

# ROCHESTER HILLS BROWNFIELD REDEVELOPMENT AUTHORITY

# ACT 381 WORK PLAN

To Conduct MDEQ Environmental Activities

Legacy Rochester Hills Redevelopment Project  
Northeast Corner of Hamlin and Adams Roads  
Rochester Hills, Michigan 48309

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# ACT 381 WORK PLAN

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## 1.0 Introduction

The Rochester Hills Brownfield Redevelopment Authority (the “Authority”) is submitting this Act 381 Work Plan for the property located at the 28-Acre Vacant Property on the Northeast Corner of Hamlin Road and Adams Road (the “subject property”). The subject property comprises two parcels (Parcel ID Numbers 15-29-101-022 and 15-29-101-023). The Brownfield Plan for the Legacy Rochester Hills Redevelopment Project (the “Brownfield Plan”) was approved by the Authority on March 6, 2018, and the Rochester Hills City Council approved the Brownfield Plan on [City Council BFP Approval Date](#). Refer to Appendix A for a copy of the Brownfield Plan and Appendix B for copies of the respective resolutions approving the Brownfield Plan.

A previous Act 381 Work Plan was approved in 2008 to conduct MDEQ environmental activities for a proposed redevelopment project on the subject property. However, the proposed project did not occur, and the anticipated previous developer walked away from the property. A new developer has been identified and a new redevelopment project proposed, which necessitated this Work Plan. The original 381 Work Plan will be withdrawn and replaced by this Work Plan. The new developer anticipates remediating the western portion of the subject property to the extent necessary to obtain a No Further Action (NFA) determination from MDEQ. The original Act 381 Work Plan did not include the required activities and costs to obtain an NFA for the subject property.

Legacy Rochester Hills (Project) consists of the redevelopment of the subject property. The final plans for the redevelopment have not been completed. However, this Project will include the remediation of contaminated soils on the western portion of the subject property and construction of a new residential apartment complex to include approximately 368 units with onsite surface parking. In addition, due care engineering controls will be constructed on the eastern portion of the subject property, where higher concentrations of contaminants in soil are present. This Project will ultimately put underutilized property back to productive use and will generate new tax revenue for the City. In addition to the economic benefits of this development to the City of Rochester Hills, environmental activities are anticipated that would provide a safer and healthier community to the public and environment alike.

Founded in 1952, Goldberg Companies, Inc, are national developers, general contractors and property managers of residential and commercial real estate. Goldberg Companies, Inc, are large community supporters in their project locations. Their commitment to quality and excellence has – and will continue to be – the cornerstone of the company. All their properties are developed to own, not to sell. As a result, their primary focus is to provide a level of construction, maintenance and management of residential properties that remains unparalleled in the real estate industry. Goldberg Companies, Inc’s broader mission is to serve the community by building trusted relationships and creating a better quality of life for its residents.

The Project is seeking tax increment financing (TIF) incentives. In addition, the Project has received approval for a sub-grant from Oakland County's 2017 EPA Assessment Grant. Redevelopment is expected to begin in 2018, starting with environmental remediation activities and site preparation, followed by construction.

Based on the current site conditions, certain activities are necessary to prepare the subject property for redevelopment. The following sections present site background information, current subject property conditions, the proposed MDEQ environmental activities and the costs associated with the proposed activities.

## **1.1 Eligible Property Information**

The following sections provide details on subject property ownership and use.

### **1.1.1 Location and Eligibility**

The subject property is the 28-acre vacant property located on the northeast corner of Hamlin Road and Adams Road in the City of Rochester Hills, Michigan. The subject property comprises two parcels (Parcel ID Numbers 15-29-101-022 and 15-29-101-023). For the purposes of this report, the western parcel (Parcel ID Number 15-29-101-022) is designated as "Parcel A". The eastern parcel (Parcel ID Number 15-29-101-023) is designated as "Parcel B".

It is anticipated that the property boundary separating the two parcels will be redrawn prior to the commencement of the Project. It should be noted that any future parcel reconfigurations or divisions will not affect the eligible property boundary, nor would they necessitate a brownfield plan or 381 work plan amendment. Moreover, while it is anticipated that Department Specific Activities (i.e., environmental activities) will be conducted on both parcels, the parcels will likely be owned by separate entities.

Please refer to the Brownfield Plan located in Appendix A for the subject property legal description. Refer to Figure 1 for a Scaled Property Location Map and Figure 2 for an Eligible Property Boundary Map. Site Plans and Renderings are also included with the Figures Appendix.

The subject property is considered "eligible property" as defined by Act 381, Section 2 because: (a) the subject property was previously utilized as a commercial property; and (b) each of the two parcels is determined to be a "facility." Please refer to Section 2.0 for further information and the Brownfield Plan provided in Appendix A for the relevant supporting documentation.

### **1.1.2 Current Ownership**

Ownership information for the parcels comprising the subject property is summarized in the following table.

DBB Adams, LLC/DBB Hamlin, LLC  
Mr. Dennis Bostick  
32900 Dequindre Road  
Warren, Michigan 48092  
Phone: (586) 939-5500

### **1.1.3 Proposed Future Ownership**

It is anticipated that the parcel lines will be redrawn prior to acquisition. The current dividing line between the eastern and western subject property parcels will be moved to the east, but the total area defined by the subject property boundary will not change. Refer to Figure 2 for the proposed new parcel boundary lines. It is anticipated that Goldberg Companies, Inc will establish a single-purpose LLC to acquire and develop the western parcel (Parcel A).

It should be noted that any future parcel reconfigurations or divisions will not affect the Eligible Property boundary, nor would they necessitate a Plan amendment. It is anticipated that a to be determined entity will acquire the eastern parcel (Parcel B), which is intended for natural open area and/or public surface parking in support of the City recreational property to the east.

Parcel B will be owned by a to be determined entity and will be subject to an agreement permitting the owner of Parcel A (the "Developer") to access and implement the remedial work described in this Plan. Goldberg Companies, Inc.

c/o Mr. Eric Bell  
25101 Chagrin Boulevard, Suite 300  
Beachwood, Ohio 44122  
Phone: (216) 831-6100

### **1.1.4 Delinquent Taxes, Interest, and Penalties**

No delinquent taxes, interest, or penalties are known to exist for the property.

### **1.1.5 Existing and Proposed Future Zoning for the Eligible Property**

The subject property is zoned Residential (R2). Future zoning is expected to stay the same. However, it is anticipated that a restrictive covenant will be placed on the eastern parcel (Parcel B) limiting future use.

## **1.2 Historical Use of the Eligible Property**

The project is the redevelopment of the former Christensen Dump, located on two parcels northeast of the intersection of Hamlin and Adams Roads. The Christensen Dump operated from the mid-1950s until the mid-1960s. Later, during the 1960s and early-1970s, 55-gallon drums (which contained a variety of chemicals including paint and solvents) were dumped illegally on the property. The property has remained unimproved with no apparent use since that time.

Both parcels are heavily contaminated. Analytical results of previous environmental investigations conducted on the two parcels indicate that concentrations of select metals, pesticides, volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs) and polynuclear aromatic compounds (PNAs) were detected in soil and/or groundwater above Michigan Department of Environmental Quality (MDEQ) Residential Cleanup Criteria (RCC).

## **1.3 Current Use of the Eligible Property**

The subject property currently is overgrown with vegetation. The subject property is not currently used for any significant or obvious purpose and has lain vacant since the early 1960s.

## 1.4 Summary of Proposed Redevelopment and Future Use for the Eligible Property

Because of both heavy contamination and geotechnical issues from dumping, the properties have been unable to attract development or use since the 1960s. The area is attractive for new construction, but the costs associated with site conditions are so high that all previous efforts have been stymied. The most recent proposal, in 2008, failed because the redevelopment plan was unable to attract funding.

The proposed redevelopment has two components. The first, on the western portion of the property (Parcel A), involves remediation of contamination and construction of approximately 368 high-quality rental residential units. The second, on the eastern end of the property (Parcel B), is limited to due care response activities in the areas of most significant contamination (excavation and removal of certain non-hazardous contaminated soils, and capping and isolating the area of most significant impact). Together, the two components will result in economically productive rehabilitation and reuse of properties that, for decades, have been a blight on the community. In addition to the significant benefits of environmental cleanup, the project will result in an immediate increase in tax revenue for some taxing jurisdictions.

Goldberg Companies, Inc., is a leader in land development, construction and property management. Unlike most management companies, Goldberg Companies, Inc., focuses on long-term ownership and management and continues to invest in and maintain their properties, which they own and manage across the country.

Redevelopment is expected to begin in 2018, beginning with environmental remediation and site preparation activities.

## 2.0 Current Property Conditions

The following sections provide detail on the subject property's Brownfield qualifications.

### 2.1 Property Eligibility

As indicated in Section 1.1.1, the subject property is considered "eligible property" as defined by Act 381, Section 2. Additional information regarding property eligibility is provided in the Sections below.

### 2.2 Summary of Environmental Conditions

Under Part 201, a "facility" is defined as "any area, place, or property where a hazardous substance in excess of the concentrations which satisfy the requirements of section 20120a (1) (a) has been released, deposited, disposed of, or otherwise comes to be located." M.C.L. § 324.20101(1) (o). A "release" is defined to include "spilling" or "leaking" of a hazardous substance into the environment. In addition, a "release" includes the abandonment of containers or other closed receptacles containing hazardous substances. M.C.L. § 324.20101(1) (bb).

#### 2.2.1 Environmental Investigations

The environmental investigations completed on the subject property since 2002 are summarized below.

- Soil Sampling and Monitoring Well Installation, prepared in June 2002 by Harding ESE for only the eastern parcel
- Limited Subsurface Investigation, prepared in October 2002 by AKT Peerless
- Limited Subsurface Investigation, prepared in December 2004 by AKT Peerless

- Phase I Environmental Site Assessment (ESA), prepared in January 2005 by AKT Peerless
- Supplemental Subsurface Investigation, prepared in February 2005 by AKT Peerless
- Category N Baseline Environmental Assessment Report, prepared on November 10, 2015 by AKT Peerless
- Phase II ESA, prepared in July 2007 by AKT Peerless
- Limited Soil Gas Investigation, conducted in April 2017 by AKT Peerless
- Limited Subsurface Investigation, conducted in June 2017 by AKT Peerless

Summaries of the reports and activities relevant to site conditions, since at least 2002, are provided in the following sections.

#### **2.2.1.1 Harding ESE June 2002 Soil Sampling and Monitoring Well Installation for Parcel 15-29-101-023**

Harding ESE conducted a subsurface investigation at the direction of the MDEQ throughout the fenced area on the subject property in June 2002. Thirteen (13) soil borings (GP-1 through GP-13) were advanced to further evaluate the historical drum burial area and assess groundwater conditions.

Laboratory analytical results indicate that concentrations of select VOCs, SVOCs, metals (arsenic, cadmium, chromium, lead, silver, and zinc), and PCBs exceed the MDEQ Drinking Water Protection (DWP), GSIP, Soil Volatilization to Indoor Air Inhalation (SVIAI), Infinite Source Volatile Soil Inhalation Criteria (VSIC), Particulate Soil Inhalation Criteria (PSI), and/or Direct Contact (DC) Residential Cleanup Criteria (RCC).

Additionally, in 2002, the MDEQ performed a groundwater sampling event of select monitoring wells. Based on review of laboratory analytical results, vinyl chloride was identified in a groundwater sample obtained from MW-4D in exceedance of the MDEQ DW RCC. The laboratory data associated with this groundwater sampling is on file with the MDEQ.

#### **2.2.1.2 AKT Peerless' October 2002 Limited Subsurface Investigation**

AKT Peerless conducted a limited subsurface investigation on the subject property and eastern adjoining parcel in October 2002. AKT Peerless advanced 15 test pits across the subject property. This investigation was performed in order to evaluate potential environmental impact associated with historical landfilling activities.

Soil samples collected from select test pits were submitted for laboratory analysis of Michigan metals and PCBs. Based on analytical results, the metals arsenic and chromium were identified in soil samples 2-3 (0-1') and 2-3 (10-12') at concentrations in exceedance of the MDEQ DWP, GSIP, and/or DC RCC.

#### **2.2.1.3 AKT Peerless' December 2004 Limited Subsurface Investigation**

On December 10, 2004, AKT Peerless conducted a limited subsurface investigation (on behalf of Hamlin & Adams Properties, LLC) of the subject property to address the environmental concerns identified in previous environmental investigations and identified within AKT Peerless' January 2005 Phase I ESA.

This subsurface investigation consisted of (1) the advancement of 10 soil borings (B-1 through B-10) on the subject property and (2) the collection of 13 soil samples and one groundwater sample. The 13 soil samples were submitted for laboratory analysis of PCBs, and the groundwater sample was submitted for laboratory analysis of Michigan metals and VOCs.



Soil laboratory analytical results indicated concentrations of PCBs were not detected above MDEQ RCC within the 13 soil samples. PCB concentrations identified in B-3 (0-1') were detected at concentrations above the Direct Contact Criteria for the Federal Toxic Substance Control Act (TSCA) 40 C.F.R. §761, Subpart D and 40 C.F.R. §761, Subpart G (1,000 parts per billion (ppb)). However, the MDEQ RRD Operational Memorandum #1 indicates that in cases where the TSCA is not applicable, the Part 201 criteria should be used. Given that the PCBs are attributed to the illegal dumping activities conducted at the subject property prior to 1978, the TSCA standards are not applicable to the subject property. Refer to Appendix D for a letter from EPA to MDEQ concurring with this approach. Therefore, AKT Peerless compared PCB analytical results to the Part 201 MDEQ DC RCC for PCBs (4,000 ppb for residential land use).

Review of groundwater laboratory analytical results indicated that concentrations of VOCs and metals were not detected above MDEQ RCC.

#### **2.2.1.4 AKT Peerless' January 2005 Phase I Environmental Site Assessment**

Hamlin & Adams Properties, LLC retained AKT Peerless to conduct a Phase I ESA of the subject property. AKT Peerless identified the following recognized environmental conditions (RECs) in the January 2005 report:

- The subject property operated as a landfill since at least the mid-1950s until the early 1960s, which included the dumping of household and slaughterhouse wastes, and illegal dumping of drums and waste containing a variety of chemicals including PCBs and paint wastes.
- The southern adjoining property operated as a landfill since at least the early 1960s until 1976.

AKT Peerless recommended conducting a limited subsurface investigation to evaluate the on-site landfilling concern.

#### **2.2.1.5 AKT Peerless' February 2005 Supplemental Subsurface Investigation**

On February 12, 2005, AKT Peerless conducted a geophysical survey of the subject property in order to further evaluate the historical subject property landfilling activities. The results of the magnetometer survey identified several anomalies at the subject property. AKT Peerless excavated 20 test pits on the subject property on February 15, 2005. The test pits were advanced in areas identified as "anomalous" during the geophysical survey and in areas that appeared to be visually disturbed.

The results of the test pit investigation activities indicated the presence of buried materials in previously unidentified areas, specifically in the north-eastern and south-eastern portion of Parcel 15-29-101-023 (the eastern parcel).

AKT Peerless collected a total of four soil samples from test pits (one from TP-2, TP-3, TP-16b and TP-21) that were visually identified to be disturbed and/or containing debris. The soil samples were submitted for laboratory analysis of VOCs, PNAs, and Michigan metals. Based on review of laboratory analytical results, select metals (arsenic, cadmium, chromium, lead, mercury and selenium) were identified at concentrations exceeding the MDEQ DW, GSIP, and/or DC RCC.

AKT Peerless concluded that based on the results of this subsurface investigation, and on the analytical results from previous subsurface investigations, contaminant concentrations were detected above the MDEQ Residential Cleanup Criteria. Therefore, the subject property met the definition of a "facility", as

defined in Part 201 of Natural Resources and Environmental Protection Act (NREPA), Michigan Public Act (PA) 451, 1994, as amended.

#### **2.2.1.6 AKT Peerless' November 2005 Category N Baseline Environmental Assessment**

A Category N BEA was completed for the subject property on behalf of Hamlin & Adams Properties, LLC in November 2005 and submitted to the MDEQ for approval. The BEA was completed subsequent to a Phase I ESA and two Phase II ESAs (subsurface investigations) previously completed at the subject property in December 2004 and January and February 2005. Based on laboratory analytical results of the previous environmental investigations summarized above, the subject property met the definition of a "facility", as defined in Part 201 of the NREPA, Michigan Public Act (PA) 451, 1994, as amended.

#### **2.2.1.7 AKT Peerless' July 2007 Phase II ESA Report**

In June and July 2007, AKT Peerless conducted a subsurface investigation at the subject property to evaluate the existing contamination. AKT Peerless conducted the following scope of work: (1) advanced 12 soil borings to be converted to permanent monitoring wells throughout the subject property; (2) the advancement of 40 soil borings in the Area B location; (3) the advancement of 40 soil borings in the Area E location; (4) the completion of 51 test pits and 2 trenches (Areas A, C, D and F); (5) the collection of 234 soil samples; (6) the completion of two groundwater sampling events; (7) the collection of 21 groundwater samples; and (8) the completion of three methane field screening events. The results of the Phase II ESA investigation identified the following:

- Benzene, toluene, ethylbenzene, xylenes, 1,2,4 trimethylbenzene, 1,3,5 trimethylbenzene, n-butylbenzene, sec-butylbenzene, n-propylbenzene, acenaphthene, benzo(a)pyrene, di-n-butyl phthalate, fluoranthene, fluorene, 2-methylnaphthalene, naphthalene, phenanthrene, PCBs, antimony, arsenic, cadmium, chromium, lead, mercury, nickel, selenium and silver were detected in soil across the subject property at concentrations exceeding the MDEQ Part 201 Non-Residential Cleanup Criteria. Various concentrations in soil were detected above the Groundwater-Surface Water Interface Protection (GSIP) criteria and Drinking Water Protection (DWP) criteria.
- Benzene, toluene, ethylbenzene, xylenes, 1,2,4 trimethylbenzene, 1,3,5 trimethylbenzene, di-n-butylphthalate, naphthalene, arsenic, lead and selenium were detected in shallow groundwater at the subject property at concentrations exceeding the MDEQ Part 201 Non-Residential Cleanup Criteria. Various concentrations in groundwater were detected above the Groundwater-Surface Water Interface (GSI) criteria and Drinking Water (DW) criteria.

#### **2.2.1.8 AKT Peerless' April 2017 Limited Soil Gas Investigation**

AKT Peerless installed a temporary groundwater monitoring well and installed soil gas monitoring wells at the subject property in April 2017. AKT Peerless obtained methane, carbon dioxide, oxygen and balance gas readings using a Landtec GEM 5000 gas analyzer. AKT Peerless submitted six soil gas and one groundwater sample for laboratory analyses. The results of the laboratory analyses of the groundwater sample and soil gas samples did not identify concentrations of target parameters above MDEQ Residential Cleanup Criteria.

#### **2.2.1.9 AKT Peerless' June 2017 Limited Subsurface Investigation**

In June 2017, AKT Peerless conducted a limited subsurface investigation at the subject property. AKT Peerless collected soil samples and submitted those samples for laboratory testing for select chemical

analyses of SVOCs and/or metals including arsenic, lead, mercury, silver, hexavalent chromium, and total chromium. The results of the investigation identified the following:

- Arsenic was detected in soil samples at the subject property at concentrations exceeding the MDEQ Part 201 Non-Residential Cleanup Criteria. Various concentrations in soil were detected above the DWP criteria and Residential Direct Contact criteria.
- Arsenic and mercury were detected in soil samples at the subject property at concentrations exceeding the MDEQ Part 201 Non-Residential Cleanup Criteria. Various concentrations in soil were detected above the GSIP criteria.

Based on the laboratory analytical results, the subject property meets the definition of a facility, as defined in Part 201 of the NREPA, Michigan Public Act (PA) 451, 1994, as amended. In addition, the results of the metals investigation provided data to be utilized in site-specific background calculations for site redevelopment.

### 2.2.2 Summary of Current Known Conditions

As demonstrated in the preceding section, the subject property has been thoroughly investigated to determine the soil, soil gas and groundwater quality that currently exists. This section summarizes the current known conditions relative to applicable Part 201 residential cleanup criteria (RCC).

AKT Peerless anticipates completing a Phase I ESA and BEA on behalf of Goldberg Companies, Inc, or on behalf of related single-purpose LLCs.

Based on the analytical results obtained during AKT Peerless' 2002, 2004, 2005, and 2007 subsurface investigations of the subject property, the following hazardous substances were detected in samples collected from the subject property above their respective MDEQ RCC in soil and/or groundwater.

#### Summary of Part 201 Exceedances in Soil

Parameter (CAS Number)	Part 201 Generic Residential Criteria Exceeded	Sample Identification <sup>(1)</sup>	Maximum Concentration (µg/kg) <sup>(2)</sup>	Parcel
Antimony (7440360)	DW / 4,300	AKT-8 (3-5')	6,140 / AKT-8 (3-5')	15-29-101-023

Parameter (CAS Number)	Part 201 Generic Residential Criteria Exceeded	Sample Identification <sup>(1)</sup>	Maximum Concentration (µg/kg) <sup>(2)</sup>	Parcel
Arsenic (7440382)	DW / 4,600 GSIP / 4,600 DC / 7,600	TP-2, TP-21, 2-3 (0-1'), 2-3 (10-12'), AKT-5 (20-22'), SB-5 (10-14'), SB-6 (18-20'), SB-9 (18-20'), SB-10 (18-20'), SS-3 (4-6'), SS-4 (2-4'), SS-6 (0-2'), SS-9 (2-4'), SS-10 (2-4') GP-1 (4-7'), GP-3 (2-6'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-5 (11-14'), GP-6 (2-4'), GP-7 (4-8'), GP-8 (0-2'), GP-8 (9-10.5'), GP-9 (4-6'), GP-9 (6-7.5'), GP-10 (6-8'), GP-10 (8-10'), GP-11 (4.5-5'), GP-12 (0-2'), MW-9D (2-4'), MW-9D (4-6'), TP-16b, EP-28 (8'), EP-33 (15'), EP-48 (6'), AKT-8 (3-5'), AKT-200 (6.5-7.5'), AKT-202 (2-3'), AKT-203 (6.5-7.5'), AKT-204 (9-10'), AKT-205 (6-7'), AKT-205 (9.5-10.5'), AKT-206 (4-5'), AKT-207 (2-3'), AKT-207 (9-10'), AKT-210 (4-5'), AKT-210 (2-3'), AKT-211 (3-4'), AKT-211 (11-12')	25,000 / SB-5 (10-14') 36,000 / GP-3 (2-6')	15-29-101-022 15-29-101-023
Acenaphthene (83329)	GSIP / 8,700	DUP-1 [EP-5 (6')]	22,100 / DUP-1 [EP-5 (6')]	15-29-101-022
Benzene (71432)	DWP / 100	GP-1 (4-7'), GP-4 (2.5-4'), EB-23 (3-5')	800 / EB-23 (3-5')	15-29-101-023
Benzo(a)anthracene (56553)	DC / 20,000	GP-4 (2.5-4'), EB-20 (5-7')	33,000 / GP-4 (2.5-4')	15-29-101-023

Parameter (CAS Number)	Part 201 Generic Residential Criteria Exceeded	Sample Identification <sup>(1)</sup>	Maximum Concentration (µg/kg) <sup>(2)</sup>	Parcel
Benzo(a)pyrene (50328)	DC / 2,000	DUP-1 [EP-5 (6')], GP-1 (4-7'), GP-4 (2.5-4'), GP-6 (2-4'), GP-10 (6-8'), EB-7 (1-3'), EB-11 (10-12'), Duplicate [EB-13 (13-15')], EB-18 (3-5'), EB-19 (4-5'), EB-20 (5-7'), EB-21 (8-10'), EB-23 (3-5'), EB-24 (8-10'), EB-25 (3-4'), EB-26 (1-3'), EB-27 (1-3'), EB-29 (1-3'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-31 (3-5'), EB-31 (7-9'), EB-32 (1-3'), EB-35 (1-3'), EB-39 (3-5'), EB-40 (3-5'), Duplicate 5 [EB-40(3-5')]	4,500 / DUP-1 [EP-5 (6')] 29,000 / GP-4 (2.5-4')	15-29-101-022 15-29-101-023
Benzo(b) fluoranthene (205992)	DC / 20,000	GP-4 (2.5-4')	48,000 / GP-4 (2.5-4')	15-29-101-023
beta-Hexachlorocyclohexane (319857)	GSIP / 37	TP1W	65 / TP1W	15-29-101-022
Bis(2-ethylhexyl)phthalate (117817)	DC / 2,800,000 SSSL / 10,000,000	GP-7 (4-8')	37,000,000 / GP-7 (4-8')	15-29-101-023
n-Butylbenzene (104518)	DWP / 1,600	EB-9 (8-10'), Duplicate 3 [EB-13 (13-15')]	10,000 / EB-9 (8-10')	15-29-101-023
sec-Butylbenzene (135998)	DWP / 1,600	GP-1 (4-7'), GP-4 (2.5-4'), EB-9 (8-10'), EB-11 (10-12'), EB-12 (8-10'), EB-13 (13-15'), Duplicate 3 [EB-13 (13-15')], EB-19 (4-5'), EB-21 (8-10'), EB-22 (6-8'), EB-23 (3-5'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-38 (3-5')	50,000/ EB-12 (8-10')	15-29-101-023
Cadmium (7440439)	DWP / 6,000	EP-31 (0.5-1'), SS-6 (0-2') GP-3 (2-6'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-6 (2-4'), GP-7 (4-8'), GP-8 (0-2'), TP-16b, EB-1 (3-5'), EP-23 (2'), EP-33 (7'), Duplicate 4 [EP-33 (7')], EP-33 (15'), AKT-8 (3-5')	39,000 / EP-31 (0.5-1') 61,000 / GP-8 (0-2')	15-29-101-022 15-29-101-023

Parameter (CAS Number)	Part 201 Generic Residential Criteria Exceeded	Sample Identification <sup>(1)</sup>	Maximum Concentration (µg/kg) <sup>(2)</sup>	Parcel
Carbon tetrachloride (56235)	DWP/ 100	GP-6 (12-13.5')	110 / GP-6 (12-13.5')	15-29-101-023
Carbazole (86748)	GSIP / 1,100	GP-6 (2-4'), GP-10 (6-8')	5,200 / GP-6 (2-4')	15-29-101-023
Chromium (total) (18540299)	DWP/ 30,000 GSIP / 3,300 PSI / 260,000 DC / 2,500,000	TP-2, TP-3-1, TP-21, 2-3 (0-1'), 2-3 (10-12'), EP-5 (6'), DUP-1 [EP-5 (6')], DUP-2 [EP-14 (7')], EP-31 (0.5-1'), EP-37 (0.5-1'), DUP-5 [EP-37 (0.5-1')], SB-3 (18-20'), SB-5 (10-14'), SB-6 (18-20'), SB-8 (18-20'), SB-9 (18-20'), SB-10 (18-20'), SB-12 (18-20'), SS-1 (0-2'), SS-2 (4-6'), SS-3 (4-6'), SS-4 (2-4'), SS-5 (2-4'), SS-6 (0-2'), SS-7 (4-6'), SS-8 (0-2'), SS-9 (2-4'), SS-10 (2-4'), TR1N, TR1S, TR1W, TR1Bottom-N, TR1Bottom-S, TR2-N, TR2-S, TR2-East, TR2-West, TR2-B North, TR2-B South, TP1N, TP1Bottom-S, SB-2 (14-16'), GP-1 (4-7'), GP-2 (13-15'), GP-3 (2-6'), GP-3 (10-12'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-5 (11-14'), GP-6 (2-4'), GP-6 (12-13.5'), GP-7 (4-8'), GP-7 (9-10.5'), GP-8 (0-2'), GP-8 (9-10.5'), GP-9 (4-6'), GP-9 (6-7.5'), GP-10 (6-8'), GP-10 (8-10'), GP-11 (4-5.5'), GP-11 (5.5-7'), GP-12 (0-2'), GP-13 (16-18'), MW-9D (2-4'), MW-9D (4-6'), TP-16B, EB-1 (3-5'), EP-19 (0.5-1'), EP-22 (6'), Duplicate 3 [EP-22 (6')], EP-23 (2'), EP-28 (8'), EP-30 (7'), EP-33 (7'), Duplicate 4 [EP-33 (7')], EP-33 (15'), EP-48 (6'), AKT-8 (3-5'), AKT-9 (8-10')	91,000 / SS-3 (4-6') 2,880,000 / GP-5 (4-8')	15-29-101-022 15-29-101-023
Dibenzofuran (132649)	GSIP / 1,700	DUP-1 [EP-5 (6')]	26,400 / DUP-1 [EP-5 (6')]	15-29-101-022

Parameter (CAS Number)	Part 201 Generic Residential Criteria Exceeded	Sample Identification <sup>(1)</sup>	Maximum Concentration (µg/kg) <sup>(2)</sup>	Parcel
Di-n-butyl phthalate (84742)	GSIP / 11,000	GP-4 (11-12'), EB-12 (10-11'), EB-38 (3-5')	61,000 / GP-4 (11-12')	15-29-101-023
Ethylbenzene (100414)	DWP / 1,500 GSIP / 360 SVIAI / 87,000 SSSL / 140,000	GP-1 (4-7'), GP-4 (2.5-4'), GP-5 (4-8'), EB-9 (8-10'), EB-11 (10- 12'), EB-12 (8-10'), EB-13 (13- 15'), Duplicate 3 [ EB-13 (13- 15')], EB-19 (4-5'), EB-21 (8- 10'), EB-22 (6-8'), EB-23 (3-5'), EB-30 (1-3'), Duplicate 4 [EB- 30 (1-3')], EB-38 (3-5'), AKT-8 (3-5')	590,000 / EB- 12 (8-10')	15-29-101-023
Fluorene (86737)	GSIP / 5,300	DUP-1 [EP-5 (6')], EB-20 (5-7'), AKT-8 (3-5')	24,700 / DUP-1 [EP-5 (6')] 6,000 / EB-20 (5-7")	15-29-101-022 15-29-101-023
Fluoranthene (206440)	GSIP / 5,500	DUP-1 [EP-5 (6')] GP-1 (4-7'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-6 (2- 4'), GP-10 (6-8'), EB-11 (10- 12'), EB-18 (3-5'), EB-19 (4-5'), EB-20 (5-7'), EB-21 (8-10'), EB- 23 (3-5'), EB-24 (8-10'), EB-25 (3-4'), EB-26 (1-3'), EB-27 (1- 3'), EB-28 (8-10'), EB-29 (1-3'), EB-30 (1-3'), Duplicate 4 [EB- 30 (1-3')], EB-32 (1-3'), EB-38 (3-5'), EB-39 (3-5'), EB-40 (3- 5'), Duplicate 5 [EB-40 (3-5')]	19,000 / DUP-1 [EP-5 (6')] 97,000 / GP-4 (2.5-4')	15-29-101-022 15-29-101-023
Isopropyl benzene (98828)	GSIP / 3,200	EB-11 (10-12'), EB-12 (8-10'), EB-19 (4-5'), EB-21 (8-10'), EB- 22 (6-8'), EB-23 (3-5'), Duplicate 4 [EB-30 (1-3')], EB- 38 (3-5')	70,000 / EB-12 (8-10')	15-29-101-023

Parameter (CAS Number)	Part 201 Generic Residential Criteria Exceeded	Sample Identification <sup>(1)</sup>	Maximum Concentration (µg/kg) <sup>(2)</sup>	Parcel
Lead (7439921)	DC / 400,000 DWP / 700,000	TP-2, TP-21, EP-31 (0.5-1'), SS-6 (0-2') GP-1 (4-7'), GP-3 (2-6'), GP-4 (2.5-4'), GP-5 (4-8'), GP-5 (11-14'), GP-6 (2-4'), GP-7 (4-8'), GP-8 (0-2'), TP-16B, EB-1 (3-5'), EP-23 (2'), EP-28 (8'), EP-33 (7'), Duplicate 4 [EP-33 (7')], EP-33 (15'), AKT-8 (3-5')	660,000 / TP-2 2,450,000 / GP-5 (4-8')	15-29-101-022 15-29-101-023
Mercury (7439976)	GSIP / 50 DWP / 1,700	TP-21, EP-14 (7'), DUP-2 [EP-14 (7')], EP-31 (0.5-1'), EP-37 (0.5-1'), DUP-5 [EP-37 (0.5-1')], SS-6 (0-2'), SS-9 (2-4') SB-3 (2-4'), GP-1 (4-7'), GP-3 (2-6'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-6 (2-4'), GP-7 (4-8'), GP-7 (9-10.5'), GP-9 (4-6'), GP-10 (8-10'), TP-16b, EB-1 (3-5'), EP-19 (0.5-1'), EP-22 (6'), Duplicate 3 [EP-22 (6')], EP-23 (2'), EP-28 (8'), EP-30 (7'), EP-33 (7'), Duplicate 4 [EP-33 (7')], EP-33 (15'), EP-44 (6'), EP-48 (6'), AKT-8 (3-5') , AKT-SS9-N1 (0-1'), AKT-SS9-N2 (0-1'), AKT-SS9-E1 (0-1'), AKT-SS9-E2 (0-1'), AKT-SS9-S1 (0-1'), AKT-SS9-S2 (0-1'), AKT-SS9-W1 (0-1'), AKT-SS9-W2 (0-1')	500 / SS-6 (0-2') & AKT-SS9-W2 (0-1') 2,530 / AKT-8 (3-5')	15-29-101-022 15-29-101-023
2-Methylnaphthalene (91576)	GSIP / 4,200 DWP / 57,000	DUP-1 [EP-5 (6')] GP-1 (4-7'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), EB-9 (8-10'), EB-11 (10-12'), EB-12 (8-10'), EB-18 (3-5'), EB-19 (4-5'), EB-20 (5-7'), EB-21 (8-10'), EB-22 (6-8'), EB-23 (3-5'), EB-24 (8-10'), EB-28 (8-10'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-38 (3-5'), EB-39 (3-5'), AKT-8 (3-5')	16,500 / DUP-1 [EP-5 (6')] 388,000,000 / EB-39 (3-5')	15-29-101-022 15-29-101-023



Parameter (CAS Number)	Part 201 Generic Residential Criteria Exceeded	Sample Identification <sup>(1)</sup>	Maximum Concentration (µg/kg) <sup>(2)</sup>	Parcel
Naphthalene (91203)	DWP / 35,000 GSIP / 730 SVIAI / 250,000 VSIC / 300,000	EP-5 (6'), DUP-1 [EP-5 (6')], EP-31 (0.5-1') GP-1 (4-7'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), EB-9 (8-10'), EB-11 (10-12'), EB-12 (8-10'), EB-12 (10-11'), EB-13 (13-15'), Duplicate 3 [EB-13 (13-15')], EB-18 (3-5'), EB-19 (4-5'), EB-20 (5-7'), EB-21 (8-10'), EB-22 (6-8'), EB-23 (3-5'), EB-28 (8-10'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-38 (3-5'), EB-39 (3-5'), EB-40 (3-5'), Duplicate 5 [EB-40 (3-5')], AKT-8 (3-5'), AKT-9 (8-10'), AKT-8 (3-5')	142,000 / DUP-1 [EP-5 (6')] 400,000 / EB-12 (8-10')	15-29-101-022 15-29-101-023
Nickel (7440020)	DWP / 100,000	AKT-8 (3-5')	339,000 / AKT-8(3-5')	15-29-101-023
Phenanthrene (85018)	GSIP / 2,100	EP-5 (6'), DUP-1 [EP-5 (6')] GP-1 (4-7'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-6 (2-4'), GP-10 (6-8'), EB-11 (10-12'), Duplicate 3 [EB-13 (13-15')], EB-18 (3-5'), EB-19 (4-5'), EB-20 (5-7'), EB-22 (6-8'), EB-23 (3-5'), EB-24 (8-10'), EB-25 (3-4'), EB-26 (1-3'), EB-27 (1-3'), EB-29 (1-3'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-35 (1-3'), EB-40 (3-5'), Duplicate 5 [EB-40 (3-5')], AKT-8 (3-5')	51,400 / DUP-1 [EP-5 (6')] 33,000 / GP-6 (2-4')	15-29-101-023

Parameter (CAS Number)	Part 201 Generic Residential Criteria Exceeded	Sample Identification <sup>(1)</sup>	Maximum Concentration (µg/kg) <sup>(2)</sup>	Parcel
Polychlorinated biphenyls (1336363)	DC / 4,000 VSIC / 240,000	DUP-1 [EP-5 (6')] GP-1 (4-7'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-7 (4-8'), GP-7 (9-10.5'), GP-8 (0-2'), EB-10 (10-12'), Duplicate 2 [EB-10 (10-12')], EB-11 (1-3'), EB-11 (8-10'), EB-11 (10-12'), EB-12 (8-10'), EB-12 (10-11'), EB-13 (3-5'), EB-13 (8-10'), EB-13 (13-15'), Duplicate 3 [EB-13 (13-15')], EB-18 (3-5'), EB-19 (4-5'), EB-19 (5-7'), EB-19 (8-10'), EB-20 (1-3'), EB-20 (3-5'), EB-20 (5-7'), EB-21 (3-5'), EB-21 (8-10'), EB-22 (3-5'), EB-22 (6-8'), EB-22 (10-12'), EB-23 (3-5'), EB-23 (5-7'), EB-23 (7-9'), EB-28 (1-3'), EB-28 (3-5'), EB-28 (8-10'), EB-29 (3-5'), EB-29 (8-9'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-30 (3-5'), EB-31 (1-3'), EB-31 (3-5'), EB-32 (1-3'), EB-36 (3-5'), EB-37 (1-3'), EB-38 (1-3'), EB-38 (3-5'), EB-38 (8-10'), EB-39 (1-3'), EB-39 (3-5'), EB-40 (1-3'), EB-40 (3-5'), Duplicate 5 [EB-40 (3-5')], EB-40 (8-10'), Duplicate 4 [EP-33 (7')], AKT-8 (3-5')	22,100 / DUP-1 [EP-5 (6')] 2,300,000 / GP-7 (4-8')	15-29-101-022 15-29-101-023
n-Propylbenzene (103651)	DWP / 1,600	GP-1 (4-7'), GP-4 (2.5-4'), EB-9 (8-10'), EB-11 (10-12'), EB-12 (8-10'), EB-13 (13-15'), Duplicate 2 [EB-13 (13-15')], EB-19 (4-5'), EB-21 (8-10'), EB-22 (6-8'), EB-23 (3-5'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-38 (3-5')	110,000 / EB-12 (8-10')	15-29-101-023

Parameter (CAS Number)	Part 201 Generic Residential Criteria Exceeded	Sample Identification <sup>(1)</sup>	Maximum Concentration (µg/kg) <sup>(2)</sup>	Parcel
Selenium (7782492)	GSIP / 400	EP-31 (0.5-1'), SS-6 (0-2'), SB-1 (19-20'), SB-3 (18-20'), SB-6 (18-20'), SB-8 (18-20'), SB-9 (18-20'), SB-10 (18-20') GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-5 (11-14'), GP-7 (4-8'), GP-8 (0-2'), TP-16b, EB-1 (3-5'), EP-23 (2'), EP-30 (7'), EP-33 (15'), AKT-8 (3-5')	1,000 / SB-1 (19-20') 1,700 / GP-4 (2.5-4')	15-29-101-022 15-29-101-023
Silver (7440224)	GSIP / 100 DWP / 4,500	EP-37 (1-2') SB-2 (14-16'), SB-3 (2-4'), GP-1 (4-7'), GP-2 (13-15'), GP-3 (2-6'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-5 (11-14'), GP-6 (2-4'), GP-7 (4-8'), EP-23 (2'), EP-33 (7'), Duplicate 4 [EP-33 (7')], EP-33 (15'), AKT-8 (3-5')	2,070 / EP-37 (1-2') 90,000 / GP-2 (13-15')	15-29-101-022 15-29-101-023
Toluene (10883)	DWP / 16,000 GSIP / 5,400 SVIAI / 330,000 SSSL / 110,000	EB-12 (8-10'), EB-13 (13-15'), Duplicate 3 [EB-13 (13-15')], EB-38 (3-5')	400,000 / EB-12 (8-10')	15-29-101-023
Trichloroethylene (79016)	DWP / 100	GP-3 (10-12'), GP7 (4-8')	410 / GP-3 (10-12')	15-29-101-023
1,2,4- Trimethylbenzene (95636)	DWP / 2,100 GSIP / 570 DC / 110,000 SSSL / 110,000	GP-1 (4-7'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-7 (4-8'), EB-9 (8-10'), EB-11 (10-12'), EB-12 (8-10'), EB-13 (13-15'), Duplicate 3 [EB-13 (13-15')], EB-19 (4-5'), EB-21 (8-10'), EB-22 (6-8'), EB-23 (3-5'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-38 (3-5'), AKT-9 (8-10')	760,000 / EB-12 (8-10')	15-29-101-023

Parameter (CAS Number)	Part 201 Generic Residential Criteria Exceeded	Sample Identification <sup>(1)</sup>	Maximum Concentration (µg/kg) <sup>(2)</sup>	Parcel
1, 3, 5-Trimethylbenzene (108678)	DWP / 1,800 GSIP / 1,100 SSSL / 150,000	GP-4 (2.5-4'), EB-9 (9-10'), EB-11 (10-12'), EB-12 (8-10'), EB-13 (13-15'), Duplicate 3 [EB-13 (13-15')], EB-19 (4-5'), EB-21 (8-10'), EB-22 (6-8'), EB-23 (3-5'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')]	280,000 / EB-12 (8-10')	15-29-101-023
Xylenes (95476)	GSIP / 820 DWP / 5,600 SSSL / 150,000	GP-1 (4-7'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-7 (4-8'), EB-9 (8-10'), EB-11 (10-12'), EB-12 (8-10'), EB-13 (13-15'), Duplicate 3 [EB-13 (13-15')], EB-19 (4-5'), EB-21 (8-10'), EB-22 (6-8'), EB-23 (3-5'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-38 (3-5')	930 / EP-31 (0.5-1') 2,070,000 / EB-12 (8-10')	15-29-101-022 15-29-101-023
Zinc (7440666)	DWP / 2,400,000	GP-5 (4-8')	7,100,000 / GP-5 (4-8')	15-29-101-023

<sup>(1)</sup> - Sample identification: B-# indicates soil boring and (#-#) indicates sample depth in feet.

