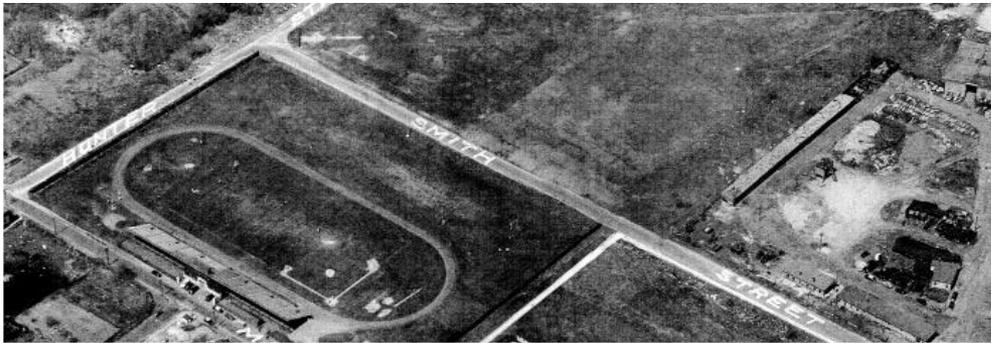




# Parker Street Waste Site

## Public Information Plan (PIP) Meeting

Wednesday — April 29, 2009



# Agenda

- ❑ Investigation Area Overview
- ❑ New Developments
- ❑ Walsh Field
- ❑ New Bedford High School (NBHS)
- ❑ Keith Middle School (KMS)
- ❑ Public Involvement – *New Feature Added*
- ❑ Review of Future Activities

