

The background of the slide is a low-angle, upward-looking photograph of several modern skyscrapers with glass facades. The buildings are rendered in a monochromatic blue-grey color, creating a sense of height and urban density. The perspective is from the ground looking up, with the buildings converging towards the top of the frame.

WATER STREET Environmental Site Characterization, Targeted Soil Removal, and Future Redevelopment



Site History

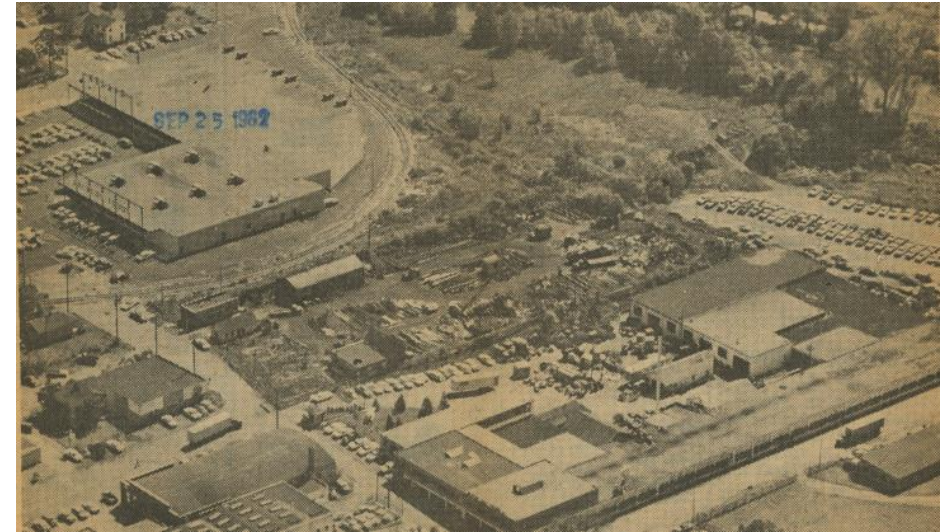
1800-1880s

- Limited industry along Huron River
- Residential along Michigan Avenue
- Public square spanning Michigan Avenue
- Undeveloped interior, including marsh land adjacent to Huron River



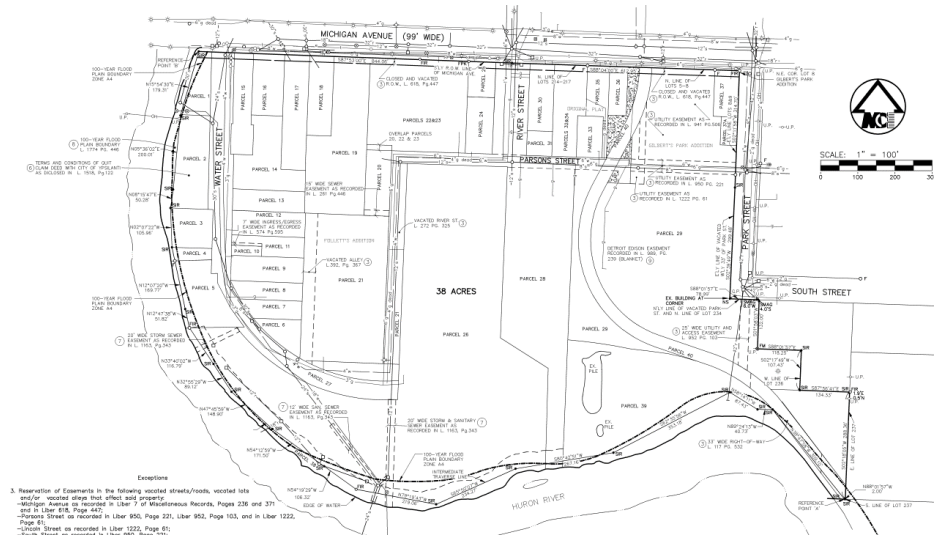
1880s-1980s

- Commercial and industrial use, including:
 - Foundries
 - Lumber yards and mills
 - Bulk petroleum and coal storage
 - **Detroit United Railway (DUR) storage yard, scrap metal junk yard**
 - **Manufacturing (e.g., Commerce Motor Truck Company/Dura Corporation)**
 - Railroads and sidings
 - **In-fill of former marsh area with non-native soil/debris**
 - Automobile service and repair
 - Dry cleaners
 - Printers
 - Restaurants, grocers
 - Gilbert Park

