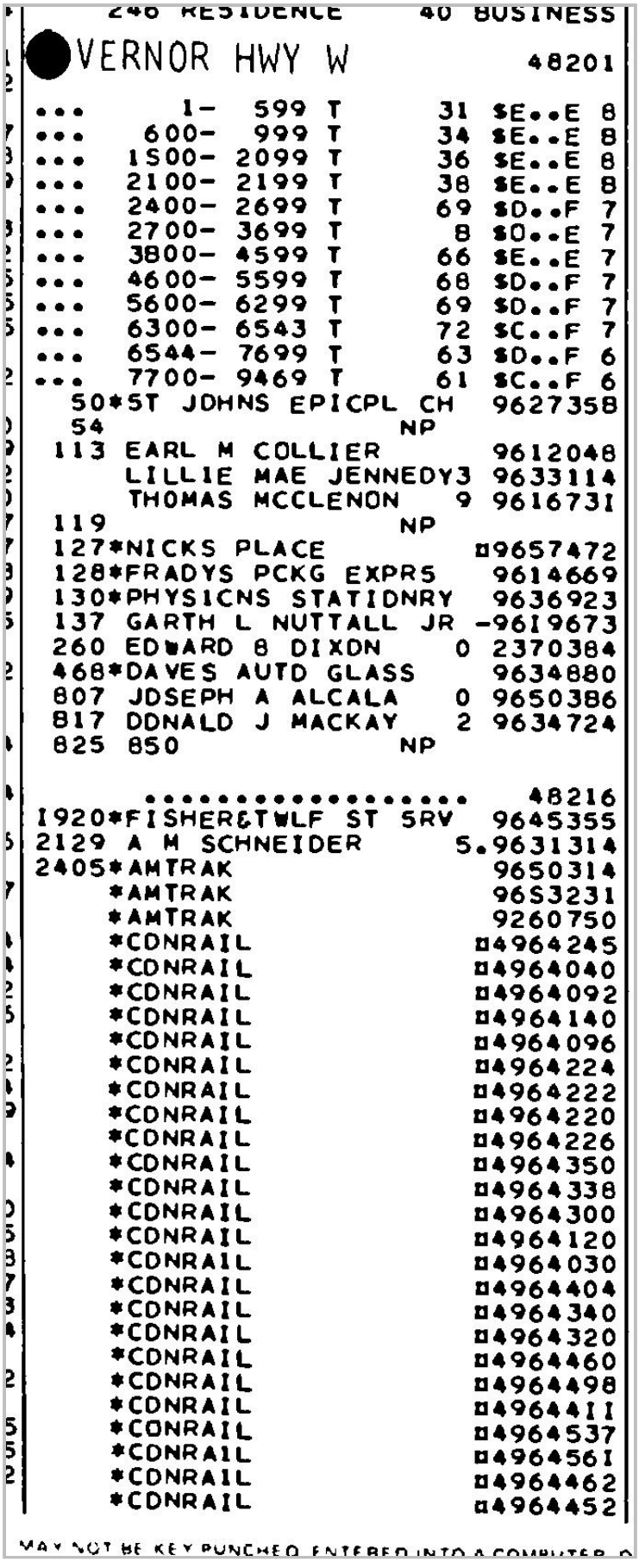
Target Street	Cross Street	Source
-	✓	Bresser's Cross-Index Directory

KALINE DR 1982



Target Street	Cross Street	Source
-	✓	Bresser's Cross-Index Directory

VERNOR HWY 1982



246 RESIDENCE 40 BUSINESS

VERNOR HWY W 48201

... 1- 599 T 31 $E..E 8
... 600- 999 T 34 $E..E 8
... 1S00- 2099 T 36 $E..E 8
... 2100- 2199 T 38 $E..E 8
... 2400- 2699 T 69 $D..F 7
... 2700- 3699 T 8 $O..E 7
... 3800- 4599 T 66 $E..E 7
... 4600- 5599 T 68 $D..F 7
... 5600- 6299 T 69 $D..F 7
... 6300- 6543 T 72 $C..F 7
... 6544- 7699 T 63 $D..F 6
... 7700- 9469 T 61 $C..F 6
50*ST JOHNS EPICPL CH 9627358
54 NP
113 EARL M COLLIER 9612048
LILLIE MAE JENNEDY3 9633114
THOMAS MCCLENON 9 9616731
119 NP
127*NICKS PLACE ¤9657472
128*FRADYS PCKG EXPRS 9614669
130*PHYSICNS STATIONRY 9636923
137 GARTH L NUTTALL JR -9619673
260 EDWARD B DIXON 0 2370384
468*DAVES AUTO GLASS 9634880
807 JOSEPH A ALCALA 0 9650386
817 DONALD J MACKAY 2 9634724
825 850 NP

..... 48216
1920*FISHER&TWLF ST SRV 9645355
2129 A M SCHNEIDER 5.9631314
2405*AMTRAK 9650314
*AMTRAK 9653231
*AMTRAK 9260750
*CONRAIL ¤4964245
*CONRAIL ¤4964040
*CONRAIL ¤4964092
*CONRAIL ¤4964140
*CONRAIL ¤4964096
*CONRAIL ¤4964224
*CONRAIL ¤4964222
*CONRAIL ¤4964220
*CONRAIL ¤4964226
*CONRAIL ¤4964350
*CONRAIL ¤4964338
*CONRAIL ¤4964300
*CONRAIL ¤4964120
*CONRAIL ¤4964030
*CONRAIL ¤4964404
*CONRAIL ¤4964340
*CONRAIL ¤4964320
*CONRAIL ¤4964460
*CONRAIL ¤4964498
*CONRAIL ¤4964411
*CONRAIL ¤4964537
*CONRAIL ¤4964561
*CONRAIL ¤4964462
*CONRAIL ¤4964452

MAY NOT BE KEY PUNCHED ENTERED INTO A COMPUTER O

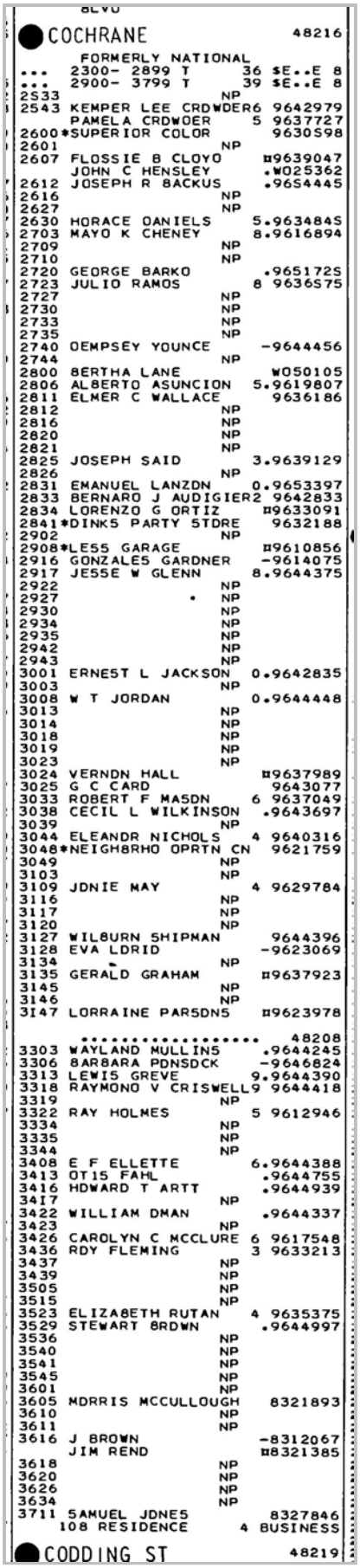
Target Street	Cross Street	Source
-	✓	Bresser's Cross-Index Directory

VERNOR HWY 1982

```
2405*CDNRAIL                  ¤4964265
     *CONRAIL                 ¤4964185
     *CONRAIL                 ¤496418S
     *CDNRAIL                 ¤4964010
     *CONRAIL                 ¤496408S
     *CONRAIL                 ¤4964417
     *CONRAIL                 ¤4964034
     *CONRAIL                 ¤4964434
     *CONRAIL                 ¤496404S
     *CONRAIL                 ¤4964200
     *CDNRAIL                 ¤4964106
     *CONRAIL                 ¤4964160
     *CONRAIL                 ¤4964268
     *CDNRAIL                 ¤4964153
     *CONRAIL                 ¤49640S8
     *CONRAIL                 ¤4964400
     *CONRAIL                 ¤4964004
     *MICH PASSNGR FDUNO       2226054
     *US AMTRACK SALES         96407S0
2600 2602 2604 2606 NP
2608 2610 2612 2614 NP
2618 MDNIOUE CDL8Y           ¤8969405
2620 OARLINE T MCCRARY 7     8957064
2622 RICHARD O TYLER   6     8972S89
2640*CASA 8LANCA LDUNGE      ¤9616969
2660 E SPARKS          6     9637368
     L STANLEY SR              96S7519
2669 NUEVO L TAMALERIA 9     9628066
2730 2734              NP
2737*SERVICE TIRE CO          2370050
2740 WILLIAM H DAVIS   2     894SS77
2760                   NP
2801*CITY PDLICE OEPT         2244020
2810*HEATLEY 8ROS SERV        2370210
28S9 2861              NP
2863 PAUL ORTD         0     9622099
     PAUL RDDRIGUEZ    0     9622099
286S ANACLETD RDORIGUEZ4     9653718
2867 LDUIS DDRANTES    S.    9633673
     JDSE HERNANDEZ    4     2370325
2869 2873 2975         NP
3000*CTY PRKG ENFRC DVN       2244937
     *CTY MUNICIPL PRKG       2244937
3003*PATS 8AR                 9649262
3031 3033 3035 3037 NP
3041 DELIA HALL        0     9623640
3344*LEDN AUTD SALES         ¤5543160
3443*PIERRE AUTO SLS 2       -5S44140
3456*8AKER ST TRLY RSTR       5S43270
3S01*PUERTD VALLARTA          5549577
     *PUERTD VLRTA RSTR       8495542
3508 ESSIE MAE WILLIAMS      -843239S
3513 MIGDALIA QUINONES       ¤8425774
3518 3526              NP
3S47 WAYNE CHAMBERS    0     8423508
     JORGE TREVIND     5     5543043
3549 JDSE A GARZA      6     5540693
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Target Street	Cross Street	Source
✓	-	Bresser's Cross-Index Directory

COCHRANE ST 1977



BLVD

COCHRANE 48216

FORMERLY NATIONAL

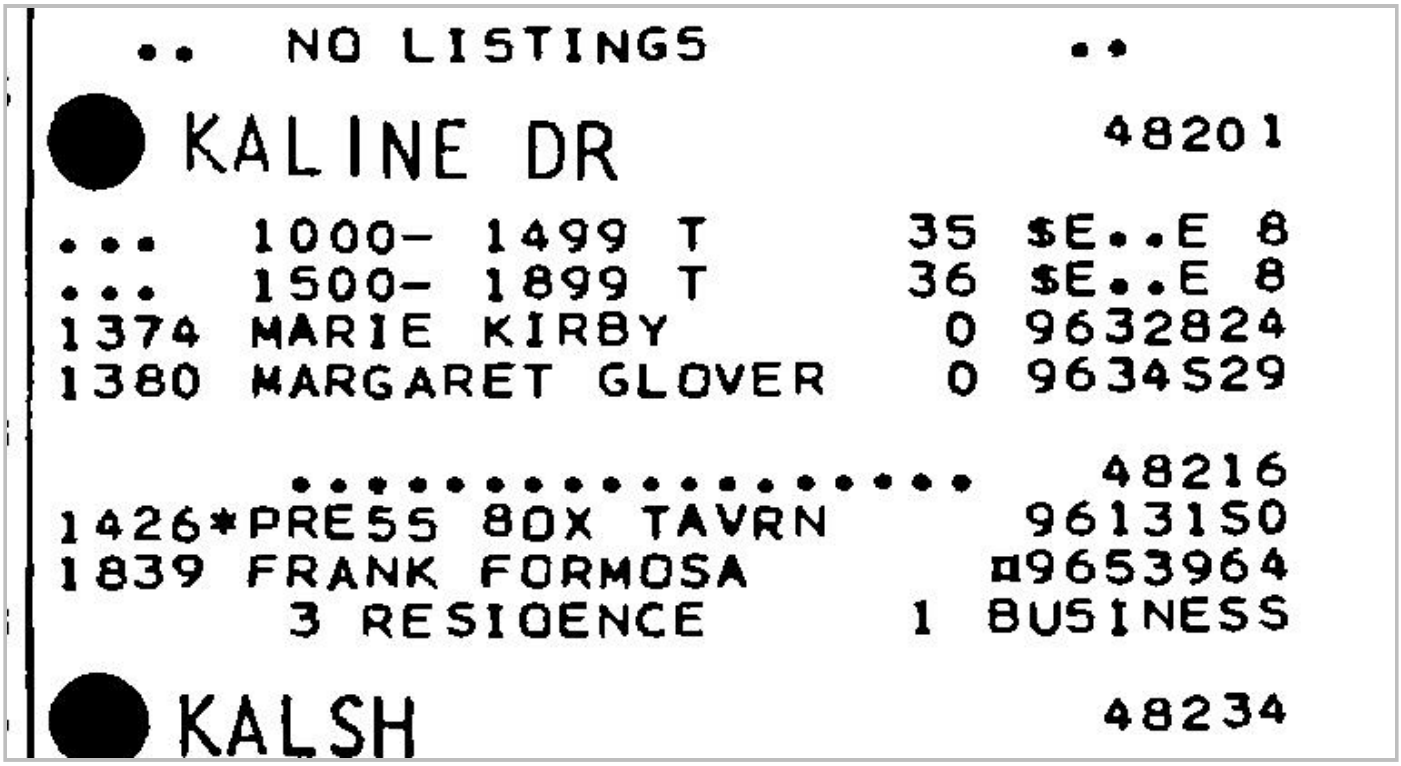
... 2300- 2899 T 36 $E..E 8
... 2900- 3799 T 39 $E..E 8
2533 NP
2543 KEMPER LEE CRDWDER 6 9642979
PAMELA CRDWDER 5 9637727
2600 *SUPERIOR COLOR 9630598
2601 NP
2607 FLOSSIE B CLOYD ¤9639047
JOHN C HENSLEY .W025362
2612 JOSEPH R BACKUS .9654445
2616 NP
2627 NP
2630 HORACE DANIELS 5.9634845
2703 MAYO K CHENEY 8.9616894
2709 NP
2710 NP
2720 GEORGE BARKO .965172S
2723 JULIO RAMOS 8 9636575
2727 NP
2730 NP
2733 NP
2735 NP
2740 DEMPSEY YOUNCE -9644456
2744 NP
2800 BERTHA LANE W050105
2806 ALBERTO ASUNCION 5.9619807
2811 ELMER C WALLACE 9636186
2812 NP
2816 NP
2820 NP
2821 NP
2825 JOSEPH SAID 3.9639129
2826 NP
2831 EMANUEL LANZON 0.9653397
2833 BERNARD J AUDIGIER2 9642833
2834 LORENZO G ORTIZ ¤9633091
2841 *DINKS PARTY STORE 9632188
2902 NP
2908 *LESS GARAGE ¤9610856
2916 GONZALES GARDNER -9614075
2917 JESSE W GLENN 8.9644375
2922 NP
2927 NP
2930 NP
2934 NP
2935 NP
2942 NP
2943 NP
3001 ERNEST L JACKSON 0.9642835
3003 NP
3008 W T JORDAN 0.9644448
3013 NP
3014 NP
3018 NP
3019 NP
3023 NP
3024 VERNON HALL ¤9637989
3025 G C CARD 9643077
3033 ROBERT F MASON 6 9637049
3038 CECIL L WILKINSON .9643697
3039 NP
3044 ELEANOR NICHOLS 4 9640316
3048 *NEIGHBRHO OPRTN CN 9621759
3049 NP
3103 NP
3109 JONIE MAY 4 9629784
3116 NP
3117 NP
3120 NP
3127 WILBURN SHIPMAN 9644396
3128 EVA LORID -9623069
3134 NP
3135 GERALD GRAHAM ¤9637923
3145 NP
3146 NP
3147 LORRAINE PARSONS ¤9623978

..... 48208
3303 WAYLAND MULLINS .9644245
3306 BARBARA PONSDCK -9646824
3313 LEWIS GREVE 9.9644390
3318 RAYMOND V CRISWELL9 9644418
3319 NP
3322 RAY HOLMES 5 9612946
3334 NP
3335 NP
3344 NP
3408 E F ELLETTE 6.9644388
3413 OTIS FAHL .9644755
3416 HOWARD T ARTT .9644939
3417 NP
3422 WILLIAM DMAN .9644337
3423 NP
3426 CAROLYN C MCCLURE 6 9617548
3436 ROY FLEMING 3 9633213
3437 NP
3439 NP
3505 NP
3515 NP
3523 ELIZABETH RUTAN 4 9635375
3529 STEWART BROWN .9644997
3536 NP
3540 NP
3541 NP
3545 NP
3601 NP
3605 MORRIS MCCULLOUGH 8321893
3610 NP
3611 NP
3616 J BROWN -8312067
JIM REND ¤8321385
3618 NP
3620 NP
3626 NP
3634 NP
3711 SAMUEL JONES 8327846
108 RESIDENCE 4 BUSINESS

CODDING ST 48219

Target Street	Cross Street	Source
-	✓	Bresser's Cross-Index Directory

KALINE DR 1977



Target Street	Cross Street	Source
-	✓	Bresser's Cross-Index Directory

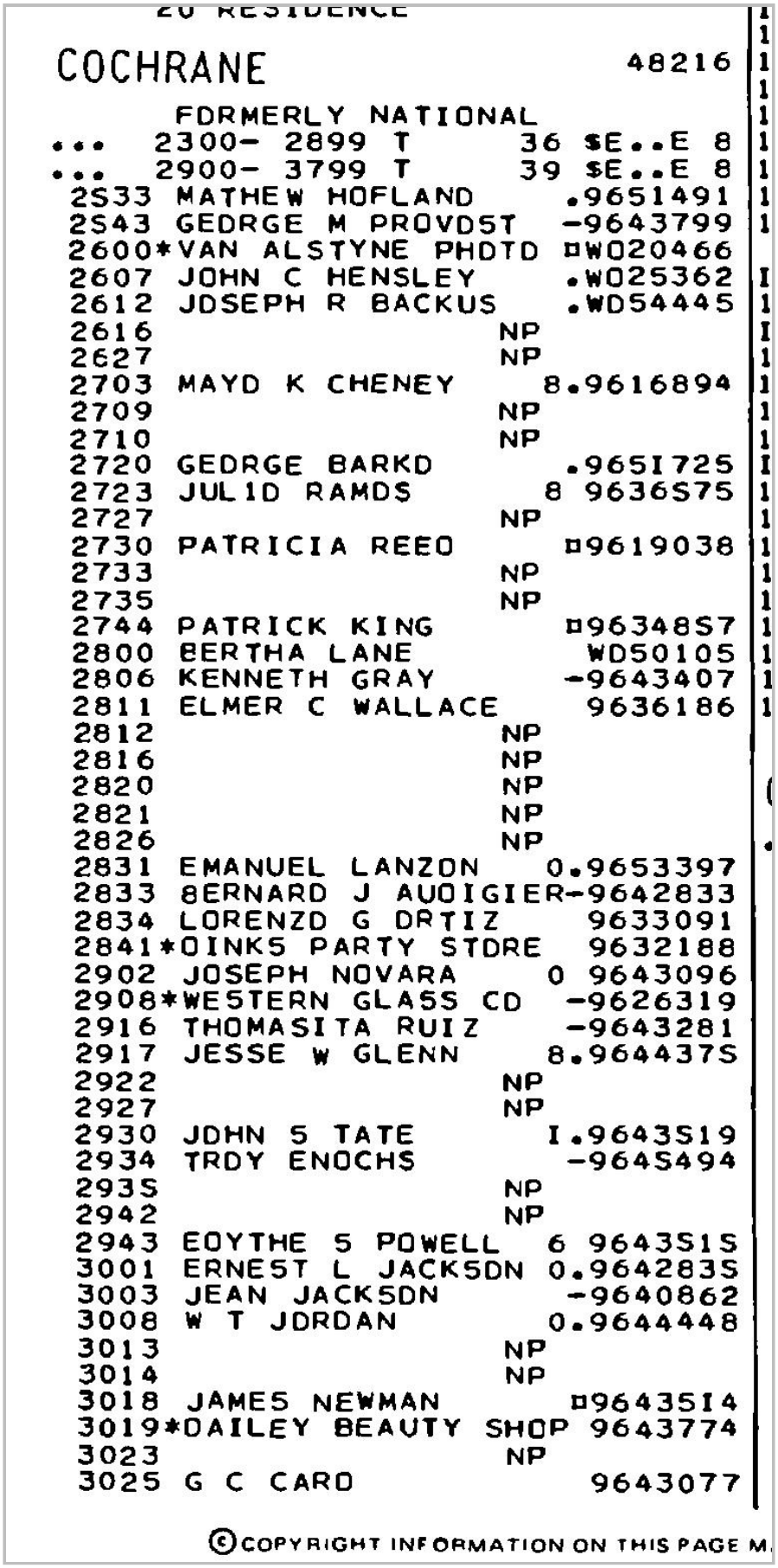
VERNOR HWY 1977

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    301 RESIDENCE      46 BUSINESS
VERNOR HWY W                 48201
...      1-  599 T       31 $E..E 8
...    600-  999 T       34 $E..E 8
...   1500- 2099 T       36 $E..E 8
...   2100- 2199 T       38 $E..E 8
...   2400- 2699 T       69 $O..F 7
...   2700- 3699 T        8 $O..E 7
...   3800- 4599 T       66 $E..E 7
...   4600- 5599 T       68 $O..F 7
...   5600- 6299 T       69 $O..F 7
...   6300- 6543 T       72 $C..F 7
...   6544- 7699 T       63 $O..F 6
...   7700- 9469 T       61 $C..F 6
  50*ST JOHNS EPICPL CH    9627358
  54 MARTIN FELBINGER    0 9610968
 113 EARL M COLLIER      1 9612048
     LILLIE MAE JENNEOY  3 9633114
     ANNE L JOHNSON      0 9619210
     VIRGINIA MCCLENON   4 9616731
     C MCOOUGAL            ¤9637043
 119 TERRIS CARLSON      8 9634331
     F E ROSE            4 9638046
 127*ART&OOTS GRILL        9611315
 128*FRAOYS PCKG EXPRS     WO14669
 130*COTTRELL-CLARKE       WO36921
    *PHYSICNS STATIONRY    9636923
 211 MARY LOUISE MORRIS   -9634918
     GAIL WILBERT         -9634918
     MARION L WILBERT     -9634918
     MARIA WILBERT        -9634918
     LOUISE WILBERT       -9634918
    *CLAYTON HOTEL          WO27885
 468*OAVES AUTO GLASS       WO34880
 495*                 NP
 807 JOSEPH A ALCALA       ¤9650386
 815                  NP
 817 OONALO J MACKAY     2 9634724
 825                  NP
 827                  NP
 850                  NP

     ..................    48216
1920*FISHER&TWELFTH SVC   ¤9645355
2129 A M SCHNEIOER      5.WO31314
2405*ACTION JACKSON       ¤2370105
    *AMTRAK                -2267460
    *CONSOLIOATEO RAIL     ¤2370100
    *FLEXI-VAN SERVICE      2370100
    *MICHIGAN ARTRAIN      ¤9634978
    *TELEPHN OCTY OVY      ¤9632486
2600                 NP
2602 BEVERLY J OAVIS      -8977464
2604                 NP
2606                 NP
2608 WILLIE P ELLIOTT   5 3610444
     ROBERT PHILLIPS    4 8946840
2610 ETHELYN E LEE      6 8944078
2612                 NP
2614 CHARLES SMITH      6 8977882
2618                 NP
2620 OARLINE T MCCRARY    ¤8957064
2622 RICHARO O TYLER    6 8985396
2640*EL SOL RESTAURANT    9653544
2653                 NP
2660 E SPARKS           6 9637368
     L STANLEY SR         9657519
     L STANLEY SR         9654327
2730 MANFORO WALKER     1.8946355
2732                 NP
2734 JERALOINE WARO     1 8972878
2737*SERVICE TIRE CO      2370050
2740 WILLIAM H OAVIS    2 8945577
```

Target Street	Cross Street	Source
✓	-	Bresser's Cross-Index Directory

COCHRANE ST 1972



```
     20 RESIDENCE
COCHRANE                                48216
      FORMERLY NATIONAL
...  2300- 2899 T      36 $E..E 8
...  2900- 3799 T      39 $E..E 8
 2S33 MATHEW HOFLAND      .9651491
 2S43 GEORGE M PROVDST   -9643799
 2600*VAN ALSTYNE PHDTD  □W020466
 2607 JOHN C HENSLEY      .W025362
 2612 JOSEPH R BACKUS     .WD54445
 2616                    NP
 2627                    NP
 2703 MAYD K CHENEY     8.9616894
 2709                    NP
 2710                    NP
 2720 GEORGE BARKD        .9651725
 2723 JULID RAMOS       8 9636575
 2727                    NP
 2730 PATRICIA REED       □9619038
 2733                    NP
 2735                    NP
 2744 PATRICK KING        □9634857
 2800 BERTHA LANE          WD50105
 2806 KENNETH GRAY        -9643407
 2811 ELMER C WALLACE      9636186
 2812                    NP
 2816                    NP
 2820                    NP
 2821                    NP
 2826                    NP
 2831 EMANUEL LANZON    0.9653397
 2833 BERNARD J AUOIGIER-9642833
 2834 LORENZO G ORTIZ      9633091
 2841*OINKS PARTY STORE    9632188
 2902 JOSEPH NOVARA      0 9643096
 2908*WESTERN GLASS CO    -9626319
 2916 THOMASITA RUIZ      -9643281
 2917 JESSE W GLENN      8.9644375
 2922                    NP
 2927                    NP
 2930 JOHN S TATE          I.9643519
 2934 TROY ENOCHS           -9645494
 2935                    NP
 2942                    NP
 2943 EOYTHE S POWELL    6 9643515
 3001 ERNEST L JACKSON 0.9642835
 3003 JEAN JACKSON         -9640862
 3008 W T JORDAN         0.9644448
 3013                    NP
 3014                    NP
 3018 JAMES NEWMAN         □9643514
 3019*DAILEY BEAUTY SHOP 9643774
 3023                    NP
 3025 G C CARD              9643077
```

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Target Street	Cross Street	Source
-	✓	Bresser's Cross-Index Directory

KALINE DR 1972

```
204S0                                  NP
204S7 CASS PAUL                          .KE4S662
      61 RESIOENCE

CHERRY                                        48201

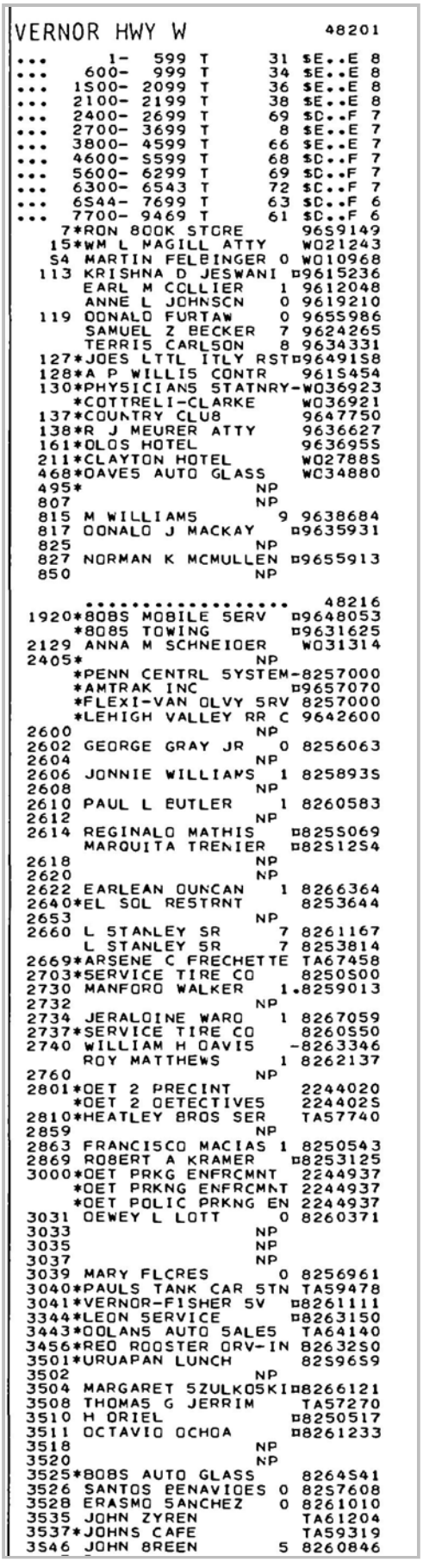
...   1000- 1499 T          35 $E..E 8
...   1S00- 1899 T          36 $E..E 8
 1374 LUZ MONTIEL IBARRA
                              1 9637847
      MARIE KIRBY             0 9632824
 1380 MARGARET GLOVER         0 9634S29
      HOWARO COLEMAN            W037888

      ....................       48216
 1426*PRES5 8OX TAVERN        9613IS0
 1827 OAVIO 8LAIR           3.9632262
 1839                                 NP
      6 RESIOENCE             1 8USINESS

CHERRYLAWN                                    48204
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Target Street	Cross Street	Source
-	✓	Bresser's Cross-Index Directory

VERNOR HWY 1972

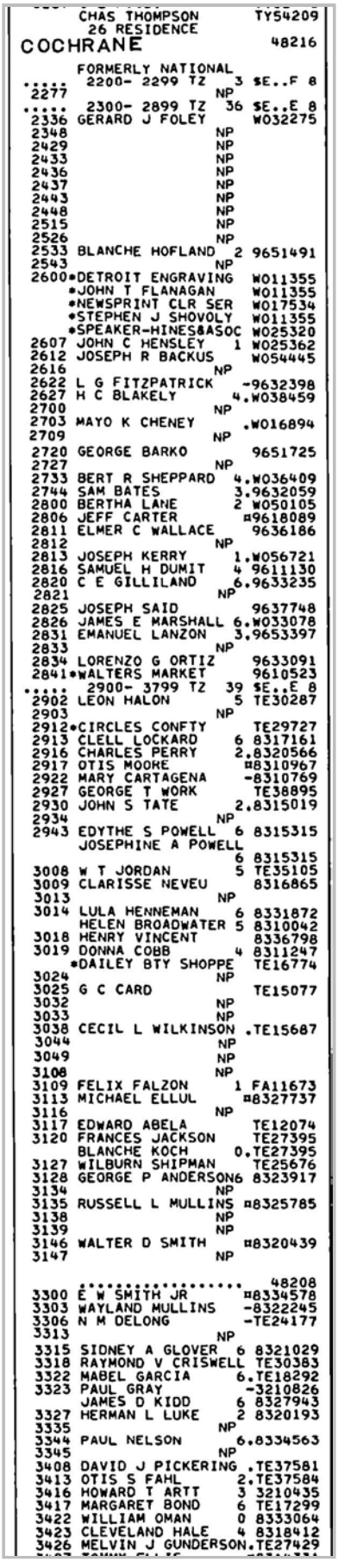


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VERNOR HWY W                                48201
...      1-  599 T      31 $E..E 8
...    600-  999 T      34 $E..E 8
...   1S00- 2099 T      36 $E..E 8
...   2100- 2199 T      38 $E..E 8
...   2400- 2699 T      69 $D..F 7
...   2700- 3699 T       8 $E..E 7
...   3800- 4599 T      66 $E..E 7
...   4600- S599 T      68 $D..F 7
...   5600- 6299 T      69 $D..F 7
...   6300- 6543 T      72 $D..F 7
...   6S44- 7699 T      63 $D..F 6
...   7700- 9469 T      61 $D..F 6
    7*RON 800K STORE        96S9149
   15*WM L MAGILL ATTY      WO21243
   S4 MARTIN FELBINGER 0    WO10968
  113 KRISHNA D JESWANI     ¤9615236
      EARL M COLLIER    1   9612048
      ANNE L JOHNSON    0   9619210
  119 OONALO FURTAW     0   9655986
      SAMUEL Z BECKER   7   9624265
      TERRIS CARLSON    8   9634331
  127*JOES LTTL ITLY RST    ¤96491S8
  128*A P WILLIS CONTR      961S454
  130*PHYSICIANS STATNRY-   WO36923
     *COTTRELI-CLARKE       WO36921
  137*COUNTRY CLUB          9647750
  138*R J MEURER ATTY       9636627
  161*OLOS HOTEL            963695S
  211*CLAYTON HOTEL         WO2788S
  468*OAVES AUTO GLASS      WO34880
  495*                  NP
  807                   NP
  815 M WILLIAMS        9 9638684
  817 OONALO J MACKAY       ¤9635931
  825                   NP
  827 NORMAN K MCMULLEN     ¤9655913
  850                   NP

      .................     48216
 1920*80BS MOBILE SERV      ¤9648053
     *8085 TOWING           ¤9631625
 2129 ANNA M SCHNEIOER      WO31314
 2405*                 NP
     *PENN CENTRL SYSTEM-   8257000
     *AMTRAK INC            ¤9657070
     *FLEXI-VAN OLVY SRV    8257000
     *LEHIGH VALLEY RR C    9642600
 2600                  NP
 2602 GEORGE GRAY JR   0    8256063
 2604                  NP
 2606 JONNIE WILLIAMS  1    825893S
 2608                  NP
 2610 PAUL L BUTLER    1    8260583
 2612                  NP
 2614 REGINALO MATHIS      ¤825S069
      MARQUITA TRENIER     ¤82S12S4
 2618                  NP
 2620                  NP
 2622 EARLEAN OUNCAN   1    8266364
 2640*EL SOL RESTRNT       8253644
 2653                  NP
 2660 L STANLEY SR     7    8261167
      L STANLEY SR     7    8253814
 2669*ARSENE C FRECHETTE   TA67458
 2703*SERVICE TIRE CO      8250S00
 2730 MANFORO WALKER   1.   8259013
 2732                  NP
 2734 JERALOINE WARO   1    8267059
 2737*SERVICE TIRE CO      8260S50
 2740 WILLIAM H OAVIS      -8263346
      ROY MATTHEWS     1    8262137
 2760                  NP
 2801*OET 2 PRECINT        2244020
     *OET 2 OETECTIVES     224402S
 2810*HEATLEY BROS SER     TA57740
 2859                  NP
 2863 FRANCISCO MACIAS 1   8250543
 2869 ROBERT A KRAMER      ¤8253125
 3000*OET PRKG ENFRCMNT    2244937
     *OET PRKNG ENFRCMNT   2244937
     *OET POLIC PRKNG EN   2244937
 3031 OEWEY L LOTT     0   8260371
 3033                  NP
 3035                  NP
 3037                  NP
 3039 MARY FLORES      0   8256961
 3040*PAULS TANK CAR STN    TA59478
 3041*VERNOR-FISHER SV     ¤8261111
 3344*LEON SERVICE         ¤8263150
 3443*OOLANS AUTO SALES    TA64140
 3456*REO ROOSTER ORV-IN   82632S0
 3501*URUAPAN LUNCH        82S96S9
 3502                  NP
 3504 MARGARET SZULKOSKI   ¤8266121
 3508 THOMAS G JERRIM      TA57270
 3510 H ORIEL              ¤8250517
 3511 OCTAVIO OCHOA        ¤8261233
 3518                  NP
 3520                  NP
 3525*BOBS AUTO GLASS      8264S41
 3526 SANTOS BENAVIOES 0   82S7608
 3528 ERASMO SANCHEZ   0   8261010
 3535 JOHN ZYREN           TA61204
 3537*JOHNS CAFE           TA59319
 3546 JOHN BREEN       5   8260846
```

Target Street	Cross Street	Source
✓	-	Bresser's Cross-Index Directory

COCHRANE ST 1967



```
      CHAS THOMPSON          TY54209
       26 RESIDENCE
COCHRANE                       48216

      FORMERLY NATIONAL
.....  2200- 2299 TZ    3 $E..F 8
 2277                  NP
.....  2300- 2899 TZ   36 $E..E 8
 2336 GERARD J FOLEY       W032275
 2348                  NP
 2429                  NP
 2433                  NP
 2436                  NP
 2437                  NP
 2443                  NP
 2448                  NP
 2515                  NP
 2526                  NP
 2533 BLANCHE HOFLAND   2 9651491
 2543                  NP
 2600*DETROIT ENGRAVING   W011355
     *JOHN T FLANAGAN     W011355
     *NEWSPRINT CLR SER   W017534
     *STEPHEN J SHOVOLY   W011355
     *SPEAKER-HINES&ASOC  W025320
 2607 JOHN C HENSLEY    1 W025362
 2612 JOSEPH R BACKUS      W054445
 2616                  NP
 2622 L G FITZPATRICK    -9632398
 2627 H C BLAKELY       4.W038459
 2700                  NP
 2703 MAYO K CHENEY      .W016894
 2709                  NP
 2720 GEORGE BARKO          9651725
 2727                  NP
 2733 BERT R SHEPPARD   4.W036409
 2744 SAM BATES         3.9632059
 2800 BERTHA LANE       2 W050105
 2806 JEFF CARTER        ¤9618089
 2811 ELMER C WALLACE     9636186
 2812                  NP
 2813 JOSEPH KERRY      1.W056721
 2816 SAMUEL H DUMIT    4 9611130
 2820 C E GILLILAND     6.9633235
 2821                  NP
 2825 JOSEPH SAID           9637748
 2826 JAMES E MARSHALL 6.W033078
 2831 EMANUEL LANZON    3.9653397
 2833                  NP
 2834 LORENZO G ORTIZ       9633091
 2841*WALTERS MARKET        9610523
.....  2900- 3799 TZ   39 $E..E 8
 2902 LEON HALON         5 TE30287
 2903                  NP
 2912*CIRCLES CONFTY       TE29727
 2913 CLELL LOCKARD      6 8317161
 2916 CHARLES PERRY      2.8320566
 2917 OTIS MOORE          ¤8310967
 2922 MARY CARTAGENA      -8310769
 2927 GEORGE T WORK        TE38895
 2930 JOHN S TATE        2.8315019
 2934                  NP
 2943 EDYTHE S POWELL    6 8315315
      JOSEPHINE A POWELL
                         6 8315315
 3008 W T JORDAN         5 TE35105
 3009 CLARISSE NEVEU       8316865
 3013                  NP
 3014 LULA HENNEMAN      6 8331872
      HELEN BROADWATER   5 8310042
 3018 HENRY VINCENT        8336798
 3019 DONNA COBB         4 8311247
     *DAILEY BTY SHOPPE    TE16774
 3024                  NP
 3025 G C CARD             TE15077
 3032                  NP
 3033                  NP
 3038 CECIL L WILKINSON .TE15687
 3044                  NP
 3049                  NP
 3108                  NP
 3109 FELIX FALZON       1 FA11673
 3113 MICHAEL ELLUL       ¤8327737
 3116                  NP
 3117 EDWARD ABELA         TE12074
 3120 FRANCES JACKSON      TE27395
      BLANCHE KOCH       0.TE27395
 3127 WILBURN SHIPMAN      TE25676
 3128 GEORGE P ANDERSON6 8323917
 3134                  NP
 3135 RUSSELL L MULLINS ¤8325785
 3138                  NP
 3139                  NP
 3146 WALTER D SMITH      ¤8320439
 3147                  NP

      .................    48208
 3300 E W SMITH JR        ¤8334578
 3303 WAYLAND MULLINS      -8322245
 3306 N M DELONG           -TE24177
 3313                  NP
 3315 SIDNEY A GLOVER    6 8321029
 3318 RAYMOND V CRISWELL   TE30383
 3322 MABEL GARCIA       6.TE18292
 3323 PAUL GRAY            -3210826
      JAMES D KIDD       6 8327943
 3327 HERMAN L LUKE      2 8320193
 3335                  NP
 3344 PAUL NELSON        6.8334563
 3345                  NP
 3408 DAVID J PICKERING .TE37581
 3413 OTIS S FAHL        2.TE37584
 3416 HOWARD T ARTT      3 3210435
 3417 MARGARET BOND      6 TE17299
 3422 WILLIAM OMAN       0 8333064
 3423 CLEVELAND HALE     4 8318412
 3426 MELVIN J GUNDERSON.TE27429
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KALINE DR 1967

57 RESIDENCE

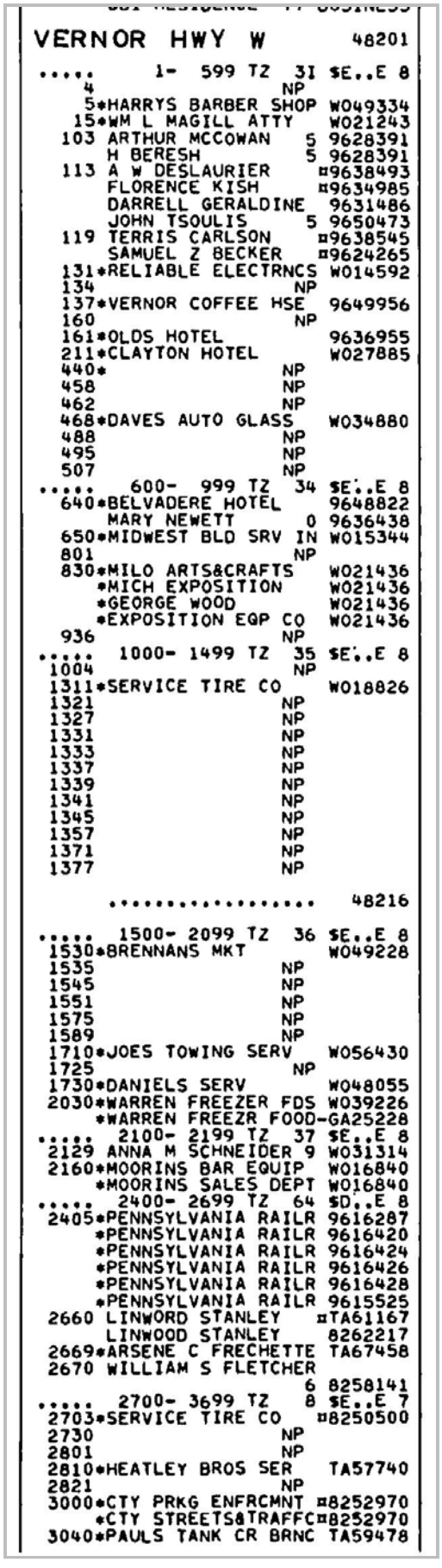
CHERRY 48201

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.....  620-  999 TZ  33 BD..E 8
  809 RIFKA ABED          1.9631466
  827                  NP
  846                  NP
  940                  NP
.....  1000- 1499 TZ  35 $E..E 8
 1245 RUTH MONETT        -9639448
 1249                  NP
 1310                  NP
 1332                  NP
 1350 COLUMBUS CARROLL    9638458
 1380 HOWARD COLEMAN      W037888

      ..................    48216
 1404 MARGARET GLOVER   0 W034529
 1406                  NP
 1407                  NP
.....  1500- 1899 TZ  36 $E..E 8
 1814 PETE GARCIA        -2244882
 1821 JOSEPH CAMILLERI 2.9637744
 1827 DAVID A BLAIR      3.W053399
 1833                  NP
 1839                  NP
 1845                  NP
 1847                  NP
 1859 ANNA MEDRANO       ¤9631763
      21 RESIDENCE
```

Target Street	Cross Street	Source
-	✓	Bresser's Cross-Index Directory

VERNOR HWY 1967



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VERNOR HWY W                    48201

.....     1-  599 TZ  3I $E..E 8
    4                    NP
    5*HARRYS BARBER SHOP    W049334
   15*WM L MAGILL ATTY      W021243
  103 ARTHUR MCCOWAN      5 9628391
      H BERESH            5 9628391
  113 A W DESLAURIER       ¤9638493
      FLORENCE KISH        ¤9634985
      DARRELL GERALDINE     9631486
      JOHN TSOULIS        5 9650473
  119 TERRIS CARLSON       ¤9638545
      SAMUEL Z BECKER      ¤9624265
  131*RELIABLE ELECTRNCS   W014592
  134                  NP
  137*VERNOR COFFEE HSE     9649956
  160                  NP
  161*OLDS HOTEL            9636955
  211*CLAYTON HOTEL         W027885
  440*                 NP
  458                  NP
  462                  NP
  468*DAVES AUTO GLASS      W034880
  488                  NP
  495                  NP
  507                  NP
.....   600-  999 TZ  34 $E..E 8
  640*BELVADERE HOTEL       9648822
      MARY NEWETT         0 9636438
  650*MIDWEST BLD SRV IN    W015344
  801                  NP
  830*MILO ARTS&CRAFTS      W021436
     *MICH EXPOSITION       W021436
     *GEORGE WOOD           W021436
     *EXPOSITION EQP CO     W021436
  936                  NP
.....  1000- 1499 TZ  35 $E..E 8
 1004                  NP
 1311*SERVICE TIRE CO       W018826
 1321                 NP
 1327                 NP
 1331                 NP
 1333                 NP
 1337                 NP
 1339                 NP
 1341                 NP
 1345                 NP
 1357                 NP
 1371                 NP
 1377                 NP

      ................   48216

.....  1500- 2099 TZ  36 $E..E 8
 1530*BRENNANS MKT          W049228
 1535                 NP
 1545                 NP
 1551                 NP
 1575                 NP
 1589                 NP
 1710*JOES TOWING SERV      W056430
 1725                  NP
 1730*DANIELS SERV          W048055
 2030*WARREN FREEZER FDS    W039226
     *WARREN FREEZR FOOD-GA25228
.....  2100- 2199 TZ  37 $E..E 8
 2129 ANNA M SCHNEIDER 9    W031314
 2160*MOORINS BAR EQUIP     W016840
     *MOORINS SALES DEPT    W016840
.....  2400- 2699 TZ  64 $D..E 8
 2405*PENNSYLVANIA RAILR    9616287
     *PENNSYLVANIA RAILR    9616420
     *PENNSYLVANIA RAILR    9616424
     *PENNSYLVANIA RAILR    9616426
     *PENNSYLVANIA RAILR    9616428
     *PENNSYLVANIA RAILR    9615525
 2660 LINWORD STANLEY      ¤TA61167
      LINWOOD STANLEY       8262217
 2669*ARSENE C FRECHETTE    TA67458
 2670 WILLIAM S FLETCHER
                       6    8258141
.....  2700- 3699 TZ   8 $E..E 7
 2703*SERVICE TIRE CO      ¤8250500
 2730                 NP
 2801                 NP
 2810*HEATLEY BROS SER      TA57740
 2821                 NP
 3000*CTY PRKG ENFRCMNT    ¤8252970
     *CTY STREETS&TRAFFC   ¤8252970
 3040*PAULS TANK CR BRNC    TA59478
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COCHRANE ST 1962

12831 ROBERT W STOGDILL •KE71089
12840 ROBERT H FRY JR •KE71998
12841 ENOS MCDONNELL JR •KE73749
12850 JAMES J KRAUSE •KE73176
12851 NP
12860 WILLIAM J ZAGER -5381875
12861 W M SMITH JR •KE71641
12870 F J LUSCZAKOSKI •KE73409
12871 F CHARLES CURTIS •KE72166
12880 EDWIN D SCOTT •KE51168
12881 ROBERT MURMAN •KE72618
12890 ANGELO GESTRO •KE38364
12891 MARIETTA GLOMB •KE80234
13011 MITCHELL PAWLAK •KE71763
13012 LESLIE LINES •KE71848
13021 GEORGE PODOLSKI KE72836
13022 FLOYD J MCCLAIN •KE70618
13031 ANNE BOZZER -5335502
PETER BOZZER -5335502
13032 WILLIAM JONES KE72435
13041 JOHN PAKULA •KE70784
13042 ROBERT EPSTEIN •KE56469
13051 H L BROOKS JR •KE72921
13052 LLOYD W ISAACS KE77236
13100 ROY C TASSINARE •KE72024
13101 JAMES D ROAN •KE71494
13110 WALTER L MAY KE71385
13111 COL JOHN MOLLEMA KE73989
13120 EARL KRUEGER •KE55197
13121 JOHN E BOWSER •KE72922
13130 WILLIAM W BUCON •KE73487
13131 JOHN T WALLERSTEIN-KE75261
13141 HAROLD R POGATS -5356382
13150 WILLIAM J BROWNE •KE72742
13151 M M MANCHESTER •KE73823
13200 S NOWOTARSKI JR •KE73108
13201 NP
13210 RAYMOND W SMITH •KE71844
13211 WALTER A SLOMKA •KE77221
13220 FRANK KULESZA JR •KE56522
13221 EWALD KLEIM •KE79896
13231 JOHN P PARKINSON •KE82331
PATRICIA PARKINSON KE82331
13232 ANNA HELMICKI •KE71843
JEROME HELMICKI KE71843
258 RESIDENCE 1 BUSINESS

NATIONAL ZONE 16

••••• 2200- 2299 TZ 3 $E..F 8
2277 VICTOR DOURTH •WO41308
••••• 2300- 2899 TZ 36 $E..E 8
2336 GERARD J FOLEY WO32275
2342 NEAL V NICOL -WO39589
2348 JOHN B KOBIELSKI WO34251
2427 JOSEPH MUSCAT WO55157
2428 JEAN YESFORD •WO31693
2433 PETER LOHMAN •WO40327
2437 SAM SCHANNAULT •WO32840
2443 VIRGIL L WILLIAMS -9637139
2501*HERRICKS MARKET WO48415
2505 EDMUND A CURALL -9621572
2514 CARL C ALBANY •WO40362
2515 ROBERT E GUERIN -WO30483
FRANK HULTS -WO55587
2518 OLEAVIA MARION -9633458
2526 JULIA A FLYNN WO30893
2527 BILL MARTIN -9648807
2533 BLANCHE HOFLAND -9651491
2600*JOHN T FLANAGAN WO11360
*DET ENGRAVNG CO WO11360
*NEWSPRNT COLOR SER WO17534
*SPEAKER HINES&THMS WO25320
2601 SELMA MAY -9613462
2607 JOHN C HENSLEY WO25362
2616 WILBUR C KUNKLE -9633049
2627 H C BLAKELY •WO38459
2703 MAYO K CHENEY •WO16894
2709 NP
2710 RONCIE C TRENT -9630095
2720 JUAN COLON -9656187
GEORGE BARKO •WO51725
2730 DOROTHY BURNS WO35719
2733 BERT R SHEPPARD •WO36409
2740 ELMER ADAMS WO38789
2800 BERTHA LANE -WO50105
2806 JACK FLETCHER -9639487
2811 ELMER C WALLACE •WO36186
2813 JOSEPH KERRY •WO56721
2816 SAMUEL H DUMIT 9611130
2820 FRANK BRUSS WO37736
2821 ROBERT CORTES •9654327
2825 JOSEPH SAID 9637748
2826 NP
2834 JAIME ORTIZ 9639022
LORENZO G ORTIZ 9639022
2841*WALTERS MARKET -9610523
••••• 2900- 3799 TZ 39 $E..E 8
2902 LEON HALON TE30287
2903 NP
2910*F J MCDONNELL CPA TE21475
2912*CIRCLES CONFTY -TE29727
2913 STEVE J THOMAS TE15692
2916 CHARLES PERRY -8320566
2917 J BENZENBERG FA10146
2927 GEORGE T WORK TE38895
2930 JOHN S TATE -8315019
2942 ELBERT ELLIOTT 8322935
3001 HENRY JACKSON -8317210
3003 JOE WESTON -8319261
3008 CONSTANCE MILLER TE34727
W T JORDAN •TE35105
3009 CLARISSE NEVEU 8316865
3013 NP
3019*DAILEY BTY SHOPPE TE16774
3024 HATTIE M SCHROCK -8321879
3025 G C CARD •TE15077
3032 LOUIS JORDAIN FA10653
3033 NP
3038 C L WILKINSON •TE15687
3039 GOLDEN MULLENS TE14607
3044 NP
3048 NP
3108 CHARLES E LITTLE TE35478
3109 FELIX FALZON FA11673
3116 WALTER SNEYD •TE26624
3117 EDWARD ABELA •TE12074

3120 BLANCHE KOCH •TE27395
FRANCES JACKSON TE27395
3127 WILBURN SHIPMAN TE25676
3128 CHARLES E NICKENS TE23948
3134 WILLIAM POTTS -8315268
3138 ERNEST PARKER •TE25788
3139 WAYLAND MULLINS TE22245
3145 NP
3146 LEON STANLEY TE32432
3147 NP

•••••ZONE 8•••••
3300 NP
3303 WARNICK ALLEN TE21086
3306 NONA DELONG •TE24177
3312 ROBERT L ONEIL 8318826
3313 REV LEWIS GREVE •TE21220
3318 RAYMOND V CRISWELL TE30383
3319 GEORGE ROOT TE21048
W R SOWDERS -8311806
3322 MABEL GARICA •TE18292
3327 HERMAN L LUKE -8320193
3330 JOE PADILLA FA10077
3335 NP
3344 CALVIN JONES TE22144
3408 D J PICKERING •TE37581
3413 OTIS S FAHL -TE37584
JAMES CARNES JR TE14514
3416 HOWARD T ARTT •FA10435
3417 NP
3422 WILLIAM OMAN TE33064
3423 CLEVELAND HALE TE18412
3426 MELVIN J GUNDERSON•TE27429
3427 L R ELLIS TE30257
3432 DONALD P GUNDERSON•TE10191
3433*C H JORDAN HTG TE13114
3436 NP
3439 ARTHUR ANDERSON TE37067
3505 NP
3510*HOTEL MARTIN 8322535
*MARTIN HOTEL 8322535
3516 NP
3518 MARIE L RIGLEY TE12631
FRANK C RIGLEY •TE12631
3528 JOE ROSCOE •TE21453
3529 LEOLA BROWN TE34619
3535 GEO COOK •TE17845
3536 PETER GOONIS •TE26239
3540 NP
3541 MAURICE J COLBURN TE16143
3545 DIONISIO CASING •TE32876
3601 NP
3602 EVA M WHELAN TE39115
3605 HARRY VENESKY •TE23185
3610 ERWIN E PALMER •TE33639
3611 SUE M POINDEXTER TE21753
3616 ORAN W TRUSTY TE19171
S W FULLERTON •TE19689
3617 F S WHEELER •TE17815
G H J FLATT TE14614
3618 MERCEDES BAEZA -8333530
CLARA MIER -8333530
3623 HERBERT SKINNER TE20168
3626 NP
3634 ANN MALONE FA10263
3639 FRANK L WADHAM •TE18617
3640 C FITZGERALD -8325736
R E FITZGERALD -8332343
3705 J D WEST -TE26184
3711 VERA SMITH TE34679
ABE B PEAK TE37757
3745*OLYMPIC BOWLG CNTR TE11513
132 RESIDENCE 13 BUSINESS

NAUMANN ZONE 12

••••• 3800- 4099 TZ 322 $C..B 9
3829 DAYTON F JOHNSON •TW33324
3836 JOHN STEWART •TW10259
3859 NP
3872 LEILA CORGILE •FO60308
3877 NP
3883 ARTERAL JOHNSON •TW32316
3889 JESSE LEE BENSON •TW15535
3919 CHAS SHIELDS •TW13518
3949 SAMUEL WATTS •TW35558
3985 JOSEPH E GUBALA •TW35682
10 RESIDENCE

NAVAHOE ZONE 15

••••• 400- 499 TZ 390 $B..D12
400 MITAR VUJOVICH •VA20143
406 ASIELEE RAMSEY -8227386
408 JOHN MOORE JR VA41110
410 ROBERT WILLIAMS -8221203
413 JOHN E PACE ED18656
415 DAVID MILLER -VA10332
418 ANDREW F HESS •VA21376
419 MOODY NORRIS VA13839
420 EDNA L GEESON •VA29690
423 NP
425 CLARENCE HICKS •VA10667
427 EDGAR HERMAN HICKS VA14605
430 LEROY SAWYER •VA29552
431 ELLA M HUNT •VA48747
434 VIRTOUS MARTIN •VA23075
435 GLORIA A KEATON •VA29836
437 NP
440 JOHN W TAYLOR VA20268
442 ANDERSON HALL VA28896
443 NP
444 LORENZO CAMPBELL VA49642
SHIRLEY CAMPBELL VA49642
ALBERT CAMPBELL •VA49642
446 LUTHER LORICK VA17311
447 BARBARA A STEWART -8248247
BERNARD STEWART -8248247
450 ARTHUR L WILLIAMS -8217264
451 OTIS M DUKES •VA22591
452 NP
458 ERNEST BETTS VA16052
459 NP
463 EDWARD S LOMAX VA16139
465 JOHN ROBINSON -8241768
467 DILLARD C TOLLEY •VA29686
MARY L TOLLEY -VA29686

KALINE DR 1962

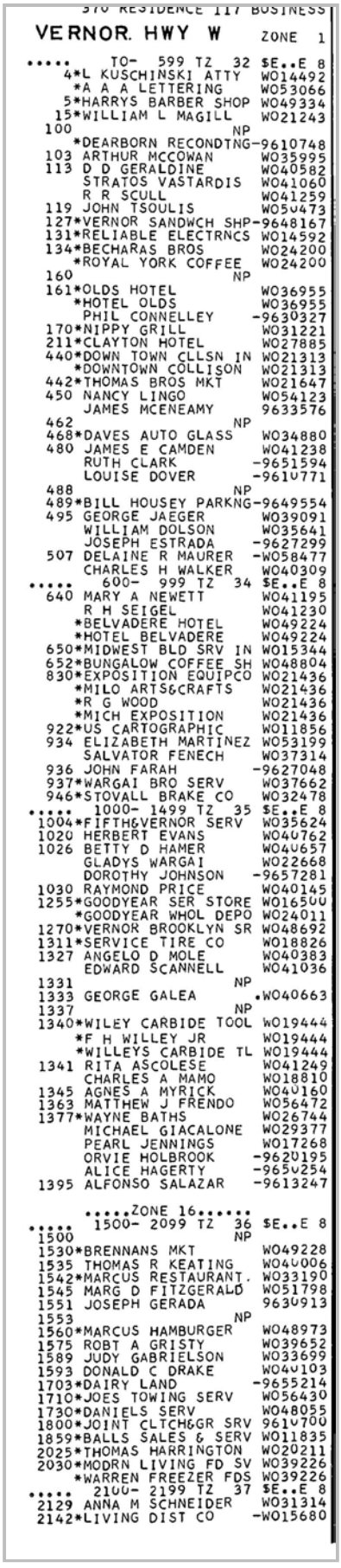
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CHERRY                                   ZONE  1

.....    620-  999 TZ   33 BD..E 8
  648 BIRDIE COLLINS          WO40981
  809 RIFKA ABED             .WO31466
  825 A RAMIREZ               WO41085
  826*JOHN H BUSBY CO         WO11681
  827 WALLACE MUNOZ           WO34874
  840*RELIABLE MLNG SERV      WO38363
     *RELIABLE ADV DSTBG      WO38363
  846                    NP
  911 ANTONIA ROSALES         WO31582
  922*IND ELECTRIC CO         WO10364
  940 ABRAHAM J HANDY        .WO37652
.....   1000- 1499 TZ   35 $E..E 8
 1031                    NP
 1249 DANIEL HERNANDEZ      -WO34725
 1310                    NP
 1316*ARTHUR W RECKLING      WO29148
     *ATLAS METAL PLATNG     WO29148
 1332 TED WILLIFORD         .9653423
 1350 COLUMBUS CARROLL      .WO41395
 1366                    NP
 1380 HOWARD COLEMAN         WO37888
        .....ZONE 16.....
 1404 MARGARET GLOVER        WO34529
 1406 MARIE ADAMSKI          WO33467
 1407                    NP
.....   1500- 1899 TZ   36 $E..E 8
 1821 JOSEPH CAMILLERI      -9637744
 1827                    NP
 1839 FRANCIS FORMOSA        WO50093
 1847                    NP
 1859 J MEDRANO              WO40201
       22 RESIDENCE    6 BUSINESS

CHERRYLAWN                               ZONE  4
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Target Street	Cross Street	Source
-	✓	Bresser's Cross-Index Directory