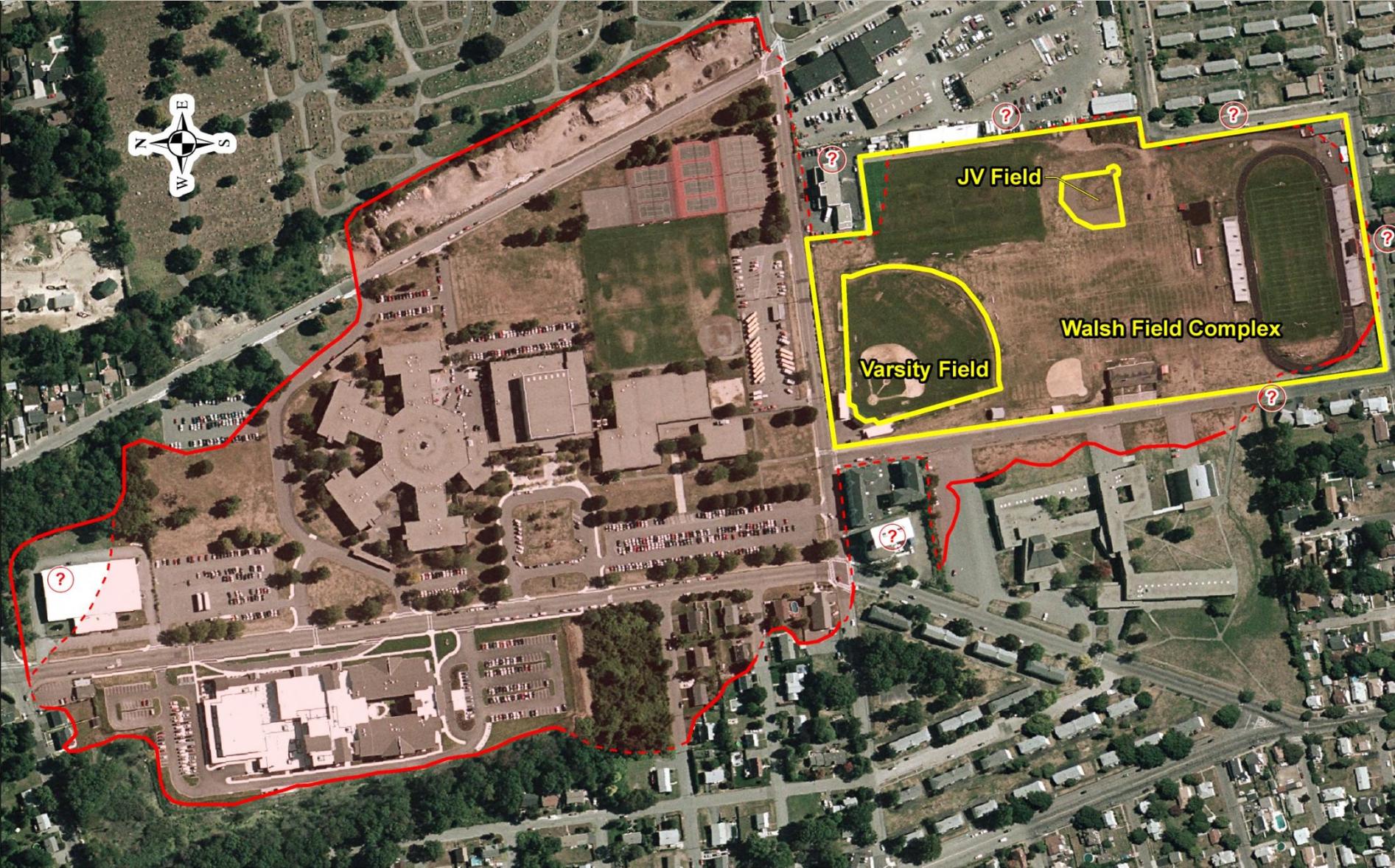
# Investigation Area Overview



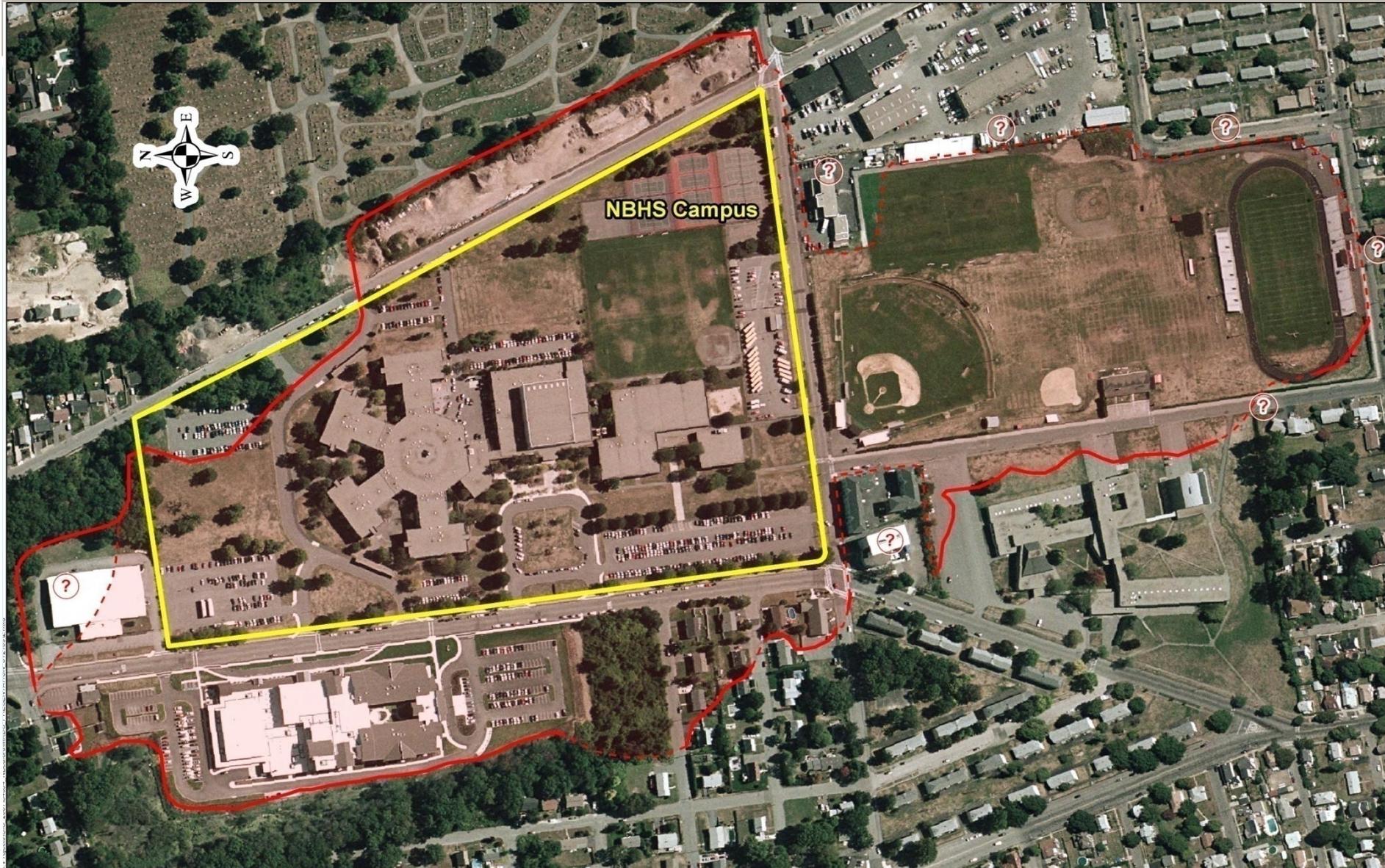
# Parker Street Waste Site Footprint



# Walsh Field Sub-Areas of Site



# High School Campus Sub-Area of Site



# High School Interior Investigation/Remediation



NBHS Source/Sink Investigation/Remediation

# KMS Wetland and Residences



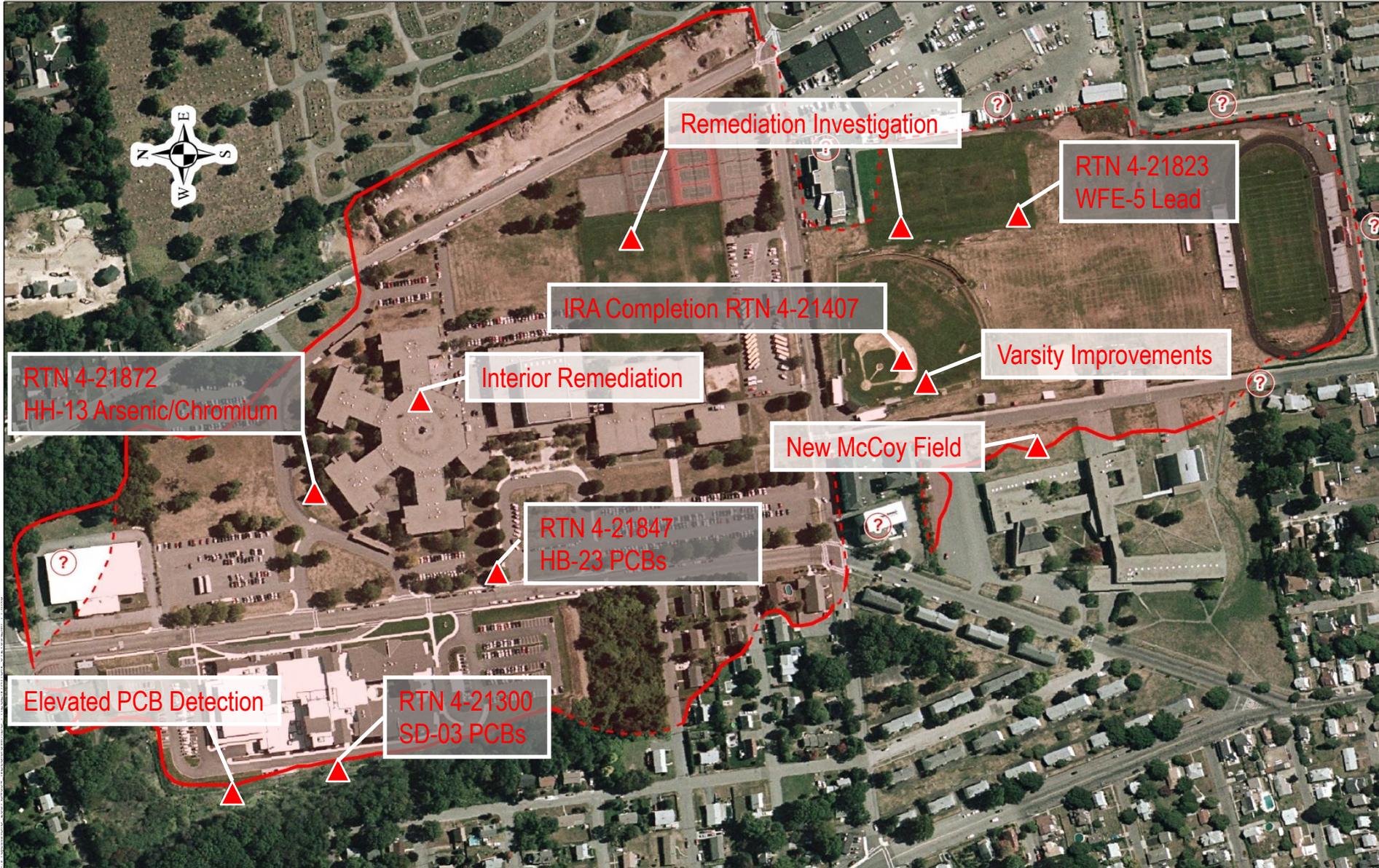
# Overall Investigation/Cleanup Status Summary

Location	Work Completed	New/Notable	In process
<b>Walsh</b>	<ul style="list-style-type: none"> <li>▪ Varsity /JV IRA (field)</li> <li>▪ Environmental investigation</li> <li>▪ Design basis memo</li> <li>▪ Current risk screening</li> <li>▪ Excavation analysis</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><i>Thorough surface soil investigation</i></b></li> <li>▪ Varsity/JV IRA Completed</li> <li>▪ WFE-5 