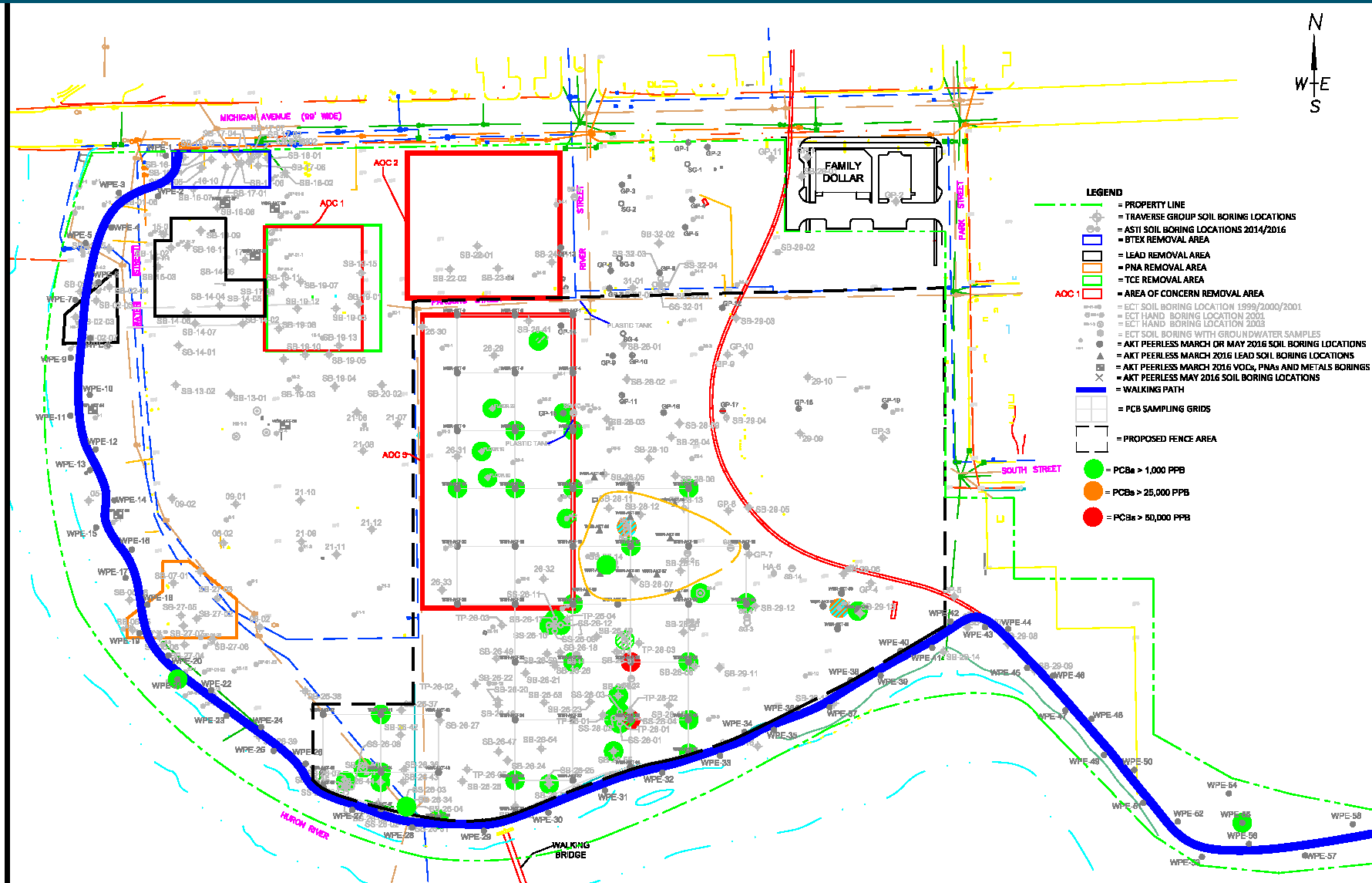


1990s-Present

- City acquisition of property and environmental Due Diligence (dozens of individual parcels)
- Completion of demolition
- Limited environmental remediation
- Due Care environmental investigations
- Brownfields Plans
- Water Street Trail remediation
- City's environmental investigation/remediation goals:
 - Maximum use of available funding to improve marketability
 - City is continuing to take steps to organize and supplement past environmental information to develop a viable strategy to move forward