VERNOR HWY 1962



570 RESIDENCE 117 BUSINESS

VERNOR HWY W ZONE 1

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.....   TO- 599 TZ 32 $E..E 8
   4*L KUSCHINSKI ATTY   WO14492
    *A A A LETTERING     WO53066
   5*HARRYS BARBER SHOP  WO49334
  15*WILLIAM L MAGILL    WO21243
 100                NP
    *DEARBORN RECONDTNG-9610748
 103 ARTHUR MCCOWAN      WO35995
 113 D D GERALDINE       WO40582
     STRATOS VASTARDIS   WO41060
     R R SCULL           WO41259
 119 JOHN TSOULIS        WO50473
 127*VERNOR SANDWCH SHP-9648167
 131*RELIABLE ELECTRNCS WO14592
 134*BECHARAS BROS       WO24200
    *ROYAL YORK COFFEE   WO24200
 160                NP
 161*OLDS HOTEL          WO36955
    *HOTEL OLDS          WO36955
     PHIL CONNELLEY     -9630327
 170*NIPPY GRILL         WO31221
 211*CLAYTON HOTEL       WO27885
 440*DOWN TOWN CLLSN IN WO21313
    *DOWNTOWN COLLISON   WO21313
 442*THOMAS BROS MKT     WO21647
 450 NANCY LINGO         WO54123
     JAMES MCENEAMY      9633576
 462                NP
 468*DAVES AUTO GLASS    WO34880
 480 JAMES E CAMDEN      WO41238
     RUTH CLARK         -9651594
     LOUISE DOVER       -9610771
 488                NP
 489*BILL HOUSEY PARKNG-9649554
 495 GEORGE JAEGER       WO39091
     WILLIAM DOLSON      WO35641
     JOSEPH ESTRADA     -9627299
 507 DELAINE R MAURER   -WO58477
     CHARLES H WALKER    WO40309
.....  600- 999 TZ 34 $E..E 8
 640 MARY A NEWETT       WO41195
     R H SEIGEL          WO41230
    *BELVADERE HOTEL     WO49224
    *HOTEL BELVADERE     WO49224
 650*MIDWEST BLD SRV IN WO15344
 652*BUNGALOW COFFEE SH WO48804
 830*EXPOSITION EQUIPCO WO21436
    *MILO ARTS&CRAFTS    WO21436
    *R G WOOD            WO21436
    *MICH EXPOSITION     WO21436
 922*US CARTOGRAPHIC     WO11856
 934 ELIZABETH MARTINEZ  WO53199
     SALVATOR FENECH     WO37314
 936 JOHN FARAH         -9627048
 937*WARGAI BRO SERV     WO37662
 946*STOVALL BRAKE CO    WO32478
.....  1000- 1499 TZ 35 $E..E 8
1004*FIFTH&VERNOR SERV   WO35624
1020 HERBERT EVANS       WO40762
1026 BETTY D HAMER       WO40657
     GLADYS WARGAI       WO22668
     DOROTHY JOHNSON    -9657281
1030 RAYMOND PRICE       WO40145
1255*GOODYEAR SER STORE  WO16500
    *GOODYEAR WHOL DEPO  WO24011
1270*VERNOR BROOKLYN SR  WO48692
1311*SERVICE TIRE CO     WO18826
1327 ANGELO D MOLE       WO40383
     EDWARD SCANNELL     WO41036
1331               NP
1333 GEORGE GALEA       .WO40663
1337               NP
1340*WILEY CARBIDE TOOL   WO19444
    *F H WILLEY JR       WO19444
    *WILLEYS CARBIDE TL  WO19444
1341 RITA ASCOLESE       WO41249
     CHARLES A MAMO      WO18810
1345 AGNES A MYRICK      WO40160
1363 MATTHEW J FRENDO    WO56472
1377*WAYNE BATHS         WO26744
     MICHAEL GIACALONE   WO29377
     PEARL JENNINGS      WO17268
     ORVIE HOLBROOK     -9620195
     ALICE HAGERTY      -9650254
1395 ALFONSO SALAZAR    -9613247

     .....ZONE 16.....
.....  1500- 2099 TZ 36 $E..E 8
1500               NP
1530*BRENNANS MKT        WO49228
1535 THOMAS R KEATING    WO40006
1542*MARCUS RESTAURANT.  WO33190
1545 MARG D FITZGERALD   WO51798
1551 JOSEPH GERADA       9630913
1553               NP
1560*MARCUS HAMBURGER     WO48973
1575 ROBT A GRISTY       WO39652
1589 JUDY GABRIELSON     WO33699
1593 DONALD C DRAKE      WO40103
1703*DAIRY LAND         -9655214
1710*JOES TOWING SERV    WO56430
1730*DANIELS SERV        WO48055
1800*JOINT CLTCH&GR SRV  9610700
1859*BALLS SALES & SERV  WO11835
2025*THOMAS HARRINGTON   WO20211
2030*MODRN LIVING FD SV  WO39226
    *WARREN FREEZER FDS  WO39226
.....  2100- 2199 TZ 37 $E..E 8
2129 ANNA M SCHNEIDER    WO31314
2142*LIVING DIST CO     -WO15680
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COCHRANE ST 1957

13232	JEROME H HELMICKI	KE7-1843

NATIONAL AVE ZONE 16

2237	MRS B LARAMIE	WO5-7925
2442	HENRY E JACKSON	□WO2-5061
2251	CRUZ E COLON	□WO3-1096
2277	VICTOR DOURTH	WO4-13D8
2283	JAS H HOFFMAN	WO5-7198
2336	GERARD J FOLEY	WO3-2275
2343	OEWEY RAY	WO5-0613
2348	JACK FLETCHER	WO3-6724
2428	JEAN YESFORO	WO3-1693
2429	TIMOTHY SCANNELL	WO4-1D36
2433	PETER LOHMAN	WO4-0327
2434	MARGIE LOGAN	WO4-D147
2437	SAM SCHANNAULT	□WO3-284D
2443	HUGH B CINCO	WO4-0159
2448	DANIEL RAMIREZ	WO3-2377
2501	*HERRICKS MKT	□WO1-5791
25D5	THURMAN MASON	□WO5-8387
2518	JOHN BORDEAU	WO2-4374
2522	GEORGE OEHRING	WO4-1271
2526	JULIA A FLYNN	WO3-D893
2533	MONROE L MERRELL	□WO3-9114
2543	VAUGHN STROTHER	WO3-7279
2546	EUGENE CHAPPLE	WO5-3129
260D	*HINES SPEAKER PRNT	WO2-5320
	*DET ART PRNTNG CO	□WO1-136D
	*GEORGE L BARRON	WO1-1360
	*STEPHEN J SHOVOLY	□WO1-1360
26D1	ELMER LEE	□WO3-D866
2612	JOSEPH R BACKUS	WO5-4445
2613	TOMMY LEE	WO4-0161
2616	VICTOR OEFRANCE	□WO4-1DD6
2623	PAUL F JOHNSON	WO3-5D15
2627	H C BLAKELY	WO3-8459
27D0	RANKIN STAMPER	WO1-8457
	EUGENE TOWLES	□WO3-2094
2703	MAYO K CHENEY	WO1-6894
27D9	DOWING DIXON	WO5-6284
2710	FRED FARMER	WO5-3449
2714	FREO GAUTHIER	WO4-D331
2715	OONALO WHITE	□WO5-1697
2717	BERTHA L WHITE	□WO3-2337
272D	GEORGE BARKO	WO5-1725
	MINNIE A CHAMP	□WO5-2835
2723	AROUS HATFIELO	□WO3-3359
	LOUISE H HATFIELD	□WO3-3359
2724	WILLMENA HAMMIEL	□WO1-7476
	MACK CALDWELL SR	WO5-4498
2733	BERT R SHEPPARD	WO3-6409
2735	SAM BAKER	WO5-7476
274D	BURA WILSON	WO5-0399
2744	ALVIN HOOD	WO2-9559
2807	LEONE BRITTON	WO1-3375
2811	ELMER C WALLACE	WO3-6186
2812	HERMAN COLLETT	WO3-9679
2816	SAMUEL H OUMIT	WO1-7192
2820	FRANK BRUSS	WO3-7736

Target Street	Cross Street	Source
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COCHRANE ST 1957

2821	ROBERT CORTES	WO2-6511
2825	JOSEPH SAID	WO4-0240
2831	REV D E GLEASON	WO5-0014
2834	RAUL ZEDA	WO5-4997
2841	GEORGE ATTARD	WO3-4796
29D2	LEON HALON	□TE3-0287
2910	F J MCDONNELL	TE2-1475
2913	STEVE J THOMAS	TE1-5692
2917	J BENZENBERG	FA1-0146
2923	JOSEPH HALE	□TE2-2564
2927	GEORGE T WORK	TE3-8895
2930	FRANK E BOWLER	TE1-3568
2935	GEORGE CARVANA	TE3-9714
2942	ELIZABETH V MURPHY	TE1-7366
2943	*CLARAMUNT FEAL EST	TE2-4816
3008	W T JORDAN	TE3-5105
	FRANCIS J MCGRAW	□TE1-1138
	CONSTANCE MILLER	TE3-4727
3009	CLARISSE NEVEU	TE1-6865
3019	SADIE B MCKENNA	□TE2-6892
	*DAILEY BTY SHOPPE	TE1-6774
3024	*FRANICS J MCDONNEL	TE2-7305
3025	G C CARD	TE3-8254
3032	LOUIS JORDAIN JR	TE2-0476
3D38	C L WILKINSON	TE1-5687
3049	JAMES L NORWOOD	□TE2-0128
3103	HOWARD KING	□TE3-2097
31D9	FELIX FALZON	FA1-1673
3113	ARTHUR D BENNETTS	TE1-933D
3117	EDWARD ABELA	TE1-2D74
3120	MARION A KOCH	TE2-7395
3128	DIANE FERNEY	□TE2-3248
3134	ELRA HERSHA	TE1-582D
3135	ALBERT H BALLARD	TE1-4122
	MAY WILDER	TE3-4524
	WILLIAM BENSCH	TE2-1D35
3138	ERNEST PARKER	TE2-5788
3139	BENEDITO DEALMEDIA	□TE1-6037
3145	JAS MALCOLM TAYLOR	TE1-3986
3146	LEON STANLEY	□TE3-2432
	ZONE 8	
3303	WARNICK ALLEN	TE2-1086
33D6	NONA DELONG	TE2-4177
3307	CHAS F SPRAKE	TE2-7755
3312	NORBERT J MITCHELL	TE2-2034
3313	REV LEWIS GREVE	TE2-1220
	TERRELL HAMMONS	□TE3-4137
3318	RAYMOND CRISWELL	TE3-0383
3322	MABEL GARICA	TE1-8292
3323	R J DICKSON	□TE3-7906
	C BALDI	TE2-4610
3327	CLINTON A REBOK	TE2-1094
3330	JOE PADILLA	FA1-0077
3344	CALVIN JONES	TE2-1019
3345	LAWRENCE R GREER	TE2-0877
3408	D J PICKERING	TE3-7581
3413	MILLARO JACKSON	TE3-5170
3416	HOWARD T ARTT	FA1-0435
3417	JAMES MESSER	□TE3-1319
3423	B F PARROTT	TE3-8064
3426	MELVIN J GUNDERSON	TE2-7429
3427	W E NEWMAN	□TE3-3324
3433	C H JORDAN	TE1-3114
3436	MARY STCYR	TE1-8974
3439	JOHNNIE E MILLER	□TE1-1339
3505	FLOYD GUIGAR	TE2-1638
3510	ED PULLENS	TE3-5827
	*MARTIN HOTEL	TE2-9705
	*HOTEL MARTIN	TE2-9705
3515	DOROTHY SHERLEY	TE1-4379
3523	BLANCHE HOFLAND	TE1-0508
3528	JOE ROSCOE	TE2-1453
3529	STEWART BROWN	TE1-4377
3535	GEO COOK	TE1-7845
3536	SOPHIA GOONIS	TE2-6239
3540	DOCK PERRY	□TE1-6256
3541	MAURICE J COLBURN	TE1-6143
	BETTY SURRIS	FA1-0669
3545	DIONISIO CASING	TE3-2876
3602	W WHELAN	TE3-9115
3604	GLADYS E DOWNEY	TE3-8686
3605	HARRY VENESKY	TE2-3185
361D	ERWIN E PALMER	TE3-3639
3616	MAE BAKER	□TE1-3899
	S W FULLERTON	TE1-9689
3617	G H J FLATT	TE1-4614
	F S WHEELER	TE1-7815
3618	IGNACIO CORTINAS	TE3-8338
3620	ROBERT BURGOS	TE3-7313
3623	PETER OIABO	□TE1-5017
	HERBERT SKINNER	TE2-0170
3639	FRANK L WADHAM	TE1-8617
3640	R E FITZGERALD	TE1-3873
3646	CLEVELAND HALE	TE1-2555
3711	JAMES L BRUSH	□TE3-6807
	ABE B PEAK	TE3-7757
	SUE M POINDEXTER	□TE2-703D
	VERA SMITH	TE3-4679
	AUSTIN M POTTER	□TE3-9163
3745	*OLYMPIC RECREATION	TE1-1513

NAUMANN ZONE 12

KALINE DR 1957

20450 W J BIRKENMEIER KE4-1340
20457 CASS PAUL KE4-5662

CHERRY ST ZONE 1

817 LUPE YDROGO ▫WO3-6754
825 GILBERT GURROLA ▫WO2-1251
A RAMIREZ WO4-1085
826 *JOHN H BOSBY CO WO1-1681
827 WALLACE MUNOZ WO3-4874
840 *HARRY MARGOLIS WO3-8363
*RELIABLE MLNG SERV WO3-8363
925 *TRI PART MFG CO WO2-8977
*A&S DISPLAY STUDIO WO2-6479
937 *DET FURN FRAME&CRV WO1-6129
940 ABRAHAM J HANDY WO3-7652
945 *DET CANDY CO WO2-3940
1249 DANL HERNANDEZ WO3-9630
1259 RALPH BENOIST WO5-2808
1300 *MICHAEL MKT ▫WO4-8992
1306 *ANDYS LUNCH WO2-5986
1316 *ARTHUR W RECKLING WO2-9148
*ATLAS METAL PLATNG WO2-9148
1332 TED WILLIFORD WO5-3423
1338 J ROBERTSON ▫WO5-4585
1350 COLUMBUS CARROLL WO4-1395
1366 ONEAL VARNER WO4-0310
1368 ALDEN MCLEOUD ▫WO1-6004
ISEBEL EARLY WO3-1504
O NEAL VARNER WO5-4424
1380 HOWARD COLEMAN WD3-7888

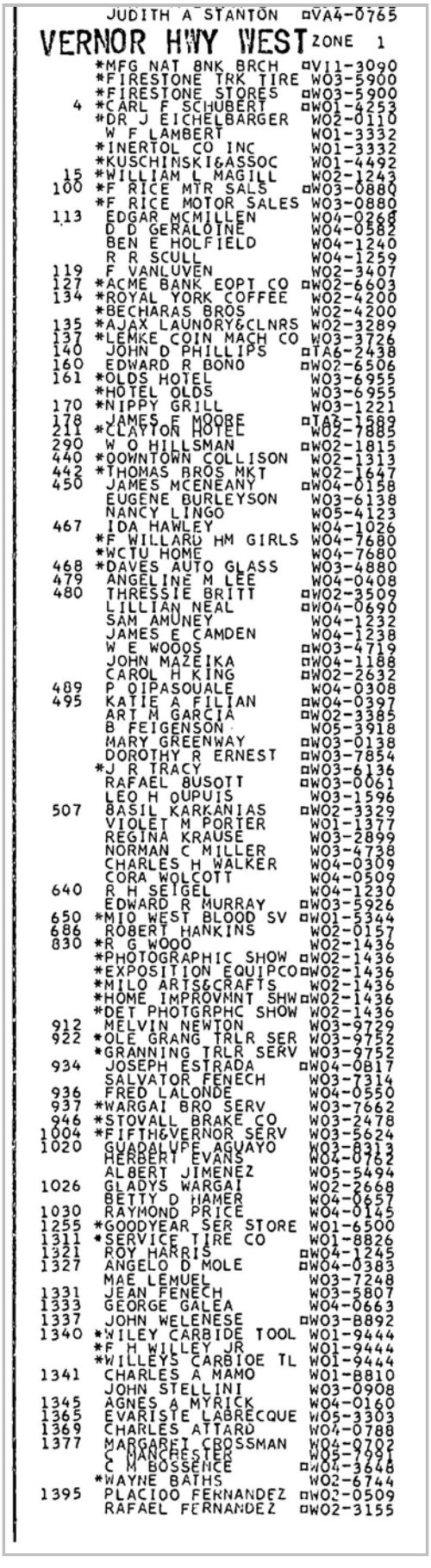
ZONE 16

1406 MARIE ADAMSKI ▫WO3-4380
1407 JOHN STOVALL WO1-1359
1415 VIOLET PRILIPP WE5-6274
1821 PATK EVANS WO3-7145
1826 ETHEL MAY PRICE WO2-3157
1827 DAVE BLAIR ▫WO5-4956
1832 A A THERIAULT WO4-0588
1833 ALFONSO RAMOS ▫WO4-0203
1838 EDW J SCHWENK WO3-9735
1839 DIMAS ACEVEDO ▫WO3-9875
1847 FRANK MERCIECA WO4-0624
LOUIS RICKETTS WO4-1010
1855 JOSEPH MEDRANO ▫WO4-0201
1859 ERASMO IDUNATE WO4-0150

CHERRYLAWN AVE ZONE 4

Target Street	Cross Street	Source
-	✓	Bresser's Cross-Index Directory

VERNOR HWY 1957



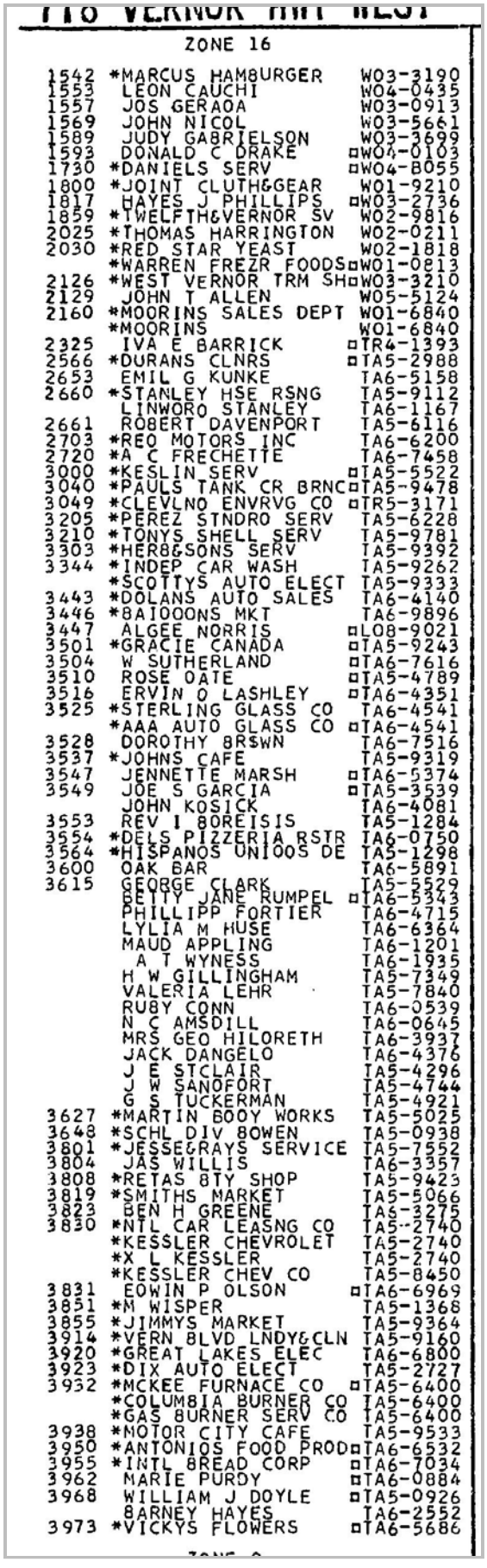
JUDITH A STANTON ▫VA4-0765

VERNOR HWY WEST ZONE 1

*MFG NAT BNK BRCH ▫VI1-3090
*FIRESTONE TRK TIRE WO3-5900
*FIRESTONE STORES ▫WO3-5900
4 *CARL F SCHUBERT ▫WO1-4253
*DR J EICHELBARGER WO2-0110
W F LAMBERT WO1-3332
*INERTOL CO INC WO1-3332
*KUSCHINSKI&ASSOC WO1-4492
15 *WILLIAM L MAGILL WO2-1243
100 *F RICE MTR SALS ▫WO3-0880
*F RICE MOTOR SALES WO3-0880
113 EDGAR MCMILLEN WO4-0268
D D GERALOINE WO4-0582
BEN E HOLFIELD WO4-1240
R R SCULL WO4-1259
119 F VANLUVEN WO2-3407
127 *ACME BANK EQPT CO ▫WO2-6603
134 *ROYAL YORK COFFEE WO2-4200
*BECHARAS BROS WO2-4200
135 *AJAX LAUNDRY&CLNRS WO2-3289
137 *LEMKE COIN MACH CO WO3-3726
140 JOHN D PHILLIPS ▫TA6-2438
160 EDWARD R BONO ▫WO2-6506
161 *OLDS HOTEL WO3-6955
*HOTEL OLDS WO3-6955
170 *NIPPY GRILL WO3-1221
178 JAMES E MOORE ▫TA2-1589
211 *CLAYTON HOTEL WO2-7885
290 W O HILLSMAN ▫WO2-1815
440 *DOWNTOWN COLLISON WO2-1313
442 *THOMAS BROS MKT WO2-1647
450 JAMES MCENEANY ▫WO4-0158
EUGENE BURLEYSON WO3-6138
NANCY LINGO WO5-4123
467 IDA HAWLEY WO4-1026
*F WILLARD HM GIRLS WO4-7680
*WCTU HOME WO4-7680
468 *DAVES AUTO GLASS WO3-4880
479 ANGELINE M LEE WO4-0408
480 THRESSIE BRITT ▫WO2-3509
LILLIAN NEAL ▫WO4-0690
SAM AMUNEY WO4-1232
JAMES E CAMDEN WO4-1238
W E WOODS ▫WO3-4719
JOHN MAZEIKA ▫WO4-1188
CAROL H KING ▫WO2-2632
489 P DIPASQUALE WO4-0308
495 KATIE A FILIAN ▫WO4-0397
ART M GARCIA ▫WO2-3385
B FEIGENSON WO5-3918
MARY GREENWAY ▫WO3-0138
DOROTHY R ERNEST ▫WO3-7854
*J R TRACY ▫WO3-6136
RAFAEL BUSOTT ▫WO3-0061
LEO H DUPUIS WO3-1596
507 BASIL KARKANIAS ▫WO2-3329
VIOLET M PORTER WO1-1377
REGINA KRAUSE WO3-2899
NORMAN C MILLER WO3-4738
CHARLES H WALKER WO4-0309
CORA WOLCOTT WO4-0509
640 R H SEIGEL WO4-1230
EDWARD R MURRAY ▫WO3-5926
650 *MID WEST BLOOD SV ▫WO1-5344
686 ROBERT HANKINS WO2-0157
830 *R G WOOD WO2-1436
*PHOTOGRAPHIC SHOW ▫WO2-1436
*EXPOSITION EQUIPCO ▫WO2-1436
*MILO ARTS&CRAFTS WO2-1436
*HOME IMPROVMNT SHW ▫WO2-1436
*DET PHOTGRPHC SHOW WO2-1436
912 MELVIN NEWTON WO3-9729
922 *OLE GRANG TRLR SER WO3-9752
*GRANNING TRLR SERV WO3-9752
934 JOSEPH ESTRADA ▫WO4-0817
SALVATOR FENECH WO3-7314
936 FRED LALONDE WO4-0550
937 *WARGAI BRO SERV WO3-7662
946 *STOVALL BRAKE CO WO3-2478
1004 *FIFTH&VERNOR SERV WO3-5624
1020 GUADALUPE AGUAYO WO2-8313
HERBERT EVANS WO4-0762
ALBERT JIMENEZ WO5-5494
1026 GLADYS WARGAI WO2-2668
BETTY D HAMER WO4-0657
1030 RAYMOND PRICE WO4-0145
1255 *GOODYEAR SER STORE WO1-6500
1311 *SERVICE TIRE CO WO1-8826
1321 ROY HARRIS ▫WO4-1245
1327 ANGELO D MOLE ▫WO4-0383
MAE LEMUEL WO3-7248
1331 JEAN FENECH WO3-5807
1333 GEORGE GALEA WO4-0663
1337 JOHN WELENESE ▫WO3-8892
1340 *WILEY CARBIDE TOOL WO1-9444
*F H WILLEY JR WO1-9444
*WILLEYS CARBIDE TL WO1-9444
1341 CHARLES A MAMO WO1-8810
JOHN STELLINI WO3-0908
1345 AGNES A MYRICK WO4-0160
1365 EVARISTE LABRECQUE WO5-3303
1369 CHARLES ATTARD WO4-0788
1377 MARGARET CROSSMAN WO4-0702
C MANCHESTER WO5-7991
C M BOSSENCE ▫WO4-3648
*WAYNE BATHS WO2-6744
1395 PLACIDO FERNANDEZ ▫WO2-0509
RAFAEL FERNANDEZ ▫WO2-3155

Target Street	Cross Street	Source
-	✓	Bresser's Cross-Index Directory

VERNOR HWY 1957



716 VERNOR HWY WEST

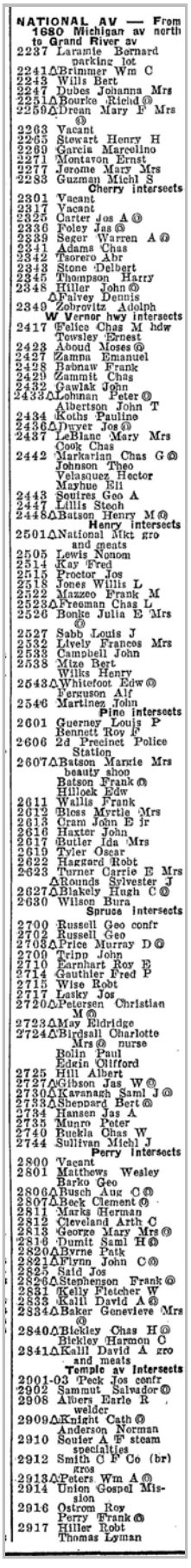
ZONE 16

1542	*MARCUS HAM8URGER	WO3-3190
1553	LEON CAUCHI	WO4-0435
1557	JOS GERAOA	WO3-0913
1569	JOHN NICOL	WO3-5661
1589	JUDY GABRIELSON	WO3-3699
1593	DONALD C DRAKE	□WO4-0103
1730	*DANIELS SERV	□WO4-8055
1800	*JOINT CLUTH&GEAR	WO1-9210
1817	HAYES J PHILLIPS	□WO3-2736
1859	*TWELFTH&VERNOR SV	WO2-9816
2025	*THOMAS HARRINGTON	WO2-0211
2030	*RED STAR YEAST	WO2-1818
	*WARREN FREZR FOODS	□WO1-0813
2126	*WEST VERNOR TRM SH	□WO3-3210
2129	JOHN T ALLEN	WO5-5124
2160	*MOORINS SALES DEPT	WO1-6840
	*MOORINS	WO1-6840
2325	IVA E BARRICK	□TR4-1393
2566	*DURANS CLNRS	□TA5-2988
2653	EMIL G KUNKE	TA6-5158
2660	*STANLEY HSE RSNG	TA5-9112
	LINWORO STANLEY	TA6-1167
2661	ROBERT DAVENPORT	TA5-6116
2703	*REO MOTORS INC	TA6-6200
2720	*A C FRECHETTE	TA6-7458
3000	*KESLIN SERV	□TA5-5522
3040	*PAULS TANK CR BRNC	□TA5-9478
3049	*CLEVLNO ENVRVG CO	□TR5-3171
3205	*PEREZ STNDRO SERV	TA5-6228
3210	*TONYS SHELL SERV	TA5-9781
3303	*HER8&SONS SERV	TA5-9392
3344	*INDEP CAR WASH	TA5-9262
	*SCOTTYS AUTO ELECT	TA5-9333
3443	*DOLANS AUTO SALES	TA6-4140
3446	*8AIOOONS MKT	TA6-9896
3447	ALGEE NORRIS	□LO8-9021
3501	*GRACIE CANADA	□TA5-9243
3504	W SUTHERLAND	□TA6-7616
3510	ROSE OATE	□TA5-4789
3516	ERVIN O LASHLEY	□TA6-4351
3525	*STERLING GLASS CO	TA6-4541
	*AAA AUTO GLASS CO	□TA6-4541
3528	DOROTHY 8RSWN	TA6-7516
3537	*JOHNS CAFE	TA5-9319
3547	JENNETTE MARSH	□TA6-5374
3549	JOE S GARCIA	□TA5-3539
	JOHN KOSICK	TA6-4081
3553	REV I 8OREISIS	TA5-1284
3554	*DELS PIZZERIA RSTR	TA6-0750
3564	*HISPANOS UNIOOS DE	TA5-1298
3600	OAK BAR	TA6-5891
3615	GEORGE CLARK	TA5-5529
	BETTY JANE RUMPEL	□TA6-5343
	PHILLIPP FORTIER	TA6-4715
	LYLIA M HUSE	TA6-6364
	MAUD APPLING	TA6-1201
	A T WYNESS	TA6-1935
	H W GILLINGHAM	TA5-7349
	VALERIA LEHR	TA5-7840
	RU8Y CONN	TA6-0539
	N C AMSDILL	TA6-0645
	MRS GEO HILORETH	TA6-3937
	JACK DANGELO	TA6-4376
	J E STCLAIR	TA5-4296
	J W SANOFORT	TA5-4744
	G S TUCKERMAN	TA5-4921
3627	*MARTIN BOOY WORKS	TA5-5025
3648	*SCHL DIV 8OWEN	TA5-0938
3801	*JESSE&RAYS SERVICE	TA5-7552
3804	JAS WILLIS	TA6-3357
3808	*RETAS 8TY SHOP	TA5-9423
3819	*SMITHS MARKET	TA5-5066
3823	BEN H GREENE	TA6-3275
3830	*NTL CAR LEASNG CO	TA5-2740
	*KESSLER CHEVROLET	TA5-2740
	*X L KESSLER	TA5-2740
	*KESSLER CHEV CO	TA5-8450
3831	EOWIN P OLSON	□TA6-6969
3851	*M WISPER	TA5-1368
3855	*JIMMYS MARKET	TA5-9364
3914	*VERN 8LVD LNDY&CLN	TA5-9160
3920	*GREAT LAKES ELEC	TA6-6800
3923	*DIX AUTO ELECT	TA5-2727
3932	*MCKEE FURNACE CO	□TA5-6400
	*COLUM8IA BURNER CO	TA5-6400
	*GAS 8URNER SERV CO	TA5-6400
3938	*MOTOR CITY CAFE	TA5-9533
3950	*ANTONIOS FOOD PROD	□TA6-6532
3955	*INTL 8READ CORP	□TA6-7034
3962	MARIE PURDY	□TA6-0884
3968	WILLIAM J DOYLE	□TA5-0926
	8ARNEY HAYES	TA6-2552
3973	*VICKYS FLOWERS	□TA6-5686

ZONE 0

Target Street	Cross Street	Source
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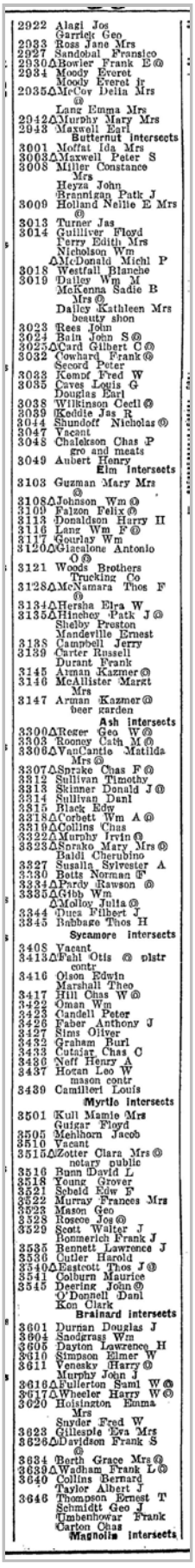
COCHRANE ST 1940



NATIONAL AV — From 1680 Michigan av north to Grand River av
2237 Laramie Bernard parking lot
2241 Δ Brimmer Wm C
2243 Wills Bert
2247 Dubes Johanna Mrs
2251 Δ Bourke Riehd @
2259 Δ Drean Mary F Mrs @
2263 Vacant
2265 Stewart Henry H
2269 Garcia Marcelino
2271 Montavon Ernst
2277 Jerome Mary Mrs
2283 Guzman Michl S
Cherry intersects
2301 Vacant
2317 Vacant
2325 Carter Jos A @
2336 Foley Jas @
2339 Seger Warren A @
2341 Adams Chas
2342 Tsorero Abr
2343 Stone Delbert
2345 Thompson Harry
2348 Hiller John @
Δ Falvey Dennis
2349 Zobrovitz Adolph
W Vernor hwy intersects
2417 Felice Chas M hdw
Towsley Ernest
2423 Aboud Moses @
2427 Zampa Emanuel
2428 Babnaw Frank
2429 Zammit Chas
2432 Gawlak John
2433 Δ Lohman Peter @
Albertson John T
2434 Koths Pauline
2436 Δ Dwyer Jos @
2437 LeBlanc Mary Mrs
Cook Chas
2442 Markarian Chas G @
Johnson Theo
Velasquez Hector
Mayhue Eli
2443 Soutres Geo A
2447 Lillis Steeh
2448 Δ Batson Henry M @
Henry intersects
2501 Δ National Mkt gro and meats
2505 Lewis Nonom
2514 Kay Fred
2515 Proctor Jos
2518 Jones Willis L
2522 Mazzeo Frank M
2523 Δ Freeman Chas L
2526 Bonke Julia E Mrs @
2527 Sabb Louis J
2532 Lively Frances Mrs
2533 Campbell John
2538 Mize Bert
Wilks Henry
2543 Δ Whitefoot Edw @
Ferguson Alf
2546 Martinez John
Pine intersects
2601 Guerney Louis P
Bennett Roy F
2606 2d Precinct Police Station
2607 Δ Batson Margie Mrs beauty shop
Batson Frank @
Hillock Edw
2611 Wallis Frank
2612 Bloss Myrtle Mrs
2613 Cram John E jr
2616 Haxter John
2617 Butler Ida Mrs
2619 Tyler Oscar
2622 Haggard Robt
2623 Turner Carrie E Mrs
Δ Rounds Sylvester J
2627 Δ Blakely Hugh C @
2630 Wilson Bura
Spruce intersects
2700 Russell Geo confr
2702 Russell Geo
2703 Δ Price Murray D @
2709 Tripp John
2710 Earnhart Roy E
2714 Gauthier Fred P
2715 Wise Robt
2717 Lasky Jos
2720 Δ Petersen Christian M @
2723 Δ May Eldridge
2724 Δ Birdsall Charlotte Mrs @ nurse
Bolin Paul
Edgin Clifford
2725 Hill Albert
2727 Δ Gibson Jas W @
2730 Δ Kavanagh Saml J @
2733 Δ Sheppard Bert @
2734 Hansen Jas A
2735 Munro Peter
2740 Buekla Chas W
2744 Sullivan Michl J
Perry intersects
2800 Vacant
2801 Matthews Wesley
Barko Geo
2806 Δ Busch Aug C @
2807 Δ Beck Clement @
2811 Marks Herman
2812 Cleveland Arth C
2813 George Mary Mrs @
2816 Dumit Saml H @
2820 Δ Byrne Patk
2821 Δ Flynn John C @
2825 Said Jos
2826 Δ Stephenson Frank @
2831 Kelly Fletcher W
2833 Kalil David A @
2834 Δ Baker Genevieve Mrs @
2840 Δ Bickley Chas H @
Bickley Harmon C
2841 Δ Kalil David A gro and meats
Temple av intersects
2901-03 Peck Jos confr
2902 Sammut Salvador @
2908 Albers Earle R welder
2909 Δ Knight Cath @
Anderson Norman
2910 Soutier A F steam specialties
2912 Smith C F Co (br) gros
2913 Δ Peters Wm A @
2914 Union Gospel Mission
2916 Ostrom Roy
Perry Frank @
2917 Hiller Robt
Thomas Lyman

Target Street	Cross Street	Source
✓	-	Polk's City Directory

COCHRANE ST 1940



2922 Alagi Jos
Garricje Geo
2933 Ross Jane Mrs
2927 Sandobal Fransico
2930△Bowler Frank E@
2934 Moody Everet
Moody Everet jr
2935△McCoy Delia Mrs
@
Lang Emma Mrs
2942△Murphy Mary Mrs
2943 Maxwell Earl
Butternut intersects
3001 Moffat Ida Mrs
3003△Maxwell Peter S
3008 Miller Constance
Mrs
Heyza John
Brannigan Patk J
3009 Holland Nellie E Mrs
@
3013 Turner Jas
3014 Guilliver Floyd
Perry Edith Mrs
Nicholson Wm
△McDonald Michl P
3018 Westfall Blanche
3019 Dailey Wm M
McKenna Sadie B
Mrs @
Dailey Kathleen Mrs
beauty shop
3023 Rees John
3024 Bain John S@
3025△Card Gilbert C@
3032 Cowhard Frank@
Secord Peter
3033 Kamof Fred W
3035 Caves Louis G
Douglas Earl
3038 Wilkinson Cecil@
3039 Keddie Jas R
3044 Shundoff Nicholas@
3047 Vacant
3048 Chalekson Chas P
gro and meats
3049 Aubert Henry
Elm intersects
3103 Guzman Mary Mrs
@
3108△Johnson Wm@
3109 Falzon Felix@
3113 Donaldson Harry H
3116 Lang Wm F@
3117 Gourlay Wm
3120△Giacalone Antonio
O@
3121 Woods Brothers
Trucking Co
3128△McNamara Thos F
@
3134△Hersha Elra W
3135△Hinchey Patk J@
Shelby Preston
Mandeville Ernest
3138 Campbell Jerry
3139 Carter Russell
Durant Frank
3145 Arman Kazmer@
3146 McAllister Markt
Mrs
3147 Arman Kazmer@
beer garden
Ash intersects
3300△Reger Geo W@
3303 Rooney Cath M@
3306△VanCantle Matilda
Mrs@
3307△Sprake Chas F@
3312 Sullivan Timothy
3313 Skinner Donald J@
3314 Sullivan Danl
3315 Black Edw
3318△Corbett Wm A@
3319△Collins Chas
3322△Murphy Irvin@
3323△Soraka Mary Mrs@
Baldi Cherubino
3327 Susalla Sylvester A
3330 Betts Norman F
3334△Pardy Rawson @
3335△Gibb Wm
△Molloy Julia@
3344 Duca Filbert J
3345 Babbage Thos H
Sycamore intersects
3408 Vacant
3413△Fahl Otis @ plstr
contr
3416 Olson Edwin
Marshall Theo
3417 Hill Chas W@
3422 Oman Wm
3423 Candell Peter
3426 Faber Anthony J
3427 Sims Oliver
3432 Graham Burl
3433 Cutsier Chas C
3436 Neff Henry A
3437 Hogan Leo W
mason contr
3439 Camilleri Louis
Myrtle intersects
3501 Kull Mamie Mrs
Guigar Floyd
3505 Mehlhorn Jacob
3510 Vacant
3515△Zotter Clara Mrs@
notary public
3516 Bunn David L
3518 Young Grover
3521 Sebold Edw F
3522 Murray Frances Mrs
3523 Mason Geo
3528 Rosece Jos@
3529 Scott Walter J
Bonnerich Frank J
3535 Bennett Lawrence J
3536 Cutler Harold
3540△Eastcott Thos J@
3541 Colburn Maurice
3545 Deering John@
O'Donnell Danl
Kon Clark
Brainard intersects
3601 Durnan Douglas J
3604 Snodgrass Wm
3606 Dayton Lawrence H
3610 Simpson Elmer W
3611 Venesky Harry@
Murphy John J
3616△Fullerton Saml W@
3617△Wheeler Harry W@
3620 Holsington Emma
Mrs
Snyder Fred W
3623 Gillespie Eva Mrs
3626△Davidson Frank S
@
3634 Berth Grace Mrs@
3639△Wadham Frank L@
3640 Collins Bernard
Taylor Albert J
3646 Thompson Ernest T
Schmidtt Geo J
Umbenhowar Frank
Carlon Chas
Magnolia intersects

Target Street	Cross Street	Source
-	✓	Polk's City Directory

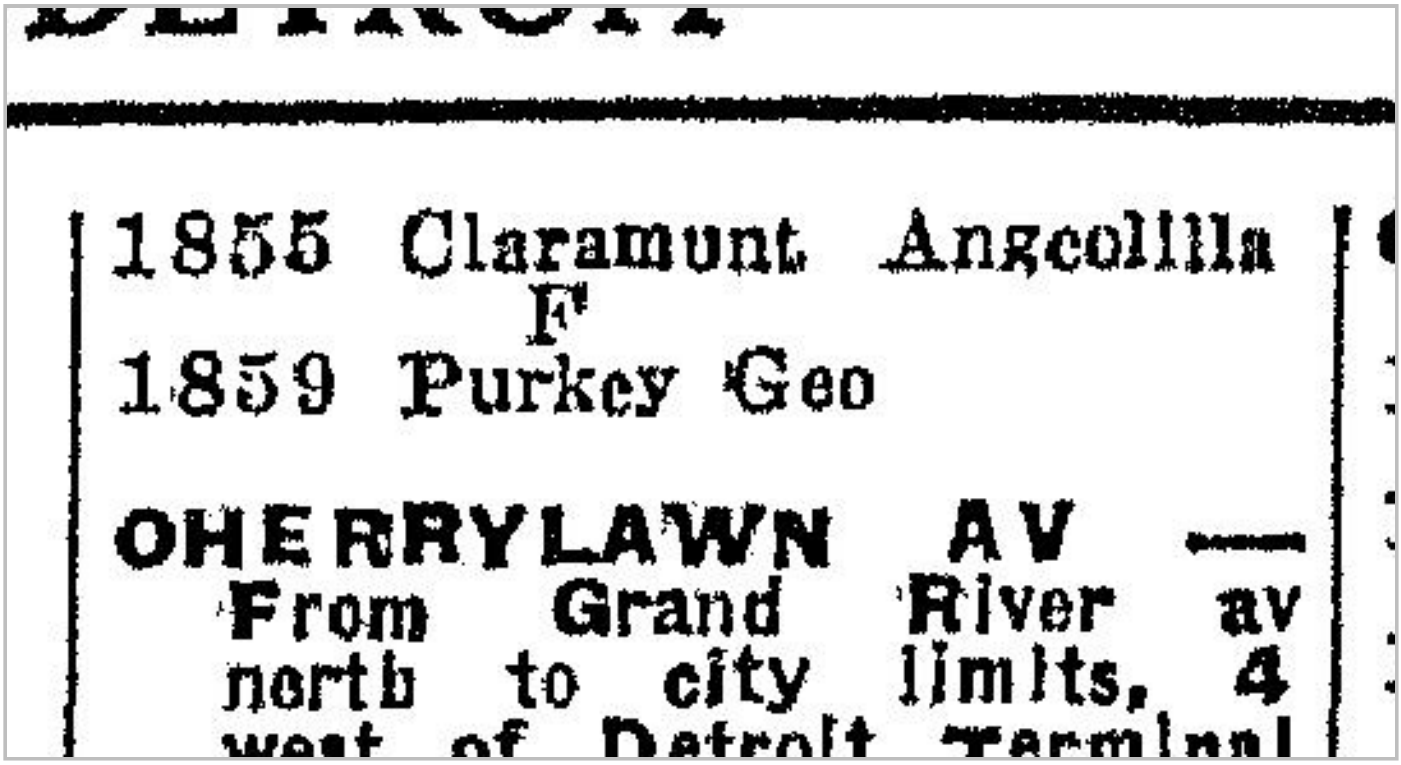
KALINE DR 1940



OHERRY — From 2301 Grand River av west to Twelfth
648 Vacant
Third av intersects
807 Walsh Harry G
809 Allouny Jos
815 Austin Mable Mrs
817 Shather Wades
825-27 LaCroix Apts
Richards John H
Spring Henry
Hill Henry
Chevillot Herbert
rear Marion Wm
Street continued
826ΔBushy John H Co
elec contrs
840ΔWire & Iron Products Inc wire mfrs
Hielscher Wm F
wire guards mfrs
846 Lopez Efren
847 Maris Ruby
Glason Frank
Fourth av intersects
911 Douglas Sydney
922-30 Genl Baking Co
(garage)
925ΔGeneral Baking Co
940ΔCarter Wm J (C)
960 Woodard Leonard
961 Miller Jos
962 Rodriques Frank
964 Vacant
Fifth av intersects
1010 Keen Julius
1017 Vacant
1027 Behrend Chas
1031ΔHouse Fredk C
phys
1039 Vacant
1042 Ronderos John
Cruse Walter
1044 Clune John
Walters John A
Bonello Chas
1045ΔShanahan Minnie Mrs (C)
1055 Eichelberg Harry
Sixth intersects
1224 Childs Albert
1225 Coffey Wm (C)
1230 Pifer Lida Mrs
1231 Johnston Thos A
1237 Atkinson Gordon
1242 Blancarte Miguel
1245 Camilleri Felix
1249 Kenworthy Andrew
1254 Doherty Margt Mrs
1259 Ramirez Frank
1260 Vacant
Brooklyn av intersects
1300 Vacant
1306 Samit John restr
1310 Elton Beverly beer garden
1332 Pomerico Pietro gro
rear Pomerico Pietro
1336 Miles Jas A
Partida Andrew
1338 Wier Cath Mrs
Neal Ethel Mrs
1344 Flanigan Peter J (C)
1350 Carroll Columbus (C)
1356 Pomerico Albert
1366ΔTeets Hugh (C)
1368 Peters Ralph
Taylor Walter
Riby David
1374 Weaver Walter
1380 Carmona Marcus J
Eighth av intersects
1401 Lancaster Elmer J
1404 Jimenez Abr
Wade Henry
1406 Torres Ramon
1407 Ferris Moses
1415 Bornend Rudolph
1419 Lewis John
1422 Moll Mathias (C)
Sumashek Jos
Uhlman John W
1425 Parent Alf
1426 Arnold Otto
1428 Arnel Otto F
Trumbull av intersects
National av intersects
Harrison av intersects
1814 Vanzandt Hazel Mrs
1817 Vacant
1821 Evans John
1826 Furtaw Agnes Mrs
1827 Schembri Peter P
1832 Phillips Ewler
1833 Moore Mollie Mrs
1838 Wagner David E
1839ΔPauls Lillian G Mrs (C)
1840 Kurth Stanley
1845 DeFelice Georgia Mrs
Schwab Lawrence A
1846 Cramphorn Ester Mrs
1847 Eckert Chas G
Jester Fred

Target Street	Cross Street	Source
-	✓	Polk's City Directory

KALINE DR 1940

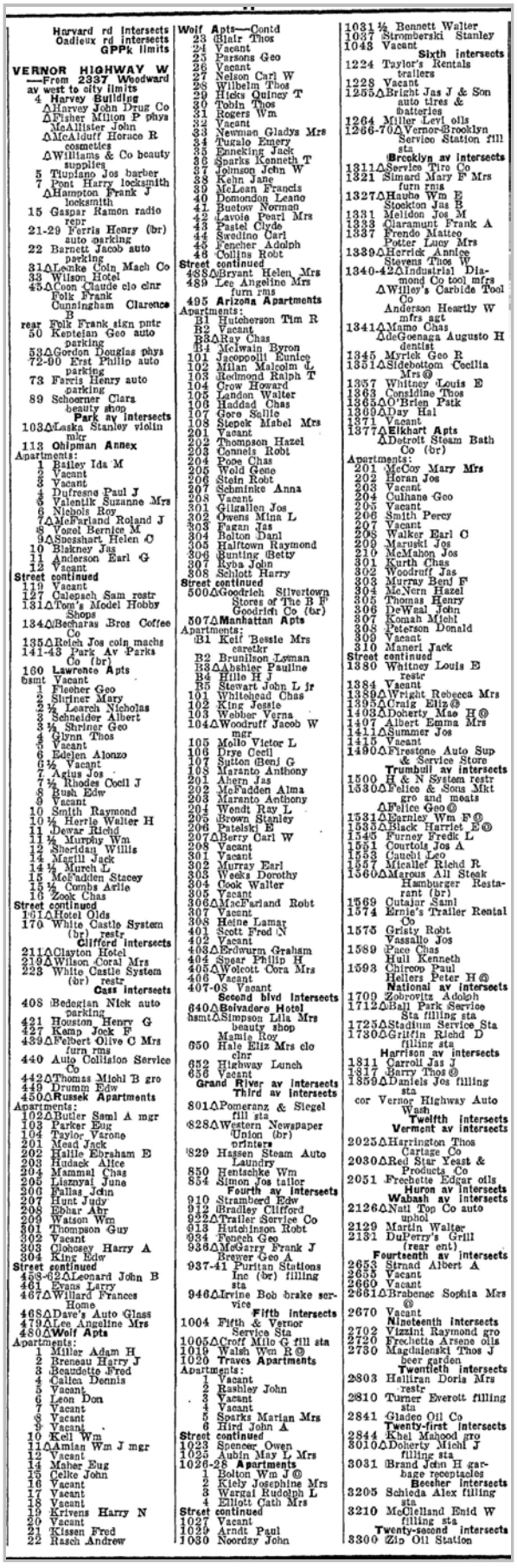


1855 Claramunt Angcollila
F
1859 Purkey Geo

CHERRYLAWN AV —
From Grand River av
north to city limits, 4
west of Detroit Terminal

Target Street	Cross Street	Source
-	✓	Polk's City Directory

VERNOR HWY 1940



Harvard rd intersects
Oadieux rd intersects
GPPk limits

VERNOR HIGHWAY W
—From 2337 Woodward av west to city limits

4 Harvey Building
ΔHarvey John Drug Co
ΔFisher Milton P phys
McAllister John
ΔMcAlduff Horace R cosmetics
ΔWilliams & Co beauty supplies
5 Tiupiano Jos barber
7 Pont Harry locksmith
ΔHampton Frank J locksmith
15 Gaspar Ramon radio repr
21-29 Ferris Henry (br) auto parking
22 Barnett Jacob auto parking
31ΔLemke Coin Mach Co
33 Wilson Hotel
45ΔCoon Claude clo clnr
Folk Frank
Cunningham Clarence B
rear Folk Frank sign pntr
50 Kepteian Geo auto parking
53ΔGordon Douglas phys
72-90 Erat Philip auto parking
73 Farris Henry auto parking
89 Schoerner Clara beauty shop

Park av intersects

103ΔLaska Stanley violin mkr
113 **Shipman Annex**
Apartments:
1 Bailey Ida M
2 Vacant
3 Vacant
4 Dufresne Paul J
5 Valentik Suzanne Mrs
6 Nichols Roy
7ΔMcFarland Roland J
8 Vozel Bernice M
9ΔSnesshart Helen C
10 Blakney Jas
11 Anderson Earl G
12 Vacant
Street continued
119 Vacant
127 Calepach Sam restr
131ΔTom's Model Hobby Shops
134ΔBecharas Bros Coffee Co
135ΔReich Jos coin machs
141-43 Park Av Parks Co (br)
160 **Lawrence Apts**
bsmt Vacant
1 Fleeher Geo
2 Shriner Mary
2½ Learch Nicholas
3 Schneider Albert
3½ Shriner Geo
4 Glynn Thos
5 Vacant
6 Edelen Alonzo
6½ Vacant
7 Agius Jos
7½ Rhodes Cecil J
8 Bush Edw
9 Vacant
10 Smith Raymond
10½ Herrle Walter H
11 Dewar Richd
11½ Murphy Wm
12 Sheridan Willis
14 Magill Jack
14½ Murch L
15 McFadden Stacey
15½ Combs Arlie
16 Zook Chas
Street continued
161ΔHotel Olds
170 White Castle System (br) restr

Clifford intersects

211ΔClayton Hotel
219ΔWilson Coral Mrs
223 White Castle System (br) restr

Cass intersects

408 Bedegian Nick auto parking
421 Houston Henry G
427 Kemp Jack F
439ΔFelbert Olive C Mrs furn rms
440 Auto Collision Service Co
442ΔThomas Michl B gro
449 Drumm Edw
450ΔRussek Apartments
Apartments:
102ΔButler Saml A mgr
103 Parker Eug
104 Taylor Varone
201 Mead Jack
202 Hallie Ebraham E
203 Hudack Alice
204 Mammal Chas
205 Lisznyai June
206 Fallas John
207 Hunt Judy
208 Ebhar Abr
209 Watson Wm
301 Thompson Guy
302 Vacant
303 Clohesey Harry A
304 King Edw
Street continued
458-62ΔLeonard John B
461 Evans Larry
467ΔWillard Frances Home
468ΔDave's Auto Glass
479ΔLee Angeline Mrs
480ΔWolf Apts
Apartments:
1 Miller Adam H
2 Breneau Harry J
3 Beardette Fred
4 Callea Dennis
5 Vacant
6 Leon Don
7 Vacant
8 Vacant
9 Vacant
10 Kell Wm
11ΔAmian Wm J mgr
12 Vacant
14 Maher Eug
15 Celko John
16 Vacant
17 Vacant
18 Vacant
19 Krivens Harry N
20 Vacant
21 Kissen Fred
22 Rasch Andrew

Wolf Apts—Contd
23 Blair Thos
24 Vacant
25 Parsons Geo
26 Vacant
27 Nelson Carl W
28 Wilhelm Thos
29 Hicks Quincy T
30 Tobin Thos
31 Rogers Wm
32 Vacant
33 Newman Gladys Mrs
34 Tugalo Emery
35 Enneking Jack
36 Sparks Kenneth T
37 Tolmson John W
38 Kehn Jane
39 McLean Francis
40 Domondon Leano
41 Buetow Norman
42 Lavoie Pearl Mrs
43 Pastel Clyde
44 Swedino Carl
45 Fencher Adolph
46 Collins Robt
Street continued
488ΔBryant Helen Mrs
489 Lee Angeline Mrs furn rms

495 Arizona Apartments
Apartments:
B1 Hutcherson Tim R
B2 Vacant
B3ΔRay Chas
B4 McIwain Byron
101 Jacoppolli Eunice
102 Milan Malcolm L
103 Redmond Ralph T
104 Crow Howard
105 Landon Walter
106 Haddad Chas
107 Gore Sallie
108 Stepek Mabel Mrs
201 Vacant
202 Thompson Hazel
203 Conneis Robt
204 Pope Chas
205 Wold Gene
206 Stein Robt
207 Schminke Anna
208 Vacant
301 Gilzallen Jos
302 Owens Mina L
303 Fagan Jas
304 Bolton Danl
305 Halftown Raymond
306 Bunting Betty
307 Ryba John
308 Schlott Harry
Street continued
500ΔGoodrich Silvertown Stores of The B F Goodrich Co (br)

507ΔManhattan Apts
Apartments:
B1 Keif Bessie Mrs caretkr
B2 Brunilson Lyman
B3ΔAbshier Pauline
B4 Hillo H J
B5 Stewart John L jr
101 Whitehead Chas
102 King Jessie
103 Walbee Verna
104ΔWoodruff Jacob W mgr
105 Mollo Victor L
106 Drye Cecil
107 Sutton Benj G
108 Maranto Anthony
201 Ahern Jas
202 McFadden Alma
203 Maranto Anthony
204 Wendt Ray L
205 Brown Stanley
206 Patelski E
207ΔBerry Carl W
208 Vacant
301 Vacant
302 Murray Earl
303 Weeks Dorothy
304 Cook Walter
305 Vacant
306ΔMacFarland Robt
307 Vacant
308 Heine Lamar
401 Scott Fred N
402 Vacant
408ΔErdwurm Graham
404 Spear Philip H
405ΔWolcott Cora Mrs
406 Vacant
407-08 Vacant

Second blvd intersects

640ΔBolvadero Hotel
bsmtΔSimpson Lila Mrs beauty shop
Mamie Roy
650 Hale Eliz Mrs clo clnr
652 Highway Lunch
656 Vacant

Grand River av intersects
Third av intersects

801ΔPomeranz & Siegel fill sta
828ΔWestern Newspaper Union (br) printers
829 Hassen Steam Auto Laundry
850 Hentschke Wm
854 Simon Jos tailor

Fourth av intersects

910 Stramberd Edw
912 Bradley Clifford
922ΔTrailer Service Co
913 Hutchinson Robt
934 Fenech Geo
936ΔMcGarry Frank J Brewer Geo A
937-41 Puritan Stations Inc (br) filling sta
946ΔIrvine Bob brake service

Fifth intersects

1004 Fifth & Vernor Service Sta
1005ΔCroff Milo G fill sta
1019 Walsh Wm R ©
1020 **Traves Apartments**
Apartments:
1 Vacant
2 Rashley John
3 Vacant
4 Vacant
5 Sparks Marian Mrs
6 Hird John A
Street continued
1023 Spencer Owen
1025 Aubin May L Mrs
1026-28 **Apartments**
1 Bolton Wm J ©
2 Kiely Josephine Mrs
3 Wergal Rudolph L
4 Elliott Cath Mrs
Street continued
1027 Vacant
1029 Arndt Paul
1030 Noordzy John

1031½ Bennett Walter
1037 Stramberski Stanley
1043 Vacant

Sixth intersects

1224 Taylor's Rentals trailers
1228 Vacant
1255ΔBright Jas J & Son auto tires & batteries
1264 Miller Levi oils
1266-70ΔVernor-Brooklyn Service Station fill sta

Brooklyn av intersects

1311ΔService Tire Co
1321 Simard Mary F Mrs furn rms
1327ΔHaubo Wm E
Stockton Jas B
1331 Melidon Jos M
1333 Claramunt Frank A
1337 Prendo Matteo
Potter Lucy Mrs
1339ΔHerrick Annice
Stevens Thos W
1340-42ΔIndustrial Diamond Co tool mfrs
ΔWilley's Carbide Tool Co
Anderson Heartly W mfrs agt
1341ΔMamo Chas
ΔdeGoenaga Augusto H dentist
1345 Myrick Geo R
1351ΔSidebottom Cecilia Mrs ©
1357 Whitney Louis E
1363 Considine Thos
1365ΔO'Brien Patk
1369ΔDay Hal
1371 Vacant
1377ΔElkhart Apts
ΔDetroit Steam Bath Co (br)
Apartments:
201 McCoy Mary Mrs
202 Horan Jos
203 Vacant
204 Culhane Geo
205 Vacant
206 Smith Percy
207 Vacant
208 Walker Earl C
209 Maruski Jos
210 McMahon Jos
301 Kurth Chas
302 Woodruff Jas
303 Murray Bend F
304 McNern Hazel
305 Thomas Henry
306 DeWaal John
307 Komah Michl
308 Peterson Donald
309 Vacant
310 Maneri Jack
Street continued
1380 Whitney Louis E restr
1384 Vacant
1389ΔWright Rebecca Mrs
1393ΔCraig Eliz ©
1403ΔDoherty Mae H ©
1407 Albert Emma Mrs
1411ΔSummer Jos
1415 Vacant
1490ΔFirestone Auto Sup & Service Store

Trumbull av intersects

1500 H & N System restr
1530ΔFelice & Sons Mkt gro and meats
ΔFelice Geo ©
1531ΔBarnley Wm F ©
1535ΔBlack Harriet E ©
1540 Furney Fredk L
1551 Courtois Jos A
1553 Cauchi Leo
1557 Micallef Richd R
1560ΔMarous All Steak Hamburger Restaurant (br)
1569 Cutajar Saml
1574 Ernie's Trailer Rental Co
1575 Gristy Robt
Vassallo Jos
1589 Pace Chas
Hull Kenneth
1593 Chirceo Paul
Hellers Peter H ©

National av intersects

1709 Zobrovitz Adolph
1712ΔBall Park Service Sta filling sta
1725ΔStadium Service Sta
1730ΔGriffin Richd D filling sta

Harrison av intersects

1811 Carroll Jas J
1817 Barry Thos ©
1859ΔDaniels Jos filling sta
cor Vernor Highway Auto Wash

Twelfth intersects
Verment av intersects

2025ΔHarrington Thos Cartage Co
2030ΔRed Star Yeast & Products Co
2051 Frechette Edgar oils

Huron av intersects
Wabash av intersects

2126ΔNati Top Co auto uphol
2129 Martin Walter
2131 DuPerry's Grill (rear ent)

