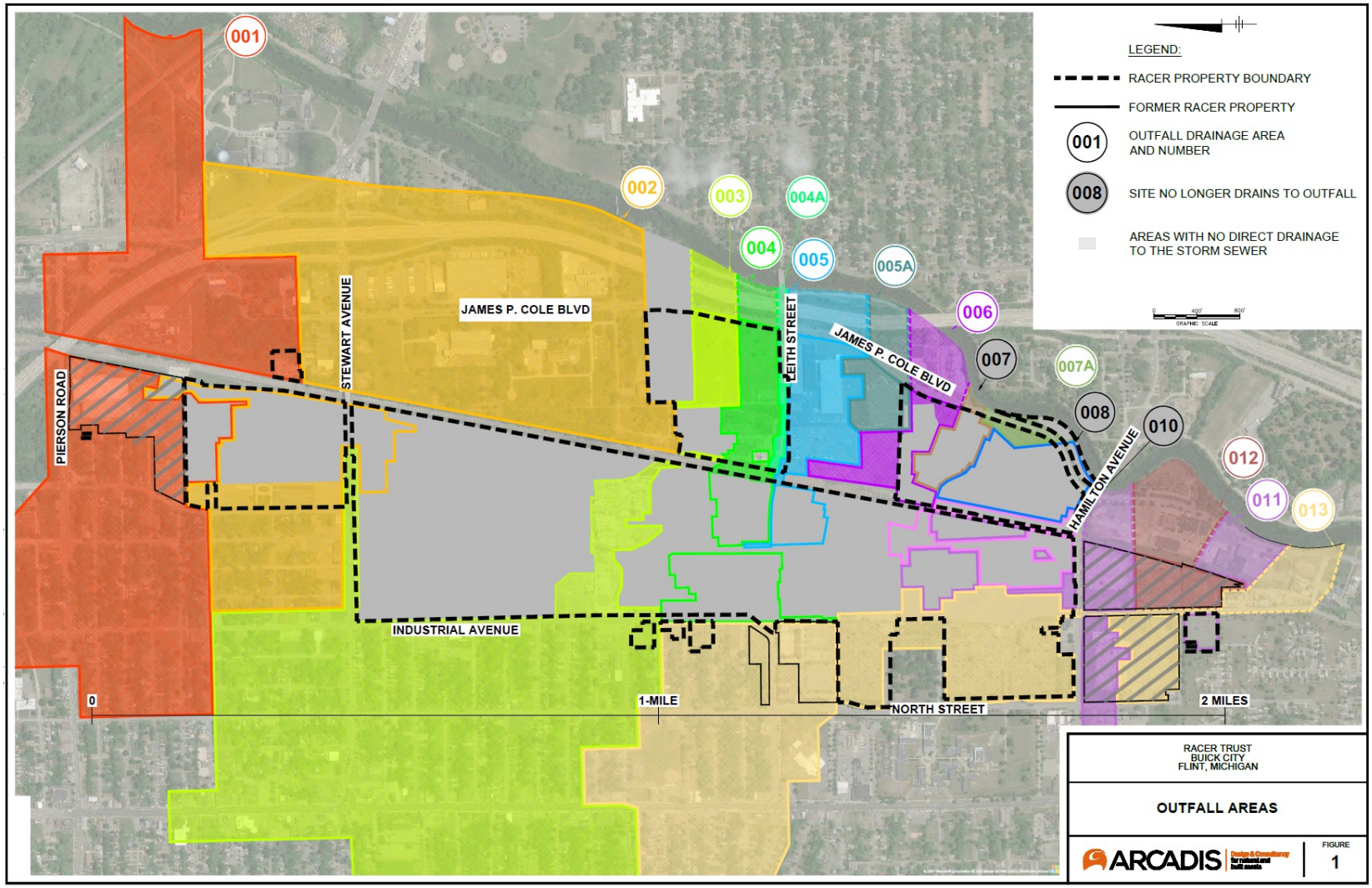
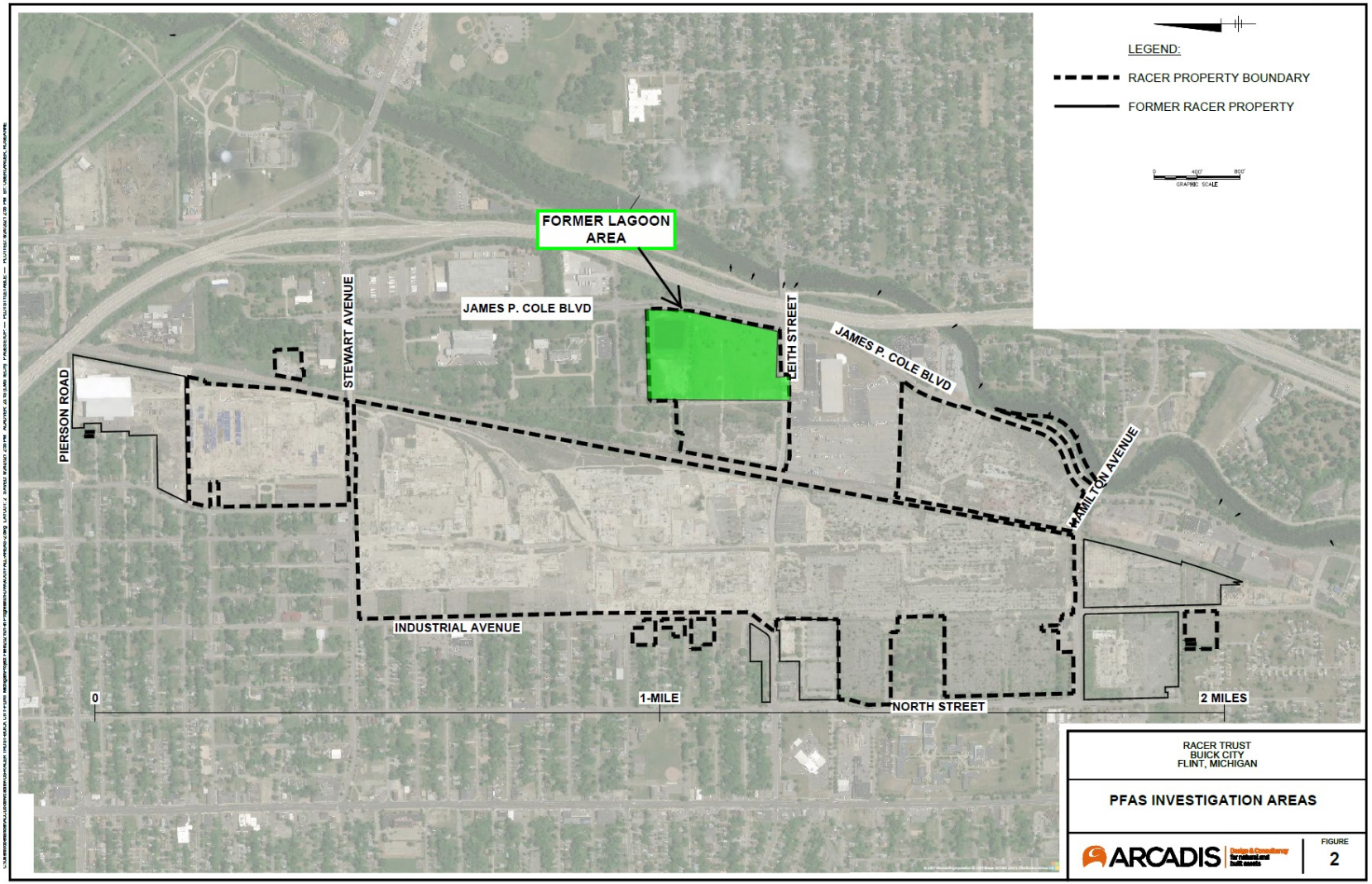
ARCADIS Design & Consultancy for natural and built assets