Lead IH Reported</li> <li>▪ WFE-5 IH Eliminated (excavation)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Remedial planning</li> <li>▪ Some additional sampling                             <ul style="list-style-type: none"> <li>• Refine remedial volumes</li> <li>• Disposal characterization</li> </ul> </li> </ul>
<b>NBHS (exterior)</b>	<ul style="list-style-type: none"> <li>▪ Varsity Improvements RAM Plan Submitted</li> <li>▪ Environmental investigation</li> <li>▪ Current risk screening</li> <li>▪ Design basis memo</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b><i>Thorough surface soil investigation</i></b></li> <li>▪ HB-23 Potential IH reported</li> <li>▪ Expedited excavation</li> <li>▪ HH-13 Potential IH reported</li> <li>▪ No calculated IH</li> <li>▪ Further evaluation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Excavation analysis</li> <li>▪ Remedial planning</li> <li>▪ Some additional sampling                             <ul style="list-style-type: none"> <li>• Refine remedial volumes</li> <li>• Disposal characterization</li> </ul> </li> </ul>
<b>NBHS (interior)</b>	<ul style="list-style-type: none"> <li>▪ Vent remediation</li> <li>▪ Source/sink sampling</li> <li>▪ Quasi-random sampling</li> </ul>	<ul style="list-style-type: none"> <li>▪ Univent test removal</li> <li>▪ EPA Plan Submitted</li> </ul>	<ul style="list-style-type: none"> <li>▪ Data analysis/report preparation</li> <li>▪ Specification preparation</li> </ul>
<b>KMS Wetland</b>	<ul style="list-style-type: none"> <li>▪ IRA initiated for PCB IH</li> <li>▪ Environmental investigation ongoing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Additional area of high PCBs detected</li> <li>▪ Status report submitted</li> </ul>	<ul style="list-style-type: none"> <li>▪ IH mitigation evaluation</li> <li>▪ Causal investigation</li> </ul>
<b>KMS (interior)</b>	<ul style="list-style-type: none"> <li>▪ All 2008 monitoring completed</li> </ul>	<ul style="list-style-type: none"> <li>▪ April 2009 air monitoring initiated</li> </ul>	<ul style="list-style-type: none"> <li>▪ Other inspections to be scheduled</li> </ul>
<b>Residential (city)</b>	<ul style="list-style-type: none"> <li>▪ Environmental investigation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pre-demolition inspection</li> </ul>	<ul style="list-style-type: none"> <li>▪ Plan for data collection</li> </ul>
<b>Residential (private)</b>	<ul style="list-style-type: none"> <li>▪ Environmental investigation</li> </ul>		<ul style="list-style-type: none"> <li>▪ Acquiring access to remaining areas</li> </ul>