<sup>(2)</sup> – µg/kg = micrograms per kilogram.

DWP – Drinking Water Protection Criteria

GSIP – Groundwater Surface Water Interface Protection Criteria

PSI– Particulate Soil Inhalation Criteria

SVIAI – Soil Volatilization to Indoor Air Inhalation Criteria

VSIC – Infinite Source Volatile Soil Inhalation Criteria

DC – Direct Contact Criteria

SSSL – Soil Saturation Concentration Screening Levels

### Summary of Part 201 Exceedances in Groundwater

Parameter (CAS Number)	Part 201 Generic Residential Cleanup Criteria Exceeded	Sample Identification <sup>(1)</sup>	Maximum Concentration (µg/L) <sup>(2)</sup>	Parcel
Arsenic (7440382)	DW / 10 GSIP / 10	MW-13D, AKT-5W, MW-2D, AKT-9W, AKT-10W	21 / AKT-5W 33 / AKT-9W	15-29-101-022 15-29-101-023

Parameter (CAS Number)	Part 201 Generic Residential Cleanup Criteria Exceeded	Sample Identification <sup>(1)</sup>	Maximum Concentration (µg/L) <sup>(2)</sup>	Parcel
Benzene (71432)	DW / 5	AKT-9W	60 / AKT-9W	15-29-101-023
Chromium (7440473)	GSIP / 11	AKT-5W, MW-6	18 / AKT-5W 15 / MW-6	15-29-101-022 15-29-101-023
Di-n-butyl phthalate (84742)	GSIP / 9.7	AKT-9W	55 / AKT-9W	15-29-101-023
Ethylbenzene (100414)	DW / 74 GSIP / 18	AKT-9W	1,090 / AKT-9W	15-29-101-023
Lead (7439921)	DW / 4	AKT-5W	42 / AKT-5W	15-29-101-022
4-Methyl-2-pentanone (MIBK) (108101)	DW / 1,800	AKT-9W	4,000 / AKT-9W	15-29-101-023
Naphthalene (91203)	GSIP / 11	AKT-9W	90 / AKT-9W	15-29-101-023
Selenium (7782492)	GSI / 5	AKT-9W	8 / AKT-9W	15-29-101-023
Toluene (108883)	DW / 790 GSI / 270	AKT-9W	2,220 / AKT-9W	15-29-101-023
1,2,4-Trimethylbenzene (95636)	DW / 63 GSI / 17	AKT-9W	730 / AKT-9W	15-29-101-023
1,3,5-Trimethylbenzene (108678)	DW / 72 GSI / 45	AKT-9W	120 / AKT-9W	15-29-101-023
Vinyl Chloride (75014)	DW/ 2	MW-4D	3.5 / MW-4D	15-29-101-023
Xylenes (1330207)	DW / 280 GSI / 41	AKT-9W	4,660 / AKT-9W	15-29-101-023

<sup>(1)</sup> - Sample identification: B-# indicates soil boring and (#-#) indicates sample depth in feet.

<sup>(2)</sup> - µg/L = micrograms per liter.

DW – Drinking Water Criteria

GSI – Groundwater Surface Water Interface Criteria

Based on the analytical findings, both parcels meet the definition of a “facility” as defined by Part 201 of NREPA, Michigan PA 451 of 1994, as amended.

### **2.3 Functionally Obsolete**

"Functionally obsolete" means that the subject property is unable to be used to adequately perform the function for which it was intended due to a substantial loss in value resulting from factors such as overcapacity, changes in technology, deficiencies or superadequacies in design, or other similar factors that affect the subject property itself or the subject property's relationship with other surrounding subject property.

A functionally obsolete designation has not been requested at this time.

### **2.4 Blighted**

"Blighted" means property that meets any of the following criteria as determined by the governing body: (i) Has been declared a public nuisance in accordance with a local housing, building, plumbing, fire, or other related code or ordinance; (ii) Is an attractive nuisance to children because of physical condition, use, or occupancy; (iii) Is a fire hazard or is otherwise dangerous to the safety of persons or property; (iv) Has had the utilities, plumbing, heating, or sewerage permanently disconnected, destroyed, removed, or rendered ineffective so that the property is unfit for its intended use; (v) Is tax reverted property owned by a qualified local governmental unit, by a county, or by this state. The sale, lease, or transfer of tax reverted property by a qualified local governmental unit, county, or this state after the property's inclusion in a brownfield plan shall not result in the loss to the property of the status as blighted property for purposes of this act; (vi) Is property owned or under the control of a land bank fast track authority, whether or not located within a qualified local governmental unit. subject property included within a brownfield plan prior to the date it meets the requirements of this subdivision to be eligible property shall be considered to become eligible property as of the date the property is determined to have been or becomes qualified as, or is combined with, other eligible property. The sale, lease, or transfer of the property by a land bank fast track authority after the property's inclusion in a brownfield plan shall not result in the loss to the property of the status as blighted property for purposes of this act; (vii) Has substantial subsurface demolition debris buried on site so that the property is unfit for its intended use.

A blight designation has not been requested for the subject property at this time.

### **2.5 Adjacent and Contiguous**

The City of Rochester Hills is considered a qualified local governmental unit as provided in Act 146 of 2000, as amended. The definition of “Eligible Property” in PA 381 of 1996, as amended, includes property that is located in a qualified local governmental unit and is a facility, functionally obsolete, or blighted and includes parcels that are adjacent or contiguous to that property if the development of the adjacent and contiguous parcels is estimated to increase the captured taxable value of that property.

Both parcels of the subject property are facilities; adjacent and contiguous status is not applicable at this time.

### 3.0 Scope of Work

The following scope of work has been identified to address the subject property's Brownfield conditions.

#### 3.1 MDEQ Eligible Activities

The subject property will be prepared to make it suitable for development. Appropriate environmental investigations and environmental remediation activities will be and have been performed to prevent exposure to materials hazardous to human health and safety, and the environment. The Developer desires to be reimbursed for the costs of eligible activities. Tax increment revenue generated by the subject property will be captured and used to reimburse the cost of the eligible activities completed on the subject property, as authorized by Act 381, as amended, and pursuant to the terms of a Reimbursement Agreement (refer to Appendix C) with the Authority.

On the western Parcel A, Department Specific Activities include environmental assessment activities, excavation, soil removal, and backfill in contaminated areas. These activities are anticipated to begin in mid-2018 and are expected to take approximately three to four months to complete. Activities on the western parcel also include installation of sub slab venting systems on new construction. Installation of the systems will be coordinated with construction activities, which are estimated to take approximately 24-36 months to complete after environmental cleanup. A date for commencement of Department Specific Activities on the eastern Parcel B cannot be estimated at this time, as it depends on future discussions between the developer, the City, and the current property owner. However, the activities, may include soil and waste removal, and installation of a hydraulic barrier, liner & cap, and passive methane venting system on the former landfill area.

Refer to Table 1 for a detailed description of the eligible activities for the Project and Table 2 for tax increment financing information.

##### 3.1.1 Department Specific Activities

###### 3.1.1.1 Baseline Environmental Assessment Activities

A Phase I ESA was completed for the subject property in January 2017. New Phase I ESAs, a Supplemental Subsurface Investigation, and BEAs are currently being prepared for the acquiring entities.

###### 3.1.1.2 NFA Report and Documentation of Due Care Compliance Report

Phase I and Phase II ESAs are in process or have been completed for the subject property. A BEA will be completed for Parcels A and B prior to the development entity's (or entities') acquisition of the subject property. Additional due care investigations are planned for Parcel A and Parcel B.

###### *Parcel A*

Remediation on Parcel A at the subject property will be completed in order to obtain an unrestricted residential status. Subsequent to the completion of remedial activities, a No Further Action (NFA) report will be prepared and submitted to MDEQ for review and approval.

The BEA and NFA reporting will be completed in accordance with Part 201 of the Natural Resources and Environmental Protection Act (NREPA), 1994 Public Act (PA) 451, as amended, and Michigan Department of Environmental Quality (MDEQ) Instructions for Preparing and Disclosing Baseline Environmental Assessments and Section 7a Compliance Analyses, effective March 11, 1999. The NFA will describe remedial activities associated with soil and groundwater contamination at the subject property in light of

the nature of the proposed development construction activities and occupancy of the developed property. A detailed breakdown of the costs associated with this task is provided later in this section.

#### *Parcel B*

On Parcel B, targeted environmental response activities will be conducted on the areas associated with previous dumping and landfilling outside of the currently fenced area. As detailed in Section 2.3.4, these activities will include limited excavation of landfilled materials (likely largely in Source Area E). In addition, the fenced area, where most significant impact is generally located, will be subject to the installation of due care engineering controls. Response activities on “areas of most significant impact” are intended to address the paint waste landfilled onsite; identification of these areas will be through field observation during excavation activities, using visual and olfactory criteria. Subsequent to the completion of response activities and installation of due care engineering controls, a Documentation of Due Care Compliance (DDCC) report will be completed. Future use of Parcel B is intended to be restricted to non-residential use and is planned to be further limited to natural open area and surface parking. Therefore, in consultation with MDEQ, due care requirements for the intended use will be met. The Developer intends that the DDCC will be reviewed and approved by MDEQ, but does not intend to pursue closure for Parcel B.

After consultation with EPA and MDEQ, encapsulation of landfilled materials, which includes areas where PCB contamination was previously detected on Parcel B, will be conducted pursuant to Part 201 of the Natural Resources and Environmental Protection Act (NREPA), 1994 Public Act (PA) 451, as amended (Part 201), rather than the Toxic Substances Control Act of 1976, which EPA administers. Correspondence with EPA outlining the basis for this determination is provided in Attachment D.

The BEA and DDCC reporting will be completed in accordance with Part 201 of the Natural Resources and Environmental Protection Act (NREPA), 1994 Public Act (PA) 451, as amended, and Michigan Department of Environmental Quality (MDEQ) Instructions for Preparing and Disclosing Baseline Environmental Assessments and Section 7a Compliance Analyses, effective March 11, 1999. A detailed breakdown of the costs associated with this task is provided later in this section.

#### **3.1.1.3 Health and Safety Plan**

A site-specific Health and Safety Plan (HASP) will be completed for redevelopment activities at the subject property by each of the subsurface contractors and others that can come into contact with potentially contaminated media during the performance of their work activities. The HASPs will comply with appropriate guidelines including the following:

- Michigan Occupational Safety and Health Act;
- Section 111(c)(6) of CERCLA;
- Occupational Safety and Health Administration requirements 29 CFR 1910 and 1926;
- Standard Operating Safety Guide Manual (revised November 1984) by the Office of Emergency and Remedial Response; and
- Occupation Safety and Health guidance manual for Hazardous Waste Site Activities (NIOSH/OSHA/USCG/EPA, DHHS [NIOSH] Publication No. 85-115, October 1985).

The HASPs will include the following elements:

- Authorized personnel and definition of responsibilities;
- proposed activities;



- personal protective equipment;
- decontamination procedures;
- work zone restrictions and delineations;
- personal protection upgrade/downgrade action limits;
- emergency information and telephone numbers;
- incident documentation procedures; and
- contingency plans.

Oversight will be conducted to ensure due care issues are addressed while eligible activities and construction activities are being completed. The following activities (at a minimum) will be documented:

- The type, location, quantities, etc., of materials removed from the site and disposed at the landfill or other appropriately licensed disposal operation.
- The final disposition and location of any contaminated media that can be managed on-site in accordance with due care requirements.
- Monitoring for unanticipated materials and/or materials previously not identified, including collection of samples for additional waste characterization.
- The type, location, materials and construction of vapor mitigation systems installed at the site to prevent future potential indoor air inhalation exposures.

The Contractor Site Safety Officer will document and enforce HASP issues with workers at the Site, including:

- Verification of on-site worker training and current certifications.
- Conducting site-specific HASP training for workers entering the site.
- Monitoring construction activities to ensure the HASP is being followed, including use of PPE, decontamination of equipment, site security, etc.

A Construction Summary Report (CSR) will be prepared and submitted to the MDEQ-RRD at the completion of development activities. The CSR will summarize the due care issues addressed during the construction activities and will include such items as photographic documentation, disposal manifests, fill material load tickets, utility abandonment logs (if any), site plans, etc. to verify that the development construction activities were conducted in accordance with approved plans.

#### **3.1.1.4 Soil Remediation Activities**

AKT Peerless has conducted several investigations that detected numerous VOCs, SVOCs, PBCs and/or metals in soil and groundwater at concentrations that exceed MDEQ's Part 201 RCC. VOCs, SVOCs, PBCs and/or metals detected in soil and/or groundwater at the subject property during past investigations include:

Antimony	Arsenic
Acenaphthene	beta-Hexachlorocyclohexane
Benzene	Benzo(a)anthracene
Benzo(a)pyrene	Benzo(b)fluoranthene

Bis(2-ethylhexyl)phthalate	n-Butylbenzene
Sec-Butylbenzene	Cadmium
Carbon tetrachloride	Carbazole
Chromium (total)	Dibenzofuran
Di-n-butyl phthalate	Ethylbenzene
Fluorene	Fluoranthene
Isopropyl benzene	Lead
Mercury	2-Methylnaphthalene
Naphthalene	Nickel
Phenanthrene	Polychlorinated biphenyls
n-Propylbenzene	Selenium
Silver	Toluene
Trichloroethylene	1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene	4-Methyl-2-pentanone (MIBK)
Vinyl Chloride	Xylenes
Zinc	

The Developer intends to construct a residential development on Parcel A and intends to remediate Parcel A so that a No Further Action (NFA) request can be submitted to MDEQ for approval. Therefore, the Developer plans to remove the source areas of contamination on Parcel A. Based on the analytical results from previous subsurface investigations, six source areas have been identified on Parcel A (additional areas of contamination related to former landfilling are on Parcel B). Site specific background calculations will be performed for arsenic and selenium as part of the NFA.

The Developer intends to perform environmental cleanup activities on Parcel B and install due care engineering controls, such that Parcel B can be used as open natural area and surface parking to support recreational activities on municipal property east of Parcel B. These cleanup activities include soil removal in Source Area E, as listed in the following table.

Procedures for relocation of contaminated soils will be specified in an Environmental Construction Management Plan for certain minimal amounts of relocation within Parcel B, if necessary. In general, however, relocation of contaminated soils is not anticipated. Moreover, no contaminated soils are to be relocated between Parcel A and Parcel B, and none will be relocated within Parcel A.

The table below provides approximate volumes of contaminated soil/fill to be removed from each of the source areas and the former landfill area on the subject property.

<b>Parcel Where Source Area Is Located</b>	<b>Source Area</b>	<b>Approximate Yd<sup>3</sup></b>
Parcel A	Source Area A	1,630
Parcel A & B	Source Area B	3,556
Parcel A	Source Area C-1	7,741
Parcel A & B	Source Area C-2	23,333
Parcel A	Source Area D	6,667
Parcel B	Source Area E	23,185
Parcel A	Source Area F	741

Due to the concentrations of soil contaminants in these source areas and due to the fact that the Developer wishes to pursue a NFA designation, impacted soil and fill materials must be removed from the Parcel A. The soil/fill will be removed and disposed at a Type II landfill. The costs included in the eligible activities include excavation, transportation, disposal, verification sampling, backfill, oversight and reporting, and project management. Due to compaction requirements, an additional 40,000 tons of backfill is anticipated to be necessary to return excavated areas to grade. Remediation activities in Source Areas A-D and F are planned to begin in early 2018, and are anticipated to take approximately three to four months to complete. The remedial and due care work in Source Areas B, C-2 and E is expected to be conducted after completion of remedial work on Parcel A, funded by the tax increment revenue stream that will then be available.

It should be noted that previous subsurface investigations encountered discontinuous, perched groundwater pockets with limited contamination. Groundwater contamination appeared to have been due to leaching from surrounding contaminated soils. It is anticipated that these pockets of impacted groundwater will be removed and properly disposed of during soil remediation activities on Parcel A.

Please refer to Table 1, Eligible Activity Cost Detail, for specific line item costs for the due care activities, and to Figure 3 for the locations of the source areas. These costs include allowances for environmental project management, field time, and contracted services.

### **3.1.1.5 Hot Spot Removal**

Previous subsurface investigations identified six hot spots of metals contamination, likely associated with shallow fill materials, much smaller than the source areas identified in section 3.1.1.3 above. These hot spots are located in the central and southeastern portions of the western Parcel A. In order to remediate these areas, approximately 1,500 yd<sup>3</sup> of soil is anticipated to be excavated and disposed at a Type II landfill. The costs included in the eligible activities include excavation, transportation, disposal, verification sampling, backfill, oversight and reporting, and project management. These activities are anticipated to be completed at the same time as the soil removal described in the previous section. The costs in this section include allowances for environmental project management, field time and contracted services.

### **3.1.1.6 Sub-Slab Venting System (New Construction)**

Methane has not been found extensively across the property; however, the subject property is at risk for migration of methane gas from the landfill located across Hamlin Road to the south. This would be a

concern for financing. As a result, the Developer intends to install passive sub-slab venting systems in all new buildings as a presumptive remedy to prevent indoor air exposure. AKT Peerless will engage with MDEQ representatives to obtain concurrence of the draft venting system construction plan. Construction of the systems will occur at the same time as construction of the residential units, which is anticipated to occur over approximately 3 years, beginning in 2018. This cost includes assessment, design, construction, testing, reporting, and project management for the systems.

An Operation and Maintenance (O&M) Plan for the sub-slab venting systems will be prepared by an environmental consultant.

#### **3.1.1.7 Engineering Controls – Former Landfill Area**

Complete removal of the area of the highest contamination, the former landfill area on the eastern parcel, is not financially feasible. A hydraulic barrier system will be installed around the perimeter of the former landfill area (approximately 1,400 linear feet). Following the removal of contaminated soils from Area E, the initial portion of the barrier wall will be constructed adjacent to the western side of the landfill area (Refer to Figure 3, where this barrier wall is denoted as the “Clay Backfill Wall”). The final design of the barrier system is not complete, but will likely consist of a (minimum) 2-foot thick clay liner “slurry wall” around the remainder of the landfill area. The clay will be compacted to 95% based on the optimum moisture content. Shoring or trench boxes will be used to ensure slope stability during the installation and compaction of the clay walls. The purpose of the Clay Backfill Wall and slurry wall is to prevent infiltration of groundwater into the former landfill area. The bottom of the Clay Backfill Wall and slurry wall will tie into native clay, and the top of these walls will tie into the clay cap, thus completely encapsulating the landfill area. Further, these control measures will act to prevent leachate formation.

As noted above, the former landfill will be covered with 2 feet of compacted clay and a flexible membrane liner and cap to prevent exacerbation of existing contamination. The clay cap will tie into the slurry wall and Clay Backfill wall. In addition, if deemed necessary by MDEQ, a passive methane venting system will be designed and installed either (a) west of the former landfill area (approximately 1,400 linear feet), or (b) within the landfill area, to manage landfill gases on-site.

The environmental consultant will prepare and implement an O&M Plan for the engineering controls installed in the former landfill area. The O&M Plan is anticipated to include a recommendation for quarterly long-term inspection/methane monitoring. The cost estimate for implementation of an O&M Plan is \$30,000 per year.

This cost includes design, installation, reporting, and project management for the systems.

#### **3.1.1.8 Passive Methane Venting System**

The south adjacent property is a former landfill. As a presumptive remedy to preemptively protect against the migration of contamination from methane gases, a passive methane venting system will be installed on the subject property along Hamlin Road, if deemed necessary by MDEQ. An O&M Plan for the venting system will be prepared.

This cost includes design, installation, reporting, and project management for the system. In addition, the environmental consultant will prepare and implement an O&M Plan for the engineering controls installed along Hamlin Road. The O&M Plan is anticipated to include a recommendation for quarterly long-term inspection/methane monitoring.

### **3.1.1.9 Waterproofing Seals and Gaskets for Stormwater Piping**

Due to known contamination in soil that will be left in place on Parcel B and to mitigate against exacerbation of contamination, chemical resistant seals and gaskets may be installed on piping located on Parcel B to prevent the intrusion of contaminants on site into the stormwater system.

### **3.1.1.10 Site Control & Erosion Control**

In order to be protective of workers and residents, the excavation areas will be fenced or barricaded to minimize potential for unauthorized access to contaminated soil. These costs include the silt fencing for the north and east in order to mitigate erosion concerns; dust monitoring during environmental mitigation work in order to address further concerns of the neighbors to the north; a Soil Erosion and Sedimentation Control Plan; and a Fugitive Dust Emission Control and Contingency Plan. Additionally, a gravel mat will be constructed along the truck route leaving the property to minimize tracking of dirt and potentially impacted soil from the property.

During soil excavation and removal activities the truck routes will be as follows:

#### *Site Arrival*

- The trucks will initially use the entrance ramps on M-59 at the Adams Road interchange.
- The trucks will proceed north on Adams Road to Hamlin Road.
- Turn right (east) on Hamlin Road to enter the site. All trucks will be staged on site while waiting to be loaded or completion of shipping papers.

#### *Site Departure*

- The trucks leave the site onto Hamlin Road and proceed west toward Adams.
- The trucks will turn left (south) onto Adams Road and proceed to the M-59 interchange.
- The trucks will access M-59 from Adams Road and procedure to their destination.

### **3.1.1.11 Dewatering**

The potential for water in excavations exists, particularly in Area E. In the event that groundwater is encountered, or if surface runoff accumulates, in sufficient quantities to require dewatering, the water will be containerized in frac tanks. Once containerized, the water will be sampled to determine whether or not disposal is necessary or if the water can be discharged to the POTW under a permit. In the event that water is encountered in a quantity that is too large to containerize, alternate methods for direct dewatering and disposal will be evaluated.

## **3.1.2 Preparation of Brownfield Plan and Act 381 Work Plan**

AKT Peerless has prepared a Brownfield Plan and MDEQ Act 381 Work Plan for the subject property in accordance with all applicable MDEQ guidance. Developer anticipates incurring costs to assist with the tracking and reporting of incurred eligible costs.

## **3.2 Local-Only Eligible Activities**

There are no local-only eligible activities identified.

## **4.0 Schedule and Costs**

The following sections present the proposed schedule to complete the Project and the associated costs.

#### 4.1 Schedule of Activities

Project activities will commence in 2018 following the Rochester Hills Brownfield Redevelopment Authority, the City Council, and MDEQ approvals, as applicable. Completion of the remediation activities on the western parcel and construction of the residential development is anticipated to be within approximately 3 years. It is anticipated that limited remedial activities will be conducted on the eastern parcel during construction of the residential development. The timing for completion of remedial activities on the eastern parcel will be dependent on funds made available by the tax increment revenue stream.

#### 4.2 Estimated Costs

The itemized estimated costs to complete the environmental eligible activities including all labor, equipment, subcontractors, and materials under this Act 381 Work Plan are provided in Sections 4.2.1 below and in the attached Table 1. Actual interest associated with the eligible activities not to exceed 5% to address the true cost of conducting the eligible activities associated with the development of this site is also included.

##### 4.2.1 Description of MDEQ Eligible Activities Costs

The estimated cost for the activities plus contingency, fees, and interest described in this section is \$14,201,575. The Developer desires to be reimbursed for the costs of eligible activities. Individual costs associated with these activities are provided in the table below. See Table 1 for further details.

##### 4.2.2 Contingency

A 15% contingency factor has been included to accommodate for unexpected conditions that may be encountered during the performance of eligible activities.

#### MDEQ Eligible Activities

Eligible Activity	Total Est. Cost
<b>Department Specific Activities</b>	
Phase I ESA	\$5,600
Baseline Environmental Assessment	\$15,000
Supplemental Subsurface Investigation	\$120,000
Environmental Construction Mgmt Plan	\$20,000
Project Management, Admin., and Consulting	\$25,000
Health & Safety Plan	\$2,000
Parcel A – Area A Soil/Waste Removal	\$114,537
Parcel A – Area B Soil/Waste Removal	\$244,444
Parcel A – Area C1 Soil/Waste Removal	\$506,426
Parcel A – Area C2 Soil/Waste Removal	\$1,473,667
Parcel A – Area D Soil/Waste Removal	\$427,833
Smaller Hot Spot Removal (SW Area)	\$100,000
Sub-slab Venting System (New Construction)	\$648,000
Parcel B – Area E Soil/Waste Removal	\$1,464,481
Parcel B – Removal & Disposal of PCB Soil	\$232,000
O & M Plan – Parcel B	\$900,000

<b>Eligible Activity</b>	<b>Total Est. Cost</b>
Import Clean Fill for Land Balancing	\$680,000
Installation of Hydraulic Barrier (slurry wall)	\$150,000
Installation of Liner and Cap over former Landfill	\$120,000
Installation of Passive Methane Venting System	\$190,000
O & M Plan – Subfloor Methane Mitigation System, Slurry Wall and Cap	\$255,000
Passive Methane Venting System – Hamlin Road	\$260,000
O & M Plan – Venting System – Hamlin Road	\$150,000
Waterproofing Seals & Gaskets – Stormwater	\$40,000
Temporary Site Control and Erosion Control	\$50,000
Dewatering	\$75,000
Closeout Reporting & DDCC	\$15,000
NFA Due Care Plan	\$30,000
<b>Subtotal of Environmental Eligible Activities</b>	<b>\$8,368,415</b>
Contingency (A 15% contingency factor has been included to accommodate unexpected conditions that may be encountered during redevelopment)	\$1,206,172
Brownfield Plan & Act 381 Work Plan Prep and Compliance	\$45,000
<b>Subtotal</b>	<b>\$9,619,587</b>
Interest	\$4,581,988
<b>Total MDEQ Reimbursable Costs</b>	<b>\$14,201,575</b>

## 5.0 Project Costs and Funding

The following subsections present the total estimated Project costs and the source and uses of funds.

### 5.1 Total Estimated Project Costs

The total costs of the non-environmental eligible activities under this Act 381 Work Plan are provided in Table 1. The Developer anticipates making an investment of up to \$50 million in real and personal property improvements on the subject property.

### 5.2 Sources and Uses of Funds

The Developer anticipates investment of approximately \$50 million in real property improvements on the subject property including acquisition of the land. Redevelopment of the subject property is expected to subsequently generate material increases in taxable value and result in incremental taxable value beginning in 20. The initial taxable value for the brownfield plan will be the subject property's 2017 assessment, because the 2017 taxable value was on the rolls when brownfield plan received final approval in early 2018, prior to spring equalization. Tax increment revenue will be utilized to reimburse the cost of eligible activities. Table 2 provides an estimate of tax increment revenue. The Developer will finance all eligible activities under this Act 381 Work Plan related to improvements on the subject property.

## 6.0 Limitations

The taxable value on real property is estimated to increase at a rate of 2.1% each year (refer to Table 2).

The incremental tax revenue estimates for the proposed development could vary from this estimate affecting the time period it takes to reimburse the eligible activities. The cost estimates included within this Act 381 Work Plan are just that—estimates—and the actual costs incurred may vary depending on site conditions. If in fact the eligible activity costs exceed the estimated amount for reimbursement, the Developer and the Authority may submit an amended Brownfield Plan and Act 381 Work Plan. Please reference the Brownfield Plan in Appendix A for additional information.

All reimbursements authorized under this Act 381 Work Plan shall be governed by the Reimbursement Agreement. The inclusion of eligible activities and estimates of costs to be reimbursed in this Act 381 Work Plan are intended to authorize the Authority to fund such reimbursements and does not obligate the Authority or the County to fund any reimbursement or to enter into the Reimbursement Agreement providing for the reimbursement of any costs for which tax increment revenues may be captured under this Act 381 Work Plan, or which are permitted to be reimbursed under this Act 381 Work Plan. The amount and source of any tax increment revenues that will be used for purposes authorized by this Act 381 Work Plan, and the terms and conditions for such use and upon any reimbursement of the expenses permitted by the Act 381 Work Plan, will be provided solely under the Reimbursement Agreement contemplated by this Act 381 Work Plan.



## Figures

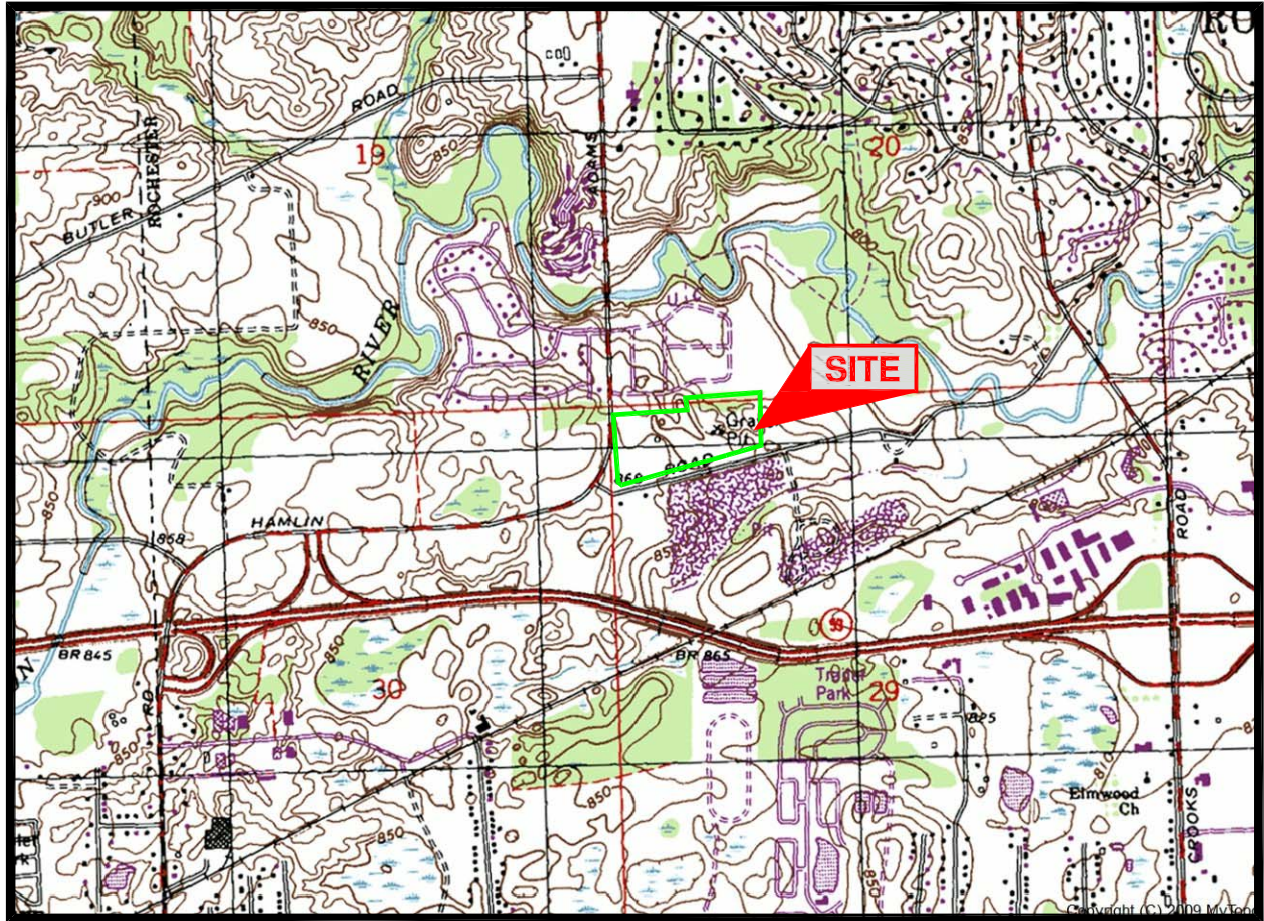
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**Figure 1**

**Scaled Property Location Map**

DRAFT

ROCHESTER QUADRANGLE  
 MICHIGAN - OAKLAND COUNTY  
 7.5 MINUTE SERIES (TOPOGRAPHIC)



T.3 N.-R.11 E.