Environmental Assessment Activities, c. 1990s-2017



DRAWN BY: ARR
DATE: 06/13/17
SCALE: 1" = 100'
FIGURE 6

SITE MAP WITH PCB SOIL RESULTS EXCEEDING TSCA HIGH OCCUPANCY CRITERIA

WATER STREET REDEVELOPMENT AREA
YPSILANTI, MICHIGAN
PROJECT NUMBER : 88098-4-27

AKTPEERLESS
ILLINOIS MICHIGAN OHIO GEORGIA
www.aktpeerless.com

Environmental Legacy

Environmental Contamination

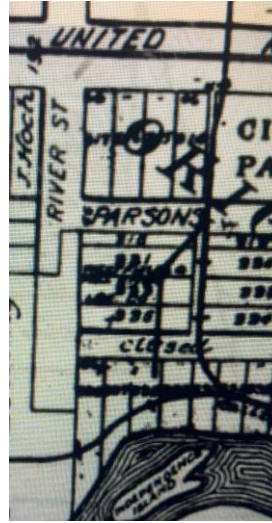
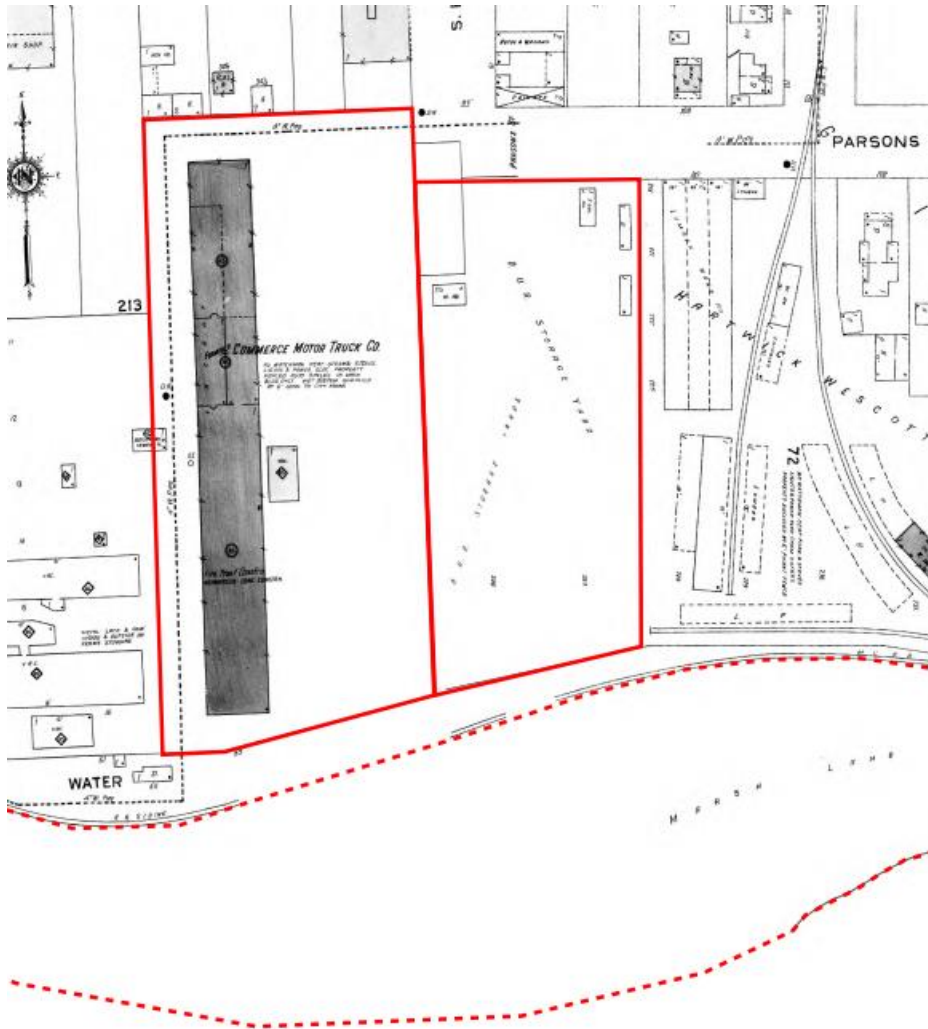
State-regulated contamination:

- Volatile Organic Compounds (VOCs), including petroleum products and chlorinated solvents
- Semi-volatile organic compounds (SVOCs), e.g., polynuclear aromatic hydrocarbons (PNAs)
- Heavy metals (e.g., arsenic, lead, etc.)