# New Developments



# New Developments Locations



# New Developments

## Remedial Investigation



- ❑ Background
  - Large and representative soil and groundwater sampling program (February – present)
  - Database integration
  - Walsh and NBHS Campus
- ❑ Action Taken
  - Over 1,000 new soil samples collected since January 2009
  - Five new groundwater monitoring wells since January 2009
- ❑ Follow-up Actions
  - Incorporate into remedial design

# New Developments

## Varsity/JV Fields

### Varsity – Summer 2008

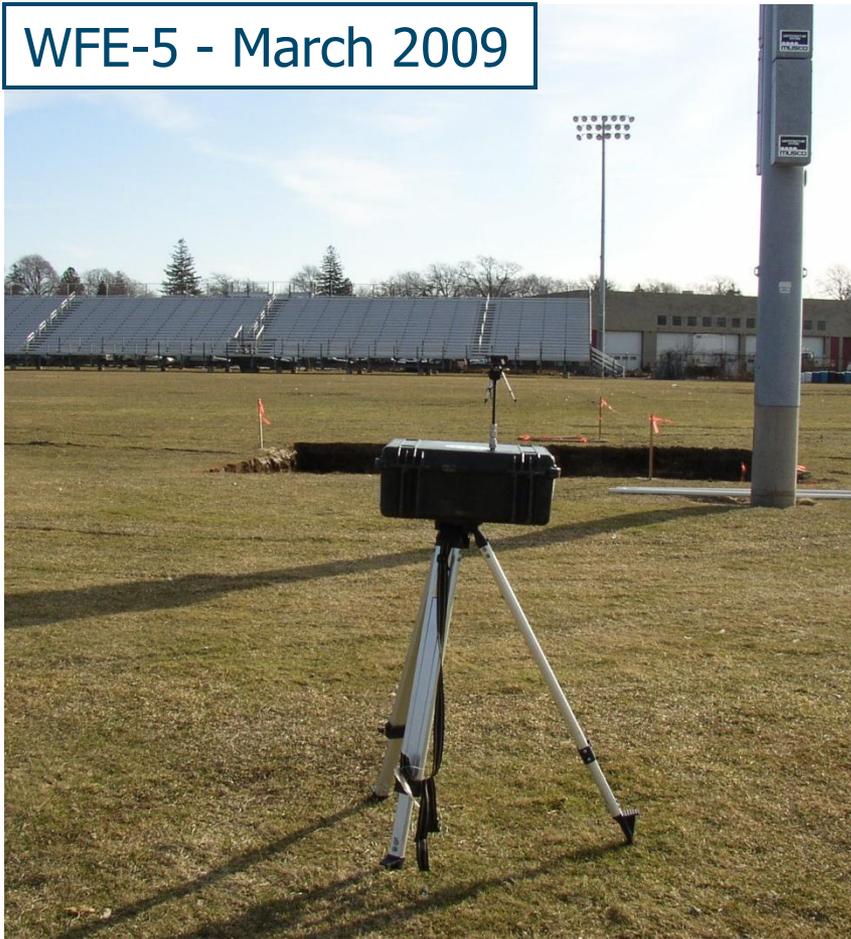


- ❑ Background
  - Imminent Hazard (IH) condition
  - Immediate Response Action (IRA)
  - RTN 4-21407
  
- ❑ Action Taken
  - Soil disposal completed 3/12-13/09
  - Soil accepted at Crapo Hill
  
- ❑ Follow-up Actions
  - Incorporate into comprehensive remedy

# New Developments

## Walsh Field – WFE-5 (Soccer Field Area)

WFE-5 - March 2009



### □ Background

- IH condition – lead 3,360 mg/kg in top foot
- Reported to MassDEP - 3/4/09
- RTN 4-21823

### □ Action Taken

- Oral approval to excavate - 3/11/09
- Excavation conducted - 3/13/09
- Approximately 41 cu. yds.

### □ Follow-up

- Shawmut Avenue soil management
- Incorporate into comprehensive remedy

# New Developments – Summary

## High School – HB-23 (Tree Belt)

HB-23 – March 2009



- ❑ Background
  - IH condition – PCB >10 mg/kg
  - Reported to MassDEP - 3/19/09
  - RTN 4-21847
- ❑ Action Taken
  - Oral approval to excavate - 3/25/09
  - Excavation conducted - 3/28/09
  - Approximately 63 cu.yds.
- ❑ Follow-up
  - Shawmut Avenue soil management
  - Incorporate into comprehensive remedy

# New Developments

## High School – HH-13 (House Area)

HH-13 – April 2009



### □ Background

- Potential IH condition – Arsenic = 40 mg/kg/chromium >200mg/kg
- Reported to MassDEP 4/2/09
- RTN 4-21872

### □ Action Taken

- Further assessment
- No IH condition present

### □ Follow-up

- Evaluate chromium valence state
- Incorporate into comprehensive remedy

# New Developments

## KMS Wetland – SD-03/New Area to North

SD-03 - March 2009



### □ Background

- IH condition – Elevated PCBs
- Reported to MassDEP 6/9/08
- RTN 4-21300

### □ Action Taken

- Further assessment
- Fencing evaluation
- Ecological risk sampling
- Delineation of “new” elevated PCBs