IMAGE TAKEN FROM 1997 U.S.G.S. TOPOGRAPHIC MAP

MICHIGAN  
 QUADRANGLE LOCATION



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**SCALED PROPERTY LOCATION MAP**

PARCEL 15-29-101-022 AND 15-29-101-023  
 NE CORNER OF HAMLIN & ADAMS ROADS  
 ROCHESTER HILLS, MICHIGAN  
 PROJECT NUMBER: 3679F6-5-25

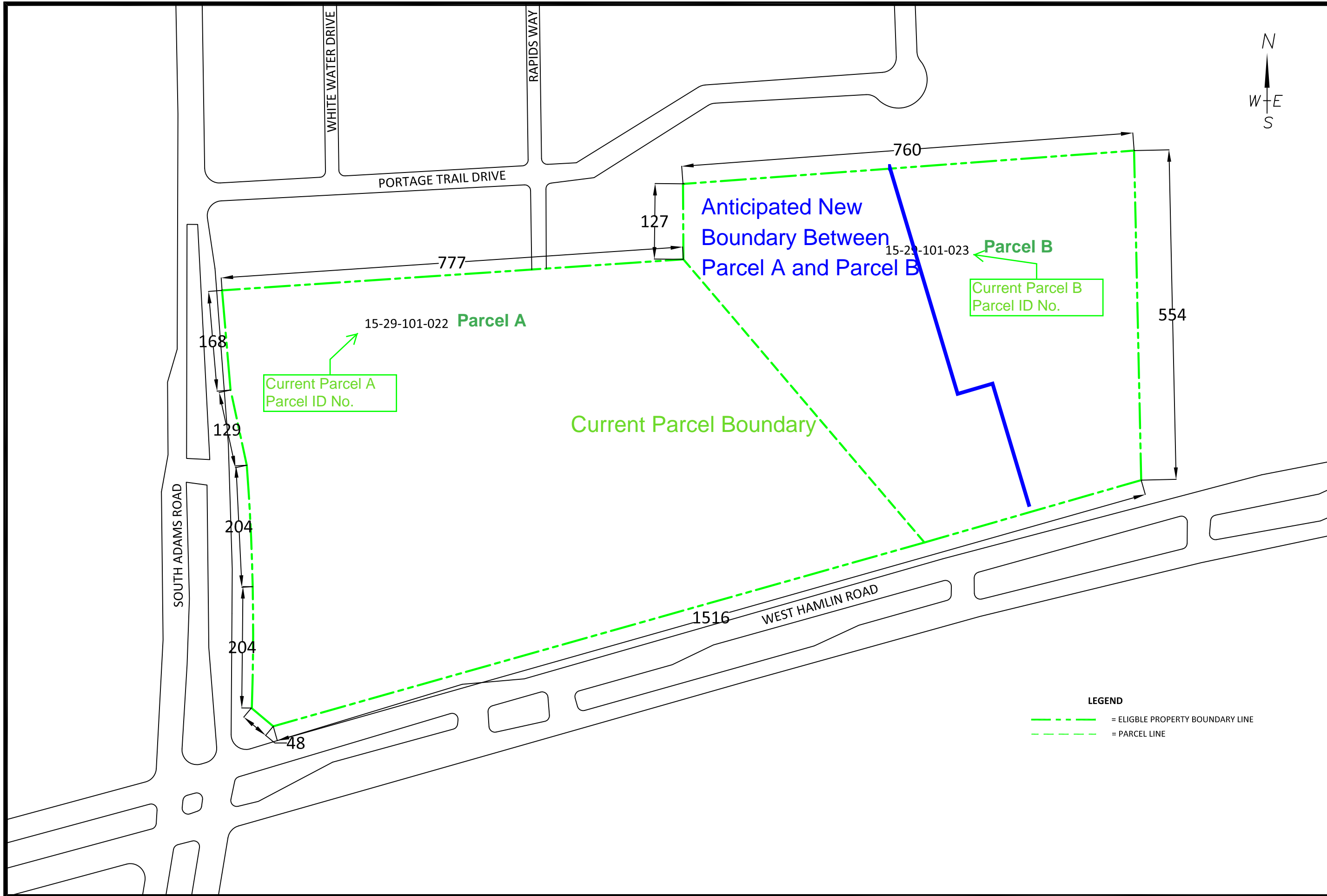
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 DATE: 06/02/2017

**FIGURE 1**

**Figure 2**

**Eligible Property Boundary Map**





DRAWN BY: ARR  
DATE: 06/02/2017

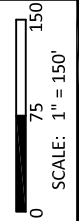


FIGURE 2

ELIGIBLE PROPERTY BOUNDARY MAP

PARCEL 15-29-101-022 AND 15-29-101-023  
NE CORNER OF HAMLIN & ADAMS ROADS  
ROCHESTER HILLS, MICHIGAN  
PROJECT NUMBER: 3679F6-5-25

LEGEND

- = ELIGIBLE PROPERTY BOUNDARY LINE
- = PARCEL LINE

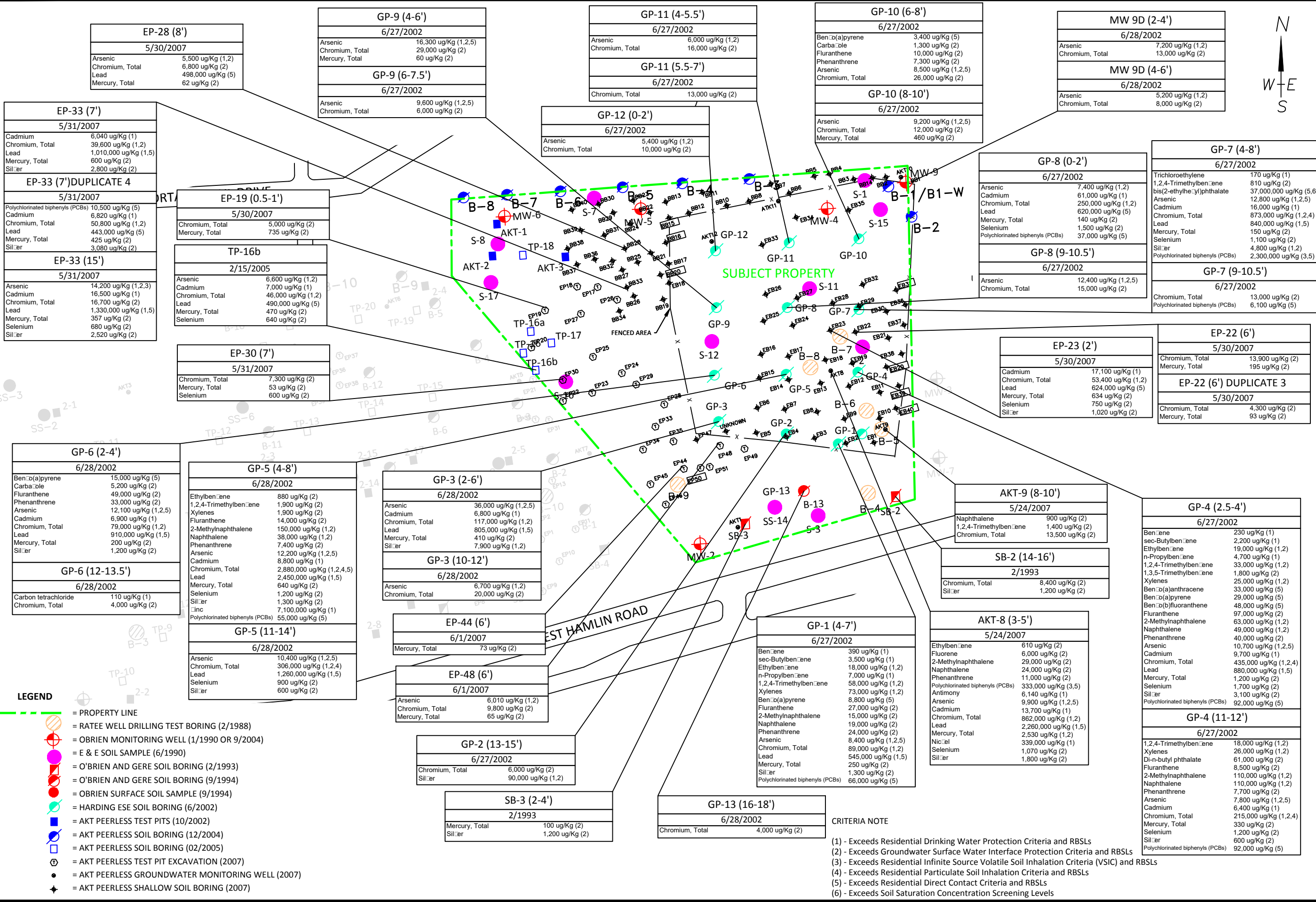


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**Figure 3**

**Property Maps with Soil Analytical Results**

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DATE: 01/05/2017

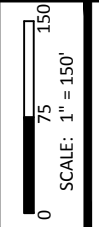


FIGURE 3A

SITE MAP WITH SOIL RESULTS EXCEEDING MDEQ RCC

PARCEL 15-29-101-023  
NE CORNER OF HAMLIN & ADAMS ROADS  
ROCHESTER HILLS, MICHIGAN  
PROJECT NUMBER : 3679F6-3-26

- LEGEND**
- = PROPERTY LINE
  - = RATEE WELL DRILLING TEST BORING (2/1988)
  - = O'BRIEN MONITORING WELL (1/1990 OR 9/2004)
  - = E & E SOIL SAMPLE (6/1990)
  - = O'BRIEN AND GERE SOIL BORING (2/1993)
  - = O'BRIEN AND GERE SOIL BORING (9/1994)
  - = O'BRIEN SURFACE SOIL SAMPLE (9/1994)
  - = HARDING ESE SOIL BORING (6/2002)
  - = AKT PEERLESS TEST PITS (10/2002)
  - = AKT PEERLESS SOIL BORING (12/2004)
  - = AKT PEERLESS SOIL BORING (02/2005)
  - = AKT PEERLESS TEST PIT EXCAVATION (2007)
  - = AKT PEERLESS GROUNDWATER MONITORING WELL (2007)
  - = AKT PEERLESS SHALLOW SOIL BORING (2007)

- CRITERIA NOTE**
- (1) - Exceeds Residential Drinking Water Protection Criteria and RBSLs
  - (2) - Exceeds Groundwater Surface Water Interface Protection Criteria and RBSLs
  - (3) - Exceeds Residential Infinite Source Volatile Soil Inhalation Criteria (VSIC) and RBSLs
  - (4) - Exceeds Residential Particulate Soil Inhalation Criteria and RBSLs
  - (5) - Exceeds Residential Direct Contact Criteria and RBSLs
  - (6) - Exceeds Soil Saturation Concentration Screening Levels

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CRITERIA NOTE

- (1) - Exceeds Residential Drinking Water Protection Criteria and RBLS
- (2) - Exceeds Groundwater Surface Water Interface Protection Criteria and RBLS
- (3) - Exceeds Residential Infinite Source Volatile Soil Inhalation Criteria (VSIC) and RBLS
- (4) - Exceeds Residential Particulate Soil Inhalation Criteria and RBLS
- (5) - Exceeds Residential Direct Contact Criteria and RBLS
- (6) - Exceeds Soil Saturation Concentration Screening Levels

<b>EB-28 (1-3')</b>	
5/24/2007	
Polychlorinated biphenyls (PCBs)	150,000 ug/Kg (5)

<b>EB-28 (3-5')</b>	
5/24/2007	
Polychlorinated biphenyls (PCBs)	31,000 ug/Kg (5)

<b>EB-28 (8-10')</b>	
5/24/2007	
Fluoranthene	10,000 ug/Kg (2)
2-Methylnaphthalene	30,000 ug/Kg (2)
Naphthalene	30,000 ug/Kg (2)
Polychlorinated biphenyls (PCBs)	16,000 ug/Kg (5)

<b>EB-27 (1-3')</b>	
5/24/2007	
Benzo(a)pyrene	10,200 ug/Kg (2)
Fluoranthene	20,500 ug/Kg (2)
Phenanthrene	14,100 ug/Kg (2)

<b>EB-23 (3-5')</b>	
5/24/2007	
Benzoene	800 ug/Kg (1)
sec-Butylbenzene	5,400 ug/Kg (1)
Ethylbenzene	46,900 ug/Kg (1.2)
Isopropylbenzene	8,000 ug/Kg (2)
Naphthalene	82,000 ug/Kg (1.2)
n-Propylbenzene	17,000 ug/Kg (1)
1,2,4-Trimethylbenzene	66,000 ug/Kg (1.2)
1,3,5-Trimethylbenzene	19,000 ug/Kg (1.2)
Xylenes	159,500 ug/Kg (1.2,6)
Benzo(a)pyrene	3,000 ug/Kg (5)
Fluoranthene	6,000 ug/Kg (2)
2-Methylnaphthalene	82,000 ug/Kg (1.2)
Phenanthrene	4,000 ug/Kg (2)
Polychlorinated biphenyls (PCBs)	149,000 ug/Kg (5)

<b>EB-26 (1-3')</b>	
5/24/2007	
Benzo(a)pyrene	4,600 ug/Kg (2)
Fluoranthene	8,400 ug/Kg (2)
Phenanthrene	3,200 ug/Kg (2)

<b>EB-25 (3-4')</b>	
5/24/2007	
Benzo(a)pyrene	9,100 ug/Kg (2)
Fluoranthene	16,700 ug/Kg (2)
Phenanthrene	9,200 ug/Kg (2)

<b>EB-24 (8-10')</b>	
5/24/2007	
Benzo(a)pyrene	3,900 ug/Kg (2)
Fluoranthene	6,700 ug/Kg (2)
2-Methylnaphthalene	6,100 ug/Kg (2)
Phenanthrene	3,100 ug/Kg (2)

<b>EB-23 (5-7')</b>	
5/24/2007	
Polychlorinated biphenyls (PCBs)	119,000 ug/Kg (5)

<b>EB-23 (7-9')</b>	
5/24/2007	
Polychlorinated biphenyls (PCBs)	99,000 ug/Kg (5)

<b>EB-22 (3-5')</b>	
5/24/2007	
Polychlorinated biphenyls (PCBs)	94,000 ug/Kg (5)

<b>EB-22 (6-8')</b>	
5/24/2007	
sec-Butylbenzene	9,000 ug/Kg (1)
Ethylbenzene	230,000 ug/Kg (1,2,3,6)
Isopropylbenzene	20,000 ug/Kg (2)
Naphthalene	130,000 ug/Kg (1.2)
n-Propylbenzene	39,000 ug/Kg (1)
1,2,4-Trimethylbenzene	142,000 ug/Kg (1,2,5,6)
1,3,5-Trimethylbenzene	41,000 ug/Kg (1.2)
Xylenes	1,033,000 ug/Kg (1,2,6)
2-Methylnaphthalene	130,000 ug/Kg (1.2)
Phenanthrene	5,600 ug/Kg (2)
Polychlorinated biphenyls (PCBs)	51,000 ug/Kg (5)

<b>EB-18 (3-5')</b>	
5/23/2007	
Benzo(a)pyrene	6,000 ug/Kg (5)
Fluoranthene	13,400 ug/Kg (2)
2-Methylnaphthalene	4,700 ug/Kg (2)
Naphthalene	2,700 ug/Kg (2)
Phenanthrene	3,700 ug/Kg (2)
Polychlorinated biphenyls (PCBs)	4,300 ug/Kg (5)

<b>EB-10 (11-13')</b>	
5/23/2007	
Polychlorinated biphenyls (PCBs)	104,000 ug/Kg (5)

<b>EB-19 (4-5')</b>	
5/23/2007	
sec-Butylbenzene	10,000 ug/Kg (1)
Ethylbenzene	38,000 ug/Kg (1.2)
Isopropylbenzene	7,000 ug/Kg (2)
Naphthalene	55,000 ug/Kg (1.2)
n-Propylbenzene	13,000 ug/Kg (1)
1,2,4-Trimethylbenzene	91,000 ug/Kg (1.2)
1,3,5-Trimethylbenzene	54,000 ug/Kg (1.2)
Xylenes	179,000 ug/Kg (1,2,6)
2-Methylnaphthalene	68,000 ug/Kg (1.2)
Benzo(a)pyrene	11,000 ug/Kg (5)
Fluoranthene	39,000 ug/Kg (2)
Phenanthrene	20,000 ug/Kg (2)
Polychlorinated biphenyls (PCBs)	203,000 ug/Kg (5)

<b>EB-19 (5-7')</b>	
5/23/2007	
Polychlorinated biphenyls (PCBs)	197,000 ug/Kg (5)

<b>EB-19 (8-10')</b>	
5/23/2007	
Polychlorinated biphenyls (PCBs)	34,000 ug/Kg (5)

<b>EB-29 (1-3')</b>	
5/24/2007	
Benzo(a)pyrene	9,700 ug/Kg (5)
Fluoranthene	17,100 ug/Kg (2)
Phenanthrene	8,700 ug/Kg (2)

<b>EB-29 (3-5')</b>	
5/24/2007	
Polychlorinated biphenyls (PCBs)	40,000 ug/Kg (5)

<b>EB-29 (8-9')</b>	
5/24/2007	
Polychlorinated biphenyls (PCBs)	6,000 ug/Kg (5)

<b>EB-21 (3-5')</b>	
5/23/2007	
Polychlorinated biphenyls (PCBs)	172,000 ug/Kg (5)

<b>EB-21 (8-10')</b>	
5/23/2007	
sec-Butylbenzene	8,000 ug/Kg (1)
Ethylbenzene	18,000 ug/Kg (1,2)
Isopropylbenzene	12,000 ug/Kg (2)
Naphthalene	60,000 ug/Kg (1,2)
n-Propylbenzene	23,000 ug/Kg (1)
1,2,4-Trimethylbenzene	117,000 ug/Kg (1,2,5,6)
1,3,5-Trimethylbenzene	27,000 ug/Kg (1,2)
Xylenes	191,000 ug/Kg (1,2,6)
2-Methylnaphthalene	52,000 ug/Kg (2)
Benzo(a)pyrene	4,000 ug/Kg (5)
Fluoranthene	8,000 ug/Kg (5)
Polychlorinated biphenyls (PCBs)	83,000 ug/Kg (5)

<b>EB-32 (1-3')</b>	
5/24/2007	
Benzo(a)pyrene	5,500 ug/Kg (5)
Fluoranthene	7,400 ug/Kg (2)
Polychlorinated biphenyls (PCBs)	29,000 ug/Kg (5)

<b>EB-35 (1-3')</b>	
5/25/2007	
Benzo(a)pyrene	3,600 ug/Kg (5)
Phenanthrene	2,700 ug/Kg (2)

<b>EB-31 (1-3')</b>	
5/24/2007	
Polychlorinated biphenyls (PCBs)	5,400 ug/Kg (5)

<b>EB-31 (3-5')</b>	
5/24/2007	
Benzo(a)pyrene	2,300 ug/Kg (5)
Polychlorinated biphenyls (PCBs)	32,000 ug/Kg (5)

<b>EB-31 (7-9')</b>	
5/24/2007	
Benzo(a)pyrene	3,000 ug/Kg (5)

<b>EB-30 (1-3')</b>	
5/24/2007	
sec-Butylbenzene	7,000 ug/Kg (1)
Ethylbenzene	111,000 ug/Kg (1,2,3)
n-Propylbenzene	40,000 ug/Kg (1)
1,2,4-Trimethylbenzene	140,000 ug/Kg (1,2,5,6)
1,3,5-Trimethylbenzene	30,000 ug/Kg (1.2)
Xylenes	330,000 ug/Kg (1,2,6)
Benzo(a)pyrene	8,000 ug/Kg (5)
Fluoranthene	15,600 ug/Kg (2)
2-Methylnaphthalene	12,100 ug/Kg (2)
Naphthalene	13,800 ug/Kg (2)
Phenanthrene	10,800 ug/Kg (2)
Polychlorinated biphenyls (PCBs)	68,000 ug/Kg (5)

<b>DUPLICATE 4 EB-30 (1-3')</b>	
5/24/2007	
sec-Butylbenzene	10,000 ug/Kg (1)
Ethylbenzene	122,000 ug/Kg (1,2,3)
Isopropylbenzene	20,000 ug/Kg (2)
Naphthalene	30,000 ug/Kg (2)
n-Propylbenzene	47,000 ug/Kg (1)
1,2,4-Trimethylbenzene	175,000 ug/Kg (1,2,5,6)
1,3,5-Trimethylbenzene	48,000 ug/Kg (1.2)
Xylenes	332,000 ug/Kg (1,2,6)
Benzo(a)pyrene	3,600 ug/Kg (5)
Fluoranthene	9,900 ug/Kg (2)
2-Methylnaphthalene	22,500 ug/Kg (2)
Phenanthrene	10,400 ug/Kg (2)
Polychlorinated biphenyls (PCBs)	284,000 ug/Kg (5)

<b>EB-30 (3-5')</b>	
5/24/2007	
Polychlorinated biphenyls (PCBs)	97,000 ug/Kg (5)

<b>EB-38 (1-3')</b>	
5/25/2007	
Polychlorinated biphenyls (PCBs)	89,000 ug/Kg (5)

<b>EB-38 (3-5')</b>	
5/25/2007	
sec-Butylbenzene	14,000 ug/Kg (1)
Ethylbenzene	71,000 ug/Kg (1,2)
Isopropylbenzene	20,000 ug/Kg (2)
n-Propylbenzene	29,000 ug/Kg (1)
Toluene	9,000 ug/Kg (2)
1,2,4-Trimethylbenzene	168,000 ug/Kg (1,2,5,6)
Xylenes	79,000 ug/Kg (1,2)
Di-n-butyl phthalate	48,000 ug/Kg (2)
Fluoranthene	8,000 ug/Kg (2)
2-Methylnaphthalene	388,000 ug/Kg (1.2)
Naphthalene	246,000 ug/Kg (1.2)
Polychlorinated biphenyls (PCBs)	56,000 ug/Kg (5)

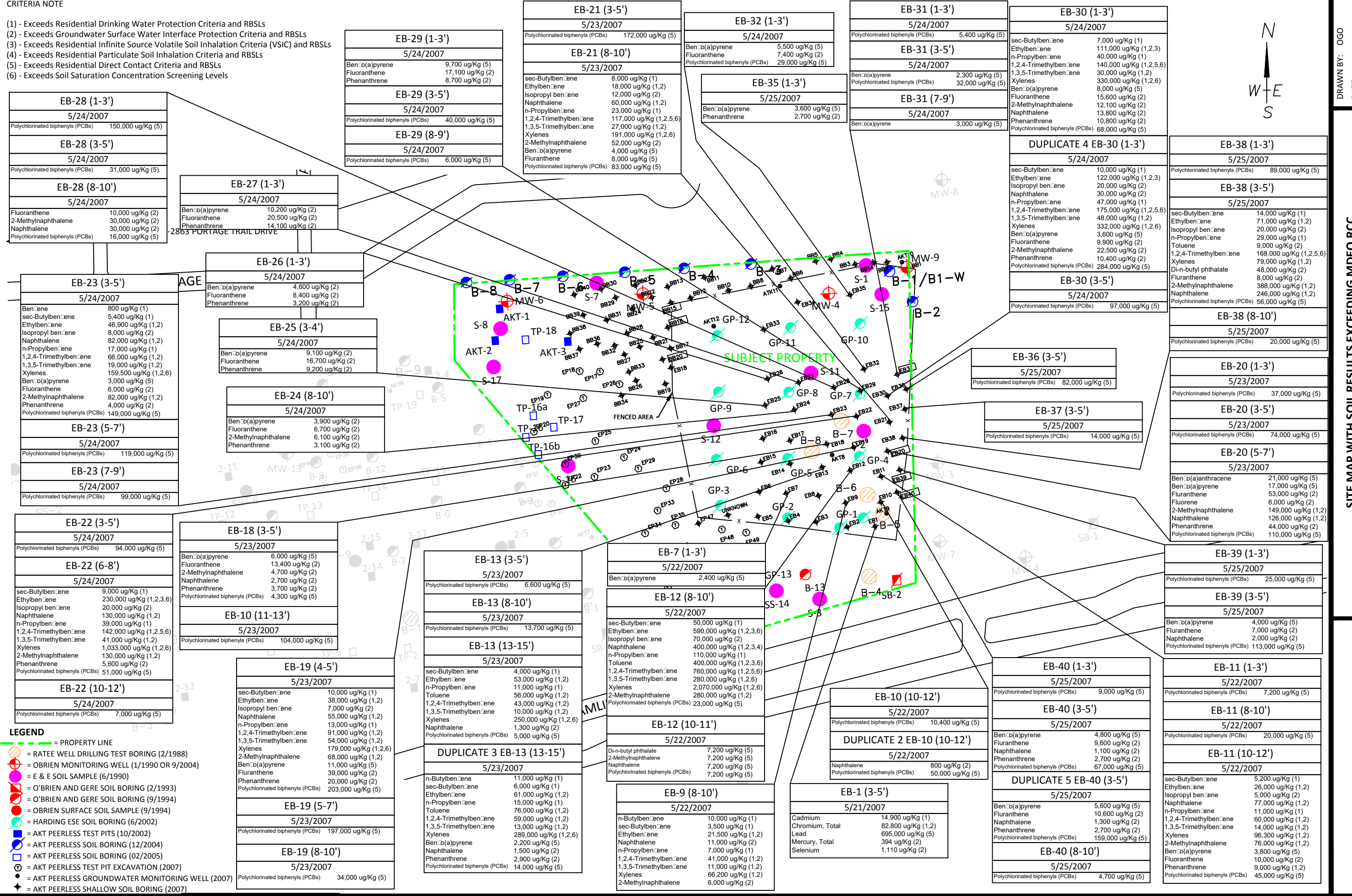
<b>EB-38 (8-10')</b>	
5/25/2007	
Polychlorinated biphenyls (PCBs)	20,000 ug/Kg (5)

<b>EB-20 (1-3')</b>	
5/23/2007	
Polychlorinated biphenyls (PCBs)	37,000 ug/Kg (5)

<b>EB-20 (3-5')</b>	
5/23/2007	
Polychlorinated biphenyls (PCBs)	74,000 ug/Kg (5)

<b>EB-20 (5-7')</b>	
5/23/2007	
Benzo(a)anthracene	21,000 ug/Kg (5)
Benzo(a)pyrene	17,000 ug/Kg (5)
Fluoranthene	53,000 ug/Kg (2)
Fluorene	6,000 ug/Kg (2)
2-Methylnaphthalene	149,000 ug/Kg (1.2)
Naphthalene	126,000 ug/Kg (1.2)
Phenanthrene	44,000 ug/Kg (2)
Polychlorinated biphenyls (PCBs)	110,000 ug/Kg (5)

- LEGEND**
- = PROPERTY LINE
  - = RATEE WELL DRILLING TEST BORING (2/1988)
  - = O'BRIEN MONITORING WELL (1/1990 OR 9/2004)
  - = E & E SOIL SAMPLE (6/1990)
  - = O'BRIEN AND GERE SOIL BORING (2/1993)
  - = O'BRIEN AND GERE SOIL BORING (9/1994)
  - = O'BRIEN SURFACE SOIL SAMPLE (9/1994)
  - = HARDING ESE SOIL BORING (6/2002)
  - = AKT PEERLESS TEST PITS (10/2002)
  - = AKT PEERLESS SOIL BORING (12/2004)
  - = AKT PEERLESS SOIL BORING (02/2005)
  - = AKT PEERLESS TEST PIT EXCAVATION (2007)
  - = AKT PEERLESS GROUNDWATER MONITORING WELL (2007)
  - = AKT PEERLESS SHALLOW SOIL BORING (2007)



DRAWN BY: OGO  
DATE: 01/05/2017  
SCALE: 1" = 150'  
FIGURE 3B

**SITE MAP WITH SOIL RESULTS EXCEEDING MDEQ RCC (AKT PEERLESS' 2007 INVESTIGATION - AREA B)**  
PARCEL 15-29-101-023  
NE CORNER OF HAMLIN & ADAMS ROADS  
ROCHESTER HILLS, MICHIGAN  
PROJECT NUMBER : 3679F6-3-26

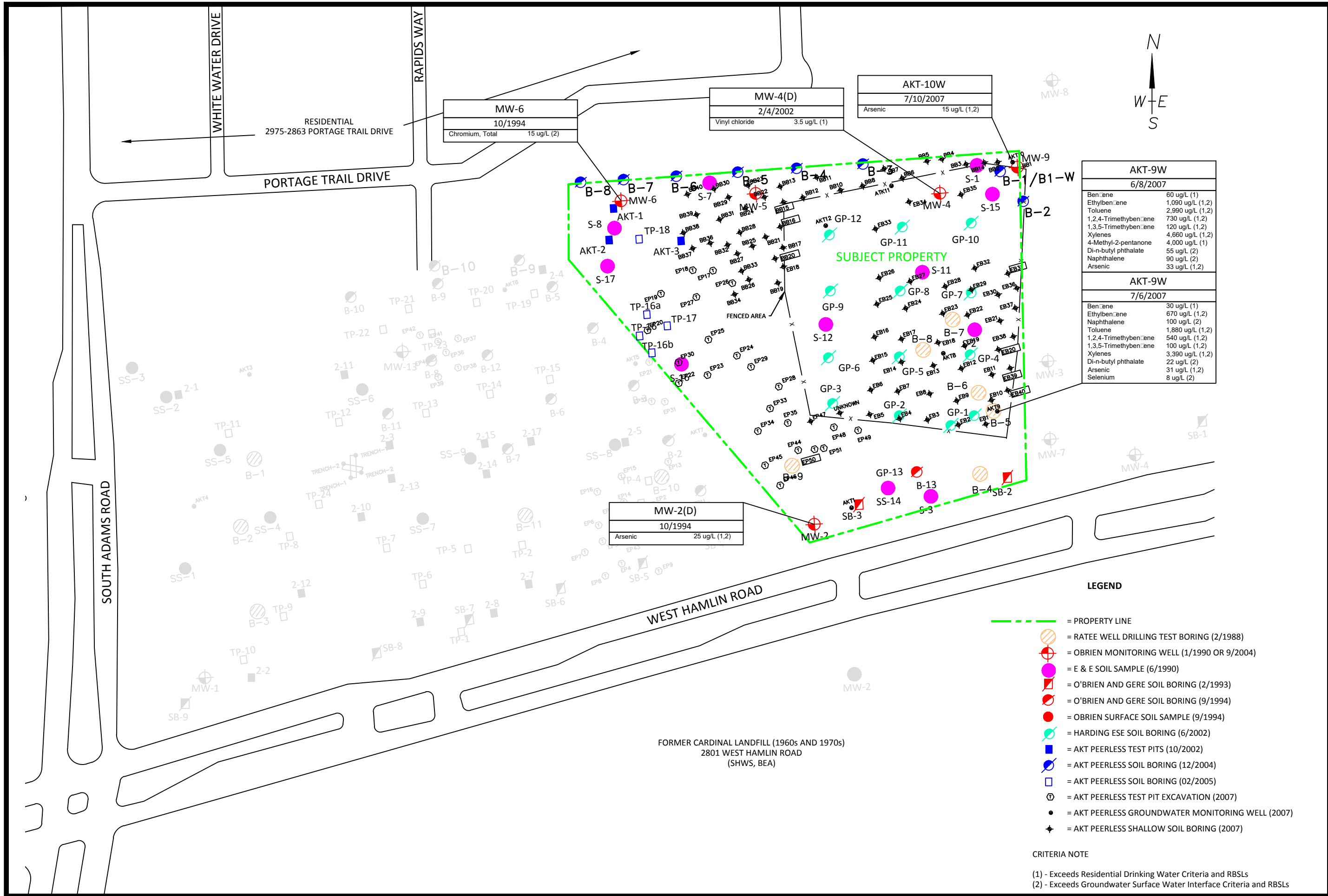
**AKT PEERLESS**  
www.aktpeerless.com



**Figure 4**

**Property Maps with Groundwater Analytical Results**

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DRAWN BY: OGO  
DATE: 01/05/2017

0 75 150  
SCALE: 1" = 150'

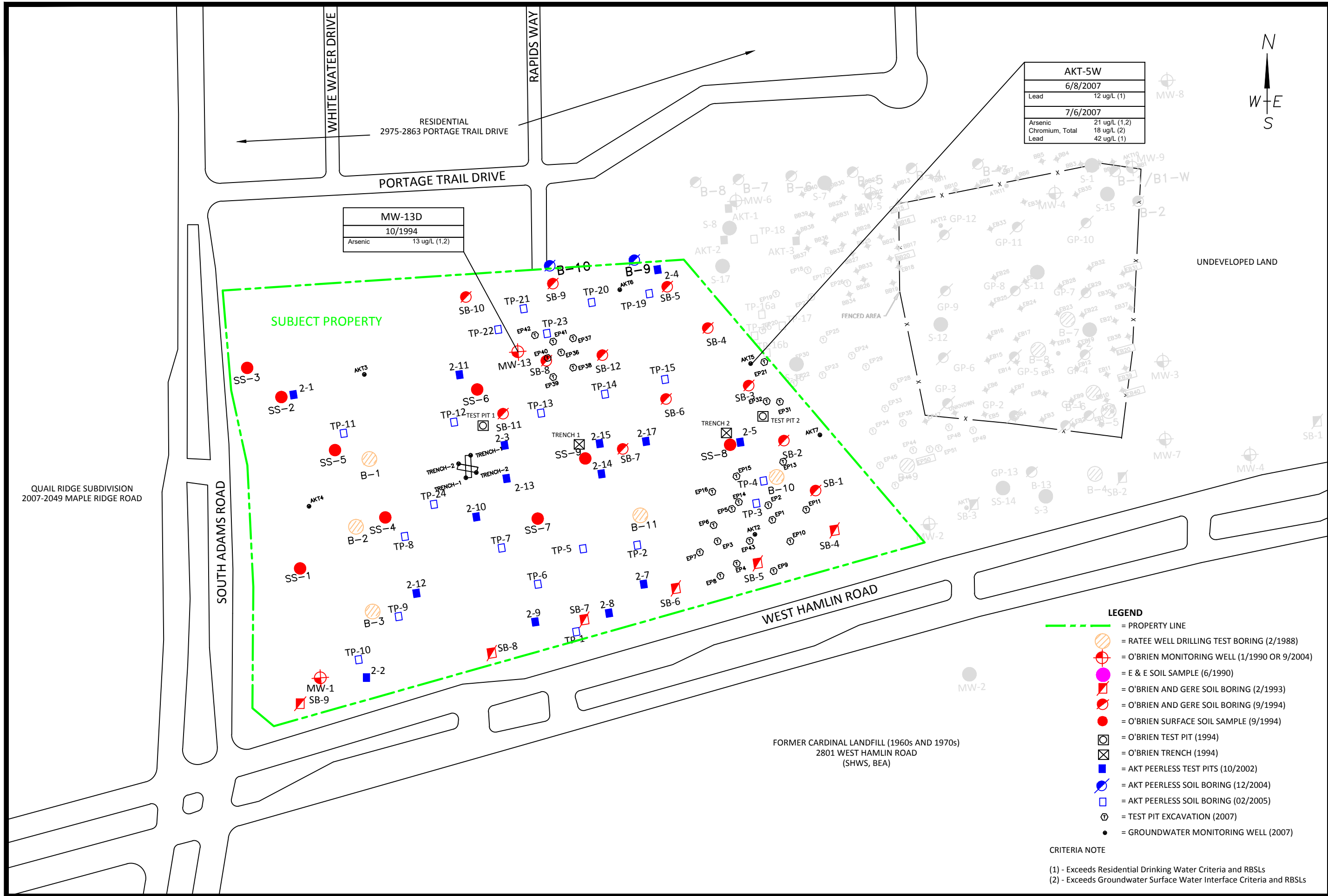
**FIGURE 4**

**SITE MAP WITH GROUNDWATER RESULTS EXCEEDING MDEQ RCC**

PARCEL 15-29-101-023  
NE CORNER OF HAMLIN & ADAMS ROADS  
ROCHESTER HILLS, MICHIGAN  
PROJECT NUMBER : 3679F6-3-26

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DRAWN BY: OGO  
 DATE: 01/05/2017

0 75 150  
 SCALE: 1" = 150'