Federally-regulated contamination:

- **Polychlorinated biphenyls (PCBs) – Target of current investigative/remediation efforts**

PCB Source Areas



4.1.1 Railroad (On-board) Transformers

The category of electrical equipment most stringently regulated by EPA is Railroad (on-board) Transformers. Table 4-1 contains a list of Railroad Transformers owned by railroad organizations.

In addition to complying with marking requirements listed in 40 CFR, Part 761.40, Railroad Transformers containing PCB dielectric fluid must comply with the following summarized provisions.

USE RESTRICTIONS:

- o All owners of Railroad Transformers containing PCB dielectric fluid must reduce the PCB concentration levels contained therein according to timetables established by EPA in January, 1983.
- a) PCB concentrations must be reduced to 60,000 ppm by July 1, 1984.

3.7 FILL MATERIALS

Historical documentation indicated that the Subject Property was formerly a marsh area along the river. During the conduct of a subsurface investigation, evidence was encountered that indicated imported fill materials and debris was used to fill the property. The origin of

this fill material is unknown; however, it appears to be construction and/or demolition debris.

TSCA PCB Cleanup Levels

High occupancy (i.e., residential) area cleanup levels

- ≤ 1 ppm – no requirements
- > 1 ppm, ≤ 10 ppm – deed restriction, cap

Low occupancy (i.e., non-residential) areas – cleanup levels

- ≤ 25 ppm – deed restriction
- > 25 ppm, ≤ 50 ppm – deed restriction, fence with M_L mark
- > 50 ppm ≤ 100 ppm – deed restriction, fence with M_L mark, cap
- > 100 ppm – cleanup required

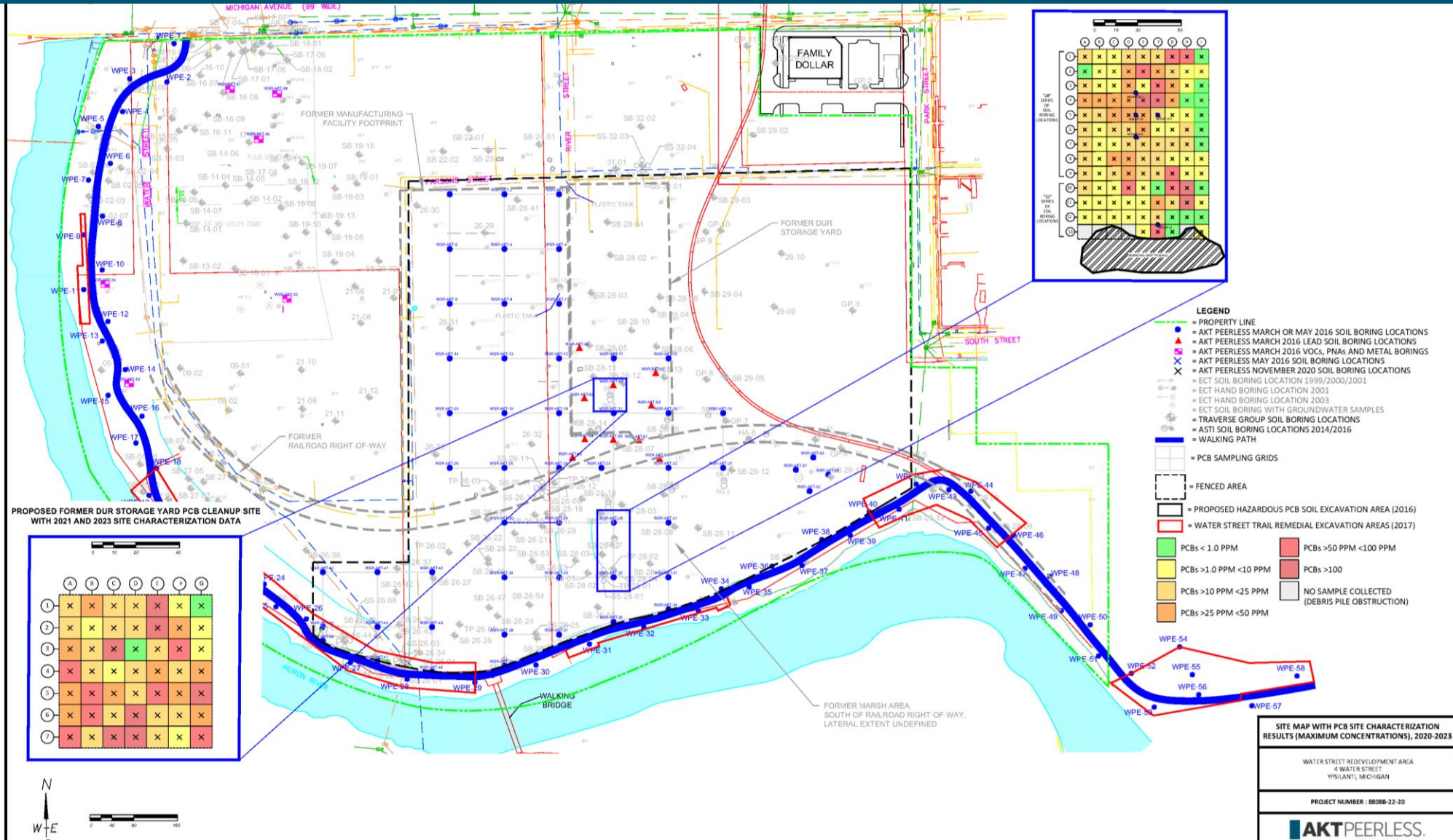
Recent PCB Site Characterization Activities