Fourteenth av intersects

2653 Strnad Albert A
2655 Vacant
2660 Vacant
2661ΔBrabenec Sophia Mrs ©
2670 Vacant

Nineteenth intersects

2702 Vizmint Raymond gro
2720 Frechette Arsene oils
2730 Magdalenski Thos J beer garden

Twentieth intersects

2803 Hallran Doris Mrs restr
2810 Turner Everett filling sta
2841 Gladeo Oil Co

Twenty-first intersects

2844 Khel Mahood gro
3010ΔDoherty Michl J filling sta
3031 Brand John H garbage receptacles

Beecher intersects

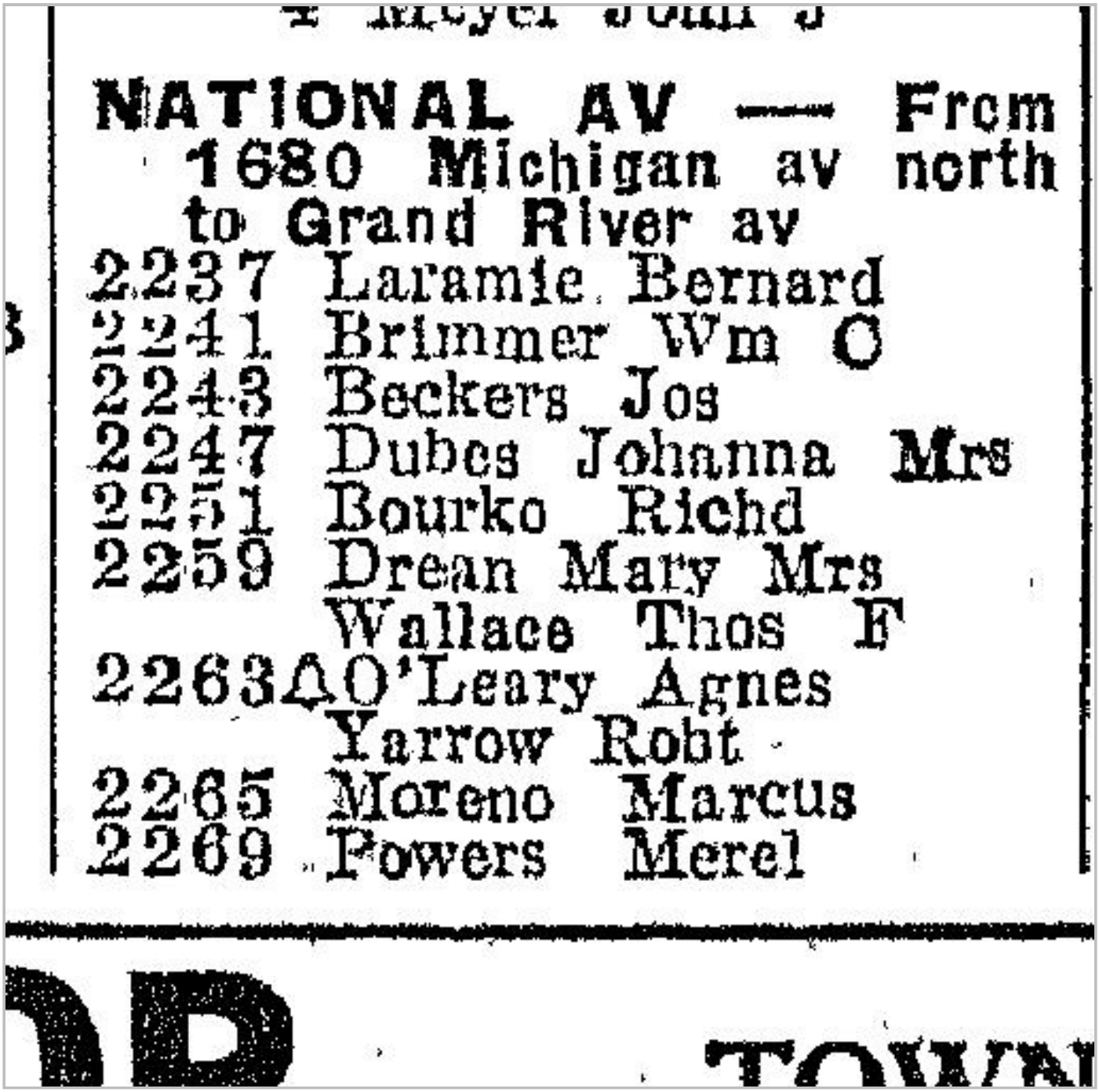
3205 Schieda Alex filling sta
3210 McClelland Enid W filling sta

Twenty-second intersects

3300 Zip Oil Station

Target Street	Cross Street	Source
✓	-	Polk's City Directory

COCHRANE ST 1935



NATIONAL AV — From
1680 Michigan av north
to Grand River av

2237 Laramie Bernard
2241 Brimmer Wm O
2243 Beckers Jos
2247 Dubes Johanna Mrs
2251 Bourko Richd
2259 Drean Mary Mrs
Wallace Thos F
2263 O'Leary Agnes
Yarrow Robt
2265 Moreno Marcus
2269 Powers Merel

Target Street	Cross Street	Source
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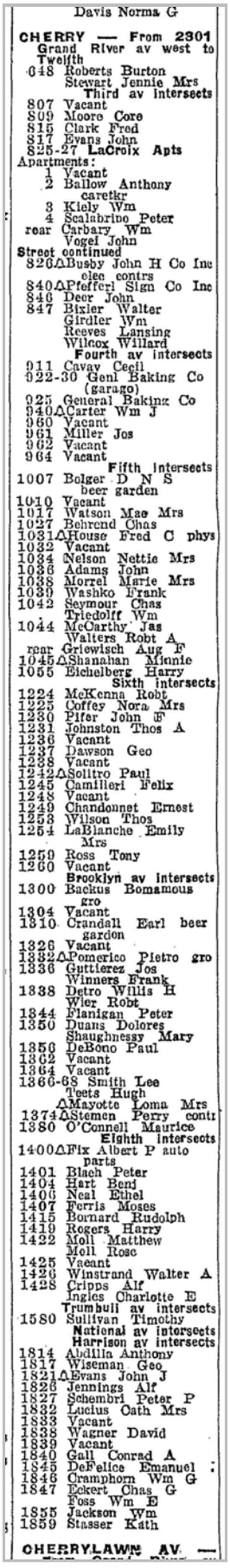
COCHRANE ST 1935



2271 Jerome Mary Mrs
2277 Sudliff Myron
2283 Guzman Michl
Cherry intersects
2300 Gloster Walter gro
2301-09 Maney John W funeral director
2304 Jacobs David
2308 Garcia Jesse
2312 Boufford Adrian
2316 Ryan Mary Mrs
2317 Vacant
2325 Carter Jos A
2333 Vacant
2336 Foley Jas
Webster Jas F
2337 Vacant
2339 Seger Warren A
2341 Adams Chas A
2342 Tesorero Abr
2343 Pinder Peter
2345 Vacant
2348 Falvey Dennis
2349 Vacant
W Vernor hwy intersects
2417 Penna Lupe Mrs
Reulas Elibera Mrs
2423 Perez Vincent
2427 Boufford Elmer
2428 Rumsby Geo
2429 Putnam Jessie Mrs
2432 O'Brien Patk
2433 Lohman Peter
2434 Barr Arth H
2436 Dwyer Jos
2437 LeBlanc Mary Mrs
Mack Jos
2439 Mack Jos G
2442 Bridge Chase
Matkarian Chas
Murdock Lee
2443 Hutchins A Leonard
2447 Lacius Fred
2448 Batson Henry M
Henry intersects
2500 Vacant
2501 Moses Edna Mrs gro
2502 Pestro Christian shoe repr
2505 Moses Albert
2508 Vacant
2514 O'Hara John
2515 Studer Harold
2518 Jones Willis L
2519 Vacant
2522 Cooper Lillian Mrs
2523 Hieber Richd A
2526 Bonke Julia E Mrs
2527 Sabb Louis J
2532 Lively Henry
2533 Hunt Steven
2538 Wilks Robt H
2543 Southard Bertha Mrs
Whitefoot Edw
Evans Earl J
2546 Stocker John
Pine intersects
2601 Gurney Louis P
Harbottle Clare Mrs
2606 Service Printing Co
2607 Batson Frank
Batson Margt Mrs beauty shop
2611 Bird Anthony
2612 Bloss Ernest A
2613 McMenemy Jas
2616 Dedas Wm
2617 Brooker Julian S
2619 Considine Thos
2622 Goruiek Mary Mrs
2623 Rounds Sylvester J
Turner Carrie M Mrs
2627 Blakley Hugh O
2630 Fitzpatrick Lawrence G
Wilson Bura
Spruce intersects
2700 Nicoloff Leo contr
2702Δ Genaci Jos J
2703 Youmans Chas F
2709 Shine Wm S
2710 Kleckler Fred
2714 Banegis Saml
2715 Gauthier Fred P
2717 Lasky Jos
2720 Peterson Christian G
2723 Vacant
2724 Birdsall Charlotte Mrs nurse
2725 Vacant
2727 Gibson Jas W
2730 Kavanagh Saml J
2733 Foren Bertha Mrs
2734 Hanson Jas K
2735 Tyla John J
2740 Buckla Chas W
2744 Novak Chas
Perry intersects
2800 Vacant
2801 Schertz Claude J
2806 Busch Aug O
2807 Beck Clement
2811 Marks Herman
2812 Cleveland Arth
2813 George Jacob
Garrison Doren
2816 Dumit Saml H
2820 Byrne Patk
2821 Flynn John C
2825 Ernhart Roy E
2826 Stephenson Frank
2831 Fisher Arth A
Ward Harold E
2833 Kalil David A
2834 Baker Genevieve Mrs
2840 Bickley Chas H
2841 Kalil David A gro
Temple av intersects
2901-03 Cortes Louis drugs
2902 Sammut Salvador
2908 Vacant
2909 Chisholm John A
Manus Harry R
Watson Albert
2910 Montague John L gro
2912 Smith C F Co (br) gros
2913 Peters Wm
2914 Union Gospel Mission
2916 Ostrom Roy M
Perry Frank
Whitman Erwin pntr
2917 Kimball Mae Mrs
2922 Cornelius Horace W
Parker Ray A
2923 Burling Alton
Knight Wm
Roche Jas
2927 Strickland Adelbert
2930Δ Bowler Frank E
2934 Moody Everett
2935 Oman Wm
Smith Chas W
2942Δ Murphy Timothy W
2943 McCoy Delia Mrs
Butternut intersects

Target Street	Cross Street	Source
-	✓	Polk's City Directory

KALINE DR 1935



Davis Norma G

CHERRY — From 2301 Grand River av west to Twelfth
648 Roberts Burton
Stewart Jennie Mrs
Third av intersects
807 Vacant
809 Moore Core
815 Clark Fred
817 Evans John
825-27 LaCroix Apts
Apartments:
1 Vacant
2 Ballow Anthony caretkr
3 Kiely Wm
4 Scalabrino Peter
rear Carbary Wm
Vogel John
Street continued
826 Busby John H Co Inc elec contrs
840 Pfefferl Sign Co Inc
846 Deer John
847 Bixler Walter
Girdler Wm
Reeves Lansing
Wilcox Willard
Fourth av intersects
911 Cavay Cecil
922-30 Genl Baking Co (garage)
925 General Baking Co
940 Carter Wm J
960 Vacant
961 Miller Jos
962 Vacant
964 Vacant
Fifth intersects
1007 Bolger D N S beer garden
1010 Vacant
1017 Watson Mae Mrs
1027 Behrend Chas
1031 House Fred C phys
1032 Vacant
1034 Nelson Nettie Mrs
1038 Adams John
1038 Morrel Marie Mrs
1039 Washko Frank
1042 Seymour Chas
Triedolff Wm
1044 McCarthy Jas
Walters Robt A
rear Griewisch Aug F
1045 Shanahan Minnie
1055 Eichelberg Harry
Sixth intersects
1224 McKenna Robt
1225 Coffey Nora Mrs
1230 Pifer John F
1231 Johnston Thos A
1236 Vacant
1237 Dawson Geo
1238 Vacant
1242 Solitro Paul
1245 Camilleri Felix
1248 Vacant
1249 Chandonnet Ernest
1253 Wilson Thos
1254 LaBlanche Emily Mrs
1259 Ross Tony
1260 Vacant
Brooklyn av intersects
1300 Backus Bomamous gro
1304 Vacant
1310 Crandall Earl beer garden
1326 Vacant
1332 Pomerico Pietro gro
1336 Guttierez Jos
Winners Frank
1338 Detro Willis H
Wier Robt
1344 Flanigan Peter
1350 Duans Dolores
Shaughnessy Mary
1356 DeBono Paul
1362 Vacant
1364 Vacant
1366-68 Smith Lee
Teets Hugh
Mayotte Loma Mrs
1374 Stemen Perry contr
1380 O'Connell Maurice
Eighth intersects
1400 Fix Albert P auto parts
1401 Blach Peter
1404 Hart Benj
1406 Neal Ethel
1407 Ferris Moses
1415 Bornard Rudolph
1419 Rogers Harry
1422 Moll Matthew
Moll Rose
1425 Vacant
1426 Winstrand Walter A
1428 Cripps Alf
Ingles Charlotte E
Trumbull av intersects
1580 Sullivan Timothy
National av intersects
Harrison av intersects
1814 Abdilla Anthony
1817 Wiseman Geo
1821 Evans John J
1826 Jennings Alf
1827 Schembri Peter P
1832 Lucius Oath Mrs
1833 Vacant
1838 Wagner David
1839 Vacant
1840 Gall Conrad A
1845 DeFelice Emanuel
1846 Cramphorn Wm G
1847 Eckert Chas G
Foss Wm E
1855 Jackson Wm
1859 Stasser Kath

CHERRYLAWN AV —

Target Street	Cross Street	Source
-	✓	Polk's City Directory

VERNOR HWY 1935



VERNOR HIGHWAY W—Contd
467 Willard Frances Home
478 Lee Louis
480 Wolf Apts
Apartments:
1 Pyle Claude F caretkr
2 Vacant
3 Parker Jean E
4 Crandall Fred
5 Vacant
6 Vacant
7 Vacant
8 Vacant
9 Brown Edw
10 Line Wallace
11 Snyder John D
12 Marcoux Adelard
14 Amuney Saml
15 Vacant
16 Vacant
17 Vacant
18 Abendroth Fred C
19 Williams Dorothy
20 Vacant
21 Vacant
22 Kinney Blaine L
23 Cantwell Tyler
24 Walch Chas
25 Vacant
26 Vacant
27 McInnis Harold G
28 Vacant
29 Hickox Roda Mrs
30 Stack Frank
31 Vacant
33 Smith Carl
34 Fox Max
35 Thompson D Grant
36 Vacant
37 Vacant
38 Shappa Jean
39 Dix Frank
40 Powell John
41 Vacant
42 Ayres Albert
43 Pestel Lloyd
44 Fretz Herbert
45 Fancher Adelard
46 Young Morris J

Street continued
488 Bryant Edw
489 Harbin Herbert W funeral dir
495 Stone Apts
Apartments:
B1 Canfield Archie B caretkr
B2 Vacant
B3 Abercrombie Ethel
101 Vacant
102 Randall Helen J
103 Vacant
104 McCollum Wm
105 Anderson Jas
106 Huggard Opal E
107 McDonald Wm D
108 Zerbarini Wm A
201 Brozak Emil J
202 Maxwell Eva
203 Vacant
204 Watson Ernest
205 Vacant
206 Trombley Henry C
207 Stoner Alvin E
208 Dumas Florence E
301 Dixon Arth
302 Roland Marie V
303 Vacant
304 Vacant
305 Carpenter Peter
306 Williams Floyd E
307 Vacant
308 Vacant

Street continued
507 Manhattan Apts
Apartments:
101 Emery Wallace V
102 Mead John
103 Vacant
104 Harriman Lettie mgr
105 Edison John T
106 Vacant
107 Vacant
108 Moriarty Sylvester M
201 Vacant
202 Vacant
203 Vacant
204 Swivan Gabriel N
205 Vacant
206 Vacant
207 Dexter Wm A
208 Vacant
301 Vacant
302 Vacant
303 Over Roy R
304 Humphries Geo W
305 Vacant
306 Vacant
307 Vacant
308 Vacant
401 Vacant
402 Vacant
403 Vacant
404 Vacant
405 Roberts John P
406 Vacant
407 Vacant
408 Vacant

Second blvd intersects
510 Gillespie John filling sta
640ΔBelvadere Hotel
650 Hale Eliz Mrs clo clnr
652 B & E Restaurant
656 Vacant
Grand River av intersects
Third av intersects
801 Kaplowitz Benj filling sta
828ΔWestern Newspaper Union printers
829 Hassen Moses D auto lndry
850 Vacant
854 Sahagian Danl tailor
Fourth av intersects
910 Vacant
912 O'Leary Leonard
922 Consolidated Bus (garage)
931ΔDick Carlton G
934 Abbott Earl W
Cooper Raymond J
936 Johns Louis
941ΔSunny Service Oil (br) filling sta
946ΔDet Brake Lining Co
Fifth intersects
1000 Stikeman Oil Co (br) filling sta
1005ΔStandard Oil Co (br) filling sta
1019ΔWalsh Wm R
1020 Traves Apts
Apartments:
1 Versey John
2 Rashlev John
3 Morrissey Mary Mrs
4 Pollow Jas
5 Mitchell Thos
6 Hird John A

Street continued
1023 Clark Thos J
1025 Aubin Mary L
1026-28 Herwit Louise
Bolton Wm J
Elliott Oath Mrs
1027 Powers Patk
1029 France Mary E Mrs
1030 Wendt Otto A
Young Malicia
1030½ Kline Jack
1037 Bonello Frank
1043 Vacant
Sixth intersects
1224 Vacant
1228 Blois Harry T
1255ΔBright Jas J & Son tires
1264 Smith Harry L filling sta
1266-70ΔHy-Way Super Lubritorium filling sta
Brooklyn av intersects
1311ΔVernor Tire & Battery Service
1321 Stmard Mary E
Bilske John J
Duggan Jos
Fisher John
Skells Bert
1327ΔHauhe Wm trucking
Stockton Jas
1331 Maledon Jos
1333 Claramunt Frank A
1337 Matteo Plendo
Potter John C
1339 Herrick Annice
Mamo Chas
1341ΔCyr Adelard
deGoenaga Augusto H dentist
1342ΔIndustrial Diamond Co tool mfrs
1345 Myrick Geo R
1351ΔSidebottom Cecilia Mrs
1352ΔWilley's Carbide Tool Co
1357ΔMagrath Mary L
1363 Day Rufus
1365 Vacant
1369 Day Hal
1371 Wellington Sidney
1377 Detroit Steam Bath Co
Koskela Henry
1377 Elkhart Apts
Apartments:
201 McCoy Mary
202 Whitney Louis
203 Sward Edw
204 Waisanen Emil
205 Carrie Edwin
206 West Geo
207 Hutchison John
208 Koskela Henry
209 Handy Rose Mrs
210 Donahue John
301 McCorkle Wm
302 Kraft Harry J
303 Johnson Oliver
304 Antikainen Toibo
305 Moran Benj
306 Lilliendohe C C
307 Mullholland John
308 Koesicky Felix
309 McCorkle Harold
310 Suorsa Henry

Street continued
1380 Whitney Louis restr
1384 Hayes John N
1389ΔWright Rebecca Mrs
1395ΔCraig Eliz
1403 Doherty Celia
1407 Attard Chas
1411 Smith Agnes Mrs
1476 Collins John S
Trumbull av intersects
1517 Clore Ralph
1521ΔZobrowitz Adolph
1530ΔFelice Geo gro
1531ΔBarnley Wm P
1535ΔHack Harriette E
1543 Ford Clifford J
1544 Henry John
1545 Furney Fredk
Fitzgerald Margt Mrs
1551 Courtois Jos A
1553 Couchi Leo
1557ΔTiche Emerson
1569 Greek John
1574 Butler Robt garage
Butler Robt auto repr
1575 Polidan Connie
1578 Hann Theo restr
1589 Ohircon Paul
Ellul John C
1593 Hellers Peter
Harder Niel B
National av intersects
1709 Morin Claude
1712 Stewart Ewing W filling sta
1717 Meore Fredk W
1725 Pasley & Jones filling sta
Harrison av intersects
1730 Griffin Richd D filling sta
1811 Ainsworth Wm H
1817 Barry Thos
1859ΔDaniels Jos filling sta
Twelfth intersects
Vermont av intersects
2025ΔHarrington Thos Cartage Co
Huron av intersects
Wabash av intersects
2129 Vacant
2131 Fowler Wm B restr
2653ΔDrabenee John F
2655 Betwee Harry
2660 Vacant
2661 Brabenec Sophia Mrs
Nineteenth intersects
2702 Vizzini Raymond prod
2703ΔStowchoff Michl filling sta
2720 Langlois Andrew oils
2730 Ye Oldbru Inn restr
Twentieth intersects
2805 Vacant
2810 Wilson Lewis D filling sta
Twenty-first intersects
3010ΔDoherty Michl J filling sta
Beecher intersects

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COCHRANE ST 1931

NATIONAL AV — From 1680 Michigan av north to Grand River av

2233 Prochnow Carl F
2237 Fritzen Chas G
2241 Brimmer Wm C
2243 Rae Saml
2247 Perez Frank
2251 Bourke Richd
2259 Drean Mary Mrs
2263 O'Leary Agnes
2265 Burns John W
2269 Carroll Herbert W
2271 Sutliff Myron
2277 Manual Bonnici
2283 Perez Vincent
2287 Vansteckelman Constant

Cherry Intersects

2300 Lemay Simeon J gro
2301-09 Maney John W undtkr
Travor Leon L
2304 Castro Jos T
2308 Garcia Chas
2309 Maney's Chapel
2312 Nuno Stanley
2316 Ryan Mary Mrs
2317 Bellov John
2325 Carter Jos A
2326 Perry Lottie B
2333 Tesorero Abr
2336 Fraser Thos J
Foley Jas
2337 Fernandez Leoncie
Gel Frank
2339 Seger Warren A
2341 Vacant
2342 Puller John
Smith Jas D
2343 Adams Nathan M
2345 Burgos Robt G
2348 Falvey Dennis D
Hellers John J
2349 Kelly Matt
rear Collick Gordon W

W Vernor hwy Intersects

2410 Bullock Robt P
2417 Aboud Geo
2418 Vacant
2422 Rumsby Geo
2423 Aboud Moses
2427 Payne Burl F
2428 McMenemy Jas
2429 Putnam Jessie Mrs
2432 McGurk Jas
2433 Lohman Peter
Gasson Marcel
2434 Metaxa Paul
2436 Dwyer Jos
2437 Bocks Belmont L
2442 Markarian Chas
2443 Micallaf Chas A
2447 Gornick Frank
2448 Miller Maynard J

Henry Intersects

2500 Vacant
2501 Smith C F Co gro
2502 Peetro Karristo shoe repr
2505 Hamilton Eug A
2508 Towell John E
2509 Lively Chas H
2514 Studer Harold
2515 Vacant
2518 Herbst Caroline
2519 Whitlow Jos E
2522 Cooper Lillie F Mrs
2523 Hieber Richd A
2526 Bonke Julia E Mrs
2527 Straubel Albert E
2532 Mallett Jos
2533 Montlouis Albert T
2538 Gordon Van L
2543 Whitefoot Edw
2546 Stocker John

Pine Intersects

2601 Sullivan Jas
Heiser Gust
2606 Service Printing Co
2607 James Jos
Taber Jos
2611 Lyons Alf J
2612 Kenny Thos F
2613 Gragg Raymond G
2616 Rule Thos J
2617 Reid Wm G
2619 Chase Garnet R Mrs
2622 Brown Harry L

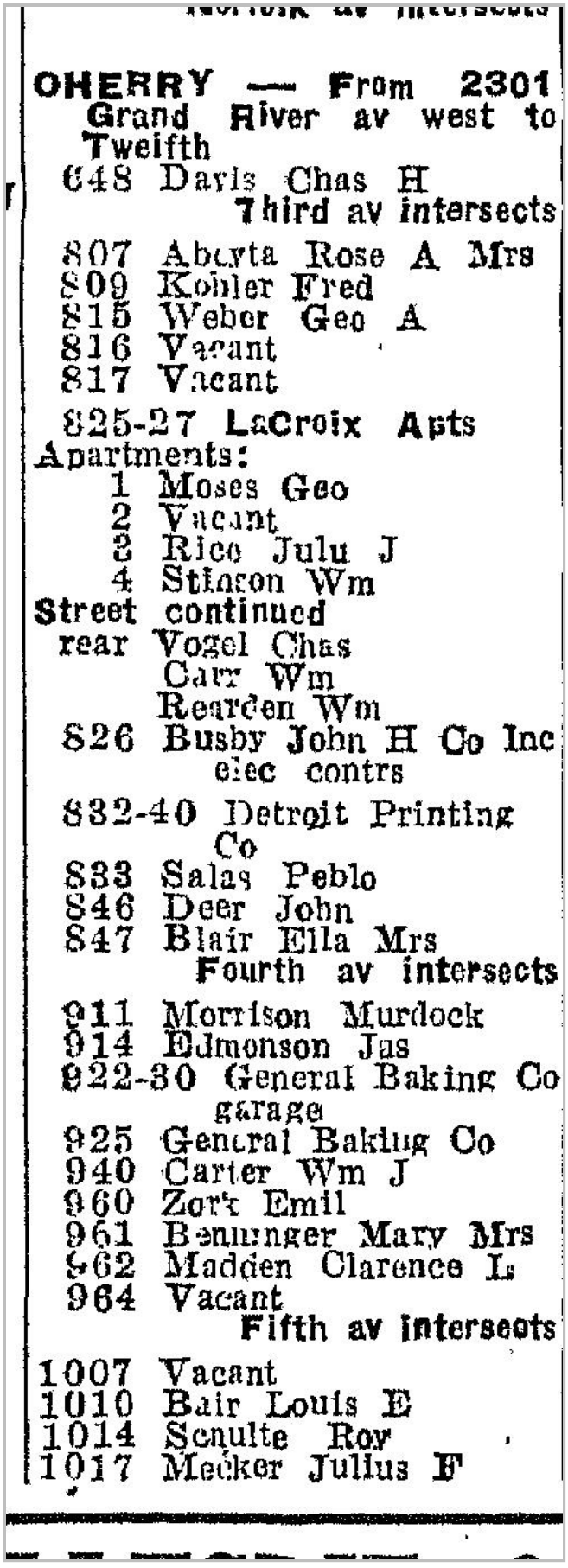
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COCHRANE ST 1931

2623 Turner Carrie M Mrs
Rounds Sylvester J
2627 Blakley Hugh C
2630 Wilson Geoffrey D
Wilson Bura
2631 Vacant
2645 Webster Jas F gro
Spruce intersects
2700 Nicolaff Leo confr
2702 Geraci Jas
2703 Flanders Geo
2709 Gonzalez Raymond
2710 Overpack Herbert G
Dunn Carl
2714 Kildow A Willard
Holland Edw
2715 Vacant
2717 Wilson Wm E
2720 Peterson Christian M
2723 Oviedo Natalie Mrs
2724 Phythian Jas H
Dorine Martin J
2725 Olson Lillie Mrs
2727 McGarry Frank J
2730 Kavanaugh Saml J
2733 Foren Chas E
2734 Hausen Jas
2735 McFadden Thos J
2740 Jarrell John L
2744 Novak Chas
Perry av intersects
2800 Smith Gustav
2801 Kelley Jas F
Talty Thos
2806 Busch Aug C
2807 Lopez Andres A
2811 Moss Jos
2812 Rabine Frank A
2813 George Jacob
2816 Dumit Saml H
2820 Livzley Wm F
2821 Flynn John C
2825 Medellin Julia S
2826 Stephenson Frank
2831 Fisher Thos
2833 Kalill David A
2834 Baker Genevieve Mrs
2840 Bickley Chas H
Behringer Edw C
2841 Kalil David A gro
Temple av intersects
2902 Sammut Salvador
2903 Ripley's Drug Store
No 2
2908 Vacant
2909 Kravis John
Morris Howard L
2910 Vacant
2912 Smith C F Co gros
2913 Peters Wm W
2914 City News Co
2916 Perry Frank
Lance Freeman
2917 Turner Wm
2922 Oakes Gertrude Mrs
2923 Roche Delia Mrs
Rowlette Lloyd S
2927 Sass Thos J
2930 Bowler Frank E
2934 Vacant
2935 Jordan Wm
2942 Murphy Timothy W
2943 McCoy Patk
Butternut intersects
3001 Loose Frank H

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KALINE DR 1931



OHERRY — From 2301 Grand River av west to Tweifth
648 Davis Chas H
Third av intersects
807 Aberta Rose A Mrs
809 Kohler Fred
815 Weber Geo A
816 Vacant
817 Vacant
825-27 LaCroix Apts
Apartments:
1 Moses Geo
2 Vacant
3 Rico Julu J
4 Stinson Wm
Street continued
rear Vogel Chas
Carr Wm
Rearden Wm
826 Busby John H Co Inc elec contrs
832-40 Detroit Printing Co
833 Salas Peblo
846 Deer John
847 Blair Ella Mrs
Fourth av intersects
911 Morrison Murdock
914 Edmonson Jas
922-30 General Baking Co garage
925 General Baking Co
940 Carter Wm J
960 Zork Emil
961 Benunger Mary Mrs
962 Madden Clarence L
964 Vacant
Fifth av intersects
1007 Vacant
1010 Bair Louis E
1014 Schulte Roy
1017 Mecker Julius F

Target Street	Cross Street	Source
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KALINE DR 1931



1026 Apartments
1 Beck Oscar
2 Binder Chas
3 Long Elmer
4 Johnson Victoria Mrs
5 Vacant
6 Bonebrake Richd A
Street continued
1027 Nelson Victor
1031 Behrend Chas
1032 Albanys Emanuel
1034 Vacant
1036 McLean Lena Mrs
1038 Vacant
1039 Delgado Mathias
1042 Wedge John
1044 McCarthy Jas J
1045 Shanehan Minnie Mrs
1055 Eichelburg Harry
Sixth av intersects
1215 Gurino Albert
1218 Nunez Jesus
1224 Piker John J
1225 Coffey Nora Mrs
1230 Pengelly Rose Mrs
1231 Johnston Thos L
1236 Scribner Nicholas
1237 Holt Jewell E
1238 Vacant
1242 Flanigan Jos G
1245 Camilleri Felix
1248 Danl Knut N
1249 Glover Floyd
1253 Coabro Anthony
1254 McFarland Ella Mrs
1259 Heike Frank
1260 Conners Geo H
Brookiyn av intersects
1300 Smith C F Co (br) gros
1304 Vacant
1306 Smyth Ella restr
1308 Bourquin Geo J whol nuts
1310 Canter Chas mus insts
1316 DeBono Paul
1326 Vacant
1332 Pomerico Pietro gro
1336 Hahn Mary Mrs
Detro Willis
1338 Weir Robt
1344 Flanigan Peter
1350 Shaughnessy Mary
1356 Drewyour Harry E
1362 Setter Jos
1364 Sternberg Albert
1366 Vacant
1368 Trowbridge Russell
Smith Edw
1374 Klag Frank
1380 Kohlen Paul
O'Brien Patk
Eighth intersects
1400 Miner Earl
1401 Black Peter
1404 Clark Arth D
1406 Vacant
1407 Vacant
1410 Totten Beulah Mrs
1415 Barrand Rudolph
1419 Sinagra John
1422 Borrand Rudolph
Moll Matthew
Kew Ellen Mrs
1425 Holmes Wm E
Wilson Orren A
1426 Lonz Chester
1428 Acton Cicero
Ingles Charlotte
1420 Vacant
Trumbull av intersects
1520 Licari Jos
1522 Stevens Mack D garage
1524 Cadeau John
1530 Maloney Cornelius
Harrigan Markt
1540 Stallini Ella
1544 Bonavia John
1550 Lusk Kate Mrs
1556 Azzopard Frank
Formosa Geo
1566 Gristy Robt A
1570 O'Connell Maurice
1576 Howell Edwin
1578 Vacant
1580 Sullivan Timothy
1588 Tejeda Lino
National av intersects
1733 Sullivan Jeremiah J
Harrison av intersects
1814 Castaneda John
1817 Smith Jas
1821 Evans John J
1826 Vacant
1827 Fletcher Basil
1832 Samson Henry
1833 Jester Ellen Mrs
1838 Guinon Wm E
1839 Pauls Fredk H
1840 Hood Elmer C
1845 Mullen Benj
Crellin Harold
1846 Morgan Roy E
Jones Clarence W
1847 Eckert Chas
Cheatlick Lillie Mrs
1855 Gonzales Jos
1859 Stasser Kath
Twelfth intersects

CHERRYLAWN AV —
From Grand River av

Target Street	Cross Street	Source
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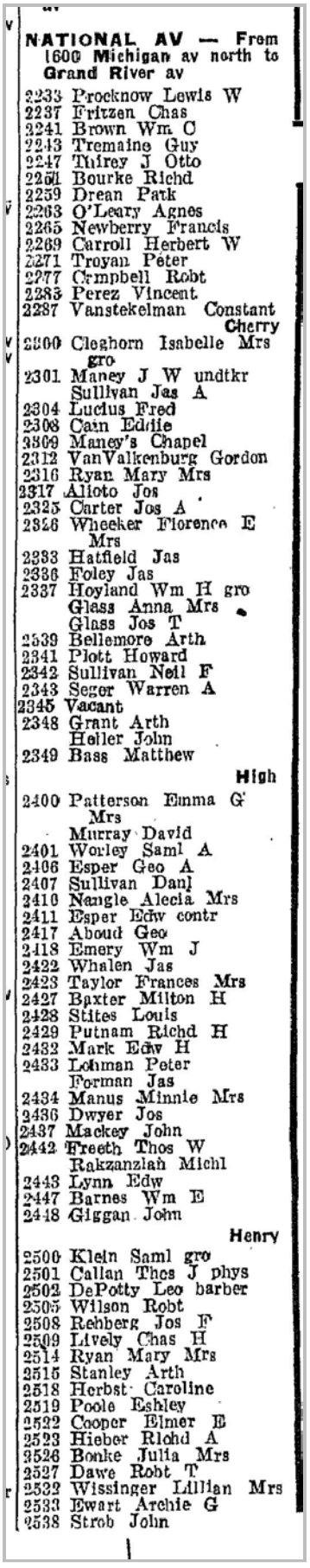
VERNOR HWY 1931



Wolfe Apts—Contd
43 Vacant
44 Waraday John
45 Vacant
46 Vacant
Street continued
488 Bryant Edw
489 Vacant
495 Stone Apartments
Apartments:
B1 Spellen Jos
B2 Pastel Clyde
B3 Anderson Harry
101 Eckert Wm U
102 Brand John
103 Vacant
104 Gill John
105 Vacant
106 Gehrs Mack
107 Haynes Florence
108 Green Wm K
201 Vacant
202 Trombley Henry
203 Vacant
204 Vacant
205 Cooley Russell
206 Whitman Gust
207 Young Wm P
208 Vacant
301 Vacant
302 Crosley John
303 Vacant
304 Davis Mabel S
305 Vacant
306 Dick Thos
307 Vacant
308 Farlin Estelle E
Street continued
498 Bourgeois Alf J
504 Barkley Cora Mrs
507 Ramona Apartments
Apartments:
1 Vacant
2 Vacant
3 Vacant
4 Segoria Anthony
5 Bishop Roy
6 Vacant
7 Jolly Geo W
8 Vacant
9 Lowe Wm
10 Vacant
11 Smith Clarence
12 Vacant
13 Vacant
14 Minor Bellville
15 Graves Harold
16 Moore Douglass
17 Vacant
18 Vacant
19 Russell Thos
20 Vacant
21 Meekor Thos
22 Riddle Frankie Mrs
23 Vacant
24 Cohen Alf
25 Vacant
26 Vacant
27 Marcello Anna
28 Vacant
29 Vacant
30 Vacant
31 Vacant
32 Vacant
33 Harris Robt
34 Gallop Chas
35 Buchanan Wm H
36 Vacant
37 Vacant
43 Murphy Maxie
Street continued
510 Alamagitis Geo confr
Second blvd intersects
640 Belvadere Hotel
Fritch Wallace W
650 Kossack Isadore lndy
652 Supreme Restaurant
656 Papazian Garabed
Grand River av intersects
Third av intersects
801 Penna Petroleum Corp (br)
828 Western Newspaper Union
Bezenah Earl L typesetting
829 Consolidated Auto Ladry
850 Howard Beatrice Mrs
854 Vanslyke Mabel Mrs
Fourth av intersects
910 Vacant
912 Aiken Harold
922 Vacant
931 Snyder Alex M real est
934 Naryac Jos
936 McHale Patk
Fifth av intersects
Crowford Park intersects
1000 Penn Petroleum Corp (br)
1005 Standard Oil Co (br)
1019 Walsh Wm R
1020 Traves The
Apartments:
1 Delrado Ralph F
2 Vacant
3 Vacant
4 Carline John
5 Vacant
6 Mitchell John
Street continued
1023 Johnson Chas
1025 Aubin Frank
1026 Young Melissa J Mrs
1027 Dell Richd A
1028 Bolton Wm J
1029 France Mary E Mrs
1030 Morrison Frank J
1030½ Weir Edw
1037 Goodman Michl
1043 Blay Anna
Sixth av intersects
1220 Irvines Broke Hosp
1224 Lynch Matthew
1227 Edelman Max lndy
1228 Vacant
1230 Conway Eug
1233 Schulte Geo
1239 Bebout Lillian Mrs
1241 Curry Jas T
1243 Prest Wm A
1245 Barnes Daisy M Mrs
Rioio Jos
Biois Harry E
1249 Curtis Geo
1250 Reo Michigan Sales (br)
1255 Flood Anna drsmkr
1261 Winston Max
1263 Fitzgerald Margt Mrs
1266-1270 Hy-Way Super Lubricrium gas sta
1267 Vacant
1269 Clifford Lloyd
Brooklyn av intersects
1311 Vernor Tire & Battery Service
1321 Prout Lula
rear M & F Garage
1327 Morton Jas E
Haubel Wm
1331 Drusseau Ralph E
1333 Getts Anna Mrs
1337 Brown John
1339 Brown Harry A
Orr Adelard
1341 Henifan Frank J
Brough Harry L
1342 Industrial Diamond Co tool mfrs
1345 Labadie Geo
1350 Hawes Wm G garage
1351 Sidebottom Celia Mrs
Beebe Mary J Mrs
1357 Magrath Mary L Mrs
1360 Hawes Wm G auto repr
1363 DeBrincat Chas
1365 Shay Margt Mrs
1369 Hunter Lydia N
1371 Race Blanche Mrs
1377 Eishart Apartments
Det Steam Baths
Fowles Frenk barber
Apartments:
201 McCoy Carl
202 Bertrand Alf
203 Vacant
204 Vacant
205 Vacant
206 Dershem Fredk
207 Vainio John
208 Vacant
209 Matheny Reynolds
210 Kaski Henry
301 Pesper John
302 Marsac Gerald F
303 Vacant
304 Leonard Geo
305 Moran B
306 Vacant
307 Vacant
308 Cobb Martin
309 Marshall Harry L
310 Miller Eur
Street continued
1380 Cadillac Lunch
1384 Hayes John H
1389 Johnson Jos W
1395 Chase Margt J Mrs
1403 Doherty Anna Mrs
1407 Attard Chas
1411 Vacant
Trumbull av intersects
1517 Roy Buziel
1521 Vacant
1530 Felice Geo
1531 Kamley Wm F
1535 Black Bessie B Mrs
1541 Laichalk Nicholas
1543 Laichalk Michl L
1544 Henry John
1545 Courtois Jas J
1550 Selo Chester E used cars
1551 Barbara Fort
1553 Dimech Chas
1557 Tiske Chas
1563 Hayden Frank U
1569 DeAlbiter Frank
1574 Bob's Garage
1575 Foldan Alphonse
1589 Smith Mae
1693 Hellers Peter N
National av intersects
1710-30 National Service Station Inc
1717 Moore Fredk
1729 Mahl Otto
Harrison av intersects
1811 Sinzer-Kittie
1817 Barry Thos
1859 Daniels Service Sta
Twelfth intersects
Vermont av intersects
Huron intersects
Wabash av intersects
2129 Vacant
2135 Vacant
Fourteenth av intersects
Michigan av intersects
2504 Vacant
Eighteenth intersects
2627 Rux Fred D
2631 Haydon John
2630 Joyner Emerson
2641 Brown Harry
2645 Ormsby Jane Mrs
2653 Brabonec John F
2655 Kasparek Frank
2660 Thomas Alf J
2661 Brabener Chas F
2670 Dann Wm A
Roberts Harold
Nineteenth intersects
2703 Gulf Refining Co (br)
2730 Cadillac Lunch
Twentieth intersects
2805 Gulf Refining Co (br)
2810 Wagner Fredk C gas sta
2858 Scandrett Geo
Twenty-first intersects
3010 Ambassador Super Service
Bircher intersects
3210 Shell Petroleum Corp
Twenty-second intersects
3300 Sowerby Williford filling sta
3303 Hacker Chas filling sta
Twenty-third intersects
3436 Johns & Sons ice
Twenty-fourth intersects
3437 Wilson John E
3501 Vernor Highway Quality Market
3502 Karnatz John A
3504 Karnatz Emory F
3508 Bell Kath Mrs
3509 Vacant
3510 Broad Wm A
3511 Vacant
3513 Vacant
3515 Wallace Wm M printers
3518 Matthews Alf
3520 Devine Louis J
3525 Hoffman-Paulding Co auto parts mfrs
3526 Vacant
3527 Vacant
3528 McClain Saml D
3531 Lyons Edw A
3532 Vacant
3535 Zarack Marcella
3537 Slavinski John confr
3537½ Stepanauckas Chas undrkrs
3546 Kuehn Paul W
3547-49 Domus The
3547 Laffin Path
3549 Harlow Edw
3564 Lithuanian Hall
Samson Chas jwlr
3566 Ramnaski Alex restr
3569 StAnthony R C Ch
3570 Ideal Battery Service
Twenty-fifth intersects
3600 Quinn Thos J barber
3602 Karstofsky Peter shoe repr
3604 DeOrnellas Manuel
3608 VanDuzer Thos S
3608 Vacant
3615 Cole Apts
Apartments:
1 Premo Gus
2 Vacant
3 Vacant
4 Vacant
5 Vacant
6 Snallstrom Alf J
7 Luddy Mary
8 Vacant
9 Vanesky Harry
10 Locke Hollis B
11 Vacant
12 Vacant
13 Vacant
14 Donahue Mary Mrs
15 Miller Carey L
16 Brown Loretta
17 Vacant
18 Vacant
19 Vacant
20 Halkids Arth
21 Vacant
22 Vacant
23 Vacant
24 Vacant
25 Vacant
Street continued
3627 Martin Body Works

Target Street	Cross Street	Source
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COCHRANE ST 1926



NATIONAL AV — From 1600 Michigan av north to Grand River av

2233 Procknow Lewis W
2237 Fritzen Chas
2241 Brown Wm C
2243 Tremaine Guy
2247 Thirey J Otto
2251 Bourke Richd
2259 Drean Park
2263 O'Leary Agnes
2265 Newberry Francis
2269 Carroll Herbert W
2271 Troyan Peter
2277 Crmpbell Robt
2283 Perez Vincent
2287 Vanstekelman Constant

Cherry

2300 Cleghorn Isabelle Mrs gro
2301 Maney J W undtkr
Sullivan Jas A
2304 Lucius Fred
2308 Cain Eddie
2309 Maney's Chapel
2312 VanValkenburg Gordon
2316 Ryan Mary Mrs
2317 Alioto Jos
2325 Carter Jos A
2326 Wheeler Florence E Mrs
2333 Hatfield Jas
2336 Foley Jas
2337 Hoyland Wm H gro
Glass Anna Mrs
Glass Jos T
2339 Bellemore Arth
2341 Plott Howard
2342 Sullivan Neil F
2343 Seger Warren A
2345 Vacant
2348 Grant Arth
Heller John
2349 Bass Matthew

High

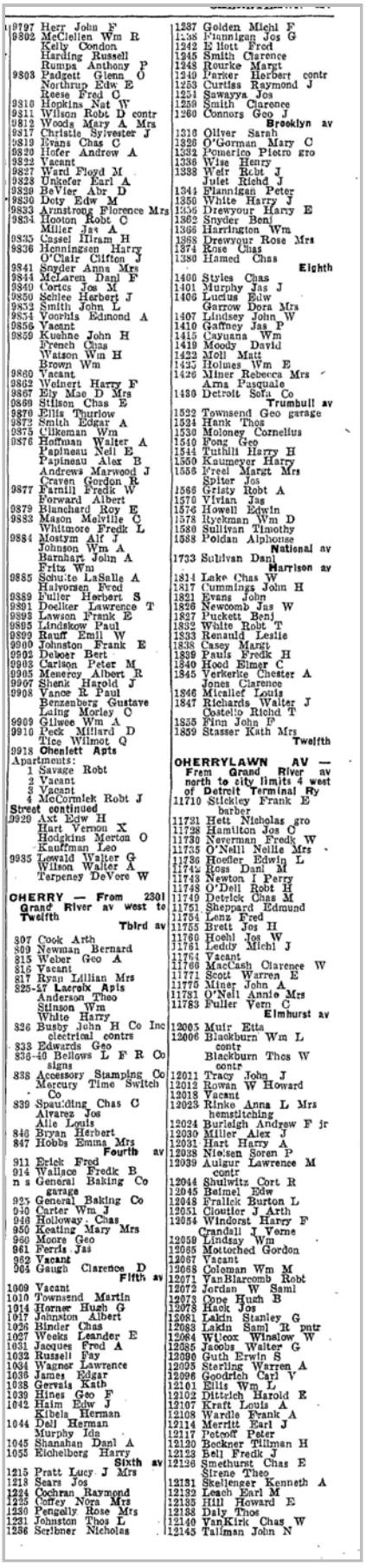
2400 Patterson Emma G Mrs
Murray David
2401 Worley Saml A
2406 Esper Geo A
2407 Sullivan Danl
2410 Nangle Alecia Mrs
2411 Esper Edw contr
2417 Aboud Geo
2418 Emery Wm J
2422 Whalen Jas
2423 Taylor Frances Mrs
2427 Baxter Milton H
2428 Stites Louis
2429 Putnam Richd H
2432 Mark Edw H
2433 Lohman Peter
Forman Jas
2434 Manus Minnie Mrs
2436 Dwyer Jos
2437 Mackey John
2442 Freeth Thos W
Rakzanzlah Michl
2443 Lynn Edw
2447 Barnes Wm E
2448 Giggan John

Henry

2500 Klein Saml gro
2501 Callan Thos J phys
2502 DePotty Leo barber
2505 Wilson Robt
2508 Rehberg Jos F
2509 Lively Chas H
2514 Ryan Mary Mrs
2515 Stanley Arth
2518 Herbst Caroline
2519 Poole Eshley
2522 Cooper Elmer E
2523 Hieber Richd A
2526 Bonke Julia Mrs
2527 Dawe Robt T
2532 Wissinger Lillian Mrs
2533 Ewart Archie G
2538 Strob John

Target Street	Cross Street	Source
-	✓	Polk's City Directory

KALINE DR 1926



9797 Herr John F
9802 McClellen Wm R
Kelly Condon
Harding Russell
Rumpa Anthony P
9803 Padgett Glenn O
Northrup Edw E
Reese Fred C
9810 Hopkins Nat W
9811 Wilson Robt D contr
9812 Woods Mary A Mrs
9817 Christie Sylvester J
9819 Evans Chas C
9820 Hofer Andrew A
9822 Vacant
9827 Ward Floyd M
9828 Unkefer Earl A
9829 BeVier Abr D
9830 Doty Edw M
9833 Armstrong Florence Mrs
9834 Hooton Robt C
Miller Jas A
9835 Cassel Hiram H
9836 Henningsen Harry
O'Clair Clifton J
9841 Snyder Anna Mrs
9844 McLaren Danl F
9849 Cortes Jos M
9850 Schlee Herbert J
9852 Smith John L
9854 Voorhis Edmond A
9856 Vacant
9859 Kuehne John H
French Chas
Watson Wm H
Brown Wm
9860 Vacant
9862 Weinert Harry F
9867 Ely Mae D Mrs
9869 Stilson Chas E
9870 Ellis Thurlow
9873 Smith Edgar A
9875 Clikeman Wm
9876 Hoffman Walter A
Papineau Neil E
Papineau Alex B
Andrews Marwood J
Craven Gordon R
9877 Farnill Fredk W
Forward Albert
9879 Blanchard Roy E
9883 Mason Melville C
Whitmore Fredk L
9884 Mostym Alf J
Johnson Wm A
Barnhart John A
Fritz Wm
9885 Schulte LaSalle A
Halvorsen Fred
9889 Fuller Herbert S
9891 Doelker Lawrence T
9893 Lawson Frank E
9895 Lindskow Paul
9899 Rauff Emil W
9900 Johnston Frank E
9902 Deboer Bert
9903 Carlson Peter M
9905 Menerey Albert R
9907 Shenk Harold J
9908 Vance R Paul
Benzenberg Gustave
Laing Morley O
9909 Gilwee Wm A
9910 Peck Millard D
Tice Wilmot Q
9918 **Ohenlett Apts**
Apartments:
1 Savage Robt
2 Vacant
3 Vacant
4 McCormick Robt J
Street continued
9920 Axt Edw H
Hart Vernon X
Hodgkins Merton O
Kauffman Leo
9935 Lowald Walter G
Wilson Walter A
Terpeney DeVore W

OHERRY — From 2301 Grand River av west to Twelfth

Third av

807 Cook Arth
809 Newman Bernard
815 Weber Geo A
816 Vacant
817 Ryan Lillian Mrs
825-27 **Lacroix Apts**
Anderson Theo
Stinson Wm
White Harry
826 Busby John H Co Inc electrical contrs
833 Edwards Geo
836-40 Bellows L F R Co signs
838 Accessory Stamping Co
Mercury Time Switch Co
839 Spaulding Chas C
Alvarez Jos
Allie Louis
846 Bryan Herbert
847 Hobbs Emma Mrs

Fourth av

911 Erick Fred
914 Wallace Fredk B
n s General Baking Co garage
925 General Baking Co
940 Carter Wm J
946 Holloway Chas
950 Keating Mary Mrs
960 Moore Geo
961 Ferris Jas
962 Vacant
964 Gaugh Clarence D

Fifth av

1009 Vacant
1010 Townsend Martin
1014 Horner Hugh G
1017 Johnston Albert
1026 Binder Chas
1027 Weeks Leander E
1031 Jacques Fred A
1032 Russell Fay
1034 Wagner Lawrence
1036 James Edgar
1038 Gervais Kath
1039 Hines Geo F
1042 Halm Edw J
Kibela Herman
1044 Dell Herman
Murphy Ida
1045 Shanahan Danl A
1055 Eichelberg Harry

Sixth av

1215 Pratt Lucy J Mrs
1218 Sears Jos
1224 Cochran Raymond
1225 Coffey Nora Mrs
1230 Pengelly Rose Mrs
1231 Johnston Thos L
1236 Scribner Nicholas
1237 Golden Michl F
1238 Flannigan Jos G
1242 Elliott Fred
1245 Smith Clarence
1248 Rourke Margt
1249 Parker Herbert contr
1253 Curtiss Raymond J
1254 Sawayya Jos
1259 Smith Clarence
1260 Connors Geo J

Brooklyn av

1316 Oliver Sarah
1326 O'Gorman Mary C
1332 Pomerico Pietro gro
1336 Wise Henry
1338 Weir Robt J
Juiet Richd J
1344 Flannigan Peter
1350 White Harry J
1356 Drewyour Harry E
1362 Snyder Benj
1366 Harrington Wm
1368 Drewyour Rose Mrs
1374 Rose Chas
1380 Hamed Chas

Eighth

1400 Styles Chas
1401 Murphy Jas J
1406 Lucius Edw
Garrow Dora Mrs
1407 Lindsey John W
1410 Gaffney Jas P
1415 Cayuana Wm
1419 Moody David
1422 Moll Matt
1425 Holmes Wm E
1426 Milner Rebecca Mrs
Arna Pasquale
1430 Detroit Sofa Co

Trumbull av

1522 Townsend Geo garage
1524 Hank Thos
1530 Moloney Cornelius
1540 Fong Geo
1544 Tuthill Harry H
1550 Kaumeyer Harry
1556 Freel Margt Mrs
Spiter Jos
1566 Gristy Robt A
1570 Vivian Jas
1576 Howell Edwin
1578 Ryckman Wm D
1580 Sullivan Timothy
1588 Poldan Alphonse

National av

1733 Sullivan Danl

Harrison av

1814 Lake Chas W
1817 Cummings John H
1821 Evans John
1826 Newcomb Jas W
1827 Puckett Benj
1832 White Robt T
1833 Renauld Leslie
1838 Casey Margt
1839 Pauls Fredk H
1840 Hood Elmer C
1845 Verkerke Chester A
Jones Clarence
1846 Micallef Louis
1847 Richards Walter J
Costello Richd T
1855 Finn John F
1859 Stasser Kath Mrs

Twelfth

OHERRYLAWN AV — From Grand River av north to city limits 4 west of Detroit Terminal Ry

11710 Stickley Frank E barber
11721 Hett Nicholas gro
11738 Hamilton Jos C
11730 Neverman Fredk W
11735 O'Neill Nellie Mrs
11736 Hoefler Edwin L
11742 Ross Danl M
11743 Newton I Perry
11748 O'Dell Robt H
11749 Detrick Chas M
11751 Sheppard Edmund
11754 Lens Fred
11755 Brett Jos H
11760 Hoehl Jos W
11761 Leddy Michl J
11764 Vacant
11766 MacCash Clarence W
11771 Scott Warren E
11775 Miner John A
11781 O'Neil Annie Mrs
11783 Fuller Vern C

Elmhurst av

12005 Muir Etta
12006 Blackburn Wm L contr
Blackburn Thos W contr
12011 Tracy John J
12012 Rowan W Howard
12018 Vacant
12023 Rinke Anna L Mrs hemstitching
12024 Burleigh Andrew F jr
12030 Miller Alex J
12031 Hart Harry A
12038 Nielsen Soren P
12039 Aulgur Lawrence M contr
12044 Shulwitz Cort R
12045 Beimel Edw
12048 Frallck Burton L
12051 Cloutier J Arth
12054 Windorat Harry F
Crandall J Verne
12059 Lindsay Wm
12065 Mottorhed Gordon
12067 Vacant
12068 Coleman Wm M
12071 VanBlarcomb Robt
12072 Jordan W Saml
12073 Cope Hugh B
12078 Hack Jos
12081 Lakin Stanley G
12083 Lakin Saml R pntr
12084 Wilcox Winslow W
12085 Jacobs Walter G
12090 Guth Erwin S
12095 Sterling Warren A
12096 Goodrich Carl V
12101 Ellis Wm L
12102 Dittrich Harold E
12107 Kraft Louis A
12108 Wardle Frank A
12114 Merritt Earl J
12117 Petroff Peter
12120 Beckner Tillman H
12123 Bell Fredk J
12126 Smethurst Chas E
Sirene Theo
12131 Skellenger Kenneth A
12132 Leach Earl M
12135 Hill Howard E
12138 Daly Thos
12140 VanKirk Chas W
12145 Tallman John N

Target Street	Cross Street	Source
✔	-	Polk's City Directory

COCHRANE ST 1921

9958—194 Raisner John
9966—200 McLaughlin C C
10204—204 Vacant
10244—228 Gillis Charles
10252—230 Gallagher Thos L
10260—232 McCracken Louis J
10268—234 Dykeman Ernest W
Bordeau av
10279—237 McDonald Scott
Ashley av
10208—250 Schmelzer Gus Rev
11305—253 Rhodes Chas F
11319—259 Vacant
11327—263 Wells L D Mrs
11351—275 Kottka Edw R
11369— Vacant
11376—294 Grove Theo J
11401—301 Tanner J Russell
Waldron Wm E
11409— Vacant
11414—316 Bruley John M
11425—313 Newkirk Wm A
Burlingame av
11645—313 Zulauf Chas T
Webb av
11737—363 Dadswell Richard
Woodbine av
12028—430 Heisner Arthur C
12056—444 Mottashed John C
12084—458 Hackett John H

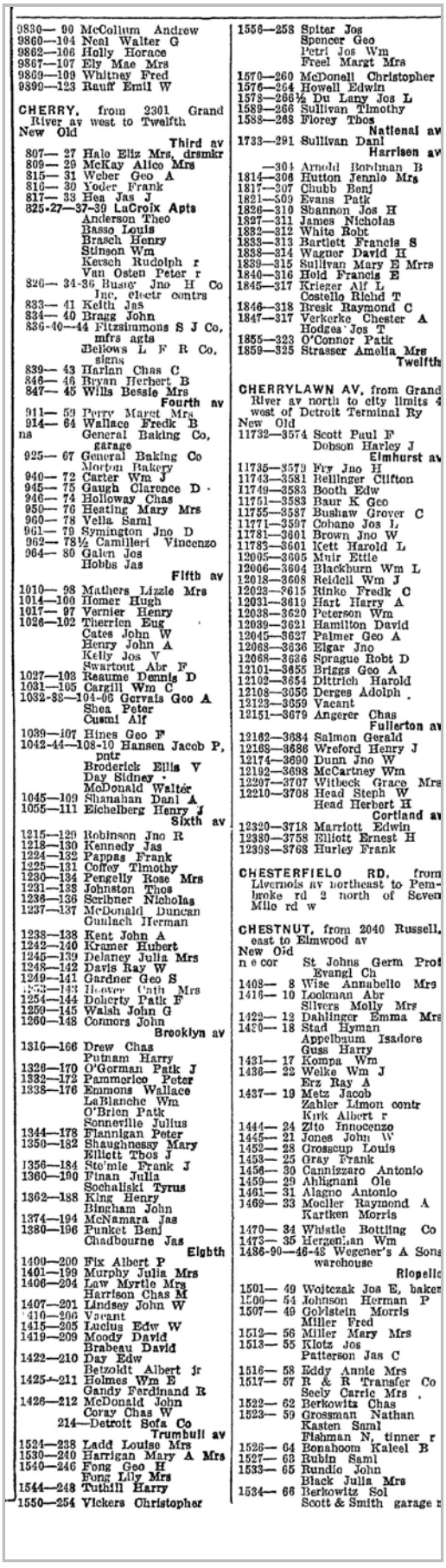
NASHVILLE AV, from Dresden east to Westphalia, 2 north of Gratiot av

NATIONAL AV, from 1680 Michigan av north to Grand River av

New Old
2217— 3 Becker Morris
2233— 15 Procknow Lewis
2237— 17 Baird Jas W
21 Peck Clarence A
2251— 23 Bourke Richd
2259— 25 Drean Patk
2268— 27 O'Leary Agnes
Morris Frank
2265— 29 Goodrow Telles
2269— 31 Richmond M
2271— 33 Van Slambrouck Bene, paperhanger
2277— 37 Sheehan Dennis
2283— 39 Nutson Chas
2287— 41 Vacant
Cherry
2300— 44 Smith Bert C, gro
2301— 43 Maney J W ,undertkr
2304— 46 Turner Carrie M
2308— 48 Holmes Henry W
2309— 45 Maney's Chapel
2312— 50 Murray Herbert C
2317— 49 Pahl Harry E
2325— 51 Carter Alice
2326— 52 Ryan Mary Mrs
Kinney Donald
2326— 54 Wheeker Jno
2333— 55 Forsythe Roy
2336— 53 Foley Jas
Clifford Bridget
2337— 57 Horner Jas, gro
Kennedy Jesse A
Barnes Jacob L
2339— 59 Joyce Mary I Mrs
2341— 59 Mullier Amel
2342— 60 Vacant
2343— 61 Seger Warren A
2345— 63 Kahler Jno
2348— 64 Hellers Jno J
2349— 65 Stafford Wm B
High
2400— 68 Patterson L
2401— 67 Worley Saml A
2406— 70 Dewstow Walter E
Marrion Roy A
2407— 69 Sullivan Danl
2410— 72 Mangle Alecia Mrs
2411— 71 Esper Edw, contr
2417— 73 Schwambach Oscar A
Ganzen Peter J
2418— 74 Emery Wm
2422— 76 Byrma Jno T
2423— 75 Halore Jno H
2427— 77 Moore O W
Simmons Lee
2428— 78 Miller Abr
2429— 77½ Putnam Richd H
2432— 80 Bryan Arth G
2433— 79 Lane Alice Mrs
2434— 80½ Bryan Arth
2436— 82 Dwyer Jos
2437— 81 McGraw Wm J
Sharplin Wm
2442— 84 Kinsman Fredk J
Markarian Chas
2443— 83 Ryan Mary Mrs
2447— 85 Barnes Wm E
2448— 86 DuFour Sara Mrs
Henry
2500— 88 Haight Wm S, gro
2501— 87 Callan Thos J, phys
2502— 90 Schindler R, meats
2505— 89 Conners Eva
2508— 92 Rehberg Jos F
2509— 91 Lively Chas H
2514— 94 Williams Earl S
2515— 93 Britton Albert E
2519— 95 Cathard Frank
2518— 96 Herbst Caroline
2522— 98 Cooper Elmer
2528— 97 Hieber Richd A
2526—100 Bonke Julia Mrs
2527— 99 Dawe Robt T
2532—102 O'Neill Dennis
2533—101 Ewart Archie G
2538—104 Ferchel Helena Mrs
Henri Robt
2543—105 Cooper Ellia Mrs
Maule Jno
2546—106 Stocker Jno
Pine
2600—103 Hogarth Wm W
2601—107 Brennan Don
McLaughlin Jos
2607—109 James Jos
2611—111 Spooner Alex
2612—112 Lettau Fred G, glove mkr
2618—113 Gee Frederic P
2616—114 Rule Thos J
2617—115 Sellery Frank H
2619—117 McQuarrie Angus
2622—120 Evans Christine Mrs
2623—119 Nash Walter
2627—123 Buelow Frank M
2630—122 DeWing Frank E
2631—125 Wandtke Otto
2645—127 Cooper Elmer, gro
Spruce
2702—132 Lynn Jno W
2703—131 Price Davld M
2709—135 Smack Wheeler
2710—138 Baker Chester
2714—140 McKay Robt A
2715—137 Rose Jno W
2717—139 Depper Annie Mrs
2720—142 Raben Benj
2724—146 Horsfall Wm
2725—141 Lee George W
Olsen Jno E
Carman Naomi L Mrs
2727—143 McGarry Frank
2730—148 Kavanagh Saml
2733—147 Foren Chas E
2734—152 Hansen Jas K
2735—149 Henri Emile
2740—154 Scott Fredk E
2744—154 Hall Geo A
Perry av
2800—156 Oke Henry
2801—155 Bresnahan B Mrs
2806—160 Busch August C
2807—159 Signor Frank
2811—161 Irvine Wm T
2812—164 Rahine Frank A
2813—163 George Jacob
2816—186 Herival Wm R
2820—168 Stephenson Frank
Laux Eug
2821—165 Light Jas W
2825—168 Smith Jno A
2826—172 Wiggins Wm T
2831—171 Meredith Jno W
2833—173 McNaughton G Mrs
2834—176 Baker Wm F
2840—178 Erschig Albert
2841—177 Abadaher Nicholas, gro
Bagg
2902—180 Fraser Eliz Mrs
2903—161 Pinkerton M E Mrs, drugs
2909—183 Morley Elmer
Myers Jos
Knight Rose
2912—183 Pure Food Specialty Co
2913—187 DeCourcy Edw W
2916—192 Perry Frank
2917—189 Ardinger Arth E
2922—194 Oakes Jas E
2923—193 Heil Ernest A G
2927—197 Leitch Mary Mrs
2930—196 Reardon Jno J
2534—109 Beier Jno M, exp
2935—199 Radtke Anthony
2942—202 Clifford Margt Mrs
2943—201 McCoy Patk M
Butternut
3000—206 Shafer Fredk W
3001—203 Loose Frank H
3002—200 Rodd Geo, gro
3003—205 Blankstein J J
3008—208 Millman Jno
3009—207 Holland Jno R
3013—211 Nacy Jas E
3014—212 Little Robt F
3018—214 Westfall Robt A
Heyniger Louis
3019—213 McKenna Anna Mrs
3023—217 Kent Edw
3024—220 Miller Henry O
3025—217 Boyle Danl J
Boyle Wm T
3032—222 Keyes Thos J
3033—219 Burrell Henry
3035—221 Jannette Rafael
Bross Chas
3038—224 Diamond Wm E
3039—223 Estey Henry P, gro
3044—226 Quinn Michl
3048—228 Saleg Geo, gro
3049—235 Doty Margt Mrs
Elm
3103—227 Forbes Mary Mrs
3108—230 Johnson Wm M
3109—231 Pagel Eliz Mrs
3116—236 Ruter Eliz Mrs
3117—233 Vacant
3119—235 McDonald Alex
3120—238 Hemming Chas E
3121—237 Arbaugh Chas I
3128—242 McCarthy Amy W
3129—241 Mathews Benj J
Glenn Saml
Smith Geo
3134—244 McNamara Thos F
3135—243 Dowd Thos J
3138—246 Wilson Frank J
3139—245 Hamilton Jos
3145—249 Portz Edw
3146—248 Bremmer Edw F
Chaffee Marcus J
3147—249 Elder Perry L, gro
Ash
3300—252 Stratton Jas M
3303—251 Rooney Cath A Mrs
3306—256 VaCantie Matilda Mrs
3307—256 VanSyckle L A Mrs
3312—260 Mitchel Jno M
3313—257 Hoal Elm're R
3315—257 Grimes Albert E
3318—264 Corbett Wm A
3319—261 Case Chester
3328—266 Murphy Timothy J
3323—268 Plekering Earl
Sprake Chas
3327—267 Shupe Geo D
3330—268 Nelson Jas
3334—272 Allen Warren R
3335—269 Molloy Michl J
3344—274 Resser Jas W
3345—273 McKay R V
Sycamore
3403—275 Hislop Jno R