**FIGURE 4**

**SITE MAP WITH GROUNDWATER RESULTS EXCEEDING MDEQ RCC**

PARCEL 15-29-101-022  
 NE CORNER OF HAMLIN & ADAMS ROADS  
 ROCHESTER HILLS, MICHIGAN  
 PROJECT NUMBER : 3679F6-3-26

- LEGEND**
- = PROPERTY LINE
  - = RATEE WELL DRILLING TEST BORING (2/1988)
  - ⊕ = O'BRIEN MONITORING WELL (1/1990 OR 9/2004)
  - = E & E SOIL SAMPLE (6/1990)
  - ⊠ = O'BRIEN AND GERE SOIL BORING (2/1993)
  - = O'BRIEN AND GERE SOIL BORING (9/1994)
  - = O'BRIEN SURFACE SOIL SAMPLE (9/1994)
  - ⊠ = O'BRIEN TEST PIT (1994)
  - ⊠ = O'BRIEN TRENCH (1994)
  - = AKT PEERLESS TEST PITS (10/2002)
  - ⊕ = AKT PEERLESS SOIL BORING (12/2004)
  - = AKT PEERLESS SOIL BORING (02/2005)
  - ⊕ = TEST PIT EXCAVATION (2007)
  - = GROUNDWATER MONITORING WELL (2007)

**CRITERIA NOTE**

(1) - Exceeds Residential Drinking Water Criteria and RBSLs  
 (2) - Exceeds Groundwater Surface Water Interface Criteria and RBSLs

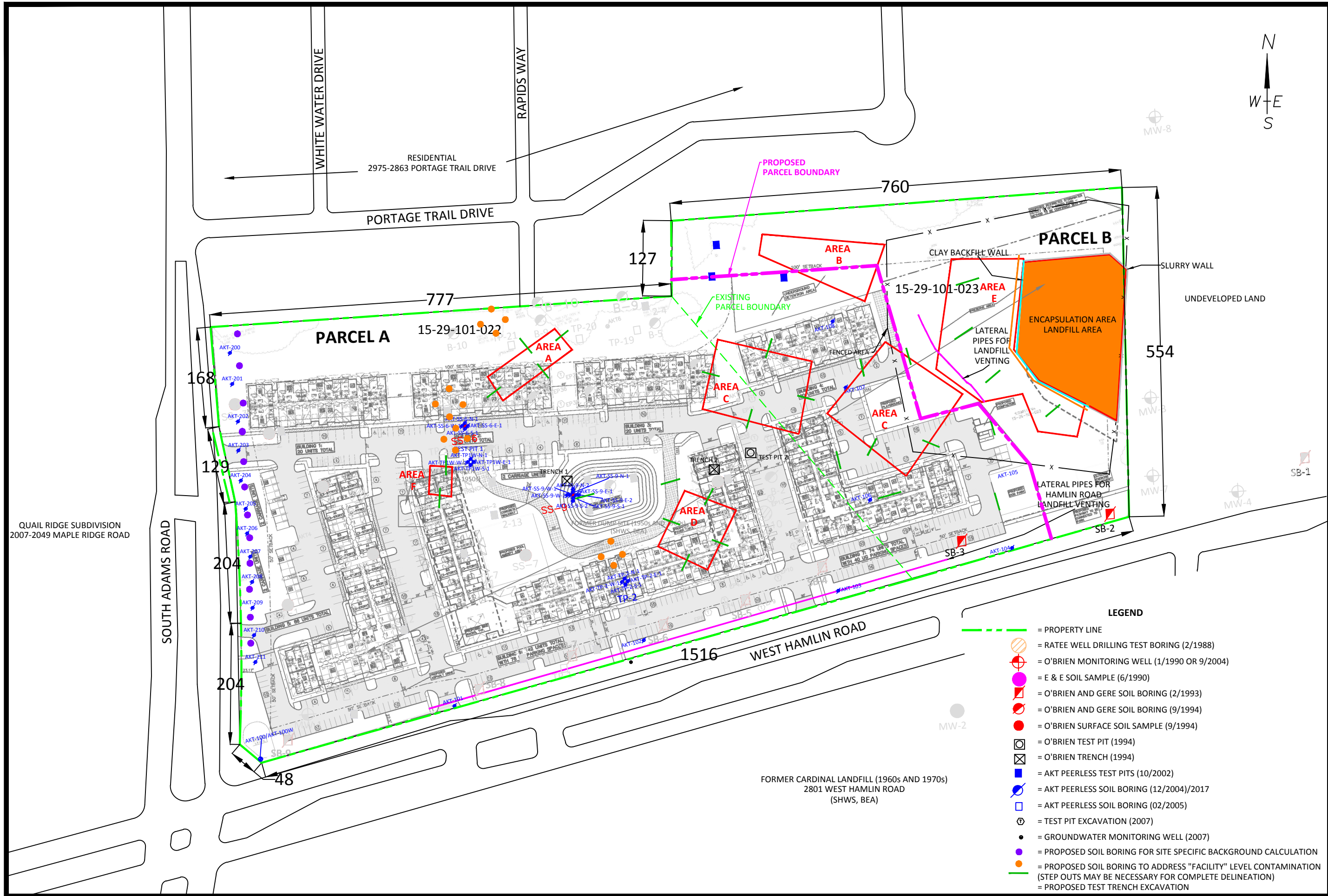


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**Figure 5**

**Proposed Locations for Soil Remediation and Engineering Controls**

DRAFT



DRAWN BY: OGO/ARR  
 DATE: 03/13/2018  
 SCALE: 1" = 150'  
 FIGURE 2

**SITE MAP WITH HISTORICAL SUBSURFACE INVESTIGATION ACTIVITIES**

PARCEL 15-29-101-022  
 NE CORNER OF HAMLIN & ADAMS ROADS  
 ROCHESTER HILLS, MICHIGAN  
 PROJECT NUMBER : 3679F6-3-26

- LEGEND**
- = PROPERTY LINE
  - = RATEE WELL DRILLING TEST BORING (2/1988)
  - = O'BRIEN MONITORING WELL (1/1990 OR 9/2004)
  - = E & E SOIL SAMPLE (6/1990)
  - = O'BRIEN AND GERE SOIL BORING (2/1993)
  - = O'BRIEN AND GERE SOIL BORING (9/1994)
  - = O'BRIEN SURFACE SOIL SAMPLE (9/1994)
  - = O'BRIEN TEST PIT (1994)
  - = O'BRIEN TRENCH (1994)
  - = AKT PEERLESS TEST PITS (10/2002)
  - = AKT PEERLESS SOIL BORING (12/2004)/2017
  - = AKT PEERLESS SOIL BORING (02/2005)
  - = TEST PIT EXCAVATION (2007)
  - = GROUNDWATER MONITORING WELL (2007)
  - = PROPOSED SOIL BORING FOR SITE SPECIFIC BACKGROUND CALCULATION
  - = PROPOSED SOIL BORING TO ADDRESS "FACILITY" LEVEL CONTAMINATION (STEP OUTS MAY BE NECESSARY FOR COMPLETE DELINEATION)
  - = PROPOSED TEST TRENCH EXCAVATION



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QUAIL RIDGE SUBDIVISION  
 2007-2049 MAPLE RIDGE ROAD

FORMER CARDINAL LANDFILL (1960s AND 1970s)  
 2801 WEST HAMLIN ROAD  
 (SHWS, BEA)

**Figure 6**

**Site Plan**

DRAFT

BUILDING DATA:			BUILDING DATA:				
TYPE:	# BEDROOMS	TOTAL UNITS	BLDG #	STORIES	SUITES	GARAGE	UG PARKING
A	1 BEDROOM	14 UNITS	1	2	20	10	0
B	2 BEDROOMS	32 UNITS	2	2	20	10	0
B1	2 BEDROOMS	12 UNITS	3	2	20	10	0
B2	2 BEDROOMS	12 UNITS	4	2	20	10	0
B3	2 BEDROOMS	18 UNITS	5	3 TO 4	66	38	0
C	3 BEDROOMS	118 UNITS	6	3 TO 4	142	0	78
C	1 BEDROOM	6 UNITS	7	3 TO 4	74	0	40
TOTAL:		368 UNITS			368	102	118

**SITE DATA TABLE:**

**LAND AREA:**  
 PARCEL #15-29-101-023:  
 GROSS = 9.30 ACRES  
 NET = 8.38 ACRES

PARCEL #15-29-101-022:  
 GROSS = 18.83 ACRES  
 NET = 14.11 ACRES

TOTAL ACREAGE = 22.49 ACRES (NET)

**ZONING INFO:**  
 EXISTING: R-2 WITH CONSENT JUDGEMENT  
 PROPOSED: RM-1 WITH MODIFIED CONSENT JUDGEMENT

**PROPOSED BUILDING AREA:**  
 MULTI-FAMILY RESIDENTIAL = 368 UNITS (MAX)  
 MAX. PROPOSED DENSITY = 368 UNITS/22.49 ACRES = 16.4 UNITS/ACRE

**PARKING REQUIRED:**  
 1 TO 2 BEDROOM UNITS:  
 1.5 SPACES PER DWELLING UNIT + 0.2 VISITOR SPACES/UNIT  
 = (1.5\*312) + (0.2\*312) = 530 SPACES

3 BEDROOM UNITS:  
 2 SPACES PER DWELLING UNIT + 0.25 VISITOR SPACES/UNIT  
 = (2\*56) + (0.25\*56) = 126 SPACES

TOTAL REQUIRED SPACES = 656 SPACES

**PARKING PROVIDED:**

509 SURFACE SPACES  
 3 DETACHED GARAGE SPACES  
 102 ATTACHED GARAGE SPACES  
 118 UNDERGROUND PARKING  
 = 732 TOTAL PARKING SPACES  
 (INCLUDING 20 ADA SPACES)

PLUS AN ADDITIONAL 12 SPACES  
 FOR USE BY INNOVATION HILLS CITY PARK

**BUILDING SETBACKS:**  
 FRONT (HAMLIN) 50' MIN.  
 FRONT (ADAMS) 50' MIN.  
 SIDE (EAST) 35' MIN.  
 REAR (NORTH) 100' MIN.

**PARKING SETBACKS:**  
 FRONT (HAMLIN) 20' MIN.  
 FRONT (ADAMS) 30' MIN.  
 SIDE (EAST) 20' MIN.  
 REAR (NORTH) 100' MIN.

**AMENITY AREAS:**  
 REQUIRED = 5% OF DEVELOPMENT ACREAGE  
 = 22.49 ACRES \* 0.05 = 1.12 ACRES

PROPOSED:  
 PLAYGROUND = 5,000 SF  
 DOG PARK = 5,000 SF  
 POOL AMENITY = 10,000 SF  
 WATER FEATURE/PERVIOUS PATHWAY = 29,107 SF  
 TOTAL = 49,107 SF (1.13 ACRES)

**REFERENCE DRAWINGS**

PEA PROJECT #203-238

**NOTE:**  
 ALL SIGNS MUST MEET CHAPTER 134 OF THE CITY CODE OF ORDINANCES AND BE APPROVED UNDER A SEPARATE PERMIT ISSUED BY THE BUILDING DEPARTMENT.

**FIRE DEPARTMENT NOTES:**

- 1) FIRE LANES SHALL BE CONSPICUOUSLY POSTED ON BOTH SIDES OF THE FIRE LANE, WITH FIRE LANE SIGNS SPACED NOT MORE THAN 100 FEET APART. FIRE LANE SIGNS SHALL READ "NO STOPPING, STANDING, PARKING, FIRE LANE", AND IN CONFORMANCE WITH THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. FIRE PREVENTION ORDINANCE CHAPTER 58, SECTION 503.
- 2) CONSTRUCTION SITES SHALL BE SAFEGUARDED IN ACCORDANCE WITH IFC CHAPTER 14.
- 3) OPEN BURNING IS NOT PERMITTED, INCLUDING THE BURNING OF TRASH, DEBRIS, OR LAND CLEARING MATERIALS. OPEN BURNING FOR WARMING OF SAND AND/OR WATER FOR THE PREPARATION OF MORTAR SHALL BE WITHIN CITY OF ROCHESTER HILLS BURN PERMIT GUIDELINES. CONTACT ROCHESTER HILLS FIRE DEPARTMENT FOR PERMIT INFORMATION. FIRE PREVENTION ORDINANCE CHAPTER 58, SECTION 307.6.2 AND 307.6.2.3.
- 4) A KNOX KEY SYSTEM SHALL BE INSTALLED, IN A LOCATION APPROVED BY THE FIRE CODE OFFICIAL. ORDERING INFORMATION IS AVAILABLE FROM THE KNOX COMPANY AT KNOXBOX.COM

**LEGEND**

● IRON FOUND	● BRASS PLUG SET	○ SEC. CORNER FOUND
⊗ IRON SET	○ MONUMENT FOUND	○ RECORDED
⊗ NAIL FOUND	○ MONUMENT SET	○ MEASURED
⊗ NAIL & CAP SET		○ CALCULATED

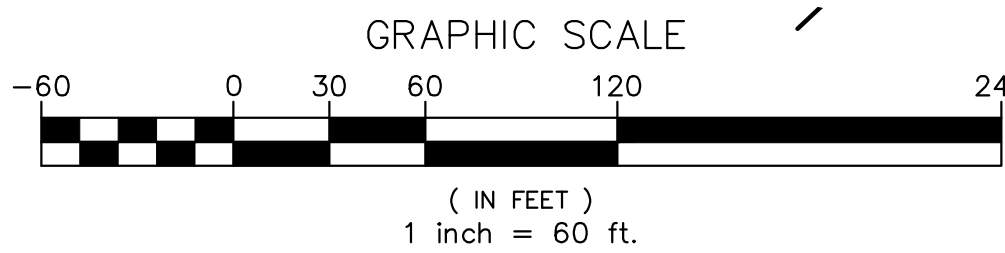
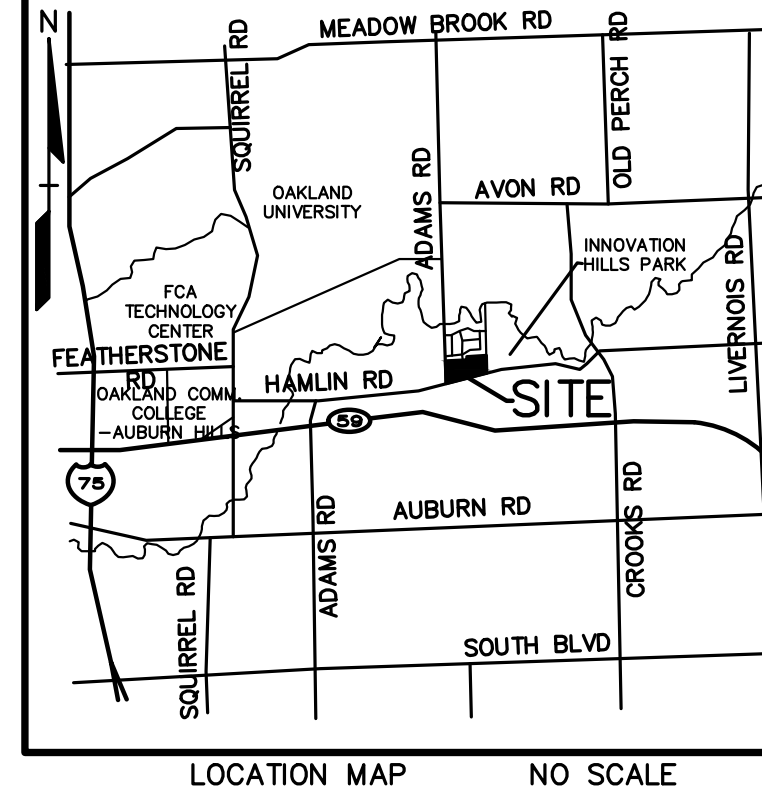
  

EXISTING

- H-ELEC- (W)-C- (ELEC. PHONE OR CABLE TV ON LINE, POLE & GUY WIRE)
- H-CATV- (ELEC. PHONE OR CABLE TV, CATV PEDESTAL)
- H-UG- (PHONE- (TELEPHONE U.G. CABLE, MANHOLE, METER & HANDHOLE)
- H-UG- (ELEC- (ELECTRIC U.G. CABLE, MANHOLE, METER & HANDHOLE)
- H-UG- (GAS- (GAS MAIN, VALVE & GAS LINE MARKER)
- H-UG- (WATER- (WATERMAIN, HYD. GATE VALVE, TAPPING SLEEVE & VALVE)
- H-UG- (SEWER- (SANITARY SEWER, CLEANOUT & MANHOLE)
- H-UG- (STORM- (STORM SEWER, CLEANOUT & MANHOLE)
- H-UG- (COMB- (COMBINED SEWER & MANHOLE)
- H-UG- (SQUARE- (SQUARE, ROUND & BEEHIVE CATCH BASIN)
- H-UG- (POST- (POST INDICATOR VALVE)
- H-UG- (WATER- (WATER VALVE BOX/HYDRANT VALVE BOX, SERVICE SHUTOFF)
- H-UG- (MANSIO- (MANSIO, TRANSFORMER, BRIDGON CONTROL VALVE)
- H-UG- (UNDE- (UNIDENTIFIED STRUCTURE)

PROPOSED

- SPOT ELEVATION
- CONTOUR LINE
- FENCE
- GUARD RAIL
- STREET LIGHT
- SIEN
- CONC.
- ASPH.
- GRAVEL
- WETLAND



No.	BY	DATE	DESCRIPTION

**CAUTION!!**  
 THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR VERIFYING THE EXACT LOCATION, DEPTH AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

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 25101 CHAGRIN BOULEVARD  
 BEACHWOOD, OH 44122

**CONCEPT SITE PLAN**  
**LEGACY ROCHESTER HILLS**  
 PART OF THE W 1/2 OF THE NW 1/4 OF SECTION 29, T. 3N., R. 11E.,  
 CITY OF ROCHESTER HILLS, OAKLAND COUNTY, MICHIGAN

DES. RLS DN RLS SUR KTR P.M  
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ORIGINAL ISSUE DATE:  
 DECEMBER 7, 2017

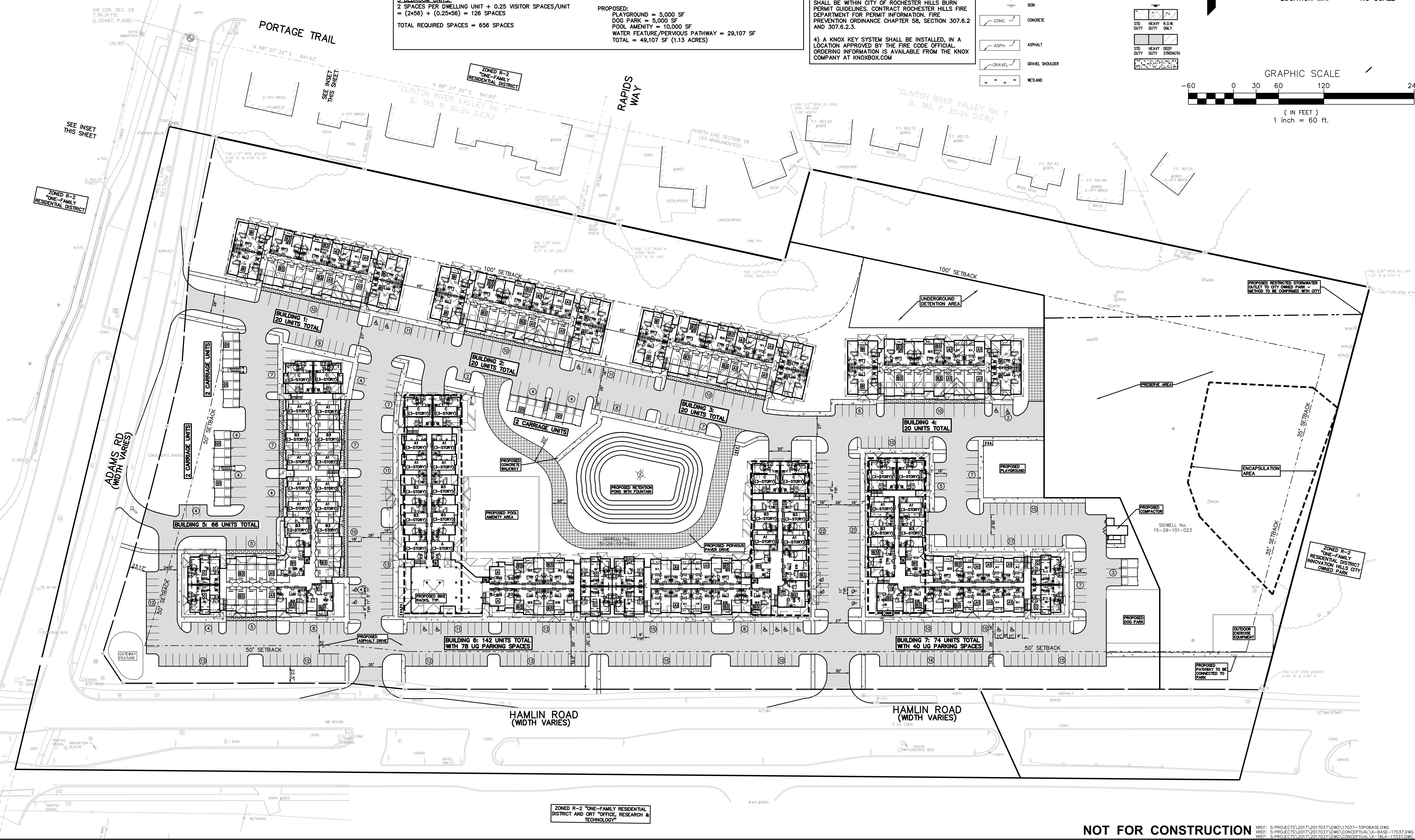
PEA JOB NO. 2017-037

SCALE: 1" = 60'

DRAWING NUMBER:

**SK-5**

**NOT FOR CONSTRUCTION**



ZONED R-2 "ONE-FAMILY RESIDENTIAL DISTRICT AND ORT "OFFICE, RESEARCH & TECHNOLOGY"

## Tables

DRAFT



**Table 1. Eligible Activities**

Legacy Rochester Hills  
 Rochester Hills, MI  
 AKT Peerless Project No. 3679F6  
*As of March 7, 2018*

ELIGIBLE ACTIVITIES COST SUMMARY				
				Estimated Cost of Eligible Activity
<b>Department Specific Activities</b>				<b>8,368,415</b>
	15% Contingency on Eligible Activities			\$ 1,206,172
<b>Brownfield Plan &amp; Act 381 WP Preparation Activities</b>				<b>\$ 45,000</b>
<b>Total Eligible Activities Cost with 15% Contingency</b>				<b>\$ 9,619,587</b>
	Interest (calculated at 5%, simple)			\$ 4,581,988
<b>Total Eligible Activities Cost, with Contingency &amp; Interest</b>				<b>\$ 14,201,575</b>
<b>BRA Administration Fee</b>				<b>\$ 200,000</b>
<b>State Revolving Fund</b>				<b>\$ 1,034,905</b>
<b>Local Brownfield Revolving Fund (LBRF)</b>				<b>\$ -</b>
<b>Total Eligible Costs for Reimbursement</b>				<b>\$ 15,436,479</b>

ELIGIBLE ACTIVITIES COST DETAIL				
	# of Units	Unit Type	Cost/ Unit	Est. Total Cost
<b>Department Specific Activities</b>				
Phase I	2	LS	\$ 2,800	\$ 5,600
BEA	2	LS	\$ 7,500	\$ 15,000
Supplemental Subsurface Investigation	1	LS	\$ 120,000	\$ 120,000
Environmental Construction Managemnt Plan	1	LS	\$ 20,000	\$ 20,000
Project Management, Adminsitraton, and Consulting Support	1	LS	\$ 25,000	\$ 25,000
HASP	1	LS	\$ 2,000	\$ 2,000
Parcel A - Area A Soil/Waste Removal				
Area A Excavation, Transportation & Disposal	1,630	YD	\$ 45	\$ 73,333
Area A Backfill	1,630	YD	\$ 17	\$ 27,704
Area A Laboratory Costs and Verification Sampling	1	LS	\$ 6,000	\$ 6,000
Area A Environmental Management/Oversight	1	LS	\$ 7,500	\$ 7,500
Parcel A - Area B Soil/Waste Removal				
Area B Excavation, Transportation & Disposal	3,556	YD	\$ 45	\$ 160,000
Area B Backfill	3,556	YD	\$ 17	\$ 60,444
Area B LaboratorY Costs and Verification Sampling	1	LS	\$ 10,000	\$ 10,000
Area B Environmental Management/Oversight	1	LS	\$ 14,000	\$ 14,000
Parcel A - Area C1 Soil/Waste Removal				
Area C1 Excavation, Transportation & Disposal	7,741	YD	\$ 45	\$ 348,333
Area C1 Backfill	7,741	YD	\$ 17	\$ 131,593
Area C1 Laboratory Costs and Verification Sampling	1	LS	\$ 11,500	\$ 11,500
Area C2 Environmental Management/Oversight	1	LS	\$ 15,000	\$ 15,000
Parcel A - Area C2 Soil/Waste Removal				
Area C2 Excavation, Transportation & Disposal	23,333	YD	\$ 45	\$ 1,050,000
Area C2 Backfill	23,333	YD	\$ 17	\$ 396,667
Area C2 Laboratory Costs and Verification Sampling	1	LS	\$ 15,000	\$ 15,000
Area C2 Environmental Management/Oversight	1	LS	\$ 12,000	\$ 12,000
Parcel A - Area D Soil/Waste Removal				
Area D Excavation, Transportation & Disposal	6,667	YD	\$ 45	\$ 300,000

**Table 1. Eligible Activities**

Legacy Rochester Hills

Rochester Hills, MI

AKT Peerless Project No. 3679F6

*As of March 7, 2018*

Area D Backfill	6,667	YD	\$ 17	\$ 113,333
Area D Laboratory Costs and Verification Sampling	1	LS	\$ 6,500	\$ 6,500
Area D Environmental Management/Oversight	1	LS	\$ 8,000	\$ 8,000
Parcel A - Area F Soil/Waste Removal				
Area F Excavation, Transportation & Disposal	741	YD	\$ 45	\$ 33,333
Area F Backfill	741	YD	\$ 17	\$ 12,593
Area F Laboratory Costs and Verification Sampling	1	LS	\$ 3,500	\$ 3,500
Area F Environmental Management/Oversight	1	LS	\$ 5,000	\$ 5,000
Smaller Hot Spot Removal (Southwestern Area)	1	LS	\$ 100,000	\$ 100,000
Sub-slab venting system - all new construction	162,000	SF	\$ 4	\$ 648,000
Parcel B - Area E Soil/Waste Removal				
Area E Excavation, Transportation & Disposal	23,185	YD	\$ 45	\$ 1,043,333
Area E Backfill	23,185	YD	\$ 17	\$ 394,148
Area E Laboratory Costs and Verification Sampling	1	LS	\$ 15,000	\$ 15,000
Area E Environmental Management/Oversight	1	LS	\$ 12,000	\$ 12,000
Parcel B - Removal and Disposal of PCB Impacted Soils	1	LS	\$ 232,000	\$ 232,000
O&M Plan - Parcel B	1	LS	\$ 900,000	\$ 900,000
Import Clean Fill for Land Balancing	40,000	CY	\$ 17	\$ 680,000
Installation Hydraulic Barrier (i.e. slurry wall)	1	LS	\$ 150,000	\$ 150,000
Installation of Liner and Cap over former landfill	1	LS	\$ 120,000	\$ 120,000
Installation of Passive Methane Venting System (former "landfill" area)	1	LS	\$ 190,000	\$ 190,000
Operation and Maintenance Plan - Subfloor Methane Mitigation Systems, S	1	LS	\$ 255,000	\$ 255,000
Passive Methane Venting System along Hamlin Road	1	LS	\$ 260,000	\$ 260,000
O&M Plan - Passive Methane Venting System along Hamlin Road	1	LS	\$ 150,000	\$ 150,000
Waterproofing Seals and Gaskets for Stormwater Piping	1	LS	\$ 40,000	\$ 40,000
Temporary Site Control & Erosion Control	1	LS	\$ 50,000	\$ 50,000
Dewatering	1	LS	\$ 75,000	\$ 75,000
Closeout Reporting (East Parcel) & Documentation of Due Care Compliance	1	LS	\$ 15,000	\$ 15,000
NFA Due Care Plan	1	LS	\$ 30,000	\$ 30,000
			<b>Subtotal</b>	<b>\$ 8,368,415</b>
<b>Brownfield Plan &amp; Act 381 Work Plan Preparation</b>				
BRA Application Fee and Administration Fee			\$	-
Brownfield Plan	1	LS	\$ 10,000	\$ 10,000
Act 381 Work Plan	1	LS	\$ 15,000	\$ 15,000
Cost Tracking & Compliance	1	LS	\$ 20,000	\$ 20,000
			<b>Subtotal</b>	<b>\$ 45,000</b>



**Table 2. Tax Increment Revenue Estimates**

Legacy Rochester Hills  
Rochester Hills, MI  
AKT Peerless Project No. 3679F6  
*As of March 7, 2018*

Estimated TV Increase rate:		11	12	13	14	15	16	17	18	19	20
Plan Year	Calendar Year	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
	Initial Taxable Value	\$ 37,440	\$ 37,440	\$ 37,440	\$ 37,440	\$ 37,440	\$ 37,440	\$ 37,440	\$ 37,440	\$ 37,440	\$ 37,440
Post-Dev TV (30% of Project Investment)	Estimated New TV	\$ 18,037,609	\$ 18,452,474	\$ 18,876,881	\$ 19,311,050	\$ 19,755,204	\$ 20,209,573	\$ 20,674,394	\$ 21,149,905	\$ 21,636,352	\$ 22,133,989
	<b>Incremental Difference (New TV - Initial TV)</b>	<b>\$ 18,000,169</b>	<b>\$ 18,415,034</b>	<b>\$ 18,839,441</b>	<b>\$ 19,273,610</b>	<b>\$ 19,717,764</b>	<b>\$ 20,172,133</b>	<b>\$ 20,636,954</b>	<b>\$ 21,112,465</b>	<b>\$ 21,598,912</b>	<b>\$ 22,096,549</b>
<b>School Capture</b>											
	<b>Millage Rate</b>										
State Education Tax (SET)	6.0000	Initial \$ 225	\$ 225	\$ 225	\$ 225	\$ 225	\$ 225	\$ 225	\$ 225	\$ 225	\$ 225
		Incremental \$ 108,001	\$ 110,490	\$ 113,037	\$ 115,642	\$ 118,307	\$ 121,033	\$ 123,822	\$ 126,675	\$ 129,593	\$ 132,579
School Operating Tax	18.0000	Initial \$ 674	\$ 674	\$ 674	\$ 674	\$ 674	\$ 674	\$ 674	\$ 674	\$ 674	\$ 674
		Incremental \$ 324,003	\$ 331,471	\$ 339,110	\$ 346,925	\$ 354,920	\$ 363,098	\$ 371,465	\$ 380,024	\$ 388,780	\$ 397,738
<b>School Total 24.0000</b>											
<b>Local Capture</b>											
	<b>Millage Rate</b>										
OAK COUNTY PARKS	0.2392	Initial \$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9
		Incremental \$ 4,306	\$ 4,405	\$ 4,506	\$ 4,610	\$ 4,716	\$ 4,825	\$ 4,936	\$ 5,050	\$ 5,166	\$ 5,285
HURON-CLIN PARK	0.2146	Initial \$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8
		Incremental \$ 3,863	\$ 3,952	\$ 4,043	\$ 4,136	\$ 4,231	\$ 4,329	\$ 4,429	\$ 4,531	\$ 4,635	\$ 4,742
GENERAL FUND	2.1136	Initial \$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79
		Incremental \$ 38,045	\$ 38,922	\$ 39,819	\$ 40,737	\$ 41,675	\$ 42,636	\$ 43,618	\$ 44,623	\$ 45,651	\$ 46,703
LOCAL STREET I	0.3507	Initial \$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13
		Incremental \$ 6,313	\$ 6,458	\$ 6,607	\$ 6,759	\$ 6,915	\$ 7,074	\$ 7,237	\$ 7,404	\$ 7,575	\$ 7,749
LOCAL STREET II	0.4803	Initial \$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18
		Incremental \$ 8,645	\$ 8,845	\$ 9,049	\$ 9,257	\$ 9,470	\$ 9,689	\$ 9,912	\$ 10,140	\$ 10,374	\$ 10,613
LOCAL STREET III	0.2939	Initial \$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11
		Incremental \$ 5,290	\$ 5,412	\$ 5,537	\$ 5,665	\$ 5,795	\$ 5,929	\$ 6,065	\$ 6,205	\$ 6,348	\$ 6,494
FIRE FUND	2.7000	Initial \$ 101	\$ 101	\$ 101	\$ 101	\$ 101	\$ 101	\$ 101	\$ 101	\$ 101	\$ 101
		Incremental \$ 48,600	\$ 49,721	\$ 50,866	\$ 52,039	\$ 53,238	\$ 54,465	\$ 55,720	\$ 57,004	\$ 58,317	\$ 59,661
SPECIAL POLICE I	1.1954	Initial \$ 45	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45
		Incremental \$ 21,517	\$ 22,013	\$ 22,521	\$ 23,040	\$ 23,571	\$ 24,114	\$ 24,669	\$ 25,238	\$ 25,819	\$ 26,414
SPECIAL POLICE II	1.5633	Initial \$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59
		Incremental \$ 28,140	\$ 28,788	\$ 29,452	\$ 30,130	\$ 30,825	\$ 31,535	\$ 32,262	\$ 33,005	\$ 33,766	\$ 34,544
PATHWAY	0.1837	Initial \$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7
		Incremental \$ 3,307	\$ 3,383	\$ 3,461	\$ 3,541	\$ 3,622	\$ 3,706	\$ 3,791	\$ 3,878	\$ 3,968	\$ 4,059
RARA OPERATING	0.1928	Initial \$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7
		Incremental \$ 3,470	\$ 3,550	\$ 3,632	\$ 3,716	\$ 3,802	\$ 3,889	\$ 3,979	\$ 4,070	\$ 4,164	\$ 4,260
OPC TRANSPORTION	0.0990	Initial \$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4
		Incremental \$ 1,782	\$ 1,823	\$ 1,865	\$ 1,908	\$ 1,952	\$ 1,997	\$ 2,043	\$ 2,090	\$ 2,138	\$ 2,188
OPC OPERATING	0.2377	Initial \$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9
		Incremental \$ 4,279	\$ 4,377	\$ 4,478	\$ 4,581	\$ 4,687	\$ 4,795	\$ 4,905	\$ 5,018	\$ 5,134	\$ 5,252
LIBRARY OPERATING	0.7739	Initial \$ 29	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29
		Incremental \$ 13,930	\$ 14,251	\$ 14,580	\$ 14,916	\$ 15,260	\$ 15,611	\$ 15,971	\$ 16,339	\$ 16,715	\$ 17,101
OAK COUNTY OPERATING	4.0400	Initial \$ 151	\$ 151	\$ 151	\$ 151	\$ 151	\$ 151	\$ 151	\$ 151	\$ 151	\$ 151
		Incremental \$ 72,721	\$ 74,397	\$ 76,111	\$ 77,865	\$ 79,660	\$ 81,495	\$ 83,373	\$ 85,294	\$ 87,260	\$ 89,270
OAK INT SD-ALLOC	0.1985	Initial \$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7
		Incremental \$ 3,573	\$ 3,655	\$ 3,740	\$ 3,826	\$ 3,914	\$ 4,004	\$ 4,096	\$ 4,191	\$ 4,287	\$ 4,386
OAK INT SD-VTD	3.1413	Initial \$ 118	\$ 118	\$ 118	\$ 118	\$ 118	\$ 118	\$ 118	\$ 118	\$ 118	\$ 118
		Incremental \$ 56,544	\$ 57,847	\$ 59,180	\$ 60,544	\$ 61,939	\$ 63,367	\$ 64,827	\$ 66,321	\$ 67,849	\$ 69,412
OAK COMM COLLEGE	1.5707	Initial \$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59
		Incremental \$ 28,273	\$ 28,924	\$ 29,591	\$ 30,273	\$ 30,971	\$ 31,684	\$ 32,414	\$ 33,161	\$ 33,925	\$ 34,707
<b>Local Total 19.5886</b>											
<b>Non-Capturable Millages</b>											
	<b>Millage Rate</b>										
ZOO AUTHORITY	0.0990	New TV \$ 1,786	\$ 1,827	\$ 1,869	\$ 1,912	\$ 1,956	\$ 2,001	\$ 2,047	\$ 2,094	\$ 2,142	\$ 2,191
ART INSTITUTE	0.1981	New TV \$ 3,573	\$ 3,655	\$ 3,740	\$ 3,826	\$ 3,914	\$ 4,004	\$ 4,096	\$ 4,190	\$ 4,286	\$ 4,385
CH 20 DRAIN DEBT	0.0417	New TV \$ 752	\$ 769	\$ 787	\$ 805	\$ 824	\$ 843	\$ 862	\$ 882	\$ 902	\$ 923
OPC BUILDING DEBT	0.2345	New TV \$ 4,230	\$ 4,327	\$ 4,427	\$ 4,528	\$ 4,633	\$ 4,739	\$ 4,848	\$ 4,960	\$ 5,074	\$ 5,190
ROCH SCH DEBT	5.9000	New TV \$ 106,422	\$ 108,870	\$ 111,374	\$ 113,935	\$ 116,556	\$ 119,236	\$ 121,979	\$ 124,784	\$ 127,654	\$ 130,591
<b>Total Non-Capturable Taxes 6.4733</b>											