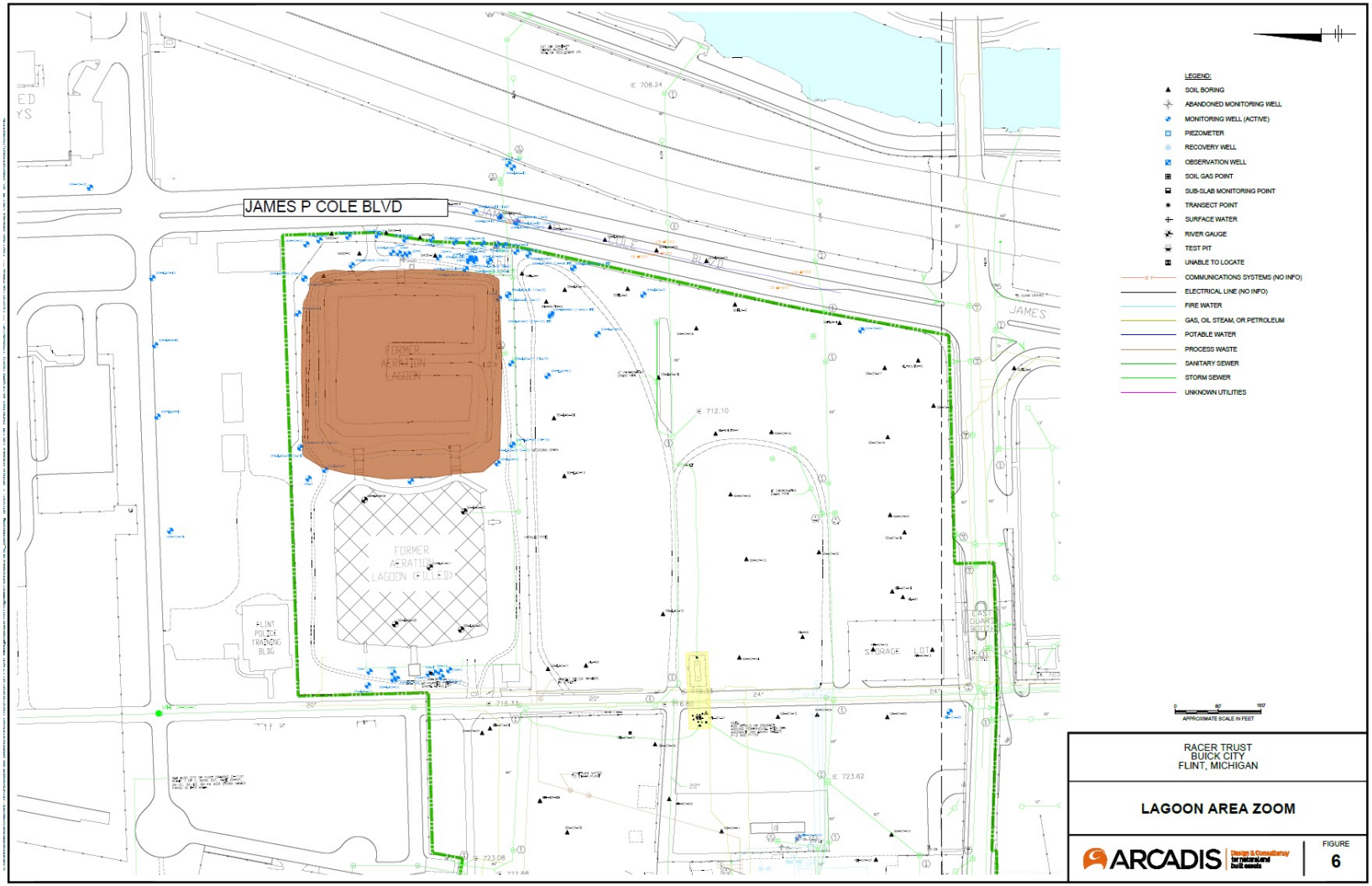
BUICK CITY SITE PUBLIC MEETING

RACER Trust

July 14, 2022

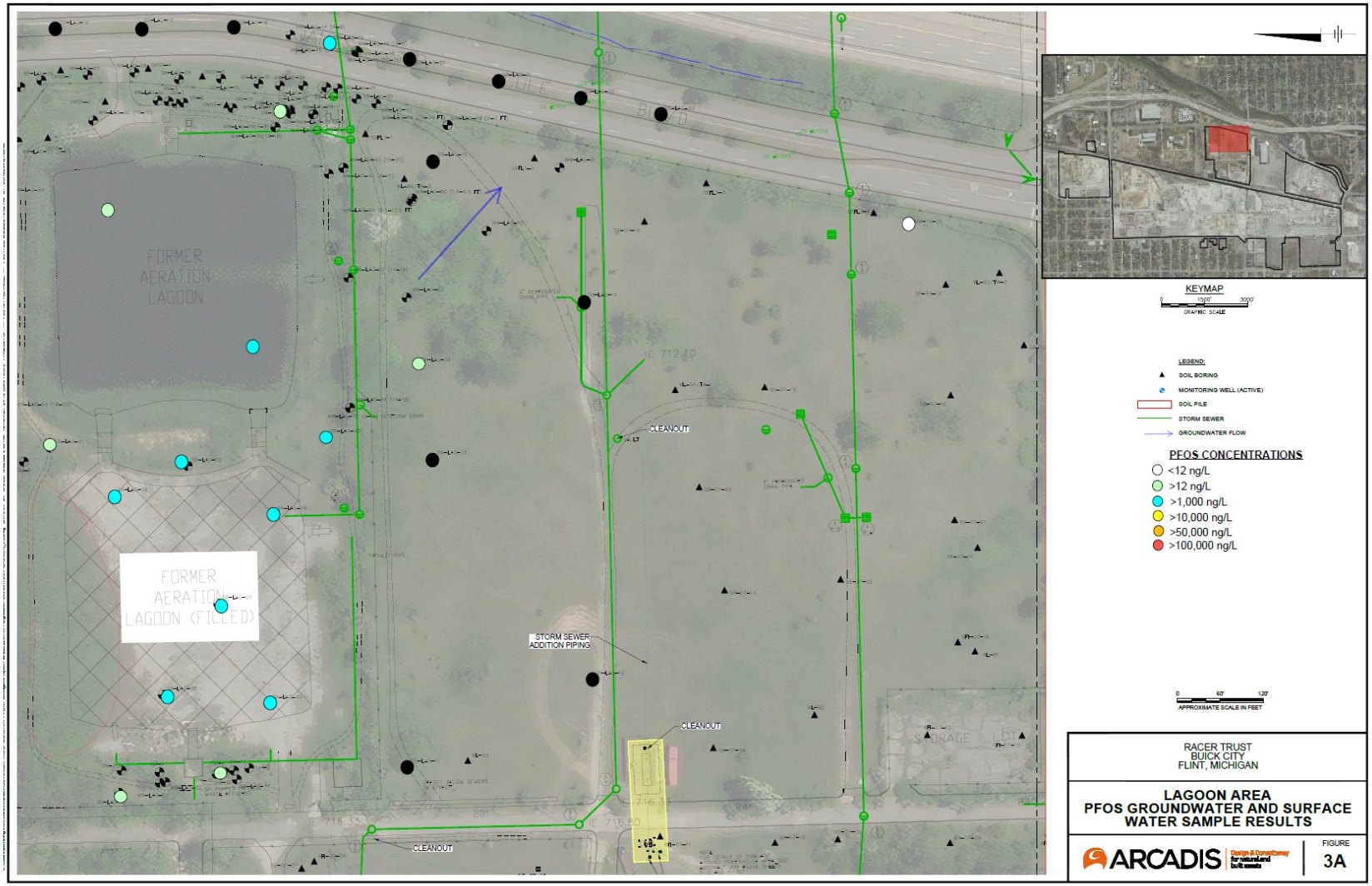

001
002
003
004A
004
005
005A
006
007
007A
008
010
012
011
013
LEGEND:
RACER PROPERTY BOUNDARY
FORMER RACER PROPERTY
001
OUTFALL DRAINAGE AREA AND NUMBER
008
SITE NO LONGER DRAINS TO OUTFALL
AREAS WITH NO DIRECT DRAINAGE TO THE STORM SEWER
GRAPHIC SCALE
JAMES P. COLE BLVD
STEWART AVENUE
KEITH STREET
JAMES P. COLE BLVD
HAMILTON AVENUE
PIERSON ROAD
INDUSTRIAL AVENUE
NORTH STREET
0
1-MILE
2 MILES
RACER TRUST
BUICK CITY
FLINT, MICHIGAN
OUTFALL AREAS
ARCADIS
FIGURE
1

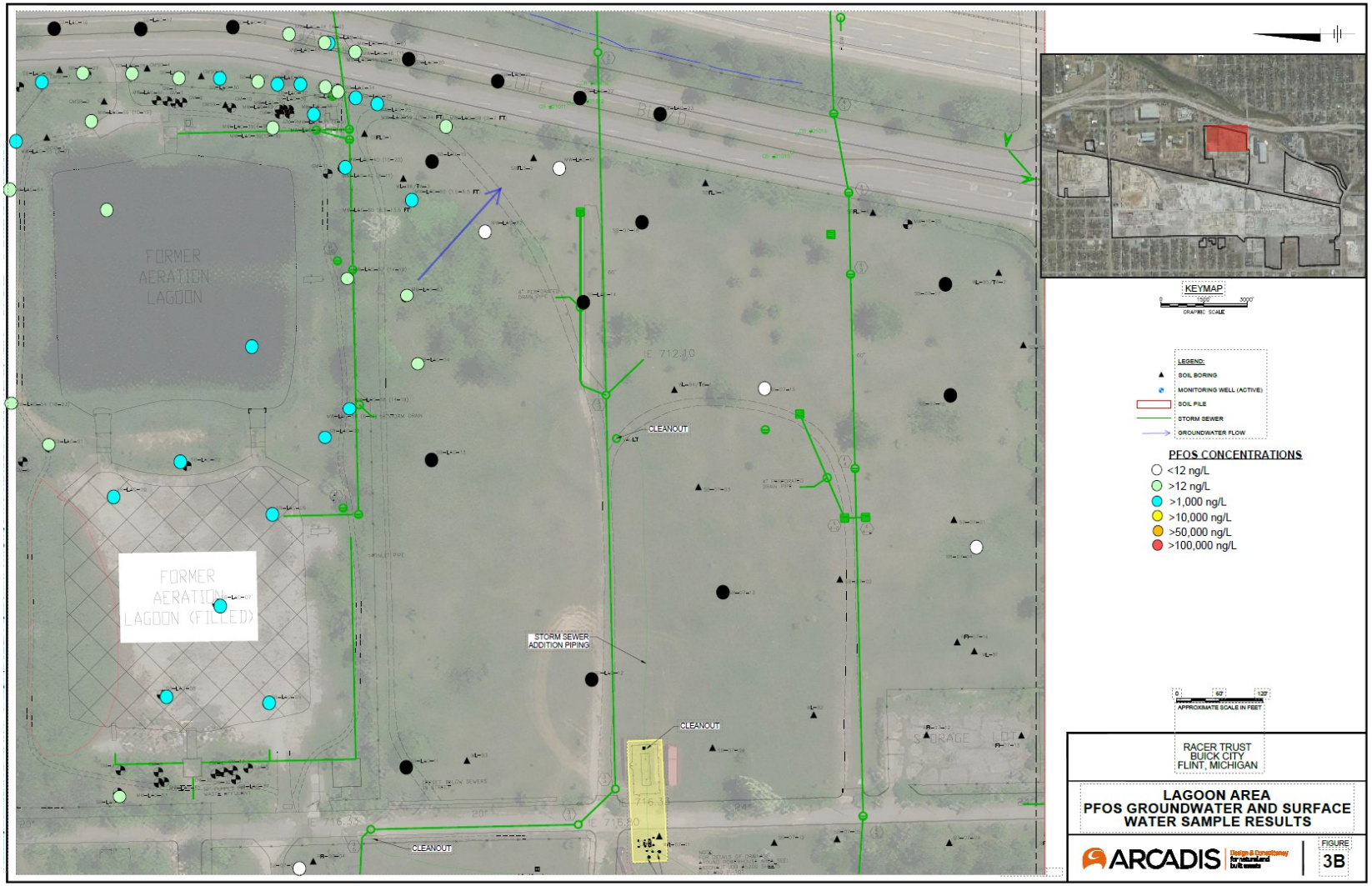

LEGEND:
RACER PROPERTY BOUNDARY
FORMER RACER PROPERTY
GRAPHIC SCALE
FORMER LAGOON AREA
JAMES P. COLE BLVD
STEWART AVENUE
KEITH STREET
JAMES P. COLE BLVD
PIERSON ROAD
HAMILTON AVENUE
INDUSTRIAL AVENUE
0
1-MILE
NORTH STREET
2 MILES
RACER TRUST
BUICK CITY
FLINT, MICHIGAN
PFAS INVESTIGATION AREAS
ARCADIS Design & Consultancy for natural and built assets
FIGURE
2


JAMES P COLE BLVD
FORMER AERATION LAGOON
FORMER AERATION LAGOON (FILLED)
FLINT POLICE TRAINING BLDG
LEGEND:
SOIL BORING
ABANDONED MONITORING WELL
MONITORING WELL (ACTIVE)
PIEZOMETER
RECOVERY WELL
OBSERVATION WELL
SOIL GAS POINT
SUB-SLAB MONITORING POINT
TRANSECT POINT
SURFACE WATER
RIVER GAUGE
TEST PIT
UNABLE TO LOCATE
COMMUNICATIONS SYSTEMS (NO INFO)
ELECTRICAL LINE (NO INFO)
FIRE WATER
GAS, OIL STEAM, OR PETROLEUM
POTABLE WATER
PROCESS WASTE
SANITARY SEWER
STORM SEWER
UNKNOWN UTILITIES
APPROXIMATE SCALE IN FEET
RACER TRUST
BUICK CITY
FLINT, MICHIGAN
LAGOON AREA ZOOM
ARCADIS Design & Consultancy for natural and built assets
FIGURE
6