Assumption: PCB soil contamination at concentrations > 50 parts per million (ppm) isolated to three “hotspots,” one in former DUR storage yard/scrap metal junk yard, two in former marsh area

Approach: Expand TSCA PCB site characterization (10' by 10' grid sampling) in the areas immediately surrounding these three hotspots (WCBRA and MEDC funded)

Results: PCB soil contamination at concentrations > 50 ppm more widespread than previously assumed in the areas surrounding these three hotspots

AKT Peerless PCB Site Characterization Results (2016-2023)



PCB Site Characterization Results (2020-2023)

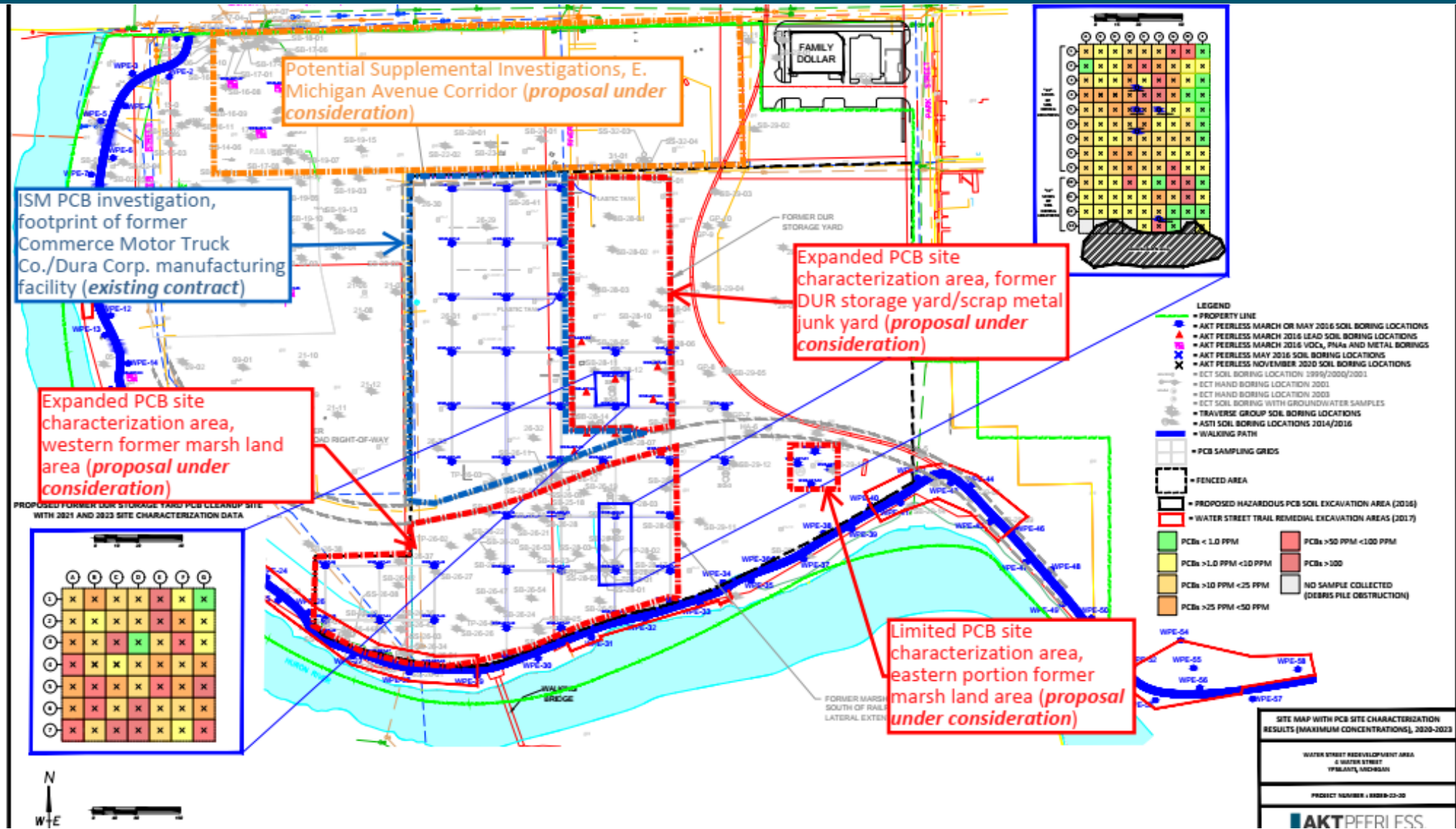
- TSCA PCB site characterization (10' by 10' sampling grid) results suggest that PCB soil contamination may extend across former DUR storage yard/scrap metal junk yard and marsh land area
 - PCB soil contamination in former DUR storage yard/scrap metal junk yard appears mostly limited to the upper two to three feet (i.e., distribution consistent with surface releases from on-board transformers, potential bulk storage of dielectric fluid, etc.)
 - PCB soil contamination in former marsh land area appears randomly distributed horizontally and vertically (i.e., distribution consistent with in-filling of the marsh with non-native soil/debris)

Proposed Next Steps

Proposed Site Characterization Activities

- Expand 10' by 10' PCB site characterization sampling grids to include (**proposal under consideration**):
 - Full footprint of former DUR storage yard/scrap metal junk yard (i.e., surface releases)
 - Footprint of western portion of former marsh land area and limited footprint of eastern portion of former marsh land area (i.e., landfilled PCB-containing waste)