**Table 3. Reimbursement Allocation Schedule**

Legacy Rochester Hills  
 Rochester Hills, MI  
 AKT Peerless Project No. 3679F6  
 As of March 7, 2018

Developer Maximum Reimbursement	Proportionality	School & Local Taxes	Local-Only Taxes	Total
State	55.1%	\$ 7,819,425		\$ 7,819,425
Local	44.9%	\$ 6,382,150	\$ -	\$ 6,382,150
<b>TOTAL</b>		<b>\$ 14,201,575</b>	<b>\$ -</b>	<b>\$ 14,201,575</b>
MDEQ	100.0%	\$ 14,201,575		
MSF	0.0%	\$ -		

Estimated Total Years of Plan: 20
-----------------------------------

Plan Year	1	2	3	4	5	6	7	8	9	10
Total State Incremental Revenue	\$ 107,371	\$ 251,730	\$ 360,000	\$ 368,301	\$ 376,792	\$ 385,479	\$ 394,366	\$ 403,457	\$ 412,757	\$ 422,271
State Brownfield Revolving Fund (3 mills of SET)	\$ 13,421	\$ 31,466	\$ 45,000	\$ 46,038	\$ 47,099	\$ 48,185	\$ 49,296	\$ 50,432	\$ 51,595	\$ 52,784
<b>State TIR Available for Reimbursement</b>	<b>\$ 93,950</b>	<b>\$ 220,264</b>	<b>\$ 315,000</b>	<b>\$ 322,263</b>	<b>\$ 329,693</b>	<b>\$ 337,294</b>	<b>\$ 345,070</b>	<b>\$ 353,025</b>	<b>\$ 361,162</b>	<b>\$ 369,487</b>
Total Local Incremental Revenue	\$ 87,635	\$ 205,460	\$ 293,829	\$ 300,604	\$ 307,535	\$ 314,625	\$ 321,878	\$ 329,298	\$ 336,889	\$ 344,654
BRA Administrative Fee	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
<b>Local TIR Available for Reimbursement</b>	<b>\$ 77,635</b>	<b>\$ 195,460</b>	<b>\$ 283,829</b>	<b>\$ 290,604</b>	<b>\$ 297,535</b>	<b>\$ 304,625</b>	<b>\$ 311,878</b>	<b>\$ 319,298</b>	<b>\$ 326,889</b>	<b>\$ 334,654</b>
<b>Total State &amp; Local TIR Available</b>	<b>\$ 171,585</b>	<b>\$ 415,724</b>	<b>\$ 598,829</b>	<b>\$ 612,867</b>	<b>\$ 627,228</b>	<b>\$ 641,919</b>	<b>\$ 656,948</b>	<b>\$ 672,323</b>	<b>\$ 688,051</b>	<b>\$ 704,141</b>

DEVELOPER	Beginning Balance	1	2	3	4	5	6	7	8	9	10
<b>DEVELOPER Reimbursement Balance</b>	<b>\$ 14,201,575</b>	<b>\$ 14,029,990</b>	<b>\$ 13,614,265</b>	<b>\$ 13,015,436</b>	<b>\$ 12,402,569</b>	<b>\$ 11,775,341</b>	<b>\$ 11,133,422</b>	<b>\$ 10,476,474</b>	<b>\$ 9,804,151</b>	<b>\$ 9,116,100</b>	<b>\$ 8,411,958</b>
<u>STATE Reimbursement Balance</u>	\$ 7,819,425	\$ 7,725,475	\$ 7,505,211	\$ 7,190,211	\$ 6,867,948	\$ 6,538,255	\$ 6,200,961	\$ 5,855,891	\$ 5,502,866	\$ 5,141,703	\$ 4,772,216
Eligible Activities Reimbursement	\$ 5,296,570	\$ 93,950	\$ 220,264	\$ 315,000	\$ 322,263	\$ 329,693	\$ 337,294	\$ 345,070	\$ 353,025	\$ 361,162	\$ 369,487
Environmental Eligible Activities	\$ 5,296,570	\$ 93,950	\$ 220,264	\$ 315,000	\$ 322,263	\$ 329,693	\$ 337,294	\$ 345,070	\$ 353,025	\$ 361,162	\$ 369,487
Interest Reimbursement	\$ 2,522,855	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Environmental Portion	\$ 2,522,855	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total STATE TIR Reimbursement</b>	<b>\$ 93,950</b>	<b>\$ 220,264</b>	<b>\$ 315,000</b>	<b>\$ 322,263</b>	<b>\$ 329,693</b>	<b>\$ 337,294</b>	<b>\$ 345,070</b>	<b>\$ 353,025</b>	<b>\$ 361,162</b>	<b>\$ 369,487</b>	
<u>LOCAL Reimbursement Balance</u>	\$ 6,382,150	\$ 6,304,514	\$ 6,109,054	\$ 5,825,225	\$ 5,534,621	\$ 5,237,086	\$ 4,932,461	\$ 4,620,583	\$ 4,301,285	\$ 3,974,396	\$ 3,639,742
Eligible Activities Reimbursement	\$ 4,323,017	\$ 77,635	\$ 195,460	\$ 283,829	\$ 290,604	\$ 297,535	\$ 304,625	\$ 311,878	\$ 319,298	\$ 326,889	\$ 334,654
Environmental Eligible Activities	\$ 4,323,017	\$ 77,635	\$ 195,460	\$ 283,829	\$ 290,604	\$ 297,535	\$ 304,625	\$ 311,878	\$ 319,298	\$ 326,889	\$ 334,654
Interest Reimbursement	\$ 2,059,133	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Environmental Portion	\$ 2,059,133	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total LOCAL TIR Reimbursement</b>	<b>\$ 77,635</b>	<b>\$ 195,460</b>	<b>\$ 283,829</b>	<b>\$ 290,604</b>	<b>\$ 297,535</b>	<b>\$ 304,625</b>	<b>\$ 311,878</b>	<b>\$ 319,298</b>	<b>\$ 326,889</b>	<b>\$ 334,654</b>	
<b>Total Annual Developer Reimbursement</b>	<b>\$ 171,585</b>	<b>\$ 415,724</b>	<b>\$ 598,829</b>	<b>\$ 612,867</b>	<b>\$ 627,228</b>	<b>\$ 641,919</b>	<b>\$ 656,948</b>	<b>\$ 672,323</b>	<b>\$ 688,051</b>	<b>\$ 704,141</b>	

**LOCAL BROWNFIELD REVOLVING FUND**

LSRRF Year	0	0	0	0	0	0	0	0	0	0
<b>LBRF Deposits</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
STATE	\$ 7,819,425	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
LOCAL	no maximum	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

**Table 3. Reimbursement Allocation Schedule**

Legacy Rochester Hills  
 Rochester Hills, MI  
 AKT Peerless Project No. 3679F6  
*As of March 7, 2018*

Estimated Capture	
Administrative Fees	\$ 200,000
State Revolving Fund	\$ 1,034,905
Local Revolving Fund	\$ -

		11	12	13	14	15	16	17	18	19	20	End Plan
Total State Incremental Revenue	\$	432,004	\$ 441,961	\$ 452,147	\$ 462,567	\$ 473,226	\$ 484,131	\$ 495,287	\$ 506,699	\$ 518,374	\$ 530,317	
State Brownfield Revolving Fund (3 mills of SI	\$	54,001	\$ 55,245	\$ 56,518	\$ 57,821	\$ 59,153	\$ 60,516	\$ 61,911	\$ 63,337	\$ 64,797	\$ 66,290	
<b>State TIR Available for Reimbursement</b>	\$	<b>378,004</b>	\$ <b>386,716</b>	\$ <b>395,628</b>	\$ <b>404,746</b>	\$ <b>414,073</b>	\$ <b>423,615</b>	\$ <b>433,376</b>	\$ <b>443,362</b>	\$ <b>453,577</b>	\$ <b>464,028</b>	
Total Local Incremental Revenue	\$	352,598	\$ 360,725	\$ 369,038	\$ 377,543	\$ 386,243	\$ 395,144	\$ 404,249	\$ 413,564	\$ 423,092	\$ 432,840	
BRA Administrative Fee	\$	10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	
<b>Local TIR Available for Reimbursement</b>	\$	<b>342,598</b>	\$ <b>350,725</b>	\$ <b>359,038</b>	\$ <b>367,543</b>	\$ <b>376,243</b>	\$ <b>385,144</b>	\$ <b>394,249</b>	\$ <b>403,564</b>	\$ <b>413,092</b>	\$ <b>422,840</b>	
<b>Total State &amp; Local TIR Available</b>	\$	<b>720,602</b>	\$ <b>737,440</b>	\$ <b>754,667</b>	\$ <b>772,289</b>	\$ <b>790,316</b>	\$ <b>808,759</b>	\$ <b>827,625</b>	\$ <b>846,925</b>	\$ <b>866,670</b>	\$ <b>886,868</b>	

**DEVELOPER**

<b>DEVELOPER Reimbursement Balance</b>	\$	<b>7,691,357</b>	\$ <b>6,953,916</b>	\$ <b>6,199,250</b>	\$ <b>5,426,961</b>	\$ <b>4,636,644</b>	\$ <b>3,827,886</b>	\$ <b>3,000,261</b>	\$ <b>2,153,335</b>	\$ <b>1,286,666</b>	\$ <b>575,092</b>	
<i>STATE Reimbursement Balance</i>	\$	4,394,213	\$ 4,007,497	\$ 3,611,869	\$ 3,207,123	\$ 2,793,050	\$ 2,369,435	\$ 1,936,059	\$ 1,492,697	\$ 1,039,120	\$ 575,092	
Eligible Activities Reimbursement	\$	378,004	\$ 386,716	\$ 395,628	\$ 404,746	\$ 414,073	\$ 270,195	\$ -	\$ -	\$ -	\$ -	
Environmental Eligible Activities	\$	378,004	\$ 386,716	\$ 395,628	\$ 404,746	\$ 414,073	\$ 270,195	\$ -	\$ -	\$ -	\$ -	
Interest Reimbursement	\$	-	\$ -	\$ -	\$ -	\$ -	\$ 153,420	\$ 433,376	\$ 443,362	\$ 453,577	\$ 464,028	
Environmental Portion	\$	-	\$ -	\$ -	\$ -	\$ -	\$ 153,420	\$ 433,376	\$ 443,362	\$ 453,577	\$ 464,028	
<b>Total STATE TIR Reimbursement</b>	\$	<b>378,004</b>	\$ <b>386,716</b>	\$ <b>395,628</b>	\$ <b>404,746</b>	\$ <b>414,073</b>	\$ <b>423,615</b>	\$ <b>433,376</b>	\$ <b>443,362</b>	\$ <b>453,577</b>	\$ <b>464,028</b>	
<i>LOCAL Reimbursement Balance</i>	\$	3,297,144	\$ 2,946,419	\$ 2,587,381	\$ 2,219,838	\$ 1,843,595	\$ 1,458,451	\$ 1,064,202	\$ 660,638	\$ 247,546	\$ -	
Eligible Activities Reimbursement	\$	342,598	\$ 350,725	\$ 359,038	\$ 367,543	\$ 160,705	\$ -	\$ -	\$ -	\$ -	\$ -	
Environmental Eligible Activities	\$	342,598	\$ 350,725	\$ 359,038	\$ 367,543	\$ 160,705	\$ -	\$ -	\$ -	\$ -	\$ -	
Interest Reimbursement	\$	-	\$ -	\$ -	\$ -	\$ 215,538	\$ 385,144	\$ 394,249	\$ 403,564	\$ 413,092	\$ 247,546	
Environmental Portion	\$	-	\$ -	\$ -	\$ -	\$ 215,538	\$ 385,144	\$ 394,249	\$ 403,564	\$ 413,092	\$ 247,546	
<b>Total LOCAL TIR Reimbursement</b>	\$	<b>342,598</b>	\$ <b>350,725</b>	\$ <b>359,038</b>	\$ <b>367,543</b>	\$ <b>376,243</b>	\$ <b>385,144</b>	\$ <b>394,249</b>	\$ <b>403,564</b>	\$ <b>413,092</b>	\$ <b>247,546</b>	
<b>Total Annual Developer Reimbursement</b>	\$	<b>720,602</b>	\$ <b>737,440</b>	\$ <b>754,667</b>	\$ <b>772,289</b>	\$ <b>790,316</b>	\$ <b>808,759</b>	\$ <b>827,625</b>	\$ <b>846,925</b>	\$ <b>866,670</b>	\$ <b>711,573</b>	

**LOCAL BROWNFIELD REVOLVING FUND**

	0	0	0	0	0	0	0	0	0	0	0
<b>LBRF Deposits</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
STATE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
LOCAL	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

**Appendix A**  
**Brownfield Plan**

DRAFT

**ROCHESTER HILLS BROWNFIELD REDEVELOPMENT  
AUTHORITY**

# **BROWNFIELD PLAN**

Parcels 15-29-101-022 and 15-29-101-023, Northeast Corner of  
Hamlin and Adams Roads, Rochester Hills, Michigan

**PREPARED BY**

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**PROJECT #**

3679f6

**REVISION DATE**

September 7, 2017

**BRA APPROVAL  
CITY APPROVAL**



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# PROJECT SUMMARY

**PROJECT NAME** Legacy Rochester Hills - Redevelopment and Reuse of Properties Located at the northeast corner of Hamlin and Adams Roads, Rochester Hills, Michigan

**DEVELOPER** GCI Acquisitions, LLC  
and  
Goldberg Companies, Inc.  
c/o Mr. Eric Bell  
25101 Chagrin Boulevard, Suite 300  
Beachwood, Ohio 44122

**ELIGIBLE PROPERTY LOCATION** The Eligible Property is located at the northeast corner of Hamlin and Adams Roads, Rochester Hills, Michigan. Parcel ID Numbers 15-29-101-022 and 15-29-101-023.

**TYPE OF ELIGIBLE PROPERTY** Facility

**SUBJECT PROJECT DESCRIPTION** Legacy Rochester Hills (Project) consists of the redevelopment of the subject property, which is located at the northeast corner of Hamlin and Adams Roads in the City of Rochester Hills. The final plans for the redevelopment have not been completed. However, this Project will include remediation of contaminated soils and construction of a new residential apartment complex with up to 400 units, an amenity, and with onsite surface parking. This Project will ultimately put an underutilized property into productive use and return it to the City's tax rolls.

In addition to the economic benefits of this development to Rochester Hills, environmental activities are anticipated that would provide a safer and healthier community to the public.

The Project is seeking approval of Tax Increment Financing (TIF). Construction is expected to begin in late 2017.

**ELIGIBLE ACTIVITIES** Department Specific Activities and preparation of a Brownfield Plan and Act 381 Work Plan

<b>DEVELOPER'S REIMBURSABLE COSTS</b>	\$8,582,337 (Est. Eligible Activities & Contingency) <u>\$3,820,293 (Interest)</u> \$12,402,630
<b>PROJECTED DURATION OF CAPTURE</b>	22 years (Includes Revolving Fund capture)
<b>ESTIMATED TOTAL CAPITAL INVESTMENT</b>	\$50 million
<b>INITIAL TAXABLE VALUE</b>	\$37,440

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# LIST OF ACRONYMS AND DEFINITIONS

<b>BEA</b>	Baseline Environmental Assessment (Michigan process to provide new property owners and/or operators with exemptions from environmental liability)
<b>BFP OR PLAN DEVELOPER</b>	Brownfield Plan GCI Acquisitions, LLC and Goldberg Companies, Inc. or other entity as approved by the Rochester Hills Brownfield Redevelopment Authority.
<b>ELIGIBLE PROPERTY</b>	Property for which eligible activities are identified under a Brownfield Plan, referred to herein as “the subject property”.
<b>ESA</b>	Environmental Site Assessment
<b>LBRF</b>	Local Site Remediation Revolving Fund
<b>MDEQ</b>	Michigan Department of Environmental Quality
<b>MEDC</b>	Michigan Economic Development Corporation
<b>MSF</b>	Michigan Strategic Fund
<b>PHASE I ESA</b>	An environmental historical review and site inspection (no soil and/or groundwater sampling and analysis)
<b>PHASE II ESA</b>	Environmental subsurface investigation (includes soil, soil gas, and/or groundwater sampling and analysis)
<b>RCC</b>	Residential Cleanup Criteria
<b>RHBRA</b>	Rochester Hills Brownfield Redevelopment Authority
<b>SUBJECT PROPERTY</b>	The Eligible Property, located at the northeast corner of Hamlin and Adams Roads, in Rochester Hills, Michigan. It comprises 2 parcels.
<b>TIF</b>	Tax Increment Financing (TIF describes the process of using TIR—i.e., TIF is the use of TIR to provide financial support to a project)
<b>TIR</b>	Tax Increment Revenue (new property tax revenue, usually due to redevelopment and improvement that is generated by a property after approval of a Brownfield Plan)

# BROWNFIELD PLAN

Northeast Corner of Hamlin and Adams Roads  
Rochester Hills, Michigan 48309

## 1.0 Introduction

The City of Rochester Hills, Michigan (the “City”), established the Rochester Hills Brownfield Redevelopment Authority (the “Authority”) on November 13, 2002, pursuant to Michigan Public Act 381 of 1996, as amended (“Act 381”). The primary purpose of Act 381 is to encourage the redevelopment of eligible property by providing economic incentives through tax increment financing for certain eligible activities.

A primary purpose of this Brownfield Plan is to promote the redevelopment of, and investment in, certain “Brownfield” properties within the City. Inclusion of the subject property in a brownfield plan will facilitate financing of environmental response and other eligible activities at eligible properties. This will enable eligible taxpayers to invest in revitalization of eligible sites, commonly referred to as “Brownfields” that otherwise would be economically unfeasible to redevelop. By facilitating redevelopment of Brownfield properties, Brownfield plans are intended to promote economic growth for the benefit of the residents of the City and all taxing units located within and benefited by the Authority.

The identification or designation of a developer or proposed use for the Eligible Property that is the subject of this Brownfield Plan (the “subject property”) shall not be integral to the effectiveness or validity of this Brownfield Plan. This Brownfield Plan is intended to apply to the subject property identified in this Brownfield Plan. With respect to tax increment revenues proposed to be captured from that subject property, the Brownfield Plan is to identify and authorize the eligible activities to be funded by such tax increment revenues. Any change in the proposed developer or proposed use of the subject property shall not necessitate an amendment to this Brownfield Plan, affect the application of this Brownfield Plan to the subject property, or impair the rights available to the Authority under this Brownfield Plan.

This Brownfield Plan is intended to be a living document, which may be modified or amended in accordance with the requirements of Act 381, as necessary to achieve the purposes of Act 381. If uses other than those currently planned by the Developer (i.e., residential use on the western Parcel A, and non-residential use, including open green space and surface parking on the eastern Parcel B) are pursued in the future, the Brownfield Plan shall be amended if support of the new use through tax increment revenue is desired. The applicable sections of Act 381 are noted throughout the Brownfield Plan for reference purposes.

This Brownfield Plan contains information required by Section 13(1) of Act 381.

Legacy Rochester Hills (Project) consists of the redevelopment of the subject property. The final plans for the redevelopment have not been completed. However, this Project will include the remediation of contaminated soils and construction of a new residential apartment complex with up to 400 units with onsite surface parking and an amenity. This Project will ultimately put underutilized property back to

productive use and will generate new tax revenue for the City. Although the Project is 100% residential, up to 10 new full-time permanent jobs are expected as well as 400 temporary construction jobs during the course of redevelopment.

In addition to the economic benefits of this development to the City of Rochester Hills, environmental activities are anticipated that would provide a safer and healthier community to the public and environment alike.

The Project is seeking approval of Tax Increment Financing (TIF). Construction is expected to begin in late 2017.

## 2.0 General Provisions

The following sections detail information required by Act 381.

The project is for the redevelopment of the former Christensen Dump, located on two parcels northeast of the intersection of Hamlin and Adams Roads. The Christenson Dump operated from the mid-1950s until the mid-1960s. Later, during the 1960s and early-1970s, 55-gallon drums (which contained a variety of chemicals including paint and solvents) were dumped illegally on the property. The property has remained unimproved with no apparent use since that time.

Both parcels are heavily contaminated. Analytical results of previous environmental investigations conducted on the two parcels indicate that concentrations of select metals, pesticides, volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs) and polynuclear aromatic compounds (PNAs) were detected in soil and/or groundwater above Michigan Department of Environmental Quality (MDEQ) Residential Cleanup Criteria (RCC).

Because of both heavy contamination and geotechnical issues from dumping, the properties have been unable to attract development or use since the 1960s. The area is attractive for new construction, but the costs associated with site conditions are so high that all previous efforts have been stymied. The most recent proposal, in 2008, failed because the redevelopment plan was unable to attract funding. In addition to financial viability, the current Legacy Rochester Hills development offers significant improvements over previous proposals, including: (1) this development entails more extensive cleanup activities on the western side of the property; (2) the proposed residential use is a better fit for the neighborhood; and (3) remediation activities planned for the former landfill include creation of a conservation area, which will expand upon municipal greenspace to the east of the subject property.

The proposed redevelopment has two components. The first, on the western portion of the property (Parcel A), involves remediation of contamination and construction of up to 400 high-quality rental residential units. The second, on the eastern end of the property (Parcel B), is limited to environmental remediation activities in the areas of most significant contamination (excavation and removal of certain non-hazardous contaminated soils, and capping and isolating of the area of most significant impact). Together, the two components will result in economically productive rehabilitation and reuse of properties that for decades been a blight on the community. In addition to the significant benefits of environmental cleanup, the project will result in an immediate increase in tax revenue for some taxing jurisdictions.

## 2.1 Description of Eligible Property (Section 13 (l)(h))

The Eligible Property (“subject property”) is located at the northeast corner of Hamlin and Adams Roads, in the northwest ¼ of Section 29 in the City of Rochester Hills (T.3N. /R.11E.), Oakland County, Michigan. The subject property is situated northeast of the intersection of Hamlin and Adams Roads. The subject property consists of two parcels that contain approximately 28 acres. It is anticipated that the property boundary separating the two parcels will be redrawn prior to the commencement of the project, and/or reconfigured into three parcels. While it is anticipated that all parcels will be the beneficiary of Department Specific Activities (i.e., environmental activities), they might not be owned by the same entity.

The subject property is in an area of Rochester Hills (“City”) that is characterized by residential properties and is served by surface roadways, municipal sanitary sewer and water, and electrical and gas utilities.

The following table describes each parcel which comprises the subject property. See Attachment A, Figure 2 – Eligible Property Boundary Map.

**Eligible Property Information**

Address	Tax Identification Number	Basis of Brownfield Eligibility	Approximate Acreage
No Address	15-29-101-022	Facility	18.8
No Address	15-29-101-023	Facility	9.2

The subject property is zoned Residential (R2). The subject property consists of undeveloped land and does not contain any structures. A chain link fence to deter entry into the most highly contaminated portion, is present on the eastern portion of the eastern parcel.

Attachment A includes site maps of the Eligible Property, refer to: Figure 1, Scaled Property Location Map and Figure 2, Eligible Property Boundary Map (which includes lot dimensions). The legal descriptions of the parcels included in the Eligible Property are presented in Attachment B.

The parcels and all tangible real and personal property located thereon will comprise the Eligible Property, which is referred to herein as the “subject property.”

## 2.2 Basis of Eligibility (Section 13 (2)(h), Section 2 (n)), Section 2(o)

The subject property is considered “Eligible Property” as defined by Act 381, Section 2 because: (a) the subject property was previously utilized as a commercial property; and (b) each of the parcels comprised by the subject property has been determined to be a “facility.” Due to the contamination present both onsite and offsite, redevelopment requires extensive environmental response activities, including removal of contaminated soils and installation of due care engineering controls.

Historical use of the property consists of the following:

- 1940 – early 1950s: agricultural land (including slaughterhouse operations)
- Mid-1950s – Mid-1960s: commercial landfill
- 1960s – Present: undeveloped

Several environmental investigations have been conducted on the subject property. Refer to Attachment D for additional details and documentation on site environmental conditions. Hazardous substances known to exceed residential cleanup criteria compounds (which form the basis for the facility designations), Chemical Abstract Service (CAS) numbers, sample location, depths, and media affected are summarized in the following tables.

On the western parcel (Tax Identification No. 15-29-101-022):

### Summary of Soil Analytical Results

Parameter	CAS Number	Sample Identification with Criteria Exceedance	Part 201 Residential Criteria Exceeded/ Established Criteria (ug/kg)	Maximum Concentration (ug/kg)/Sample Location
Arsenic	7440382	TP-2, TP-21, 2-3 (0-1'), 2-3 (10-12'), AKT-5 (20-22'), SB-5 (10-14'), SB-6 (18-20'), SB-9 (18-20'), SB-10 (18-20'), SS-3 (4-6'), SS-4 (2-4'), SS-6 (0-2'), SS-9 (2-4'), SS-10 (2-4')	DWP / 4,600 GSIP / 4,600 DC / 7,600	25,000 / SB-5 (10-14')
Acenaphthene	83329	DUP-1 [EP-5 (6')]	GSIP / 8,700	22,100 / DUP-1 [EP-5 (6')]
Benzo(a)pyrene	50328	DUP-1 [EP-5 (6')]	DC / 2,000	4,500 / DUP-1 [EP-5 (6')]
beta-Hexachlorocyclohexane	319857	TP1W	GSIP / 37	65 / TP1W
Cadmium	7440439	EP-31 (0.5-1'), SS-6 (0-2')	DWP / 6,000	39,000 / EP-31 (0.5-1')



Parameter	CAS Number	Sample Identification with Criteria Exceedance	Part 201 Residential Criteria Exceeded/ Established Criteria (ug/kg)	Maximum Concentration (ug/kg)/Sample Location
Chromium (total)	18540299	TP-2, TP-3-1, TP-21, 2-3 (0-1'), 2-3 (10-12'), EP-5 (6'), DUP-1 [EP-5 (6')], DUP-2 [EP-14 (7')], EP-31 (0.5-1'), EP-37 (0.5-1'), DUP-5 [EP-37 (0.5-1')], SB-3 (18-20'), SB-5 (10-14'), SB-6 (18-20'), SB-8 (18-20'), SB-9 (18-20'), SB-10 (18-20'), SB-12 (18-20'), SS-1 (0-2'), SS-2 (4-6'), SS-3 (4-6'), SS-4 (2-4'), SS-5 (2-4'), SS-6 (0-2'), SS-7 (4-6'), SS-8 (0-2'), SS-9 (2-4'), SS-10 (2-4'), TR1N, TR1S, TR1W, TR1Bottom-N, TR1Bottom-S, TR2-N, TR2-S, TR2-East, TR2-West, TR2-B North, TR2-B South, TP1N, TP1Bottom-S	DWP/ 30,000 GSIP / 3,300	91,000 / SS-3 (4-6')
Dibenzofuran	132649	DUP-1 [EP-5 (6')]	GSIP / 1,700	26,400 / DUP-1 [EP-5 (6')]
Fluorene	86737	DUP-1 [EP-5 (6')]	GSIP / 5,300	24,700 / DUP-1 [EP-5 (6')]
Fluoranthene	206440	DUP-1 [EP-5 (6')]	GSIP / 5,500	19,000 / DUP-1 [EP-5 (6')]
Lead	7439921	TP-2, TP-21, EP-31 (0.5-1'), SS-6 (0-2')	DC / 400,000	660,000 / TP-2
Mercury	7439976	TP-21, EP-14 (7'), DUP-2 [EP-14 (7')], EP-31 (0.5-1'), EP-37 (0.5-1'), DUP-5 [EP-37 (0.5-1')], SS-6 (0-2'), SS-9 (2-4')	GSIP / 50	500 / SS-6 (0-2')
2-Methylnaphthalene	91576	DUP-1 [EP-5 (6')]	GSIP / 4,200	16,500 / DUP-1 [EP-5 (6')]
Naphthalene	91203	EP-5 (6'), DUP-1 [EP-5 (6')], EP-31 (0.5-1')	DWP / 35,000 GSIP / 730	142,000 / DUP-1 [EP-5 (6')]
Phenanthrene	85018	EP-5 (6'), DUP-1 [EP-5 (6')]	GSIP / 2,100	51,400 / DUP-1 [EP-5 (6')]

Parameter	CAS Number	Sample Identification with Criteria Exceedance	Part 201 Residential Criteria Exceeded/ Established Criteria (ug/kg)	Maximum Concentration (ug/kg)/Sample Location
Polychlorinated biphenyls	1336363	DUP-1 [EP-5 (6')]	DC / 4,000	22,100 / DUP-1 [EP-5 (6')]
Selenium	7782492	EP-31 (0.5-1'), SS-6 (0-2'), SB-1 (19-20'), SB-3 (18-20'), SB-6 (18-20'), SB-8 (18-20'), SB-9 (18-20'), SB-10 (18-20')	GSIP / 400	1,000 / SB-1 (19-20')
Silver	7440224	EP-37 (1-2')	GSIP / 100	2,070 / EP-37 (1-2')
Xylenes	95476	EP-31 (0.5-1')	GSIP / 820	930 / EP-31 (0.5-1')

Table Notes:

ug/kg – microgram per kilogram

DWP – Drinking Water Protection Criteria

GSIP – Groundwater Surface Water Interface Protection Criteria

DC – Direct Contact Criteria

### Summary of Groundwater Analytical Results

Parameter	CAS Number	Sample Identification with Criteria Exceedance	Part 201 Residential Criteria Exceeded/ Established Criteria (ug/kg)	Maximum Concentration (ug/kg)/Sample Location
Arsenic	7440382	MW-13D, AKT-5W	DW/ 10 GSI/10	21 / AKT-5W
Chromium	7440473	AKT-5W	GSI / 11	18 / AKT-5W
Lead	7439921	AKT-5W	DW/ 4	42 / AKT-5W

Table Notes:

ug/L – microgram per liter

DW – Drinking Water Criteria

GSI – Groundwater Surface Water Interface Criteria

On the eastern parcel (Tax Identification No. 15-29-101-023):

### Summary of Soil Analytical Results

Parameter	CAS Number	Sample Identification with Criteria Exceedance	Part 201 Residential Criteria Exceeded/ Established Criteria (ug/kg)	Maximum Concentration (ug/kg)/Sample Location
Antimony	7440360	AKT-8 (3-5')	DWP / 4,300	6,140 / AKT-8 (3-5')
Arsenic	7440382	GP-1 (4-7'), GP-3 (2-6'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-5 (11-14'), GP-6 (2-4'), GP-7 (4-8'), GP-8 (0-2'), GP-8 (9-10.5'), GP-9 (4-6'), GP-9 (6-7.5'), GP-10 (6-8'), GP-10 (8-10'), GP-11 (4.5-5'), GP-12 (0-2'), MW-9D (2-4'), MW-9D (4-6'), TP-16b, EP-28 (8'), EP-33 (15'), EP-48 (6'), AKT-8 (3-5')	DWP / 4,600 GSIP / 4,600 DC / 7,600	36,000 / GP-3 (2-6')
Benzene	71432	GP-1 (4-7'), GP-4 (2.5-4'), EB-23 (3-5')	DWP / 100	800 / EB-23 (3-5')
Benzo(a)anthracene	56553	GP-4 (2.5-4'), EB-20 (5-7')	DC / 20,000	33,000 / GP-4 (2.5-4')
Benzo(a)pyrene	50328	GP-1 (4-7'), GP-4 (2.5-4'), GP-6 (2-4'), GP-10 (6-8'), EB-7 (1-3'), EB-11 (10-12'), Duplicate [EB-13 (13-15')], EB-18 (3-5'), EB-19 (4-5'), EB-20 (5-7'), EB-21 (8-10'), EB-23 (3-5'), EB-24 (8-10'), EB-25 (3-4'), EB-26 (1-3'), EB-27 (1-3'), EB-29 (1-3'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-31 (3-5'), EB-31 (7-9'), EB-32 (1-3'), EB-35 (1-3'), EB-39 (3-5'), EB-40 (3-5'), Duplicate 5 [EB-40(3-5')]	DC / 2,000	29,000 / GP-4 (2.5-4')
Benzo(b)fluoranthene	205992	GP-4 (2.5-4')	DC / 20,000	48,000 / GP-4 (2.5-4')
Bis(2-ethylhexyl)phthalate	117817	GP-7 (4-8')	DC / 2,800,000 SSSL / 10,000,000	37,000,000 / GP-7 (4-8')
n-Butylbenzene	104518	EB-9 (8-10'), Duplicate 3 [EB-13 (13-15')]	DWP / 1,600	10,000 / EB-9 (8-10')

Parameter	CAS Number	Sample Identification with Criteria Exceedance	Part 201 Residential Criteria Exceeded/ Established Criteria (ug/kg)	Maximum Concentration (ug/kg)/Sample Location
sec-Butylbenzene	135998	GP-1 (4-7'), GP-4 (2.5-4'), EB-9 (8-10'), EB-11 (10-12'), EB-12 (8-10'), EB-13 (13-15'), Duplicate 3 [EB-13 (13-15')], EB-19 (4-5'), EB-21 (8-10'), EB-22 (6-8'), EB-23 (3-5'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-38 (3-5')	DWP / 1,600	50,000/ EB-12 (8-10')
Cadmium	7440439	GP-3 (2-6'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-6 (2-4'), GP-7 (4-8'), GP-8 (0-2'), TP-16b, EB-1 (3-5'), EP-23 (2'), EP-33 (7'), Duplicate 4 [EP-33 (7')], EP-33 (15'), AKT-8 (3-5')	DWP / 6,000	61,000 / GP-8 (0-2')
Carbon tetrachloride	56235	GP-6 (12-13.5')	DWP / 100	110 / GP-6 (12-13.5')
Carbazole	86748	GP-6 (2-4'), GP-10 (6-8')	GSIP / 1,100	5,200 / GP-6 (2-4')
Chromium (total)	18540299	SB-2 (14-16'), GP-1 (4-7'), GP-2 (13-15'), GP-3 (2-6'), GP-3 (10-12'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-5 (11-14'), GP-6 (2-4'), GP-6 (12-13.5'), GP-7 (4-8'), GP-7 (9-10.5'), GP-8 (0-2'), GP-8 (9-10.5'), GP-9 (4-6'), GP-9 (6-7.5'), GP-10 (6-8'), GP-10 (8-10'), GP-11 (4-5.5'), GP-11 (5.5-7'), GP-12 (0-2'), GP-13 (16-18'), MW-9D (2-4'), MW-9D (4-6'), TP-16B, EB-1 (3-5'), EP-19 (0.5-1'), EP-22 (6'), Duplicate 3 [EP-22 (6')], EP-23 (2'), EP-28 (8'), EP-30 (7'), EP-33 (7'), Duplicate 4 [EP-33 (7')], EP-33 (15'), EP-48 (6'), AKT-8 (3-5'), AKT-9 (8-10')	DWP/ 30,000 GSIP / 3,300 PSI / 260,000 DC / 2,500,000	2,880,000 / GP-5 (4-8')
Di-n-butyl phthalate	84742	GP-4 (11-12'), EB-12 (10-11'), EB-38 (3-5')	GSIP / 11,000	61,000 / GP-4 (11-12')

Parameter	CAS Number	Sample Identification with Criteria Exceedance	Part 201 Residential Criteria Exceeded/ Established Criteria (ug/kg)	Maximum Concentration (ug/kg)/Sample Location
Ethylbenzene	100414	GP-1 (4-7'), GP-4 (2.5-4'), GP-5 (4-8'), EB-9 (8-10'), EB-11 (10-12'), EB-12 (8-10'), EB-13 (13-15'), Duplicate 3 [EB-13 (13-15')], EB-19 (4-5'), EB-21 (8-10'), EB-22 (6-8'), EB-23 (3-5'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-38 (3-5'), AKT-8 (3-5')	DWP / 1,500 GSIP / 360 SVIAI / 87,000 SSSL / 140,000	590,000 / EB-12 (8-10')
Fluorene	86737	EB-20 (5-7'), AKT-8 (3-5')	GSIP / 5,300	6,000 / EB-20 (5-7')
Fluoranthene	206440	GP-1 (4-7'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-6 (2-4'), GP-10 (6-8'), EB-11 (10-12'), EB-18 (3-5'), EB-19 (4-5'), EB-20 (5-7'), EB-21 (8-10'), EB-23 (3-5'), EB-24 (8-10'), EB-25 (3-4'), EB-26 (1-3'), EB-27 (1-3'), EB-28 (8-10'), EB-29 (1-3'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-32 (1-3'), EB-38 (3-5'), EB-39 (3-5'), EB-40 (3-5'), Duplicate 5 [EB-40 (3-5')]	GSIP / 5,500	97,000 / GP-4 (2.5-4')
Isopropyl benzene	98828	EB-11 (10-12'), EB-12 (8-10'), EB-19 (4-5'), EB-21 (8-10'), EB-22 (6-8'), EB-23 (3-5'), Duplicate 4 [EB-30 (1-3')], EB-38 (3-5')	GSIP / 3,200	70,000 / EB-12 (8-10')
Lead	7439921	GP-1 (4-7'), GP-3 (2-6'), GP-4 (2.5-4'), GP-5 (4-8'), GP-5 (11-14'), GP-6 (2-4'), GP-7 (4-8'), GP-8 (0-2'), TP-16B, EB-1 (3-5'), EP-23 (2'), EP-28 (8'), EP-33 (7'), Duplicate 4 [EP-33 (7')], EP-33 (15'), AKT-8 (3-5')	DWP / 700,000 DC / 400,000	2,450,000 / GP-5 (4-8')