ARCADIS Design & Consultancy for natural and built assets

April – October 2021 PFOS Data

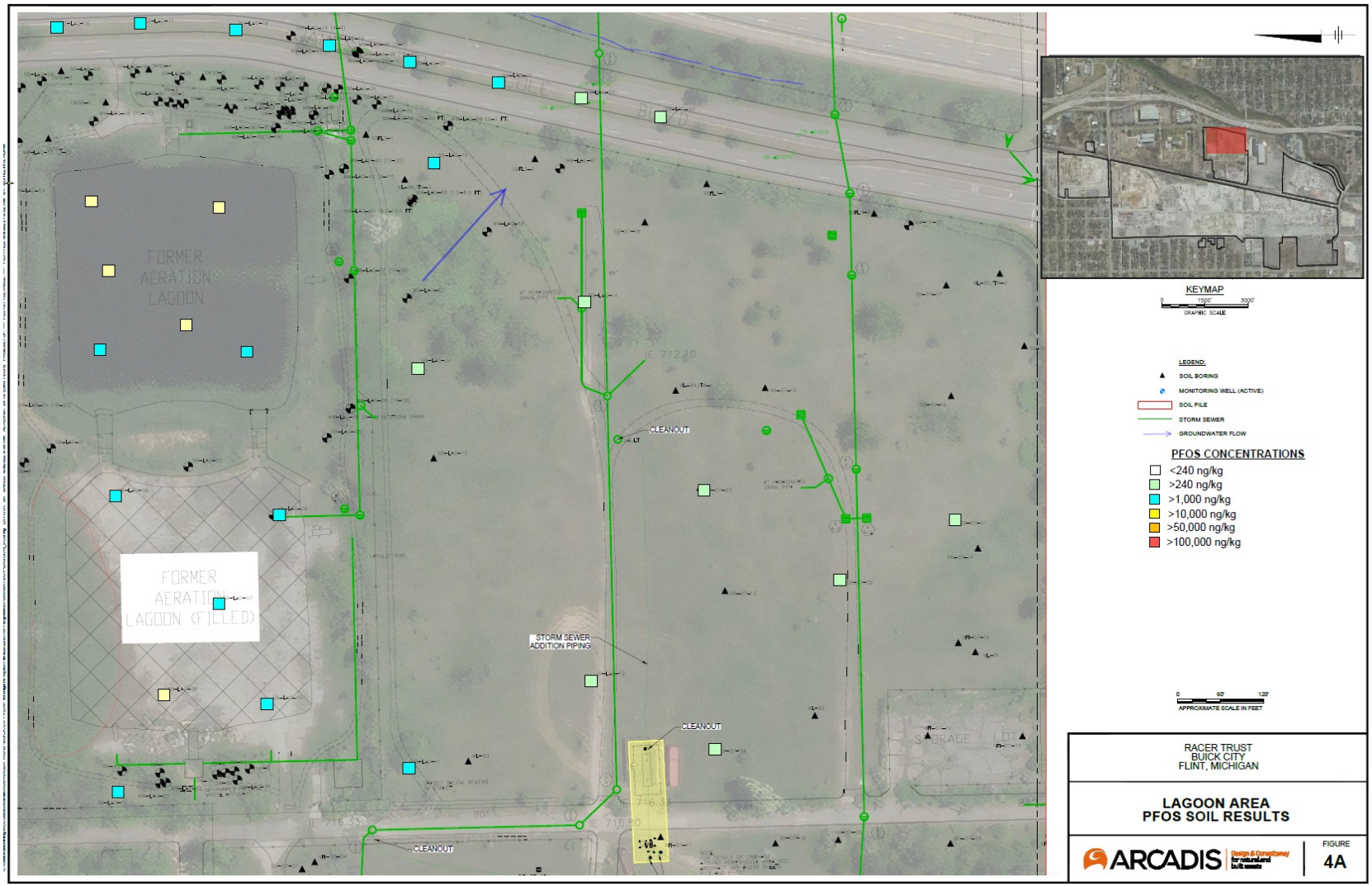


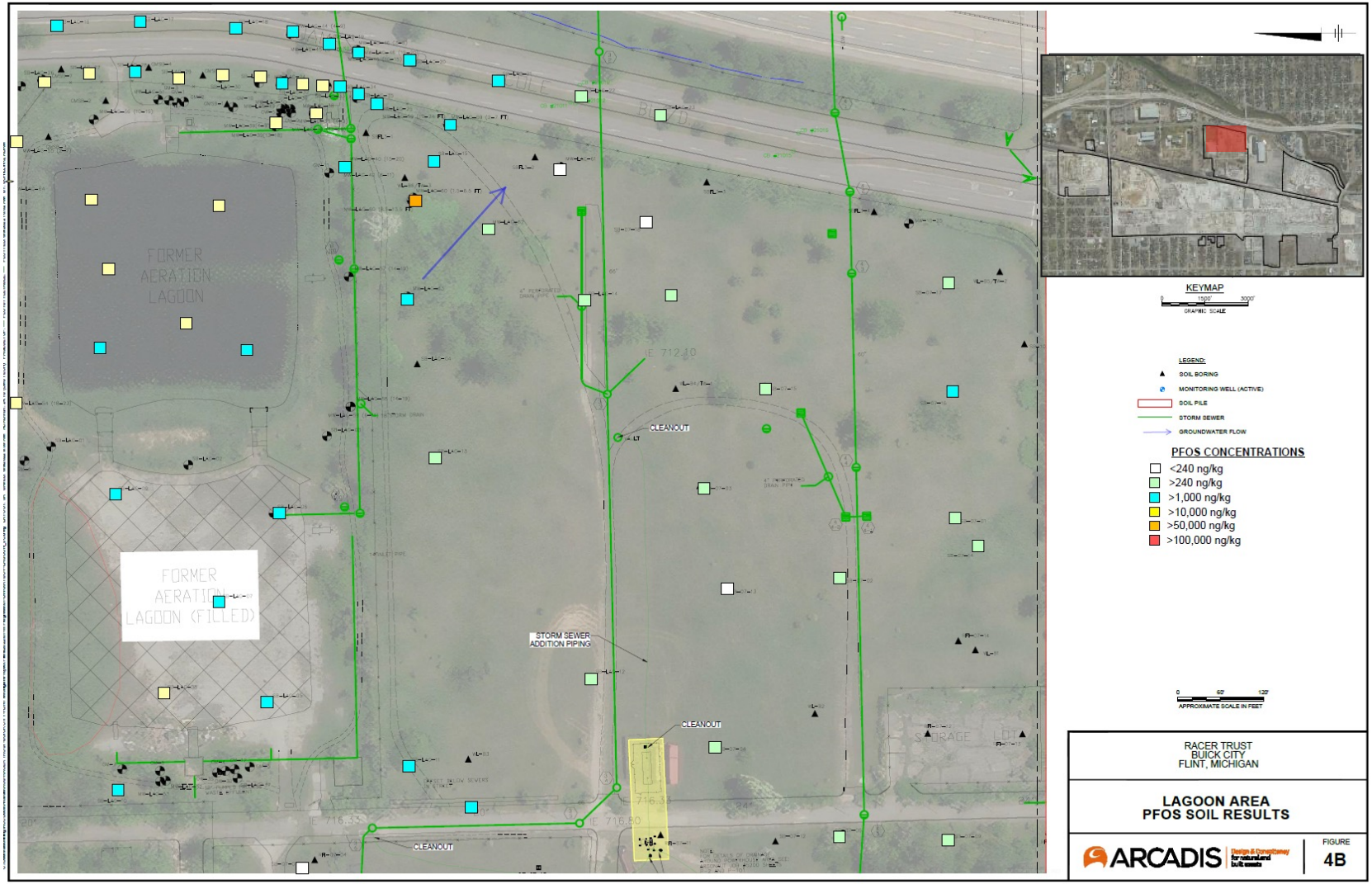


November 2021 – May 2022 PFOS Data

ARCADIS Design & Consultancy for natural and built assets

April – October 2021 PFOS Data





November 2021 – May 2022 PFOS Data

June 9

June 15

July 6

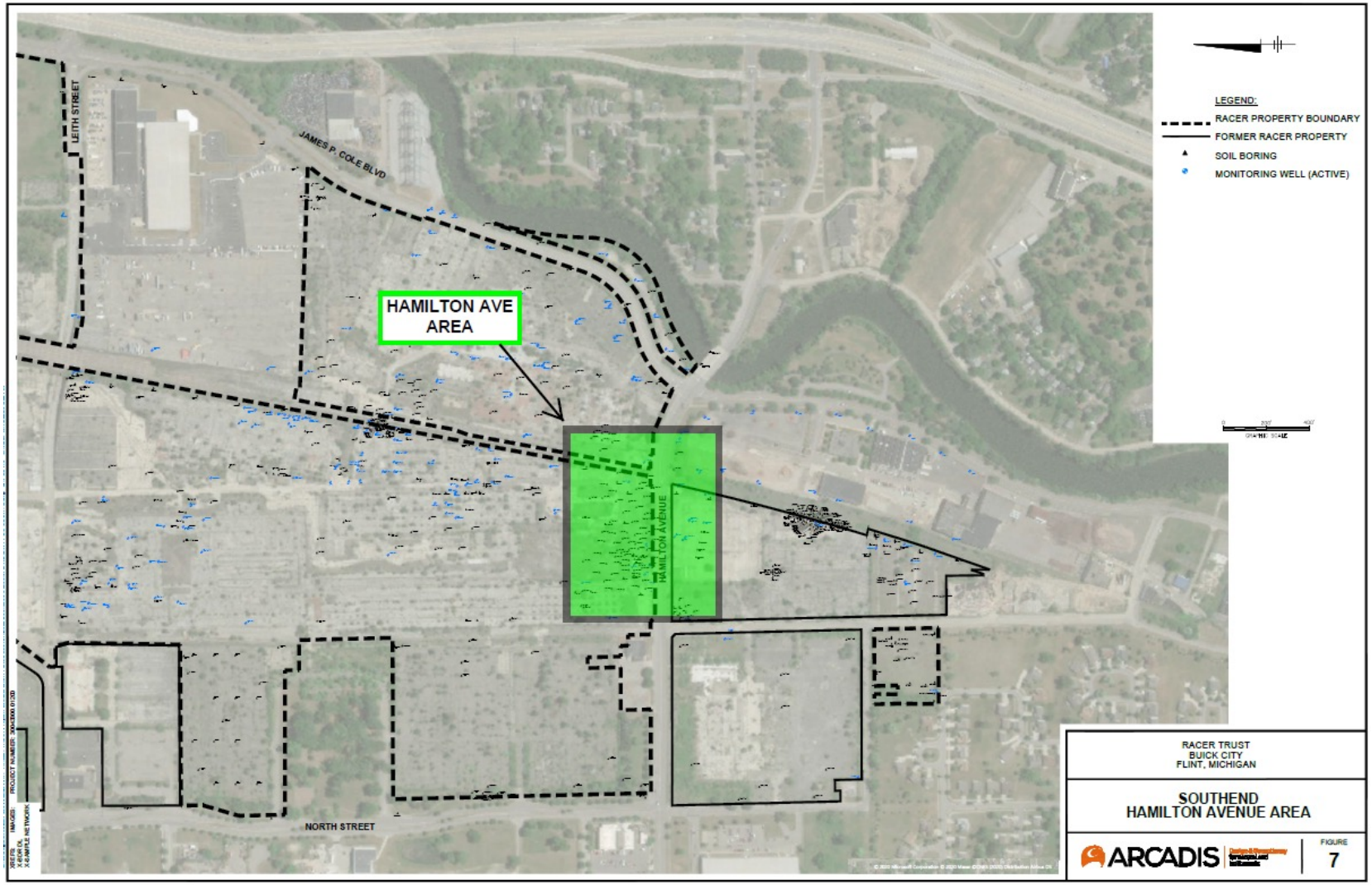
July 6

ARCADIS Design & Consultancy for natural and built assets

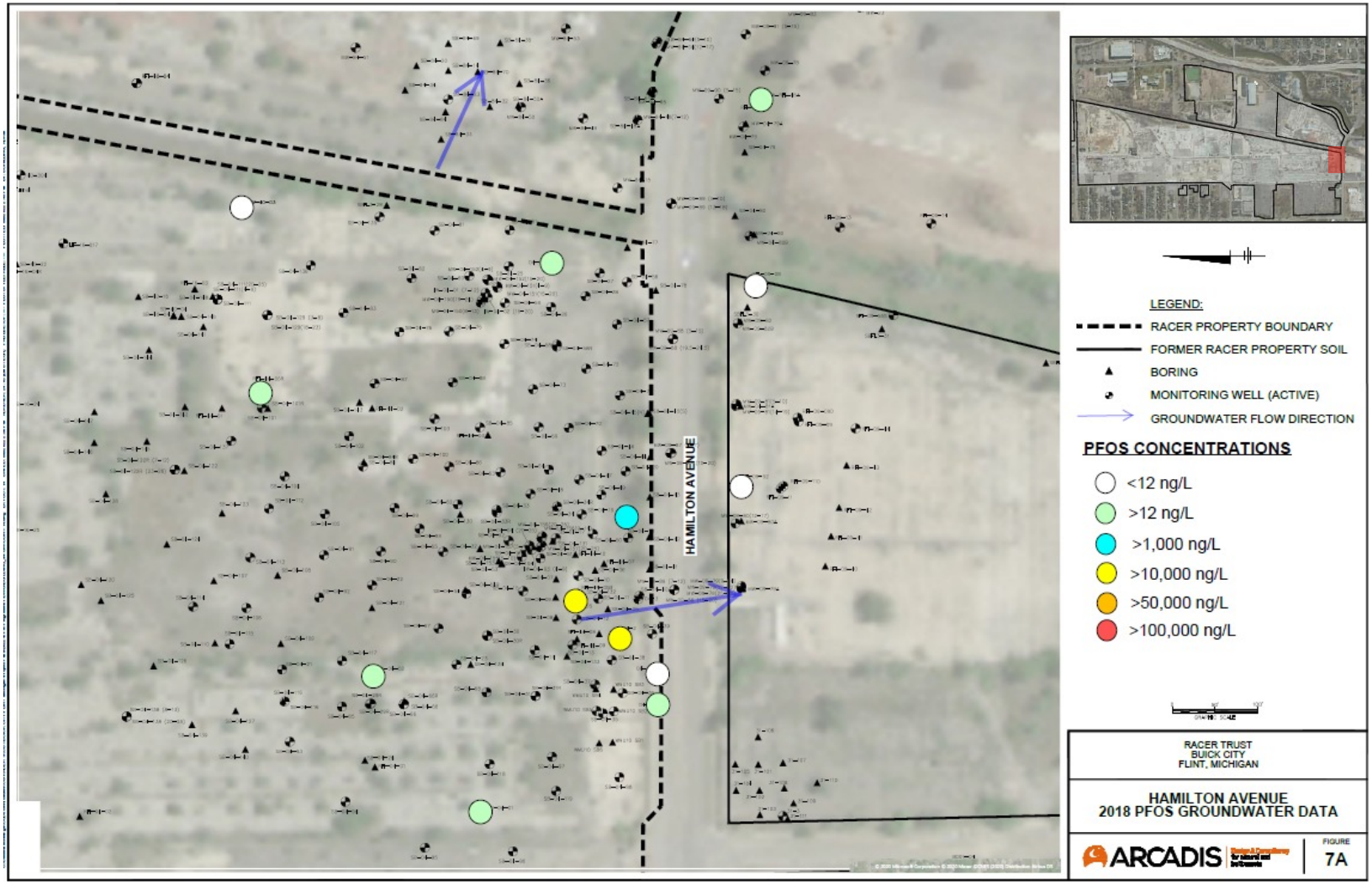
July 6

ARCADIS Design & Consultancy for natural and built assets

July 6

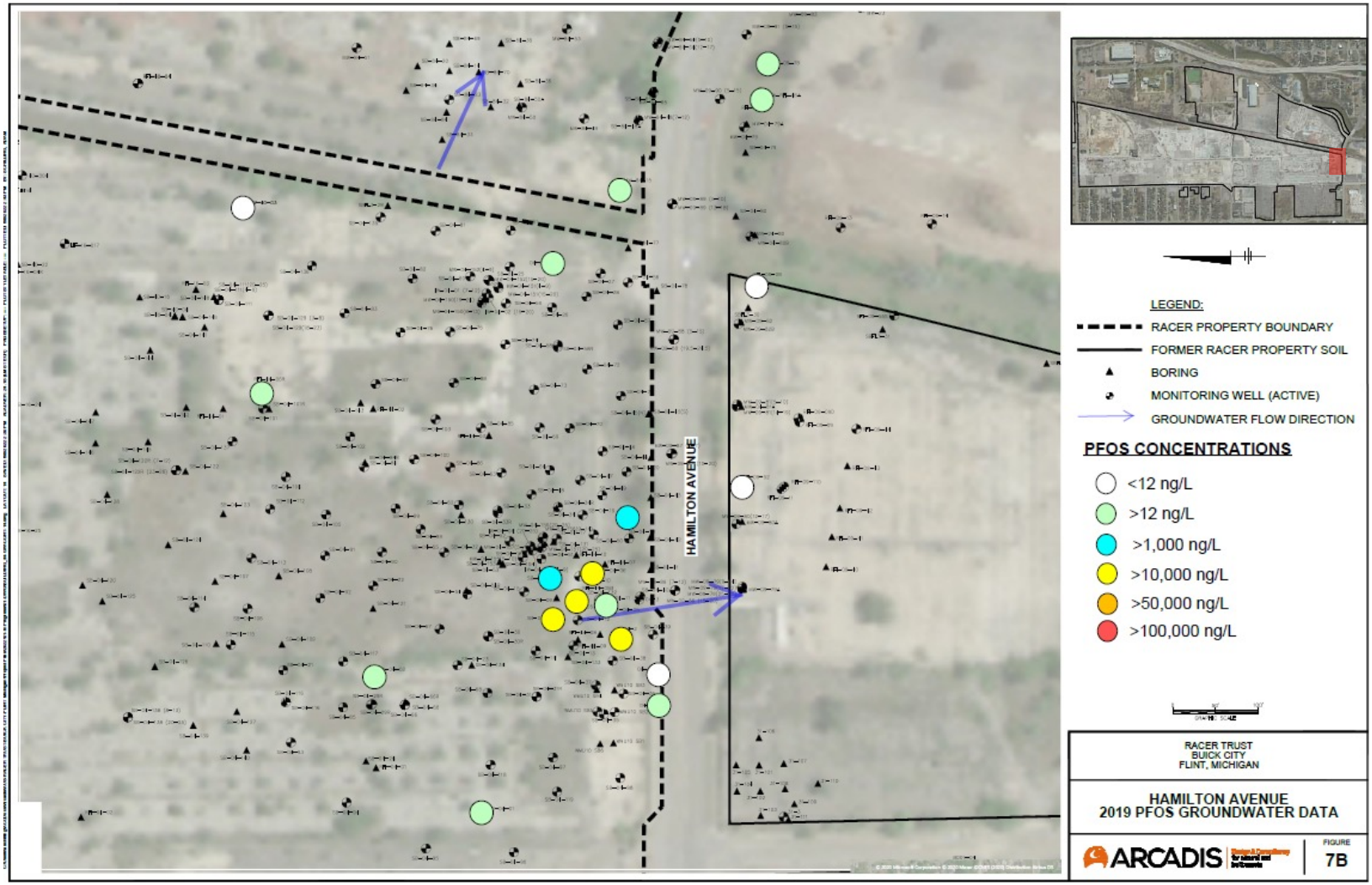

LEITH STREET
JAMES P. COLE BLVD
HAMILTON AVE AREA
HAMILTON AVENUE
NORTH STREET
LEGEND:
RACER PROPERTY BOUNDARY
FORMER RACER PROPERTY
SOIL BORING
MONITORING WELL (ACTIVE)
RACER TRUST
BUICK CITY
FLINT, MICHIGAN
SOUTHEND
HAMILTON AVENUE AREA
ARCADIS
FIGURE
7