- Other (**proposal under consideration**):
 - Comprehensive environmental conditions report (i.e., site-wide)
 - Potential supplemental investigations of property fronting E. Michigan Avenue (i.e., potential first phase of redevelopment)

Proposed Expansion of PCB Site Characterization Areas (2023)



Benefits to City

- Obtain clearest picture to date of high-concentration and low-concentration PCB soil contamination by late-2023, early-2024
- Maximize use of remaining available funding to clean up PCB soil contamination to the fullest extent possible in early- to mid-2024 to improve marketability
- Augment the City's strategy for further remediation following 2024 cleanup activities and completion of the comprehensive environmental conditions report, by late-2024

Process Timeline

CWA Testing Phase

June 2023 – December 2023

- Work with AKT Peerless and City to stay current on environmental circumstances as testing continues.

August 2023 – December 2023

- Review cumulative testing results to craft a strategy for next steps using planning and real estate principles. Site geography and timing will be important considerations.

CWA Remediation Phase

January 2024 – June 2024

- With testing complete, revise site use strategies with City and AKT Peerless as remediation commences.

July 2024 – September 2024

- Assist City in understanding of site's anticipated environmental status by the end of 2024 and formalize development strategy.

October 2024 – June 2025

- Develop strategic partnerships to pursue the reuse of the property informed by the City's goals and objectives.