Parameter	CAS Number	Sample Identification with Criteria Exceedance	Part 201 Residential Criteria Exceeded/ Established Criteria (ug/kg)	Maximum Concentration (ug/kg)/Sample Location
Mercury	7439976	SB-3 (2-4'), GP-1 (4-7'), GP-3 (2-6'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-6 (2-4'), GP-7 (4-8'), GP-7 (9-10.5'), GP-9 (4-6'), GP-10 (8-10'), TP-16b, EB-1 (3-5'), EP-19 (0.5-1'), EP-22 (6'), Duplicate 3 [EP-22 (6')], EP-23 (2'), EP-28 (8'), EP-30 (7'), EP-33 (7'), Duplicate 4 [EP-33 (7')], EP-33 (15'), EP-44 (6'), EP-48 (6'), AKT-8 (3-5')	DWP / 1,700 GSIP / 50	2,530 / AKT-8 (3-5')
2-Methylnaphthalene	91576	GP-1 (4-7'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), EB-9 (8-10'), EB-11 (10-12'), EB-12 (8-10'), EB-18 (3-5'), EB-19 (4-5'), EB-20 (5-7'), EB-21 (8-10'), EB-22 (6-8'), EB-23 (3-5'), EB-24 (8-10'), EB-28 (8-10'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-38 (3-5'), EB-39 (3-5'), AKT-8 (3-5')	DWP / 57,000 GSIP / 4,200	388,000,000 / EB-39 (3-5')
Naphthalene	91203	GP-1 (4-7'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), EB-9 (8-10'), EB-11 (10-12'), EB-12 (8-10'), EB-12 (10-11'), EB-13 (13-15'), Duplicate 3 [EB-13 (13-15')], EB-18 (3-5'), EB-19 (4-5'), EB-20 (5-7'), EB-21 (8-10'), EB-22 (6-8'), EB-23 (3-5'), EB-28 (8-10'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-38 (3-5'), EB-39 (3-5'), EB-40 (3-5'), Duplicate 5 [EB-40 (3-5')], AKT-8 (3-5'), AKT-9 (8-10'), AKT-8 (3-5')	DWP / 35,000 GSIP / 730 SVIAI / 250,000 VSIC / 300,000	400,000 / EB-12 (8-10')
Nickel	7440020	AKT-8 (3-5')	DWP / 100,000	339,000 / AKT-8(3-5')

Parameter	CAS Number	Sample Identification with Criteria Exceedance	Part 201 Residential Criteria Exceeded/ Established Criteria (ug/kg)	Maximum Concentration (ug/kg)/Sample Location
Phenanthrene	85018	GP-1 (4-7'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-6 (2-4'), GP-10 (6-8'), EB-11 (10-12'), Duplicate 3 [ EB-13 (13-15')], EB-18 (3-5'), EB-19 (4-5'), EB-20 (5-7'), EB-22 (6-8'), EB-23 (3-5'), EB-24 (8-10'), EB-25 (3-4'), EB-26 (1-3'), EB-27 (1-3'), EB-29 (1-3'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-35 (1-3'), EB-40 (3-5'), Duplicate 5 [EB-40 (3-5')], AKT-8 (3-5')	GSIP / 2,100	33,000 / GP-6 (2-4')
Polychlorinated biphenyls	1336363	GP-1 (4-7'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-7 (4-8'), GP-7 (9-10.5'), GP-8 (0-2'), EB-10 (10-12'), Duplicate 2 [EB-10 (10-12')], EB-11 (1-3'), EB-11 (8-10'), EB-11 (10-12'), EB-12 (8-10'), EB-12 (10-11'), EB-13 (3-5'), EB-13 (8-10'), EB-13 (13-15'), Duplicate 3 [EB-13 (13-15')], EB-18 (3-5'), EB-19 (4-5'), EB-19 (5-7'), EB-19 (8-10'), EB-20 (1-3'), EB-20 (3-5'), EB-20 (5-7'), EB-21 (3-5'), EB-21 (8-10'), EB-22 (3-5'), EB-22 (6-8'), EB-22 (10-12'), EB-23 (3-5'), EB-23 (5-7'), EB-23 (7-9'), EB-28 (1-3'), EB-28 (3-5'), EB-28 (8-10'), EB-29 (3-5'), EB-29 (8-9'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-30 (3-5'), EB-31 (1-3'), EB-31 (3-5'), EB-32 (1-3'), EB-36 (3-5'), EB-37 (1-3'), EB-38 (1-3'), EB-38 (3-5'), EB-38 (8-10'), EB-39 (1-3'), EB-39 (3-5'), EB-40 (1-3'), EB-40 (3-5'), Duplicate 5 [EB-40 (3-5')], EB-40 (8-10'), Duplicate 4 [EP-33 (7')], AKT-8 (3-5')	DC / 4,000 VSIC / 240,000	2,300,000 / GP-7 (4-8')

Parameter	CAS Number	Sample Identification with Criteria Exceedance	Part 201 Residential Criteria Exceeded/ Established Criteria (ug/kg)	Maximum Concentration (ug/kg)/Sample Location
n-Propylbenzene	103651	GP-1 (4-7'), GP-4 (2.5-4'), EB-9 (8-10'), EB-11 (10-12'), EB-12 (8-10'), EB-13 (13-15'), Duplicate 2 [EB-13 (13-15')], EB-19 (4-5'), EB-21 (8-10'), EB-22 (6-8'), EB-23 (3-5'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-38 (3-5')	DWP / 1,600	110,000 / EB-12 (8-10')
Selenium	7782492	GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-5 (11-14'), GP-7 (4-8'), GP-8 (0-2'), TP-16b, EB-1 (3-5'), EP-23 (2'), EP-30 (7'), EP-33 (15'), AKT-8 (3-5')	GSIP / 400	1,700 / GP-4 (2.5-4')
Silver	7440224	SB-2 (14-16'), SB-3 (2-4'), GP-1 (4-7'), GP-2 (13-15'), GP-3 (2-6'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-5 (11-14'), GP-6 (2-4'), GP-7 (4-8'), EP-23 (2'), EP-33 (7'), Duplicate 4 [EP-33 (7')], EP-33 (15'), AKT-8 (3-5')	DWP / 4,500 GSIP / 100	90,000 / GP-2 (13-15')
Toluene	10883	EB-12 (8-10'), EB-13 (13-15'), Duplicate 3 [EB-13 (13-15')], EB-38 (3-5')	DWP / 16,000 GSIP / 5,400 SVIAI / 330,000 SSSL / 110,000	400,000 / EB-12 (8-10')
Trichloroethylene	79016	GP-3 (10-12'), GP7 (4-8')	DWP / 100	410 / GP-3 (10-12')
1,2,4-Trimethylbenzene	95636	GP-1 (4-7'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-7 (4-8'), EB-9 (8-10'), EB-11 (10-12'), EB-12 (8-10'), EB-13 (13-15'), Duplicate 3 [EB-13 (13-15')], EB-19 (4-5'), EB-21 (8-10'), EB-22 (6-8'), EB-23 (3-5'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-38 (3-5'), AKT-9 (8-10')	DWP / 2,100 GSIP / 570 DC / 110,000 SSSL / 110,000	760,000 / EB-12 (8-10')



Parameter	CAS Number	Sample Identification with Criteria Exceedance	Part 201 Residential Criteria Exceeded/ Established Criteria (ug/kg)	Maximum Concentration (ug/kg)/Sample Location
1, 3, 5-Trimethylbenzene	108678	GP-4 (2.5-4'), EB-9 (9-10'), EB-11 (10-12'), EB-12 (8-10'), EB-13 (13-15'), Duplicate 3 [EB-13 (13-15')], EB-19 (4-5'), EB-21 (8-10'), EB-22 (6-8'), EB-23 (3-5'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')]	DWP / 1,800 GSIP / 1,100 SSSL / 150,000	280,000 / EB-12 (8-10')
Xylenes	95476	GP-1 (4-7'), GP-4 (2.5-4'), GP-4 (11-12'), GP-5 (4-8'), GP-7 (4-8'), EB-9 (8-10'), EB-11 (10-12'), EB-12 (8-10'), EB-13 (13-15'), Duplicate 3 [EB-13 (13-15')], EB-19 (4-5'), EB-21 (8-10'), EB-22 (6-8'), EB-23 (3-5'), EB-30 (1-3'), Duplicate 4 [EB-30 (1-3')], EB-38 (3-5')	DWP / 5,600 GSIP / 820 SSSL / 150,000	2,070,000 / EB-12 (8-10')
Zinc	7440666	GP-5 (4-8')	DWP / 2,400,000	7,100,000 / GP-5 (4-8')

Table Notes:

ug/kg – microgram per kilogram

DWP – Drinking Water Protection Criteria

GSIP – Groundwater Surface Water Interface Protection Criteria

PSI– Particulate Soil Inhalation Criteria

SVIAI – Soil Volatilization to Indoor Air Inhalation Criteria

VSIC – Infinite Source Volatile Soil Inhalation Criteria

DC – Direct Contact Criteria

SSSL – Soil Saturation Concentration Screening Levels

### Summary of Groundwater Analytical Results

Parameter	CAS Number	Sample Identification with Criteria Exceedance	Part 201 Residential Criteria Exceeded/ Established Criteria (ug/kg)	Maximum Concentration (ug/kg)/Sample Location
Arsenic	7440382	MW-2D, AKT-9W, AKT-10W	DW/ 10 GSI/10	33 / AKT-9W
Benzene	71432	AKT-9W	DW / 5	60 / AKT-9W

Parameter	CAS Number	Sample Identification with Criteria Exceedance	Part 201 Residential Criteria Exceeded/ Established Criteria (ug/kg)	Maximum Concentration (ug/kg)/Sample Location
Chromium	7440473	MW-6	GSI / 11	15 / MW-6
Di-n-butyl phthalate	84742	AKT-9W	GSI / 9.7	55 / AKT-9W
Ethylbenzene	100414	AKT-9W	DW / 74 GSI / 18	1,090 / AKT-9W
4-Methyl-2-pentanone (MIBK)	108101	AKT-9W	DW / 1,800	4,000 / AKT-9W
Naphthalene	91203	AKT-9W	GSI / 11	90 / AKT-9W
Selenium	7782492	AKT-9W	GSI / 5	8 / AKT-9W
Toluene	108883	AKT-9W	DW / 790 GSI / 270	2,220 / AKT-9W
1,2,4-Trimethylbenzene	95636	AKT-9W	DW / 63 GSI / 17	730 / AKT-9W
1,3,5-Trimethylbenzene	108678	AKT-9W	DW / 72 GSI / 45	120 / AKT-9W
Vinyl Chloride	75014	MW-4D	DW/ 2	3.5 / MW-4D
Xylenes	1330207	AKT-9W	DW / 280 GSI / 41	4,660 / AKT-9W

Table Notes:

ug/L – microgram per liter

DW – Drinking Water Criteria

GSI – Groundwater Surface Water Interface Criteria

Based on this information, Parcels A and B are a “facility” as defined in Part 201 of Natural Resources and Environmental Protection Act (NREPA), Michigan Public Act (PA) 451, as amended.

### 2.3 Summary of Eligible Activities and Description of Costs (Section 13 (2)(a),(b))

The “eligible activities” that are intended to be carried out at the subject property are considered “eligible activities” as defined by Sec 2 of Act 381, because they include Department Specific Activities and preparation of a Brownfield and Act 381 work plan (see Table 1). On the western Parcel A, Department Specific Activities include environmental assessment; excavation, soil removal, and backfill in contaminated area. These activities are anticipated to begin in late 2017 or early 2018, and are expected to take approximately three to four months to complete. Department Specific Activities on the western parcel also include installation of sub slab venting systems on new construction. Installation of

the systems will be coordinated with construction activities, which are estimated to take approximately 24-36 months to complete after environmental cleanup. A date for commencement of Department Specific Activities on the eastern Parcel B cannot be estimated at this time, as it depends on future discussions between the developer, the city, and the current property owner. However, the activities, which include soil and waste removal; and installation of a hydraulic barrier, liner & cap, and passive methane venting system on the former landfill area.

Detailed information on eligible activities is summarized below:

- **Baseline Environmental Assessment Activities**

A Phase I ESA was completed for the subject property in January 2017. A Supplemental Subsurface Investigation and BEA are currently being prepared on behalf of GCI Acquisitions, LLC and Goldberg Companies, Inc. and/or an affiliated entity. Additional Phase I ESAs and BEAs may be completed for new entities.

- **NFA Report and Documentation of Due Care Compliance Report**

Phase I and Phase II ESAs are in process or have been completed for the subject property. A BEA will be completed for the facility parcels (i.e., 15-29-101-022 and 15-29-101-023) prior to the development entity's (or entities') acquisition of the subject property. Additional due care investigations are planned for Parcel A and Parcel B.

#### *Parcel A*

Remediation on Parcel A at the subject property will be completed in order to obtain an unrestricted residential status. Subsequent to the completion of remedial activities, a No Further Action (NFA) report will be prepared and submitted to MDEQ for review and approval.

The BEA and NFA reporting will be completed in accordance with Part 201 of the Natural Resources and Environmental Protection Act (NREPA), 1994 Public Act (PA) 451, as amended, and Michigan Department of Environmental Quality (MDEQ) Instructions for Preparing and Disclosing Baseline Environmental Assessments and Section 7a Compliance Analyses, effective March 11, 1999. The NFA will describe remedial activities associated with soil and groundwater contamination at the subject property in light of the nature of the proposed development construction activities and occupancy of the developed property. A detailed breakdown of the costs associated with this task is provided later in this section.

#### *Parcel B*

Environmental cleanup activities will be conducted on the areas of most significant impact on Parcel B. Subsequent to the completion of remedial activities and installation of due care engineering controls, a Documentation of Due Care Compliance (DDCC) report will be completed.

The BEA and DDCC reporting will be completed in accordance with Part 201 of the Natural Resources and Environmental Protection Act (NREPA), 1994 Public Act (PA) 451, as amended, and Michigan Department of Environmental Quality (MDEQ) Instructions for Preparing and Disclosing Baseline Environmental Assessments and Section 7a Compliance Analyses, effective March 11, 1999. A detailed breakdown of the costs associated with this task is provided later in this section.

- **Health and Safety Plan**

A site-specific Health and Safety Plan (HASP) will be completed for redevelopment activities at the subject property by each of the subsurface contractors and others that can come into contact with potentially contaminated media during the performance of their work activities. The HASPs will comply with appropriate guidelines including the following:

- Michigan Occupational Safety and Health Act;
- Section 111(c)(6) of CERCLA;
- Occupational Safety and Health Administration requirements 29 CFR 1910 and 1926;
- Standard Operating Safety Guide Manual (revised November 1984) by the Office of Emergency and Remedial Response; and
- Occupation Safety and Health guidance manual for Hazardous Waste Site Activities (NIOSH/OSHA/USCG/EPA, DHHS [NIOSH] Publication No. 85-115, October 1985).

The HASPs will include the following elements:

- Authorized personnel and definition of responsibilities;
- proposed activities;
- personal protective equipment;
- decontamination procedures;
- work zone restrictions and delineations;
- personal protection upgrade/downgrade action limits;
- emergency information and telephone numbers;
- incident documentation procedures; and
- contingency plans.

Oversight will be conducted to ensure due care issues are addressed while eligible activities and construction activities are being completed. The following activities (at a minimum) will be documented:

- The type, location, quantities, etc., of materials removed from the site and disposed at the landfill or other appropriately licensed disposal operation.
- The final disposition and location of any contaminated media that can be managed on-site in accordance with due care requirements.
- Monitoring for unanticipated materials and/or materials previously not identified, including collection of samples for additional waste characterization.
- The type, location, materials and construction of vapor mitigation systems installed at the site to prevent future potential indoor air inhalation exposures.

The Contractor Site Safety Officer will document and enforce HASP issues with workers at the Site, including:

- Verification of on-site worker training and current certifications.
- Conducting site-specific HASP training for workers entering the site.
- Monitoring construction activities to ensure the HASP is being followed, including use of PPE, decontamination of equipment, site security, etc.

A Construction Summary Report (CSR) will be prepared and submitted to the MDEQ-RD at the completion of development activities. The CSR will summarize the due care issues addressed during the

construction activities and will include such items as photographic documentation, disposal manifests, fill material load tickets, utility abandonment logs (if any), site plans, etc. to verify that the development construction activities were conducted in accordance with approved plans.

- **Soil Remediation Activities**

AKT Peerless has conducted several investigations that detected numerous VOCs, SVOCs, PBCs and/or metals in soil and groundwater at concentrations that exceed MDEQ's Part 201 RCC. VOCs, SVOCs, PBCs and/or metals detected in soil and/or groundwater at the subject property during past investigations include:

Antimony	Arsenic
Acenaphthene	beta-Hexachlorocyclohexane
Benzene	Benzo(a)anthracene
Benzo(a)pyrene	Benzo(b)fluoranthene
Bis(2-ethylhexyl)phthalate	n-Butylbenzene
Sec-Butylbenzene	Cadmium
Carbon tetrachloride	Carbazole
Chromium (total)	Dibenzofuran
Di-n-butyl phthalate	Ethylbenzene
Fluorene	Fluoranthene
Isopropyl benzene	Lead
Mercury	2-Methylnaphthalene
Naphthalene	Nickel
Phenanthrene	Polychlorinated biphenyls
n-Propylbenzene	Selenium
Silver	Toluene
Trichloroethylene	1,2,4-Trimethylbenzene
1,3,5-Trimethylbenzene	4-Methyl-2-pentanone (MIBK)
Vinyl Chloride	Xylenes
Zinc	

The Developer intends to construct a residential development on Parcel A of the subject property and intends to remediate Parcel A of the subject property to the extent that MDEQ may approve a No Further Action request. Therefore, the Developer plans to remove the source areas of contamination on Parcel A. Based on the analytical results from previous subsurface investigations, six source areas have been identified on Parcel A (additional areas of contamination related to former landfilling are on the eastern parcel) Refer to Figure 3 in the Attachment A for anticipated remediation areas. Site specific background calculations will be performed for arsenic and selenium.

The Developer intends to perform environmental cleanup activities on Parcel B and install due care engineering controls, such that Parcel B can be used as open greenspace and surface parking to support recreational activities on municipal property east of the subject property. These cleanup activities include soil removal in Source Area E, as listed in the following table.

The table below provides approximate volumes of contaminated soil/fill to be removed from each of the source areas and the former landfill area on the subject property.

<b>Parcel Where Source Area Is Located</b>	<b>Source Area</b>	<b>Approximate Yd<sup>3</sup></b>
Parcel A	Source Area A	1,630
Parcel A	Source Area B	3,556
Parcel A	Source Area C-1	7,741
Parcel A	Source Area C-2	23,333
Parcel A	Source Area D	6,667
Parcel B	Source Area E	23,185
Parcel A	Source Area F	741

Due to the concentrations of soil contaminants in these source areas and due to the fact that development requirements necessitate a NFA designation, impacted soil and fill materials must be removed from the subject property. The soil/fill will be removed and disposed at a Type II landfill. The costs included in the eligible activities include excavation, transportation, disposal, verification sampling, backfill, oversight and reporting, and project management. Due to compaction requirements, an additional 40,000 tons of backfill is anticipated to be necessary to return excavated areas to grade. Remediation activities in Source Areas A-D and F is planned to begin in late 2017 or early 2018, and is anticipated to take approximately three to four months to complete. The commencement date for remediation in Source Area E depends on future discussions between the Developer, the City, and the current property owner and cannot be estimated at this time.

It should be noted that previous subsurface investigations encountered discontinuous, perched groundwater pockets with limited contamination. Groundwater contamination appeared to have been due to leaching from surrounding contaminated soils. It is anticipated that these pockets of impacted groundwater will be removed during soil remediation activities on Parcel A.

Please refer to Table 1, Eligible Activity Cost Detail, for specific line item costs for the due care activities, and to Figure 3 for the locations of the source areas. These costs include allowances for environmental project management, field time, and contracted services.

- **Hot Spot Removal**

Previous subsurface investigations identified six hot spots of metals contamination, likely associated with shallow fill materials, much smaller than the source areas identified in section 3.1.1.3 above. These hot spots are located in the central and southeastern portions of the western Parcel A. In order to remediate these areas, approximately 1,500 yd<sup>3</sup> of soil is anticipated to be excavated and disposed at a Type II landfill. The costs included in the eligible activities include excavation, transportation, disposal, verification sampling, backfill, oversight and reporting, and project management. These activities are anticipated to be completed at the same time as the soil removal described in the previous section. The costs in this section include allowances for environmental project management, field time, and contracted services.

- **Sub-Slab Venting System (New Construction)**

Methane has not been found extensively across the property; however, the subject property is at risk for migration of methane gas from the landfill located across Hamlin Road to the south. As a result, the Developer intends to install passive sub-slab venting systems in all new buildings as a presumptive remedy to prevent indoor air exposure. AKT Peerless will engage with MDEQ representatives to obtain approval of the draft venting system construction plan. Construction of the systems will occur at the same time as construction of the residential units, which is anticipated to occur over approximately 3 years, beginning in late 2017 or early 2018. This cost includes assessment, design, construction, testing, reporting, and project management for the systems.

An Operation and Maintenance (O&M) Plan for the sub-slab venting systems will be prepared by an environmental consultant.

- **Engineering Controls – Former Landfill Area**

The area of the highest contamination, the former landfill area on the eastern parcel, is neither geotechnically sound or financially feasible for development. A temporary hydraulic barrier system will be installed around the perimeter of the former landfill area (approximately 1,400 linear feet) following the removal of contaminated soils from Area E. (Refer to Figure 3). The final design of the barrier system is not complete, but will likely consist of a (minimum) 2-foot thick clay liner “slurry wall.” The clay will be compacted to 95% based on the optimum moisture content. Shoring or trench boxes will be used to ensure slope stability during the installation and compaction of the clay walls.

Next, the former landfill will be covered with 2 feet of compacted clay and a flexible membrane liner and cap to prevent exacerbation of existing contamination. In addition, a passive methane venting system will be designed and installed around the perimeter of the former landfill area (approximately 1,400 linear feet) to manage landfill gases on-site. The venting system will replace the temporary “slurry wall”.

The environmental consultant will prepare and implement an O&M Plan for the engineering controls installed in the former landfill area. The O&M Plan is anticipated to include a recommendation for quarterly long term inspection/methane monitoring.

This cost includes design, installation, reporting, and project management for the systems.

- **Passive Methane Venting System**

The south adjacent property is a former landfill. To preemptively protect against the migration of contamination from methane gases, a passive methane venting system will be installed along Hamlin Road. An O&M Plan for the venting system will be prepared.

This cost includes design, installation, reporting, and project management for the system.

• **Site Control & Erosion Control**

In order to be protective of workers and residents, the excavation areas will be fenced or barricaded to minimize potential for unauthorized access to contaminated soil. These costs include the silt fencing for the north and east in order to mitigate erosion concerns, as well as dust monitoring during environmental mitigation work in order to address further concerns of the neighbors to the north. Additionally, a gravel mat will be constructed along the truck route leaving the property to minimize tracking of dirt and potentially impacted soil from the property.

During soil excavation and removal activities the truck routes will be as follows:

*Site Arrival*

- The trucks will initially use the entrance ramps on M-59 at the Adams Road interchange.
- The trucks will proceed north on Adams Road to Hamlin Road.
- Turn right (east) on Hamlin Road to enter the site. All trucks will be staged on site while waiting to be loaded or completion of shipping papers.

*Site Departure*

- The trucks leave the site onto Hamlin Road and proceed west toward Adams.
- The trucks will turn left (south) onto Adams Road and proceed to the M-59 interchange.
- The trucks will access M-59 from Adams Road and procedure to their destination.

See Figure 4 for a proposed truck route map.

• **Dewatering**

The potential for water in excavations exists, particularly in Area E. In the event that groundwater is encountered in sufficient quantities to require dewatering, the water will be containerized in frac tanks. Once containerized, the water will be sampled to determine whether or not disposal is necessary or if the water can be discharged to the POTW under a permit. In the event that groundwater is encountered in a quantity that is too large to containerize, alternate methods for direct dewatering and disposal will be evaluated.

A summary of the eligible activities and the estimated cost of each eligible activity intended to be paid for with Tax Incremental Revenues from the subject property are shown in the table below.

**Estimated Cost of Reimbursable Eligible Activities**

Description of Eligible Activity		Estimated Cost*	
1.	Department Specific Activities	\$	7,428,415
<b>Subtotal Environmental &amp; Non-Environmental Eligible Activities</b>		\$	7,428,415
2.	15% Contingency on Eligible Activities**	\$	1,108,922
3.	Brownfield Plan & Act 381 WP Preparation Activities	\$	45,000
<b>Total Eligible Activities Cost with 15% Contingency</b>		\$	8,582,337
4.	BRA Administration Fee	\$	220,000
5.	State Revolving Fund	\$	1,138,752
6.	Local Brownfield Revolving Fund (LBRF)***	\$	2,287,787
7.	Interest (calculated at 5%, simple)****	\$	3,820,293



<b>Total Eligible Costs for Reimbursement</b>	\$	<b>16,049,169</b>
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\*Estimated costs are subject to approval by MDEQ, as required. Any costs not approved by the MDEQ, as required, may become local only costs paid out of captured tax increment revenues from locally levied millages (to the extent available). Reimbursement of these activity costs would be limited to the local proportional share of local captured taxes.

\*\*The contingency is applied to the Subtotal, excepting those particular activities which have already been performed.

\*\*\*LBRF deposits will be made in accordance with Act 381 and with RHBRA policy.

\*\*\*\*Interest is calculated annually at 5% simple interest on unreimbursed eligible activities.

A detailed breakout of the eligible activities and the estimated cost of each eligible activity intended to be paid for with Tax Increment Revenues from the subject property is shown in Attachment C, Table 1. It is currently anticipated that redevelopment will begin in late 2017 and be completed in 2021.

The Developer desires to be reimbursed for the costs of eligible activities. Tax increment revenue generated by the subject property will be captured by the Authority and used to reimburse the cost of the eligible activities completed on the subject property after approval of this Brownfield Plan and an associated reimbursement agreement.

The costs listed in the table above are estimated costs and may increase or decrease depending on the nature and extent of environmental contamination and other unknown conditions encountered on the subject property. Costs may be moved between categories of eligible activities, provided that the total amount of incurred eligible activity costs requested for reimbursement does not exceed the total cap approved by the municipality. The actual cost of those eligible activities encompassed by this Brownfield Plan that will qualify for reimbursement from tax increment revenues of the Authority from the subject property shall be governed by the terms of a Reimbursement Agreement with the Authority (the "Reimbursement Agreement"). No costs of eligible activities will be qualified for reimbursement except to the extent permitted in accordance with the terms and conditions of the Reimbursement Agreement and/or the Development Agreement.

In accordance with this Brownfield Plan, and the associated Reimbursement Agreement, the amount advanced by the Developer will be repaid by the Authority solely from the tax increment revenues realized from the Eligible Property. It should be noted that the environmental costs for the project of \$8,582,337 represent an approximately 17% increase in the development costs. This increase far exceeds any reasonable construction contingency for the project. Moreover, these costs do not add any benefit to the lenders' loan to value considerations, and therefore are anticipated to be funded through equity, reducing (or eliminating) investors' returns on equity. In addition, the sub slab venting systems planned for the western parcel to address potential migration from offsite, and the capping and containment to remedy former illegal dumping on the eastern parcel are costs to address environmental issues that were not caused by the developers, and are outside the area of the developers' residential construction. Moreover, the eligible activities on the eastern parcel provide a significant, direct benefit to the City of Rochester Hills in its efforts to develop quality greenspace east of the subject property, as well as to the residents currently living immediately to the north. In general, the subject property is located within a larger area of former landfills that have resisted redevelopment for decades. This project represents a turning point and will be a model for other projects, providing a vital pathway and boon for the area.

Per its brownfield guidance, the City of Rochester Hills permits interest in extreme circumstances where there is a gap in financing. Due to the extreme circumstances associated with the cleanup of the former illegal landfill – including remediation activities on a largely vacant parcel separate from the new residential development, the projected amount to be reimbursed includes interest at the rate set at 5% simple interest, as permitted by the Act. The interest reimbursement is estimated at \$3,820,293. This amount is insufficient to fully cover the financing gap created by the \$8,582,337 in projected environmental cost (which the senior lender for the project will not loan on), but it is necessary to make the project financeable. Since the senior lender will not finance the environmental cost, those costs must be covered with equity. Without interest reimbursement, the project cannot attract enough equity to complete those activities.

Payments will be made to the full extent incremental property tax revenues are or become available for such purpose under the Act. However, if the actual cost of eligible activities turns out to be lower than the above estimates, interest reimbursement may be lower, subject to the 5% simple interest calculation.

Tax increment revenues will first be used to pay or reimburse administrative expenses described in the table above. The amount of school tax revenues, which will be used to reimburse the costs of implementing eligible activities at this site, will be limited to the school tax portion of the cost of: (1) eligible activities approved by the MDEQ (as required); (2) assessment activities and brownfield and work plan preparation; and (3) the interest calculated as described above. If the use of school tax revenues to reimburse specific eligible activities is not approved by the MDEQ, these specific activities will be reimbursed with local-only TIR (to the extent available).

#### **2.4 Estimate of Captured Taxable Value and Tax Increment Revenues (Section 13(2)(c)); Impact of Tax Increment Financing On Taxing Jurisdictions (Section 13(2)(g), Section 2(ee))**

This Brownfield Plan anticipates the capture of tax increment revenues to reimburse the Developer for the costs of eligible activities under this Brownfield Plan in accordance with the Reimbursement Agreement. A table of estimated tax increment revenues to be captured is attached to this Brownfield Plan as Attachment C, Table 2. Tax increment revenue capture is expected to begin in 2019.

All reimbursement will be in accordance with the Reimbursement Agreement and the Development Agreement.

The total estimated cost of the eligible activities and other costs (including administrative fees, contingency, interest, and LBRF deposits) to be reimbursed through the capture of tax increment revenue is projected to be \$16,049,169. Of this total, \$8,582,337 are eligible activities including contingency. This represents a 17% increase to the total development costs, which – excluding land and the eligible activities – exceed \$37 million.

The estimated effective initial taxable value for this Brownfield Plan is \$37,440 and is based on land and real property tax only. No personal property is currently on the subject property. Significant taxable personal property is not anticipated in the new development; however, to the extent that new taxable personal property generates tax increment revenue, the reimbursement period may be shorted. The initial taxable value of \$37,440 is set in 2017, the year in which the eligible property was included in this plan. Redevelopment of the subject property is expected to initially generate incremental taxable value in 2019 with the first significant increase in taxable value of approximately \$4,473,792 beginning in 2019. Only tax revenue from the incremental increase will go toward reimbursement; there will be no loss to taxing jurisdictions during the life of the Plan.

It is estimated that the Authority will capture the 2019 through 2040 tax increment revenues to reimburse the cost of the eligible activities, reimburse interest, State Brownfield Redevelopment Fund, LBRF and pay Authority administrative fees. An estimated schedule of tax increment revenue reimbursement is provided as Attachment C, Table 3.

The captured incremental taxable value and associated tax increment revenue will be based on the actual increased taxable value from all taxable improvements on the subject property and the actual millage rates levied by the various taxing jurisdictions during each year of the plan, as shown in Attachment C, Tables 2 and 3. The actual tax increment captured will be based on taxable value set through the property assessment process by the local unit of government and equalized by the County and the millage rates set each year by the taxing jurisdictions.

## **2.5 Impact on Taxing Jurisdictions (Section 13(2)(g))**

Based on the current expectations, the Rochester Hills School District is projected to receive some \$585,558 toward bond repayment over the anticipated life of the Plan; the Zoo Authority, Art Institute, Ch 20 Drain Debt reduction fund and OPC Building debt retirement fund will all see significant payments as reflected on Table 2. Further, the Plan will provide some \$220,000 in fees to the Authority. Following completion of this Plan, the subject property is anticipated to provide over \$430,000 per year thereafter in local taxes and over \$530,000 per year in school and education taxes. Also, the project will employ and house tenants that will help stimulate the regional economy, providing further tax benefits.

The following table presents an estimation of the tax revenues generated on the subject property during the life of the Plan. Revenues are shown by taxing jurisdiction.

**Impact to Taxing Jurisdictions**

<u>School Capture</u>	Millage Rate	Developer Reimbursement	BRA Admin Reimbursement	State Revolving Fund	LBRF	Taxing Jurisdiction
State Education Tax (SET)	6.0000	\$ 1,707,230		\$1,138,752	\$ 314,915	\$ 4,942
School Operating Tax	18.0000	\$ 5,121,691			\$ 944,746	\$ 14,826
<u>Local Capture</u>						
OAK COUNTY PARKS	0.2392	\$ 68,062	\$ 2,686		\$ 12,555	\$ 197
HURON-CLIN PARK	0.2146	\$ 61,062	\$ 2,410		\$ 11,263	\$ 177
GENERAL FUND	2.1136	\$ 601,400	\$ 23,738		\$ 110,934	\$ 1,741
LOCAL STREET I	0.3507	\$ 99,788	\$ 3,939		\$ 18,407	\$ 289
LOCAL STREET II	0.4803	\$ 136,664	\$ 5,394		\$ 25,209	\$ 396
LOCAL STREET III	0.2939	\$ 83,626	\$ 3,301		\$ 15,426	\$ 242
FIRE FUND	2.7000	\$ 768,254	\$ 30,324		\$ 141,712	\$ 2,224
SPECIAL POLICE I	1.1954	\$ 340,137	\$ 13,426		\$ 62,742	\$ 985
SPECIAL POLICE II	1.5633	\$ 444,819	\$ 17,557		\$ 82,051	\$ 1,288
PATHWAY	0.1837	\$ 52,270	\$ 2,063		\$ 9,642	\$ 151
RARA OPERATING	0.1928	\$ 54,859	\$ 2,165		\$ 10,119	\$ 159
OPC TRANSPORTION	0.0990	\$ 28,169	\$ 1,112		\$ 5,196	\$ 82
OPC OPERATING	0.2377	\$ 67,635	\$ 2,670		\$ 12,476	\$ 196
LIBRARY OPERATING	0.7739	\$ 220,204	\$ 8,692		\$ 40,619	\$ 637
OAK COUNTY OPERATING	4.0400	\$ 1,149,535	\$ 45,373		\$ 212,043	\$ 3,328
OAK INT SD-ALLOC	0.1985	\$ 56,481	\$ 2,229		\$ 10,418	\$ 164
OAK INT SD-VTD	3.1413	\$ 893,820	\$ 35,280		\$ 164,874	\$ 2,587
OAK COMM COLLEGE	1.5707	\$ 446,924	\$ 17,641		\$ 82,440	\$ 1,294
<b>TOTALS</b>		<b>\$ 12,402,630</b>	<b>\$ 220,000</b>	<b>\$1,138,752</b>	<b>\$ 2,287,787</b>	<b>\$ 678,359</b>
<b>Total Non-Capturable Taxes</b>						
In addition, taxes levied by the following millages will not be captured under the Brownfield Plan, but instead will flow through to the proper tax units.						
<u>Total Non-Capturable Taxes</u>						
ZOO AUTHORITY	0.0990					\$ 9,825
ART INSTITUTE	0.1981					\$ 19,661
CH 20 DRAIN DEBT	0.0417					\$ 4,139
OPC BUILDING DEBT	0.2345					\$ 23,273
ROCH SCH DEBT	5.9000					\$ 585,558

## **2.6 Plan of Financing (Section 13(2)(d)); Maximum Amount of Indebtedness (Section 13(2)(e))**

Eligible activities are to be financed by the Developer. No bonds will be issued nor will other governmental funds be utilized. The Authority will reimburse the Developer for the cost of approved eligible activities, but only from tax increment revenues generated from the subject property as available, and subject to the Reimbursement Agreement.