Hamilton Ave Area



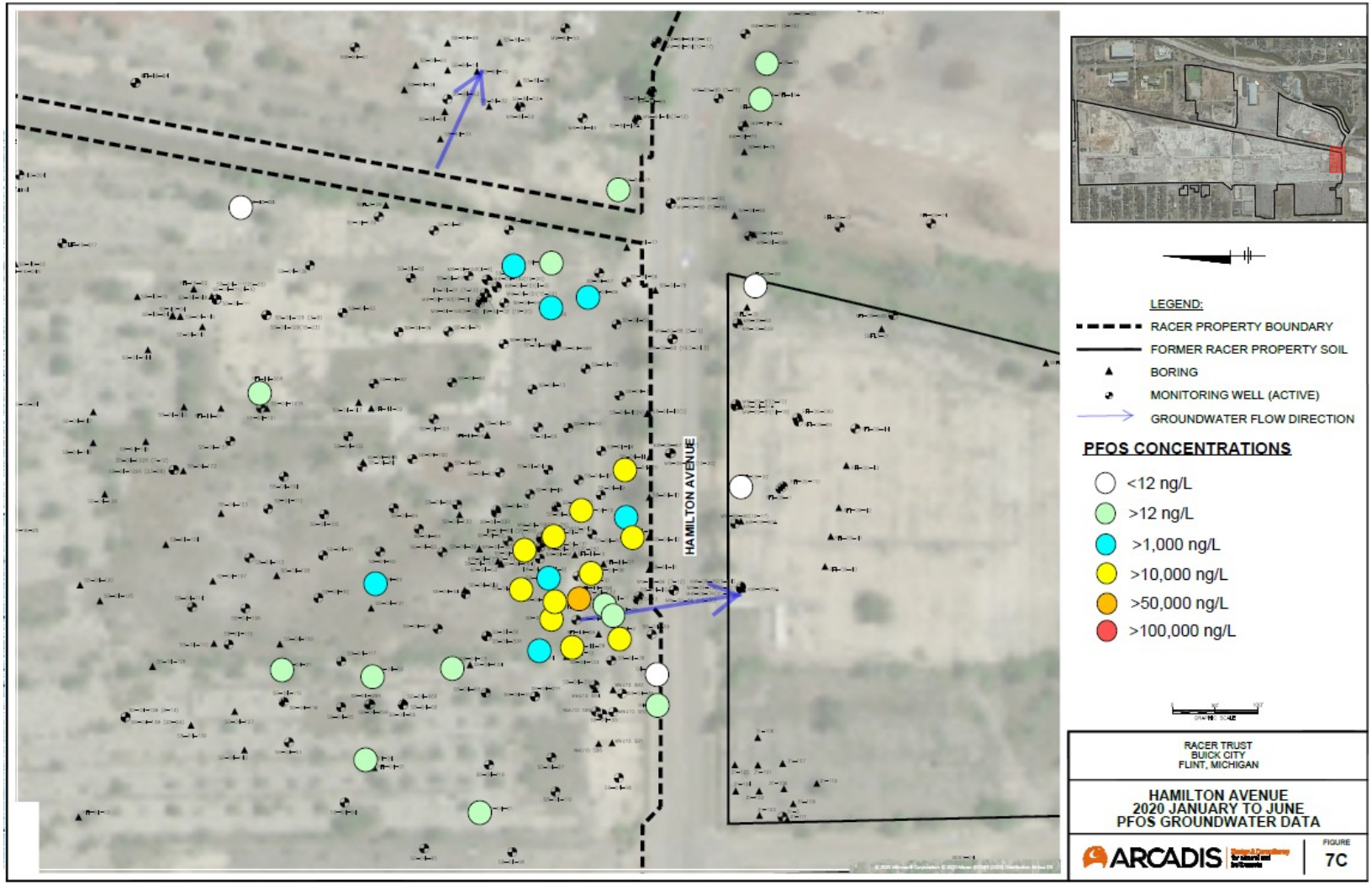
2018 PFOS Groundwater Data

Hamilton Ave Area



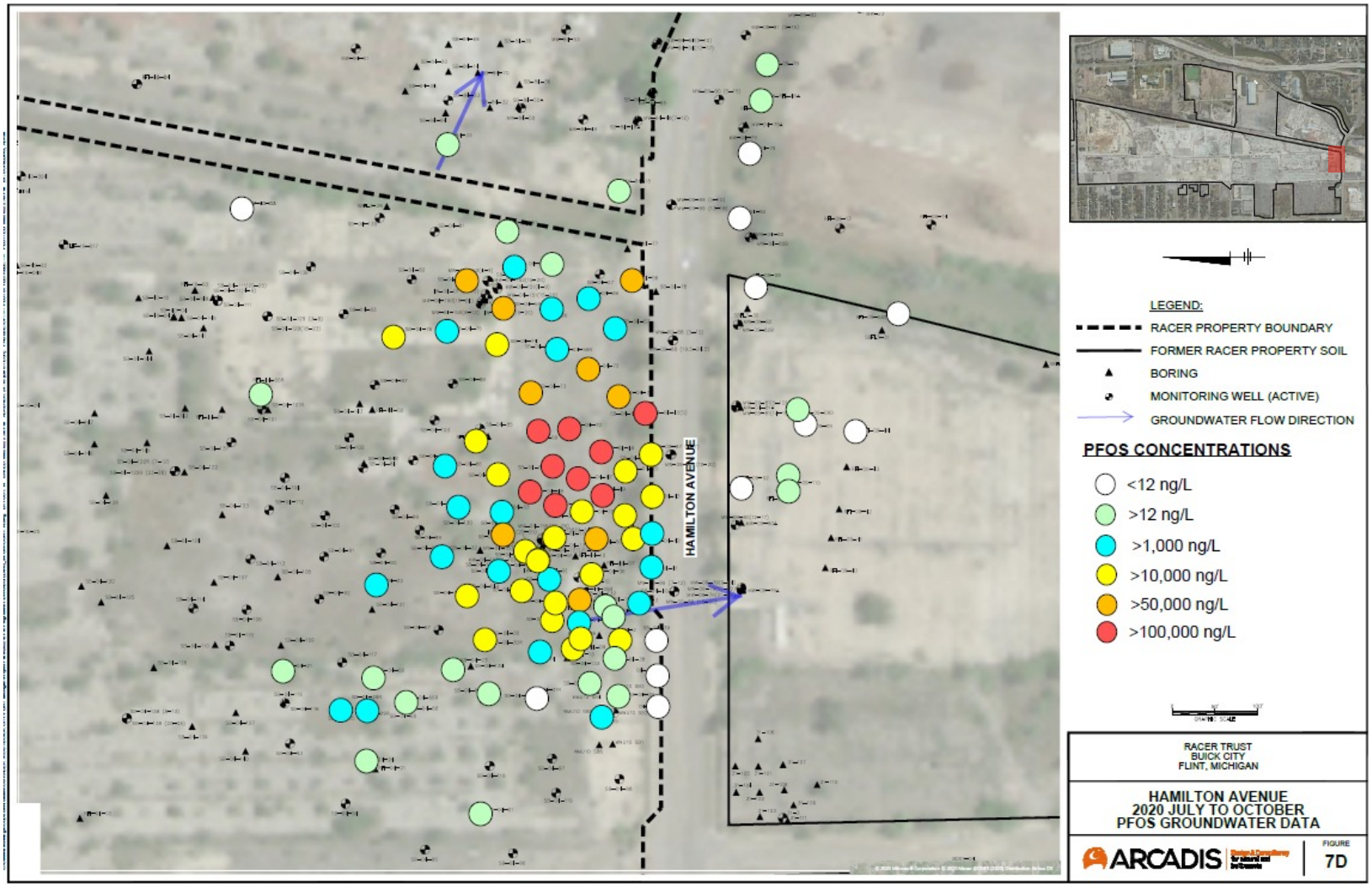
2019 PFOS Groundwater Data

Hamilton Ave Area



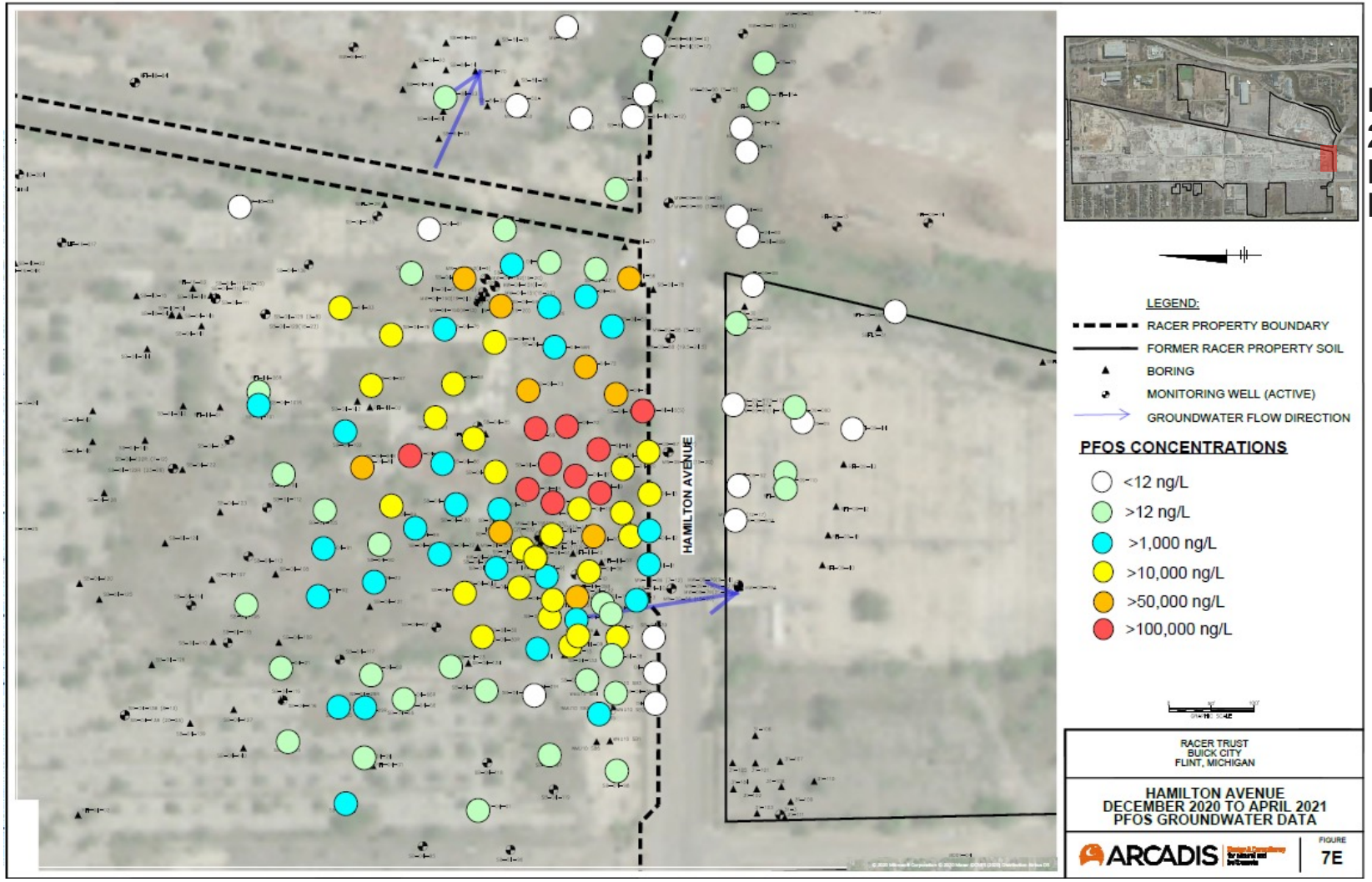
January – June 2020 PFOS Groundwater Data