Target Street	Cross Street	Source
-	✓	Polk's City Directory

KALINE DR 1921



9830— 90 McCollum Andrew
9860—104 Neal Walter G
9862—106 Holly Horace
9867—107 Ely Mae Mrs
9869—109 Whitney Fred
9890—123 Rauff Emil W

CHERRY, from 2301 Grand River av west to Twelfth New Old

Third av

807— 27 Hale Eliz Mrs, drsmkr
809— 29 McKay Alice Mrs
815— 31 Weber Geo A
816— 30 Yoder Frank
817— 33 Hea Jas J
825-27—37-39 LaCroix Apts
Anderson Theo
Basso Louis
Brasch Henry
Stinson Wm
Kersch Rudolph r
Van Osten Peter r
826— 34-36 Busby Jno H Co Inc, electr contrs
833— 41 Keith Jas
834— 40 Bragg John
836-40—44 Fitzsimmons S J Co, mfrs arts
Bellows L F R Co, signs
839— 43 Harlan Chas C
846— 46 Bryan Herbert B
847— 45 Wills Bessie Mrs

Fourth av

911— 59 Perry Margt Mrs
914— 64 Wallace Fredk B
na General Baking Co, garage
925— 67 General Baking Co Morton Bakery
940— 72 Carter Wm J
945— 75 Gaugh Clarence D
946— 74 Holloway Chas
950— 76 Keating Mary Mrs
960— 78 Vella Saml
961— 79 Symington Jno D
962— 78½ Camilleri Vincenzo
964— 80 Galen Jos
Hobbs Jas

Fifth av

1010— 98 Mathers Lizzie Mrs
1014—100 Homer Hugh
1017— 97 Vernier Henry
1026—102 Therrien Eug
Cates John W
Henry John A
Kelly Jos V
Swartout Abr F
1027—103 Reaume Dennis D
1031—105 Cargill Wm C
1032-38—104-06 Gervais Geo A
Shea Peter
Cusmi Alf
1039—107 Hines Geo F
1042-44—108-10 Hansen Jacob P, pntr
Broderick Ellis V
Day Sidney
McDonald Walter
1045—109 Shanahan Dani A
1055—111 Eichelberg Henry J

Sixth av

1215—129 Robinson Jno R
1218—130 Kennedy Jas
1224—132 Pappas Frank
1225—131 Coffey Timothy
1230—134 Pengelly Rose Mrs
1231—133 Johnston Thos
1236—136 Scribner Nicholas
1237—137 McDonald Duncan
Gaulach Herman
1238—138 Kent John A
1242—140 Kramer Hubert
1245—139 Delaney Julia Mrs
1248—142 Davis Ray W
1249—141 Gardner Geo S
1253—143 Beaver Cath Mrs
1254—144 Doherty Patk F
1259—145 Walsh John G
1260—148 Connors John

Brooklyn av

1316—166 Drew Chas
Putnam Harry
1326—170 O'Gorman Patk J
1332—172 Pammerico Peter
1338—176 Emmons Wallace
LaBlanche Wm
O'Brien Patk
Sonneville Julius
1344—178 Flannigan Peter
1350—182 Shaughnessy Mary
Elliott Thos J
1356—184 Stomile Frank J
1360—190 Finan Julia
Sochaliski Tyrus
1362—188 King Henry
Bingham John
1374—194 McNamara Jas
1380—196 Punket Benj
Chadbourne Jas

Eighth

1400—200 Fix Albert P
1401—199 Murphy Julia Mrs
1406—204 Law Myrtle Mrs
Harrison Chas M
1407—201 Lindsey John W
1410—206 Vacant
1415—205 Lucius Edw W
1419—209 Moody David
Brabeau David
1422—210 Day Edw
Betzoldt Albert jr
1425—211 Holmes Wm E
Gandy Ferdinand R
1426—212 McDonald John
Coray Chas W
214—Detroit Sofa Co

Trumbull av

1524—238 Ladd Louise Mrs
1530—240 Harrigan Mary A Mrs
1540—246 Fong Geo H
Fong Lily Mrs
1544—248 Tuthill Harry
1550—254 Vickers Christopher
1556—258 Spitar Jos
Spencer Geo
Petri Jos Wm
Freel Margt Mrs
1570—260 McDonell Christopher
1576—264 Howell Edwin
1578—266½ Du Lany Jos L
1580—266 Sullivan Timothy
1588—268 Florey Thos

National av

1733—291 Sullivan Danl

Harrison av

—304 Arnold Bordman B
1814—306 Hutton Jennie Mrs
1817—307 Chubb Benj
1821—309 Evans Patk
1826—310 Shannon Jos H
1827—311 James Nicholas
1832—312 White Robt
1835—313 Bartlett Francis S
1838—314 Wagner David H
1839—315 Sullivan Mary E Mrs
1840—316 Hold Francis E
1845—317 Krieger Alf L
Costello Richd T
1846—318 Bresk Raymond C
1847—317 Verkerke Chester A
Hodges Jos T
1855—323 O'Connor Patk
1859—325 Strasser Amelia Mrs

Twelfth

CHERRYLAWN AV, from Grand River av north to city limits 4 west of Detroit Terminal Ry New Old

11732—3574 Scott Paul F
Dobson Harley J

Elmhurst av

11735—3579 Fry Jno H
11743—3581 Reilinger Clifton
11749—3583 Booth Edw
11751—3583 Baur K Geo
11755—3587 Bushaw Grover C
11771—3597 Cobano Jos L
11781—3601 Brown Jno W
11783—3601 Kett Harold L
12005—3605 Muir Ettie
12006—3604 Blackburn Wm L
12018—3608 Reidell Wm J
12023—3615 Rinke Fredk C
12031—3619 Hart Harry A
12038—3620 Peterson Wm
12039—3621 Hamilton David
12045—3627 Palmer Geo A
12068—3636 Elgar Jno
12068—3636 Sprague Robt D
12101—3655 Briggs Geo A
12102—3654 Dittrich Harold
12108—3656 Derges Adolph
12123—3659 Vacant
12151—3679 Angerer Chas

Fullerton av

12162—3684 Salmon Gerald
12168—3686 Wreford Henry J
12174—3690 Dunn Jno W
12192—3698 McCartney Wm
12207—3707 Witbeck Grace Mrs
12210—3708 Head Steph W
Head Herbert H

Cortland av

12320—3718 Marriott Edwin
12380—3758 Elliott Ernest H
12398—3768 Hurley Frank

CHESTERFIELD RD, from Livernois av northeast to Pembroke rd 2 north of Seven Mile rd w

CHESTNUT, from 2040 Russell, east to Elmwood av New Old

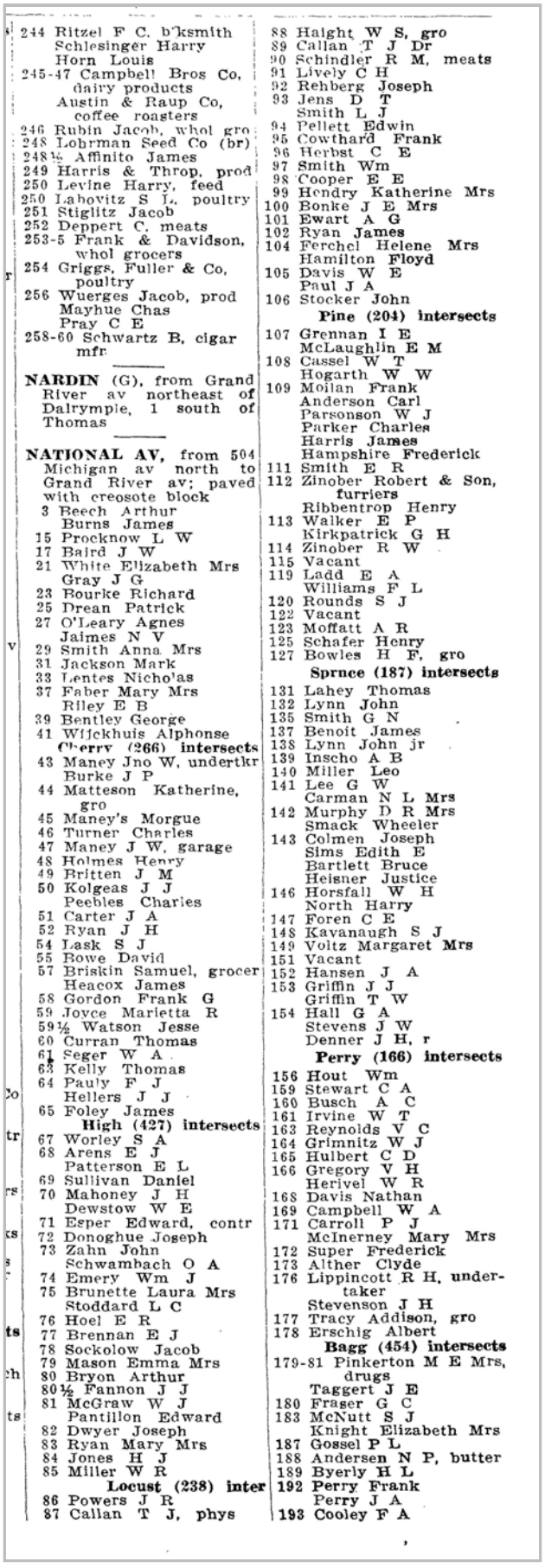
n e cor St Johns Germ Prot Evangl Ch
1408— 8 Wise Annabello Mrs
1416— 10 Lookman Abr
Silvers Molly Mrs
1422— 12 Dahlinger Emma Mrs
1430— 18 Stad Hyman
Appelbaum Isadore
Guss Harry
1431— 17 Kompa Wm
1436— 22 Welke Wm J
Erz Ray A
1437— 19 Metz Jacob
Zahler Limon contr
Kirk Albert r
1444— 24 Zito Innocenzo
1445— 21 Jones John W
1452— 28 Grosscup Louis
1453— 25 Gray Frank
1456— 30 Cannizzaro Antonio
1459— 29 Ahlignani Ole
1461— 31 Alagno Antonio
1469— 33 Moeller Raymond A
Kartken Morris
1470— 34 Whistle Bottling Co
1473— 35 Hergenhan Wm
1486-90—46-48 Wegener's A Sons warehouse

Riopelle

1501— 49 Wojtczak Jos E, baker
1506— 54 Johnson Herman P
1507— 49 Goldstein Morris
Miller Fred
1512— 56 Miller Mary Mrs
1513— 55 Klotz Jos
Patterson Jas C
1516— 58 Eddy Annie Mrs
1517— 57 R & R Transfer Co
Seely Carrie Mrs
1522— 62 Berkowitz Chas
1523— 59 Grossman Nathan
Kasten Saml
Fishman N, tinner r
1526— 64 Bonahoom Kaleel B
1527— 63 Rubin Saml
1533— 65 Rundle John
Black Julia Mrs
1534— 66 Berkowitz Sol
Scott & Smith garage r

Target Street	Cross Street	Source
✓	-	Polk's City Directory

COCHRANE ST 1916



244 Ritzel F C, b'ksmith
Schlesinger Harry
Horn Louis
245-47 Campbell Bros Co, dairy products
Austin & Raup Co, coffee roasters
246 Rubin Jacob, whol gro
248 Lobrman Seed Co (br)
248½ Affinito James
249 Harris & Throp, prod
250 Levine Harry, feed
250 Labovitz S L, poultry
251 Stiglitz Jacob
252 Deppert C, meats
253-5 Frank & Davidson, whol grocers
254 Griggs, Fuller & Co, poultry
256 Wuerges Jacob, prod
Mayhue Chas
Pray C E
258-60 Schwartz B, cigar mfr

NARDIN (G), from Grand River av northeast of Dalrymple, 1 south of Thomas

NATIONAL AV, from 504 Michigan av north to Grand River av; paved with creosote block
3 Beech Arthur
Burns James
15 Procknow L W
17 Baird J W
21 White Elizabeth Mrs
Gray J G
23 Bourke Richard
25 Drean Patrick
27 O'Leary Agnes
Jaimes N V
29 Smith Anna Mrs
31 Jackson Mark
33 Lentes Nicho'as
37 Faber Mary Mrs
Riley E B
39 Bentley George
41 Wijckhuis Alphonse
Cherry (266) intersects
43 Maney Jno W, undertkr
Burke J P
44 Matteson Katherine, gro
45 Maney's Morgue
46 Turner Charles
47 Maney J W, garage
48 Holmes Henry
49 Britten J M
50 Kolgeas J J
Peebles Charles
51 Carter J A
52 Ryan J H
54 Lask S J
55 Bowe David
57 Briskin Samuel, grocer
Heacox James
58 Gordon Frank G
59 Joyce Marietta R
59½ Watson Jesse
60 Curran Thomas
61 Seger W A
63 Kelly Thomas
64 Pauly F J
Hellers J J
65 Foley James
High (427) intersects
67 Worley S A
68 Arens E J
Patterson E L
69 Sullivan Daniel
70 Mahoney J H
Dewstow W E
71 Esper Edward, contr
72 Donoghue Joseph
73 Zahn John
Schwambach O A
74 Emery Wm J
75 Brunette Laura Mrs
Stoddard L C
76 Hoel E R
77 Brennan E J
78 Sockolow Jacob
79 Mason Emma Mrs
80 Bryon Arthur
80½ Fannon J J
81 McGraw W J
Pantillon Edward
82 Dwyer Joseph
83 Ryan Mary Mrs
84 Jones H J
85 Miller W R
Locust (238) inter
86 Powers J R
87 Callan T J, phys
88 Haight W S, gro
89 Callan T J Dr
90 Schindler R M, meats
91 Lively C H
92 Rehberg Joseph
93 Jens D T
Smith L J
94 Pellett Edwin
95 Cowthard Frank
96 Herbst C E
97 Smith Wm
98 Cooper E E
99 Hendry Katherine Mrs
100 Bonke J E Mrs
101 Ewart A G
102 Ryan James
104 Ferchel Helene Mrs
Hamilton Floyd
105 Davis W E
Paul J A
106 Stocker John
Pine (204) intersects
107 Grennan I E
McLaughlin E M
108 Cassel W T
Hogarth W W
109 Moilan Frank
Anderson Carl
Parsonson W J
Parker Charles
Harris James
Hampshire Frederick
111 Smith E R
112 Zinober Robert & Son, furriers
Ribbentrop Henry
113 Walker E P
Kirkpatrick G H
114 Zinober R W
115 Vacant
119 Ladd E A
Williams F L
120 Rounds S J
122 Vacant
123 Moffatt A R
125 Schafer Henry
127 Bowles H F, gro
Spruce (187) intersects
131 Lahey Thomas
132 Lynn John
135 Smith G N
137 Benoit James
138 Lynn John jr
139 Inscho A B
140 Miller Leo
141 Lee G W
Carman N L Mrs
142 Murphy D R Mrs
Smack Wheeler
143 Colmen Joseph
Sims Edith E
Bartlett Bruce
Heisner Justice
146 Horsfall W H
North Harry
147 Foren C E
148 Kavanaugh S J
149 Voltz Margaret Mrs
151 Vacant
152 Hansen J A
153 Griffin J J
Griffin T W
154 Hall G A
Stevens J W
Denner J H, r
Perry (166) intersects
156 Hout Wm
159 Stewart C A
160 Busch A C
161 Irvine W T
163 Reynolds V C
164 Grimnitz W J
165 Hulbert C D
166 Gregory V H
Herivel W R
168 Davis Nathan
169 Campbell W A
171 Carroll P J
McInerney Mary Mrs
172 Super Frederick
173 Alther Clyde
176 Lippincott R H, undertaker
Stevenson J H
177 Tracy Addison, gro
178 Erschig Albert
Bagg (454) intersects
179-81 Pinkerton M E Mrs, drugs
Taggert J E
180 Fraser G C
183 McNutt S J
Knight Elizabeth Mrs
187 Gossel P L
188 Andersen N P, butter
189 Byerly H L
192 Perry Frank
Perry J A
193 Cooley F A

Target Street	Cross Street	Source
✓	-	Polk's City Directory

COCHRANE ST 1916



National Av (1916) R. L. P

194 Beier Augustus
McIntosh D E
196 Reardon S T
Bowler F E
197 Leitch D A
198 Corey J F
199 Vanderseal J A
Price Minnie
Pincombe Wm
201 McCoy P M
Bntternut (123) intersects
202 Clifford Margaret Mrs
206 Fitzgerald J P
205 Blankstein John
206 McClellan W H, gro
Boyce Albert
Bettendorf Wm
207 Holland J R
208 Milliman John, contr
211 Nacy J E
212 Buck A M
213 McKenna Anna Mrs
McKenna W J, plmbr
214 Jones J O
217 Boyle Thomas
Boyle Wm
219 Thorsted J A
220 Miller H O
221 Cole J E
Everson John
222 Brown C K
Vaughan R O
223 Estey H P, grocer
224 Vacant
225 Doty Ora V
226 Hemdan & Baddour, grocers
Thompson J T
Hunter James
Elm (118) intersects
227 Forbes Mary Mrs
Lodder Clarence
230 Johnson Wm
231 Pagel Eliz Mrs
233 Gunther F W
233½ Bayer Charles
235 Shroff Roy
236 Liebhauser Anthony
237 Swaton A F
238 Hemming C E
241 Finn W E
O'Connor David
Barnes Wallace
McGraw John
242 McCarthy Amy
243 Dowd T J
244 McNamara T F
245 King Chester
246 Schafer J S, tailor
248 Crask W W
249 O'Donnell J J, saloon
Freer H C
Ash (88) intersects
251 Rooney Catherine
252 Stratton J N
255 VanSyckle L A Mrs
256 VaCantie Matilda Mrs
Johnson Howard
257 Bettison W C
Powell R B
260 Mitchell J M
261 Spear George
263 Sprake Charles
Freimuth F G
264 Murphy Frances
266 Murphy T J
267 Ferguson S E Mrs
268 Rockey A E
269 Molloy M J
272 Pilon J E
273 Woodbeck Frederick
274 Burley John
Syeamore (72) intersects
275 Mills G E Mrs
279 Norris Susan
Rodmann Olga
Whatmouth James
280 Smithson Alonzo
281 Sterner M G Mrs, chiro
Sullivan E G
Smith Earl
Price R D
282 Hackett E P
283 Healey E A
284 Kirkwood J D
285 Newall J A
287 Shepard J A
290 Wilson John
291 Pendergast J E
292 Rice W M
296 Schontz S H
Schontz E J
297 Chisholm Alex, grocer
Villerot E G
298 Larr A O
Myrtle (47) intersects
301 Henderson P Mrs
Bater H J
302 VanValkenberg C Mrs
303 Foy Charles
304 Eke H H
306 Kincaid Alice Mrs
307 Zotter C C
308 Meyer M M
309 King H N
Meyers John
310 McNamara D S
312 Bermingham W J
313 Tripp Wm
Tripp Theron
315 Butler G A
316 Branton R M
319 Kerr James
320 DuBois J W
321 Newsted H L
Nunn Walter
Abbey H L
323 Pentecostal Church
Brainard (365) intersects
324 Bowler F T
325 Sponenburgh C L
326 Palmer Hattie Mrs
327 Blue Archibald
328 Wheeler H A
329 Rossbach F X
Harris J H
330 Hoisington E A
Bergeron Theodore
Banks O O
332 McMorran J R
341 Baker H D Mrs
Wadham F L
344 Pierson Henry
Magnolia (9) intersects
345 Dickinson H H
346 Anthony T Mrs
359 LeVanway Rose Mrs
361 Vacant
363 Striker F P
Hazel (7) commences
Grand River av (657) int

NAVAHOE AV, from Avondale av north to Jefferson av, one east of Connors av

NAVARRE, from 454 McClellan av east to Pennsylvania av, paved with cedar
8 Zerbe H A
10 Gordon C L
11 Losekamp Herman
15 Lobenstein E R Mrs
16 Pierce J C
17 Hoffman Arthur
18 Siewert E R
19 Leonard R M
20 Morris R B
21 Kabel Ernest
22 Miler H C
26 Vacant
27 Magann J W
28 Lowther Georgina
29 Carten J W
30 Holt J G
31 Droste Joseph
32 Schroeder H L
33 McKeough J J
Dompier J A
34 Stewart Louis
34½ Bowen W H
36 Philip Louis
37 Daniels Theodore
Warner C R
38 Stevens J M
Stevens Beatrice, music tchr
39 Wilson E M
40 Malloy J W
40½ Jones L H
41 Vacant
42 Strachan G C, plmbr
45 Gehring Mary Mrs
46 Landis J F
49 Austin H L
51 Goeddeke J F
53 Scott R M, contr

NAVIN, from Michigan av north, eight west of Lonyo road

NAVY AV, from Waterman av west to Lawndale av, 3 south of Ferndale av; unpaved
1917 Hoffner Wm
1982 Briggs W H
1984 Weiss George
1994 Thomas S O
2000 Anderson J F
2024 Preston W F
Central av (798) intersects
n s Vacant

Target Street	Cross Street	Source
-	✓	Polk's City Directory

KALINE DR 1916

CHERRY, from 213 Grand River av west to 12th. Paved with cedar to Trumbull av with asphalt from Trumbull av to 12th

Third av (350) intersects

27 Muma R T
29 Krause Fritz
31 Weber G A
33 Meer Frank
35 Gillem Alice Mrs
36 Webb Eva

37-39 Burns Apartments

37 Ludgate David
Braasch H A
38 Bullen Miles
39 Burns Catherine Mrs
Stinson Wm
40 Wuestenburg Martha
Appleby W R
41 Bechtold Peter
43 Braxmaier Wm
44 Booth George
45 Idles Henry
46 Goes J E
47 Pruim P J

Fourth av (306) intersects

59 Johnson John
64 Wallace F B
Belcher Newton
66 Roberts R J
Sheeran J J
Horn Frank
67-73 Morton Bakery
General Baking Co
70 Smith L H
72 Carter Wm J
74 Joy M M Mrs
75 Kincaide Eliz Mrs
76 Keating Mary Mrs
78 Lequelle Anthony
78½ Duffren Sophia Mrs
80 Shepard Frederick
Taylor Nina M

Fifth av (306) intersects

97 Vernier Henry
98 Horner J J
100 Horner H G
102 Strubank David
Hoover A J
Sams H E
Russell J V
Graven Robert
Cate Emma Mrs
Thomas J E
103 Reaume D D
104 Osmond H R
105 Melody J J
106 Utting Wm G
107 Hynes Thomas
109 Shanahan D A
110 Daley Edmund
111 Eichelberg H J

Sixth av (206) intersects

129 Boody Harry
130 Shoup Henry
131 Coffey Timothy
132 Coon J H
133 Grogan Wm F
134 Pengelly S N
136 Scribner Nicholas, pntr
137 Mapese Emma Mrs
138 Kent J A
139 Delany Julia Mrs
140 Kraemer Hubert
141 Riley Peter
142 Gargle Wm
143 Cronk Joseph
144 Doherty P F
145 Walsh J G
148 Connors John

Broklyn av (298) intersects

166 Cornish Wm H
Hutton Jennie Mrs
170 Gorman P J
172 Bonavia John
176 Call G A
Galbraith Charles
176½ Lachapelle Earl
Heber Robert
178 Smith F R
Smith J H
182 Elliott T J
184 Stelmle F J
188 Coddington Wm J
Loomis Edward
190 Teets Rose Mrs
194 McNamara James

Eighth intersects

196 Kearn Pearl Mrs
199 Murphy Julia Mrs
200 Fix A P
201 Molitor F T
Verplank Mary
204 Harrison C M
Neil Richard
205 Shultis Jacob
206 Zerkle Juston
209 LaParl A E
210 McGraw Margaret Mrs
Phillips J J
211 Peckham F W
212 Cory C W, pntr
McDonald John
214 Mich Tent & Awng Co
Cadillac Casket Co

Trumbull av (299) inter

238 Horn C G
240 Harrigan Mary A
246 Fong Lily
248 Tuthill Harry
254 Vicker Christian
256 Kielly Margaret Mrs
258 Howell Edward
O'Sullivan P T
260 Jackson Bert
264 Horner James
266 Sullivan Timothy
268 Vizzini Michael

National av (40) intersects

291 Sullivan Daniel

Harrison av (31) inter

306 Faber A J
307 Chubb Benjamin
309 Evans Patrick
310 Smyth Wm M
311 Roeder F W Mrs
312 White R T
313 McGraw F J
314 Miller Charles
315 Sullivan Michael
316 McMillen J G
317 Sisson J M
Krieger A L
Beall J B
Verkerke C A
318 Clarke C B
323 Koehler Phillip
325 Stasser Amelia Mrs

Twelfth (352) intersects

CHERRY BLVD, from Gd River av south to Plymouth rd

CHESTER AV (Leesville), from Jean av north to Edgewood, 13 west of Gratiot av

---

CHESTNUT, from 278 Russell east to Elmwood av; paved with cedar to Jos. Campau av

ne cor St Johns German Evangelical Church
10 Gillary Charles
Silvers Mollie Mrs
12 Dahlinger Emma Mrs
17 Wookey Wm A
18 Freedman Ellis
Brooks Jeremiah P, r
Richardson Frank
19 Muscovich Jacob
21 Schaefer Abraham
22 Welke W J
Stulz Quintus A
24 Pruss Gustav C
25 Tappe Henry
28 Grosscup Louis
29 Alagno Antonio
30 Litsky Daniel
Conazato Michael
31 Alagno Angelo
33 Moeller Hattie Mrs
34-36 Vacant
35 Ormond Helen Mrs
46 Wegener A & Sons, warehouse

Riopelle (385) intersects

49 Jubelt August, baker
Mitchell G C
Haggerty Thomas
54 Weber Inez G
55 Patterson J C
56 Miller Mary Mrs
57 Seely J A
58 Eddy Anna Mrs
59 Grossman Nathan
Messino Vincent
62 Roberts F L
63 Rosen Jacob
Ruben Samuel
64 Bonahoom K B
65 Malsberger Harry
66 Bayer Katharine Mrs
69 Fox W F
70 Stotts L D
72 Roberts T W
73 Basil Joseph
Mideo Cordell
Rocco Bionto
75 Kaufmann F W
Steinberger Alexander
76 Martz E J

Target Street	Cross Street	Source
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COCHRANE ST 1911

182 Benenson Morris
185 Abram Barney
" Fichman Nathan
186 Bonnstein Moses
187 Barsall Samuel
" Shapiro David
" Martin David
" Kusselow Morris
188 Pollinger Reuben
" Manger Max
190 Tennebaum Frank
191 Weiner Isidore
192 Levi Morris
193 Baggleman David
" Garfinkel Joseph
" Friedman Joseph, r
195 Dear Reuben
" Slackman Samuel
" Abraham Samuel, r
196 Sullivan Eugene H
199 Morris Jacob M, bottles
200 Friedman Freda Mrs
201 Ettinger Wm
" Steinberg Lena N Mrs
" Zeeman Morris
202 Fineberg Harry
" Forman Wm
203 Jacob Jeannette Mrs
204 Talberg Charles
205 Robinovitch David
208 Levine Harry
209 Diskey Louis
" Gold Barnard
210 Ford Willis
211 Greenblatt Philip
212 Jackson Clark
" Lee James E
213 Vacant
214 Behrmann Shollum
" Mildner Fredericka Mrs
215 Epstein Abraham, baker
219 Kanicopsky Isaac
222 Luth Carrie
" Levy Meyer, gro

Rivard (453) intersects.

231 Bloom Samuel
233 Brown Charles
" Visper Morris
237 Michel James
238 Robinowitz Isaac
239 Aid Nicholas
" Thiery Joseph
241 Friedman Max
242 Lightstone Lawrence
" Strong Harry
243 Sverzensky Morris, produce
244 Segal Samuel
245 Passarolli James
" Resnik Louis
247 Watnoski Anthony
" Raskin Louis
248 Thiery Joseph
249 Gambo Frank
" Gambo Tony
250 Broskyn Samuel
" Polasky Samuel
252 Freedman David
253-5 Frank Bros, whol gro
254 Cohen Joseph
256 Beggerman David
258 Freedman Herman
" Garfinkle David
260 Weil Louis & Co, produce

Russell (391) intersects.

NATIONAL AV, from 504 Michigan av, north to Grand River av. Paved with cedar.

6 Przyborowsky Krawery, shoemaker
8 Likaw Wm
10 Weiner Edward T
12 Doherty Mary E
13 Procknow Lewis
14 Ege Wm
16 Lynch Patrick J
17 Martin Nellie
" Pierce Thomas
20 Vacant
21 Chadwick Porter J
22 Eby Edward
23 Bourke Catherine Mrs
24 Edgar John H
25 Dreau Patrick, contr
26 Brown Clarence
27 O'Leary Agnes
" Smith Cyrus W
28 Alters Daniel W
" Faust David B
29 Smith Wm W
31 Browne Charles
32 Van Dine Arthur D
33 Fleming Alonzo
34 Esslinger Louis
36 Wilson George E
37 Faber Mary
" Riley Edward B
38 Lemon Fred M
39 Murphy George
40 Wood Otto L
41 Duford Joseph

Cherry (266) intersects.

43 Maney John W, undertkr
" Burke John P
44 Paine Steven D, gro
45 Maney's Morgue
46 Turner Charles
48 Gallagher James P
49 Handy Allen H
50 Marvett John W
51 Carter Hannah
52 Ryan John
54 Wheeker John
55 Mac Rae Frederick
57 Feeney John W
" Warriner Wm H
" Rock Hubert W
58 Clifford Daniel
" Russell Daniel
59 Joyce Stewart F
" Burke Joseph
60 Sullivan Ellen Mrs
" Sullivan Neil F, undertaker
61 Seger Warren A
63 Whiteley Frank
64 Duchene Henry E
" Powers Thomas H, r
65 Foley Mary Mrs

High (424) intersects.

67 Worley Samuel A
68 Patterson Emma L
69 Pouch Harry
70 Mahoney John H
" Dewstow Walter E
71 Esper Michl & Sons, contrs
" Esper Edward
72 Donoghue Joseph
73 Horrigan Winifred
" Zahn John
74 Donoghue Edward
75 Cook Anna
76 Robinson Charles A
77 Wilkins Wm
78 Brodbeck Martin C
79 Mason Emma
80 Vacant
80½ Bryan Arthur
81 McGraw Wm J
82 Dwyer Joseph
83 Ludeman Henry J F
84 Brown Samuel
" Glowacki Frank
" Looker Thomas F
" Miller Charles A
85 Nieman Fred C
86 Walters Allan

Locust (238) intersects.

88 Haight Wm S
89 Callan Thos J, phys
90 Schindler R M, meats
91 Lively Charles H
92 Hillman Wm G
93 McDonald Minnie
94 Johnson Anna Mrs
95 Shafer Henry
96 Herbst Carrie E
97 Atfield Arthur J, contr
98 Cooper Elmer E
99 Cooper Charles
" Dorner Martin
100 Bonke Julia
101 Ewart Archibald A
102 Ryan James
104 Breshna Frank
105 Israel Walter F
" Gerry Mary
106 Johnston Helen C, nurse
" Stocker John
107 Treahy Bartholomew T
108 Chapman Wilbur M
" Hogarth Wm W
109 Bird Alice J
" Youngs John M
112 Williams J J
" Zinober Robt & Son, furriers
113 Walker Edward P
114 Zinober Robert W
115 Sellery Frank H
119 Bessenger Susan
" Williams Frank L
120 Rounds Sylvester J
122 Collins Richard E
123 Stuart August E
125 Butler Leo
127 Bowles Hillary F, grocer

Spruce (187) intersects.

131 Lahey Thomas
132 Carpenter Howard T, vet surgeon
135 Smith George N
137 Hogan John J
138 Carter Michael
139 Stewart Wm H
140 Rowan Bernard P
141 Lee George W
" Carman Naom
142 Brown Archibald
" Murphy Delphene R
143 Bowles Hillary F
146 Kendall James C
147 Foren Charles E
148 Cavanaugh Samuel J
149 Parent Joseph
151 Leonard Edward J, barber
152 Welfare Alfred
153 Griffin John J
154 Denner John H

Perry (165) intersects.

155 Roberts Wm
" Fisher Archibald
156 Kirby Edgar A
160 Busch August C
161 Spear Minnie
" Stewart Charles A
163 Welch John J
164 Burmaster Louis H
165 Hulbert Charles D
166 Lang, Wm F
168 Croasdell John J
169 Campbell Wm A
171 Vanderhoof Neil
172 Supper Frederick
173 Vacant
176 Haverstock Samuel, phys
177 Roberts Wm J, grocer
" McInerney Annie, r
178 Erschig Albert

Bagg (454) intersects.

179-181 Pinkerton Margt E, drugs
180 Healy Andrew
183 Peel Joseph W
" Knight Elizabeth
187 Morgan Fredk J
188 Anderson N Peter
189 Conn Richard W
192 Maynard Fredk T
193 Cooley Geo E
194 Bier Augustus
196 Reardon John J
197 Leitch Duncan A
198 Willis Wm
199 St Aubin Arthur E
201 McCoy Patrick M
202 Clifford Margt Mrs

Butternut (123) intersects.

205 Talbot Emma Mrs
" Talbot Charles
206 Kline Arthur J, grocer
" Holm Anton M
207 Holland John E
208 Schultz John C

Target Street	Cross Street	Source
✓	-	Polk's City Directory

COCHRANE ST 1911

211 Nacy James E
212 Bennett Lee W
213 McKenna Anna
214 Eckliff Eugene
217 Haskett Ellen
219 Thorsted Jens A
220 Miller Henry
" Brandon Anna J
221 Tansley Charles
" Everson John
222 Holman Frank
223 Younger Thos H, grocer
224 Munson Rush G
225 Putrow Elizabeth
226 Powell David P
" Winters John

Elm (118) intersects.

227 Everson Peter C
230 Lemmon Stelling B
231 Pagel Eliz Mrs
233 Hawkins Wm
235 Woodworth Willis P
236 Beverly Wm W
238 Schmidt Peter A
241 Prendeville Michl C
" O'Connor David
242 McCarthy Eugene O
243 Dowd Thomas J
244 Williams Otto R
245 Driver James T
246 Cook Sidney M
248 O'Donnell James J
249 O'Donnell James, grocer
249 Canfield Fred

Ash (88) intersects.

251 Rooney Chas A
252 Stratton James N
255 Van Syckle Libbie A
256 Johnston Chas R
257 Bettison Wm C
260 Mitchell John M
261 Bennett Leonard W
263 Sprake Chas
264 Murphy Deborah
266 Murphy Timothy J
267 Ferguson Robert
268 Rockey Benjamin
269 Molloy Michael
" Thomas Burr C
272 Stephens Arthur W
273 Munro John C
274 Bennett James

Sycamore (72) intersects.

275 Bigham Wm
279 Norris Susan
280 Rennardson Geo W
281 Sterner Marion G, nurse
" Vincent Park B
282 Shuell Ella
283 Healey Edward A
284 Soper Jennie
285 Moran Thomas M
287 Lawrence Jennie
290 Wilson John
291 Pendergast John E
291 Wright Dell
292 Bayer John J
296 Hill Henrietta
297 Villerot Adele L, music tchr
" MacLeod Bros, grocers
301 Duffy Joseph P
301½ Mathieu Victor
302 Matheson Seth
303 Ganger John A
304 Eke Harry H
306 Larr Albert
307 Zotter Carl C
308 Meyer Martin M, cigar mfr
309 Kent George
" Green Fred C
" Spink Robert
310 Wood Robert
312 Bermingham Thos F
" Bermingham Emily N, real estate
313 Reaume Mary
" Wallace Rachel
315 Crank Frederick B
316 Branton Robert M
319 Kerr James
320 DuBois John W
321 Lord Shedrick W
" Smith Frank T

Brainard (365) intersects.

324 Bowler Frank T
325 Sponenburg Chas L
326 Palmer Jas P, produce
327 Blue Archibald
328 Wheeler Harry A
329 Rossbach Archie W
" Rossbach Frank X
330 Becker Abraham
" McKibbin Alexander C
332 Schneckenburger Laban
338 Windeknecht John
" Vacant
340 Nelson Emily
341 Baker Harriet H D
344 Pierson Henry

Magnolia (9) intersects.

345 Dickinson Horace H
346 Anthony Thomasina
359 Darnell Chas T
361 Campbell Geo A
363 Striker Fredk P

Hazel (7) commences.
Grand River av (657) int.

NAVARRE, from 454 McClellan av east, to Penusylvania av, second north of Kercheval av.

NAVIN, from Michigan av north, eight west of Lonyo road.

NAVY AV, from 823 Springwells av, west to Lawndale av, third south of Toledo av.

NEFF (GROSSE POINTE) from Jefferson av north to Mack av, first west of Rivard Boulevard.

NEIMAN AV (River Rouge) from west Jefferson av, north to Haltiner av, first west of Burke av.

NEWARK, from 235 16th, west to 20th.

Seventeenth (285) intersects.

100 Hines Catherine Mrs
104 Worden Elwin A
106 Brainard Benjamin C
108 Jennings Byron L
110 Vacant
112 Knight James W
114 Kelly Chas J

Nineteenth (347) intersects.

s w cor Mead & Co, machs
128 Linchek Frank

Twentieth (360) intersects.

NEWBERRY, from 697 Junction av, first north of Dix av, west to Cavalry av.

17 Cadaret Fredk
" Foster Arthur A
19 Motier John
20 James Albert
21 Orlofske August
22 Raths Mathias P
24 Ross John N
25 O'Halloran Dennis J
26 Lessnau John A
27 Burke Thos
28 Ranker Maxwell H
30 McLellan Archibald J, contr
31 Donovan John J
32 Kelley Geo W
" Kelley Jos E
33 Detroit Public Lighting Plant, sub station
34 Meagher Jas B
36 Monette Edgar
39 Blovitz Joseph
41 Garrett Frederick J

Target Street	Cross Street	Source
-	✓	Polk's City Directory

KALINE DR 1911

1536 Kuehn Henry, drugs
East Grand Blvd intersects.

CHERRY, from 213 Grand River av west to 12th. Paved with cedar to Trumbull av, with asphalt from Trumbull av to 12th.
Third av (350) intersects.
27 Ryan Albert W
29 Stiles Lewis G
31 Rogers George W
33 Sharp Joseph T
35 Martin Burton A
35 Rollet Wm O
36 Clark Edward
37 Spanier Helen Mrs
" Wilson Leonard S
38 Bullen Miles
39 Burns Katherine
" Durfee Minnie P Mrs
40 Schenk Herman
41 Keyes George H
" Patterson Wm
43 Downer Elmer G
44 Keating Maurice J
45 Sebring Seraph Mrs
46 Goes Jacob
Fourth av (306) intersects.
59 Stitt Margaret
64 Morin John B, M D
66 Livingston Frank E
67-73 Morton Baking & Mfg Co
70 Locke Marie
" O'Connor Helen
" Smith Lee H
72 Carter Wm J
74 Joy Margaret M Mrs
75 Joy Ella
76 Laqahil Anthony
77 Robertson John S
" English Lucy A Mrs
78 Applegate Maud Mrs
78½ Spry Louis
80 Thomson Wm C, M D
Fifth av (306) intersects.
97 Grover Henry J
98 Keillor Charles L
100 Harding Albert M
102 Coffey Clifford D
" Dukett Edward
" Dukett George
" Erwin Robert H
" Kaiser Albert
" Wilson Knud I
103 Reaume Dennis D
104 Brown Anna Mrs
" Oliver George W
105 Melody John J
106 Turner Wm
107 Hynes Thomas
109 Shanahan Daniel A
110 Fisher Alpharetta M
111 Elchelberg Harry J
Sixth av (296) intersects.
129 Foster Emma
130 Bulgrin Henry G
131 Coffey Timothy
132 Coon James H
133 Grogan Wm F
134 Gaffney Wm F
136 Conway Thomas D
137 Mapes Emma Mrs
138 Goldy John C
139 Delany Julia
140 Kraemer Hubert
141 Olds Frederick
142 Mulcaster Nelson R
143 Cronk Joseph
144 Doherty Patrick F
145 Walsh John G
148 Conners John
166 Cornish Wm H
" Hutton Jennie
170 Gorman Patrick J
172 Johnson Orville M
176 Naville Mary
178 McKinstry Miles K
182 Shaughnessy Mary
Brooklyn av (298) intersects.
184 Steimle Frank J
188 Maloney Timothy J
" Petty Wm E
190 Jackman Mary
194 McNamara James
Eighth intersects.
196 Cooper Sarah A
199 Murphy John J
200 McGregor Charles E
201 Shields Frank J
" Verplank Mary A
204 Milton Fred W
" White Robert D
205 Jones Susan
206 Cram Frederick O
209 Lamy Herbert E
" Ward Wm
210 Cummings Delmer
" McGraw Dennis
211 Peckham Frank W
212 Cory Charles W
212 Deasey Laura
214 Lake Salt Co
" Michigan Tent & Awning Co
Trumbull av (299) intersects.
238 Ryan Patrick
240 Harrigan Michael M
246 Holmes Priscilla Mrs
248 Tuthill Harry
254 Vicker Christian
256 Kielly Margaret Mrs
258 Gillett Amanda
258 Kennedy Emma Mrs
264 Donner Wm P
266 Sullivan Timothy
267 Faber Anthony J
271 Hall Frank horseshoer
National av (40) intersects.
291 Sullivan Daniel
Harrison av (31) intersects.
307 Erickson Peter K
309 Evans Patrick
310 Russell Reuben J
311 Roeder Frederica Mrs
312 Barber Wm R
313 Vacant
314 Mettetal Emil
315 Sullivan Michael
319 Hurley John
321 Cody Charles C
323 Jackson John H
325 Stasser Amelia
Twelfth (352) intersects.

CHESTER AV (Leesville)

CHESTNUT from 278 Russell east to Elmwood av paved with cedar to Jos Campau av
n e cor St. John's German Evangelical School
10 Gillay Charles
" Silverstein Louis
12 Dahlinger Charles F
18 Hummel Carl
19 Eberle Henry
21 Koehler Charles
22 Welke Wm
22 Wilkins Walter
24 Pruss Gustav
24 Stretke Ida
25 Marschke Walter W
28 Huser George
29 Ullmann Wm
30 Erz Mary
" Peters James
31 Little Harvey
33 Moeller Hattie Mrs
" Schemke Frederick
34 Netschke August P
35 Jorn Wm
46 Cummings Frank E
48 Evers Robert A
Riopelle (385) intersects.
49 Bries Ernest
" Jubelt A baker
" Toelle Edward
54 Norton Jay
" Von Oyen J Oswald
55 Patterson James C
56 Miller Mary Mrs
57 Purser Cornelius
" Seely John A
58 Moser Wm
59 Hanselmann Jacob

10.5 Regulatory Records Documentation: The EDR Radius Map Report with GeoCheck, EGLE Records, Health Department FOIA Request, Assessing Department Records, Detroit Fire Department Request, and EGLE Perfected Environmental Liens

ASTI ENVIRONMENTAL

Investigation • Remediation
Compliance • Restoration

10448 Citation Drive, Suite 100
Brighton, MI 48116

Mailing Address:
P.O. Box 2160
Brighton, MI 48116-2160

800 395-ASTI
Fax: 810.225.3800

www.asti-env.com

March 8, 2020

Wayne County Department of Public Services
Land Resource Management Division
Patrick Cullen
3600 Commerce Court Building E
Wayne, MI 48184
Email: pcullen@waynecounty.com
Cc: dlonce@waynecounty.com

Re: FOIA Request

Dear Mr. Cullen:
I am conducting an environmental site assessment update for a site in **Detroit**, Michigan. Pursuant of the Freedom of Information Act 442, Public Act 1976 as amended, ASTI respectfully requests any reports or information pertaining to landfilling activity, spills/releases, 201 sites, above-ground storage tanks, under-ground storage tanks, soil or water contamination etc for the following locations:

2610 Cochrane St

Please send any records to FOIA@asti-env.com

Sincerely,



ASTI Environmental
Laura Gray
FOIA@asti-env.com

LAW DEPARTMENT

Coleman A. Young Municipal Center
2 Woodward Avenue, Suite 500
Detroit, Michigan 48226-3437

Phone 313•224•4550
Fax 313•224•5505
www.detroitmi.gov

March 19, 2020

Laura Gray
ASTI Environmental
10448 Citation Drive, Suite 100
Brighton, MI 48116

RE: Freedom of Information Act Request No. A20-04463, Dated March 8, 2020, Concerning City of Detroit Records Pertaining to 2610 Cochrane PID 0800580-3

Dear Ms. Gray:

This letter serves as the City of Detroit's response to the above-referenced matter. Your request was received at the City of Detroit Law Department Freedom of Information Act Section, via facsimile or email, on March 9, 2020. Because your request was received by electronic transmission, pursuant to Section 5(1) of the Michigan Freedom of Information Act (the "Act"), MCL 15.235(1); it is deemed to have been received at the Law Department on the next business day, March 10, 2020.

Your request seeks:

"

Description of the record: Historical and current assessing field cards.

Date and time or time period, if applicable:

Identify City department or agency: Detroit assessing - Law Department

Any other information that will assist the department/agency in locating the requested record:

2610 Cochrane St, Parcel ID: 0800580-3

"

Your request was submitted to the Detroit Office of the Chief Financial Officer (OCFO) to conduct a search for the requested records. OCFO submitted the below referenced records and after review by the Law Department, your request is granted.

The record from OCFO consists of Two (2) pages. Enclosed please find one (1) copy of same. Because the enclosed record comprises fewer than ten (10) pages, no copying costs have been assessed.

You can find the summary of the City of Detroit Freedom of Information Act procedures

and guidelines at www.detroitmi.gov and specifically at https://detroitmi.gov/document/foia-procedures-and-guidelines and https://detroitmi.gov/how-do-i/request-document/foia-freedom-information-act-request.

Please note that pursuant to Section 10 and 10a of the Act, MCL 15.240 and 15.240a, a person receiving a written denial of a request or receiving a letter to submit the labor costs may do one of the following:

1) Submit a written appeal to the head of the public body denying the request. Such appeal, if submitted, should specifically state the word "appeal" and identify the reason or reasons for reversal of the disclosure denial. MCL 15.240(1)(a) and MCL 15.240a(1)(a); or

2) Commence an action in the circuit court to compel the disclosure of the public records within 180 days after the public body's denial of the request, MCL 15.240(1)(b), or 45 days after the public body's request for labor costs, MCL 15.240a(1)(b). If a court finds that the information withheld by a public body is not exempt from disclosure, or that the labor costs requested by the public body exceeds the amount permitted, the requesting party may receive the requested record and, at the discretion of the court, reasonable attorney fees and /or cost. MCL 15.240(6) and (7), and MCL 15.240a(6) and (7).

Very truly yours,

Daniel Clark
Paralegal
Freedom of Information Section
City of Detroit
(313) 237-0536

DNC/

Parcel Number: 08000580-3 Jurisdiction: CITY OF DETROIT County: WAYNE Printed on 03/10/2020

Grantor	Grantee	Sale Price	Sale Date	Inst. Type	Terms of Sale	Liber & Page	Verified By	Prcnt. Trans.

Property Address

2610 COCHRANE

Owner's Name/Address

City of Detroit P&DD, Care of DBA
CITY OF DETROIT P&DD, CARE OF DBA
65 CADILLAC SQ 11TH FLOOR
DETROIT MI 48226

Tax Description

PT OF PC 22 AND 27 BG PT OF 116 AND ALL OF LOTS 109 THRU 115 OF PLAT P.C.27 L2 P5 ALSO PT OF LOTS 47 THRU 53 AND 63, ALL OF LOTS 64 THRU 69 JULIANA T ABBOTTS SUB L5 P 36 INCL VAC KALINE DR, VAC CHERRY ST AND ALL ALLYS WITHIN THE DESC PARCEL; ALSO DESC AS: COMM AT N LINE MICHIGAN AVE (120 FT WD) AND E LINE LINE OF COCHRANE AVE (65 FT WD) TH N 23D 42M 59S W 458.48 FT TO POB; TH N 23D 42M 59S W 198.31 FT; TH N 68D 48M 15S E 100.84 FT; TH N 66D 14M 47S E 20 FT; N 66D 27M 12S E 184.76 FT; TH S 23D 38M 17S E 194.25 FT; TH S 66D 27M 12S W 305.24 TO POB IRRG 1.366 ACRES
SPLIT/COMBINED ON 06/08/2017 FROM 08000574.,08006416-36, 08000580-91;

Comments/Influences

2018 SPLIT/COMBINE
SPLIT/COMB. ON 06/08/2017 COMPLETED 06/08/2017 DEANJ CUSTOMERS REQUEST; PARENT PARCEL(S): 08000574., 08006416-36, 08000580-91;
CHILD PARCEL(S): 08000580-3, 08000584-6, 08000587-9, 08000590-1;

Who	When	What
DMM	08/14/2019	DESKTOP RE

The Equalizer. Copyright (c) 1999 - 2009. Licensed To: City of Detroit, County of Wayne, Michigan

Class: 202-COMMERCIAL VAC Zoning: B4
School: DETROIT PUBLIC SCHOOLS
P.R.E. 0%
WARD#: 08
2020 Est TCV 0

Building Permit(s)	Date	Number	Status

	Improved	X	Vacant

	Public Improvements
	Dirt Road
	Gravel Road
X	Paved Road
X	Storm Sewer
X	Sidewalk
X	Water
X	Sewer
X	Electric
X	Gas
	Curb
X	Street Lights
X	Standard Utilities
	Underground Utils.

	Topography of Site
X	Level
	Rolling
X	Low
	High
	Landscaped
	Swamp
	Wooded
	Pond
	Waterfront
	Ravine
	Wetland
	Flood Plain

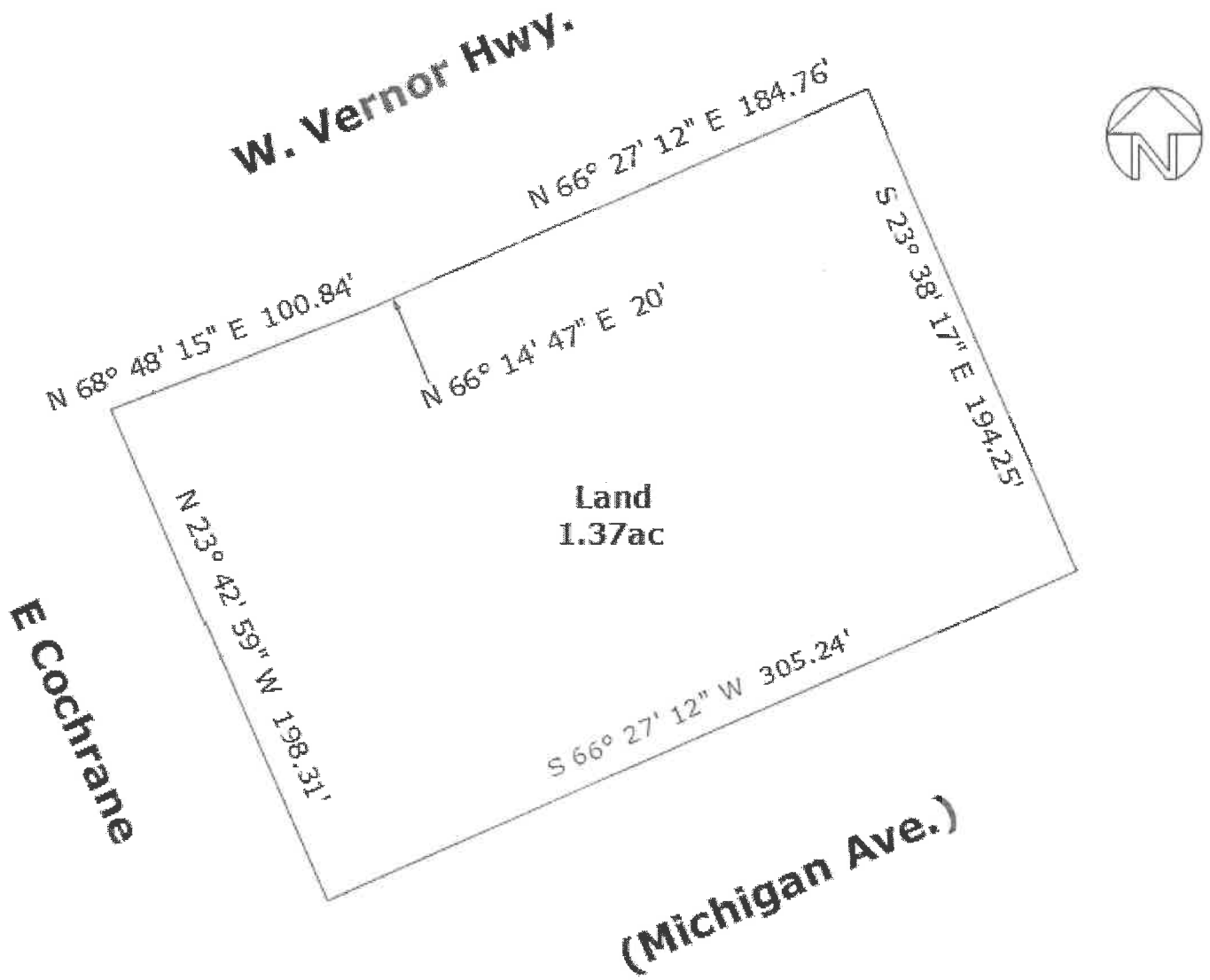
Land Value Estimates for Land Table CGCT.COMERCIAL GENERAL CORKTOWN

Description	Frontage	Depth	* Factors * Front	Depth	Rate	%Adj.	IRREG Reason	Value
	198.31	305.24	1.0000	0.0000	0	100*		0
cgct sq ft rates		59,502.960	Sq Ft		16.52	100		982,718

* denotes lines that do not contribute to the total acreage calculation.
198 Actual Front Feet, 1.37 Total Acres Total Est. Land Value = 982,718

Year	Land Value	Building Value	Assessed Value	Board of Review	Tribunal/ Other	Taxable Value
2020	EXEMPT	EXEMPT	EXEMPT			EXEMPT
2019	EXEMPT	EXEMPT	EXEMPT			EXEMPT
2018	0	0	0			0
2017	0	0	0			0

*** Information herein deemed reliable but not guaranteed***



*** Information herein deemed reliable but not guaranteed***

ASTI ENVIRONMENTAL

Investigation • Remediation
Compliance • Restoration

10448 Citation Drive, Suite 100
Brighton, MI 48116

Mailing Address:
P.O. Box 2160
Brighton, MI 48116-2160

800 395-ASTI
Fax: 810.225.3800

www.asti-env.com

March 10, 2020

City of Detroit Fire Department
1301 Third Street
Detroit, MI 48226
milesg@detroitmi.gov

RE: Request for Record

Dear Ms. Miles,

I am conducting an environmental site assessment in **Detroit, Michigan**. Please check to see if there are reports for spills/releases, above ground storage tanks, underground storage tanks, or Hazmat incidents for the following addresses:

Address No.

2610 Crochane St

Historical:

1545 – 1593 Vernor HWY (odd only)

2286 – 2336 National Ave (even only)

If you have any questions concerning information contained in this request, please give me a call or send me an email

Sincerely,

ASTI Environmental

Laura Gray
FOIA@asti-env.com
810-599-5476

10.6 Interview Documentation: MSHDA User's Questionnaire, Owner Questionnaire, and Title Commitment

SECTION VIII: 2020 - USER'S ENVIRONMENTAL QUESTIONNAIRE AND DISCLOSURE STATEMENT

The Authority requires the completion of its "User's Environmental Questionnaire and Disclosure Statement" to fulfill Section 6, User's Responsibilities of the ASTM Standard E 1527-13. **The checklist is to be completed and signed by the sponsor (developer), and returned to the Environmental Professional conducting the Phase I. This questionnaire is to be reviewed by the Environmental Professional and incorporated into their Phase I report (the completed User's Questionnaire is to be included in Appendix 10.6 of the Phase I report). Failure to properly complete this process will result in delays.**

In preparing this document, the **"User" (Sponsor)** must make a good faith effort to answer the questions in the checklist. The User or a preparer designated by the User presents that to the best of his/her knowledge, the above statements and facts are true and correct and that to the best of the preparer's knowledge, no material facts have been omitted or misstated. Time and care should be taken to check whatever records are in the User's possession. If any of the following questions are answered in the affirmative or if answers are unknown, are qualified, or cannot be obtained, the burden is on the Environmental Professional to determine whether further inquiry is appropriate. The User should document the reason for any affirmative answer to provide the Environmental Professional with all appropriate information. Moreover, the Environmental Professional must determine if further inquiry in any area where the property owner provides incomplete information is warranted, providing written explanation for their recommendation(s).

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Relief and Brownfield's Revitalization Act of 2001 (the "Brownfield's Amendments"), the User must provide the following information (if available) to the Environmental Professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

User's (Sponsor's) Name: American Community Developers, Inc.

User's (Sponsor's) Telephone No.: 313-881-8150

Subject Property: Left Field

Property Address: 2610 Cochrane Street

City: Detroit **State:** MI **Zip:** 48216

1.0 **Environmental Cleanup Liens:**

Are you aware of any environmental cleanup liens against the property that are filed, recorded, or unrecorded under federal, tribal, state, or local law?

☐ YES ■ NO If YES, please describe:

Not to the best of our knowledge

2.0 **Activity and Land Use Limitations:**

Are you aware of any activity and land use limitations, such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed, recorded or unrecorded in a registry under federal, tribal, state or local law?

☐ YES ■ NO If YES, please describe:

Not to the best of our knowledge

3.0 **Specialized Knowledge or Experience of the User:**

(a) As the user of this ESA do you have any knowledge or experience related to the property or nearby properties that could be material to any environmental conditions of this property?

☐ YES ■ NO If YES, please describe:

Not to the best of our knowledge

(b) Are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

☐ YES ■ NO If YES, please describe:

4.0 **Relationship of Purchase Price to Fair Market Value:**

(a) Does the purchase price being paid for this property reasonably reflect the fair market value of the property?

■ YES ☐ NO If YES, please describe:

(b) If you conclude that there is a difference, have you considered whether the lower price is because contamination is known or believed to be present at the property?

☐ YES ☐ NO If YES, please describe:

N/A

5.0 **Commonly Known or Reasonably Ascertainable Information:**

Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user,

(a) Do you know the past uses of the property? Please list: _____

The site was previously the home of Tigers Stadium.