All reimbursements authorized under this Brownfield Plan shall be governed by the Reimbursement Agreement. The Authority shall not incur any note or bonded indebtedness to finance the purposes of this Brownfield Plan. The inclusion of eligible activities and estimates of costs to be reimbursed in this Brownfield Plan is intended to: (1) authorize the Authority to fund such reimbursements; and (2) does not obligate the Authority to fund any reimbursement or to enter into the Reimbursement Agreement providing for the reimbursement of any costs for which tax increment revenues may be captured under this Brownfield Plan, or which are permitted to be reimbursed under this Brownfield Plan. The amount and source of any tax increment revenues that will be used for purposes authorized by this Brownfield Plan, and the terms and conditions for such use and upon any reimbursement of the expenses permitted by the Brownfield Plan, will be provided solely under the Reimbursement Agreement contemplated by this Brownfield Plan.

## **2.7 Duration of Brownfield Plan (Section 13(2)(f))**

Current tax capture projections indicate the tax increment capture will continue for 22 years. In no event shall the duration of the Brownfield Plan exceed 35 years following the date of the resolution approving the Brownfield Plan, nor shall the duration of the tax capture exceed the lesser of the period authorized under subsection (4) and (5) of Section 13 of Act 381 or 30 years. Further, in no event shall the beginning date of the capture of tax increment revenues be later than five years after the date of the resolution approving the Brownfield Plan.

## **2.8 Effective Date of Inclusion in Brownfield Plan**

The subject property will become a part of this Brownfield Plan on the date this Brownfield Plan is approved by the City of Rochester Hills. The date of tax capture is anticipated to commence the first year that tax increment revenue becomes available— but in no case shall the beginning date of tax capture shall exceed five years beyond the date of the governing body resolution approving the Brownfield Plan.

## **2.9 Displacement/Relocation of Individuals on Eligible Property (Section 13(2)(i-l))**

There are no persons or businesses residing on the Eligible Property, and no occupied residences will be acquired or cleared; therefore, there will be no displacement or relocation of persons or businesses under this Brownfield Plan.

## **2.10 Local Brownfield Revolving Fund (“LBRF”) (Section 8, Section 13(5))**

The Authority has established a Local Brownfield Revolving Fund (LBRF). The Authority will capture incremental local and state school taxes to fund the LBRF, to the extent allowed by law. The rate and schedule of incremental tax capture for the LBRF will be determined on a case-by-case basis.

Considerations may include, but not be limited to the following: total capture duration, total annual capture, project economic factors, level of existing LBRF funding, projected need for LBRF funds, and amount of school tax capture available in accordance with Act 381.

The amount of tax increment revenue authorized for capture and deposit in the LBRF is estimated at \$1,794,505.

**2.11 Other Information**

The tax capture breakdown of tax increment revenues anticipated to become available for use in this Brownfield Plan is summarized below.

There are 43.6335 non-homestead mills available for capture, with school millage equaling 24.0000 mills (55%) and local millage equaling 19.6335 mills (45%). None of the project will include homestead residential property, with those properties including the State Education Tax and local ISD taxes. The requested tax capture for MDEQ eligible activities breaks down as follows:

**Tax Capture**

<b>State to Local Tax Capture</b>	<b>Eligible Activities, Interest, Contingency</b>
MDEQ School tax capture (55%)	\$6,828,921
MDEQ Local tax capture (45%)	\$5,573,709
Local-Only tax capture	\$0
<b>Total</b>	<b>\$12,402,630</b>

## Attachments

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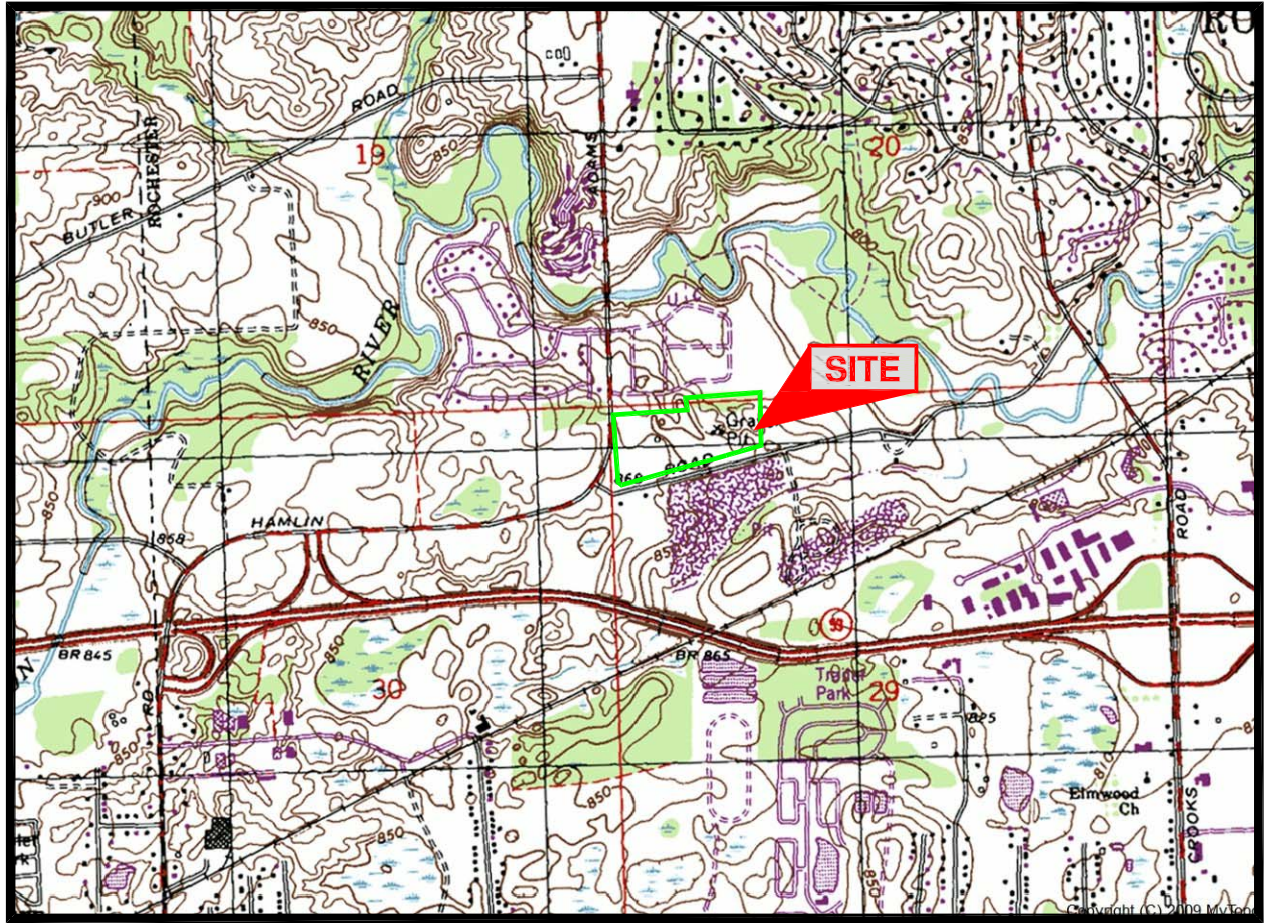
**Attachment A**

**Site Maps**

DRAFT - CONFIDENTIAL



ROCHESTER QUADRANGLE  
 MICHIGAN - OAKLAND COUNTY  
 7.5 MINUTE SERIES (TOPOGRAPHIC)



T.3 N.-R.11 E.

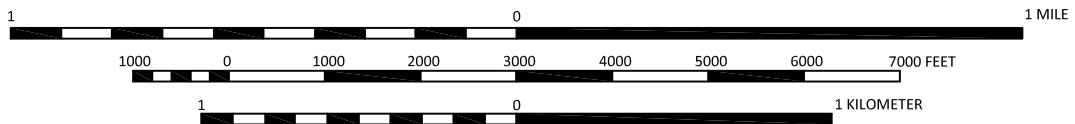


IMAGE TAKEN FROM 1997 U.S.G.S. TOPOGRAPHIC MAP

MICHIGAN  
 QUADRANGLE LOCATION



**AKT**PEERLESS

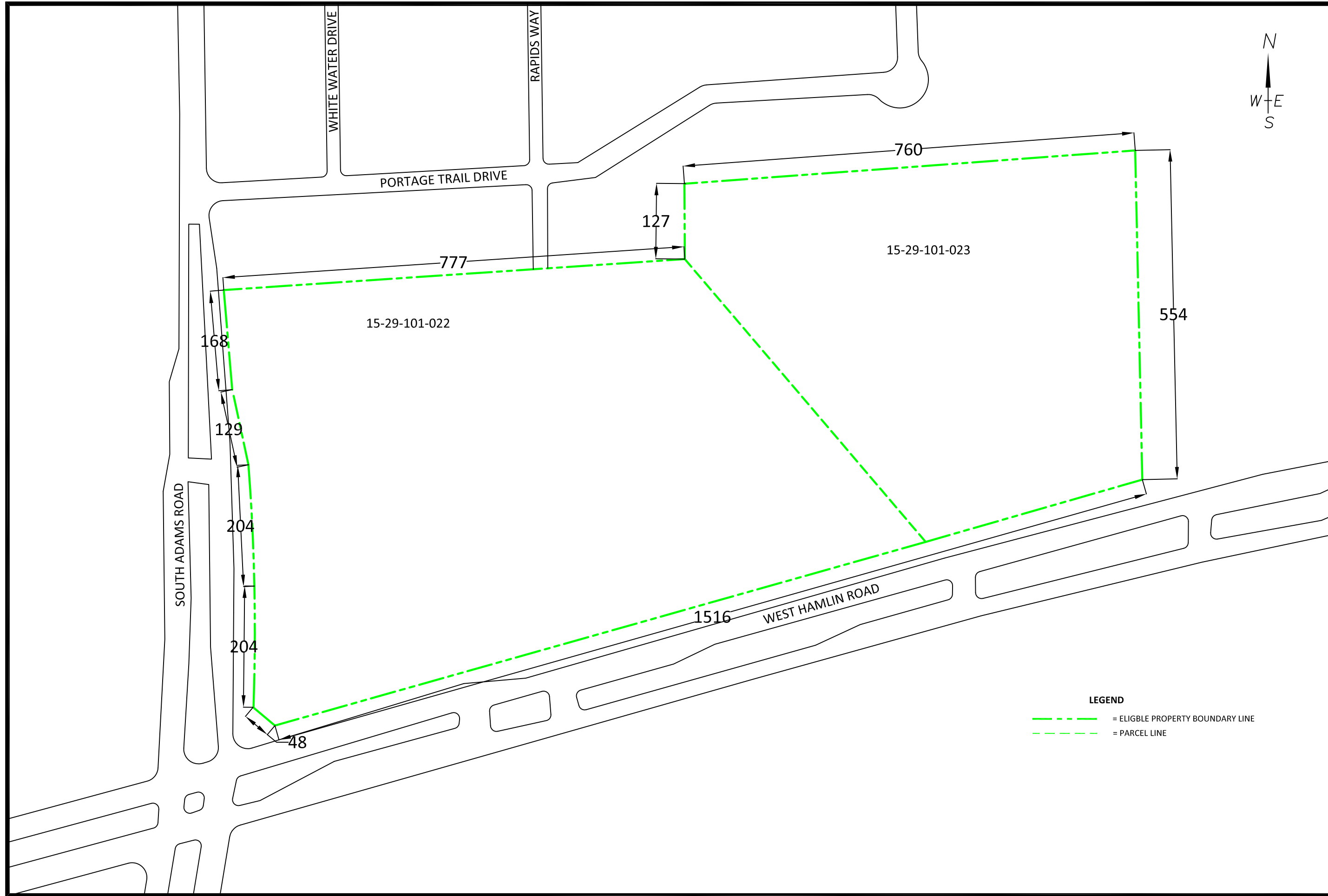
www.aktpeerless.com

**SCALED PROPERTY LOCATION MAP**

PARCEL 15-29-101-022 AND 15-29-101-023  
 NE CORNER OF HAMLIN & ADAMS ROADS  
 ROCHESTER HILLS, MICHIGAN  
 PROJECT NUMBER: 3679F6-5-25

DRAWN BY: ARR  
 DATE: 06/02/2017

**FIGURE 1**



DRAWN BY: ARR  
 DATE: 06/02/2017

0 75 150  
 SCALE: 1" = 150'

**FIGURE 2**

**ELIGIBLE PROPERTY BOUNDARY MAP**

PARCEL 15-29-101-022 AND 15-29-101-023  
 NE CORNER OF HAMLIN & ADAMS ROADS  
 ROCHESTER HILLS, MICHIGAN  
 PROJECT NUMBER: 3679F6-5-25

**AKTPEERLESS**

www.aktpeerless.com

**LEGEND**

--- = ELIGBLE PROPERTY BOUNDARY LINE  
 --- = PARCEL LINE

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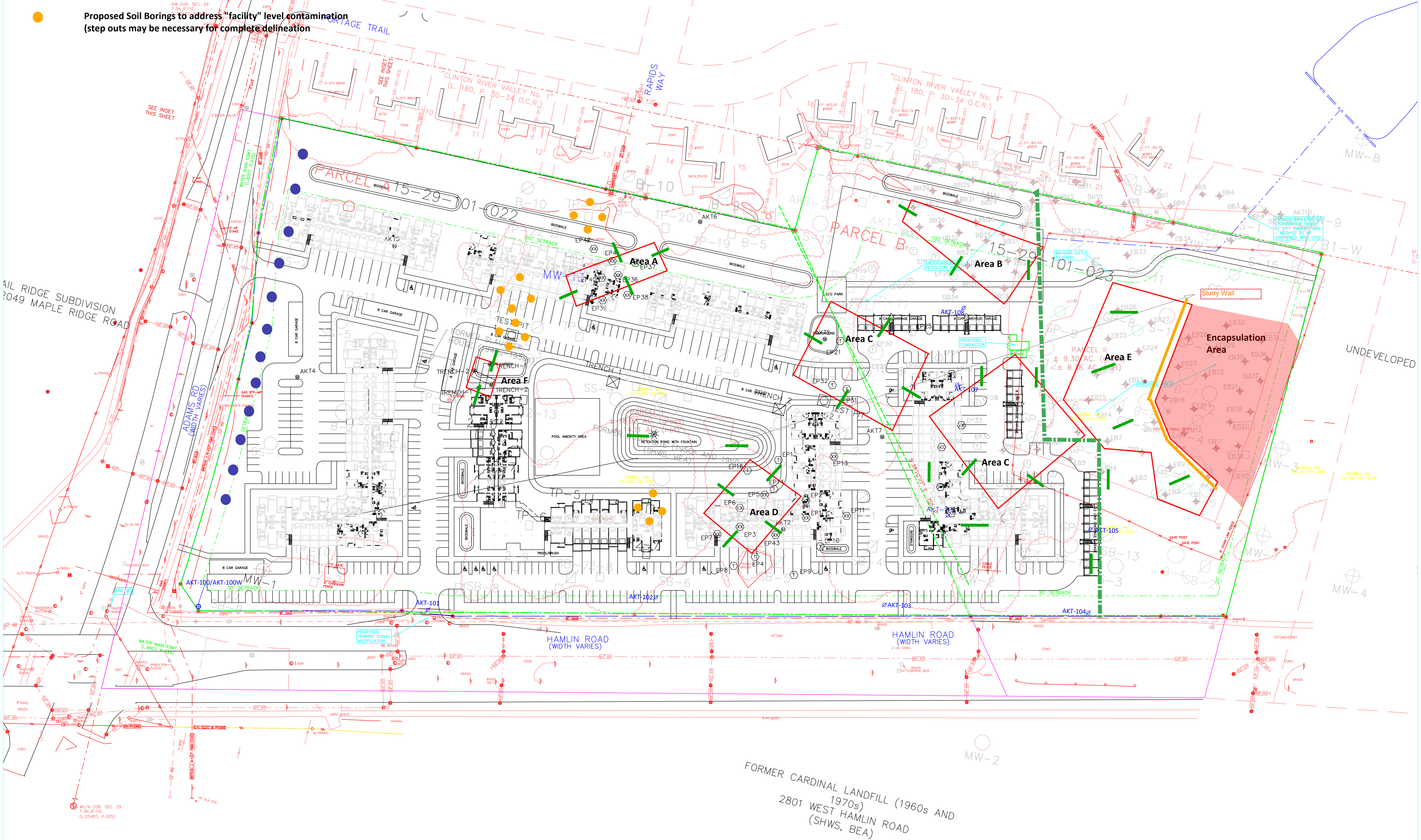
**Figure 3.**

**Map Showing Proposed New Parcel Boundaries**

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**Attachment B**  
**Legal Description(s)**

- Proposed Property Boundary
- Proposed Test Trench Excavation
- Proposed Soil Boring for site-specific background calculation
- Proposed Soil Borings to address "facility" level contamination (step outs may be necessary for complete delineation)



FORMER CARDINAL LANDFILL (1960s AND 1970s)  
 2801 WEST HAMLIN ROAD  
 (SHWS, BEA)

W1/4 COR. SEC. 29  
 T.3N, R.11E  
 (L.23487, P.005)

SIDWELL No.  
 15-29-101-021

SIDWELL No.  
 15-29-101-020

SIDWELL No.  
 15-29-101-023

SIDWELL No.  
 15-29-101-022

SIDWELL No.  
 15-29-101-024

SIDWELL No.  
 15-29-101-025

SIDWELL No.  
 15-29-101-026

SIDWELL No.  
 15-29-101-027

SIDWELL No.  
 15-29-101-028

SIDWELL No.  
 15-29-101-029

SIDWELL No.  
 15-29-101-030

SIDWELL No.  
 15-29-101-031

SIDWELL No.  
 15-29-101-032

SIDWELL No.  
 15-29-101-033

SIDWELL No.  
 15-29-101-034

70-15-29-101-022  
 DBB HAMLIN LLC  
  
 ROCHESTER HILLS innovative by nature  
 MICHIGAN  
 Mailing Address  
 32900 DEQUINDRE RD, WARREN, MI 48092-1064

Legal Information: T3N, R11E, SEC 29 PART OF W 1/2 OF NW 1/4 BEG AT PT DIST S 00-33-37 E 120.85 FT FROM NW SEC COR, TH N 88-30-46 E 836.53 FT, TH S 88-06-17 E 750.59 FT, TH S 76-30-50 W 1327.14 FT, TH N 00-33-37 W 878.45 FT TO BEG 18.80 A 1-24-00 FR 002

**Photos**



**Assessing**

**General**

Property class	202 COMMERCIAL
School district	220 ROCHESTER 63260
State equalized value 2016	\$30,080
Assessed value 2016	\$30,080
Taxable value 2016	\$30,080
Assessed value 2015	\$30,080
Taxable value 2015	\$30,080
Assessed value 2014	\$30,080
Taxable value 2014	\$30,080
Date of last name change	01/29/2010
Total acreage	14.0927
Total estimated land value	\$60,160
Land improvement amounts	\$0
Estimated TCV	\$60,160
ECF neighborhood code	00200

**Principle Residence Exemption**

Year	June 1	Final
2016	0	0
2015	0	0

**Land Information**

Lot	Frontage	Depth
1	0.00	0.00
2	0.00	0.00

3

0.00

0.00

**Frontage and Depth****0.00 Total Frontage****0.00 Average Depth****Sales Information**

Sale date	Price	Instrument	Grantor	Grantee	Terms of Sale	Liber/Page
09/13/2016	\$750,000	PTA	HAMLIN ADAMS PROPERTIES LLC	DBB HAMLIN LLC	REVIEW	n/a
10/27/2005	\$1	WD	ADAMS/HAMLIN DEVELOPMENT CO LLC	HAMLIN/ADAMS PROPERTIES LLC	ARMS LENGTH ECF	36594/237
10/27/2005	\$1	WD	HAMLIN REDEVELOPMENT CO LLC	HAMLIN/ADAMS PROPERTIES LLC	ARMS LENGTH ECF	36638/890
05/08/1997	\$130,000	WD	JAMENS,SHARRON	HALANSKI,ROMAN	07 - NOT REPRES	17251:629

**Residential Building Information**

Sorry, there is no Residential Building information available.

**Sketches**

Sorry, there are no Images available.

**Photos**

**If no records appear for your search, then either there are no records or they are older than the year 2000. If you believe records exist but are not shown in this search please contact the Treasury Department for Property Taxes, Special Assessments and Miscellaneous Receivables at 248.656.4675, Assessing Department for Assessments at 248.656.4605 and Building Department for Building-related searches at 248.656.4615.**

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70-15-29-101-023  
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**Photos**



**Assessing**

**General**

Property class	202 COMMERCIAL
School district	220 ROCHESTER 63260
State equalized value 2016	\$7,360
Assessed value 2016	\$7,360
Taxable value 2016	\$7,360
Assessed value 2015	\$7,360
Taxable value 2015	\$7,360
Assessed value 2014	\$7,360
Taxable value 2014	\$7,360
Date of last name change	01/29/2010
Total acreage	8.4056
Total estimated land value	\$14,720
Land improvement amounts	\$0
Estimated TCV	\$14,720
ECF neighborhood code	00200

**Principle Residence Exemption**

Year	June 1	Final
2016	0	0
2015	0	0

**Land Information**

Lot	Frontage	Depth
1	0.00	0.00
2	0.00	0.00



3

0.00

0.00

**Frontage and Depth**

**0.00 Total Frontage**

**0.00 Average Depth**

**Sales Information**

Sale date	Price	Instrument	Grantor	Grantee	Terms of Sale	Liber/Page
09/13/2016	\$750,000	PTA	HAMLIN ADAMS PROPERTIES LLC	DBB ADAMS LLC	REVIEW	n/a
10/27/2005	\$1	WD	HAMLIN REDEVELOPMENT CO LLC	ADAMS/HAMLIN PROPERTIES LLC	ARMS LENGTH ECF	36638/890
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**Sketches**

Sorry, there are no Images available.

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Name changes and sales information is updated at the end of each business day. If you do not see a change in this information, please check out website again tomorrow. When using the Assessing Department search tool, land divisions that have occurred since January 1st will not show up until next year. However, the new numbers will show up when using the Building Department search tool.

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**Attachment C**

**Tables**

**Table 1. Eligible Activities**

Legacy Rochester Hills  
 Rochester Hills, MI  
 AKT Peerless Project No. 3679F6  
*As of August 15, 2017*

ELIGIBLE ACTIVITIES COST SUMMARY				
				Estimated Cost of Eligible Activity
Department Specific Activities				\$ 7,428,415
	15% Contingency on Eligible Activities			\$ 1,108,922
Brownfield Plan & Act 381 WP Preparation Activities				\$ 45,000
<b>Total Eligible Activities Cost with 15% Contingency</b>				<b>\$ 8,582,337</b>
	Interest (calculated at 5%, simple)			\$ 3,820,293
<b>Total Eligible Activities Cost, with Contingency &amp; Interest</b>				<b>\$ 12,402,630</b>
BRA Administration Fee				\$ 220,000
State Revolving Fund				\$ 1,138,752
Local Brownfield Revolving Fund (LBRF)				\$ 2,287,787
<b>Total Eligible Costs for Reimbursement</b>				<b>\$ 16,049,169</b>

ELIGIBLE ACTIVITIES COST DETAIL				
	# of Units	Unit Type	Cost/Unit	Est. Total Cost
<b>Department Specific Activities</b>				
Phase I	2	LS	\$ 2,800	\$ 5,600
BEA	2	LS	\$ 7,500	\$ 15,000
Supplemental Subsurface Investigation	1	LS	\$ 120,000	\$ 120,000
Environmental Construction Management Plan	1	LS	\$ 20,000	\$ 20,000
Project Management, Administration, and Consulting Support	1	LS	\$ 25,000	\$ 25,000
HASP	1	LS	\$ 2,000	\$ 2,000
Parcel A - Area A Soil/Waste Removal				
Area A Excavation, Transportation & Disposal	1,630	YD	\$ 45	\$ 73,333
Area A Backfill	1,630	YD	\$ 17	\$ 27,704
Area A Laboratory Costs and Verification Sampling	1	LS	\$ 6,000	\$ 6,000
Area A Environmental Management/Oversight	1	LS	\$ 7,500	\$ 7,500
Parcel A - Area B Soil/Waste Removal				
Area B Excavation, Transportation & Disposal	3,556	YD	\$ 45	\$ 160,000
Area B Backfill	3,556	YD	\$ 17	\$ 60,444
Area B Laboratory Costs and Verification Sampling	1	LS	\$ 10,000	\$ 10,000
Area B Environmental Management/Oversight	1	LS	\$ 14,000	\$ 14,000
Parcel A - Area C1 Soil/Waste Removal				
Area C1 Excavation, Transportation & Disposal	7,741	YD	\$ 45	\$ 348,333
Area C1 Backfill	7,741	YD	\$ 17	\$ 131,593
Area C1 Laboratory Costs and Verification Sampling	1	LS	\$ 11,500	\$ 11,500
Area C2 Environmental Management/Oversight	1	LS	\$ 15,000	\$ 15,000
Parcel A - Area C2 Soil/Waste Removal				
Area C2 Excavation, Transportation & Disposal	23,333	YD	\$ 45	\$ 1,050,000
Area C2 Backfill	23,333	YD	\$ 17	\$ 396,667
Area C2 Laboratory Costs and Verification Sampling	1	LS	\$ 15,000	\$ 15,000
Area C2 Environmental Management/Oversight	1	LS	\$ 12,000	\$ 12,000
Parcel A - Area D Soil/Waste Removal				
Area D Excavation, Transportation & Disposal	6,667	YD	\$ 45	\$ 300,000
Area D Backfill	6,667	YD	\$ 17	\$ 113,333

**Table 1. Eligible Activities**

Legacy Rochester Hills  
Rochester Hills, MI  
AKT Peerless Project No. 3679F6  
*As of August 15, 2017*

Area D Laboratory Costs and Verification Sampling	1	LS	\$ 6,500	\$ 6,500
Area D Environmental Management/Oversight	1	LS	\$ 8,000	\$ 8,000
Parcel A - Area F Soil/Waste Removal				
Area F Excavation, Transportation & Disposal	741	YD	\$ 45	\$ 33,333
Area F Backfill	741	YD	\$ 17	\$ 12,593
Area F Laboratory Costs and Verification Sampling	1	LS	\$ 3,500	\$ 3,500
Area F Environmental Management/Oversight	1	LS	\$ 5,000	\$ 5,000
Smaller Hot Spot Removal (Southwestern Area)	1	LS	\$ 100,000	\$ 100,000
Sub-slab venting system - all new construction	162,000	SF	\$ 4	\$ 648,000
Parcel B - Area E Soil/Waste Removal				
Area E Excavation, Transportation & Disposal	23,185	YD	\$ 45	\$ 1,043,333
Area E Backfill	23,185	YD	\$ 17	\$ 394,148
Area E Laboratory Costs and Verification Sampling	1	LS	\$ 15,000	\$ 15,000
Area E Environmental Management/Oversight	1	LS	\$ 12,000	\$ 12,000
Parcel B - Removal and Disposal of PCB Impacted Soils	1	LS	\$ 232,000	\$ 232,000
Import Clean Fill for Land Balancing	40,000	CY	\$ 17	\$ 680,000
Installation Hydraulic Barrier (i.e. slurry wall)	1	LS	\$ 150,000	\$ 150,000
Installation of Liner and Cap over former landfill	1	LS	\$ 120,000	\$ 120,000
Installation of Passive Methane Venting System (former "landfill" area)	1	LS	\$ 190,000	\$ 190,000
Operation and Maintenance Plan - Subfloor Methane Mitigation Systems, S	1	LS	\$ 255,000	\$ 255,000
Passive Methane Venting System along Hamlin Road	1	LS	\$ 260,000	\$ 260,000
O&M Plan - Passive Methane Venting System along Hamlin Road	1	LS	\$ 150,000	\$ 150,000
Temporary Site Control & Erosion Control	1	LS	\$ 50,000	\$ 50,000
Dewatering	1	LS	\$ 75,000	\$ 75,000
Closeout Reporting (East Parcel) & Documentation of Due Care Compliance	1	LS	\$ 15,000	\$ 15,000
NFA Due Care Plan	1	LS	\$ 30,000	\$ 30,000
			<b>Subtotal</b>	<b>\$ 7,428,415</b>
<b>Brownfield Plan &amp; Act 381 Work Plan Preparation</b>				
BRA Application Fee and Administration Fee				\$ -
Brownfield Plan	1	LS	\$ 10,000	\$ 10,000
Act 381 Work Plan	1	LS	\$ 15,000	\$ 15,000
Cost Tracking & Compliance	1	LS	\$ 20,000	\$ 20,000
			<b>Subtotal</b>	<b>\$ 45,000</b>



Table 2. Tax Increment Revenue Estimates

Legacy Rochester Hills

Rochester Hills, MI

AKT Peerless Project No. 3679F6

As of August 15, 2017

Estimated TV Increase rate:

Plan Year		15	16	17	18	19	20	21	22	23
Calendar Year		2033	2034	2035	2036	2037	2038	2039	2040	2041
Initial Taxable Value		\$ 37,440	\$ 37,440	\$ 37,440	\$ 37,440	\$ 37,440	\$ 37,440	\$ 37,440	\$ 37,440	\$ 37,440
Post-Dev TV (30% of Project Investment)	Estimated New TV	\$ 19,071,110	\$ 19,452,532	\$ 19,841,583	\$ 20,238,414	\$ 20,643,183	\$ 21,056,046	\$ 21,477,167	\$ 21,906,711	\$ 22,344,845
	<b>Incremental Difference (New TV - Initial TV)</b>	<b>\$ 19,033,670</b>	<b>\$ 19,415,092</b>	<b>\$ 19,804,143</b>	<b>\$ 20,200,974</b>	<b>\$ 20,605,743</b>	<b>\$ 21,018,606</b>	<b>\$ 21,439,727</b>	<b>\$ 21,869,271</b>	<b>\$ 22,307,405</b>

School Capture		Millage Rate										
State Education Tax (SET)	6.0000	Initial	\$ 225	\$ 225	\$ 225	\$ 225	\$ 225	\$ 225	\$ 225	\$ 225	\$ 225	\$ 225
		Incremental	\$ 114,202	\$ 116,491	\$ 118,825	\$ 121,206	\$ 123,634	\$ 126,112	\$ 128,638	\$ 131,216	\$ 133,844	
School Operating Tax	18.0000	Initial	\$ 674	\$ 674	\$ 674	\$ 674	\$ 674	\$ 674	\$ 674	\$ 674	\$ 674	\$ 674
		Incremental	\$ 342,606	\$ 349,472	\$ 356,475	\$ 363,618	\$ 370,903	\$ 378,335	\$ 385,915	\$ 393,647	\$ 401,533	

School Total 24.0000

Local Capture		Millage Rate										
OAK COUNTY PARKS	0.2392	Initial	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9
		Incremental	\$ 4,553	\$ 4,644	\$ 4,737	\$ 4,832	\$ 4,929	\$ 5,028	\$ 5,128	\$ 5,231	\$ 5,336	
HURON-CLIN PARK	0.2146	Initial	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8	\$ 8
		Incremental	\$ 4,085	\$ 4,166	\$ 4,250	\$ 4,335	\$ 4,422	\$ 4,511	\$ 4,601	\$ 4,693	\$ 4,787	
GENERAL FUND	2.1136	Initial	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79
		Incremental	\$ 40,230	\$ 41,036	\$ 41,858	\$ 42,697	\$ 43,552	\$ 44,425	\$ 45,315	\$ 46,223	\$ 47,149	
LOCAL STREET I	0.3507	Initial	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13
		Incremental	\$ 6,675	\$ 6,809	\$ 6,945	\$ 7,084	\$ 7,226	\$ 7,371	\$ 7,519	\$ 7,670	\$ 7,823	
LOCAL STREET II	0.4803	Initial	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18
		Incremental	\$ 9,142	\$ 9,325	\$ 9,512	\$ 9,703	\$ 9,897	\$ 10,095	\$ 10,298	\$ 10,504	\$ 10,714	
LOCAL STREET III	0.2939	Initial	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11
		Incremental	\$ 5,594	\$ 5,706	\$ 5,820	\$ 5,937	\$ 6,056	\$ 6,177	\$ 6,301	\$ 6,427	\$ 6,556	
FIRE FUND	2.7000	Initial	\$ 101	\$ 101	\$ 101	\$ 101	\$ 101	\$ 101	\$ 101	\$ 101	\$ 101	\$ 101
		Incremental	\$ 51,391	\$ 52,421	\$ 53,471	\$ 54,543	\$ 55,636	\$ 56,750	\$ 57,887	\$ 59,047	\$ 60,230	
SPECIAL POLICE I	1.1954	Initial	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45
		Incremental	\$ 22,753	\$ 23,209	\$ 23,674	\$ 24,148	\$ 24,632	\$ 25,126	\$ 25,629	\$ 26,143	\$ 26,666	
SPECIAL POLICE II	1.5633	Initial	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59
		Incremental	\$ 29,755	\$ 30,352	\$ 30,960	\$ 31,580	\$ 32,213	\$ 32,858	\$ 33,517	\$ 34,188	\$ 34,873	
PATHWAY	0.1837	Initial	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7
		Incremental	\$ 3,496	\$ 3,567	\$ 3,638	\$ 3,711	\$ 3,785	\$ 3,861	\$ 3,938	\$ 4,017	\$ 4,098	
RARA OPERATING	0.1928	Initial	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7
		Incremental	\$ 3,670	\$ 3,743	\$ 3,818	\$ 3,895	\$ 3,973	\$ 4,052	\$ 4,134	\$ 4,216	\$ 4,301	
OPC TRANSPORTION	0.0990	Initial	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4
		Incremental	\$ 1,884	\$ 1,922	\$ 1,961	\$ 2,000	\$ 2,040	\$ 2,081	\$ 2,123	\$ 2,165	\$ 2,208	
OPC OPERATING	0.2377	Initial	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9
		Incremental	\$ 4,524	\$ 4,615	\$ 4,707	\$ 4,802	\$ 4,898	\$ 4,996	\$ 5,096	\$ 5,198	\$ 5,302	
LIBRARY OPERATING	0.7739	Initial	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29
		Incremental	\$ 14,730	\$ 15,025	\$ 15,326	\$ 15,634	\$ 15,947	\$ 16,266	\$ 16,592	\$ 16,925	\$ 17,264	
OAK COUNTY OPERATING	4.0400	Initial	\$ 151	\$ 151	\$ 151	\$ 151	\$ 151	\$ 151	\$ 151	\$ 151	\$ 151	\$ 151
		Incremental	\$ 76,896	\$ 78,437	\$ 80,009	\$ 81,612	\$ 83,247	\$ 84,915	\$ 86,616	\$ 88,352	\$ 90,122	
OAK INT SD-ALLOC	0.1985	Initial	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7
		Incremental	\$ 3,778	\$ 3,854	\$ 3,931	\$ 4,010	\$ 4,090	\$ 4,172	\$ 4,256	\$ 4,341	\$ 4,428	
OAK INT SD-VTD	3.1413	Initial	\$ 118	\$ 118	\$ 118	\$ 118	\$ 118	\$ 118	\$ 118	\$ 118	\$ 118	\$ 118
		Incremental	\$ 59,790	\$ 60,989	\$ 62,211	\$ 63,457	\$ 64,729	\$ 66,026	\$ 67,349	\$ 68,698	\$ 70,074	
OAK COMM COLLEGE	1.5707	Initial	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59	\$ 59
		Incremental	\$ 29,896	\$ 30,495	\$ 31,106	\$ 31,730	\$ 32,365	\$ 33,014	\$ 33,675	\$ 34,350	\$ 35,038	

Local Total 19.5886

Non-Capturable Millages		Millage Rate									
ZOO AUTHORITY	0.0990	New TV	\$ 1,888	\$ 1,926	\$ 1,964	\$ 2,004	\$ 2,044	\$ 2,085	\$ 2,126	\$ 2,169	\$ 2,212
ART INSTITUTE	0.1981	New TV	\$ 3,778	\$ 3,854	\$ 3,931	\$ 4,009	\$ 4,089	\$ 4,171	\$ 4,255	\$ 4,340	\$ 4,427
CH 20 DRAIN DEBT	0.0417	New TV	\$ 795	\$ 811	\$ 827	\$ 844	\$ 861	\$ 878	\$ 896	\$ 914	\$ 932
OPC BUILDING DEBT	0.2345	New TV	\$ 4,472	\$ 4,562	\$ 4,653	\$ 4,746	\$ 4,841	\$ 4,938	\$ 5,036	\$ 5,137	\$ 5,240
ROCH SCH DEBT	5.9000	New TV	\$ 112,520	\$ 114,770	\$ 117,065	\$ 119,407	\$ 121,795	\$ 124,231	\$ 126,715	\$ 129,250	\$ 131,835