Hamilton Ave Area



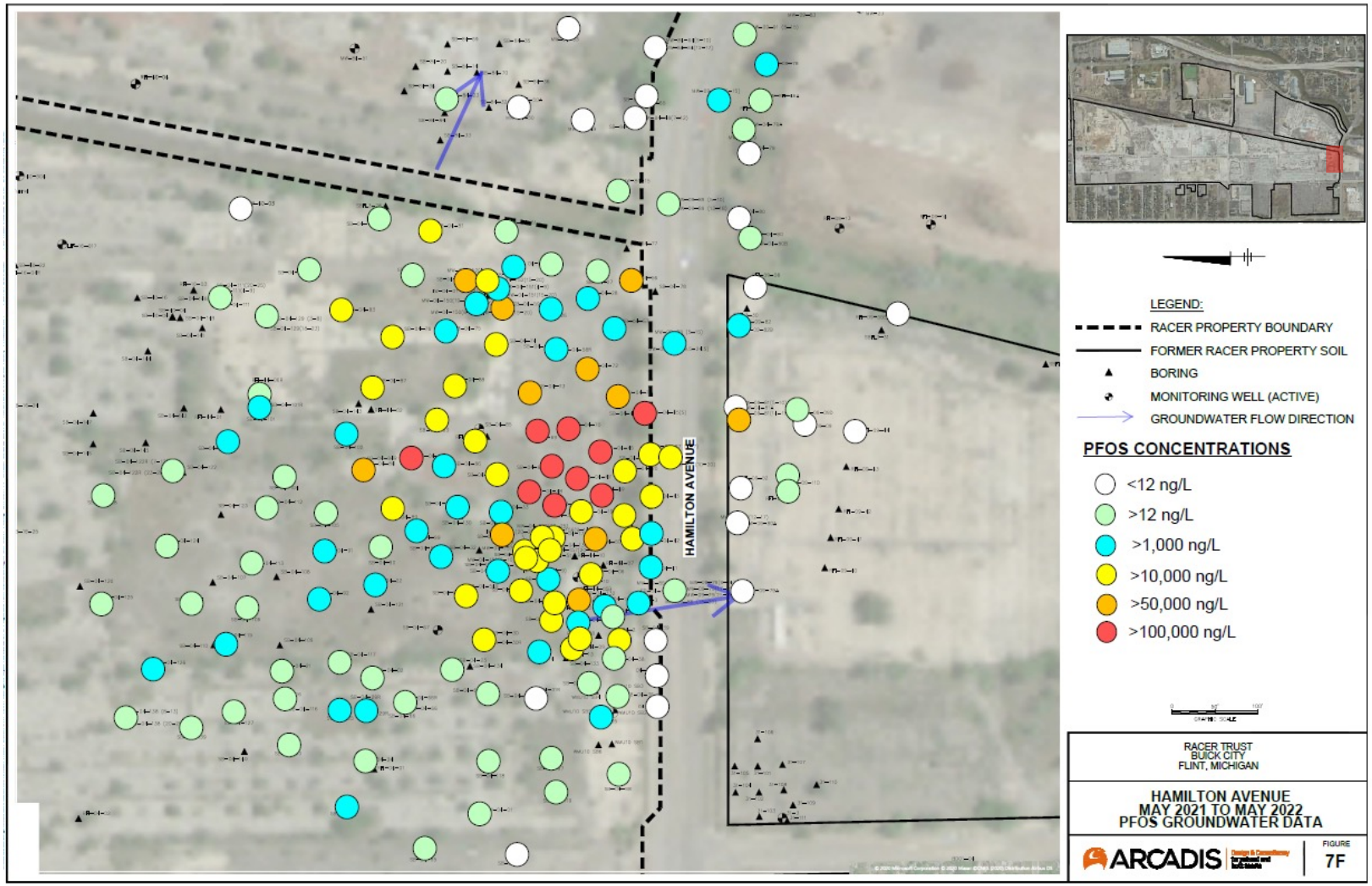
July – October 2020 PFOS Groundwater Data

Hamilton Ave Area



December 2020 – April 2021
PFOS Groundwater Data

Hamilton Ave Area



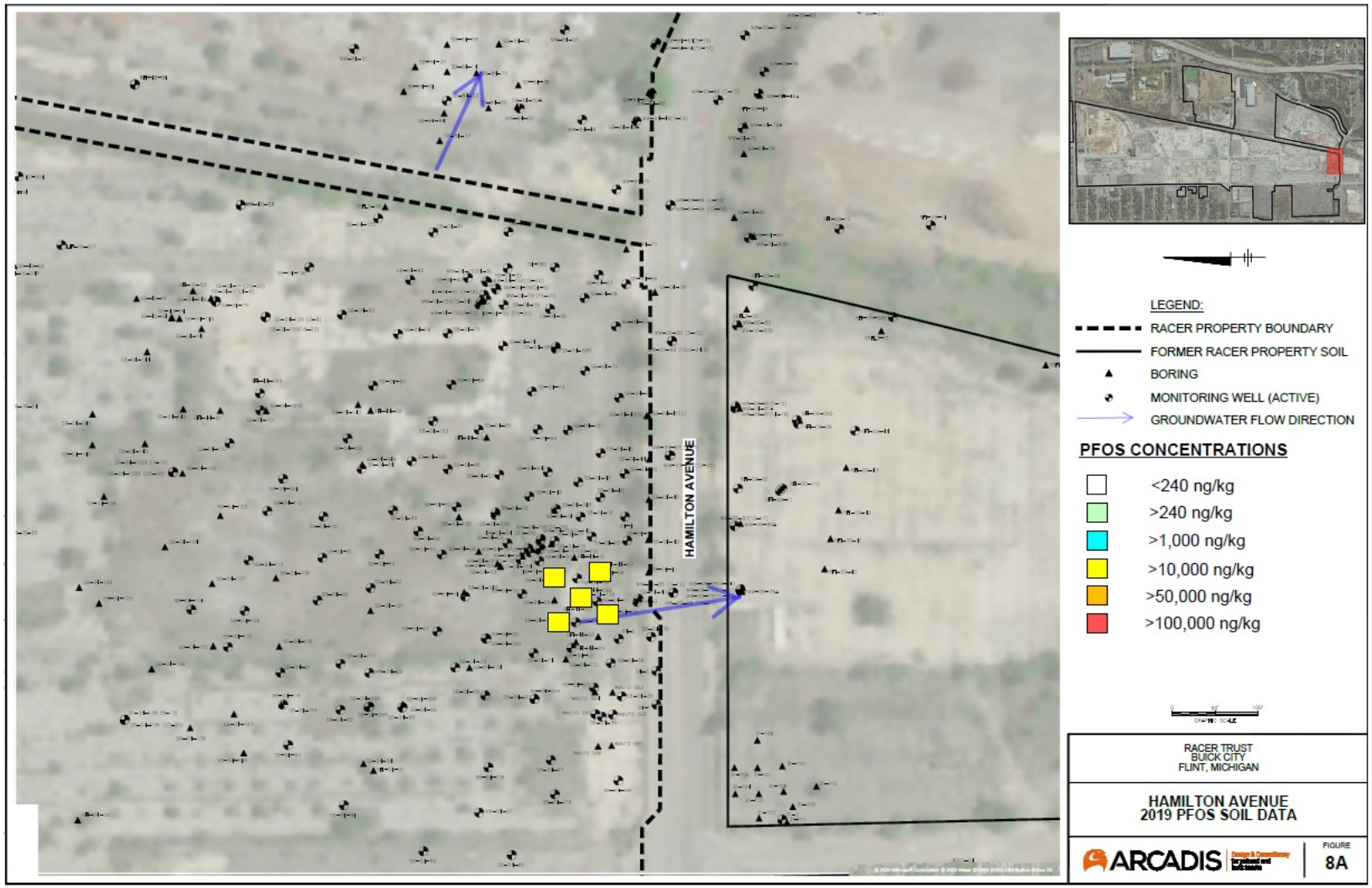
May 2021 – May 2022 PFOS Groundwater Data

6 wells installed in Hamilton Avenue

13 wells installed south of Hamilton Avenue

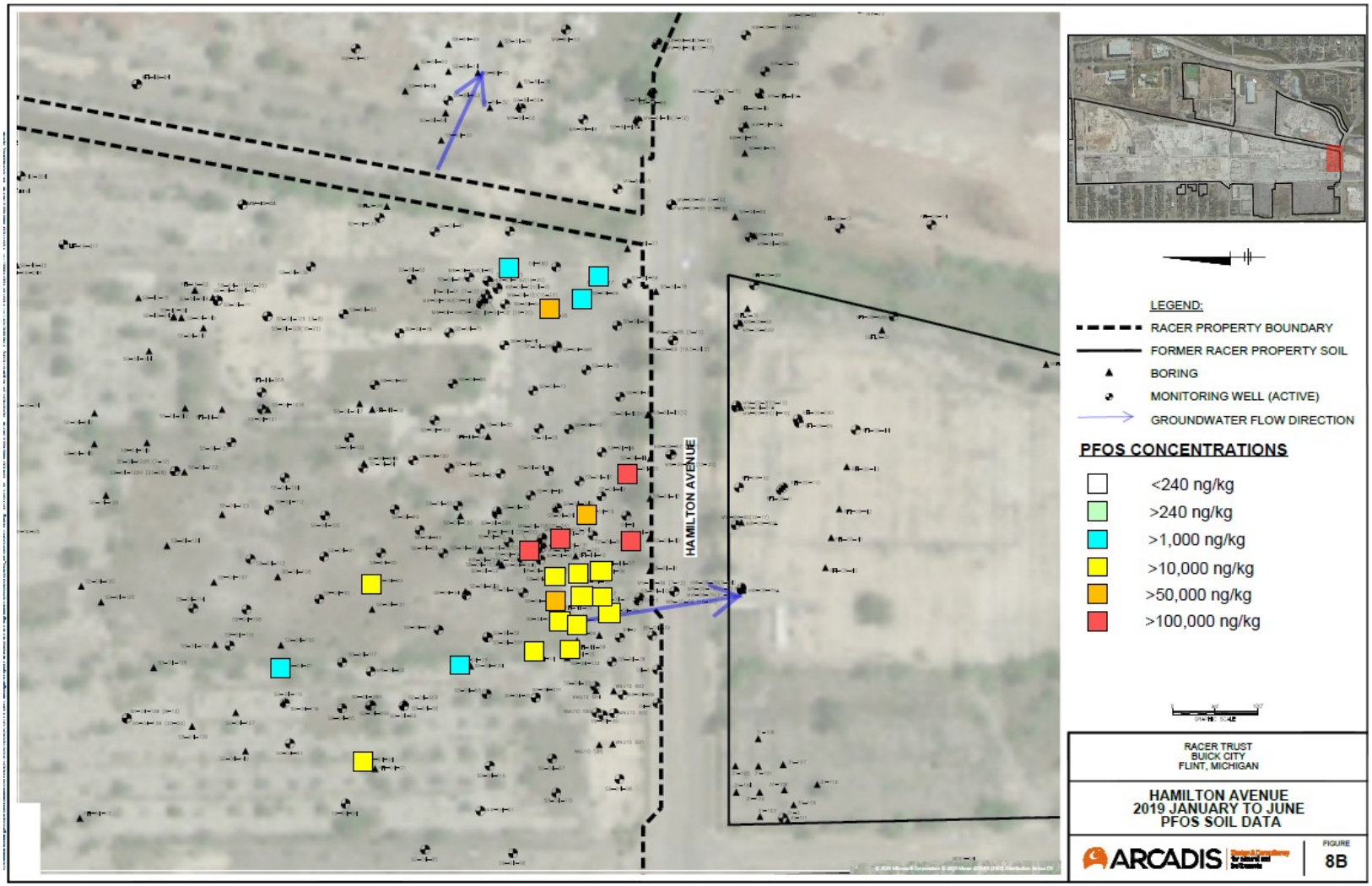
22 wells installed to the northwest for additional delineation