_____.

(b) Do you know the specific chemicals that are present or once were present at the property?

☐ YES ■ NO If YES, please describe:

Not to the best of our knowledge

(c) Do you know of spills or other chemical releases that have taken place at the property?

☐ YES ■ NO If YES, please describe:

Not to the best of our knowledge

(d) Do you know of any environmental cleanups that have taken place at the property?

☐ YES ■ NO If YES, please describe:

Not to the best of our knowledge

6.0 **Presence or Likely Presence of Contamination:**

As the user of this ESA and based on your knowledge and experience related to the property, are

there any obvious indicators that point to the presence or likely presence of contamination at the property?

☐ YES ■ NO If YES, please describe:

Not to the best of our knowledge

User's Signature: _____ Date 3/23/2020

User's Printed Name: Michael D. Essian II, VP of American Community Developers, Inc.

ASTI Environmental Phase I ESA

OWNER QUESTIONNAIRE

Respondent Name: Sarah Pavelko **Signature:** Sarah Pavelko

Time of Association with the Property: 9/7/2017 **Title** Director of Develo

Date: 4/2/20

Phone Number and/or Email Address: spavelko@degc.org

Subject Property Address: 2610 Chocrane

Please answer all questions to the best of your knowledge and in good faith.

	Question	Response		Comment (Please provide for Yes responses)
		Yes	No	
1	Is the Property currently used for manufacturing or industrial use?	☐	☑	
2	Is an adjacent property currently used for manufacturing or industrial use?	☐	☑	
3	Has the property or adjoining property been used for manufacturing or industrial purposes in the past?	☐	☑	
4	To the best of your knowledge, has the property been used as a gas station, motor repair facility, print shop, dry cleaner, photo lab, junkyard, recycling facility, or landfill?	☐	☑	
5	To the best of your knowledge, has an adjacent property been used as a gas station, motor repair facility, print shop, dry cleaner, photo lab, junkyard, recycling facility, or landfill?	☐	☑	
6	Are there any pesticides, herbicides, automotive or industrial batteries, paints or other chemicals stored on the property (exclude those <5 gallons unless in large quantities of >25 gallons total)?	☐	☑	
7	Have pesticides, herbicides, or other agricultural chemicals been stored, mixed, or applied to the property?	☐	☑	
8	Are there any plastic or metal drums (typically 55-gallon) located on the property?	☐	☑	
9	Has fill dirt from an offsite source been placed on the property that may be contaminated or from an unknown source?	☐	☑	
10	Has any construction debris, substances identified as hazardous substances, unidentified wastes, tires, batteries, or other wastes been dumped above grade, buried, or burned at the property?	☐	☑	
11	Is there any soil on the property that has been obviously stained?	☐	☑	
12	Does the property discharge waste water, on or adjacent to the property, other than storm water into a sewer system or retention/detention pond?	☐	☑	
13	Is the property served by a private well or non-public water system? Include potable and irrigation wells.	☐	☑	
14	Do you know of former water (potable or irrigation) wells associated with the property?	☐	☑	
15	Is there currently or has there been in the past a septic system for the property?	☐	☑	
16	Are there or have there been in the past any pits, ponds, or lagoons associated with waste treatment or disposal on the property?	☐	☑	

	Question	Response		Comment (Please provide for Yes responses)
		Yes	No	
17	Are there storage tanks, above ground or underground, located on the property?	☐	☑	
18	In the past, have there been storage tanks, above ground or underground, located on the property?	☐	☐	Unknown
19	Have polychlorinated biphenyls (PCBs) been used in electrical transformers, capacitors, or other equipment at the property?	☐	☐	Unknown
20	Is there a transformer on the property that is not owned by a public or private utility company for which there are no records indicating the absence of PCBs?	☐	☐	Unknown
21	Do you have any knowledge of environmental liens or government notification relating to past or recurrent violations of environmental laws with respect to the property?	☐	☑	
22	Are there currently or have there been in the past any floor drains, sumps, and/or oil-water separators on the property?	☐	☐	Unknown
23	If yes, to question 22, do the drains/sumps discharge to the sewer system?	☐	☐	
24	Are you aware of the presence of asbestos-containing materials?	☐	☑	
25	Are you aware of the presence of lead-based paint?	☐	☑	
26	Is there an asbestos and/or lead-based paint Operations & Maintenance Program in place?	☐	☑	
27	Has the water ever been tested for lead?	☐	☑	
28	Has radon testing ever been conducted?	☐	☐	Unknown
29	Is there now or has there been evidence of mold or mildew present?	☐	☑	
30	Are there any prior environmental investigations (Phase I ESAs, Phase II ESAs, geotechnical reports, remedial reports, etc.) available?	☑	☐	They have been provided.
31	Please provide a brief description of the historical use of the property including construction dates, past operations, former buildings, etc.	former stadium site. Currently used for construction mobilization/parking.		

ALTA COMMITMENT FOR TITLE INSURANCE

Issued By:

Fidelity National Title Insurance Company

Commitment Number:

GLT2000075

NOTICE

IMPORTANT - READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and the Commitment Conditions, Fidelity National Title Insurance Company, a Florida corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Policy Amount and the name of the Proposed Insured.

If all of the Schedule B, Part I-Requirements have not been met within one hundred eighty (180) days after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

Fidelity National Title Insurance Company

By:

President

Countersigned By:

Authorized Officer or Agent

Attest:

Secretary

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Fidelity National Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

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Transaction Identification Data for reference only:

ISSUING OFFICE:	FOR SETTLEMENT INQUIRIES, CONTACT:
Title Officer: Maxine Lievois Fidelity National Title Insurance Company 1050 Wilshire Drive, Suite 310 Troy, MI 48084 Phone: 248-816-3850 Fax: 248-649-4836 Main Phone: (248)649-1555 Email: Maxine.Lievois@fnf.com	Escrow Officer: Maxine Lievois Fidelity National Title Insurance Company 1050 Wilshire Drive, Suite 310 Troy, MI 48084 Phone: 248-816-3850 Fax: 248-649-4836 Main Phone: (248)649-1555 Email: Maxine.Lievois@fnf.com

Order Number: GLT2000075

Property Address: 2610 Cochrane St, Detroit, MI 48216

Project Name:

SCHEDULE A

1. Commitment Date: February 6, 2020 at 08:00 AM
2. Policy to be issued:

   (a) ALTA Owner's Policy 2006
   Proposed Insured: Purchaser with contractual obligations under the purchase and sale agreement with the vested owner identified in Schedule A.
   Proposed Policy Amount: $100,000.00

3. The estate or interest in the Land described or referred to in this Commitment is:

   Fee Simple

4. The Title is, at the Commitment Date, vested in:

   Lee F. Robinson and The Economic Development Corporation of the City of Detroit, a Michigan public authority and body corporate, as their interests may appear. (as to North 12 feet of Lot 115)

   The Economic Development Corporation of the City of Detroit, a Michigan public authority and body corporate (as to remainder)

5. The Land is described as follows:

   SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

END OF SCHEDULE A

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Fidelity National Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

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EXHIBIT "A"

Legal Description

Land situated in the City of Detroit, County of Wayne and State of Michigan, described as follows:

Part of Private Claim 22 and Private Claim 27, being part of Lot 116 and all of Lots 109 through 115 of Plat of P.C. 27 recorded in Liber 2, Page 5 of Plats, Wayne County Records; also part of Lots 47 through 53, and 63 and all of Lots 64 through 69 of Plat of Juliana T. Abbott's Sub'n recorded in Liber 5, Page 36 of Plats, Wayne County Records, and being more particularly described as:
Commencing at the intersection of the North line of Michigan Avenue (120 feet wide) and the East line of Cochrane Avenue (65 feet wide), said point being the Southwest corner of Lot 5 of Plat of P.C. 27, recorded in Liber 2, Page 5 of Plats, Wayne County Records; Thence along said East line of Cochrane Avenue North 23 degrees 42 minutes 59 seconds West, 458.48 feet to the point of beginning; Thence continuing along said East line, North 23 degrees 42 minutes 59 seconds West, 198.31 feet to a point on the South right of way line of the Fisher Freeway Service Drive; Thence the following three (3) courses along said South line: (1) North 68 degrees 48 minutes 15 seconds East, 100.84 feet; (2) North 66 degrees 14 minutes 47 seconds East, 20.00 feet; and (3) North 66 degrees 27 minutes 12 seconds East, 184.76 feet; Thence South 23 degrees 38 minutes 17 seconds East, 194.25 feet; Thence South 66 degrees 27 minutes 12 seconds West, 305.24 feet to the point of beginning, including vacated Kaline Drive, vacated Cherry Street and the vacated alleys within the above described parcel.

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SCHEDULE B, PART I
REQUIREMENTS

All of the following Requirements must be met:

1. The Proposed Insured must notify the Company in writing of the name of any party not referred to in this Commitment who will obtain an interest in the Land or who will make a loan on the Land. The Company may then make additional Requirements or Exceptions.

2. Pay the agreed amount for the estate or interest to be insured.

3. Pay the premiums, fees, and charges for the Policy to the Company.

4. Documents satisfactory to the Company that convey the Title or create the Mortgage to be insured, or both, must be properly authorized, executed, delivered, and recorded in the Public Records.

5. For each policy to be issued as identified in Schedule A, Item 2; the Company shall not be liable under this commitment until it receives a designation for a Proposed Insured, acceptable to the Company. As provided in Commitment Condition 4, the Company may amend this commitment to add, among other things, additional exceptions or requirements after the designation of the Proposed Insured.

6. The Proposed Policy Amount(s) must be increased to the full value of the estate or interest being insured, and any additional premium must be paid at that time. An Owner's policy should reflect the purchase price or full value of the Land. A Loan Policy should reflect the loan amount or value of the property as collateral. Proposed Policy Amount(s) will be revised and premiums charged consistent therewith when the final amounts are approved.

7. It has been requested by the Proposed Insured that the Company issue its ALTA Owner's Policy without standard exceptions. The ALTA Owner's Policy without standard exceptions shall be issued upon the Company determining that the following additional requirements have been satisfied.
   A) Submission of an affidavit in acceptable form executed by the present title holder establishing the following facts:
   -That the present affiant is in possession of said property and has no knowledge of any other parties in possession or claiming rights of possession.
   -That the affiant has no knowledge of the granting of any unrecorded water, mineral and/or oil rights, unrecorded easements or claims of easements, boundary line disputes, or claims of such grants or rights relative thereto.
   B) Submit proper sworn statements and waivers showing payment or release of lien rights covering improvements made on subject land in the last 120 days or satisfactory proof that no improvements have been made within the last 120 days.
   C) Submit satisfactory survey by an approved surveyor, certified to the Company, showing no encroachments or adverse rights upon the subject property or any variation between the property description in this commitment and the survey description.

8. Furnish to the Company for review, copies of the municipal by-laws, charter and/or other authority documentation for The Economic Development Corporation of the City of Detroit, sufficient to evidence its ability to and method by which it is able to convey title to real property.

   The Company reserves the right to add additional items or make further requirements after review of the requested documentation.

9. Elimination of the interest of Lee F. Robinson, in the following manner:

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SCHEDULE B, PART I
REQUIREMENTS
(continued)

(a) Record documentation that the above parties received notice of the show cause hearing, and the foreclosure hearing from the Wayne County Treasurer as required by MCL 211.78 et. seq.; (NOTE: Failed proofs of service were recorded at Liber 47343, Page 149, Liber 47343, Page 150, Liber 47343, Page 151 and Liber 47343, Page 152); OR

(b) Record a Deed from Lee F. Robinson to The Economic Development Corporation of the City of Detroit.

(c) Obtain and record a judgment quieting title to the subject property to perfect title in the name of The Economic Development Corporation of the City of Detroit. (as to North 12 feet of Lot 115)

10. Record a Warranty Deed from The Economic Development Corporation of the City of Detroit to the proposed insured.

11. Furnish for recordation a release of the option to develop subject property as set forth in the PAL Development Agreement dated June 16, 2016 evidenced by Declaration of Restrictions shown below

    In favor of: Detroit Police Athletic League, Incorporated, a Michigan nonprofit corporation
    Recording No: Liber 53050, Page 1059.

12. Furnish for recordation a release of rights of Tiger Stadium Partners 2 LLC, developer of optional future expansion area in Master Deed (Tiger Towns @ The Corner) shown below:

    Recording No: Liber 54627, Page 730.

13. The search did not disclose any open mortgages or deeds of trust of record, therefore the Company reserves the right to require further evidence to confirm that the property is unencumbered, and further reserves the right to make additional requirements or add additional items or exceptions upon receipt of the requested evidence.

14. Taxes for the year are as follows:
    As to Parcel Number: **Ward 08, Item No. 000580-3**

    The 2019 Summer and Winter Taxes are exempt for the above tax roll number.

    Note: The Land may lose its tax exempt status upon conveyance of said Land.

    SEV & Taxable Value: $0, 2019
    Principal Residence Exemption: 0%

15. Furnish to the Company satisfactory evidence that the Land is not subject to either a Commercial or Industrial Facility Tax as established under Act 198 of Public Acts of 1974 or Act 255 of Public Acts of 1978. Should either tax apply, submit satisfactory evidence to the Company that all such taxes have been paid.

If, per Public Act 201 of 2010, the land to be insured is defined as "Commercial Real Estate" and the proposed transaction is or will be the subject of a written commission agreement running in favor of a commercial real estate broker, the Company shall be immediately notified and this form will be revised and made subject to such

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SCHEDULE B, PART I
REQUIREMENTS
(continued)

further requirements and exceptions as deemed necessary.

Please be aware that due to the conflict between federal and state laws concerning the cultivation, distribution, manufacture or sale of marijuana, the Company is not able to close or insure any transaction involving Land that is associated with these activities.

END OF SCHEDULE B, PART I

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SCHEDULE B, PART II
EXCEPTIONS

THIS COMMITMENT DOES NOT REPUBLISH ANY COVENANT, CONDITION, RESTRICTION, OR LIMITATION CONTAINED IN ANY DOCUMENT REFERRED TO IN THIS COMMITMENT TO THE EXTENT THAT THE SPECIFIC COVENANT, CONDITION, RESTRICTION, OR LIMITATION VIOLATES STATE OR FEDERAL LAW BASED ON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, GENDER IDENTITY, HANDICAP, FAMILIAL STATUS, OR NATIONAL ORIGIN.

The Policy will not insure against loss or damage resulting from the terms and provisions of any lease or easement identified in Schedule A, and will include the following Exceptions unless cleared to the satisfaction of the Company:

1. Any defect, lien, encumbrance, adverse claim, or other matter that appears for the first time in the Public Records or is created, attaches, or is disclosed between the Commitment Date and the date on which all of the Schedule B, Part I—Requirements are met.

2. Rights or claims of parties in possession not shown by the Public Records.

3. Any encroachment, encumbrance, violation, variation or adverse circumstance affecting the Title that would be disclosed by an accurate and complete survey of the Land.

4. Easements or claims of easements not shown by the Public Records and existing water, mineral, oil and exploration rights.

5. Any lien, or right to a lien, for services, labor, or material heretofore or hereafter furnished, imposed by law and not shown by the Public Records.

6. Building and use restrictions not appearing in the record chain of title.

7. Taxes and/or assessments which become a lien or become due and payable subsequent to the effective date herein.

8. No liability is assumed by the Company for tax increase occasioned by retroactive revaluation or change in land usage.

9. Rights of the public to any portion of the Land lying within the bounds of any street, road, alley or highway.

10. Covenants, conditions, restrictions and easements but omitting any covenants or restrictions, if any, including but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, or source of income, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law, as set forth in the Deeds

    Register Nos: A-116813 and C-119299.
    (NOTE: Documents unavailable at time of examination, copies to follow later)

11. Any irregularities, reservations, easements, encroachments or other matters in the proceedings occasioning the vacation of street and alley by Resolution dated Oct 12, 1937, J.C.C. Page 2166, evidenced by Deed dated December 3, 1937 and recorded on December 7, 1937 in Liber 4948, Page 552.

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SCHEDULE B, PART II
EXCEPTIONS
(continued)

12. Any interest in any oil, gas and/or minerals, as disclosed by Deed of Michigan State Highway Commission Dated March 22, 1978, between Michigan State Highway Commission and the City of Detroit Recorded on July 9, 1979 in Liber 20568, Page 241.

    As affected by Release of Restrictive Covenant Dated June 29, 2017 and recorded in Liber 53826, Page 625.

13. Board of Zoning Appeals, Decision and Order dated January 28, 1993 and recorded on February 2, 1993 in Liber 26325, Page 953.

14. Any irregularities, reservations, easements, encroachments or other matters in the proceedings occasioning the vacation of Kaline Drive and alleys by Resolution recorded on June 8, 1993 and recorded in Liber 26576, Page 761.

15. Affidavit of Jurisdictional Transfer of Land dated August 15, 2006 and recorded on September 14, 2006 in Liber 45292, Page 436. (as to North 12 feet of Lot 115)

16. Oil, gas, mineral and aboriginal antiquities reserved by the State of Michigan along with terms, conditions and provisions contained in Deed recorded on February 24, 2011 in Liber 48998, Page 183. (as to North 12 feet of Lot 115)

17. Terms, Covenants, and Conditions of Land Transfer Agreement dated June 7, 2016 as disclosed in Deed and recorded on May 17, 2016 in Liber 53050, Page 1049.

    As affected by Affidavit to Correct a Recording, recorded in Liber 53056, Page 1199.

18. Declaration of Restrictions (Tiger Stadium Site), dated June 16, 2016 and recorded in Liber 53050, Page 1059.

    As affected by Affidavit to Correct a Recording recorded in Liber 53056, Page 1211.

19. Board of Zoning Appeals, Decision and Order, recorded on August 22, 2016 in Liber 53177, Page 144.

20. Board of Zoning Appeals, Decision and Order, recorded on March 16, 2018 in Liber 54266, Page 1234.

21. Board of Zoning Appeals, Decision and Order, recorded on March 19, 2018 in Liber 54269, Page 1331.

22. Any irregularities, reservations, easements or other matters in the proceedings occasioning the vacation of the street and alley by Resolution described in Petition No. 1812 of Larson Realty dated July 2, 2018 and recorded on August 14, 2018 in Liber 54560, Page 531.

    As further evidenced by Resolution recorded in Liber 55473, Page 514.

23. Terms, provisions, conditions, restrictions, easements and limitations contained in the Master Deed dated September 13, 2018 and recorded on September 20, 2018 in Liber 54627, Page 730. Name of Condominium: Tiger Towns @ The Corner, and any amendments thereto, if any, including, but not limited to, the rights of the co-

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SCHEDULE B, PART II
EXCEPTIONS
(continued)

owners of the Condominium set forth below in general common elements and limited common elements, as set forth in said Master Deed and Amendments thereto, and designated as Wayne County Condominium Subdivision Plan No. 1103, and as described in Act 59 of the Public Acts of 1978, as amended, but omitting any covenants or restrictions, if any, including, but not limited to those based upon race, color, religion, sex, sexual orientation, familial status, marital status, disability, handicap, national origin, ancestry, or source of income, as set forth in applicable state or federal laws, except to the extent that said covenant or restriction is permitted by applicable law.

24. Board of Zoning Appeals, Decision and Order, recorded on October 18, 2018 in Liber 54677, Page 1128.

The policy does not insure against unpaid water, sewer, electric or gas charges, if any, that have not been levied as taxes against these lands. (Meter readings should be obtained and adjusted between appropriate parties.)

END OF SCHEDULE B, PART II

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Fidelity National Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

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COMMITMENT CONDITIONS

1. DEFINITIONS

(a) "Knowledge" or "Known": Actual or imputed knowledge, but not constructive notice imparted by the Public Records.

(b) "Land": The land described in Schedule A and affixed improvements that by law constitute real property. The term "Land" does not include any property beyond the lines of the area described in Schedule A, nor any right, title, interest, estate, or easement in abutting streets, roads, avenues, alleys, lanes, ways, or waterways, but this does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.

(c) "Mortgage": A mortgage, deed of trust, or other security instrument, including one evidenced by electronic means authorized by law.

(d) "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.

(e) "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.

(f) "Proposed Policy Amount": Each dollar amount specified in Schedule A as the Proposed Policy Amount of each Policy to be issued pursuant to this Commitment.

(g) "Public Records": Records established under state statutes at the Commitment Date for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without Knowledge.

(h) "Title": The estate or interest described in Schedule A.

2. If all of the Schedule B, Part I-Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.

3. The Company's liability and obligation is limited by and this Commitment is not valid without:

(a) the Notice;

(b) the Commitment to Issue Policy;

(c) the Commitment Conditions;

(d) Schedule A;

(e) Schedule B, Part I-Requirements;

(f) Schedule B, Part II-Exceptions; and

(g) a counter-signature by the Company or its issuing agent that may be in electronic form.

4. COMPANY'S RIGHT TO AMEND

The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company shall not be liable for any other amendment to this Commitment.

5. LIMITATIONS OF LIABILITY

(a) The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:

(i) comply with the Schedule B, Part I-Requirements;

(ii) eliminate, with the Company's written consent, any Schedule B, Part II-Exceptions; or

(iii) acquire the Title or create the Mortgage covered by this Commitment.

(b) The Company shall not be liable under Commitment Condition 5(a) if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.

(c) The Company will only have liability under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.

(d) The Company's liability shall not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Conditions 5(a)(i) through 5(a)(iii) or the Proposed Policy Amount.

(e) The Company shall not be liable for the content of the Transaction Identification Data, if any.

(f) In no event shall the Company be obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I-Requirements have been met to the satisfaction of the Company.

(g) In any event, the Company's liability is limited by the terms and provisions of the Policy.

6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT

(a) Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.

(b) Any claim must be based in contract and must be restricted solely to the terms and provisions of this Commitment.

(c) Until the Policy is issued, this Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.

This page is only a part of a 2016 ALTA® Commitment for Title Insurance issued by Fidelity National Title Insurance Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I-Requirements; Schedule B, Part II-Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

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(continued)

(d) The deletion or modification of any Schedule B, Part II-Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.

(e) Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company.

(f) When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

7. IF THIS COMMITMENT HAS BEEN ISSUED BY AN ISSUING AGENT

The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for the purpose of providing closing or settlement services.

8. PRO-FORMA POLICY

The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

9. ARBITRATION

The Policy contains an arbitration clause. All arbitrable matters when the Proposed Policy Amount is Two Million And No/100 Dollars ($2,000,000.00) or less shall be arbitrated at the option of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at http://www.alta.org/arbitration.

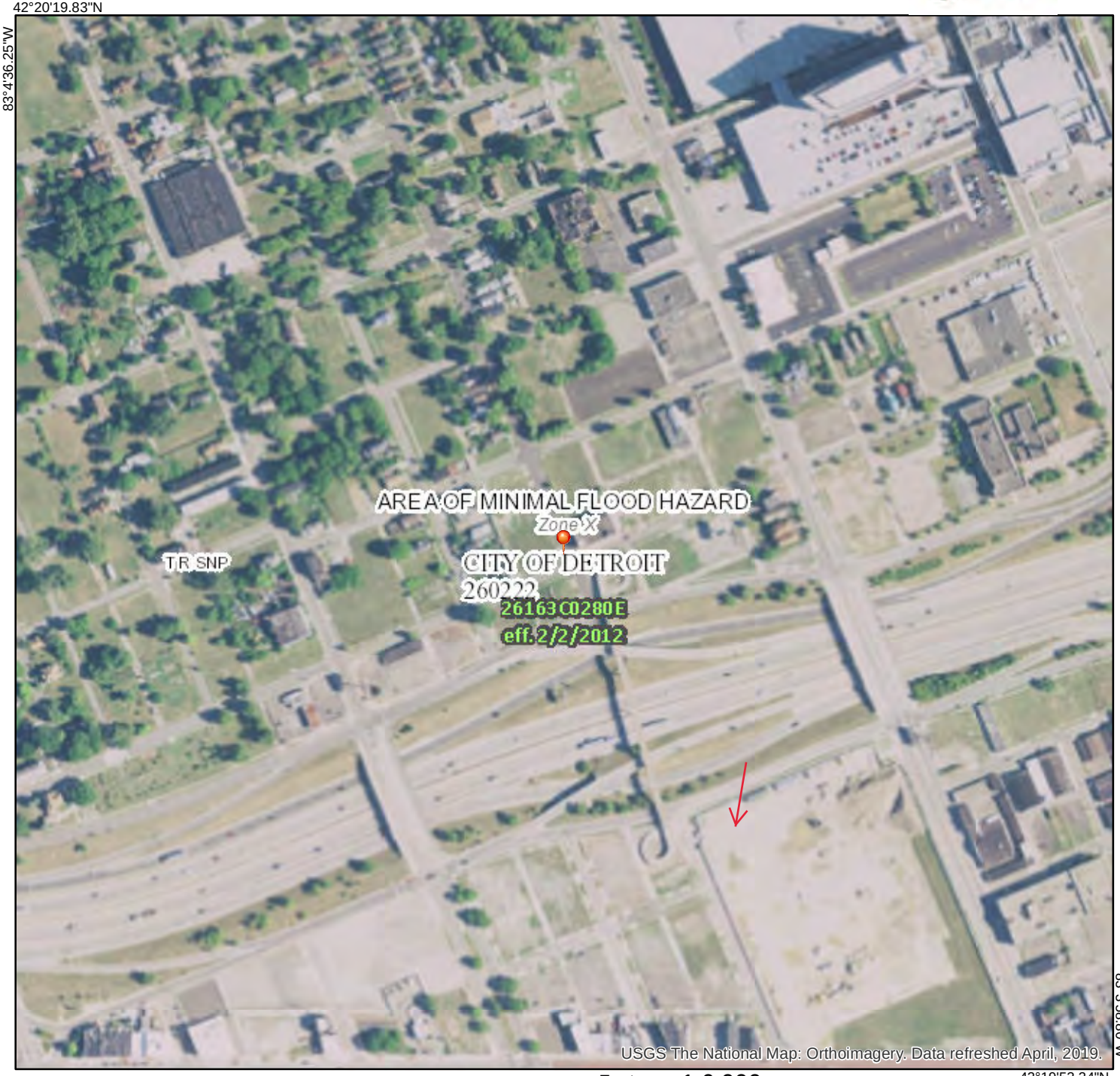
END OF CONDITIONS

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10.7 Special Contractual Conditions Between User and Environmental Professional: FEMA Map, NWI Map, NPMS Map, Noise Assessment, and Acceptable Separation Distance Calculations

National Flood Hazard Layer FIRMette



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 3/10/2020 at 8:56:58 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

U.S. Fish and Wildlife Service
National Wetlands Inventory

2610 Cochrane, Detroit

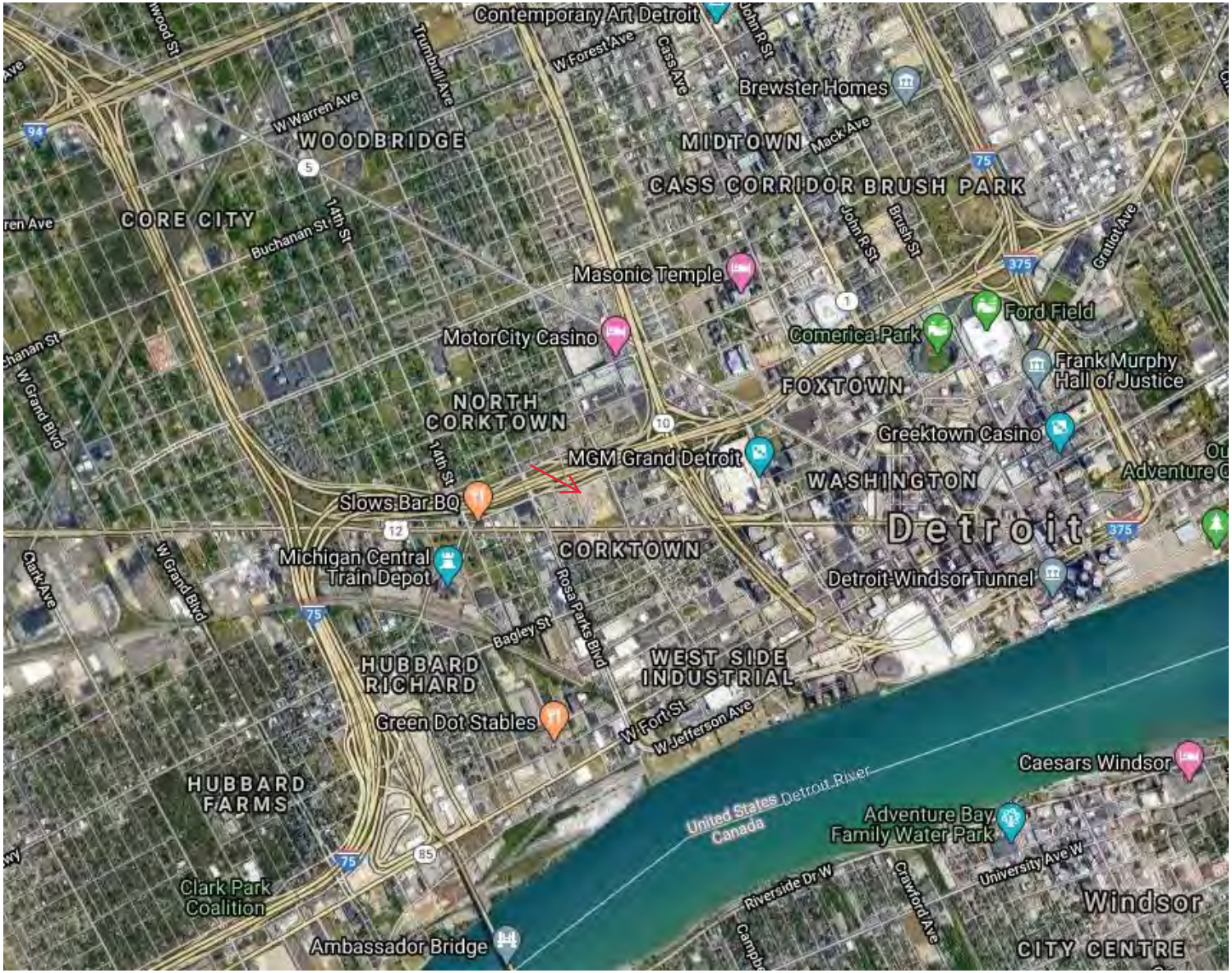


March 10, 2020

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



Legend

- Gas Transmission Pipelines
- Hazardous Liquid Pipelines

500 m
1000 ft

Pipelines depicted on this map represent gas transmission and hazardous liquid lines only. Gas gathering and gas distribution systems are not represented.

This map should never be used as a substitute for contacting a one-call center prior to excavation activities. Please call 811 before any digging occurs.

Questions regarding this map or its contents can be directed to npms@dot.gov.

Projection: Geographic

Datum: NAD83

Map produced by the Public Viewer application at www.npms.phmsa.dot.gov

Date Printed: Mar 10, 2020

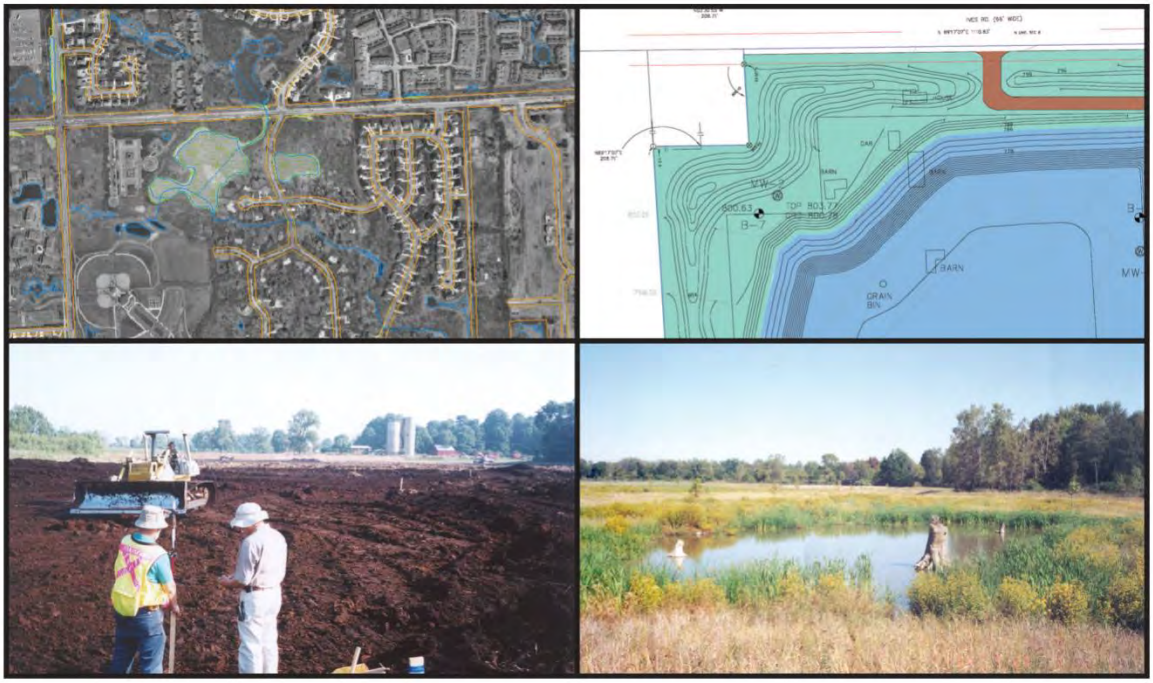
811 Know what's below. Call before you dig.

Noise Assessment
Left Field
2610 Chochrane
Detroit, Michigan

American Community Developers

March 26, 2020

ASTI ENVIRONMENTAL



ASTI ENVIRONMENTAL

Noise Assessment
Left Field
2610 Cochrane
Detroit, Michigan

March 26, 2020

Report Prepared For:

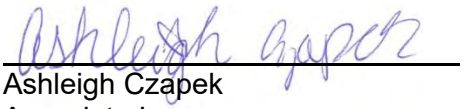
American Community Developers
20250 Harper Ave.
Harper Woods, Michigan 48225

Report Prepared By:

ASTI Environmental
10448 Citation Drive, Suite 100
Brighton, Michigan 48116
800-395-ASTI

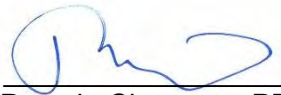
ASTI Project No. 11456

Report Prepared by:



Ashleigh Czapek
Associate I

Report Reviewed by:



Pamela Chapman, PE, EP
Phase I Group Leader

ENVIRONMENTAL

TABLE OF CONTENTS

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	2.3	Railroads	5
	2.4	Non-Transportation Sources	5
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ATTACHMENTS

- **A** NAL Location Map
- **B** Airport Noise Contour Map
- **C** AADT Information
- **D** Day-Night Level Electronic Assessment

1.0 INTRODUCTION

American Community Developers proposes the new construction utilizing funding provided from the Michigan State Housing Development Authority (MSHDA) of the Left Field Residences at 2610 Cochrane, Detroit, Michigan, referred to herein as “Subject Property”.

This assessment was conducted to provide the noise level and associated noise category at each designated Noise Assessment Location (NAL) at the Subject Property. This assessment does not include an evaluation of noise attenuation but general guidance is provided at the end of this assessment.

This evaluation was conducted per guidelines set forth in 24 CFR 51B. This noise analysis evaluates the Subject Property’s exposure to three major sources of noise: aircraft, roadways, and railways. If identified, additional non-transportation noise sources such as loud impulse sounds from nearby industry are also evaluated.

The following three sources of transportation noise and their applicable search distances are outlined below when evaluating noise at a site.

1. Aircraft - All military and FAA-regulated civil airfields within 15 miles of the Subject Property.
2. Roadways - Major roadways and limited access highways/freeways within 1,000 feet of the Subject Property utilizing a 10-year projection. Roadways considered are generally based on number of lanes, speed limit, presence of stop signs or lights, overall traffic counts, and/or number of medium or heavy trucks.
3. Railroad - All active railroads within 3,000 feet of the Subject Property.

The noise level calculated at a NAL is known as the day-night average sound level or DNL. A calculated DNL can fall within three categories as follows.

1. Acceptable - DNL not exceeding 65 decibels (dB)
2. Normally Unacceptable - DNL above the 65 dB threshold but not exceeding 75 dB
3. Unacceptable - DNL above 75 dB

Three NALs (NAL #1, NAL #2 and NAL #3) were selected on the Subject Property for this analysis based on proximity to noise sources. A map with the Subject Property boundaries and NAL locations is included as Attachment A.

The following is a summary of the applicable noise sources identified at the NALs.

NAL #1

Noise Source with Applicable Distance	Name	Distance to NAL
Airport(s)	Coleman A Young International Airport	5.5 miles
	Windsor International Airport	6.5 miles
Busy Road(s)	W. Fisher Service Dr.	54 feet
	I-75 off ramp to the Lodge	130 feet
	I-75	308 feet
	I-75 on ramp from the Lodge	477 feet
	Trumbull	574 feet
	Rosa Parks Blvd.	687 feet
	Michigan Ave.	690 feet
Railroad(s)	None	NA
Non-Transportation	None	NA

NAL #2

Noise Source with Applicable Distance	Name	Distance to NAL
Airport(s)	Coleman A Young International Airport	5.5 miles
	Windsor International Airport	6.5 miles
Busy Road(s)	W. Fisher Service Dr.	77 feet
	I-75 off ramp to the Lodge	151 feet
	I-75	320 feet
	I-75 on ramp from the Lodge	487 feet
	Trumbull	485 feet
	Michigan Ave.	676 feet
	Rosa Parks Blvd.	758 feet
Railroad(s)	None	NA
Non-Transportation	None	NA

NAL #3

Noise Source with Applicable Distance	Name	Distance to NAL
Airport(s)	Coleman A Young International Airport	5.5 miles
	Windsor International Airport	6.5 miles
Busy Road(s)	W. Fisher Service Dr.	198 feet
	I-75 off ramp to the Lodge	275 feet

Noise Source with Applicable Distance	Name	Distance to NAL
	I-75	450 feet
	Trumbull	576 feet
	Michigan Ave.	559 feet
	I-75 on ramp from the Lodge	619 feet
	Rosa Parks Blvd.	661 feet
Railroad(s)	None	NA
Non-Transportation	None	NA

2.0 EVALUATION OF NOISE SOURCES

2.1 Airports

Coleman A. Young International Airport is approximately 5.5 miles distant. Based on the Noise Contour Map for the airport (Attachment B), the site is not within a distance of concern.

Windsor International Airport is approximately 6.5 miles distant. Based on the Noise Contour Map for the airport (Attachment B), the site is not within a distance of concern.

Other small airfields were identified within 15 miles, but these airfields have no commercial traffic and are not likely FAA-regulated. They are not considered to represent a noise concern.

2.2 Busy Roadways

The major roadways are:

- W. Fisher Service Dr.
- I-75 (plus on and off ramps)
- Trumbull
- Rosa Parks Blvd.
- Michigan Ave.

W. Fisher Service Dr. is a 2-lane one-way road heading east and the speed limit is 25 mph near the Subject Property. The roadway is an approximate effective distance of 54 feet from the northwestern corner of the proposed residential building (NAL #1).

The I-75 off ramp to the Lodge is a 2-lane one-way road heading east and the speed limit is 40 mph near the Subject Property. The roadway is an approximate effective distance of 130 feet from the northwestern corner of the proposed residential building (NAL #1).

I-75 is a 6-lane highway and the speed limit is 55 mph near the Subject Property. The highway is an approximate effective distance of 308 feet from the northwestern corner of the proposed residential building (NAL #1).

The I-75 on ramp from the Lodge is a 2-lane one-way road heading west and the speed limit is 40 mph near the Subject Property. The roadway is an approximate effective distance of 477 feet from the northwestern corner of the proposed residential building (NAL #1).

Trumbull is a 4-lane road with a center turn lane and the speed limit is 35 mph near the Subject Property. The roadway is an approximate effective distance of 485 feet from the northeastern corner of the proposed lobby building (NAL #2).

Rosa Parks Blvd. is a 4-lane road and the speed limit is 30 mph near the Subject Property. The roadway is an approximate effective distance of 661 feet from the southwestern corner of the proposed residential building (NAL #3).

Michigan Ave. is a 4-lane road with a center turn lane and the speed limit is 35 mph near the Subject Property. The roadway is an approximate effective distance of 559 feet from the southwestern corner of the proposed residential building (NAL #3).

Traffic counts for roadways were obtained through MDOT. Projections were done through 2030. A growth rate of 1% per year compounded was judged appropriate as traffic levels are expected to remain relatively stable. Traffic projections are included in Attachment C.

2.3 Railroads

Not applicable.

2.4 Non-Transportation Sources

Not applicable.

3.0 CALCULATIONS

A Noise DNL calculator worksheet for the NALs are provided in Attachment D.

Using the HUD DNL calculator, the noise level at NAL #1, as predicted in 2030, is calculated to be 75.7 dB and within the Unacceptable range. However, HUD allows for a one decibel variance and as this is less than 76 dB it will be acceptable with approved noise attenuation.

Using the HUD DNL calculator, the noise level at NAL #2, as predicted in 2030, is calculated to be 74.2 dB and within the Normally Unacceptable range.

Using the HUD DNL calculator, the noise level at NAL #3, as predicted in 2030, is calculated to be 71.1 dB and within the Normally Unacceptable range.

4.0 CONCLUSIONS

The following is a summary of the findings of this assessment.

NAL #	Combined Source DNL (dB)	Category
1	75.7	Unacceptable
2	74.2	Normally Unacceptable
3	71.1	Normally Unacceptable

5.0 REFERENCES

- 24 CFR Part 51 Subpart B
- The Noise Guidebook, U.S. Department of Housing and Urban Development,
- U.S. DOT
- https://mdot.ms2soft.com/
- https://www.hudexchange.info/programs/environmental-review/dnl-calculator/

HUD ATTENUATION GUIDANCE

https://www.hudexchange.info/programs/environmental-review/noise-abatement-and-control/

All sites whose environmental or community noise exposure exceeds the day night average sound level (DNL) of 65 decibels (dB) are considered noise-impacted areas. For new construction that is proposed in high noise areas, grantees shall incorporate noise attenuation features to the extent required by HUD environmental criteria and standards contained in Subpart B (Noise Abatement and Control) of 24 CFR Part 51. The interior standard is 45 dB.

The "Normally Unacceptable" noise zone includes community noise levels from above 65 dB to 75 dB. Approvals in this noise zone require a minimum of 5 dB additional sound attenuation for buildings having noise-sensitive uses if the day-night average sound level is greater than 65 dB but does not exceed 70 dB, or a minimum of 10 dB of additional sound attenuation if the day-night average sound level is greater than 70 dB but does not exceed 75 dB.

Locations with day-night average noise levels above 75 dB have “Unacceptable” noise exposure. For new construction, noise attenuation measures in these locations require the approval of the Assistant Secretary for Community Planning and Development (for projects reviewed under Part 50) or the Responsible Entity’s Certifying Officer (for projects reviewed under Part 58). The acceptance of such locations normally requires an environmental impact statement.

The environmental review record should contain **one** of the following:

- Documentation the proposed action is not within 1000 feet of a major roadway, 3,000 feet of a railroad, or 15 miles of a military or FAA-regulated civil airfield.
- If within those distances, documentation showing the noise level is *Acceptable* (at or below 65 DNL).
- If within those distances, documentation showing that there’s an effective noise barrier (i.e., that provides sufficient protection).

- Documentation showing the noise generated by the noise source(s) is *Normally Unacceptable (66 – 75 DNL)* and identifying noise attenuation requirements that will bring the interior noise level to 45 DNL and/or exterior noise level to 65 DNL.

ATTACHMENT A

NAL Location Map



Service Layer Credits: Google Earth

Left Field

2610 Cochrane,
Detroit, MI

0 37.5 75 150 Feet

N

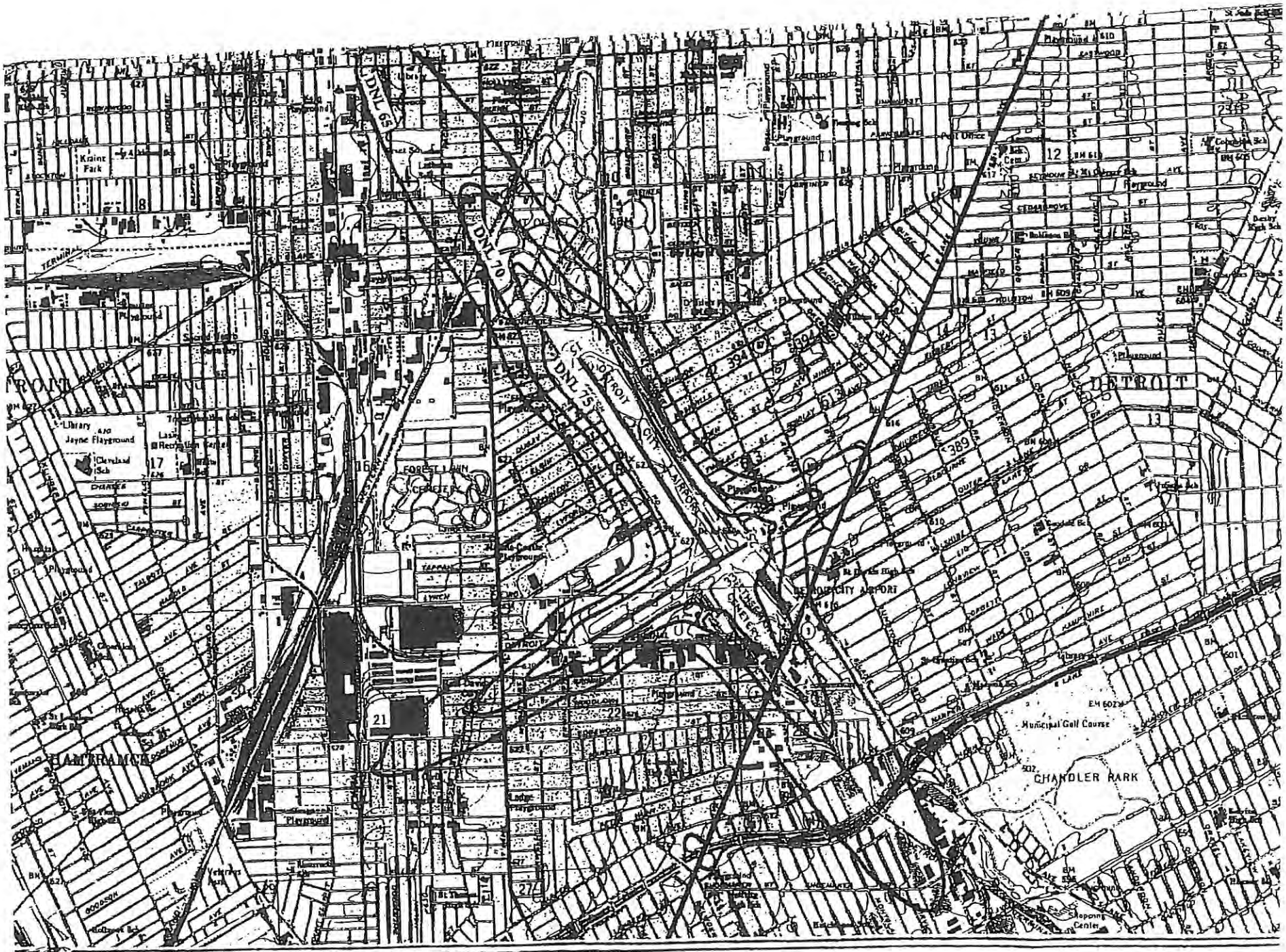
ASTI Environmental

Client: American Community Developers
Created by: RMH, March 27, 2020, ASTI Project 11456

Noise Assessment Location Map

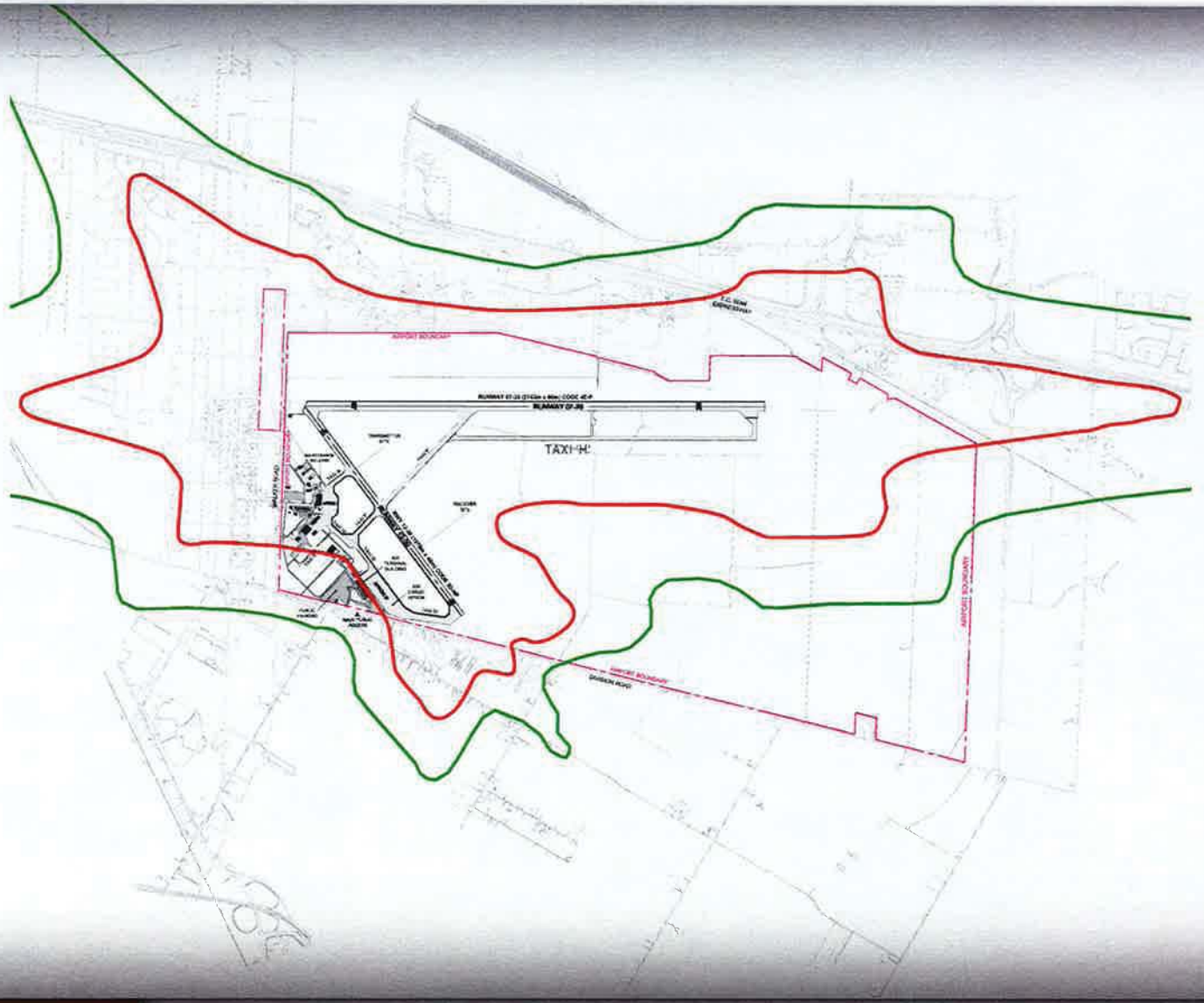
ATTACHMENT B

Airport Noise Contour Maps



CITY OF DETROIT
AIRPORT DEPARTMENT

1996 BASE
NOISE EXPOSURE CONTOURS



WINDSOR AIRPORT
MASTER PLAN

FIGURE 3-4 - AIRPORT NOISE EXPOSURE FORECAST CONTOURS

30 NEF (NOISE EXPOSURE FORECAST)

25 NEF

Notes

1. Conceptual Layout
2. All dimensions approximate
3. Noise Exposure Forecast provided by Windsor Airport Management

YQG YOUR QUICK GATEWAY
WINDSOR INTERNATIONAL AIRPORT

DILLON CONSULTING

Base data provided by City of Windsor Official Plan
Map created by EDH
Map checked by EGL

File Location: \\20dillon.dillon.ca\toronto data\PROJECTS\DRAFT\09\092665 Windsor Airport Master Plan

Map Projection: n/aTAXI 'H'

Project #: 09-2665
Status: n/a
Date: December 2010

N E W S

ATTACHMENT C

AADT Information

Auto and Heavy Truck 10-year ADT Projections

W. Fisher Service Drive

	Cars	% Change	Trucks	% Change
2016	8278		719.84	
2017	8618	4.1	749.36	4.1
2018	8618	0.0	749.36	0.0
2019	8574	-0.5	745.6	-0.5
	% Change/Year Assumption	1	**%/Year Change Assumption**	1

2030 Projections

	Cars	Trucks
2019	8574	746
2020	8660	753
2021	8747	761
2022	8834	768
2023	8923	776
2024	9012	784
2025	9102	791
2026	9193	799
2027	9285	807
2028	9378	815
2029	9471	824
2030	9566	832

Predicted 2030 Auto ADT	Predicted 2030 Truck ADT
9566	832

Auto and Heavy Truck 10-year ADT Projections

I-75 off ramp to the Lodge

	Cars	% Change	Trucks	% Change
2015	13464		1664.08	
2016	13464	0.0	1664.08	0.0
2017	13612	1.1	1682.34	1.1
2018	12074	-11.3	1492.26	-11.3
2019	12013	-0.5	1484.78	-0.5
	Avg % change:	-2.7	Avg % change:	-2.68
	Avg % change (Last 5-yr Trend):	-2.7	Avg % change (Last 5-yr Trend):	-2.68
	% Change/Year Assumption	1	**%/Year Change Assumption**	1

2030 Projections

	Cars	Trucks
2019	12013	1485
2020	12133	1500
2021	12255	1515
2022	12377	1530
2023	12501	1545
2024	12626	1561
2025	12752	1576
2026	12880	1592
2027	13009	1608
2028	13139	1624
2029	13270	1640
2030	13403	1657

Predicted 2030 Auto ADT	Predicted 2030 Truck ADT
13403	1657

Auto and Heavy Truck 10-year ADT Projections

I-75

	Cars	% Change	Trucks	% Change
2014	95693		11827.2	
2015	75027	-21.6	9273	-21.6
2016	73252	-2.4	9053.66	-2.4
2017	74058	1.1	9153.21	1.1
2018	74058	0.0	9153.21	0.0
	Avg % change:	0.0	Avg % change:	-5.72
	Avg % change (Last 5-yr Trend):	-5.7	Avg % change (Last 5-yr Trend):	-5.72
	% Change/Year Assumption	1	**%/Year Change Assumption**	1

2030 Projections

	Cars	Trucks
2018	74058	9153
2019	74798	9245
2020	75546	9337
2021	76302	9431
2022	77065	9525
2023	77835	9620
2024	78614	9716
2025	79400	9813
2026	80194	9912
2027	80996	10011
2028	81806	10111
2029	82624	10212
2030	83450	10314

Predicted 2030 Auto ADT	Predicted 2030 Truck ADT
83450	10314

Auto and Heavy Truck 10-year ADT Projections

I-75 On-ramp from the Lodge

	Cars	% Change	Trucks	% Change
2015	18548		2292.51	
2016	17638	-4.9	2179.98	-4.9
2017	17832	1.1	2203.96	1.1
2018	11478	-35.6	1418.67	-35.6
	% Change/Year Assumption	1	**%/Year Change Assumption**	1

2030 Projections

	Cars	Trucks
2018	11478	1419
2019	11593	1433
2020	11709	1447
2021	11826	1462
2022	11944	1476
2023	12064	1491
2024	12184	1506
2025	12306	1521
2026	12429	1536
2027	12554	1552
2028	12679	1567
2029	12806	1583
2030	12934	1599

Predicted 2030 Auto ADT	Predicted 2030 Truck ADT
12934	1599

Auto and Heavy Truck 10-year ADT Projections

Trumbull Ave.

	Cars	% Change	Trucks	% Change
2016	7156		622.24	
2017	7449	4.1	647.76	4.1
2018	7449	0.0	647.76	0.0
2019	7412	-0.5	644.56	-0.5
	% Change/Year Assumption	1	**%/Year Change Assumption**	1

2030 Projections

	Cars	Trucks
2019	7412	645
2020	7487	651
2021	7561	658
2022	7637	664
2023	7713	671
2024	7791	677
2025	7868	684
2026	7947	691
2027	8027	698
2028	8107	705
2029	8188	712
2030	8270	719

Predicted 2030 Auto ADT	Predicted 2030 Truck ADT
8270	719

Auto and Heavy Truck 10-year ADT Projections

Rosa Parks Blvd.

	Cars	% Change	Trucks	% Change
2016	22806		1983.12	
2017	8595	-62.3	747.36	-62.3
2018	8595	0.0	747.36	0.0
2019	10109	17.6	879.04	17.6
	% Change/Year Assumption	1	**%/Year Change Assumption**	1

2030 Projections

	Cars	Trucks
2019	10109	879
2020	10210	888
2021	10312	897
2022	10415	906
2023	10519	915
2024	10625	924
2025	10731	933
2026	10838	942
2027	10947	952
2028	11056	961
2029	11167	971
2030	11278	981

Predicted 2030 Auto ADT	Predicted 2030 Truck ADT
11278	981

Auto and Heavy Truck 10-year ADT Projections

Michigan Avenue (US-12)

	Cars	% Change	Trucks	% Change
2017	11707		1018	
2018	11707	0.0	1018	0.0
2019	11648	-0.5	1012.88	-0.5
	% Change/Year Assumption	1	**%/Year Change Assumption**	1

2030 Projections

	Cars	Trucks
2019	11648	1013
2020	11765	1023
2021	11882	1033
2022	12001	1044
2023	12121	1054
2024	12242	1065
2025	12365	1075
2026	12488	1086
2027	12613	1097
2028	12739	1108
2029	12867	1119
2030	12995	1130

Predicted 2030 Auto ADT	Predicted 2030 Truck ADT
12995	1130

ATTACHMENT D

Day-Night Level Electronic Assessments

DNL Calculator

WARNING: HUD recommends the use of Microsoft Internet Explorer for performing noise calculations. The HUD Noise Calculator has an error when using Google Chrome unless the cache is cleared before each use of the calculator. HUD is aware of the problem and working to fix it in the programming of the calculator.

The Day/Night Noise Level Calculator is an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. For more information on using the DNL calculator, view the **Day/Night Noise Level Calculator Electronic Assessment Tool Overview (/programs/environmental-review/daynight-noise-level-electronic-assessment-tool/)**.

Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	11456
Record Date	03/25/2020
User's Name	ASTI Environmental NAL 1

Road # 1 Name:	**W. Fisher Service Dr.**

Road #1

Vehicle Type	Cars	Medium Trucks	Heavy Trucks
Effective Distance	54	54	54
Distance to Stop Sign	35	35	35
Average Speed	25	25	25
Average Daily Trips (ADT)	9566	416	416
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	52.5236	58.9072	72.9826
Calculate Road #1 DNL	73.225	Reset	

Road # 2 Name: **I-75 off ramp to the Lodge**

Road #2

Vehicle Type	Cars	Medium Trucks	Heavy Trucks
Effective Distance	130	130	130
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	13403	1355	302
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	60.5147	60.5621	63.3158
Calculate Road #2 DNL	66.4271	Reset	

Road # 3 Name: **I-75**

Road # 3 Name:	I-75

Road #3

Vehicle Type	Cars	Medium Trucks	Heavy Trucks
Effective Distance	308	308	308
Distance to Stop Sign			
Average Speed	55	55	55
Average Daily Trips (ADT)	83450	8441	1873
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	65.6039	65.6536	66.4293
Calculate Road #3 DNL	70.6689	Reset	

Road # 4 Name:	I-75 on ramp from the Lodge

Road #4

Vehicle Type	Cars	Medium Trucks	Heavy Trucks
Effective Distance	477	477	477
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	12934	1308	291
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	51.8914	51.9402	54.686
Calculate Road #4 DNL	57.8009	Reset	

Calculate Road #4 DNL	57.8009	Reset

Road # 5 Name:	**Trumbull**

Road #5

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	574	574	574
Distance to Stop Sign			
Average Speed	35	35	35
Average Daily Trips (ADT)	8270	360	359
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	47.5834	43.9714	54.3922
Calculate Road #5 DNL	55.5537	Reset	

Road # 6 Name:	**Rosa Parks Blvd.**

Road #6

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	687	687	687
Distance to Stop Sign			
Average Speed	30	30	30
Average Daily Trips (ADT)	11278	491	490
Night Fraction of ADT	15	15	15
Road Gradient (%)			2

Road Gradient (%)			2
Vehicle DNL	46.4211	42.8096	54.5725
Calculate Road #6 DNL	55.4655	Reset	

Road # 7 Name:	**Michigan Ave.**

Road #7

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	690	690	690
Distance to Stop Sign			
Average Speed	35	35	35
Average Daily Trips (ADT)	12995	565	565
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	48.3471	44.7298	55.1626
Calculate Road #7 DNL	56.3225	Reset	

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	○ **Yes** ◉ **No**
Combined DNL for all Road and Rail sources	**75.7465**
Combined DNL including Airport	**N/A**

	N/A
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
  - Incorporate natural or man-made barriers. See ***The Noise Guidebook (/resource/313/hud-noise-guidebook/)***
  - Construct noise barrier. See the **Barrier Performance Module (/programs/environmental-review/bpm-calculator/)**

Tools and Guidance

Day/Night Noise Level Assessment Tool User Guide (/resource/3822/day-night-noise-level-assessment-tool-user-guide/)

Day/Night Noise Level Assessment Tool Flowcharts (/resource/3823/day-night-noise-level-assessment-tool-flowcharts/)

DNL Calculator

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Guidelines

- To display the Road and/or Rail DNL calculator(s), click on the "Add Road Source" and/or "Add Rail Source" button(s) below.
- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	11456
Record Date	03/25/2020
User's Name	ASTI Environmental NAL 2

Road # 1 Name:	**W. Fisher Service Dr.**

Road #1

Vehicle Type	Cars	Medium Trucks	Heavy Trucks
Effective Distance	77	77	77
Distance to Stop Sign	35	35	35
Average Speed	25	25	25
Average Daily Trips (ADT)	9566	416	416
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	50.2121	56.5957	70.6712
Calculate Road #1 DNL	70.9136	Reset	

Road # 2 Name: **I-75 off ramp to the Lodge**

Road #2

Vehicle Type	Cars	Medium Trucks	Heavy Trucks
Effective Distance	151	151	151
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	13403	1355	302
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	59.5392	59.5866	62.3403
Calculate Road #2 DNL	65.4516	Reset	

Road # 3 Name: **I-75**

Road # 3 Name:	I-75

Road #3

Vehicle Type	Cars	Medium Trucks	Heavy Trucks
Effective Distance	320	320	320
Distance to Stop Sign			
Average Speed	55	55	55
Average Daily Trips (ADT)	83450	8441	1873
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	65.3549	65.4046	66.1803
Calculate Road #3 DNL	70.4199	Reset	

Road # 4 Name:	I-75 on ramp from the Lodge

Road #4

Vehicle Type	Cars	Medium Trucks	Heavy Trucks
Effective Distance	487	487	487
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	12934	1308	291
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	51.7563	51.805	54.5509
Calculate Road #4 DNL	57.6658	Reset	

Calculate Road #4 DNL	57.6658	Reset

Road # 5 Name:	**Trumbull**

Road #5

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	485	485	485
Distance to Stop Sign			
Average Speed	35	35	35
Average Daily Trips (ADT)	8270	360	359
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	48.681	45.0689	55.4897
Calculate Road #5 DNL	56.6512	Reset	

Road # 6 Name:	**Rosa Parks Blvd.**

Road #6

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	758	758	758
Distance to Stop Sign			
Average Speed	30	30	30
Average Daily Trips (ADT)	11278	491	490
Night Fraction of ADT	15	15	15
Road Gradient (%)			2

Road Gradient (%)			2
Vehicle DNL	45.7804	42.1689	53.9318
Calculate Road #6 DNL	54.8248	Reset	

Road # 7 Name:	**Michigan Ave.**

Road #7

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	676	676	676
Distance to Stop Sign			
Average Speed	35	35	35
Average Daily Trips (ADT)	12995	565	565
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	48.4806	44.8633	55.2962
Calculate Road #7 DNL	56.456	Reset	

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	○ **Yes** ◉ **No**
Combined DNL for all Road and Rail sources	**74.2807**
Combined DNL including Airport	**N/A**

	N/A
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
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Tools and Guidance

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- All Road and Rail input values must be positive non-decimal numbers.
- All Road and/or Rail DNL value(s) must be calculated separately before calculating the Site DNL.
- All checkboxes that apply must be checked for vehicles and trains in the tables' headers.
- **Note #1:** Tooltips, containing field specific information, have been added in this tool and may be accessed by hovering over all the respective data fields (site identification, roadway and railway assessment, DNL calculation results, roadway and railway input variables) with the mouse.
- **Note #2:** DNL Calculator assumes roadway data is always entered.

DNL Calculator

Site ID	11456
Record Date	03/25/2020
User's Name	ASTI Environmental NAL 3

Road # 1 Name:	**W. Fisher Service Dr.**

Road #1

Vehicle Type	Cars	Medium Trucks	Heavy Trucks
Effective Distance	198	198	198
Distance to Stop Sign	35	35	35
Average Speed	25	25	25
Average Daily Trips (ADT)	9566	416	416
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	44.0595	50.4431	64.5186

Calculate Road #1 DNL | 64.761 | Reset

Road # 2 Name: **I-75 off ramp to the Lodge**

Road #2

Vehicle Type	Cars	Medium Trucks	Heavy Trucks
Effective Distance	275	275	275
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	13403	1355	302
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	55.6339	55.6813	58.435

Calculate Road #2 DNL | 61.5463 | Reset

Road # 3 Name: **I-75**

Road # 3 Name:	I-75

Road #3

Vehicle Type	Cars	Medium Trucks	Heavy Trucks
Effective Distance	450	450	450
Distance to Stop Sign			
Average Speed	55	55	55
Average Daily Trips (ADT)	83450	8441	1873
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	63.134	63.1837	63.9593
Calculate Road #3 DNL	68.199	Reset	

Road # 4 Name:	I-75 on ramp from the Lodge

Road #4

Vehicle Type	Cars	Medium Trucks	Heavy Trucks
Effective Distance	619	619	619
Distance to Stop Sign			
Average Speed	40	40	40
Average Daily Trips (ADT)	12934	1308	291
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	50.1938	50.2426	52.9885
Calculate Road #4 DNL	56.1034	Reset	

Calculate Road #4 DNL	56.1034	Reset

Road # 5 Name:	**Trumbull**

Road #5

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	574	574	574
Distance to Stop Sign			
Average Speed	35	35	35
Average Daily Trips (ADT)	8270	360	359
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	47.5834	43.9714	54.3922
Calculate Road #5 DNL	55.5537	Reset	

Road # 6 Name:	**Rosa Parks Blvd.**

Road #6

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	661	661	661
Distance to Stop Sign			
Average Speed	30	30	30
Average Daily Trips (ADT)	11278	491	490
Night Fraction of ADT	15	15	15
Road Gradient (%)			2

Road Gradient (%)			2
Vehicle DNL	46.6724	43.0609	54.8238
Calculate Road #6 DNL	55.7168	Reset	

Road # 7 Name:	**Michigan Ave.**

Road #7

Vehicle Type	**Cars** ☑	**Medium Trucks** ☑	**Heavy Trucks** ☑
Effective Distance	559	559	559
Distance to Stop Sign			
Average Speed	35	35	35
Average Daily Trips (ADT)	12995	565	565
Night Fraction of ADT	15	15	15
Road Gradient (%)			2
Vehicle DNL	49.7186	46.1013	56.5342
Calculate Road #7 DNL	57.694	Reset	

Add Road Source | Add Rail Source

Airport Noise Level	
Loud Impulse Sounds?	○ **Yes** ◉ **No**
Combined DNL for all Road and Rail sources	**71.138**
Combined DNL including Airport	**N/A**

	N/A
Site DNL with Loud Impulse Sound	

Calculate

Mitigation Options

If your site DNL is in Excess of 65 decibels, your options are:

- **No Action Alternative**: Cancel the project at this location
- **Other Reasonable Alternatives**: Choose an alternate site
- **Mitigation**
  - **Contact your Field or Regional Environmental Officer (/programs/environmental-review/hud-environmental-staff-contacts/)**
  - Increase mitigation in the building walls (only effective if no outdoor, noise sensitive areas)
  - Reconfigure the site plan to increase the distance between the noise source and noise-sensitive uses
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  - Construct noise barrier. See the **Barrier Performance Module (/programs/environmental-review/bpm-calculator/)**

Tools and Guidance

Day/Night Noise Level Assessment Tool User Guide (/resource/3822/day-night-noise-level-assessment-tool-user-guide/)

Day/Night Noise Level Assessment Tool Flowcharts (/resource/3823/day-night-noise-level-assessment-tool-flowcharts/)

Acceptable Separation Distance (ASD) Electronic Assessment Tool

The Environmental Planning Division (EPD) has developed an electronic-based assessment tool that calculates the Acceptable Separation Distance (ASD) from stationary hazards. The ASD is the distance from above ground stationary containerized hazards of an explosive or fire prone nature, to where a HUD assisted project can be located. The ASD is consistent with the Department's standards of blast overpressure (0.5 psi-buildings) and thermal radiation (450 BTU/ft^2 - hr - people and 10,000 BTU/ft^2 - hr - buildings). Calculation of the ASD is the first step to assess site suitability for proposed HUD-assisted projects near stationary hazards. Additional guidance on ASDs is available in the Department's guidebook "Siting of HUD- Assisted Projects Near Hazardous Facilities" and the regulation 24 CFR Part 51, Subpart C, Sitting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature.

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☐ **No:** ☑
Does the container hold a cryogenic liquified gas?	**Yes:** ☐ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	8000
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	

ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	657.70
ASD for Thermal Radiation for Buildings (ASDBPU)	131.49
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options **(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)**

Providing Feedback & Corrections

After using the ASD Assessment Tool following the directions in this User Guide, users are encouraged to provide feedback on how the ASD Assessment Tool may be improved. Users are also encouraged to send comments or corrections for the improvement of the tool.

Please send comments or other input using the **Contact Us (https://www.hudexchange.info/contact-us/)** form.

Related Information

- **ASD User Guide (/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)**
- **ASD Flow Chart (/resource/3840/acceptable-separation-distance-asd-flowchart/)**

Acceptable Separation Distance (ASD) Electronic Assessment Tool

The Environmental Planning Division (EPD) has developed an electronic-based assessment tool that calculates the Acceptable Separation Distance (ASD) from stationary hazards. The ASD is the distance from above ground stationary containerized hazards of an explosive or fire prone nature, to where a HUD assisted project can be located. The ASD is consistent with the Department's standards of blast overpressure (0.5 psi-buildings) and thermal radiation (450 BTU/ft^2 - hr - people and 10,000 BTU/ft^2 - hr - buildings). Calculation of the ASD is the first step to assess site suitability for proposed HUD-assisted projects near stationary hazards. Additional guidance on ASDs is available in the Department's guidebook "Siting of HUD- Assisted Projects Near Hazardous Facilities" and the regulation 24 CFR Part 51, Subpart C, Sitting of HUD-Assisted Projects Near Hazardous Operations Handling Conventional Fuels or Chemicals of an Explosive or Flammable Nature.

Note: Tool tips, containing field specific information, have been added in this tool and may be accessed by hovering over the ASD result fields with the mouse.

Acceptable Separation Distance Assessment Tool

Is the container above ground?	**Yes:** ☑ **No:** ☐
Is the container under pressure?	**Yes:** ☑ **No:** ☐
Does the container hold a cryogenic liquified gas?	**Yes:** ☑ **No:** ☐
Is the container diked?	**Yes:** ☐ **No:** ☑
What is the volume (gal) of the container?	13500
What is the Diked Area Length (ft)?	
What is the Diked Area Width (ft)?	
Calculate Acceptable Separation Distance	
Diked Area (sqft)	

ASD for Blast Over Pressure (ASDBOP)	
ASD for Thermal Radiation for People (ASDPPU)	817.89
ASD for Thermal Radiation for Buildings (ASDBPU)	167.48
ASD for Thermal Radiation for People (ASDPNPD)	
ASD for Thermal Radiation for Buildings (ASDBNPD)	

For mitigation options, please click on the following link: Mitigation Options **(/resource/3846/acceptable-separation-distance-asd-hazard-mitigation-options/)**

Providing Feedback & Corrections

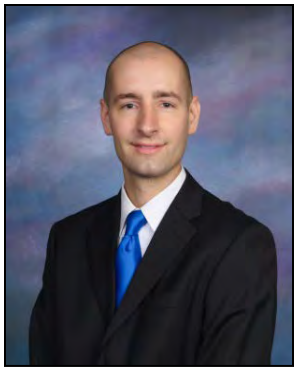
After using the ASD Assessment Tool following the directions in this User Guide, users are encouraged to provide feedback on how the ASD Assessment Tool may be improved. Users are also encouraged to send comments or corrections for the improvement of the tool.

Please send comments or other input using the **Contact Us (https://www.hudexchange.info/contact-us/)** form.

Related Information

- **ASD User Guide (/resource/3839/acceptable-separation-distance-asd-assessment-tool-user-guide/)**
- **ASD Flow Chart (/resource/3840/acceptable-separation-distance-asd-flowchart/)**

10.8 Qualifications of the Environmental Professional(s): Resume of EP(s) and Additional Staff



Anthony LLoyd Spencer, EP

Associate II

PROFILE

Certifications/Training
Environmental Professional (AAI)
40-Hour OSHA HAZWOPER Training
HUD Basic Environmental Training, August 2012

Education and Training
Wayne State University, B.S., Environmental Science, Minor, Geology, May 2011

Experience History
Associate II, Property Service Group, ASTI ENVIRONMENTAL
Research Assistant, Ohio State University, School of Environment and Natural Resources
Research Assistant, Wayne State University, Department of Biology

Professional Background
Mr. Spencer specializes in Phase I environmental site assessments (ESAs). He has completed ESAs for residential, commercial, and industrial sites. He has experience working in Michigan, Ohio, Kentucky, Oklahoma, Pennsylvania, and North Carolina. Work has included vacant land, apartment complexes, residential scattered lots, former plating facilities, print shops, landfills, auto garages, gasoline stations, and schools. The property evaluations have included site inspections, historical research, and contact with federal, state, and local agencies. Mr. Spencer also has experience assisting with Phase II ESA sampling and report preparation, noise assessments, NEPA reporting, HUD narratives, and SHPO consultation.

Mr. Spencer has also conducted tree identification and timber cruising for the U.S. Fish & Wildlife Service in Michigan's Upper Peninsula.

Years Experience:

7 --- ASTI
2 --- other agencies



PAMELA S. CHAPMAN,
PE Group Leader Phase I ESAs

PROFILE

Education
University of Michigan, B.S.E., Civil Engineering, 1990

Certifications/Training
Professional Engineer (PE), MI No. 67062
Environmental Professional (AAI)
OSHA 29 CFR 1910.120 HAZWOPER 40-Hour and 8-Hour Refresher (2019)
American Red Cross Adult First Aid and CPR Certified
ASTM Certification in Risk-Based Corrective Action (RBCA) Applied at Petroleum Release Sites
ITRC, Petroleum Vapor Intrusion: Fundamentals of Screening, Investigation, and Management
ITRC, Light Non-Aqueous Phase Liquids
EDR ASTM E1527-13 Online Course

Experience History
Group Leader Phase I ESAs, Property Services Group, ASTI Environmental
Project Manager, Inland Seas Engineering, Inc.
Project Manager, Environmental Investigations, Inc.
Project Engineer, Testing Engineers & Consultants, Inc.
Project Engineer, Dell Engineering, Inc.

PROFESSIONAL BACKGROUND

Ms. Chapman specializes in Phase I Environmental Site Assessments (ESAs). She has completed ESAs for residential, commercial, and industrial sites. Work has included vacant land, residential lots, dry cleaners, print shops, landfills, auto garages, gasoline stations, and a former foundry. The property evaluations have included site inspections, historical research, and contact with federal, state, and local agencies. Ms. Chapman also has experience conducting Phase II ESA sampling, preparing Baseline Environmental Assessments, Due Care Plans, Leaking Underground Storage Tank reports, and Part 201 No Further Action reports.

Years Experience: <1 - ASTI ENVIRONMENTAL
26 - OTHER FIRMS/AGENCIES

10.9 MSHDA Phase I Letter of Reliance

ASTI ENVIRONMENTAL

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10448 Citation Drive, Suite 100
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Mailing Address:
P.O. Box 2160
Brighton, MI 48116-2160
800 395-ASTI
Fax: 810.225.3800

www.asti-env.com

April 16, 2020

PRIVILEGED AND CONFIDENTIAL

Mr. Dan Lince
Environmental Manager
Rental Development Division
Michigan State Housing Development Authority
735 E. Michigan Avenue
Lansing, Michigan 48912

RE: Phase I ESA for: Left Field, 2610 Cochrane Street, Detroit, Michigan, ASTI Project No. 11456, dated April 16, 2020

Dear Mr. Lince:

Please find enclosed the Phase I Environmental Site Assessment for the subject property dated April 16, 2020 to the Michigan State Housing Development Authority.

It is my understanding that the information contained in the Phase I Environmental Site Assessment will be used by the Authority in considering proposed financing of residential development of the subject property and, furthermore, that the Authority may rely upon the Phase I Environmental Site Assessment as if it was issued to the Authority.

I **represent** that the attached is a true, correct and complete copy of the Phase I Environmental Site Assessment for the above captioned property and that the report represents my professional opinion of the site as of this date and that I meet the definition of an Environmental Professional as defined in Section 312.10 of 40 CFR 312. I also **represent** that the Phase I Environmental Site Assessment including the evaluation, recommendations, and conclusions as of this date has been performed in conformance with the scope and limitations of the ASTM Practice E 1527-13, ASTM Practice E 2600-15, and MSHDA's Environmental Review Requirements for 2020.

Sincerely,

ASTI Environmental

Anthony Spencer, EP
Associate III

10.10 Copy of Environmental Professional Insurance Certificate

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 08/13/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER	CONTACT NAME: Sandy Watterson	
Daly Merritt Insurance 3099 Biddle Avenue Wyandotte MI 48192	PHONE (A/C, No, Ext): (734) 283-1400	FAX (A/C, No): (734) 283-1197
	E-MAIL ADDRESS: sandy.watterson@dalymerritt.com	

INSURED	INSURER(S) AFFORDING COVERAGE	NAIC #
Applied Science & Technology Inc. dba ASTI Environmental 10448 Citation Drive, Suite 100 Brighton MI 48116	INSURER A : Illinois Union Insurance Company	27960
	INSURER B : Cincinnati Insurance Co.	10677
	INSURER C : Accident Fund Ins. Co. of Am.	10166
	INSURER D :	
	INSURER E :	
	INSURER F :	

COVERAGES **CERTIFICATE NUMBER:** CL198217543 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☒ POLICY ☐ PRO-JECT ☐ LOC ☐ OTHER:			G24038002 012	08/06/2019	08/06/2020	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG $	$ 1,000,000 $ 100,000 $ 5,000 $ 1,000,000 $ 2,000,000 $ 2,000,000 $
B	AUTOMOBILE LIABILITY ☒ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☒ HIRED AUTOS ONLY ☒ NON-OWNED AUTOS ONLY			EBA0159852	08/06/2019	08/06/2020	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) Uninsured motorist	$ 1,000,000 $ $ $ $ 1,000,000
A	☐ UMBRELLA LIAB ☐ OCCUR ☒ EXCESS LIAB ☐ CLAIMS-MADE ☐ DED ☐ RETENTION $			G24038014 012	08/06/2019	08/06/2020	EACH OCCURRENCE AGGREGATE $	$ 7,000,000 $ 7,000,000 $
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N ☐ (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A		WCV8009416	08/06/2019	08/06/2020	☒ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	 $ 1,000,000 $ 1,000,000 $ 1,000,000
A	Contractors Pollution Professional Liability			G24038002 012	08/06/2019	08/06/2020	Ea Poll Condition/Gen Ag Each Claim/Gen Agg	$1M/$2M $1M/$2M

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Michigan State Housing Development Authority is named as Additional Insured, ATIMA.

CERTIFICATE HOLDER

Michigan State Housing Development Authority
735 East Michigan Avenue
Lansing MI 48909

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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ATTACHMENTS
(Adobe's Attachment Panel/Sidebar of Provided Digital Phase I ESA)

- Phase II ESA – DRAFT, Tiger Stadium, 2121 Trumbull Avenue (A.K.A 1620 Michigan Avenue), Detroit, Michigan dated February 16, 2007
- Due Care Plan, Section 7A Compliance Analysis, Tiger Stadium Property, 2121 Trumbull Avenue, Detroit, Michigan, dated November 5, 2007
- Baseline Environmental Assessment, Detroit PAL – Parcels 1 and 2, 1620 Michigan Avenue, Detroit, Michigan dated July 18, 2016

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- **ENVIRONMENTAL ASSESSMENTS AND IMPACT STATEMENTS**
- **ENVIRONMENTAL OPPORTUNITIES ASSESSMENT**
- **GIS MAPPING**
- **HAZARD MITIGATION PLANNING**
- **MINING AND RECLAMATION ASSISTANCE**
- **REMEDIATION IMPLEMENTATION, OPERATION AND MAINTENANCE**
- **PHASE I ESA AND ENVIRONMENTAL DUE DILIGENCE ASSESSMENTS**
- **REGULATORY COMPLIANCE AND PERMITTING**
- **SOIL AND GROUNDWATER ASSESSMENTS**
- **SOIL AND GROUNDWATER REMEDIATION**
- **STORAGE TANK COMPLIANCE AND CLOSURE**
- **THREATENED AND ENDANGERED SPECIES SURVEYS**
- **WATERSHED AND STORMWATER MANAGEMENT PROGRAMS**
- **WETLAND DELINEATION, PERMITTING, MITIGATION AND BANKING**

ASTI ENVIRONMENTAL
Detroit/Grand Rapids/Brighton

Phone: 1-800-395-2784
www.asti-env.com
Email: environmental@asti-env.com

Attachment B

Phase II Environmental Site Assessment, February 3, 2021

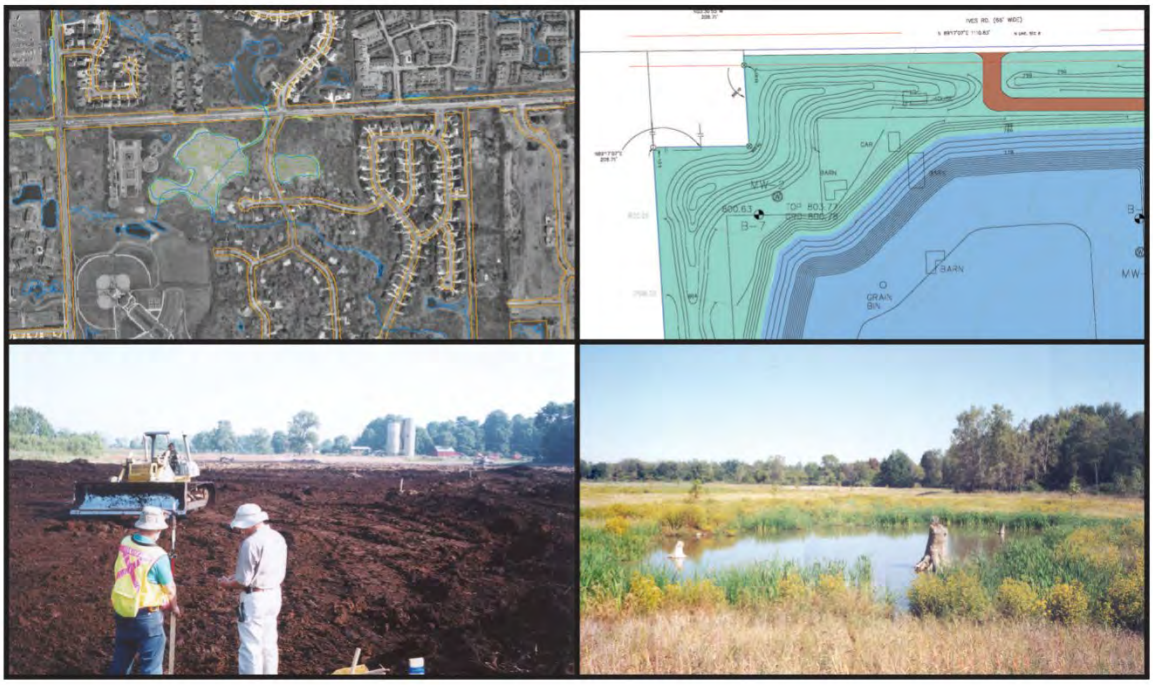
Limited Phase II Environmental Site Assessment

Left Field
2610 Cochrane Street
Detroit, Michigan

American Community Developers, Inc.

February 3, 2021

ASTI ENVIRONMENTAL



ASTI
ENVIRONMENTAL

Limited Phase II Environmental Site Assessment

Left Field
2610 Cochrane Street
Detroit, Michigan

February 3, 2021

Prepared For:

American Community Developers, Inc.
20250 Harper Avenue
Detroit, Michigan 48225

And

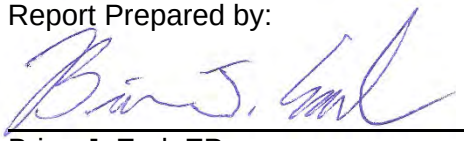
Michigan State Housing Development Authority
735 E. Michigan Avenue
Lansing, Michigan 48912

Report Prepared By:

ASTI Environmental
10448 Citation Drive, Suite 100
Brighton, Michigan 48116
(810) 225-2800

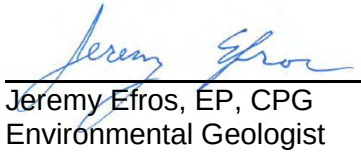
ASTI Project No. 1-11456

Report Prepared by:



Brian J. Earl, EP
Hydrogeologist

Report Reviewed by:



Jeremy Efros, EP, CPG
Environmental Geologist

ASTI ENVIRONMENTAL

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FIGURES

1 Site Location Map
2 Soil Boring Location Map

TABLE

1 Summary of Soil Sample Analytical Results

ATTACHMENTS

A Soil Boring Logs
B Laboratory Analytical Reports and Chain-of-Custody Documentation

1.0 INTRODUCTION

ASTI Environmental (ASTI) was retained by American Community Developers, Inc. to conduct a Limited Phase II Environmental Site Assessment (ESA) of the property located at 2610 Cochrane Street in Detroit, Wayne County, Michigan (Subject Property). This Limited Phase II ESA was prepared for the benefit of American Community Developers, Inc. and the Michigan State Housing Development Authority (MSHDA) and ASTI acknowledges that said parties may rely upon the contents and conclusions presented in this report. The Subject Property consists of approximately 1.37 acres of land on one parcel with Parcel ID 08000580-3. A Site Location Map is provided as Figure 1.

The site investigation was conducted in accordance with ASTI's proposal dated December 15, 2020.

2.0 PURPOSE AND SUBJECT PROPERTY HISTORY AND INFORMATION

2.1 Purpose

ASTI completed a Phase I ESA for the Subject Property on April 16, 2020. The Phase I ESA identified the following recognized environmental condition (REC) in regard to the Subject Property:

- Per the findings of the Baseline Environmental Assessment (BEA), dated July 18, 2016, the Subject Property is a "facility" as defined in Part 201 of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as Amended (Part 201). The basis of the BEA is concentrations of metals above Part 201 GRCC and the primary exposure pathway is direct contact.

  Results at the Subject Property may vary since the associated Phase II ESA, dated February 16, 2007, did not include sampling locations on the Subject Property. The concern appears to be fill material based on the information reviewed. One pile of apparent fill material (soil with intermixed brick debris) is located on the southwest portion of the Subject Property and it appears to have been placed there during offsite construction activities.

The purpose of the Limited Phase II ESA was to assess if impacts have occurred on the Subject Property from this REC.

2.2 Historical Uses of the Subject Property

Based on the research documented in the Phase I ESA, the Subject Property was developed with an alley, roadway, grocery store, dwellings, and residential outbuildings as early as 1884. The south portion was redeveloped with spectator and concession areas for Tiger Stadium in the 1940s. Developments on the north portion were redeveloped as surface parking lots in the 1950s and 1960s. Tiger Stadium was demolished in 2008 and 2009 but had been vacant since 1999. Since then, the Subject Property has only been used as a staging area for nearby construction activities.

2.3 Current Uses of the Subject Property

The Subject Property is currently vacant with no obvious use.

2.4 Existing Infrastructure Features

The Subject Property is currently undeveloped. Potable water, storm water, and sewerage services are available to the Subject Property through the city of Detroit. Electrical and natural gas utilities are available to the Subject Property through DTE.

3.0 SOIL BORING LOCATIONS

On January 14, 2021, ASTI supervised the completion of four soil borings (SB-1 through SB-4) at the Subject Property using a direct-push Geoprobe® drill rig. The soil borings were advanced to depth of either 10 or 15 feet below ground surface (bgs). Groundwater was not encountered in any of the soil borings. A Soil Boring Location Map is provided as Figure 2. Boring/sample ID, boring/sample locations, and depth were as follows:

Boring/Sample ID	Boring/Sample Location	Depth of Boring
SB-1	Southeast corner of the Subject Property	15 feet
SB-2	Southwest corner of the Subject Property	10 feet
SB-3	Northwest corner of the Subject Property	10 feet
SB-4	Northeast corner of the Subject Property	10 feet

4.0 SAMPLE COLLECTION PROCEDURES

The soil borings were advanced to 10 or 15 feet bgs using a direct-push Geoprobe® drill rig. Using the drill rig, soil was extracted from the ground in pre-cleaned, 5-foot-long, acetate liners. Soil encountered during field activities was identified by ASTI's field personnel, examined for visual and/or olfactory evidence of impact, and screened using a photoionization detector (PID) with notes recorded in a field logbook. Prior to sampling, the PID was calibrated to manufacturer specifications using 100 parts per million (ppm) isobutylene calibration gas. All down-hole equipment was decontaminated using an Alconox® wash and clean water rinse prior to and between borings to minimize the risk of cross contamination of the samples.

ASTI collected two soil samples from borings SB-1, SB-2, and SB-3. Only one sample was collected from boring SB-4. The soil samples were collected into laboratory certified clean, unpreserved 8-ounce glass jars and 40-ml glass vials preserved in the field with methanol, placed on ice, and submitted to Fibertec Environmental Services (Fibertec) in Holt, Michigan under standard chain-of-custody procedures.

A duplicate soil sample (Dup-1s) was collected from SB-3 (6-7') for quality assurance/quality control (QA/QC) purposes. In addition, a methanol blank was maintained with the samples during sampling and transport. The soil samples were analyzed for volatile organic compounds (VOCs) by US EPA Method 8260D, polynuclear aromatic hydrocarbons (PNAs) by US EPA Method 8270E, and the Michigan 10 metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc) by US EPA Methods 6020A and 7471B.

Sample depth, location rationale, and analysis are provided in the following table.

Boring	Sample Matrix	Sample Depth	Rationale for sample depth	Analysis
SB-1	Soil	0.5-1'	Shallow sub-surface soils	PNAs and MI 10 Metals
		4-4.75'	Bottom of fill materials	VOCs, PNAs, MI 10 Metals

Boring	Sample Matrix	Sample Depth	Rationale for sample depth	Analysis
SB-2	Soil	0.5-1’	Shallow sub-surface soils	PNAs and MI 10 Metals
		5-6’	Within a sand layer	VOCs, PNAs, MI 10 Metals
SB-3	Soil	0.5-1’	Shallow sub-surface soils	PNAs and MI 10 Metals
		6-7’	Depth of lithologic interface	VOCs, PNAs, MI 10 Metals
SB-4	Soil	0.5-1’	Shallow sub-surface soils	PNAs and MI 10 Metals

5.0 SOIL AND GROUNDWATER CHARACTERISTICS

The following sections describe the encountered soil and groundwater conditions during the investigation.

5.1 Soil

The general subsurface lithology encountered in soil borings underlying surface cover (gravel, topsoil, and/or concrete) consisted of dark brown, well sorted sand extending to depths of between 1-foot (SB-4) and 2 feet (SB-2) bgs except in SB-1 where no sand was encountered. The sand was underlain by silty clay stratum that extended to the maximum depth explored of each boring with the exception of SB-4, which had a sand lens from 1.5 to 7 feet bgs before the silty clay stratum was encountered again. No staining, odors, or elevated PID readings were noted in the soil borings. Refer to the boring logs included as Attachment A for more details on the encountered stratigraphy.

5.2 Groundwater

Groundwater was not encountered in the soil borings.

6.0 PATHWAY EVALUATION

The Michigan Department of Environment, Great Lakes, and Environment (EGLE) Generic Residential Cleanup Criteria (GRCC) used for comparison of the soil analytical for the Subject Property under Part 201 of Michigan's Natural Resources and Environmental Protection Act, 1994 PA 451, as Amended (Part 201) are the drinking water protection (DWP), groundwater surface water interface protection (GSIP), direct contact (DC), soil volatilization to indoor air inhalation (SVIAI), and particulate soil inhalation (PSI).

In addition, the soil sample results were compared to the EGLE residential volatilization to indoor air pathway (VIAP) screening levels.

7.0 ANALYTICAL RESULTS

Soil Analytical

VOCs

The laboratory analytical results for the soil samples reported no VOCs were detected above the laboratory reporting limits in the samples analyzed for VOCs..

PNAs

The laboratory analytical results for the soil samples reported concentrations of the PNAs fluoranthene and phenanthrene exceeded the GRCC for GSIP in soil sample SB-3 (0.5-1'). The phenanthrene concentration also exceeded the VIAP screening level in this sample. In addition, the PNA benzo(a)pyrene exceeded the GRCC for DC in soil sample SB-3 (0.5-1'). No other PNAs were detected at concentrations exceeding the GRCC or VIAP in SB-3 (0.5-1') or the remainder of the soil samples.

Metals

The laboratory analytical results for the soil samples reported concentrations of arsenic exceeding the GRCC for DWP, GSIP, and/or DC in soil samples SB-1 (0.5-1'), SB-1 (4-4.75'), SB-2 (0.5-1'), SB-2 (5-6'), and SB-3 (6-7').

Of these samples, SB-1 (4-4.75'), SB-2 (5-6'), and SB-3 (6-7') were collected in a native clay. The Subject Property is located within the Huron-Erie Glacial Lobe and these samples were collected in native soils. Following Part 324.20101(e)(ii) of NREPA Act 451 of 1994 for use of regional background, the regional background concentration for arsenic in the Huron-Erie Glacial Lobe is 22,800 µg/kg in clay. The arsenic concentrations in SB-1 (4-4.75'), SB-2 (5-6'), and SB-3 (6-7') were 8,000 µg/kg, 8,400 µg/kg, and 8,000 µg/kg, respectively. Therefore, the arsenic concentrations reported in these samples fall within the regional background concentration and do not represent exceedances of the GRCC or releases.

Mercury was detected in the sample from SB-1 (0.5-1') at a concentration exceeding the GRCC for GSIP. In addition, the detected concentration also exceeded the VIAP screening level.

The metal lead was reported at a concentration below the GRCC but above 75,000 µg/kg in soil sample SB-1 (0.5-1') and therefore this sample was additionally analyzed for fine and coarse fraction lead. Results of the fine and coarse fraction lead analysis were below the GRCC.

No other metals were reported above the GRCC.

The Laboratory Analytical Reports and Chain-of-Custody documentation for this Limited Phase II ESA are provided as Attachment B.

8.0 CONCLUSIONS AND RECOMMENDATIONS

The laboratory analytical results for the soil samples collected at the Subject Property identified benzo(a)pyrene, fluoranthene, phenanthrene, arsenic, and mercury exceeding one or more of the EGLE Part 201 GRCC. It is ASTI's opinion that the Subject Property is a "facility" as defined in Part 201. ASTI opines that the data provides sufficient information to support a professional opinion that a release of hazardous substances and/or petroleum products has occurred at the Subject Property with respect to the REC assessed.

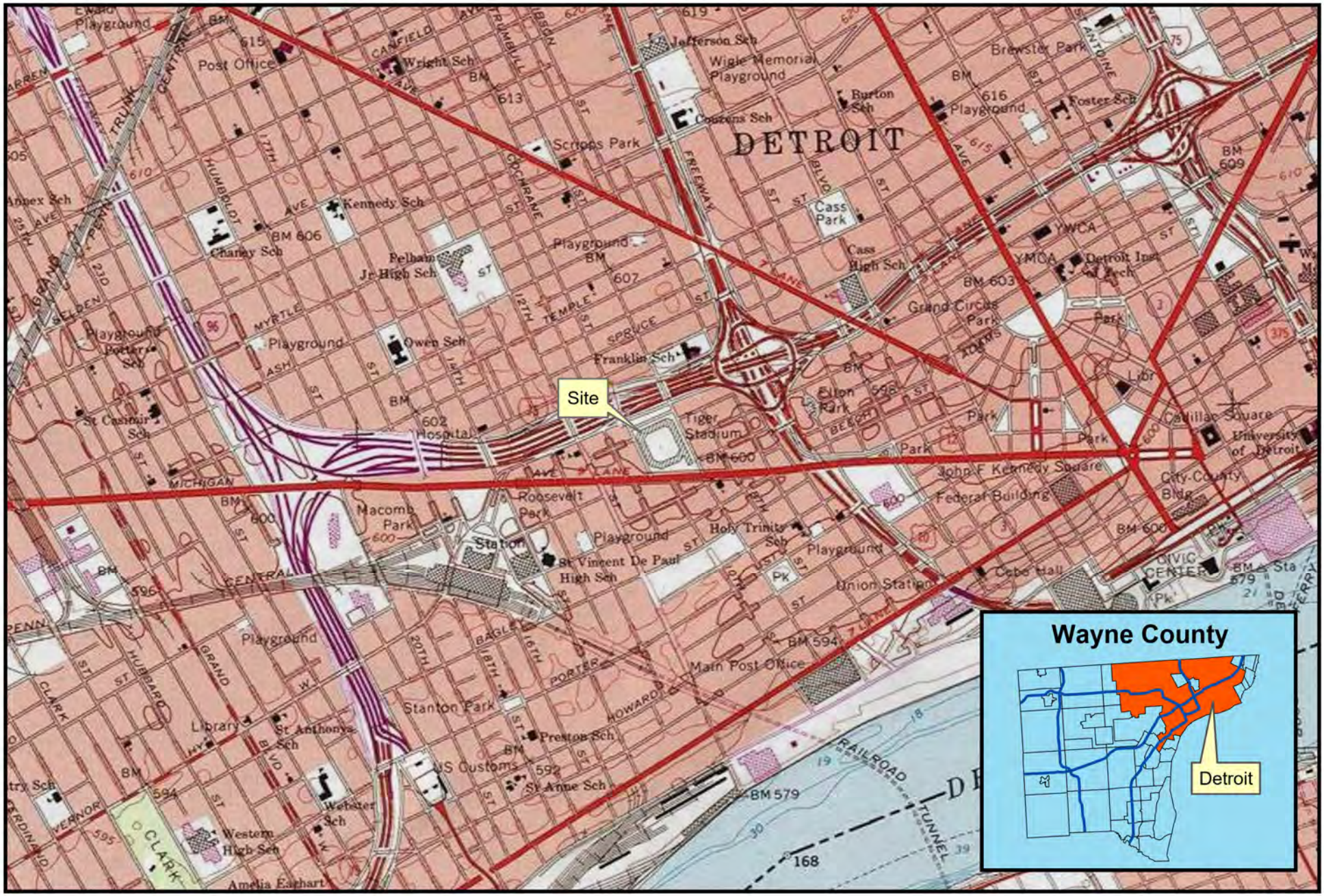
ASTI recommends that American Community Developers, Inc. have a Baseline Environmental Assessment (BEA) prepared for the Subject Property to obtain statutory liability protection for the pre-existing contamination. Owners or operators of a facility that follow the procedures of Part 201, and have not caused the impacts, are not liable for any historical contamination identified; however, in accordance with Part 20107(a), a person who owns a property and has knowledge that it is a facility must prepare a written due care plan and must comply with the following due care obligations:

- undertake measures as necessary to prevent exacerbation of the existing contamination.
- exercise due care by undertaking response activities necessary to mitigate unacceptable exposure to hazardous substances and to allow for the intended use of the facility in a manner that protects the public health and safety.
- take reasonable precautions against the foreseeable acts or omissions of a third party and the resultant consequences of those acts or omissions.
- provide reasonable cooperation/access to persons conducting cleanup
- comply with established land use or resource use restrictions
- refrain from interfering with restrictions or response activities

ASTI recommends that American Community Developers, Inc. have a Due Care Plan (DCP) completed for the Subject Property in order to satisfy the owner and/or operator's Part 20107(a) due care obligations.

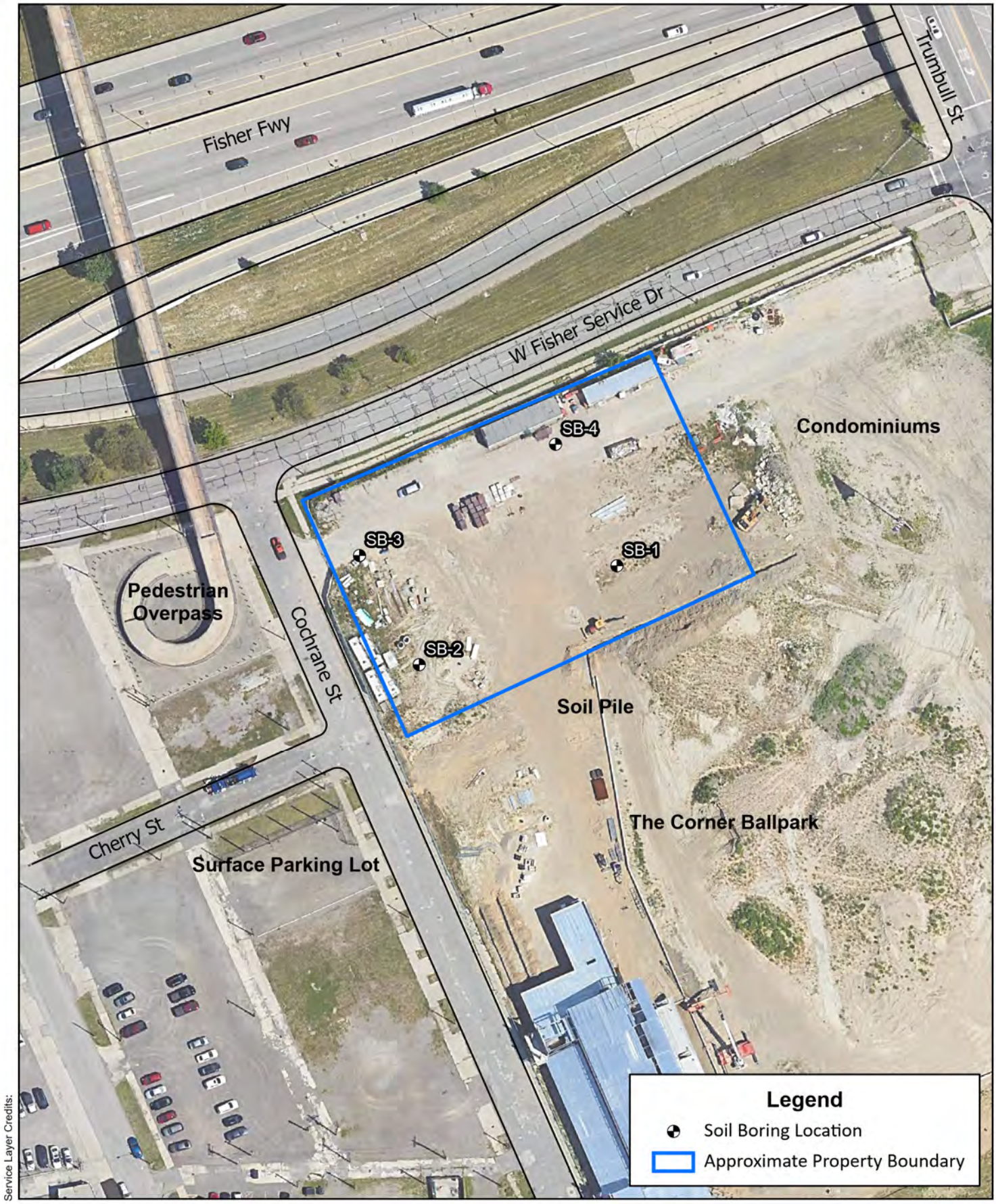
FIGURES

1 Site Location Map
2 Soil Boring Location Map



Created for: American Community Developers
Created by: RMH, January 20, 2021, ASTI Project 1-11456

Figure 1 - Site Location Map



Service Layer Credits:

Left Field

2610 Cochrane,
Detroit, MI

0 37.5 75 150 Feet

N

ASTI Environmental

Client: American Community Developers
Created by: RMH, January 20, 2021, ASTI Project 1-11456

Figure 2 - Soil Boring Location Map

TABLE

1 Summary of Soil Sample Analytical Results

Table 1 Summary of Soil Sample Analytical Results
Left Field, 2610 Cochrane Street, Detroit, Michigan
ASTI File No. 1-11456

Parameters (µg/kg)	Statewide Default Background Levels*	Regional Background Concentration^	Residential Drinking Water Protection Criteria*	Groundwater Surface Water Interface Protection Criteria*	Residential Soil Volatilization to Indoor Air Inhalation Criteria*	Residential Finite Source Volatile Soil Inhalation for 5 Meter Source Thickness	Residential Particulate Soil Inhalation Criteria*	Residential Direct Contact Criteria*	Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels	SB-1 (0.5-1') 1/14/2021 µg/kg	SB-1 (4-4.75') 1/14/2021 µg/kg	SB-2 (0.5-1') 1/14/2021 µg/kg	SB-2 (5-6') 1/14/2021 µg/kg	SB-3 (0.5-1') 1/14/2021 µg/kg	SB-3 (6-7') 1/14/2021 µg/kg	SB-4 (0.5-1') 1/14/2021 µg/kg	Dup-1s SB-3 (6-7') 1/14/2021 µg/kg	Meth Blank 10/29/2020 µg/kg
Metals																		
Arsenic	5,800	22,800	**4,600**	**4,600**	NLV	NLV	720,000	**7,500**	NA	**7,500**	*8,000*	**8,600**	*8,400*	5,000	*8,000*	1,400	5,400	~
Barium	75,000	172,000	1,300,000	(G)	NLV	NLV	330,000,000	37,000,000	NA	120,000	48,000	58,000	42,000	71,000	50,000	44,000	68,000	~
Cadmium	1,200	2,000	6,000	(G,X)	NLV	NLV	1,700,000	550,000	NA	470	140	180	150	240	140	140	170	~
Chromium, Total	18,000 (total)	30,400	1,000,000,000 (D)	(G,X)	NLV	NLV	330,000,000	790,000,000	NA	15,000	16,000	18,000	15,000	13,000	18,000	3,600	25,000	~
Copper	32,000	23,500	5,800,000	(G)	NLV	NLV	130,000,000	20,000,000	NA	28,000	11,000	19,000	16,000	14,000	18,000	1,200	18,000	~
Lead	21,000	24,100	700,000	(G,X)	NLV	NLV	100,000,000	400,000	NA	190,000	11,000	42,000	8,300	68,000	7,800	1,200	9,700	~
Lead, Fine Fraction	21,000	ND	700,000	(G,X)	NLV	NLV	100,000,000	400,000	NA	50,500	~	~	~	~	~	~	~	~
Lead, Coarse Fraction	21,000	ND	700,000	(G,X)	NLV	NLV	100,000,000	400,000	NA	66,700	~	~	~	~	~	~	~	~
Lead, Total (Calculated)	21,000	ND	700,000	(G,X)	NLV	NLV	100,000,000	400,000	NA	65,400	~	~	~	~	~	~	~	~
Mercury, Total	130	120	1,700	**50 (M); 1.2**	48,000	52,000	20,000,000	160,000	**22**	**170**	<50	77	<50	55	<50	<50	<50	~
Selenium	410	1,200	4,000	400	NLV	NLV	130,000,000	2,600,000	NA	380	230	340	<200	220	260	<200	360	~
Silver	1,000	1,200	4,500	100 (M); 27	NLV	NLV	6,700,000	2,500,000	NA	<100	<100	<100	<100	<100	<100	<100	<100	~
Zinc	47,000	85,800	2,400,000	(G)	NLV	NLV	ID	170,000,000	NA	1,500,000	45,000	63,000	42,000	77,000	44,000	16,000	57,000	~
PNAs																		
Anthracene	NA	NA	41,000	ID	1,000,000,000 (D)	1,400,000,000	67,000,000,000	230,000,000	13,000,000	<330	<330	<330	<330	920	<330	<330	<330	~
Benzo(a)anthracene	NA	NA	NLL	NLL	NLV	NLV	ID	20,000	160,000	510	<330	<330	<330	4,100	<330	<330	<330	~
Benzo(a)pyrene	NA	NA	NLL	NLL	NLV	NLV	1,500,000	**2,000**	NA	420	<330	<330	<330	**4,000**	<330	<330	<330	~
Benzo(b)fluoranthene	NA	NA	NLL	NLL	ID	ID	ID	20,000	NA	590	<330	<330	<330	5,400	<330	<330	<330	~
Benzo(g,h,i)perylene	NA	NA	NLL	NLL	NLV	NLV	800,000,000	2,500,000	NA	<330	<330	<330	<330	2,900	<330	<330	<330	~
Benzo(k)fluoranthene	NA	NA	NLL	NLL	NLV	NLV	ID	200,000	NA	<330	<330	<330	<330	2,000	<330	<330	<330	~
Chrysene	NA	NA	NLL	NLL	ID	ID	ID	2,000,000	NA	370	<330	<330	<330	3,500	<330	<330	<330	~
Dibenzo(a,h)anthracene	NA	NA	NLL	NLL	NLV	NLV	ID	2,000	NA	<330	<330	<330	<330	650	<330	<330	<330	~
Fluoranthene	NA	NA	730,000	**5,500**	1,000,000,000 (D)	740,000,000	9,300,000,000	46,000,000	NA	750	<330	<330	<330	**7,600**	<330	<330	<330	~
Indeno(1,2,3-cd)pyrene	NA	NA	NLL	NLL	NLV	NLV	ID	20,000	NA	<330	<330	<330	<330	2,800	<330	<330	<330	~
Phenanthrene	NA	NA	56,000	**2,100**	2,800,000	160,000	6,700,000	1,600,000	**1,700**	460	<330	<330	<330	**3,300**	<330	<330	<330	~
Pyrene	NA	NA	480,000	ID	1,000,000,000 (D)	650,000,000	6,700,000,000	29,000,000	25,000,000	840	<330	<330	<330	7,900	<330	<330	<330	~
Remaining PNAs	NA	NA	CS	CS	CS	CS	CS	CS	CS	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	~
VOCs																		
All VOCs	NA	NA	CS	CS	CS	CS	CS	CS	CS	~	<RL	~	<RL	~	<RL	~	<RL	<RL

*Per R299.46, June 25, 2018
^Represents the most conservative regional background concentration for the Huron-Erie Lobe from the Michigan Background Soil Survey 2005 (Updated 2015) Tables 1, 3, or 4.
~ Parameter not tested for at his location.
ID-Inadequate data to develop criterion.
NA-Not available.
NLL-Hazardous substance is not likely to leach under most soil conditions.
NLV-Hazardous substance is not likely to volatilize under most conditions.
C-Value presented is a screening level based on the chemical-specific generic soil saturation concentration (Csat)
D-Calculated criterion exceeds 100%, hence it is reduced to 100% or 1.0e+9 ppb.
G-Groundwater Surface Water Interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water.
M-Calculated criterion is below the analytical target detection limit, therefore, the criterions defaults to the target detection limit.
X-The Groundwater Surface Water Interface (GSI) criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source.
CS-Compound specific
<RL-Below reporting limit
Italicized results were samples collected in native sand or clay and were compared to and found to be below the regional background concentration

ATTACHMENTS

Attachment A

Soil Boring Logs

ASTI Environmental
10448 Citation Dr., Suite 100
Brighton, MI 48116

SOIL BORING LOG

Boring Data	
Boring ID:	**SB-1**
Total Depth:	15' bgs

Proj. Name:	Left Field
Proj. Number:	1-11456

Date Completed:	1/14/2021

Site Address:	2610 Cochrane Street
	Detroit, MI

MW Data	
Size:	NA
Type:	NA
Screen Length:	NA
Well Depth:	NA
GW Depth (▼):	NA

Drilled by:	Fibertec			
Method:	Direct push probe			
Geologist:	Mitchel Dykla			

Depth From	Depth To	Description	PID (ppm)	Sample Depth
0	4"	Gravel	0.0	
4"	4.75'	SILTY CLAY, Trace Fine Sand, Trace Gravel, Brick Pieces, Dark Brown, Medium Stiff, (fill)	0.0	Soil at 0.5'-1' and 4'-4.75'
4.75'	6'	SILTY CLAY, Trace Fine Sand, Trace Gravel, Brown with Gray Mottles, Stiff, Ocasional Silt Seems, (silty clay)	0.0	
6'	12'	SILTY CLAY, Trace Fine Sand, Trace Gravel, Brown, Stiff, Ocasional Silt Seems, (silty clay)	0.0	
12'	15'	SILTY CLAY, Trace Fine Sand, Trace Gravel, Gray, Medium Stiff, (silty clay)	0.0	
		End of Boring		

ppm = parts per million
MW = monitoring well
bgs = below ground surface
( ) = USDA soil texture

ASTI Environmental
10448 Citation Dr., Suite 100
Brighton, MI 48116

SOIL BORING LOG

Boring Data	
Boring ID:	**SB-2**
Total Depth:	10' bgs

Proj. Name:	Left Field
Proj. Number:	1-11456

Date Completed:	1/14/2021

Site Address:	2610 Cochrane Street Detroit, MI

MW Data	
Size:	NA
Type:	NA
Screen Length:	NA
Well Depth:	NA
GW Depth (▼):	NA

Drilled by:	Fibertec			
Method:	Direct push probe			
Geologist:	Mitchel Dykla			

Depth From	Depth To	Description	PID (ppm)	Sample Depth
0	2"	Topsoil	0.0	
2"	2'	SAND, Trace Very Fine Sand, Fine to Medium Grained, Trace Gravel, Trace Silt, Dark Brown, Moist, Loose, (sand)	0.0	Soil at 0.5'-1'
2'	5'	SILTY CLAY, Trace Fine Sand, Trace Gravel, Brown with Gray Mottles, Stiff, Ocasional Silt Seems, (silty clay)	0.0	
5'	7'	SILTY SAND, Trace Gravel, Fine to Very Fine Grained, Brown, Moist, Medium Dense, (sandy loam)	0.0	Soil at 5'-6'
7'	10'	SILTY CLAY, Trace Fine Sand, Trace Gravel, Gray, Medium Stiff, (silty clay)	0.0	
		End of Boring		

ppm = parts per million
MW = monitoring well
bgs = below ground surface
( ) = USDA soil texture

ASTI Environmental
10448 Citation Dr., Suite 100
Brighton, MI 48116

SOIL BORING LOG

Boring Data	
Boring ID:	**SB-3**
Total Depth:	10' bgs

Proj. Name:	Left Field
Proj. Number:	1-11456

Date Completed:	1/14/2021

Site Address:	2610 Cochrane Street
	Detroit, MI

MW Data	
Size:	NA
Type:	NA
Screen Length:	NA
Well Depth:	NA
GW Depth (▼):	NA

Drilled by:	Fibertec
Method:	Direct push probe
Geologist:	Mitchel Dykla

Depth From	Depth To	Description	PID (ppm)	Sample Depth
0	1"	Gravel	0.0	
1"	6"	Concrete		
6"	1.5'	SAND, Trace Very Fine Sand, Fine to Medium Grained, Trace Gravel, Trace Silt, Dark Brown, Moist, Loose, (sand)	0.0	Soil at 0.5'-1'
1.5'	6'	SILTY CLAY, Trace Fine Sand, Trace Gravel, Brown with Gray Mottles, Stiff, (silty clay)	0.0	
6'	10'	SILTY CLAY, Trace Fine Sand, Trace Gravel, Brown with Gray Mottles, Stiff, Ocasional Silt Seems, (silty clay)	0.0	Soil at 6'-7'
		End of Boring		

ppm = parts per million
MW = monitoring well
bgs = below ground surface
( ) = USDA soil texture

ASTI Environmental
10448 Citation Dr., Suite 100
Brighton, MI 48116

SOIL BORING LOG

Boring Data	
Boring ID:	**SB-4**
Total Depth:	10' bgs

Proj. Name:	Left Field
Proj. Number:	1-11456
Site Address:	2610 Cochrane Street
	Detroit, MI
Drilled by:	Fibertec
Method:	Direct push probe
Geologist:	Mitchel Dykla

Date Completed:	1/14/2021

MW Data	
Size:	NA
Type:	NA
Screen Length:	NA
Well Depth:	NA
GW Depth (▼):	NA

Depth From	Depth To	Description	PID (ppm)	Sample Depth
0	2"	Gravel	0.0	
2"	1'	SAND, Trace Very Fine Sand, Fine to Medium Grained, Trace Gravel, Trace Silt, Dark Brown, Moist, Loose, (sand)	0.0	Soil at 0.5'-1'
1'	1.5'	SILTY CLAY, Trace Fine Sand, Trace Gravel, Brown, Stiff, (silty clay)	0.0	
1.5'	7'	SAND, Trace Fine Sand, Trace Gravel, Medium to Coarse Grained, Loose, (sand)	0.0	
7'	10'	SILTY CLAY, Trace Fine Sand, Trace Gravel, Brown, Stiff, (silty clay)	0.0	
		End of Boring		

ppm = parts per million
MW = monitoring well
bgs = below ground surface
( ) = USDA soil texture

Attachment B

Laboratory Analytical Reports and Chain-of-Custody Documentation

Fibertec
environmental
services

Tuesday, January 26, 2021

Fibertec Project Number: 99913
Project Identification: Left Field (1-11456) /1-11456
Submittal Date: 01/15/2021

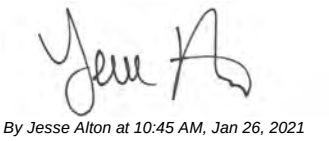
Mr. Brian Earl
Applied Science & Technology, Inc. - Brighton
10448 Citation Dr.
Suite 100
Brighton, MI 48116

Dear Mr. Earl,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,



By Jesse Alton at 10:45 AM, Jan 26, 2021

For Daryl P. Strandbergh
Laboratory Director

Enclosures

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-1 (0.5-1')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**08:39**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: 99913-001** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: SB-1 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**9**		%	1	1.0	01/18/21	MC210118	01/19/21	MC210118	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: 99913-001** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: SB-1 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**7500**		µg/kg	100	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
2. Barium	**120000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
3. Cadmium	**470**		µg/kg	50	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
4. Chromium	**15000**		µg/kg	500	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
5. Copper	**28000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
6. Lead	**190000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
7. Selenium	**380**		µg/kg	200	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
8. Silver	U		µg/kg	100	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
9. Zinc	**150000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA

Mercury by CVAAS **Aliquot ID: 99913-001** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: SB-1 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**170**		µg/kg	50	8.4	01/21/21	PM21A21A	01/21/21	M721A21A	JLH

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: 99913-001** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: SB-1 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
2. Acenaphthylene (SIM)	U		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
3. Anthracene (SIM)	U		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
4. Benzo(a)anthracene (SIM)	**510**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
5. Benzo(a)pyrene (SIM)	**420**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
6. Benzo(b)fluoranthene (SIM)	**590**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
9. Chrysene (SIM)	**370**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-1 (0.5-1')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**08:39**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: 99913-001** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: SB-1 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
11. Fluoranthene (SIM)	**750**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
12. Fluorene (SIM)	U		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
15. Naphthalene (SIM)	U		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
16. Phenanthrene (SIM)	**460**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
17. Pyrene (SIM)	**840**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-1 (4-4.75')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**08:39**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: 99913-002** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: SB-1 (4-4.75')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**12**		%	1	1.0	01/18/21	MC210118	01/19/21	MC210118	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: 99913-002** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: SB-1 (4-4.75')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**8000**		µg/kg	100	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
2. Barium	**48000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
3. Cadmium	**140**		µg/kg	50	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
4. Chromium	**16000**		µg/kg	500	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
5. Copper	**11000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
6. Lead	**11000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
7. Selenium	**230**		µg/kg	200	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
8. Silver	U		µg/kg	100	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
9. Zinc	**45000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA

Mercury by CVAAS **Aliquot ID: 99913-002** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: SB-1 (4-4.75')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	9.4	01/21/21	PM21A21A	01/21/21	M721A21A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: 99913-002A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SB-1 (4-4.75')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 2. Acrylonitrile	U	V+	µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
3. Benzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
4. Bromobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
5. Bromochloromethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
7. Bromoform	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
8. Bromomethane	U		µg/kg	200	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
9. 2-Butanone	U	V+	µg/kg	750	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-1 (4-4.75')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**08:39**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: 99913-002A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SB-1 (4-4.75')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
14. Carbon Tetrachloride	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
15. Chlorobenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
16. Chloroethane	U	V+	µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
17. Chloroform	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
18. Chloromethane	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
22. Dibromomethane	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
28. 1,2-Dichloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
32. 1,2-Dichloropropane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
33. cis-1,3-Dichloropropene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
35. Ethylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
40. Methylene Chloride	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
42. MTBE	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
43. Naphthalene	U		µg/kg	330	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
45. Styrene	U		µg/kg	64	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-1 (4-4.75')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**08:39**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: 99913-002A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SB-1 (4-4.75')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
49. Toluene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
53. Trichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
54. Trichlorofluoromethane	U	V+	µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
59. Vinyl Chloride	U		µg/kg	45	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
60. m&p-Xylene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
61. o-Xylene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 62. Xylenes	U		µg/kg	150	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: 99913-002** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: SB-1 (4-4.75')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	01/23/21	PS21A22B	01/25/21	S621A25C	RKB
2. Acenaphthylene (SIM)	U		µg/kg	330	10	01/23/21	PS21A22B	01/25/21	S621A25C	RKB
3. Anthracene (SIM)	U		µg/kg	330	10	01/23/21	PS21A22B	01/25/21	S621A25C	RKB
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	10	01/23/21	PS21A22B	01/25/21	S621A25C	RKB
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	10	01/23/21	PS21A22B	01/25/21	S621A25C	RKB
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	10	01/23/21	PS21A22B	01/25/21	S621A25C	RKB
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	10	01/23/21	PS21A22B	01/25/21	S621A25C	RKB
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	10	01/23/21	PS21A22B	01/25/21	S621A25C	RKB
9. Chrysene (SIM)	U		µg/kg	330	10	01/23/21	PS21A22B	01/25/21	S621A25C	RKB
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	10	01/23/21	PS21A22B	01/25/21	S621A25C	RKB
11. Fluoranthene (SIM)	U		µg/kg	330	10	01/23/21	PS21A22B	01/25/21	S621A25C	RKB
12. Fluorene (SIM)	U		µg/kg	330	10	01/23/21	PS21A22B	01/25/21	S621A25C	RKB
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	10	01/23/21	PS21A22B	01/25/21	S621A25C	RKB
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	10	01/23/21	PS21A22B	01/25/21	S621A25C	RKB
15. Naphthalene (SIM)	U		µg/kg	330	10	01/23/21	PS21A22B	01/25/21	S621A25C	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-1 (4-4.75')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**08:39**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: 99913-002** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: SB-1 (4-4.75')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
16. Phenanthrene (SIM)	U		µg/kg	330	10	01/23/21	PS21A22B	01/25/21	S621A25C	RKB
17. Pyrene (SIM)	U		µg/kg	330	10	01/23/21	PS21A22B	01/25/21	S621A25C	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-2 (0.5-1')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**08:58**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: 99913-003** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: SB-2 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**15**		%	1	1.0	01/18/21	MC210118	01/19/21	MC210118	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: 99913-003** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: SB-2 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**8600**		µg/kg	100	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
2. Barium	**58000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
3. Cadmium	**180**		µg/kg	50	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
4. Chromium	**18000**		µg/kg	500	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
5. Copper	**19000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
6. Lead	**42000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
7. Selenium	**340**		µg/kg	200	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
8. Silver	U		µg/kg	100	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
9. Zinc	**63000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA

Mercury by CVAAS **Aliquot ID: 99913-003** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: SB-2 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**77**		µg/kg	50	9.3	01/21/21	PM21A21A	01/21/21	M721A21A	JLH

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: 99913-003** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: SB-2 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
3. Anthracene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
9. Chrysene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-2 (0.5-1')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**08:58**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: 99913-003** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: SB-2 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
11. Fluoranthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
12. Fluorene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
15. Naphthalene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
16. Phenanthrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
17. Pyrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-2 (5-6')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**08:58**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: 99913-004** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: SB-2 (5-6')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**17**		%	1	1.0	01/18/21	MC210118	01/19/21	MC210118	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: 99913-004** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: SB-2 (5-6')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**8400**		µg/kg	100	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
2. Barium	**42000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
3. Cadmium	**150**		µg/kg	50	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
4. Chromium	**15000**		µg/kg	500	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
5. Copper	**16000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
6. Lead	**8300**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
7. Selenium	U		µg/kg	200	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
8. Silver	U		µg/kg	100	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
9. Zinc	**42000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA

Mercury by CVAAS **Aliquot ID: 99913-004** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: SB-2 (5-6')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	8.9	01/21/21	PM21A21A	01/21/21	M721A21A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: 99913-004A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SB-2 (5-6')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 2. Acrylonitrile	U	V+	µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
3. Benzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
4. Bromobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
5. Bromochloromethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
7. Bromoform	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
8. Bromomethane	U		µg/kg	200	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
9. 2-Butanone	U	V+	µg/kg	750	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-2 (5-6')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**08:58**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: 99913-004A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SB-2 (5-6')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
14. Carbon Tetrachloride	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
15. Chlorobenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
16. Chloroethane	U	V+	µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
17. Chloroform	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
18. Chloromethane	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
22. Dibromomethane	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
28. 1,2-Dichloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
32. 1,2-Dichloropropane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
33. cis-1,3-Dichloropropene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
35. Ethylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
40. Methylene Chloride	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
42. MTBE	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
43. Naphthalene	U		µg/kg	330	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
45. Styrene	U		µg/kg	71	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-2 (5-6')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**08:58**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: 99913-004A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SB-2 (5-6')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
49. Toluene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
50. 1,2,4-Trichlorobenzene	U		µg/kg	270	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
53. Trichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
54. Trichlorofluoromethane	U	V+	µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
59. Vinyl Chloride	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
60. m&p-Xylene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
61. o-Xylene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 62. Xylenes	U		µg/kg	150	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: 99913-004** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: SB-2 (5-6')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
3. Anthracene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
9. Chrysene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
11. Fluoranthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
12. Fluorene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
15. Naphthalene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-2 (5-6')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**08:58**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: 99913-004** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: SB-2 (5-6')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
16. Phenanthrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
17. Pyrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-3 (0.5-1')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:13**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: 99913-005** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: SB-3 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**16**		%	1	1.0	01/18/21	MC210118	01/19/21	MC210118	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: 99913-005** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: SB-3 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**5000**		µg/kg	100	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
2. Barium	**71000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
3. Cadmium	**240**		µg/kg	50	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
4. Chromium	**13000**		µg/kg	500	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
5. Copper	**14000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
6. Lead	**68000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
7. Selenium	**220**		µg/kg	200	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
8. Silver	U		µg/kg	100	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
9. Zinc	**77000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA

Mercury by CVAAS **Aliquot ID: 99913-005** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: SB-3 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	**55**		µg/kg	50	9.1	01/21/21	PM21A21A	01/21/21	M721A21A	JLH

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: 99913-005** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: SB-3 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
2. Acenaphthylene (SIM)	U		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
3. Anthracene (SIM)	**920**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
4. Benzo(a)anthracene (SIM)	**4100**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
5. Benzo(a)pyrene (SIM)	**4000**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
6. Benzo(b)fluoranthene (SIM)	**5400**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
7. Benzo(ghi)perylene (SIM)	**2900**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
8. Benzo(k)fluoranthene (SIM)	**2000**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
9. Chrysene (SIM)	**3500**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-3 (0.5-1')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:13**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: 99913-005** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: SB-3 (0.5-1')**

						Preparation		Analysis		
Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	P. Date	P. Batch	A. Date	A. Batch	Init.
10. Dibenzo(a,h)anthracene (SIM)	**650**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
11. Fluoranthene (SIM)	**7600**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
12. Fluorene (SIM)	U		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
13. Indeno(1,2,3-cd)pyrene (SIM)	**2800**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
15. Naphthalene (SIM)	U		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
16. Phenanthrene (SIM)	**3300**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
17. Pyrene (SIM)	**7900**		µg/kg	330	10	01/22/21	PS21A22B	01/22/21	S621A22A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-3 (6-7')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:13**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: 99913-006** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: SB-3 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**22**		%	1	1.0	01/18/21	MC210118	01/19/21	MC210118	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: 99913-006** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: SB-3 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**8000**		µg/kg	100	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
2. Barium	**50000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
3. Cadmium	**140**		µg/kg	50	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
4. Chromium	**18000**		µg/kg	500	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
5. Copper	**18000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
6. Lead	**7800**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
7. Selenium	**260**		µg/kg	200	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
8. Silver	U		µg/kg	100	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
9. Zinc	**44000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA

Mercury by CVAAS **Aliquot ID: 99913-006** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: SB-3 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	8.7	01/21/21	PM21A21A	01/21/21	M721A21A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: 99913-006A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SB-3 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 2. Acrylonitrile	U	V+	µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
3. Benzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
4. Bromobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
5. Bromochloromethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
7. Bromoform	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
8. Bromomethane	U		µg/kg	200	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
9. 2-Butanone	U	V+	µg/kg	750	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-3 (6-7')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:13**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: 99913-006A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SB-3 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
14. Carbon Tetrachloride	U		µg/kg	56	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
15. Chlorobenzene	U		µg/kg	56	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
16. Chloroethane	U	V+	µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
17. Chloroform	U		µg/kg	56	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
18. Chloromethane	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
22. Dibromomethane	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
27. 1,1-Dichloroethane	U		µg/kg	56	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
28. 1,2-Dichloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
32. 1,2-Dichloropropane	U		µg/kg	56	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
33. cis-1,3-Dichloropropene	U		µg/kg	56	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
34. trans-1,3-Dichloropropene	U		µg/kg	56	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
35. Ethylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
40. Methylene Chloride	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
42. MTBE	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
43. Naphthalene	U		µg/kg	330	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
45. Styrene	U		µg/kg	80	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-3 (6-7')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:13**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: 99913-006A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: SB-3 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
49. Toluene	U		µg/kg	56	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
50. 1,2,4-Trichlorobenzene	U		µg/kg	300	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
51. 1,1,1-Trichloroethane	U		µg/kg	56	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
52. 1,1,2-Trichloroethane	U		µg/kg	56	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
53. Trichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
54. Trichlorofluoromethane	U	V+	µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
59. Vinyl Chloride	U		µg/kg	56	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
60. m&p-Xylene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
61. o-Xylene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 62. Xylenes	U		µg/kg	150	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: 99913-006** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: SB-3 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
3. Anthracene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
9. Chrysene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
11. Fluoranthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
12. Fluorene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
15. Naphthalene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-3 (6-7')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:13**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: 99913-006** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: SB-3 (6-7')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
16. Phenanthrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
17. Pyrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-4 (0.5-1')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:28**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: 99913-007** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: SB-4 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**5**		%	1	1.0	01/18/21	MC210118	01/19/21	MC210118	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: 99913-007** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: SB-4 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**1400**		µg/kg	100	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
2. Barium	**44000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
3. Cadmium	**140**		µg/kg	50	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
4. Chromium	**3600**		µg/kg	500	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
5. Copper	**1200**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
6. Lead	**1200**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
7. Selenium	U		µg/kg	200	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
8. Silver	U		µg/kg	100	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA
9. Zinc	**16000**		µg/kg	1000	20	01/22/21	PT21A22B	01/22/21	T421A22A	CJA

Mercury by CVAAS **Aliquot ID: 99913-007** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: SB-4 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	9.3	01/21/21	PM21A21A	01/21/21	M721A21A	JLH

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: 99913-007** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: SB-4 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
3. Anthracene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
9. Chrysene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-4 (0.5-1')**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**09:28**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: 99913-007** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: SB-4 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
11. Fluoranthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
12. Fluorene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
15. Naphthalene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
16. Phenanthrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
17. Pyrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Dup-1s**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Water (Moisture) Content Dried at 105 ± 5°C **Aliquot ID: 99913-008** **Matrix: Soil/Solid**
Method: ASTM D2216-10 **Description: Dup-1s**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Percent Moisture (Water Content)	**21**		%	1	1.0	01/18/21	MC210118	01/19/21	MC210118	LET

Michigan 10 Elements by ICP/MS **Aliquot ID: 99913-008** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: Dup-1s**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Arsenic	**5400**		µg/kg	100	20	01/22/21	PT21A22C	01/22/21	T421A22A	CJA
2. Barium	**68000**		µg/kg	1000	20	01/22/21	PT21A22C	01/22/21	T421A22A	CJA
3. Cadmium	**170**		µg/kg	50	20	01/22/21	PT21A22C	01/22/21	T421A22A	CJA
4. Chromium	**25000**		µg/kg	500	20	01/22/21	PT21A22C	01/22/21	T421A22A	CJA
5. Copper	**18000**		µg/kg	1000	20	01/22/21	PT21A22C	01/22/21	T421A22A	CJA
6. Lead	**9700**		µg/kg	1000	20	01/22/21	PT21A22C	01/22/21	T421A22A	CJA
7. Selenium	**360**		µg/kg	200	20	01/22/21	PT21A22C	01/22/21	T421A22A	CJA
8. Silver	U		µg/kg	100	20	01/22/21	PT21A22C	01/22/21	T421A22A	CJA
9. Zinc	**57000**		µg/kg	1000	20	01/22/21	PT21A22C	01/22/21	T421A22A	CJA

Mercury by CVAAS **Aliquot ID: 99913-008** **Matrix: Soil/Solid**
Method: EPA 7471B **Description: Dup-1s**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Mercury	U		µg/kg	50	9.0	01/21/21	PM21A21A	01/21/21	M721A21A	JLH

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: 99913-008A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: Dup-1s**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acetone	U		µg/kg	1000	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 2. Acrylonitrile	U	V+	µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
3. Benzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
4. Bromobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
5. Bromochloromethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
6. Bromodichloromethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
7. Bromoform	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
8. Bromomethane	U		µg/kg	200	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
9. 2-Butanone	U	V+	µg/kg	750	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Dup-1s**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: 99913-008A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: Dup-1s**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
10. n-Butylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
11. sec-Butylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
12. tert-Butylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
13. Carbon Disulfide	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
14. Carbon Tetrachloride	U		µg/kg	53	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
15. Chlorobenzene	U		µg/kg	53	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
16. Chloroethane	U	V+	µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
17. Chloroform	U		µg/kg	53	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
18. Chloromethane	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
21. Dibromochloromethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
22. Dibromomethane	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
27. 1,1-Dichloroethane	U		µg/kg	53	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
28. 1,2-Dichloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
29. 1,1-Dichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
32. 1,2-Dichloropropane	U		µg/kg	53	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
33. cis-1,3-Dichloropropene	U		µg/kg	53	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
34. trans-1,3-Dichloropropene	U		µg/kg	53	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
35. Ethylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
36. Ethylene Dibromide	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
37. 2-Hexanone	U	V+	µg/kg	2500	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
38. Isopropylbenzene	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
40. Methylene Chloride	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
42. MTBE	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
43. Naphthalene	U		µg/kg	330	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
45. Styrene	U		µg/kg	75	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Dup-1s**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: 99913-008A** **Matrix: Soil/Solid**
Method: EPA 5035A/EPA 8260D **Description: Dup-1s**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
49. Toluene	U		µg/kg	53	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
50. 1,2,4-Trichlorobenzene	U		µg/kg	290	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
51. 1,1,1-Trichloroethane	U		µg/kg	53	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
52. 1,1,2-Trichloroethane	U		µg/kg	53	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
53. Trichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
54. Trichlorofluoromethane	U	V+	µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
59. Vinyl Chloride	U		µg/kg	53	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
60. m&p-Xylene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
61. o-Xylene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 62. Xylenes	U		µg/kg	150	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: 99913-008** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: Dup-1s**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
1. Acenaphthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
2. Acenaphthylene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
3. Anthracene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
4. Benzo(a)anthracene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
5. Benzo(a)pyrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
6. Benzo(b)fluoranthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
7. Benzo(ghi)perylene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
8. Benzo(k)fluoranthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
9. Chrysene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
10. Dibenzo(a,h)anthracene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
11. Fluoranthene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
12. Fluorene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
13. Indeno(1,2,3-cd)pyrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
14. 2-Methylnaphthalene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
15. Naphthalene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Dup-1s**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**NA**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Polynuclear Aromatic Hydrocarbons (PNAs) **Aliquot ID: 99913-008** **Matrix: Soil/Solid**
Method: EPA 3546/EPA 8270E **Description: Dup-1s**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
16. Phenanthrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB
17. Pyrene (SIM)	U		µg/kg	330	1.0	01/22/21	PS21A22B	01/22/21	S621A22A	RKB

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Meth Blank**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Blank: Methanol**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: 99913-009** **Matrix: Blank: Methanol**
Method: EPA 5035A/EPA 8260D **Description: Meth Blank**

	Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
	1. Acetone	U		µg/kg	1000	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡	2. Acrylonitrile	U	V+	µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	3. Benzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	4. Bromobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	5. Bromochloromethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	6. Bromodichloromethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	7. Bromoform	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	8. Bromomethane	U		µg/kg	200	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	9. 2-Butanone	U	V+	µg/kg	750	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	10. n-Butylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	11. sec-Butylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	12. tert-Butylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	13. Carbon Disulfide	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	14. Carbon Tetrachloride	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	15. Chlorobenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	16. Chloroethane	U	V+	µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	17. Chloroform	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	18. Chloromethane	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	19. 2-Chlorotoluene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡	20. 1,2-Dibromo-3-chloropropane (SIM)	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	21. Dibromochloromethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	22. Dibromomethane	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	23. 1,2-Dichlorobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	24. 1,3-Dichlorobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	25. 1,4-Dichlorobenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	26. Dichlorodifluoromethane	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	27. 1,1-Dichloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	28. 1,2-Dichloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	29. 1,1-Dichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	30. cis-1,2-Dichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	31. trans-1,2-Dichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	32. 1,2-Dichloropropane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	33. cis-1,3-Dichloropropene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	34. trans-1,3-Dichloropropene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	35. Ethylbenzene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	36. Ethylene Dibromide	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
	37. 2-Hexanone	U	V+	µg/kg	2500	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**Meth Blank**	Chain of Custody:	**192666**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Blank: Methanol**	Collect Time:	**NA**

Sample Comments:

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Volatile Organic Compounds (VOCs) by GC/MS, 5035 **Aliquot ID: 99913-009** **Matrix: Blank: Methanol**
Method: EPA 5035A/EPA 8260D **Description: Meth Blank**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
38. Isopropylbenzene	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
39. 4-Methyl-2-pentanone	U	V+	µg/kg	2500	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
40. Methylene Chloride	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 41. 2-Methylnaphthalene	U		µg/kg	330	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
42. MTBE	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
43. Naphthalene	U		µg/kg	330	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
44. n-Propylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
45. Styrene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
46. 1,1,1,2-Tetrachloroethane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
47. 1,1,2,2-Tetrachloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
48. Tetrachloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
49. Toluene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
50. 1,2,4-Trichlorobenzene	U		µg/kg	250	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
51. 1,1,1-Trichloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
52. 1,1,2-Trichloroethane	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
53. Trichloroethene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
54. Trichlorofluoromethane	U	V+	µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
55. 1,2,3-Trichloropropane	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 56. 1,2,3-Trimethylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
57. 1,2,4-Trimethylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
58. 1,3,5-Trimethylbenzene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
59. Vinyl Chloride	U		µg/kg	40	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
60. m&p-Xylene	U		µg/kg	100	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
61. o-Xylene	U		µg/kg	50	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC
‡ 62. Xylenes	U		µg/kg	150	1.0	01/19/21	VI21A19B	01/19/21	VI21A19B	BRC

Definitions/ Qualifiers:

A: Spike recovery or precision unusable due to dilution.
B: The analyte was detected in the associated method blank.
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
J: The concentration is an estimated value.
M: Modified Method
U: The analyte was not detected at or above the reporting limit.
X: Matrix Interference has resulted in a raised reporting limit or distorted result.
W: Results reported on a wet-weight basis.
***:** Value reported is outside QC limits

Exception Summary:

V+ : Recovery in the associated continuing calibration verification sample (CCV) exceeds the upper control limit. Results may be biased high.

Analysis Locations:

All analyses performed in Holt.



Accreditation Number(s):

T104704518-19-8 (TX)

Fibertec
environmental
services

Tuesday, February 02, 2021

Fibertec Project Number:	99913 Supplemental
Project Identification:	Left Field (1-11456) /1-11456
Submittal Date:	01/15/2021

Mr. Brian Earl
Applied Science & Technology, Inc. - Brighton
10448 Citation Dr.
Suite 100
Brighton, MI 48116

Dear Mr. Earl,

Thank you for selecting Fibertec Environmental Services as your analytical laboratory. The samples you submitted have been analyzed in accordance with NELAC standards and the results compiled in the attached report. Any exceptions to NELAC compliance are noted in the report. These results apply only to those samples submitted. Please note TO-15 samples will be disposed of 7 calendar days after the reporting date. All other samples will be disposed of 30 days after the reporting date.

If you have any questions regarding these results or if we may be of further assistance to you, please contact me at (517) 699-0345.

Sincerely,



By Sue Ricketts at 3:18 PM, Feb 02, 2021

For Daryl P. Strandbergh
Laboratory Director

Enclosures

Client Identification:	**Applied Science & Technology, Inc. - Brighton**	Sample Description:	**SB-1 (0.5-1')**	Chain of Custody:	**N/A**
Client Project Name:	**Left Field (1-11456)**	Sample No:		Collect Date:	**01/14/21**
Client Project No:	**1-11456**	Sample Matrix:	**Soil/Solid**	Collect Time:	**08:39**

Sample Comments: **Soil results have been calculated and reported on a dry weight basis unless otherwise noted.**

Definitions: Q: Qualifier (see definitions at end of report) NA: Not Applicable ‡: Parameter not included in NELAC Scope of Analysis.

Lead, MDEQ Criteria **Aliquot ID: 99913-001A** **Matrix: Soil/Solid**
Method: EPA 0200.2/EPA 6020A **Description: SB-1 (0.5-1')**

Parameter(s)	Result	Q	Units	Reporting Limit	Dilution	Preparation P. Date	Preparation P. Batch	Analysis A. Date	Analysis A. Batch	Init.
‡ 1. Lead, Coarse Fraction	**66700**		µg/kg	1000	100	02/01/21	PT21B01D	02/02/21	T421B02A	CJA
‡ 2. Lead, Fine Fraction	**50500**		µg/kg	2000	200	02/01/21	PT21B01D	02/02/21	T421B02A	CJA
‡ 3. Lead, Total (Calculated)	**65400**		µg/kg	1000	1.0	NA	NA	02/02/21	NA	CJA
‡ 4. Percent Total Solids	**92.4**		%	0.1	1.0	NA	NA	02/02/21	NA	CJA

Definitions/ Qualifiers:

A: Spike recovery or precision unusable due to dilution.
B: The analyte was detected in the associated method blank.
E: The analyte was detected at a concentration greater than the calibration range, therefore the result is estimated.
J: The concentration is an estimated value.
M: Modified Method
U: The analyte was not detected at or above the reporting limit.
X: Matrix Interference has resulted in a raised reporting limit or distorted result.
W: Results reported on a wet-weight basis.
***:** Value reported is outside QC limits

Exception Summary:

Analysis Locations:

All analyses performed in Holt.

NELAP ACCREDITED TNI LABORATORY

Accreditation Number(s):

T104704518-19-8 (TX)

Fibertec environmental services

Analytical Laboratory
1914 Holloway Drive
Holt, MI 48842
Phone: 517 699 0345
Fax: 517 699 0388
email: lab@fibertec.us

8660 S. Mackinaw Trail
Cadillac, MI 49601
Phone: 231 775 8368
Fax: 231 775 8584

Industrial Hygiene Services, Inc.
3125 Sovereign Drive
Suite 9B
Lansing, MI 48911
Phone: 517 999 6020
email: asbestos@fibertecihs.com

Geoprobe
11766 E. Grand River Rd.
Brighton, MI 48116
Phone: 810 220 3300
Fax: 810 220 3311

Chain of Custody # **192666**
PAGE 1 of 1

Client Name: ASTI Environmental
Contact Person: Brian Earl
Project Name/ Number: Left Field / 1-11456
Email distribution list: bearl@asti-env.com mdyklan@asti-env.com
Quote#
Purchase Order#

Date	Time	Sample #	Client Sample Descriptor	MATRIX (SEE RIGHT CORNER FOR CODE)	# OF CONTAINERS	VOCs	PNAs	Michigan 10 Metals	HOLD SAMPLE
1-14-21	839		SB-1 (0.5-1')	S	2	X	X	X	
	839		SB-1 (4-4.75')		2	X	X	X	
	858		SB-2 (0.5-1')		1		X	X	
	858		SB-2 (5-6')		2	X	X	X	
	913		SB-3 (0.5-1')		1		X	X	
	913		SB-3 (6-7')		2	X	X	X	
	928		SB-4 (0.5-1')		1		X	X	
	—		Dup-1s		2	X	X	X	
	—		Meth Blank			X			

PARAMETERS

Matrix Code: S Soil; A Air; O Oil; P Wipe; GW Ground Water; SW Surface Water; WW Waste Water; X Other: Specify

Deliverables: Level 2; Level 3; Level 4; EDD

Remarks:

Received By Lab
JAN 15 2021
Initials: CT

Comments:

Sampled/Relinquished By: Michael [signature] — Date/ Time: 1-14-20 1320 — Received By: ASTI Cold Storage
Relinquished By: ASTI Cold Storage — Date/ Time: — Received By: [signature] 1/15/21 8:50
Relinquished By: [signature] — Date/ Time: 1/15/21 2:25 — Received By Laboratory: [signature]

Turnaround Time ALL RESULTS WILL BE SENT BY THE END OF THE BUSINESS DAY

_____1 bus. day _____2 bus. days _____3 bus. days _____4 bus. days
X 5-7 bus. days (standard) Other (specify time/date requirement): _____

LAB USE ONLY
Fibertec project number: 99913
Temperature upon receipt at Lab: 2.8°C
Received On Ice

Please see back for terms and conditions

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- **ECOLOGICAL ASSESSMENTS AND RESTORATION**
- **ENVIRONMENTAL ASSESSMENTS AND IMPACT STATEMENTS**
- **ENVIRONMENTAL OPPORTUNITIES ASSESSMENT**
- **GIS MAPPING**
- **HAZARD MITIGATION PLANNING**
- **MINING AND RECLAMATION ASSISTANCE**
- **REMEDIATION IMPLEMENTATION, OPERATION AND MAINTENANCE**
- **PHASE I ESA AND ENVIRONMENTAL DUE DILIGENCE ASSESSMENTS**
- **REGULATORY COMPLIANCE AND PERMITTING**
- **SOIL AND GROUNDWATER ASSESSMENTS**
- **SOIL AND GROUNDWATER REMEDIATION**
- **STORAGE TANK COMPLIANCE AND CLOSURE**
- **THREATENED AND ENDANGERED SPECIES SURVEYS**
- **WATERSHED AND STORMWATER MANAGEMENT PROGRAMS**
- **WETLAND DELINEATION, PERMITTING, MITIGATION AND BANKING**

ASTI ENVIRONMENTAL
Detroit/Grand Rapids/Brighton

Phone: 1-800-395-2784
www.asti-env.com
Email: environmental@asti-env.com

Attachment C

Checklist – Assessment of the Volatilization to Indoor Air Screening Levels

VOLATILIZATION TO INDOOR AIR PATHWAY SCREENING LEVELS ASSESSMENT

The following checklist will assist in documenting if site conditions allow the use of the Volatilization to Indoor Air Pathway (VIAP) Screening Levels or if the development of site-specific criteria or site-specific target levels (SSTLs) is necessary:

VIAP SCREENING LEVEL ASSESSMENT

Residential VIAP Screening Levels (Table 1) are calculated based on unrestricted residential use of a property. The building input parameters assume a residential structure with a basement.

CSM SUPPORTS	PAGE NUMBER	ADDITIONAL INFO NEEDED	RESIDENTIAL VIAP SCREENING LEVEL ASSESSMENT
Yes ☐ No ☒	3	☐	Is there is a poured concrete floor, block or poured concrete wall in a basement? *If no, site-specific criteria or SSTLs must be developed.*
Yes ☒ No ☐	3	☐	Is there a slab-on-grade foundation? *If yes, site-specific criteria or SSTLs must be developed.*
Yes ☐ No ☒	3	☐	Is there a crawl space foundation, with dirt floor or poured concrete slab? *If yes, site-specific criteria or SSTLs must be developed.*
Yes ☒ No ☐	3	☐	Is the structure a high-rise apartment with 6 or more floors (including a basement)? *If yes, site-specific criteria or SSTLs must be developed.*
Yes ☒ No ☐	3	☐	Is there any other building construction inconsistent with the residential structure assumptions? *If yes, site-specific criteria or SSTLs must be developed.*
Yes ☐ No ☒	5	☐	Is the depth to first encountered groundwater, considering seasonal variation, **≤ 10 feet?** *If yes, shallow groundwater VIAP screening levels must be used or site-specific criteria or SSTLs must be developed.*
Yes ☒ No ☐	5	☐	Is the depth to first encountered groundwater, considering seasonal variation, > 10 feet? *If yes, groundwater not in contact VIAP screening levels may be used or site-specific criteria or SSTLs must be developed.*

Nonresidential VIAP Screening Levels (Table 2) are calculated based on restricted nonresidential use of a property. The building input parameters assume a nonresidential structure that has a poured concrete slab-on-grade and has less than 50,000 ft^2 of continuously open space.

CSM SUPPORTS	PAGE NUMBER	ADDITIONAL INFO NEEDED	NONRESIDENTIAL VIAP SCREENING LEVEL ASSESSMENT
Yes ☐ No ☐		☐	Is the structure > 50,000 ft^2 of continuously open space with no areas < 50,000 ft^2? *If yes, site-specific criteria or SSTLs must be developed.*
Yes ☐ No ☐		☐	Is there a basement? *If yes, site-specific criteria or SSTLs must be developed.*
Yes ☐ No ☐		☐	Is there a below grade pit, crawlspace (with dirt floor or poured concrete slab), or elevator shaft that extend below grade such that conditions do not meet the assumptions of a slab-on-grade? *If yes, site-specific criteria or SSTLs must be developed.*
Yes ☐ No ☐		☐	Is there a combination of foundation types? *If yes, site-specific criteria or SSTLs must be developed.*
Yes ☐ No ☐		☐	Is the structure a former residential structure that is now a nonresidential use? *If yes, site-specific criteria or SSTLs must be developed.*
Yes ☐ No ☐		☐	Is there any other building construction inconsistent with the nonresidential structure assumptions? *If yes, site-specific criteria or SSTLs must be developed.*
Yes ☐ No ☐		☐	Is depth to first encountered groundwater, considering seasonal variation, **≤ 5 feet?** *If yes, shallow groundwater VIAP screening levels must be used or site-specific criteria or SSTLs must be developed.*
Yes ☐ No ☐		☐	Is depth to first encountered groundwater, considering seasonal variation, > 5 feet? *If yes, groundwater not in contact VIAP screening levels may be used or site-specific criteria or SSTLs must be developed.*

Attachment D

Site Development Plans

Owner / Developer

American Community Developers, Inc
20250 Harper Avenue
Detroit, MI 48201

Phone: 313 881-8150
Contact: Mr. Paul Weber

Architect

DesignWerks Architecture, LLC
1310 E. Sherwood Road
Williamston, MI 48895

Contact: Mr. Paul Weber, AIA, CDT, LEED AP
email: designwerks.architecture@gmail.com
Phone: 517 388-2161

Civil Engineer

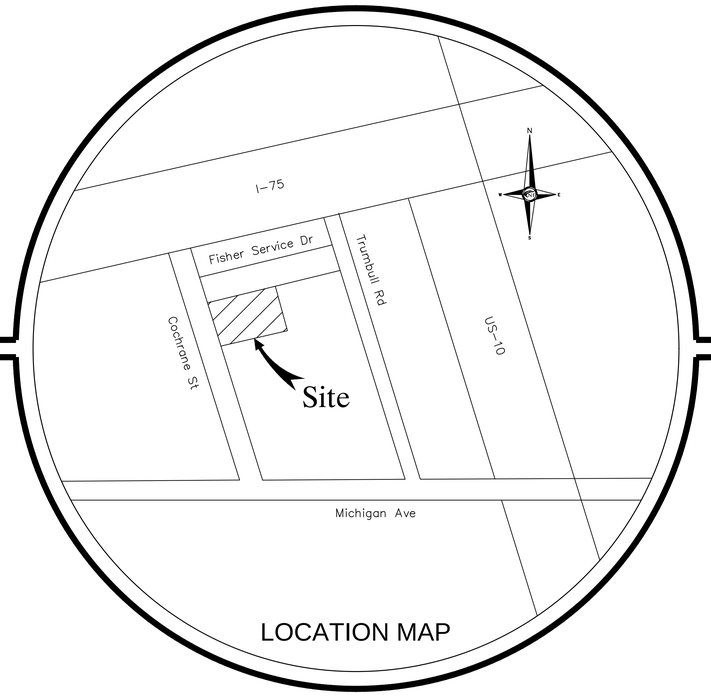
NOWAK & FRAUS ENGINEERS
28 W. Adams Ave.
Suite 210
Detroit, MI 48226
Tel. (313) 965-2444

CONTACT: John Cecil, P.E.

Tel. (248) 410-0278

City of Detroit,
Wayne County, Michigan
SITE PLAN DOCUMENTS
Prepared For
American Community Developers, Inc.

PRIVATE CLAIM 22, 27 LOTS 116, 64-69 AND PART OF LOTS 109-115
CITY OF DETROIT,
WAYNE COUNTY, MICHIGAN



LOCATION MAP

LEGAL DESCRIPTION

LAND SITUATED IN THE CITY OF DETROIT, COUNTY OF WAYNE AND STATE OF MICHIGAN, DESCRIBED AS FOLLOWS:

PART OF PRIVATE CLAIM 22 AND PRIVATE CLAIM 27, BEING PART OF LOT 116 AND ALL OF LOTS 109 THROUGH 115 OF PLAT OF P.C. 27, RECORDED IN LIBER 2, PAGE 5 OF PLATS, WAYNE COUNTY RECORDS; ALSO PART OF LOTS 47 THROUGH 53, AND 63 AND ALL OF LOTS 64 THROUGH 69 OF PLAT OF JULIANA T. ABBOTT'S SUBDIVISION RECORDED IN LIBER 5, PAGE 36 OF PLATS, WAYNE COUNTY RECORDS, AND BEING MORE PARTICULARLY DESCRIBED AS:

COMMENCING AT THE INTERSECTION OF THE NORTH LINE OF MICHIGAN AVENUE (120 FEET WIDE) AND THE EAST LINE OF COCHRANE AVENUE (65 FEET WIDE), SAID POINT BEING THE SOUTHWEST CORNER OF LOT 5 OF PLAT OF P.C. 27, RECORDED IN LIBER 2, PAGE 5 OF PLATS, WAYNE COUNTY RECORDS; THENCE ALONG SAID EAST LINE OF COCHRANE AVENUE NORTH 23 DEGREES 42 MINUTES 59 SECONDS WEST, 458.48 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING ALONG SAID EAST LINE, NORTH 23 DEGREES 42 MINUTES 59 SECONDS WEST, 198.31 FEET TO A POINT ON THE SOUTH RIGHT OF WAY LINE OF THE FISHER FREEWAY SERVICE DRIVE; THENCE THE FOLLOWING THREE (3) COURSES ALONG SAID SOUTH LINE: (1) NORTH 68 DEGREES 48 MINUTES 15 SECONDS EAST, 100.84 FEET; (2) NORTH 66 DEGREES 14 MINUTES 47 SECONDS EAST, 20.00 FEET; AND (3) NORTH 66 DEGREES 27 MINUTES 12 SECONDS EAST, 184.76 FEET; THENCE SOUTH 23 DEGREES 38 MINUTES 17 SECONDS EAST, 194.25 FEET; THENCE SOUTH 66 DEGREES 27 MINUTES 12 SECONDS WEST, 305.24 FEET TO THE POINT OF BEGINNING, INCLUDING VACATED KALINE DRIVE, VACATED CHERRY STREET AND THE VACATED ALLEYS WITHIN THE ABOVE DESCRIBED PARCEL.

Project Name

LEFT FIELD DEVELOPMENT

SHEET INDEX

CIVIL DRAWINGS
C0 Cover Sheet
C1 Alta Survey
C2 Demolition Plan
C3 Site Plan
C4 Dimensional Stringer Plan
C5 Utility and Storm water Management Plan

LANDSCAPE DRAWINGS
L1 Landscape Plan

ARCHITECTURAL DRAWINGS
A101 Cochrane Building Elevations
A102 Ballfield Building Elevations

REVISIONS:
10-29-20 ISSUED FOR SITE PLAN APPROVAL ONLY

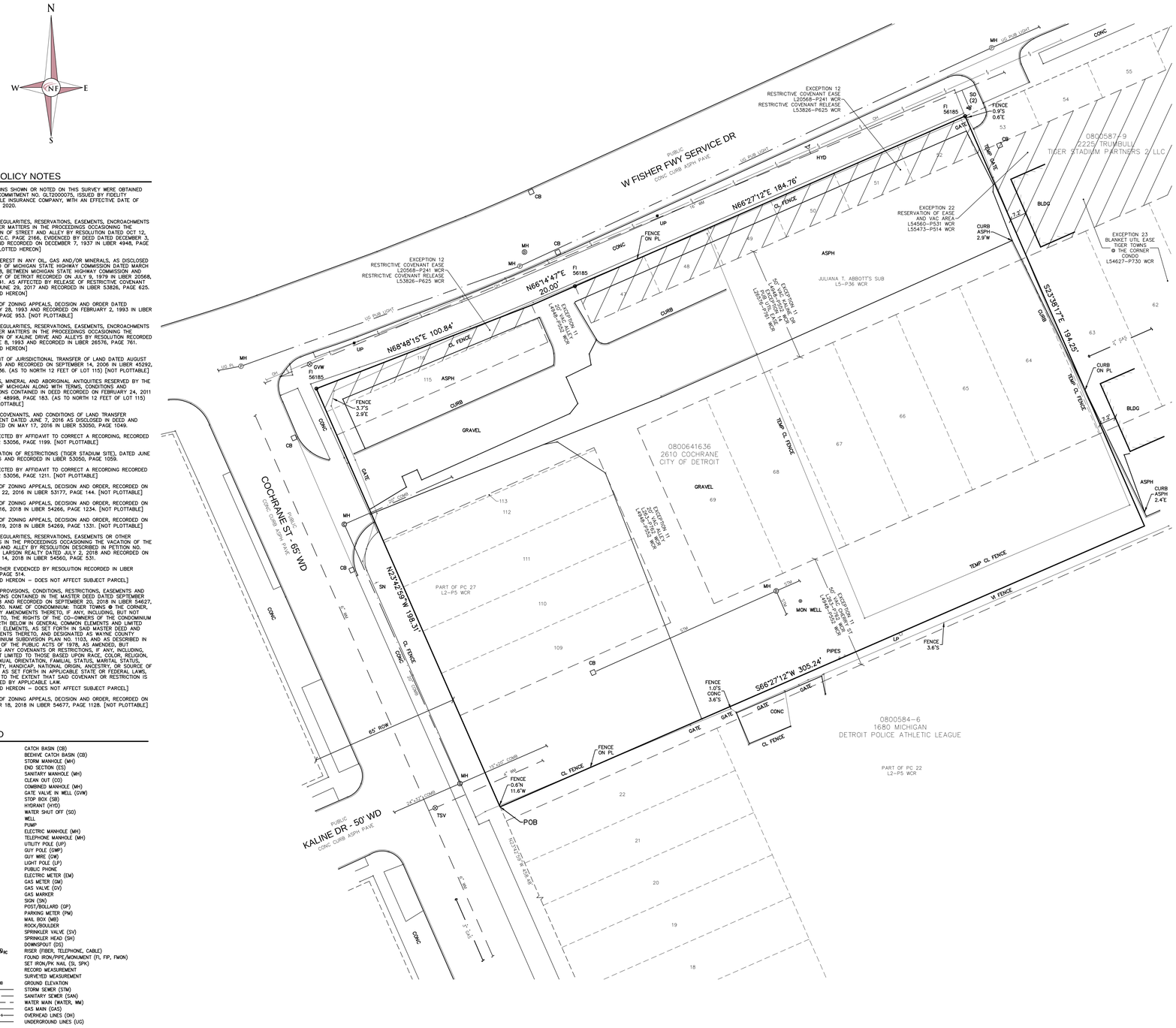
Know what's below Call before you dig.

N & F JOB #l611

STATE OF MICHIGAN
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44012
53744
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NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
28 WEST ADAMS, SUITE 210
DETROIT, MI 48226
TEL (313) 965-2444
FAX (248) 332-8257
WWW.NOWAKFRAUS.COM



TITLE POLICY NOTES

ALL EXCEPTIONS SHOWN OR NOTED ON THIS SURVEY WERE OBTAINED FROM TITLE COMMITMENT NO. GLT2000075, ISSUED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, WITH AN EFFECTIVE DATE OF FEBRUARY 6, 2020.

11. ANY IRREGULARITIES, RESERVATIONS, EASEMENTS, ENCROACHMENTS OR OTHER MATTERS IN THE PROCEEDINGS OCCASIONING THE VACATION OF STREET AND ALLEY BY RESOLUTION DATED OCT 12, 1937, J.C.C. PAGE 2166, EVIDENCED BY DEED DATED DECEMBER 3, 1937 AND RECORDED ON DECEMBER 7, 1937 IN LIBER 4948, PAGE 552. [PLOTTED HEREON]

12. ANY INTEREST IN ANY OIL, GAS AND/OR MINERALS, AS DISCLOSED BY DEED OF MICHIGAN STATE HIGHWAY COMMISSION DATED MARCH 22, 1978, BETWEEN MICHIGAN STATE HIGHWAY COMMISSION AND THE CITY OF DETROIT RECORDED ON JULY 9, 1979 IN LIBER 20568, PAGE 241. AS AFFECTED BY RELEASE OF RESTRICTIVE COVENANT DATED JUNE 29, 2017 AND RECORDED IN LIBER 53826, PAGE 625. [PLOTTED HEREON]

13. BOARD OF ZONING APPEALS, DECISION AND ORDER DATED JANUARY 28, 1993 AND RECORDED ON FEBRUARY 2, 1993 IN LIBER 26325, PAGE 953. [NOT PLOTTABLE]

14. ANY IRREGULARITIES, RESERVATIONS, EASEMENTS, ENCROACHMENTS OR OTHER MATTERS IN THE PROCEEDINGS OCCASIONING THE VACATION OF KALINE DRIVE AND ALLEYS BY RESOLUTION RECORDED ON JUNE 8, 1993 AND RECORDED IN LIBER 26576, PAGE 761. [PLOTTED HEREON]

15. AFFIDAVIT OF JURISDICTIONAL TRANSFER OF LAND DATED AUGUST 15, 2006 AND RECORDED ON SEPTEMBER 14, 2006 IN LIBER 45292, PAGE 436. (AS TO NORTH 12 FEET OF LOT 115) [NOT PLOTTABLE]

16. OIL, GAS, MINERAL AND ABORIGINAL ANTIQUITIES RESERVED BY THE STATE OF MICHIGAN ALONG WITH TERMS, CONDITIONS AND PROVISIONS CONTAINED IN DEED RECORDED ON FEBRUARY 24, 2011 IN LIBER 48998, PAGE 183. (AS TO NORTH 12 FEET OF LOT 115) [NOT PLOTTABLE]

17. TERMS, COVENANTS, AND CONDITIONS OF LAND TRANSFER AGREEMENT DATED JUNE 7, 2016 AS DISCLOSED IN DEED AND RECORDED ON MAY 17, 2016 IN LIBER 53050, PAGE 1049.

    AS AFFECTED BY AFFIDAVIT TO CORRECT A RECORDING, RECORDED IN LIBER 53056, PAGE 1199. [NOT PLOTTABLE]

18. DECLARATION OF RESTRICTIONS (TIGER STADIUM SITE), DATED JUNE 16, 2016 AND RECORDED IN LIBER 53050, PAGE 1059.

    AS AFFECTED BY AFFIDAVIT TO CORRECT A RECORDING RECORDED IN LIBER 53056, PAGE 1211. [NOT PLOTTABLE]

19. BOARD OF ZONING APPEALS, DECISION AND ORDER, RECORDED ON AUGUST 22, 2016 IN LIBER 53177, PAGE 144. [NOT PLOTTABLE]

20. BOARD OF ZONING APPEALS, DECISION AND ORDER, RECORDED ON MARCH 16, 2018 IN LIBER 54266, PAGE 1234. [NOT PLOTTABLE]

21. BOARD OF ZONING APPEALS, DECISION AND ORDER, RECORDED ON MARCH 19, 2018 IN LIBER 54269, PAGE 1331. [NOT PLOTTABLE]

22. ANY IRREGULARITIES, RESERVATIONS, EASEMENTS OR OTHER MATTERS IN THE PROCEEDINGS OCCASIONING THE VACATION OF THE STREET AND ALLEY BY RESOLUTION DESCRIBED IN PETITION NO. 1812 OF LARSON REALTY DATED JULY 2, 2018 AND RECORDED ON AUGUST 14, 2018 IN LIBER 54560, PAGE 531.

    AS FURTHER EVIDENCED BY RESOLUTION RECORDED IN LIBER 55473, PAGE 514.
    [PLOTTED HEREON – DOES NOT AFFECT SUBJECT PARCEL]

23. TERMS, PROVISIONS, CONDITIONS, RESTRICTIONS, EASEMENTS AND LIMITATIONS CONTAINED IN THE MASTER DEED DATED SEPTEMBER 13, 2018 AND RECORDED ON SEPTEMBER 20, 2018 IN LIBER 54627, PAGE 730. NAME OF CONDOMINIUM: TIGER TOWNS @ THE CORNER, AND ANY AMENDMENTS THERETO, IF ANY, INCLUDING, BUT NOT LIMITED TO, THE RIGHTS OF THE CO-OWNERS OF THE CONDOMINIUM SET FORTH BELOW IN GENERAL COMMON ELEMENTS AND LIMITED COMMON ELEMENTS, AS SET FORTH IN SAID MASTER DEED AND AMENDMENTS THERETO, AND DESIGNATED AS WAYNE COUNTY CONDOMINIUM SUBDIVISION PLAN NO. 1103, AND AS DESCRIBED IN ACT 59 OF THE PUBLIC ACTS OF 1978, AS AMENDED, BUT OMITTING ANY COVENANTS OR RESTRICTIONS, IF ANY, INCLUDING, BUT NOT LIMITED TO THOSE BASED UPON RACE, COLOR, RELIGION, SEX, SEXUAL ORIENTATION, FAMILIAL STATUS, MARITAL STATUS, DISABILITY, HANDICAP, NATIONAL ORIGIN, ANCESTRY, OR SOURCE OF INCOME, AS SET FORTH IN APPLICABLE STATE OR FEDERAL LAWS, EXCEPT TO THE EXTENT THAT SAID COVENANT OR RESTRICTION IS PERMITTED BY APPLICABLE LAW.
    [PLOTTED HEREON – DOES NOT AFFECT SUBJECT PARCEL]

24. BOARD OF ZONING APPEALS, DECISION AND ORDER, RECORDED ON OCTOBER 18, 2018 IN LIBER 54677, PAGE 1128. [NOT PLOTTABLE]

LEGEND

- CATCH BASIN (CB)
- BEEHIVE CATCH BASIN (CB)
- STORM MANHOLE (MH)
- END SECTION (ES)
- SANITARY MANHOLE (MH)
- CLEAN OUT (CO)
- COMBINED MANHOLE (MH)
- GATE VALVE IN WELL (GVW)
- STOP BOX (SB)
- HYDRANT (HYD)
- WATER SHUT OFF (SO)
- WELL
- PUMP
- ELECTRIC MANHOLE (MH)
- TELEPHONE MANHOLE (MH)
- UTILITY POLE (UP)
- GUY POLE (GWP)
- GUY WIRE (GW)
- LIGHT POLE (LP)
- PUBLIC PHONE
- ELECTRIC METER (EM)
- GAS METER (GM)
- GAS VALVE (GV)
- GAS MARKER
- SIGN (SN)
- POST/BOLLARD (GP)
- PARKING METER (PM)
- MAIL BOX (MB)
- ROCK/BOULDER
- SPRINKLER VALVE (SV)
- SPRINKLER HEAD (SH)
- DOWNSPOUT (DS)
- RISER (FIBER, TELEPHONE, CABLE)
- FOUND IRON/PIPE/MONUMENT (FI, FIP, FMON)
- SET IRON/PK NAIL (SI, SPK)
- RECORD MEASUREMENT
- SURVEYED MEASUREMENT
- 000.00 GROUND ELEVATION
- STORM SEWER (STM)
- SANITARY SEWER (SAN)
- WATER MAIN (WATER, WM)
- GAS MAIN (GAS)
- OVERHEAD LINES (OH)
- UNDERGROUND LINES (UG)

LEGAL DESCRIPTION

LAND SITUATED IN THE CITY OF DETROIT, COUNTY OF WAYNE AND STATE OF MICHIGAN, DESCRIBED AS FOLLOWS:

PART OF PRIVATE CLAIM 22 AND PRIVATE CLAIM 27, BEING PART OF LOT 116 AND ALL OF LOTS 109 THROUGH 115 OF PLAT OF P.C. 27 RECORDED IN LIBER 2, PAGE 5 OF PLATS, WAYNE COUNTY RECORDS; ALSO PART OF LOTS 47 THROUGH 53, AND 63 AND ALL OF LOTS 64 THROUGH 69 OF PLAT OF JULIANA T. ABBOTT'S SUBDIVISION RECORDED IN LIBER 5, PAGE 36 OF PLATS, WAYNE COUNTY RECORDS, AND BEING MORE PARTICULARLY DESCRIBED AS:

COMMENCING AT THE INTERSECTION OF THE NORTH LINE OF MICHIGAN AVENUE (120 FEET WIDE) AND THE EAST LINE OF COCHRANE AVENUE (65 FEET WIDE), SAID POINT BEING THE SOUTHWEST CORNER OF LOT 5 OF PLAT OF P.C. 27, RECORDED IN LIBER 2, PAGE 5 OF PLATS, WAYNE COUNTY RECORDS; THENCE ALONG SAID EAST LINE OF COCHRANE AVENUE NORTH 23 DEGREES 42 MINUTES 59 SECONDS WEST, 458.48 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING ALONG SAID EAST LINE, NORTH 23 DEGREES 42 MINUTES 59 SECONDS WEST, 198.31 FEET TO A POINT ON THE SOUTH RIGHT OF WAY LINE OF THE FISHER FREEWAY SERVICE DRIVE; THENCE THE FOLLOWING THREE (3) COURSES ALONG SAID SOUTH LINE: (1) NORTH 68 DEGREES 48 MINUTES 15 SECONDS EAST, 100.84 FEET; (2) NORTH 66 DEGREES 14 MINUTES 47 SECONDS EAST, 20.00 FEET; AND (3) NORTH 66 DEGREES 27 MINUTES 12 SECONDS EAST, 184.76 FEET; THENCE SOUTH 23 DEGREES 38 MINUTES 17 SECONDS EAST, 194.25 FEET; THENCE SOUTH 66 DEGREES 27 MINUTES 12 SECONDS WEST, 305.24 FEET TO THE POINT OF BEGINNING, INCLUDING VACATED KALINE DRIVE, VACATED CHERRY STREET AND THE VACATED ALLEYS WITHIN THE ABOVE DESCRIBED PARCEL.

SURVEY NOTES

THERE WAS OBSERVABLE EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION OR BUILDING ADDITIONS WITHIN RECENT MONTHS.

THERE ARE NO CHANGES IN STREET RIGHT-OF-WAY LINES EITHER COMPLETED OR PROPOSED, AND AVAILABLE FROM THE CONTROLLING JURISDICTION.

THERE WAS NO OBSERVABLE EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.

THERE WAS NO OBSERVABLE EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL.

SITE DATA

PARCEL	08006641636
GROSS LAND AREA	59,518 SQUARE FEET OR 1.366 ACRES
PARKING PROVIDED	NO STRIPED STALLS VISIBLE

NOTE:
ZONING CLASSIFICATION, BUILDING HEIGHT AND FLOOR SPACE AREA RESTRICTIONS, SETBACK AND PARKING REQUIREMENTS CAN ONLY BE SHOWN ONCE THE CLIENT PROVIDES A ZONING REPORT OR LETTER PURSUANT TO 2016 ALTA/NSPS LAND TITLE SURVEY REQUIREMENTS.

FLOOD HAZARD NOTE

THIS PROPERTY IS NOT LOCATED WITHIN THE FLOOD HAZARD AREA INDICATED BY FLOOD INSURANCE RATE MAP (FIRM) NO. 26163C0280E, EFFECTIVE DATE: FEBRUARY 2, 2012.

COVID-19 PANDEMIC CONDITION

DUE TO THE UNPRECEDENTED COVID-19 PANDEMIC CONDITION AND RESTRICTIONS THE STANDARD DATA WHICH IS OBTAINED FROM MISS DIG / CALL 811 HAS BEEN RESTRICTED TO CRITICAL INFRASTRUCTURE ONLY. NFE WILL MAKE EVERY EFFORT TO OBTAIN CURRENT REFERENCE DATA FROM THE GOVERNING AGENCIES; HOWEVER, THIS DATA MAY BE PARTIAL OR INCOMPLETE. NFE WILL ISSUE THIS SURVEY WITH THE BEST AVAILABLE INFORMATION FROM OUR FIELD SURVEY AND OTHER AVAILABLE REFERENCE DATA. NFE WILL NOT BE RESPONSIBLE FOR INCOMPLETE OR PARTIAL DATA PROVIDED BY THIRD PARTY FACILITY OWNERS.

ALL SURVEYS BEING UTILIZED FOR DESIGN PURPOSES BY OTHERS; IT WILL BE THE CLIENT'S OBLIGATION TO UPDATE THE UTILITY INFORMATION AS IT BECOMES AVAILABLE. NFE IS NOT RESPONSIBLE FOR BURIED UTILITIES FOR WHICH PLANS WERE NOT FURNISHED OR CANNOT BE OBSERVED IN THE FIELD.

SURVEYOR'S CERTIFICATION

CERTIFIED TO:

LEE F. ROBINSON AND THE
ECONOMIC DEVELOPMENT CORPORATION OF THE CITY OF DETROIT
A MICHIGAN PUBLIC AUTHORITY AND BODY CORPORATE,
AS THEIR INTERESTS MAY APPEAR
(AS TO NORTH 12 FEET OF LOT 115)

THE ECONOMIC DEVELOPMENT CORPORATION OF THE CITY OF DETROIT
A MICHIGAN PUBLIC AUTHORITY AND BODY CORPORATE
(AS TO REMAINDER)

FIDELITY NATIONAL TITLE INSURANCE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDE ITEMS 1, 2, 3, 4, 6, 8, 9, 11, 13, 16 AND 19 OF TABLE A THEREOF.

THE FIELD WORK WAS COMPLETED ON MARCH 3, 2020

CHAD L. FINDLEY, P.S. NO. 55108,
WITHIN THE STATE OF MICHIGAN
DATED: 4-10-20

STATE OF MICHIGAN
CHAD L. FINDLEY
PROFESSIONAL SURVEYOR
NO. 55108
LICENSED PROFESSIONAL SURVEYOR

1" = 20'
20 10 0 10 20 30

LEFT FIELD DEVELOPMENT
2610 COCHRANE
DETROIT MI, 48201

OWNER

AMERICAN COMMUNITY DEVELOPERS, INC
20250 HARPER AVENUE
DETROIT, MICHIGAN 48201
313.881.8150

CIVIL ENGINEER

NOWAK & FRAUS ENGINEERS
28 W. ADAMS, SUITE 210
DETROIT, MI 48226
313.965.2444

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
28 WEST ADAMS, SUITE 210
DETROIT, MI 48226
TEL. (313) 965-2444
FAX. (248) 332-8257

PROJECT
Left Field
2610 Cochrane
Detroit, Michigan

CLIENT
American Community Developers
20250 Harper Ave
Detroit, MI 48225

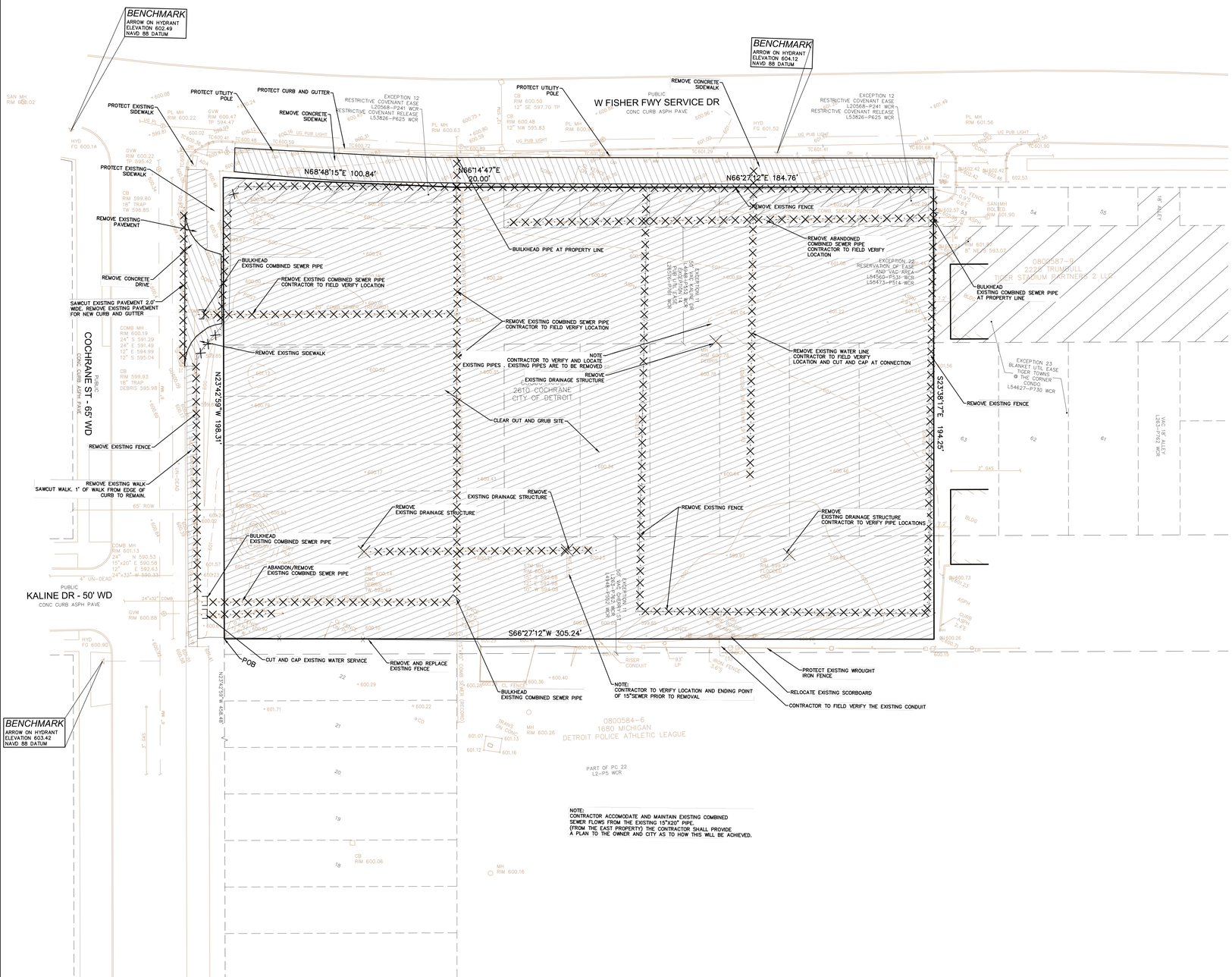
Contact:
Mr. Michael Essian, VP
Phone: (313) 881-8150
Email: mike@acdmail.com

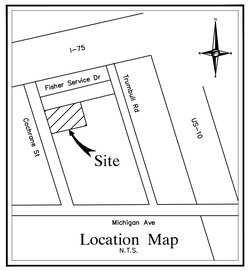
PROJECT LOCATION
Part of Private Claim 22 and 27 at Cochrane and Fisher Fwy Service Dr
City of Detroit,
Wayne County, Michigan

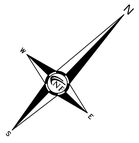
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ISSUED FOR SITE PLAN ONLY	XX.XX.2020

SITE PLAN

C1







DEMOLITION NOTES

DEMOLITION OF SITE IMPROVEMENTS SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE PUBLIC AGENCY HAVING JURISDICTION OVER SAID DEMOLITION.

FOR ANY DEMOLITION WITHIN PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR, AND SECURE, ALL NECESSARY PERMITS AND LIKEWISE SHALL ARRANGE FOR ALL SITE INSPECTIONS.

SITE DEMOLITION INCLUDES THE COMPLETE REMOVAL OF SITE IMPROVEMENTS AND OFF-SITE DISPOSAL. DEBRIS SHALL BE TRANSPORTED TO AN APPROPRIATE DISPOSAL FACILITY THAT IS LICENSED FOR THAT TYPE OF DEBRIS.

THE CONTRACTOR SHALL COORDINATE TRUCK ROUTES WITH THE MUNICIPALITY PRIOR TO COMMENCEMENT OF SITE DEMOLITION. ALL TRUCKS SHALL BE TARPED OR PROPERLY SECURED TO CONTAIN DEMOLITION DEBRIS PRIOR TO LEAVING SITE.

EXISTING ON-SITE UNDERGROUND UTILITIES AND BUILDING SERVICES HAVE BEEN INDICATED BASED UPON THE BEST AVAILABLE UTILITY RECORDS AND/OR ON-SITE INSPECTION. NO GUARANTEE IS MADE BY THE DESIGN ENGINEER, AS TO THE COMPLETENESS OR ACCURACY OF UTILITY DATA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF UTILITY INFORMATION (THE DESIGN ENGINEER MAKES NO GUARANTEE NOR ASSUMES ANY LIABILITY AS TO THE COMPLETENESS AND/OR ACCURACY OF UTILITY DATA).