**Table 3. Reimbursement Allocation Schedule**

Legacy Rochester Hills  
 Rochester Hills, MI  
 AKT Peerless Project No. 3679F6  
*As of August 15, 2017*

Developer Maximum Reimbursement	Proportionality	School & Local Taxes	Local-Only Taxes	Total
State	55.1%	\$ 6,828,921		\$ 6,828,921
Local	44.9%	\$ 5,573,709	\$ -	\$ 5,573,709
<b>TOTAL</b>		<b>\$ 12,402,630</b>	<b>\$ -</b>	<b>\$ 12,402,630</b>
MDEQ	100.0%	\$ 12,402,630		
MSF	0.0%	\$ -		

Estimated Total Years of Plan: 22

Estimated Capture
Administrative Fees
State Revolving Fund
Local Revolving Fund

Plan Year	1	2	3	4	5	6	7	8	9	10	11	12
Total State Incremental Revenue	\$ 107,371	\$ 251,730	\$ 360,000	\$ 367,218	\$ 374,580	\$ 382,090	\$ 389,750	\$ 397,563	\$ 405,532	\$ 413,660	\$ 421,952	\$ 430,409
State Brownfield Revolving Fund (3 mills of SET)	\$ 13,421	\$ 31,466	\$ 45,000	\$ 45,902	\$ 46,823	\$ 47,761	\$ 48,719	\$ 49,695	\$ 50,691	\$ 51,708	\$ 52,744	\$ 53,801
Local Brownfield Revolving Fund (3% of capture)	\$ 3,221	\$ 7,552	\$ 10,800	\$ 11,017	\$ 11,237	\$ 11,463	\$ 11,692	\$ 11,927	\$ 12,166	\$ 12,410	\$ 12,659	\$ 12,912
<b>State TIR Available for Reimbursement</b>	<b>\$ 90,729</b>	<b>\$ 212,712</b>	<b>\$ 304,200</b>	<b>\$ 310,299</b>	<b>\$ 316,520</b>	<b>\$ 322,866</b>	<b>\$ 329,338</b>	<b>\$ 335,940</b>	<b>\$ 342,674</b>	<b>\$ 349,543</b>	<b>\$ 356,549</b>	<b>\$ 363,695</b>
Total Local Incremental Revenue	\$ 87,635	\$ 205,460	\$ 293,829	\$ 299,720	\$ 305,729	\$ 311,859	\$ 318,110	\$ 324,487	\$ 330,992	\$ 337,626	\$ 344,393	\$ 351,296
BRA Administrative Fee	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Local Brownfield Revolving Fund (3% of capture)	\$ 2,629	\$ 6,164	\$ 8,815	\$ 8,992	\$ 9,172	\$ 9,356	\$ 9,543	\$ 9,735	\$ 9,930	\$ 10,129	\$ 10,332	\$ 10,539
<b>Local TIR Available for Reimbursement</b>	<b>\$ 75,006</b>	<b>\$ 189,296</b>	<b>\$ 275,014</b>	<b>\$ 280,729</b>	<b>\$ 286,557</b>	<b>\$ 292,503</b>	<b>\$ 298,567</b>	<b>\$ 304,753</b>	<b>\$ 311,062</b>	<b>\$ 317,497</b>	<b>\$ 324,062</b>	<b>\$ 330,757</b>
<b>Total State &amp; Local TIR Available</b>	<b>\$ 165,735</b>	<b>\$ 402,009</b>	<b>\$ 579,214</b>	<b>\$ 591,028</b>	<b>\$ 603,078</b>	<b>\$ 615,369</b>	<b>\$ 627,906</b>	<b>\$ 640,693</b>	<b>\$ 653,736</b>	<b>\$ 667,040</b>	<b>\$ 680,611</b>	<b>\$ 694,452</b>

DEVELOPER	Beginning Balance	1	2	3	4	5	6	7	8	9	10	11	12
<b>DEVELOPER Reimbursement Balance</b>	<b>\$ 12,402,630</b>	<b>\$ 12,236,895</b>	<b>\$ 11,834,886</b>	<b>\$ 11,255,672</b>	<b>\$ 10,664,644</b>	<b>\$ 10,061,567</b>	<b>\$ 9,446,198</b>	<b>\$ 8,818,292</b>	<b>\$ 8,177,599</b>	<b>\$ 7,523,863</b>	<b>\$ 6,856,822</b>	<b>\$ 6,176,212</b>	<b>\$ 5,481,759</b>
<i>STATE Reimbursement Balance</i>	<i>\$ 6,828,921</i>	<i>\$ 6,738,193</i>	<i>\$ 6,525,480</i>	<i>\$ 6,221,280</i>	<i>\$ 5,910,981</i>	<i>\$ 5,594,461</i>	<i>\$ 5,271,595</i>	<i>\$ 4,942,257</i>	<i>\$ 4,606,316</i>	<i>\$ 4,263,642</i>	<i>\$ 3,914,099</i>	<i>\$ 3,557,550</i>	<i>\$ 3,193,854</i>
Eligible Activities Reimbursement	\$ 4,725,458	\$ 90,729	\$ 212,712	\$ 304,200	\$ 310,299	\$ 316,520	\$ 322,866	\$ 329,338	\$ 335,940	\$ 342,674	\$ 349,543	\$ 356,549	\$ 363,695
Environmental Eligible Activities	\$ 4,725,458	\$ 90,729	\$ 212,712	\$ 304,200	\$ 310,299	\$ 316,520	\$ 322,866	\$ 329,338	\$ 335,940	\$ 342,674	\$ 349,543	\$ 356,549	\$ 363,695
Interest Reimbursement	\$ 2,103,463	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Environmental Portion	\$ 2,103,463	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total STATE TIR Reimbursement</b>	<b>\$ 90,729</b>	<b>\$ 212,712</b>	<b>\$ 304,200</b>	<b>\$ 310,299</b>	<b>\$ 316,520</b>	<b>\$ 322,866</b>	<b>\$ 329,338</b>	<b>\$ 335,940</b>	<b>\$ 342,674</b>	<b>\$ 349,543</b>	<b>\$ 356,549</b>	<b>\$ 363,695</b>	
<i>LOCAL Reimbursement Balance</i>	<i>\$ 5,573,709</i>	<i>\$ 5,498,702</i>	<i>\$ 5,309,406</i>	<i>\$ 5,034,392</i>	<i>\$ 4,753,663</i>	<i>\$ 4,467,106</i>	<i>\$ 4,174,603</i>	<i>\$ 3,876,036</i>	<i>\$ 3,571,283</i>	<i>\$ 3,260,221</i>	<i>\$ 2,942,724</i>	<i>\$ 2,618,662</i>	<i>\$ 2,287,905</i>
Eligible Activities Reimbursement	\$ 3,856,879	\$ 75,006	\$ 189,296	\$ 275,014	\$ 280,729	\$ 286,557	\$ 292,503	\$ 298,567	\$ 304,753	\$ 311,062	\$ 317,497	\$ 324,062	\$ 330,757
Environmental Eligible Activities	\$ 3,856,879	\$ 75,006	\$ 189,296	\$ 275,014	\$ 280,729	\$ 286,557	\$ 292,503	\$ 298,567	\$ 304,753	\$ 311,062	\$ 317,497	\$ 324,062	\$ 330,757
Interest Reimbursement	\$ 1,716,829	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Environmental Portion	\$ 1,716,829	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Total LOCAL TIR Reimbursement</b>	<b>\$ 75,006</b>	<b>\$ 189,296</b>	<b>\$ 275,014</b>	<b>\$ 280,729</b>	<b>\$ 286,557</b>	<b>\$ 292,503</b>	<b>\$ 298,567</b>	<b>\$ 304,753</b>	<b>\$ 311,062</b>	<b>\$ 317,497</b>	<b>\$ 324,062</b>	<b>\$ 330,757</b>	
<b>Total Annual Developer Reimbursement</b>	<b>\$ 165,735</b>	<b>\$ 402,009</b>	<b>\$ 579,214</b>	<b>\$ 591,028</b>	<b>\$ 603,078</b>	<b>\$ 615,369</b>	<b>\$ 627,906</b>	<b>\$ 640,693</b>	<b>\$ 653,736</b>	<b>\$ 667,040</b>	<b>\$ 680,611</b>	<b>\$ 694,452</b>	

LOCAL BROWNFIELD REVOLVING FUN	LSRRF Year	0	0	0	0	0	0	0	0	0	0	0
LBRF Deposits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
STATE	\$ 6,828,921	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
LOCAL	no maximum	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

**Table 3. Reimbursement Allocation Schedule**

Legacy Rochester Hills  
 Rochester Hills, MI  
 AKT Peerless Project No. 3679F6  
*As of August 15, 2017*

\$	220,000
\$	1,138,752
\$	2,287,787

	13	14
Total State Incremental Revenue	\$ 439,035	\$ 447,833
State Brownfield Revolving Fund (3 mills of SE)	\$ 54,879	\$ 55,979
Local Brownfield Revolving Fund (3% of captu	\$ 13,171	\$ 13,435
<b>State TIR Available for Reimbursement</b>	<b>\$ 370,984</b>	<b>\$ 378,419</b>
Total Local Incremental Revenue	\$ 358,337	\$ 365,518
BRA Administrative Fee	\$ 10,000	\$ 10,000
Local Brownfield Revolving Fund (3% of captu	\$ 10,750	\$ 10,966
<b>Local TIR Available for Reimbursement</b>	<b>\$ 337,586</b>	<b>\$ 344,552</b>
<b>Total State &amp; Local TIR Available</b>	<b>\$ 708,571</b>	<b>\$ 722,972</b>

**DEVELOPER**

<i>DEVELOPER Reimbursement Balance</i>	\$ 4,773,188	\$ 4,050,217
<i>STATE Reimbursement Balance</i>	\$ 2,822,870	\$ 2,444,451
Eligible Activities Reimbursement	\$ 370,984	\$ 378,419
Environmental Eligible Activities	\$ 370,984	\$ 378,419
Interest Reimbursement	\$ -	\$ -
Environmental Portion	\$ -	\$ -
<b>Total STATE TIR Reimbursement</b>	<b>\$ 370,984</b>	<b>\$ 378,419</b>
<i>LOCAL Reimbursement Balance</i>	\$ 1,950,319	\$ 1,605,766
Eligible Activities Reimbursement	\$ 337,586	\$ 233,489
Environmental Eligible Activities	\$ 337,586	\$ 233,489
Interest Reimbursement	\$ -	\$ 111,063
Environmental Portion	\$ -	\$ 111,063
<b>Total LOCAL TIR Reimbursement</b>	<b>\$ 337,586</b>	<b>\$ 344,552</b>
<b>Total Annual Developer Reimbursement</b>	<b>\$ 708,571</b>	<b>\$ 722,972</b>

<b>LOCAL BROWNFIELD REVOLVING FUN</b>	0	0
<b>LBRF Deposits</b>	\$ -	\$ -
STATE	\$ -	\$ -
LOCAL	\$ -	\$ -



**Table 3. Reimbursement Allocation Schedule**

Legacy Rochester Hills  
 Rochester Hills, MI  
 AKT Peerless Project No. 3679F6  
*As of August 15, 2017*

	End Plan									
	15	16	17	18	19	20	21	22	23	
Total State Incremental Revenue	\$ 456,808	\$ 465,962	\$ 475,299	\$ 484,823	\$ 494,538	\$ 504,447	\$ 514,553	\$ 524,862	\$ 535,378	
State Brownfield Revolving Fund (3 mills of SE)	\$ 57,101	\$ 58,245	\$ 59,412	\$ 60,603	\$ 61,817	\$ 63,056	\$ 64,319	\$ 65,608	\$ 66,922	
Local Brownfield Revolving Fund (3% of captu	\$ 13,704	\$ 13,979	\$ 14,259	\$ 14,545	\$ 14,836	\$ 15,133	\$ 15,437	\$ 15,746	\$ 16,061	
<b>State TIR Available for Reimbursement</b>	<b>\$ 386,003</b>	<b>\$ 393,738</b>	<b>\$ 401,628</b>	<b>\$ 409,676</b>	<b>\$ 417,884</b>	<b>\$ 426,257</b>	<b>\$ 434,798</b>	<b>\$ 443,509</b>	<b>\$ 452,394</b>	
Total Local Incremental Revenue	\$ 372,843	\$ 380,314	\$ 387,935	\$ 395,709	\$ 403,638	\$ 411,725	\$ 419,974	\$ 428,388	\$ 436,971	
BRA Administrative Fee	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	
Local Brownfield Revolving Fund (3% of captu	\$ 11,185	\$ 11,409	\$ 11,638	\$ 11,871	\$ 12,109	\$ 12,352	\$ 12,599	\$ 12,852	\$ 13,109	
<b>Local TIR Available for Reimbursement</b>	<b>\$ 351,658</b>	<b>\$ 358,905</b>	<b>\$ 366,297</b>	<b>\$ 373,838</b>	<b>\$ 381,529</b>	<b>\$ 389,373</b>	<b>\$ 397,375</b>	<b>\$ 405,537</b>	<b>\$ 413,862</b>	
<b>Total State &amp; Local TIR Available</b>	<b>\$ 737,660</b>	<b>\$ 752,643</b>	<b>\$ 767,925</b>	<b>\$ 783,513</b>	<b>\$ 799,413</b>	<b>\$ 815,631</b>	<b>\$ 832,173</b>	<b>\$ 849,046</b>	<b>\$ 866,256</b>	

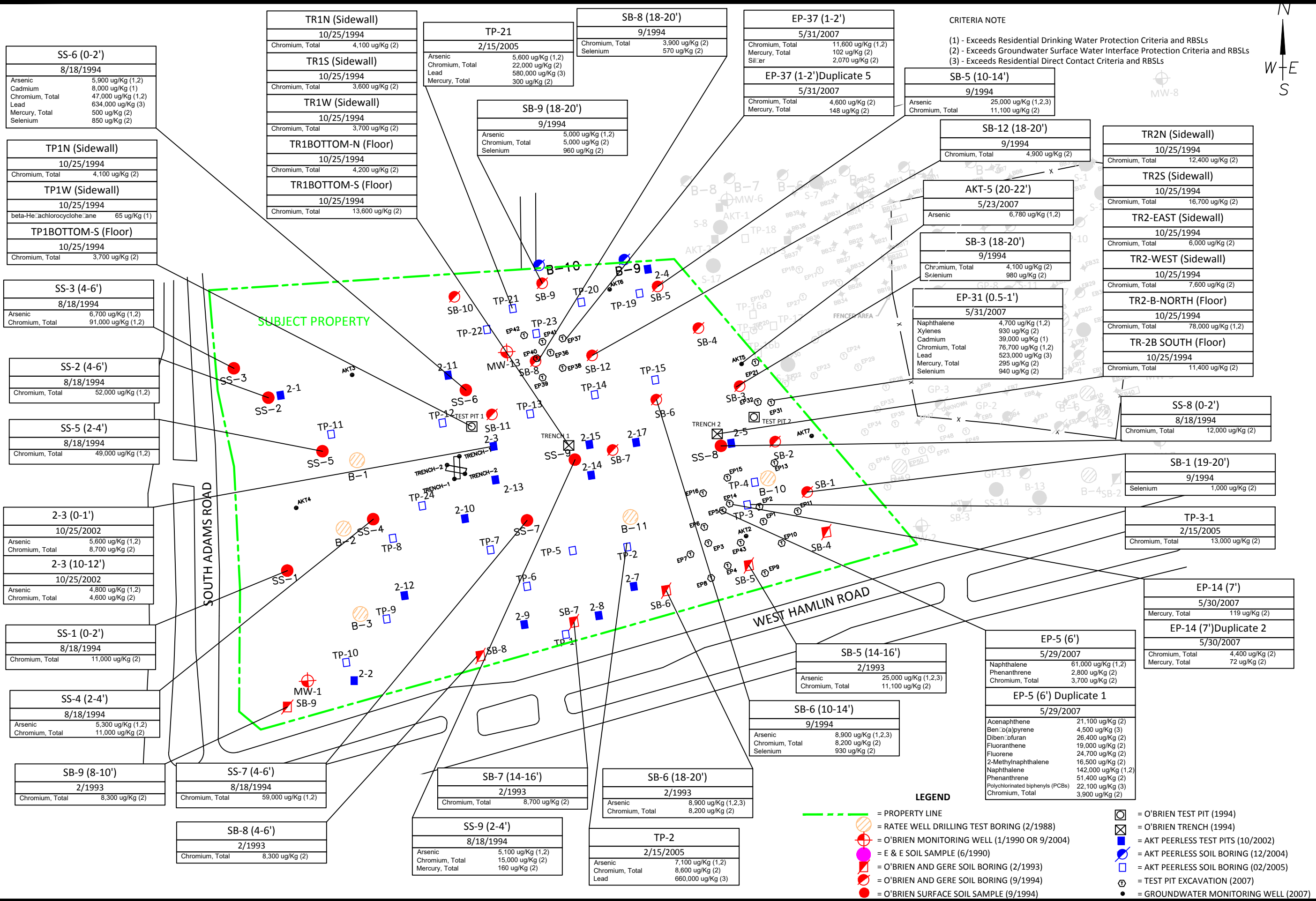
**DEVELOPER**

<b>DEVELOPER Reimbursement Balance</b>	<b>\$ 3,312,556</b>	<b>\$ 2,559,913</b>	<b>\$ 1,791,988</b>	<b>\$ 1,008,475</b>	<b>\$ 435,521</b>	<b>\$ 9,264</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ (0)</b>
<i>STATE Reimbursement Balance</i>	<i>\$ 2,058,448</i>	<i>\$ 1,664,710</i>	<i>\$ 1,263,082</i>	<i>\$ 853,406</i>	<i>\$ 435,521</i>	<i>\$ 9,264</i>	<i>\$ (0)</i>	<i>\$ (0)</i>	<i>\$ (0)</i>
Eligible Activities Reimbursement	\$ 340,987	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Environmental Eligible Activities	\$ 340,987	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Reimbursement	\$ 45,016	\$ 393,738	\$ 401,628	\$ 409,676	\$ 417,884	\$ 426,257	\$ 9,264	\$ -	\$ -
Environmental Portion	\$ 45,016	\$ 393,738	\$ 401,628	\$ 409,676	\$ 417,884	\$ 426,257	\$ 9,264	\$ -	\$ -
<b>Total STATE TIR Reimbursement</b>	<b>\$ 386,003</b>	<b>\$ 393,738</b>	<b>\$ 401,628</b>	<b>\$ 409,676</b>	<b>\$ 417,884</b>	<b>\$ 426,257</b>	<b>\$ 9,264</b>	<b>\$ -</b>	<b>\$ -</b>
<i>LOCAL Reimbursement Balance</i>	<i>\$ 1,254,109</i>	<i>\$ 895,203</i>	<i>\$ 528,906</i>	<i>\$ 155,069</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>	<i>\$ -</i>
Eligible Activities Reimbursement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Environmental Eligible Activities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Interest Reimbursement	\$ 351,658	\$ 358,905	\$ 366,297	\$ 373,838	\$ 155,069	\$ -	\$ -	\$ -	\$ -
Environmental Portion	\$ 351,658	\$ 358,905	\$ 366,297	\$ 373,838	\$ 155,069	\$ -	\$ -	\$ -	\$ -
<b>Total LOCAL TIR Reimbursement</b>	<b>\$ 351,658</b>	<b>\$ 358,905</b>	<b>\$ 366,297</b>	<b>\$ 373,838</b>	<b>\$ 155,069</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Total Annual Developer Reimbursement</b>	<b>\$ 737,660</b>	<b>\$ 752,643</b>	<b>\$ 767,925</b>	<b>\$ 783,513</b>	<b>\$ 572,953</b>	<b>\$ 426,257</b>	<b>\$ 9,264</b>	<b>\$ -</b>	<b>\$ -</b>

<b>LOCAL BROWNFIELD REVOLVING FUN</b>	0	0	0	1	2	3	4	5	0
<b>LBRF Deposits</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 226,460</b>	<b>\$ 389,373</b>	<b>\$ 822,909</b>	<b>\$ 849,046</b>	<b>\$ -</b>
STATE	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 425,534	\$ 443,509	\$ -
LOCAL	\$ -	\$ -	\$ -	\$ -	\$ 226,460	\$ 389,373	\$ 397,375	\$ 405,537	\$ -

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**Attachment D**  
**Environmental Documentation**

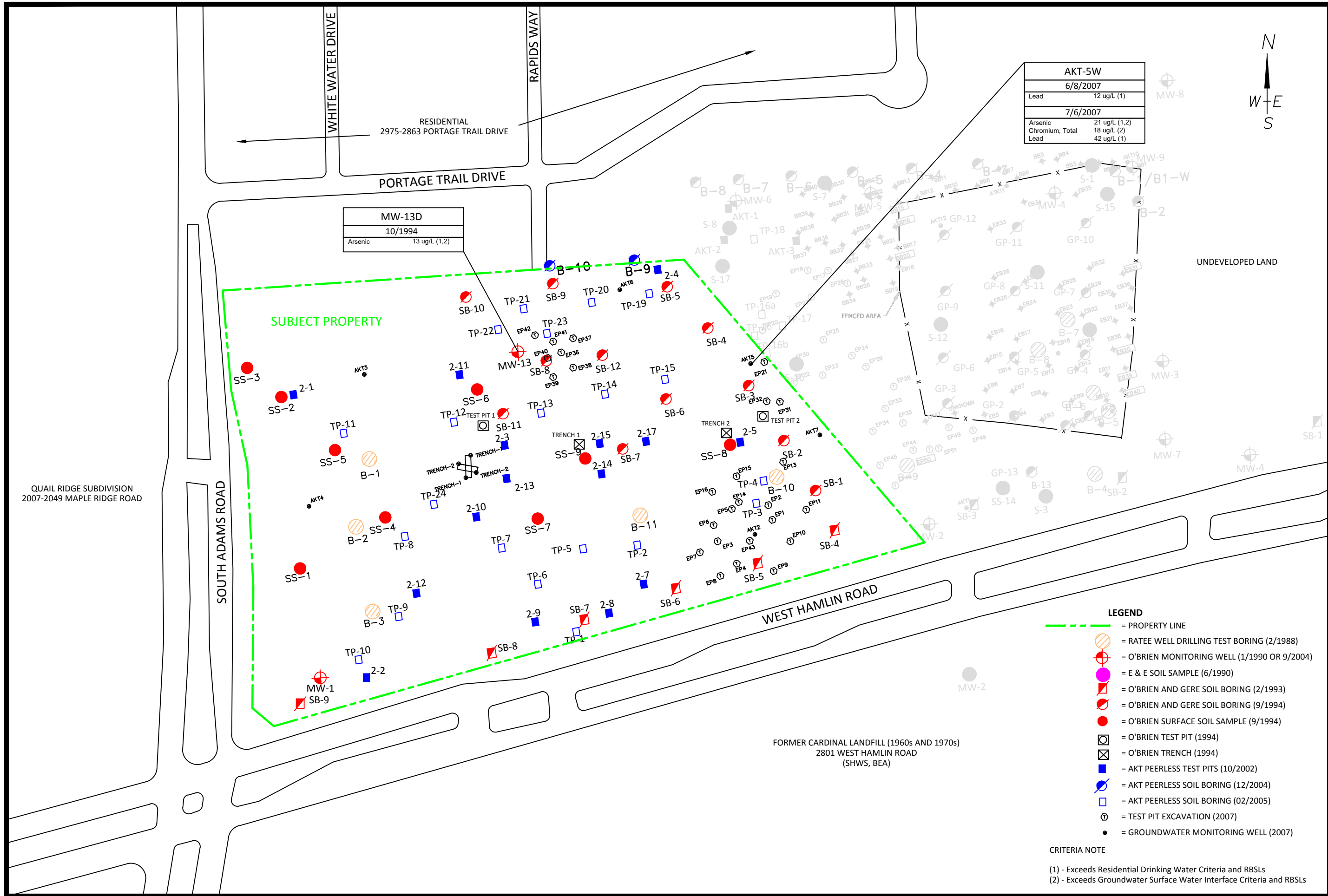


DRAWN BY: OGO  
 DATE: 01/05/2017  
 SCALE: 1" = 150'  
 FIGURE 3

**SITE MAP WITH SOIL RESULTS EXCEEDING MDEQ RCC**

PARCEL 15-29-101-022  
 NE CORNER OF HAMLIN & ADAMS ROADS  
 ROCHESTER HILLS, MICHIGAN  
 PROJECT NUMBER : 3679F6-3-26

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DRAWN BY: OGO  
 DATE: 01/05/2017

0 75 150  
 SCALE: 1" = 150'

**FIGURE 4**

**SITE MAP WITH GROUNDWATER RESULTS EXCEEDING MDEQ RCC**

PARCEL 15-29-101-022  
 NE CORNER OF HAMLIN & ADAMS ROADS  
 ROCHESTER HILLS, MICHIGAN  
 PROJECT NUMBER : 3679F6-3-26

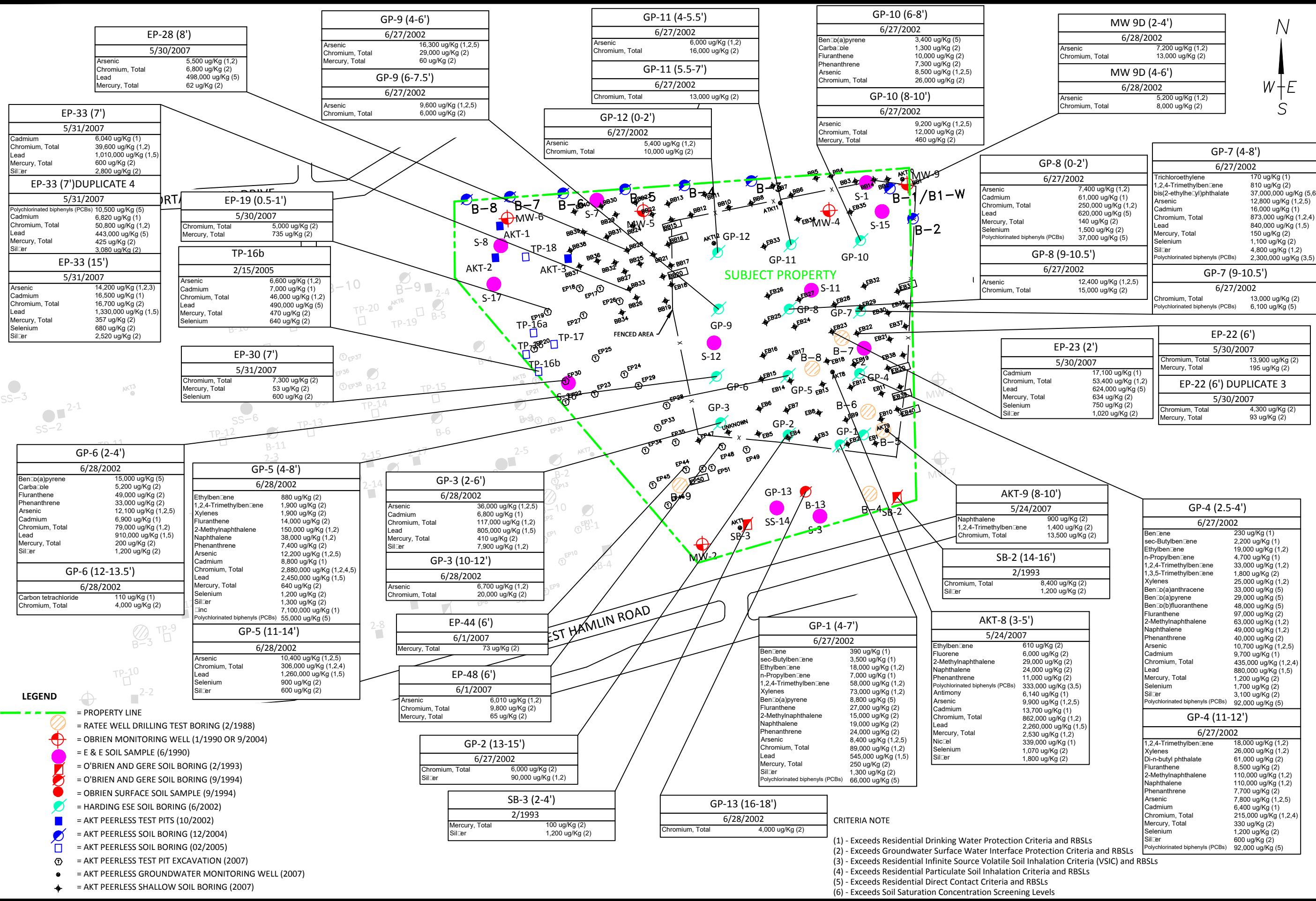
- LEGEND**
- = PROPERTY LINE
  - = RATEE WELL DRILLING TEST BORING (2/1988)
  - = O'BRIEN MONITORING WELL (1/1990 OR 9/2004)
  - = E & E SOIL SAMPLE (6/1990)
  - = O'BRIEN AND GERE SOIL BORING (2/1993)
  - = O'BRIEN AND GERE SOIL BORING (9/1994)
  - = O'BRIEN SURFACE SOIL SAMPLE (9/1994)
  - = O'BRIEN TEST PIT (1994)
  - = O'BRIEN TRENCH (1994)
  - = AKT PEERLESS TEST PITS (10/2002)
  - = AKT PEERLESS SOIL BORING (12/2004)
  - = AKT PEERLESS SOIL BORING (02/2005)
  - = TEST PIT EXCAVATION (2007)
  - = GROUNDWATER MONITORING WELL (2007)

**CRITERIA NOTE**

(1) - Exceeds Residential Drinking Water Criteria and RBSLs  
 (2) - Exceeds Groundwater Surface Water Interface Criteria and RBSLs



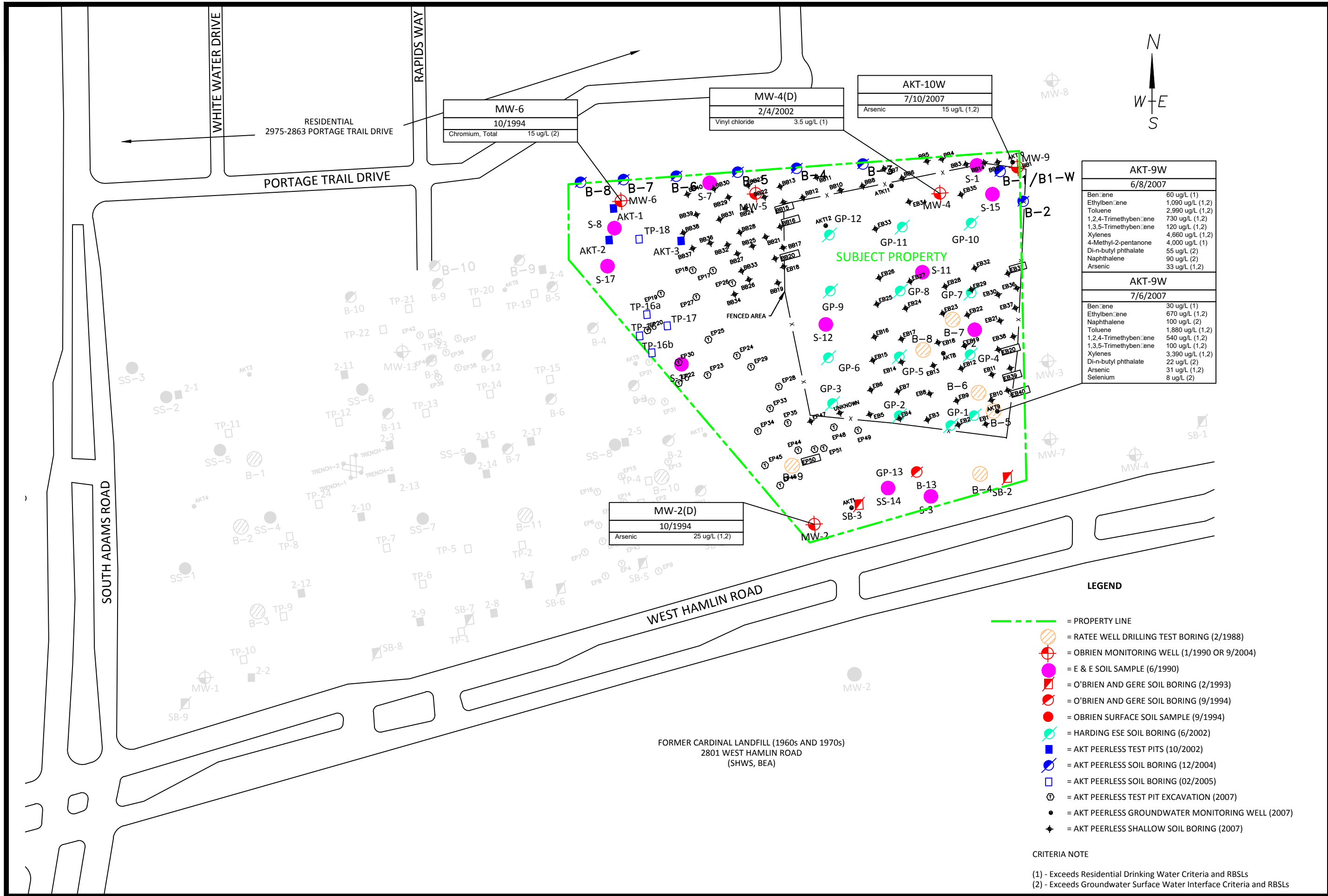
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SITE MAP WITH SOIL RESULTS EXCEEDING MDEQ RCC

PARCEL 15-29-101-023  
NE CORNER OF HAMLIN & ADAMS ROADS  
ROCHESTER HILLS, MICHIGAN  
PROJECT NUMBER : 3679F6-3-26





<b>MW-6</b>
10/1994
Chromium, Total 15 ug/L (2)

<b>MW-4(D)</b>
2/4/2002
Vinyl chloride 3.5 ug/L (1)

<b>AKT-10W</b>
7/10/2007
Arsenic 15 ug/L (1,2)

<b>MW-2(D)</b>
10/1994
Arsenic 25 ug/L (1,2)

<b>AKT-9W</b>
6/8/2007

Ben.:ene	60 ug/L (1)
Ethylben.:ene	1,090 ug/L (1,2)
Toluene	2,990 ug/L (1,2)
1,2,4-Trimethyben.:ene	730 ug/L (1,2)
1,3,5-Trimethyben.:ene	120 ug/L (1,2)
Xylenes	4,660 ug/L (1,2)
4-Methyl-2-pentanone	4,000 ug/L (1)
Di-n-butyl phthalate	55 ug/L (2)
Naphthalene	90 ug/L (2)
Arsenic	33 ug/L (1,2)

<b>AKT-9W</b>
7/6/2007

Ben.:ene	30 ug/L (1)
Ethylben.:ene	670 ug/L (1,2)
Naphthalene	100 ug/L (2)
Toluene	1,880 ug/L (1,2)
1,2,4-Trimethyben.:ene	540 ug/L (1,2)
1,3,5-Trimethyben.:ene	100 ug/L (1,2)
Xylenes	3,390 ug/L (1,2)
Di-n-butyl phthalate	22 ug/L (2)
Arsenic	31 ug/L (1,2)
Selenium	8 ug/L (2)

- LEGEND**
- = PROPERTY LINE
  - = RATEE WELL DRILLING TEST BORING (2/1988)
  - = O'BRIEN MONITORING WELL (1/1990 OR 9/2004)
  - = E & E SOIL SAMPLE (6/1990)
  - = O'BRIEN AND GERE SOIL BORING (2/1993)
  - = O'BRIEN AND GERE SOIL BORING (9/1994)
  - = O'BRIEN SURFACE SOIL SAMPLE (9/1994)
  - = HARDING ESE SOIL BORING (6/2002)
  - = AKT PEERLESS TEST PITS (10/2002)
  - = AKT PEERLESS SOIL BORING (12/2004)
  - = AKT PEERLESS SOIL BORING (02/2005)
  - = AKT PEERLESS TEST PIT EXCAVATION (2007)
  - = AKT PEERLESS GROUNDWATER MONITORING WELL (2007)
  - = AKT PEERLESS SHALLOW SOIL BORING (2007)

**CRITERIA NOTE**

(1) - Exceeds Residential Drinking Water Criteria and RBSLs  
 (2) - Exceeds Groundwater Surface Water Interface Criteria and RBSLs

DRAWN BY: OGO  
 DATE: 01/05/2017  
 SCALE: 1" = 150'  
**FIGURE 4**

**SITE MAP WITH GROUNDWATER RESULTS EXCEEDING MDEQ RCC**

PARCEL 15-29-101-023  
 NE CORNER OF HAMLIN & ADAMS ROADS  
 ROCHESTER HILLS, MICHIGAN  
 PROJECT NUMBER : 3679F6-3-26

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## **Appendix B**

### **Resolutions**

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## Appendix C

### Executed Reimbursement Agreement

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**Appendix D**  
**Supplemental Material**

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