Hamilton Ave Area



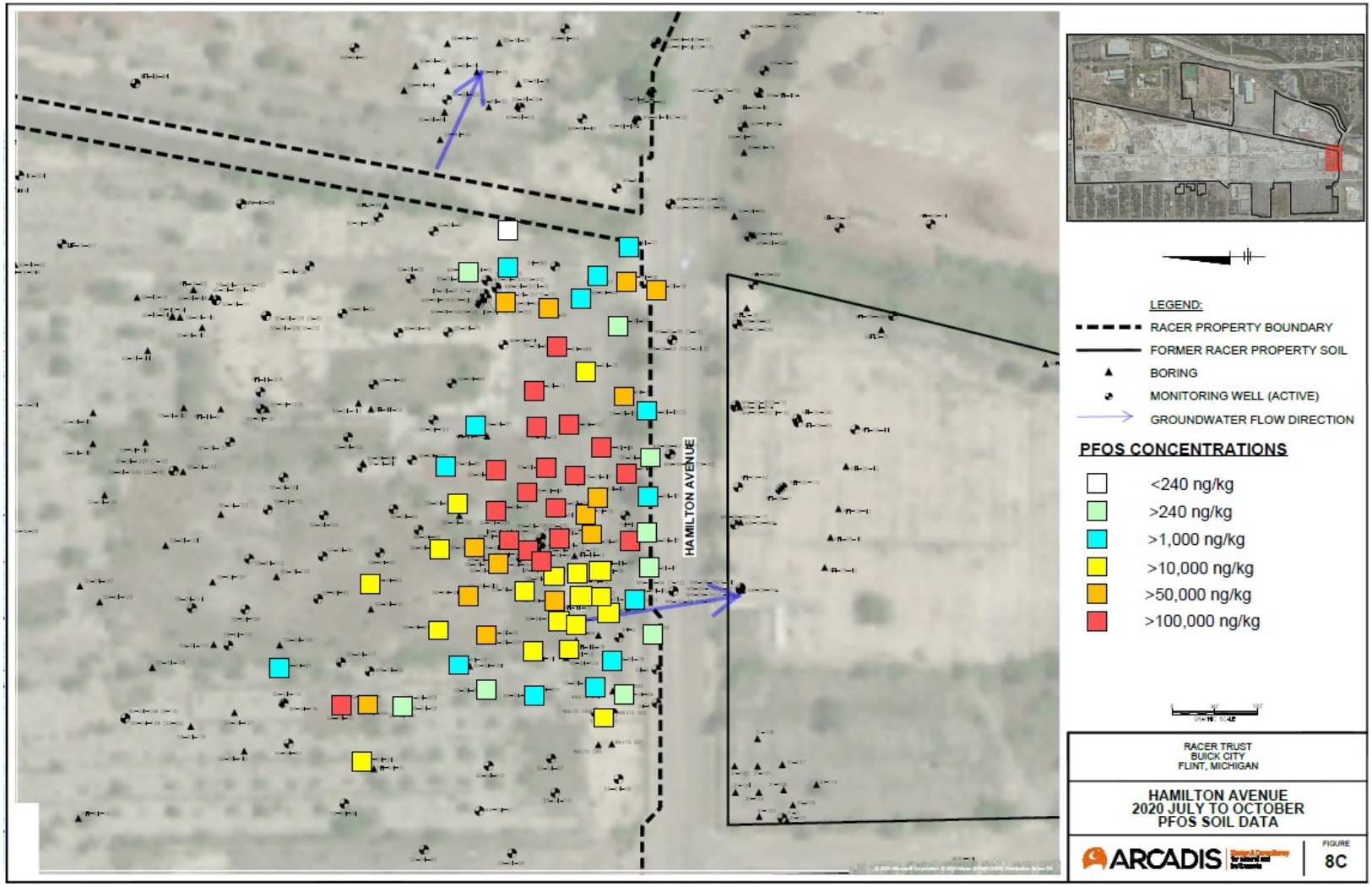
2019
PFOS Soil Data

Hamilton Ave Area



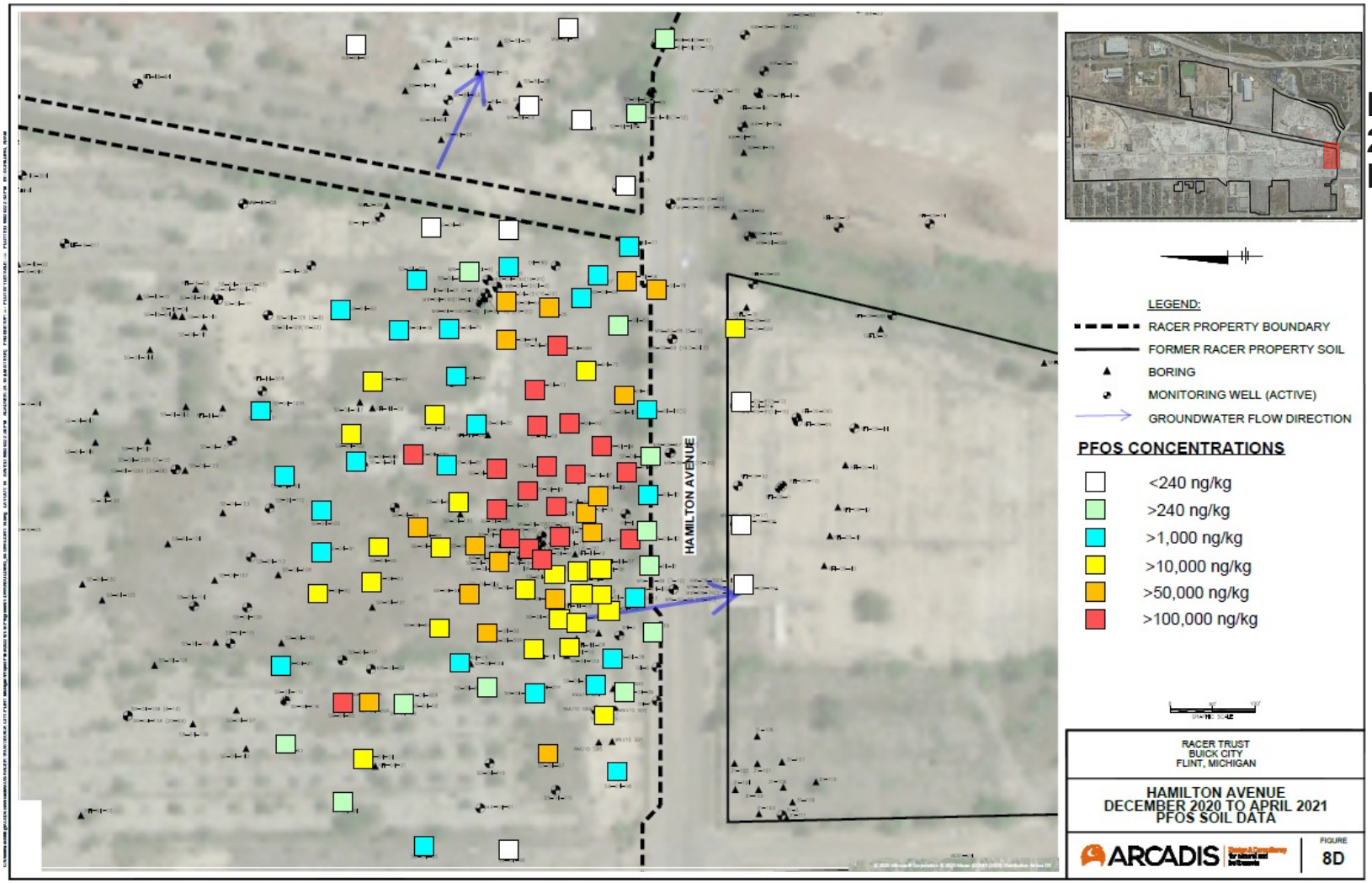
January – June 2020 PFOS Soil Data

Hamilton Ave Area



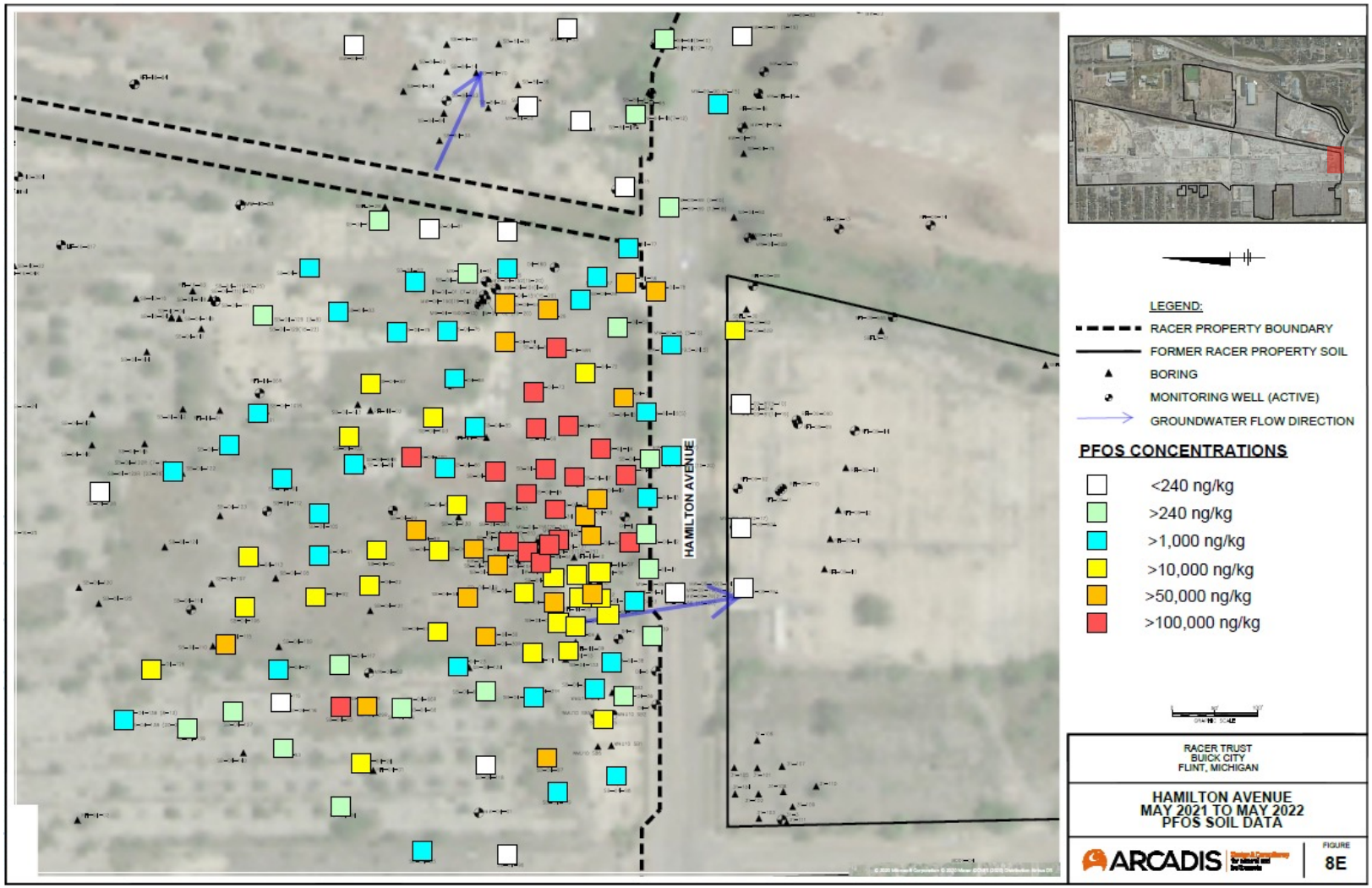
July – October 2020 PFOS Soil Data

Hamilton Ave Area



December 2020 – April 2021
PFOS Soil Data

Hamilton Ave Area

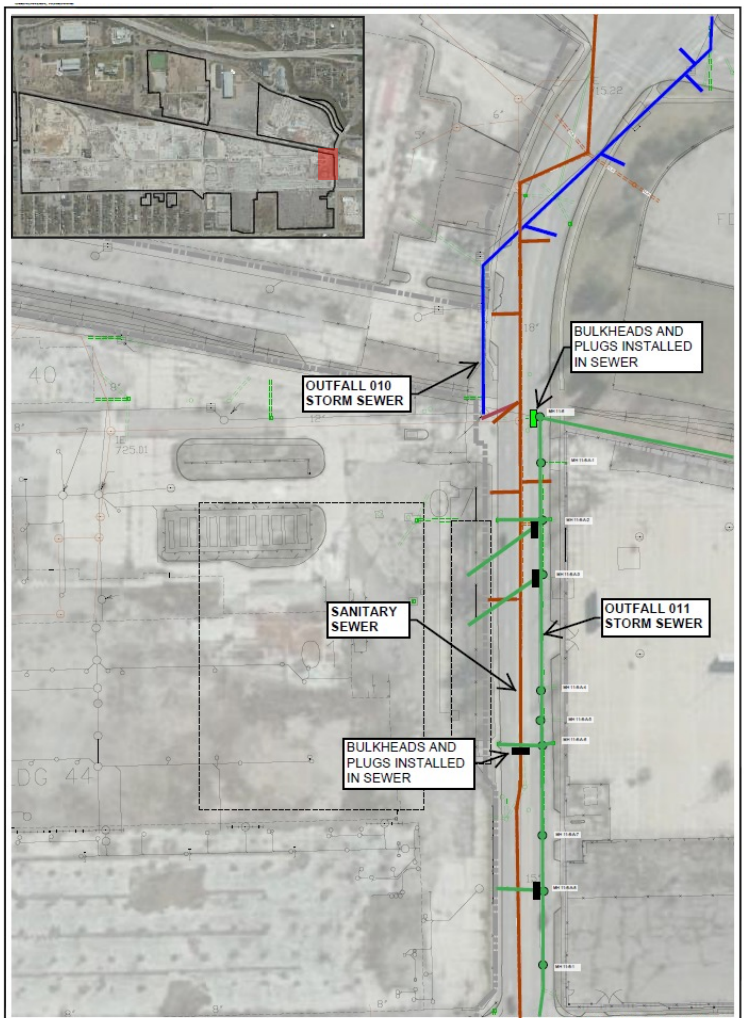


May 2021 – May 2022 PFOS Soil Data

10 borings installed south of Hamilton Avenue

17 borings installed to the northwest for additional delineation

Hamilton Avenue – Outfall 010 and 011 Storm Sewers



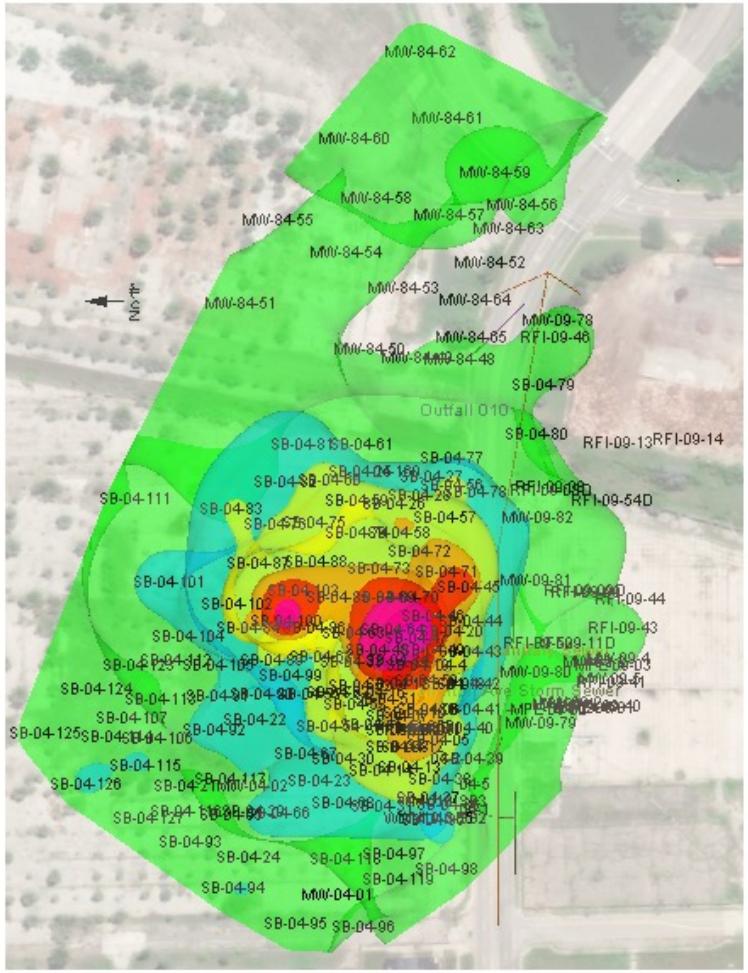
Outfall 010

- Bulkhead installation completed in September 2021 to eliminate contributions from the Site.
- Before bulkhead installation PFOS concentrations ranged from 1,500 ng/L to 3,000 ng/L.