PRIOR TO THE REMOVAL OR ABANDONMENT OF ANY EXISTING UNDERGROUND UTILITY OR BUILDING SERVICE LINES CALLED FOR IN THE PLANS OR DISCOVERED DURING EXCAVATION, THE CONTRACTOR MUST DETERMINE IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE. IF THE UTILITY LINE OR BUILDING SERVICE IS STILL IN USE/ACTIVE THE CONTRACTOR MUST TAKE ALL THE NECESSARY STEPS TO GUARANTEE THAT THE UTILITY LINE OR BUILDING SERVICE IS RECONNECTED WITHOUT AN INTERRUPTION IN SERVICE. THE RECONNECTION OF THE UTILITY LINE OR BUILDING SERVICE MUST BE IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS OF THE APPROPRIATE GOVERNMENTAL AGENCY OR PRIVATE UTILITY COMPANY.

SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR PRIOR TO SITE DEMOLITION.

* THE CONTRACTOR SHALL NOTIFY MISS DIG (1-800-482-7171) A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE START OF THE SITE DEMOLITION.

THE CONTRACTOR SHALL COORDINATE THE REMOVAL AND/OR RELOCATION OF EXISTING UTILITY POLES AND BUILDING SERVICES WITH THE DETROIT EDISON COMPANY. REMOVAL OF DETROIT EDISON ELECTRICAL SERVICES SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND REQUIREMENTS OF DETROIT EDISON.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF PRIVATE UTILITY COMPANIES AND COORDINATE UTILITY SERVICE SHUT OFF/DISCONNECT, PRIOR TO DEMOLITION OF EXISTING STRUCTURES OR PROPERTIES.

ANY ON-SITE STORM SEWER FACILITIES LOCATED DURING DEMOLITION SHALL BE REMOVED AND BULK HEADED AT THE PROPERTY LINE IF INDICATED FOR REMOVAL ON THE PLANS.

WATER SERVICES AND/OR STOP-BOX SHALL BE PRESERVED AND BULK HEADED AT THE PROPERTY LINE OR AS DIRECTED BY THE OWNER'S REPRESENTATION.

UTILITIES

AT LEAST 72 HOURS (3 WORKING DAYS) PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY MISS DIG AND THE LOCAL COMMUNITY (WHERE APPLICABLE) TO STAKE LOCATIONS OF EXISTING UTILITIES.

THE CONTRACTOR SHALL EXPOSE AND VERIFY EXISTING UTILITIES FOR LOCATION, SIZE, DEPTH, MATERIAL AND CONFIGURATION PRIOR TO CONSTRUCTION. COSTS FOR EXPLORATORY EXCAVATION IS AN INCIDENTAL COST AND SHALL NOT BE CONSIDERED AN EXTRA TO THE CONTRACT.

THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY EXISTING UTILITIES WHICH DO NOT MATCH THE PLANS AND SPECIFICATIONS PRIOR TO COMMENCING WORK. ANY FIELD CHANGES OF THE PROPOSED UTILITIES SHALL BE APPROVED BY THE OWNER AND ENGINEER BEFORE THE WORK IS DONE.

THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES FROM DAMAGE. ANY SERVICE OR UTILITY DAMAGED OR REMOVED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR, IN CONFORMANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY PROVIDER.

DAMAGE TO PRIVATE PROPERTY

ALL SIDEWALKS, DRIVEWAYS, LAWNS, FENCING, TREES, SHRUBS, SPRINKLERS, LANDSCAPING, ETC., THAT ARE DAMAGED DURING CONSTRUCTION MUST BE REPAIRED OR REPLACED, IN KIND OR BETTER, BY THE CONTRACTOR. ALL STREET SIGNS, MAIL BOXES, ETC., REMOVED SHALL BE REPLACED IN KIND OR BETTER, BY THE CONTRACTOR. ALL THE REPAIRS OR REPLACEMENTS DUE TO THE CONTRACTOR'S WORK ARE TO BE INCLUDED IN THE CONTRACT PRICE(S) AND SHALL NOT BE AN EXTRA TO THE CONTRACT.

THE CONTRACTOR SHALL SECURE PERMISSION IN WRITING FROM ADJACENT PROPERTY OWNERS PRIOR TO ENTERING UPON ANY ADJOINING PROPERTIES, UNLESS OFFSITE PERMITS HAVE ALREADY BEEN OBTAINED BY THE OWNER AND ARE PART OF THE CONTRACT DOCUMENTS.

DEWATERING OF TRENCH AND EXCAVATIONS

IF NOT SPECIFICALLY PROVIDED FOR IN THE CONSTRUCTION DESIGN DOCUMENTS, THE DESIGN OR QUALITATIVE ANALYSIS OF GROUND WATER DEWATERING SYSTEMS IS BEYOND THE SCOPE OF DESIGN FOR THESE DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING AND PROVIDING APPROPRIATE EXCAVATION DEWATERING SYSTEMS FOR USE DURING CONSTRUCTION.

THE DEWATERING METHOD SELECTED BY THE CONTRACTOR WILL NOT ADVERSELY AFFECT ADJACENT PAVEMENTS OR STRUCTURES PRIOR TO BEGINNING DEWATERING CONDITIONS. MEANS AND METHODS OF DEWATERING ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF DEWATERING WILL BE CONSIDERED INCLUDED IN THE WORK OF CONSTRUCTING THE UNDERGROUND UTILITIES UNLESS SPECIFICALLY INDICATED OTHERWISE.

BY-PASS PUMPING

FROM TIME TO TIME IT MAY BE NECESSARY FOR THE CONTRACTOR TO BY-PASS PUMP TO COMPLETE THE WORK INDICATED ON THE PLANS. THE COST OF BY-PASS PUMPING, THE METHODS, EQUIPMENT AND MEANS OF PROVIDING THAT WORK ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE CONSIDERED PART OF THE WORK WHETHER SPECIFICALLY CALLED OUT ON THE PLANS OR NOT.

PAVEMENT REMOVAL

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE THICKNESS OF THE PAVEMENT REMOVAL. PAVEMENT CORE SAMPLES ARE FOR INFORMATIONAL PURPOSES ONLY AS TO THE THICKNESS OF THE PAVEMENT AT THE LOCATION OF THE SAMPLE. THE OWNER AND ENGINEER MAKE NO REPRESENTATION, WARRANTY OR GUARANTY THAT THE SAMPLES ACCURATELY REFLECT THE PAVEMENT THICKNESS ON THE PROJECT.

TOPOGRAPHIC SURVEY NOTES

ALL ELEVATIONS ARE EXISTING ELEVATIONS, UNLESS OTHERWISE NOTED.

UTILITY LOCATIONS WERE OBTAINED FROM MUNICIPAL OFFICIALS AND RECORDS OF UTILITY COMPANIES, AND NO GUARANTEE CAN BE MADE TO THE COMPLETENESS, OR EXACTNESS OF LOCATION.

THIS SURVEY MAY NOT SHOW ALL EASEMENTS OF RECORD UNLESS AN UPDATED TITLE POLICY IS FURNISHED TO THE SURVEYOR BY THE OWNER

LEGEND

- MANHOLE
- HYDRANT
- GATE VALVE
- MANHOLE CATCH BASIN
- UTILITY POLE
- GUY POLE
- GUY WIRE
- 12" MAPLE
- EXISTING SANITARY SEWER
- EXISTING SAN. CLEAN OUT
- EXISTING WATER MAIN
- EXISTING STORM SEWER
- EX. R. Y. CATCH BASIN
- EXISTING BURIED CABLES
- OVERHEAD LINES
- LIGHT POLE
- SIGN
- EXISTING GAS MAIN
- EXISTING UTILITY TO BE REMOVED
- EXISTING UTILITY TO BE ABANDONED
- INDICATES EXISTING TREE TO BE REMOVED
- INDICATES AREAS OF PAVEMENT, BUILDINGS, ETC. TO BE REMOVED

LEFT FIELD DEVELOPMENT
2610 COCHRANE
DETROIT MI, 48201

OWNER

AMERICAN COMMUNITY DEVELOPERS, INC
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DETROIT, MI 48226
313.965.2444

STATE OF MICHIGAN
JOHN A. CECIL
ENGINEER
NO. 53741
PROFESSIONAL ENGINEER

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

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WWW.NOWAKFRAUS.COM

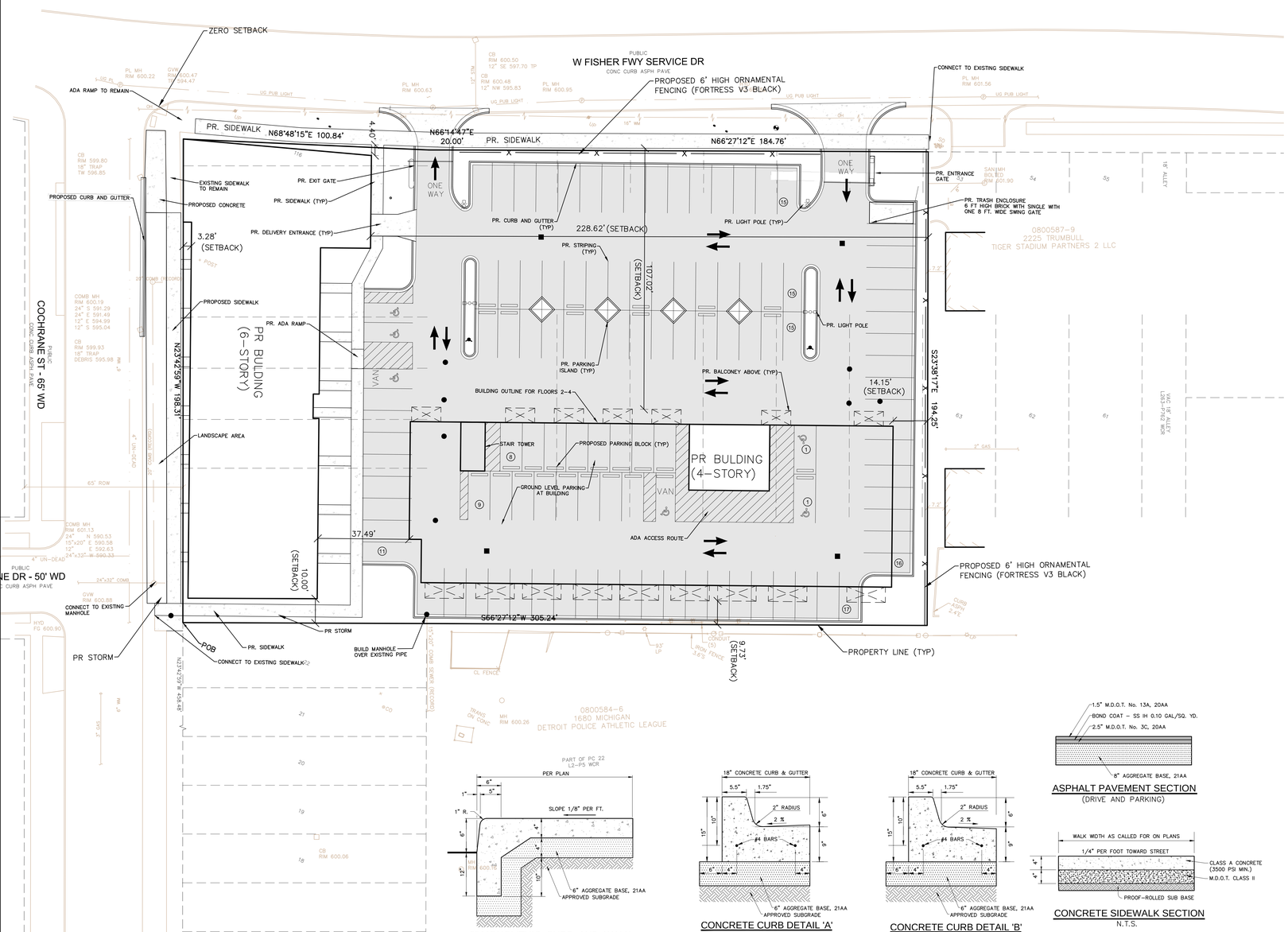
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ISSUED FOR SITE PLAN APPROVAL ONLY	10.29.2020

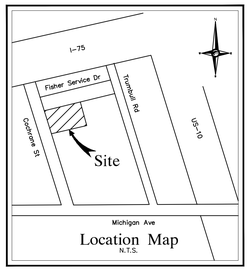
DEMOLITION PLAN

C2

1" = 20'

20 10 0 10 20 30





NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF DETROIT.

THE DESIGN WORKMANSHIP AND CONSTRUCTION MATERIALS SHALL BE IN GENERAL CONFORMANCE WITH THE CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT STORMWATER MANAGEMENT DESIGN MANUAL, LATEST ADDITION.

REFER TO LANDSCAPING PLAN FOR ALL LANDSCAPING AND OPEN SPACE REQUIREMENTS.

SITE DATA

SITE AREA	59,518 SFT.	1.36 AC
IMPERVIOUS	51,182 SFT.	1.17 AC
GREEN SPACE	7,405 SFT.	0.17 AC
PROPOSED USE:	MULTI-FAMILY HOUSING	
ZONING:	B4-GENERAL BUSINESS DISTRICT CONDITIONAL RESIDENTIAL USE (SEC 69-9-80 (4)	
GROSS BUILDING AREA (6 STORY):	64,440 SFT.	
GROSS BUILDING AREA (4 STORY):	44,647 SFT.	
BUILDING FOOTPRINT (6 STORY):	10,740 SFT.	
BUILDING FOOTPRINT (3 STORY):	14,385 SFT.	
LOT COVERAGE:	25,125 SFT.	

	ORDINANCE	6-STORY BLDG	4 STORY BLDG
SETBACKS			
FRONT	20'	VARIES 0'-3.28'	107.52'
SIDE	17'	VARIES 0'-10'	14.35'
REAR	30'	228.62'	VARIES 9.75'-10.99'
HEIGHT	35'	75'	75'
STORIES	3	6	4
FLOOR AREA RATIO			
UNITS PER ACRE		88.2	

PARKING DATA:
1.25 SPACE PER UNIT (MIN.)

	ORDINANCE	PROPOSED
PARKING REQUIRED:	75	111
ACCESSIBLE PARKING	4+1 VAN	+2 VAN

REFER TO LANDSCAPE PLANS FOR ALL SCREENING REQUIREMENTS

SITE PLAN - GENERAL NOTES

ADJACENT ZONING:
ALL AREAS SURROUNDING THE SITE IS B-4 ZONING

1. SITE LIGHTING: SITE LIGHTS TO BE POLE MOUNTED, 20' HIGH

COVID-19 PANDEMIC CONDITION

DUE TO THE UNPRECEDENTED COVID-19 PANDEMIC CONDITION AND RESTRICTIONS THE STANDARD DATA WHICH IS OBTAINED FROM MISS DIG / CALL 811 HAS BEEN RESTRICTED TO CRITICAL INFRASTRUCTURE ONLY. NFE WILL MAKE EVERY EFFORT TO OBTAIN CURRENT REFERENCE DATA FROM THE GOVERNING AGENCIES; HOWEVER, THIS DATA MAY BE PARTIAL OR INCOMPLETE. NFE WILL ISSUE THIS SURVEY WITH THE BEST AVAILABLE INFORMATION FROM OUR FIELD SURVEY AND OTHER AVAILABLE REFERENCE DATA. NFE WILL NOT BE RESPONSIBLE FOR INCOMPLETE OR PARTIAL DATA PROVIDED BY THIRD PARTY FACILITY OWNERS. NFE IS NOT RESPONSIBLE FOR BURIED UTILITIES FOR WHICH PLANS WERE NOT FURNISHED OR CANNOT BE OBSERVED IN THE FIELD.

ALL CONSTRUCTION DOCUMENTS WILL BE UPDATED WHEN THE UTILITY INFORMATION IS PROVIDED BY THE FACILITY OWNER UP UNTIL THE TIME OF SUBMITTAL. ONCE THE PLANS HAVE BEEN SUBMITTED AND APPROVED IT IS THE CONTRACTORS RESPONSIBILITY TO OBTAIN A MISS DIG TICKET PRIOR TO COMMENCING ANY CONSTRUCTION REQUIRING EXCAVATION. CONTRACTOR SHALL IMMEDIATELY NOTIFY NFE OF ANY UTILITIES FLAGGED BY MISS DIG THAT WERE NOT SHOWN ON THE PLANS OR UTILITIES UNCOVERED DURING THEIR WORK.

LEGAL DESCRIPTION

LAND SITUATED IN THE CITY OF DETROIT, COUNTY OF WAYNE AND STATE OF MICHIGAN, DESCRIBED AS FOLLOWS:

PART OF PRIVATE CLAIM 22 AND PRIVATE CLAIM 27, BEING PART OF LOT 116 AND ALL OF LOTS 109 THROUGH 115 OF PLAT OF P.C. 27 RECORDED IN LIBER 2, PAGE 5 OF PLATS, WAYNE COUNTY RECORDS; ALSO PART OF LOTS 47 THROUGH 53, AND 63 AND ALL OF LOTS 64 THROUGH 69 OF PLAT OF JULIANA T. ABBOTT'S SUBDIVISION RECORDED IN LIBER 5, PAGE 36 OF PLATS, WAYNE COUNTY RECORDS, AND BEING MORE PARTICULARLY DESCRIBED AS:

COMMENCING AT THE INTERSECTION OF THE NORTH LINE OF MICHIGAN AVENUE (120 FEET WIDE) AND THE EAST LINE OF COCHRANE AVENUE (65 FEET WIDE), SAID POINT BEING THE SOUTHWEST CORNER OF LOT 5 OF PLAT OF P.C. 27, RECORDED IN LIBER 2, PAGE 5 OF PLATS, WAYNE COUNTY RECORDS; THENCE ALONG SAID EAST LINE OF COCHRANE AVENUE NORTH 23 DEGREES 42 MINUTES 59 SECONDS WEST, 458.48 FEET TO THE POINT OF BEGINNING; THENCE CONTINUING ALONG SAID EAST LINE, NORTH 23 DEGREES 42 MINUTES 59 SECONDS WEST, 198.31 FEET TO A POINT ON THE SOUTH RIGHT OF WAY LINE OF THE FISHER FREEWAY SERVICE DRIVE; THENCE THE FOLLOWING THREE (3) COURSES ALONG SAID SOUTH LINE: (1) NORTH 68 DEGREES 48 MINUTES 15 SECONDS EAST, 100.84 FEET; (2) NORTH 66 DEGREES 14 MINUTES 47 SECONDS EAST, 20.00 FEET; AND (3) NORTH 66 DEGREES 27 MINUTES 12 SECONDS EAST, 184.76 FEET; THENCE SOUTH 23 DEGREES 38 MINUTES 17 SECONDS EAST, 194.25 FEET; THENCE SOUTH 66 DEGREES 27 MINUTES 12 SECONDS WEST, 305.24 FEET TO THE POINT OF BEGINNING, INCLUDING VACATED KALINE DRIVE, VACATED CHERRY STREET AND THE VACATED ALLEYS WITHIN THE ABOVE DESCRIBED PARCEL.

GENERAL PAVING NOTES

PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS SECTION AS INDICATED ON THE PLANS AND AS FOLLOWS:

CONCRETE: PORTLAND CEMENT TYPE IA (AIR-ENTRAINED) WITH A MINIMUM CEMENT CONTENT OF SIX SACKS PER CUBIC YARD, MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,500 PSI AND A SLUMP OF 1 1/2 TO 3 INCHES.

ASPHALT: BASE COURSE – MDOT BITUMINOUS MIXTURE NO. 3C, 20AA; SURFACE COURSE – MDOT BITUMINOUS MIXTURE NO. 13A, 20AA; ASPHALT CEMENT PENETRATION GRADE 85-100, BOND COAT – MDOT SS-1H EMULSION AT 0.10 GALLON PER SQUARE YARD; MAXIMUM 2 INCH LIFT.

PAVEMENT BASE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. EXISTING SUB-BASE SHALL BE PROOF-ROLLED IN THE PRESENCE OF THE ENGINEER TO DETERMINE STABILITY.

ALL CONCRETE PAVEMENT, DRIVEWAYS, CURB & GUTTER, ETC., SHALL BE SPRAY CURED WITH WHITE MEMBRANE CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.

ALL CONCRETE PAVEMENT JOINTS SHALL BE FILLED WITH HOT POURED RUBBERIZED ASPHALT JOINT SEALING COMPOUND IMMEDIATELY AFTER SAWCUT OPERATION. FEDERAL SPECIFICATION SS-S164.

ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, CURRENT EDITION.

ALL TOP OF CURB ELEVATIONS, AS SHOWN ON THE PLANS, ARE CALCULATED FOR A 6" CONCRETE CURB UNLESS OTHERWISE NOTED.

ALL SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1993, SHALL BE INSTALLED AS INDICATED ON THE PLANS.

CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.

FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LIKEWISE ARRANGE FOR ALL INSPECTION.

EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS.

EXPANSION JOINTS SHOULD BE INSTALLED AT THE END OF ALL INTERSECTION RADII.

SIDEWALK RAMPS, CONFORMING TO PUBLIC ACT NO. 8, 1973, SHALL BE INSTALLED AS SHOWN AT ALL STREET INTERSECTIONS AND AT ALL BARRIER FREE PARKING AREAS AS INDICATED ON THE PLANS.

ALL PAVEMENT AREAS SHALL BE PROOF-ROLLED UNDER THE SUPERVISION OF A GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF BASE MATERIALS AND PAVING MATERIALS.

FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 8 INCHES THICK TO 98% OF THE MAXIMUM DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.

PAVING LEGEND

- PROPOSED CONCRETE PAVEMENT
- PROPOSED ASPHALT PAVEMENT

LEGEND

- MANHOLE — EXISTING SANITARY SEWER
- SAN. CLEAN OUT
- HYDRANT, GATE VALVE — EXISTING WATERMAIN
- MANHOLE, CATCH BASIN — EXISTING STORM SEWER
- EX. R. Y. CATCH BASIN
- UTILITY POLE, GUY POLE — EXISTING BURIED CABLES
- GUY WIRE — OVERHEAD LINES
- LIGHT POLE
- SIGN
- C.O., MANHOLE — EXISTING GAS MAIN
- HYDRANT, GATE VALVE — PR. SANITARY SEWER
- PR. WATER MAIN
- INLET, C.B., MANHOLE — PR. STORM SEWER
- PR. R. Y. CATCH BASIN
- PROPOSED LIGHT POLE

6" MONOLITHIC CURB AND WALK
N.T.S.

CONCRETE CURB DETAIL 'A'
N.T.S.

CONCRETE CURB DETAIL 'B'
N.T.S.

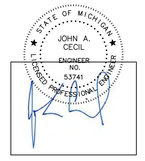
LEFT FIELD DEVELOPMENT
2610 COCHRANE
DETROIT MI, 48201

OWNER

AMERICAN COMMUNITY DEVELOPERS, INC
20250 HARPER AVENUE
DETROIT, MICHIGAN 48201
313.881.8150

CIVIL ENGINEER

NOWAK & FRAUS ENGINEERS
28 W. ADAMS, SUITE 210
DETROIT, MI 48226
313.965.2444



NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

NOWAK & FRAUS ENGINEERS
28 WEST ADAMS, SUITE 210
DETROIT, MI 48226
TEL (313) 965-2444
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

DRAWING ISSUE	DATE
ISSUED FOR SITE PLAN APPROVAL ONLY	10.29.2020

SITE PLAN

C3

1" = 20'

20 10 0 10 20 30

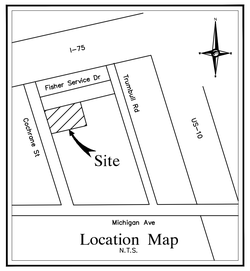
LEFT FIELD DEVELOPMENT
2610 COCHRANE
DETROIT MI, 48201

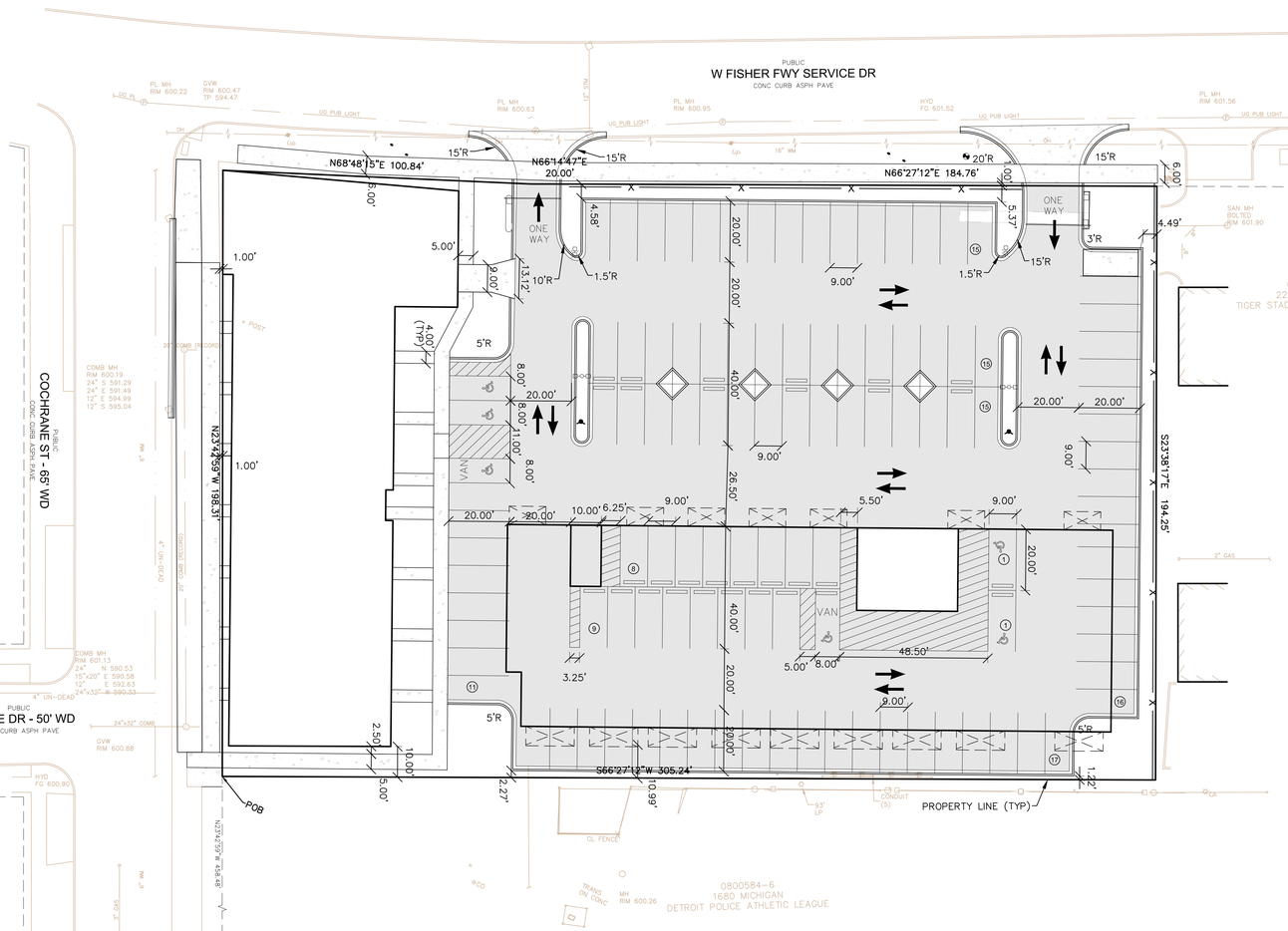
OWNER

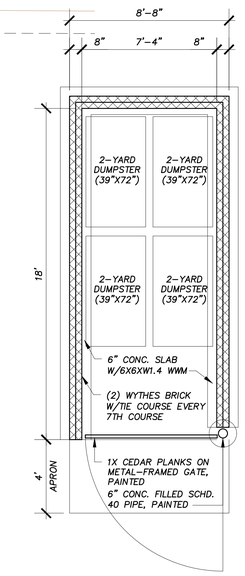
AMERICAN COMMUNITY DEVELOPERS, INC
20250 HARPER AVENUE
DETROIT, MICHIGAN 48201
313.881.8150

CIVIL ENGINEER

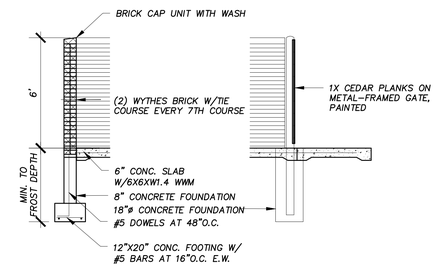
NOWAK & FRAUS ENGINEERS
28 W. ADAMS, SUITE 210
DETROIT, MI 48226
313.965.2444







X / X-X DUMPSTER ENCLOSURE PLAN
SCALE: NTS



X / X-X DUMPSTER ENCLOSURE SECTION
SCALE: NTS

PAVING LEGEND

- PROPOSED CONCRETE PAVEMENT
- PROPOSED ASPHALT PAVEMENT

LEGEND

- MANHOLE — EXISTING SANITARY SEWER
- SAN. CLEAN OUT
- HYDRANT, GATE VALVE — EXISTING WATERMAIN
- MANHOLE, CATCH BASIN — EXISTING STORM SEWER
- EX. R. Y. CATCH BASIN
- UTILITY POLE, GUY POLE — EXISTING BURIED CABLES
- GUY WIRE — OVERHEAD LINES
- LIGHT POLE
- SIGN
- EXISTING GAS MAIN
- C.O., MANHOLE — PR. SANITARY SEWER
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- INLET, C.B., MANHOLE — PR. STORM SEWER
- PR. R. Y. CATCH BASIN
- PROPOSED LIGHT POLE

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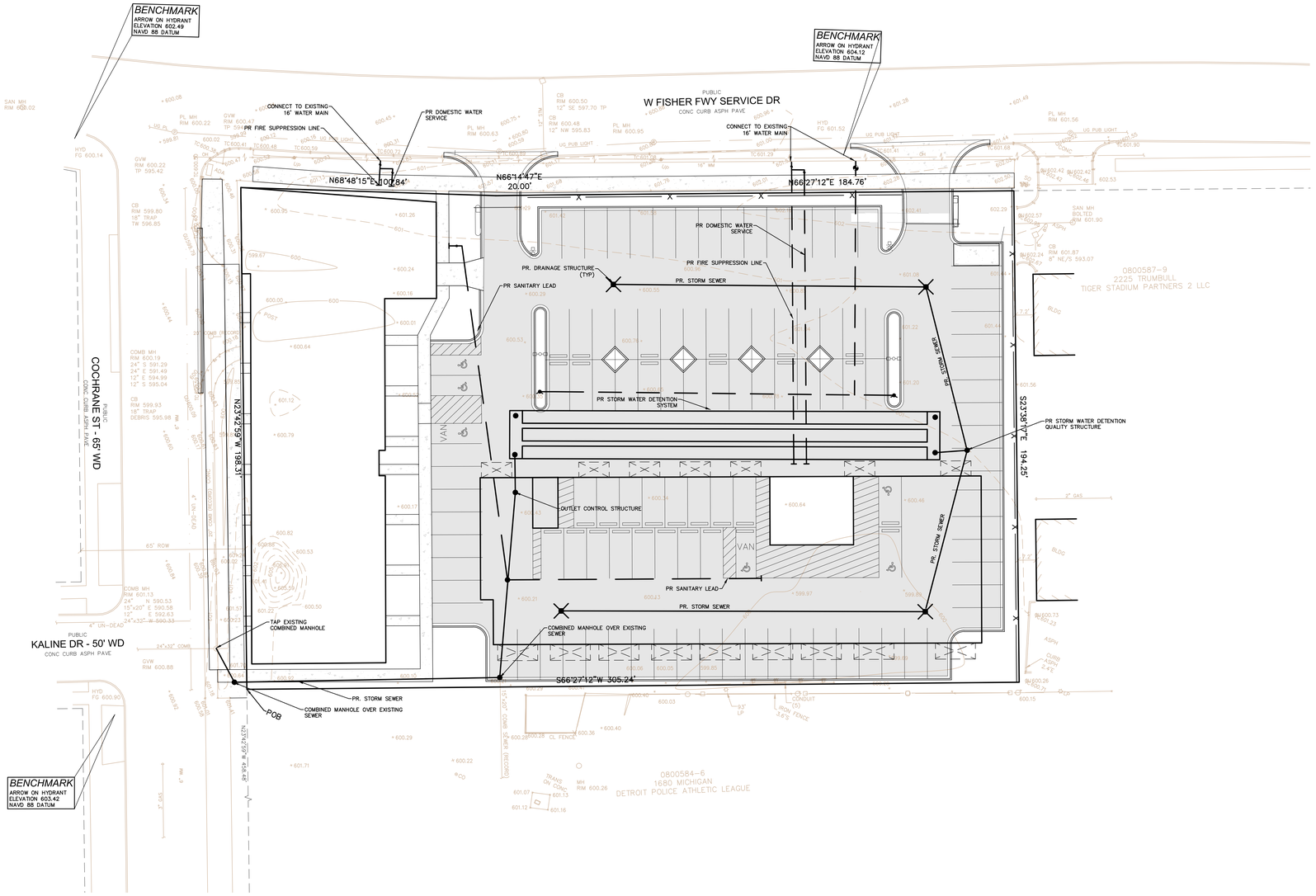
STATE OF MICHIGAN
JOHN A. CECIL
ENGINEER NO. 53741
REGISTERED PROFESSIONAL ENGINEER

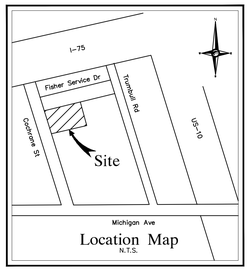
DRAWING ISSUE	DATE
ISSUED FOR SITE PLAN APPROVAL ONLY	10.29.2020

SITE DIMENSIONAL PLAN

C4

1" = 20'
20 10 0 10 20 30







COVID-19 PANDEMIC CONDITION

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Project Name & Location: **L611, 2610 Cochrane Street, Detroit, MI**

10 Year Detention Calculation - City of Detroit Methodology - For Preliminary Design ONLY

Calculate Critical Storm Duration for 10 year event (D_{10}):

Q_a = peak allowable discharge per acre = 0.15 cfs/ac
C = Runoff Coefficient = 0.78

$D_{10} = 30.9*(Q_a/C)^{-0.979}$ (Ref. Detroit Stormwater Design Manual Eqn. 4.7)

D_{10} = 155.3 min

Calculate Design Rainfall Intensity (i):

T = return period 10 years
D = critical storm duration = D_{10} = 155.3 min

i = (38.4164*T^0.2082)/(12.3258 + D)^0.8405 (Ref. Detroit Stormwater Design Manual Eqn. 4.1)

i = design rainfall intensity = 0.84 in/hr

Calculate Required Storage Volume (Vn):

A = tributary drainage area = 1.36 acre
C = Runoff Coefficient = 0.780441176
Dn = critical storm duration = D_{10} = 155.3 min
I = rainfall intensity based on Dn = 0.84 in/hr
Q_a = peak allowable discharge per acre = 0.15 cfs/ac

$Vn = 60.5*Dn*C*A*I - 60*Dn*Q_a*A$ (Ref. Detroit Stormwater Design Manual Eqn. 4.9)

Vn = req'd detention volume (10 year) = 6454.5 CFT (For Preliminary Design ONLY)

Vn = req'd detention volume (10 year) = 9700.0 CFT (Determined by TR-55 Hydrograph)

LEGEND

- MANHOLE — EXISTING SANITARY SEWER
- HYDRANT — SAN. CLEAN OUT
- GATE VALVE — EXISTING WATER MAIN
- MANHOLE CATCH BASIN — EXISTING STORM SEWER
- EX. R. Y. CATCH BASIN
- UTILITY POLE — GUY POLE — EXISTING BURIED CABLES
- GUY WIRE — OVERHEAD LINES
- LIGHT POLE
- SIGN
- EXISTING GAS MAIN
- C.O. — MANHOLE — PR. SANITARY SEWER
- HYDRANT — GATE VALVE — PR. WATER MAIN
- INLET — C.B. — MANHOLE — PR. STORM SEWER
- PR. R. Y. CATCH BASIN
- SAND BACKFILL (95 % DENSITY)
- PROPOSED LIGHT POLE

LEFT FIELD DEVELOPMENT
2610 COCHRANE
DETROIT MI, 48201

OWNER

AMERICAN COMMUNITY DEVELOPERS, INC
20250 HARPER AVENUE
DETROIT, MICHIGAN 48201
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CIVIL ENGINEER

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STATE OF MICHIGAN
JOHN A. CECIL
ENGINEER NO. 53741
PROFESSIONAL ENGINEER

NF ENGINEERS
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UTILITY AND STORM WATER MANAGEMENT PLAN

C5

1" = 20'

20 10 0 10 20 30

GROUNDCOVER KEY

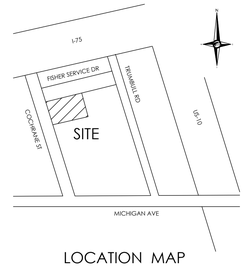
1. TYPICAL SOD LAWN AREAS, SOWN ON 3" TOPSOIL
2. RESTORE EXISTING LAWN AREAS W/ HYDROSEED AND MULCH
3. 4' DIA SPADE CUT EDGE W/ 3" SHREDDED BARK MULCH
4. 3" DEPTH DOUBLE SHREDDED HARDWOOD BARK MULCH
5. 3/4" - 1 1/2" STONE MULCH, 3-4" DEPTH ON WEED BARRIER

LANDSCAPE REQUIREMENTS

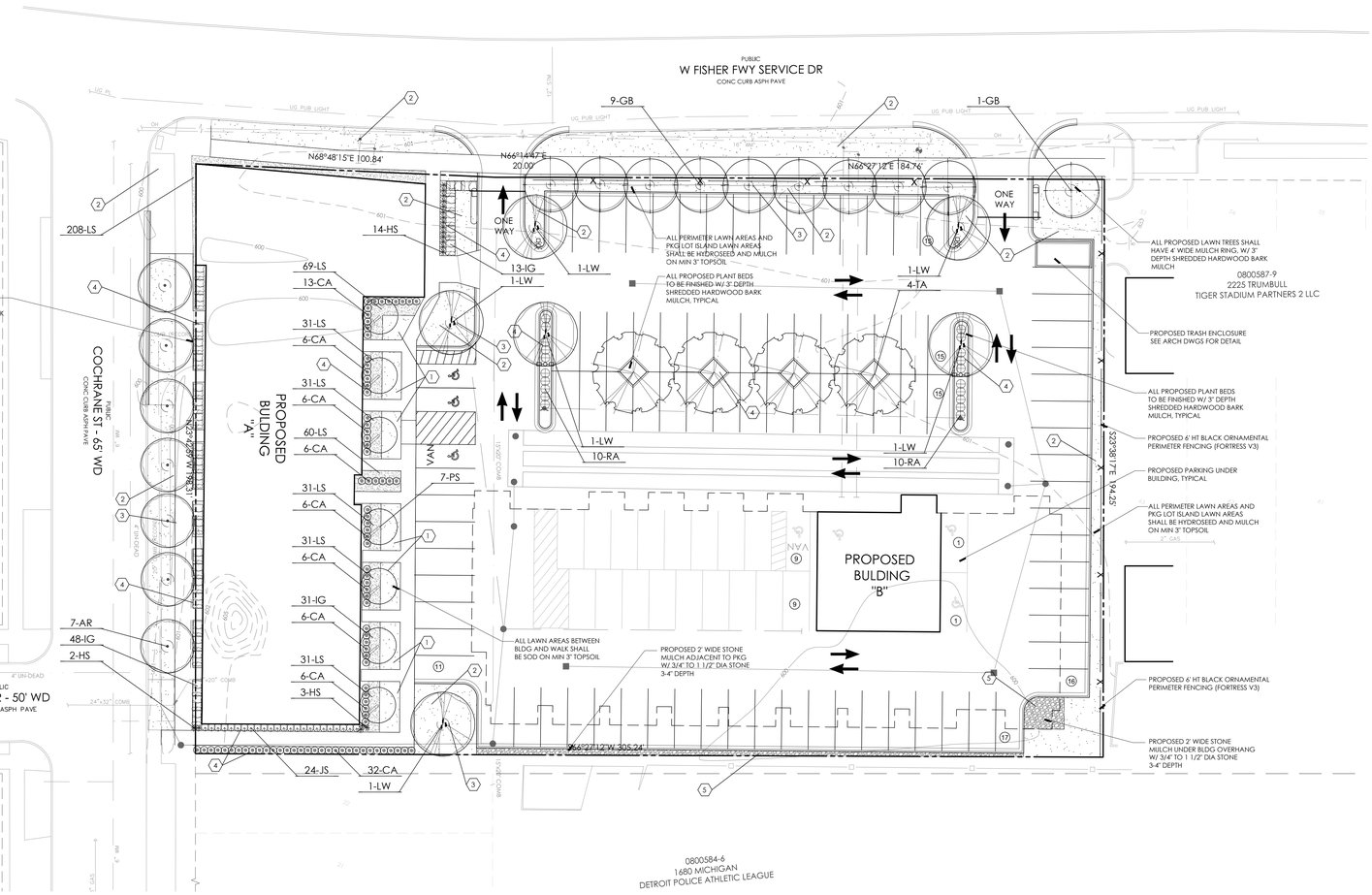
LANDSCAPE ABUTTING A R.O.W.
1 DECIDUOUS TREE PER 30 L.F. AND HEDGE ADJACENT TO PARKING
FISHER FREEWAY SERVICE DRIVE
REQUIRED: 305.62 L.F. / 30 L.F. = 10.18 OR 10 TREES REQUIRED
PROVIDED: 10 TREES & ORNAMENTAL FENCE

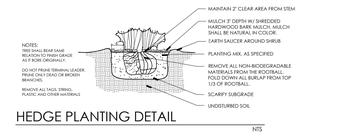
COCHRANE STREET
REQUIRED: 198.31 L.F. / 30 L.F. = 6.61 OR 7 TREES REQUIRED
PROVIDED: 7 TREES

PARKING LOT LANDSCAPE REQUIREMENTS
22 S.F. OF INTERIOR LANDSCAPING FOR EACH PARKING SPACE
109 SPACES X 22 S.F. = 2,398 S.F. REQUIRED
2,398 S.F. / 250 = 9.6 OR 10 TREES REQUIRED
PROVIDED: 2,470.47 S.F. AND 10 TREES

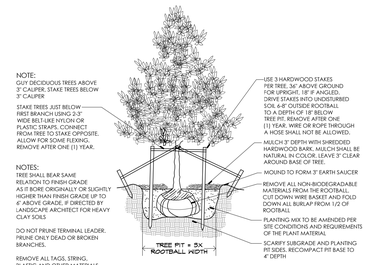


LOCATION MAP
N.T.S.

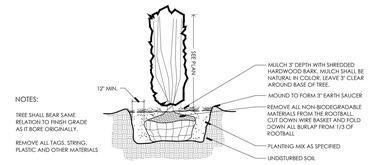




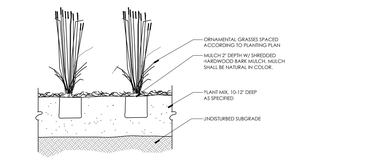
HEDGE PLANTING DETAIL
NTS



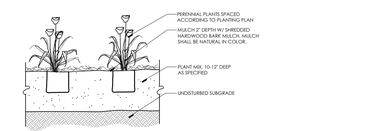
DECIDUOUS TREE PLANTING DETAIL
NTS



UPRIGHT EVERGREEN SHRUB PLANTING DETAIL
NTS



ORNAMENTAL GRASS PLANTING DETAIL
NTS



PERENNIAL PLANTING DETAIL
NTS

PLANT SCHEDULE

KEY	QTY	BOTANICAL/COMMON NAME	SIZE	SPACING	ROOT	COMMENT
TREES						
AR	7	Acer rubrum 'Armstrong' Armstrong Maple	2.5" CAL	SEE PLAN	B&B	FULLY BRANCHED HEADS
GB	10	Gingko biloba 'Princeton Sentry' Princeton Sentry Ginkgo	2.5" CAL	SEE PLAN	B&B	FULLY BRANCHED HEADS
LW	6	Liquidambar styraciflua 'Worpelsdon' Worpelsdon Sweet Gum	2.5" CAL	SEE PLAN	B&B	FULLY BRANCHED HEADS
PS	7	Prunus sargentii 'Pink Flair' Pink Flair Flowering Cherry	2.5" CAL	SEE PLAN	B&B	FULLY BRANCHED HEADS
TA	4	Tilia americana 'Boulevard' Boulevard Linden	2.5" CAL	SEE PLAN	B&B	FULLY BRANCHED HEADS
SHRUBS						
IG	61	Ilex glabra 'Strong Box' Strong Box Holly	30" HT	30" OC	B&B	MAINTAIN AS HEDGE
JS	24	Juniperus scopulorum 'Grey Gleam' Grey Gleam Upright Juniper	5' HT	30" OC	B&B	SHEAR AT UNIFORM 5' HT
RA	20	Ribes alpinum 'Green Mound' Green Mound Alpine Currant	30" HT	30" OC	B&B	
GROUNDCOVERS/PERENNIALS						
CA	55	Calamagrostis a. 'Karl Foerster' Karl Foerster Feather Reed Grass	3 GAL	30" OC	CONT	
HS	19	Hemerocallis 'Stella D'Oro' Stella D'Oro Daylily	2 GAL	24" OC	CONT	
LS	523	Liriope spicata Creeping Lilyturf	1 GAL	15" OC	CONT	

GENERAL SOD NOTE:

ALL LAWN AREAS DESIGNATED TO BE SODDED, SHALL BE SODDED WITH A BLENDED DURABLE BLUEGRASS SOD, TYPICALLY GROWN IN THE REGION. ALL TURF SHALL BE PLACED ON A MINIMUM 3" PREPARED TOPSOIL, AND WATERED DAILY UNTIL ESTABLISHMENT. IN AREAS SUBJECT TO EROSION, SODDED LAWN SHALL BE STABILIZED WHERE NECESSARY, AND LAID PERPENDICULAR TO SLOPES
SOD INSTALLATION SHALL OCCUR ONLY:
SPRING: APRIL1 TO JUNE1
FALL: AUGUST 15 TO OCTOBER 15

GENERAL SEED NOTE:

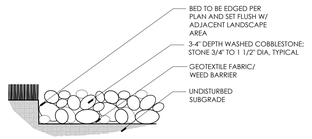
ALL LAWN AREAS DESIGNATED TO BE SEEDED, SHALL BE HYDRO-SEEDED WITH SPECIFIED BLENDS, AND STABILIZED WITH WOOD CELLULOSE FIBER MULCH (2,000 LBS PER ACRE) . IN AREAS SUBJECT TO EROSION, SEEDED LAWN SHALL BE FURTHER STABILIZED WHERE NECESSARY WITH BIODEGRADABLE EROSION BLANKET AND STAKED UNTIL ESTABLISHED. ALL SEED SHALL BE APPLIED OVER A MINIMUM 3" PREPARED TOPSOIL, AND SHALL BE KEPT MOIST AND WATERED DAILY UNTIL ESTABLISHED.
SEEDING INSTALLATION SHALL OCCUR ONLY:
SPRING: APRIL1 TO JUNE1
FALL: AUGUST 15 TO OCTOBER 15

TYPICAL SEEDED LAWN MIX:

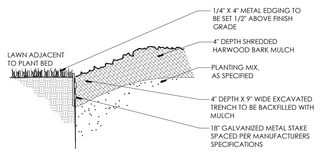
ALL LAWN AREAS DESIGNATED TO BE SEEDED, SHALL BE HYDROSEEDED WITH TYPICAL DROUGHT TOLERANT, DURABLE BLENDED SEED MIX, AT A RATE OF 220 LBS PER ACRE
MIX IS COMPRISED OF
- 30% NITE HAWK PERENNIAL RYE
- 30% KENTUCKY BLUEGRASS
- 20% CREEPING RED FESCUE
- 10% MERIT KENTUCKY BLUEGRASS
- 10% NEWPORT KENTUCKY BLUEGRASS

GENERAL LANDSCAPE NOTES

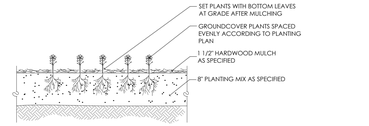
1. LANDSCAPE CONTRACTOR SHALL VISIT SITE, INSPECT EXISTING CONDITIONS AND REVIEW PROPOSED PLANTING AND RELATED WORK. IN CASE OF DISCREPANCY BETWEEN PLAN AND PLANT LIST, THE PLAN SHALL GOVERN QUANTITIES. CONTACT THE LANDSCAPE ARCHITECT WITH ANY CONCERNS.
2. THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON-SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION ON HIS/HER PHASE OF WORK. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. THE CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES, AND SHALL REPORT ANY UNACCEPTABLE SITE CONDITIONS TO THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT.
4. PLANTS SHALL BE FULL, WELL-BRANCHED, AND IN HEALTHY VIGOROUS GROWING CONDITION.
5. ALL PLANTS SHALL BE INSPECTED BEFORE AND AFTER PLANTING IS COMPLETE.
6. ALL TREES MUST BE STAKED, FERTILIZED AND MULCHED AND SHALL BE GUARANTEED TO EXHIBIT A NORMAL GROWTH CYCLE FOR AT LEAST ONE (1) YEAR FOLLOWING PLANTING.
7. ALL MATERIAL SHALL CONFORM TO THE GUIDELINES ESTABLISHED IN THE MOST RECENT EDITION OF THE "AMERICAN STANDARDS FOR NURSERY STOCK."
8. CONTRACTOR WILL SUPPLY FINISHED GRADE AND EXCAVATE AS NECESSARY TO INSTALL MULCH TO A DEPTH OF 3" IN PLANTING BEDS AS INDICATED IN PLANT DETAILS AND A DEPTH OF 4" IN ALL LAWN AREAS.
9. PROVIDE CLEAN BACKFILL SOIL, USING MATERIAL STOCKPILED ON SITE. SOIL SHALL BE SCREENED AND FREE OF DEBRIS, FOREIGN MATERIAL, AND STONE.
10. SLOW-RELEASE FERTILIZER SHALL BE ADDED TO THE PLANT PITS BEFORE BEING BACKFILLED. APPLICATION SHALL BE AT THE MANUFACTURERS RECOMMENDED RATES.
11. AMENDED PLANT MIX (PREPARED TOPSOIL) SHALL CONSIST OF 1/3 SCREENED TOPSOIL, 1/3 SAND, AND 1/3 "DAIRY DOO" COMPOST, MIXED WELL AND SPREAD TO A DEPTH AS INDICATED IN PLANTING DETAILS.
12. ALL PLANTINGS SHALL BE MULCHED WITH SHREDDED HARDWOOD BARK, SPREAD TO A DEPTH OF 3" FOR TREES AND SHRUBS, AND 2" ON ANNUALS, PERENNIALS, AND GROUNDCOVERS. MULCH SHALL BE NEAT AND FREE FROM DEBRIS AND FOREIGN MATERIAL, AND PIECES ON INCONSISTENT SIZE.
13. NO SUBSTITUTIONS OR CHANGES OF LOCATION, OR PLANT TYPE SHALL BE MADE WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE.
14. THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCIES BETWEEN PLANT QUANTITIES ON THE PLANT LIST AND ON THE PLAN.
15. THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL PLANT MATERIAL IN A VERTICAL CONDITION THROUGHOUT THE GUARANTEED PERIOD.
16. THE LANDSCAPE ARCHITECT OR OWNERS REPRESENTATIVE SHALL HAVE THE RIGHT TO REJECT ANY WORK OR MATERIAL THAT DOES NOT MEET THE REQUIREMENTS OF THE PLANS AND/OR SPECIFICATIONS.
17. THE LANDSCAPE CONTRACTOR SHALL SEED AND MULCH OR SOD (AS INDICATED ON PLANS) ALL DISTURBED AREAS WITHIN THE LIMITS OF THE PROJECT AREA. OUTSIDE LIMITS, FURTHER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING AREAS DISTURBED DURING CONSTRUCTION, NOT IN THE CONTRACT LIMITS, TO EQUAL OR GREATER CONDITION.
18. ALL LANDSCAPE AREAS SHALL HAVE PROPER DRAINAGE THAT PREVENTS EXCESSIVE WATER FROM PONDING ON LAWN AREAS OR AROUND TREES AND SHRUBS.
19. ALL LANDSCAPE AREAS SHALL BE IRRIGATED WITH AN AUTOMATIC UNDERGROUND SYSTEM.



COBBLESTONE MULCH DETAIL
NTS



METAL EDGING DETAIL
NTS



GROUNDCOVER PLANTING DETAIL
NTS

LEFT FIELD DEVELOPMENT
2610 COCHRANE ST.
DETROIT MI 48201

OWNER

AMERICAN COMMUNITY DEVELOPERS, INC
20250 HARPER AVENUE
DETROIT, MICHIGAN 48201
313.881.8150

CIVIL ENGINEER

NOWAK & FRAUS ENGINEERS
28 W. ADAMS, SUITE 210
DETROIT, MI 48226
313.965.2444

NF ENGINEERS
CIVIL ENGINEERS
LAND SURVEYORS
LAND PLANNERS

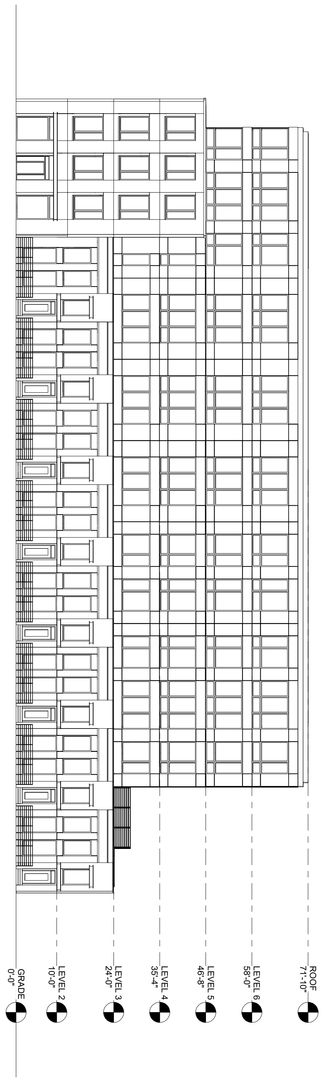
NOWAK & FRAUS ENGINEERS
28 WEST ADAMS, SUITE 210
DETROIT, MI 48226
TEL. (313) 965-2444
FAX. (248) 332-8257
WWW.NOWAKFRAUS.COM

DRAWING ISSUE	DATE
ISSUED FOR SITE PLAN APPROVAL ONLY	10.29.2020

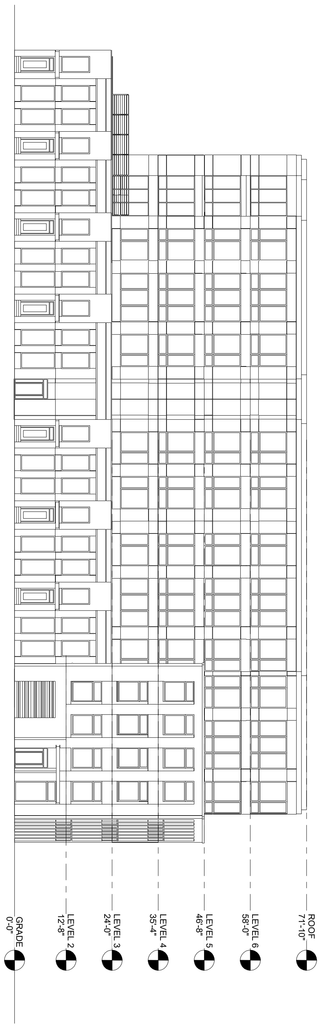
LANDSCAPE PLAN

L1

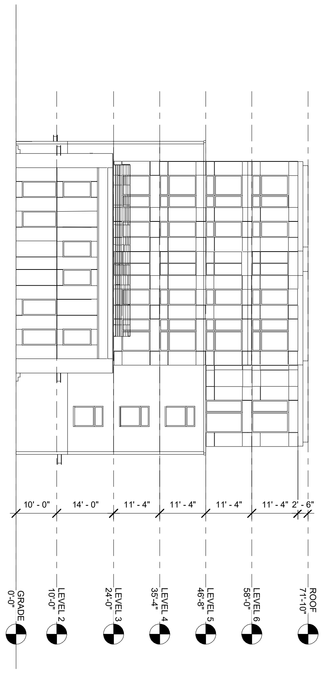
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1" = 20'



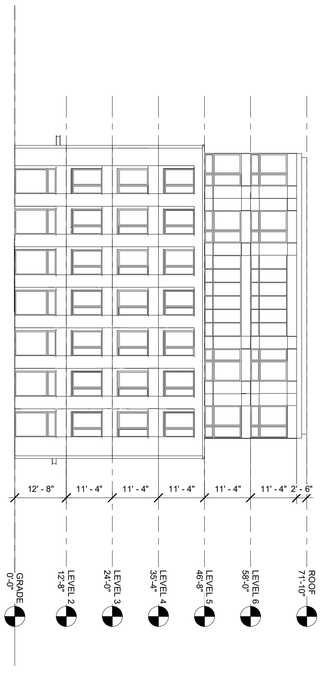
2 BUILDING A WEST ELEVATION
1/16" = 1'-0"



4 BUILDING A EAST ELEVATION
1/16" = 1'-0"



1 BUILDING A SOUTH ELEVATION
1/16" = 1'-0"



3 BUILDING A NORTH ELEVATION
1/16" = 1'-0"

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COCHERANE
BUILDING ELEVATIONS
LEFT FIELD

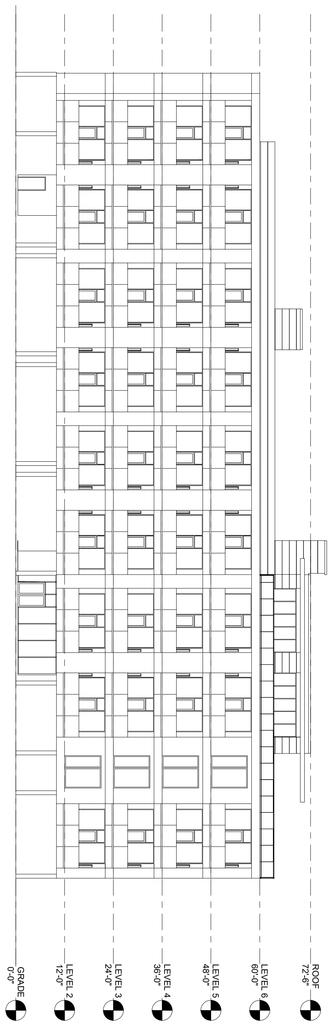
Revision Schedule

No.	Description	Date

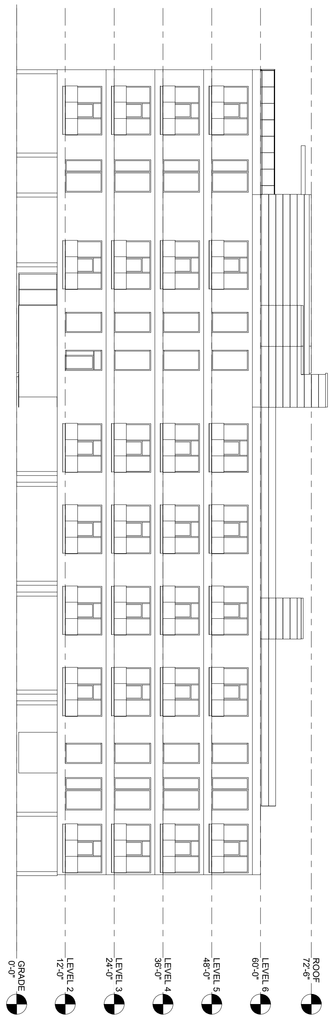
Owner

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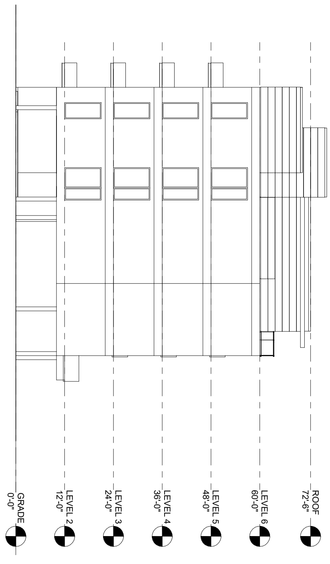
designwerks architecture



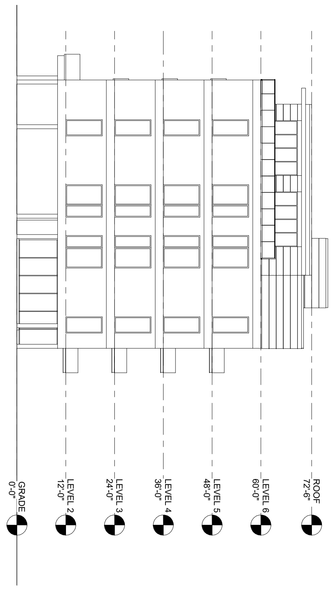
2 BUILDING B SOUTH ELEVATION
1/16" = 1'-0"



4 BUILDING B NORTH ELEVATION
1/16" = 1'-0"



1 BUILDING B WEST ELEVATION
1/16" = 1'-0"



3 BUILDING B EAST ELEVATION
1/16" = 1'-0"

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BALLFIELD BUILDING ELEVATIONS

LEFT FIELD

Revision Schedule

No.	Description	Date

Owner

Enter address here

designwerks architecture

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- **MINING AND RECLAMATION ASSISTANCE**
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- **SOIL AND GROUNDWATER ASSESSMENTS**
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