- Most recent sample indicates PFOS concentration at 550 ng/L in April 2022.

Outfall 011

- Permanent bulkheads installed in December 2021 to eliminate contributions from the Site.
- Most recent samples indicate groundwater is still entering the Outfall 011 storm sewer.
- Additional work is planned to address sewer lines and manholes servicing the road.

Hamilton Ave Area 3-D Model, Sept 2021



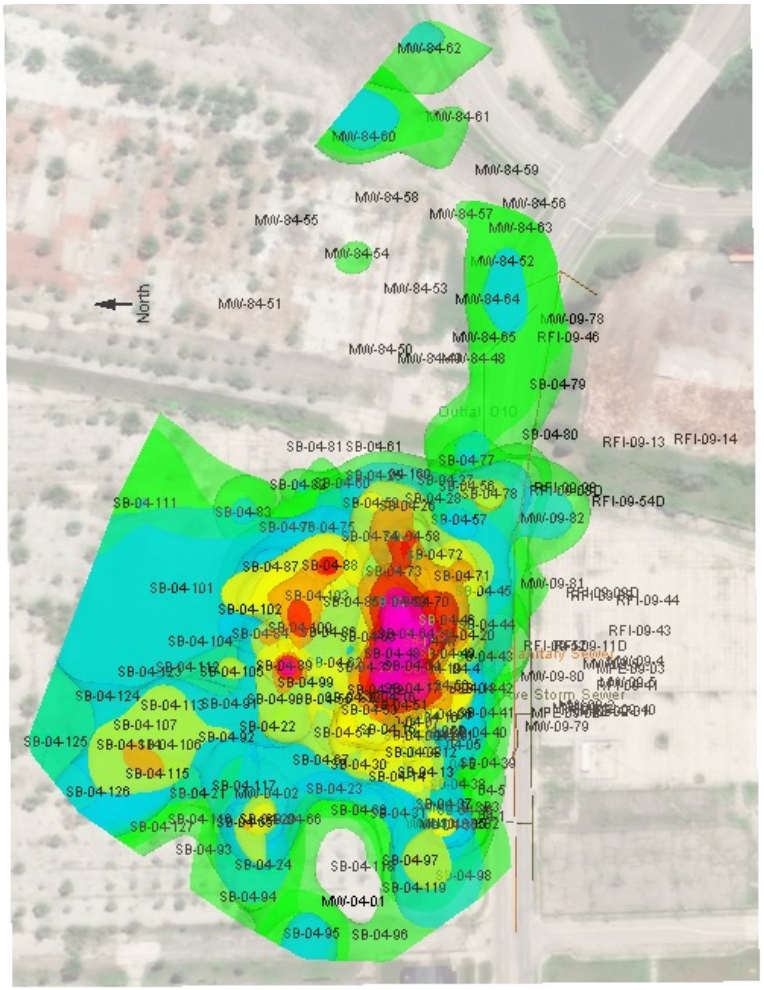
PFOS in Groundwater

Posted Analytical Data
PFOS

- >250,000 ng/L
- >100,000 - 250,000 ng/L
- >50,000 - 100,000 ng/L
- >10,000 - 50,000 ng/L
- >1,000 - 10,000 ng/L
- >12 - 1,000 ng/L

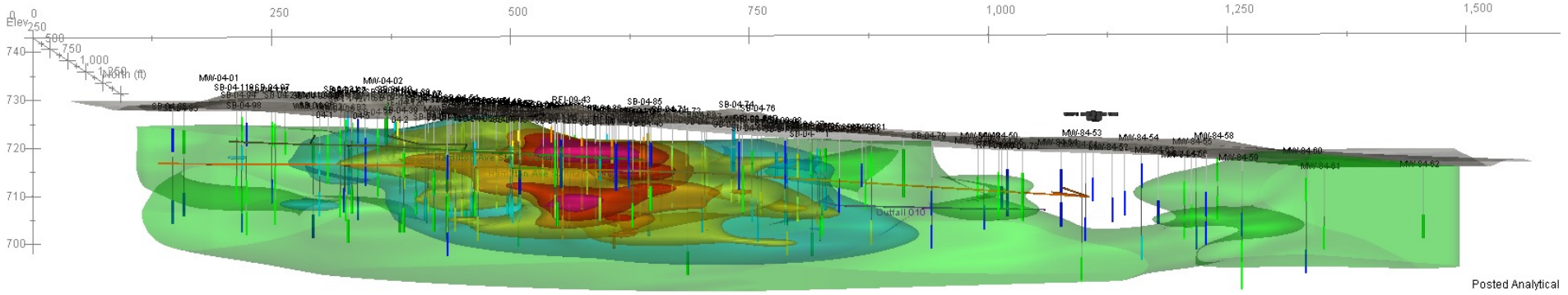
Posted Soil Analytical Data
PFOS

- >250,000 ng/kg
- >100,000 - 250,000 ng/kg
- >50,000 - 100,000 ng/kg
- >10,000 - 50,000 ng/kg
- >1,000 - 10,000 ng/kg
- >240 - 1,000 ng/kg



PFOS in Soil

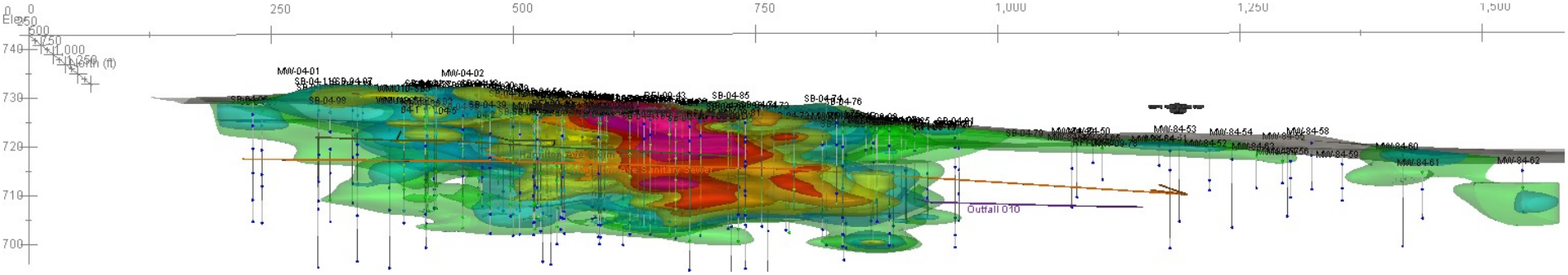
Hamilton Ave Area 3-D Model



W

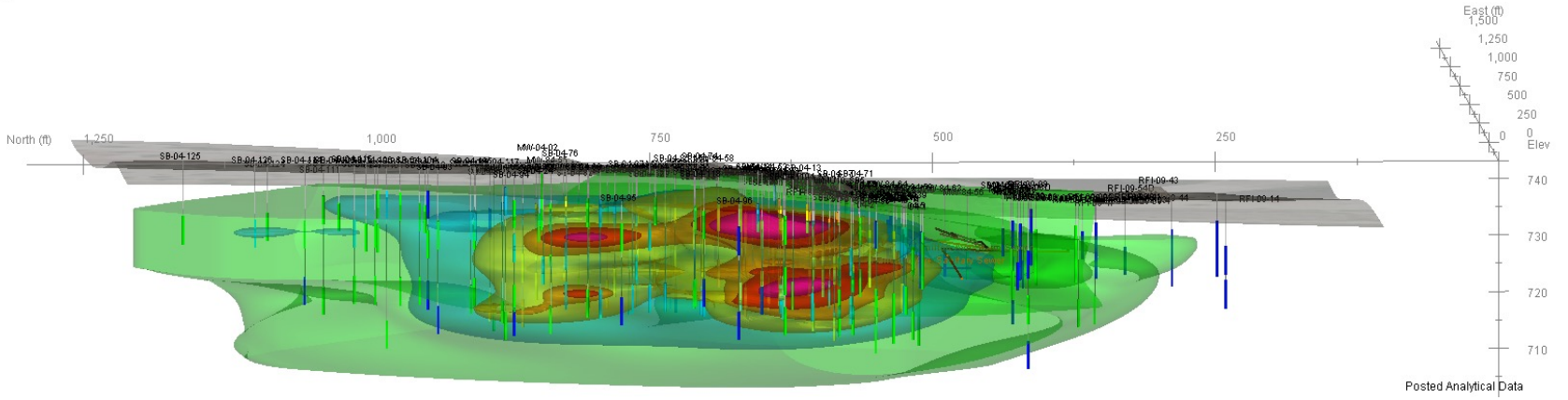
PFOS in Groundwater

E



PFOS in Soil

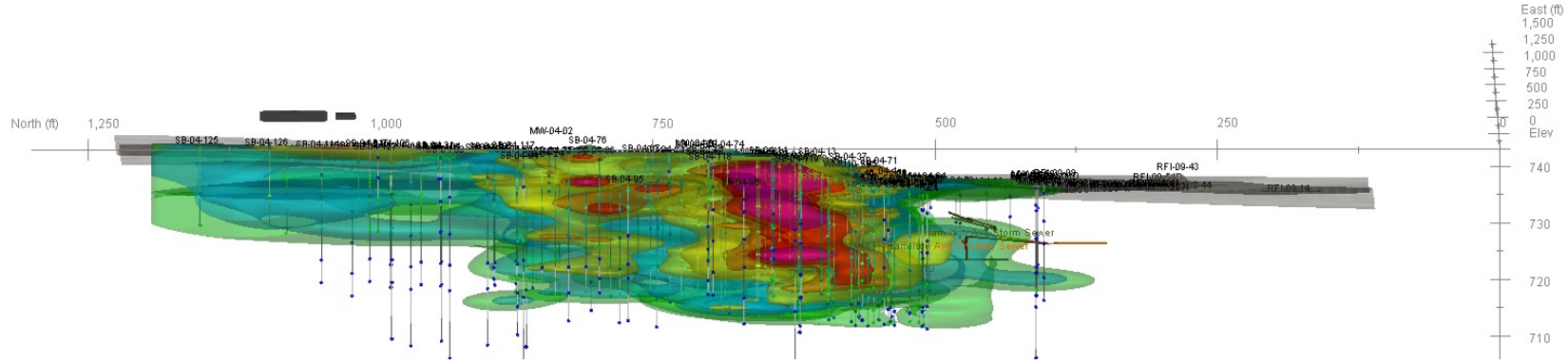
Hamilton Ave Area 3-D Model



N

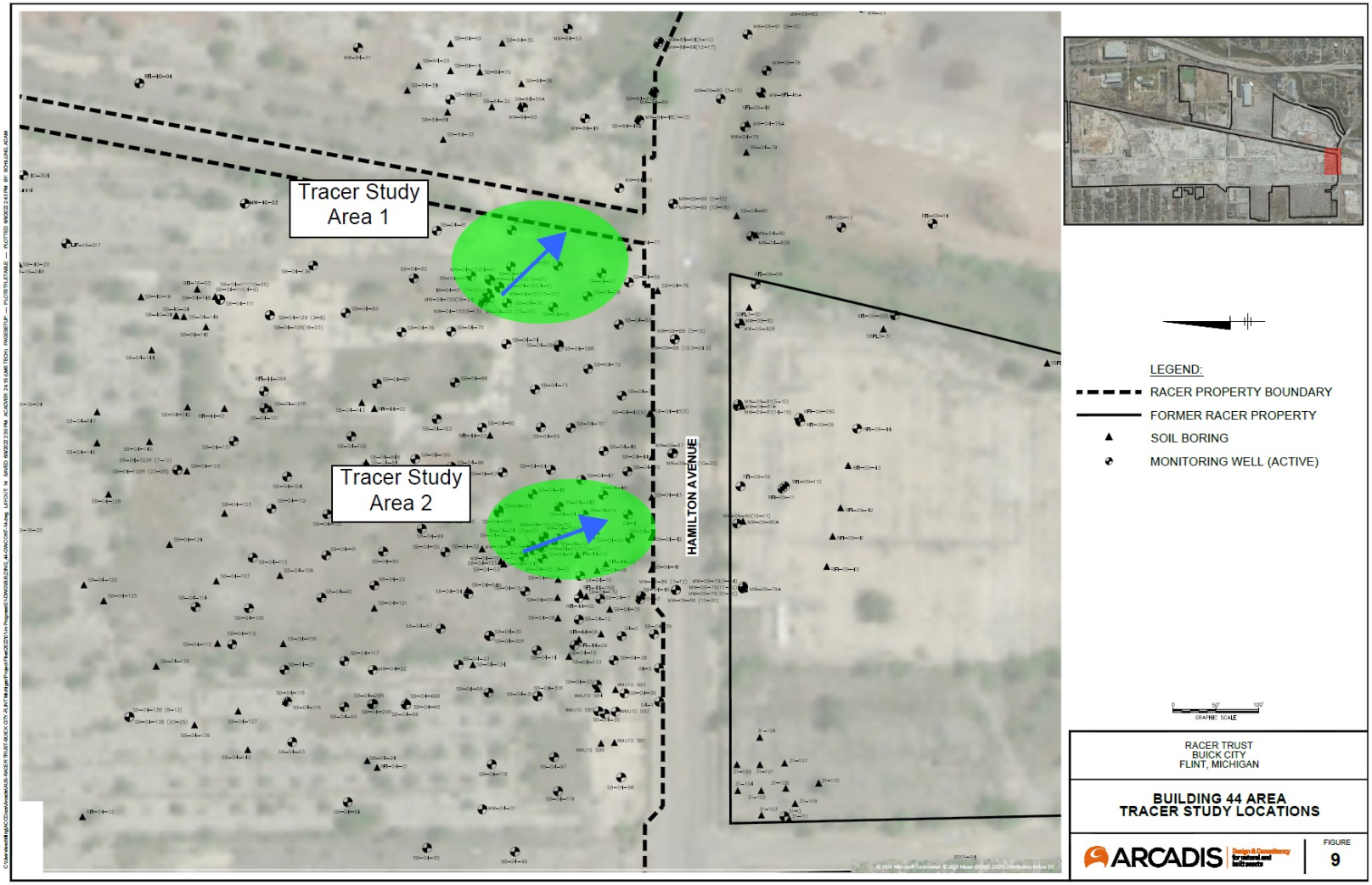
PFOS in Groundwater

S



PFOS in Soil

Tracer Study

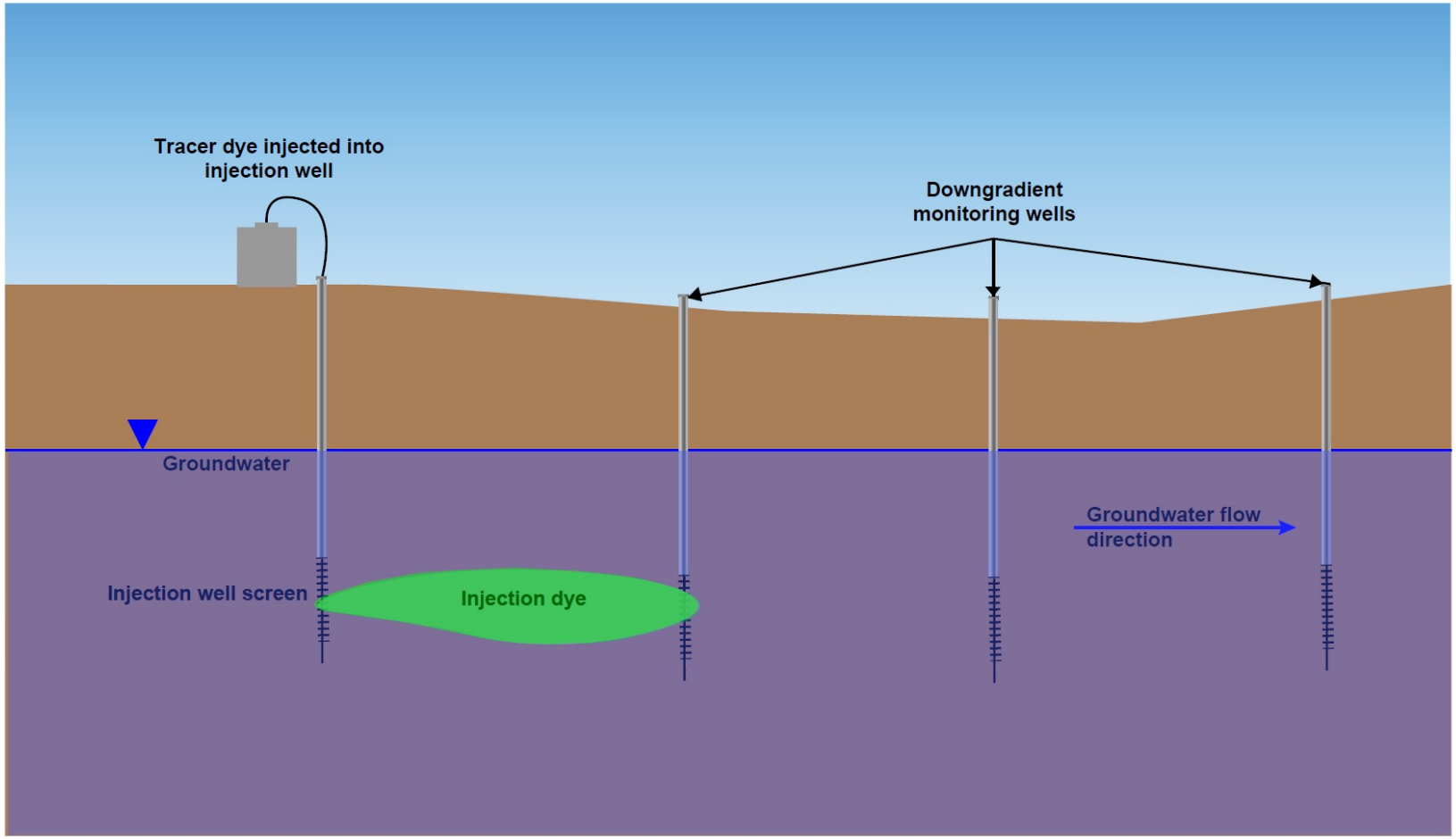


The tracer study is being conducted to evaluate the speed and direction of groundwater flowing in two areas near Hamilton Avenue.

Three different dye colors (green, orange and yellow) will be used in the tracer study.

Downgradient monitoring wells will be monitored for the presence of dye over the course of several months to better understand how groundwater moves in this area.

Conceptual Tracer Study Cross Section



PFAS Next Steps – Remedial Technologies

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Soil

- Stabilization in place – reduces potential for soil to leach PFAS
  - Chemical fixation
  - Encapsulation
- Soil washing and water treatment
- Containment – slurry wall
- On-site treatment and disposal in approved containment unit (concrete vault, landfill liner)
- Off-site disposal
- Bioremediation potential

Water

- Granular activated carbon
- Anion exchange resins
- Absorptive media
- Fractionation
- Membrane filtration
  - Nanofiltration/ultrafiltration
  - Reverse osmosis
- Bioremediation potential

Research and Work to Find Solutions

- PFAS in drinking water has been the primary focus of scientists and agencies
- We have only encountered 1 site in Michigan with a drinking water well issue
  - At our Coldwater Road site we worked with County Health officials and installed an in-home treatment system
- Surface water impacts are the next most important areas for PFAS
- As our summary shows, we continue to work hard to understand and address PFAS in groundwater and surface water
- A great deal of research is going on to find technology to address PFAS
- 3 weeks ago we identified a method that might destroy PFAS with micro-organisms (bacteria) – we are following field work in Alpena this fall.

Research on PFAS in the Air

- Some national research has found PFAS in small amounts almost everywhere – including in the UP
- National studies have shown PFAS can be dispersed in the air at plants where PFAS was manufactured
- Based on the best available national research and site-specific data, airborne PFAS is not considered an issue at Buick City
- We continue to follow this research and if this information changes, we will post a notice and include that information in our next update

Site Activities

- We have arranged to accept clean fill dirt from several road construction projects including I-69. These soils have been used for environmental remediation work and can be used to prepare building pads for new development.

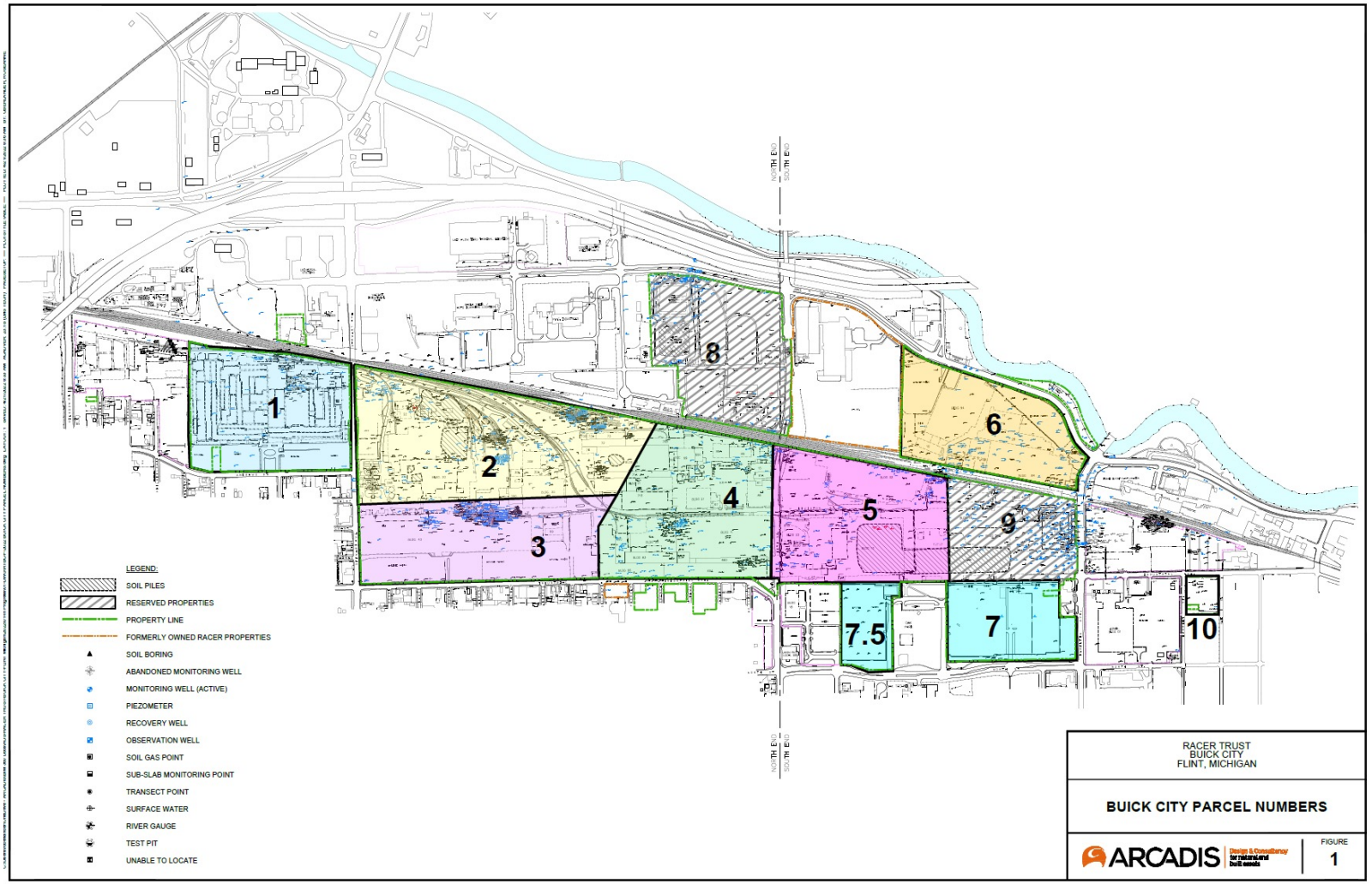
- We have licensed portions of the site for vehicle parking and equipment storage and for an AJAX concrete batch plant in support of the I-69 reconstruction. Site improvements to support those activities have been provided by the licensees.

- We have installed plugs in the storm and sanitary sewers to eliminate Site contributions to the sewer system and Flint River.

- We continue to evaluate surface impacts at the Site. Surface covers have been installed over several impacted soil areas.

- We have defined an area for the excavation of PCB impacted soils. The soil removal is expected to be completed this summer.

Parcel Areas



Redevelopment

- RACER has positioned its Buick City property to capture a significant economic development opportunity, in terms of new investment, tax revenues and jobs, for the City of Flint and the Flint region.
- RACER has signed an agreement to sell the remaining 352 acres to Ashley Capital – an experienced and well qualified developer who we have worked with before, most recently in Livonia.
- We are working hard to provide information to Ashley Capital to help their analysis of this opportunity.
- If they are satisfied with this analysis, we are hopeful they will close within the coming months.
- If they purchase the remaining property, we will continue to perform our work to address the old contamination issues.