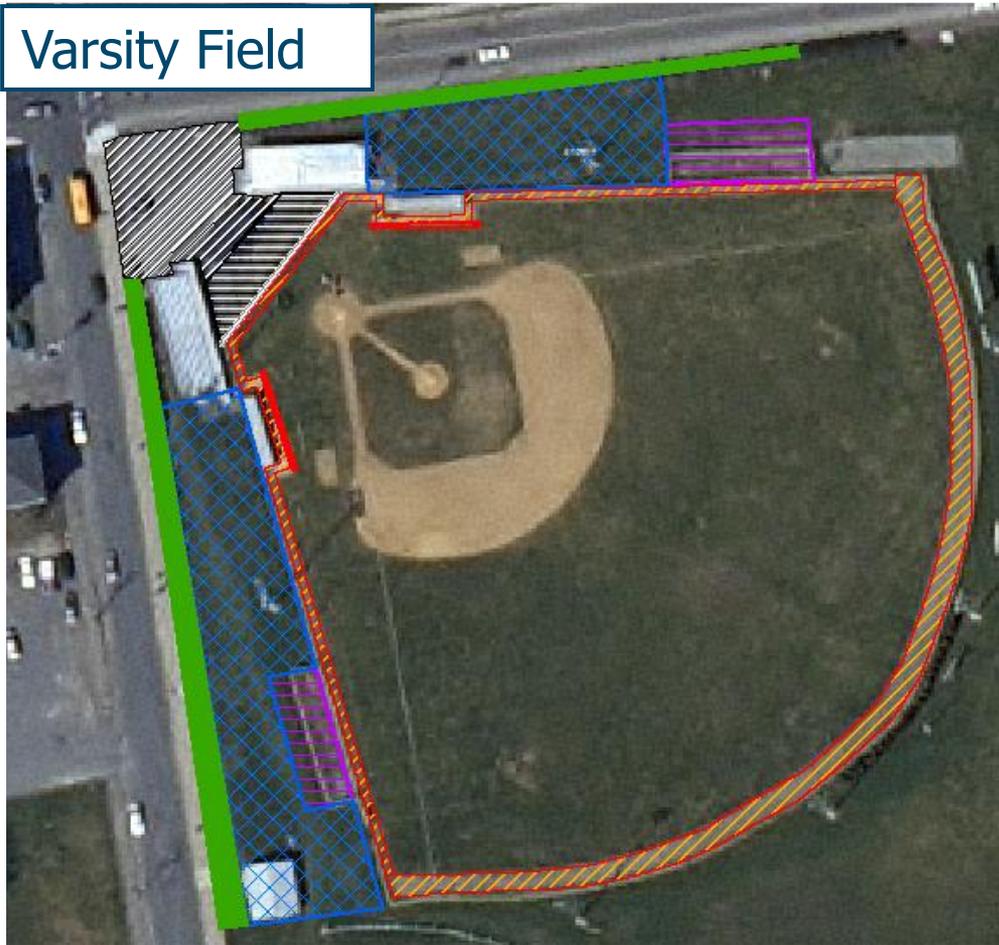
### □ Follow-up

- Ecological risk evaluation (continued)
- Fencing decision/installation
- Remedy design

# New Developments – Summary

## Walsh Field – Varsity Improvements

Varsity Field

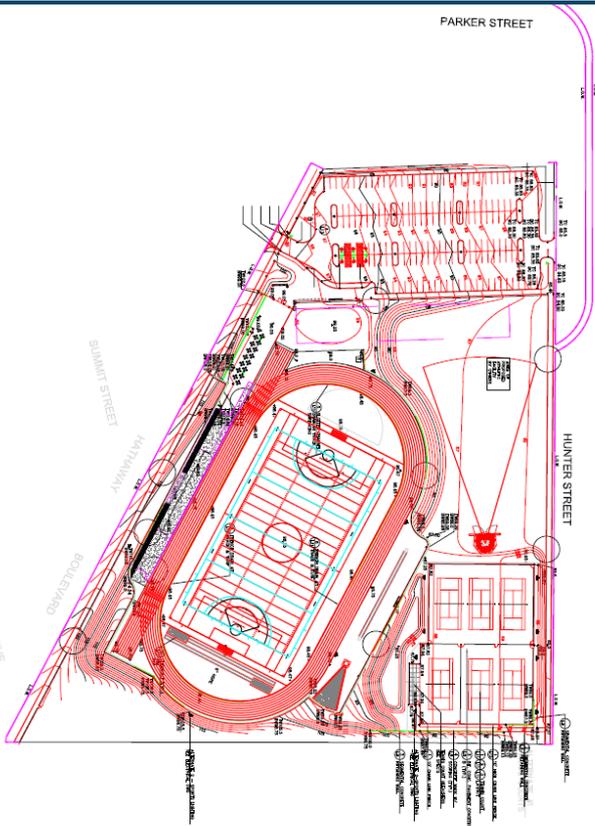


- ❑ Background
  - Field rehabilitation
  - Accommodate new baseball league
- ❑ Action Taken
  - Release Abatement Measure (RAM) Plan prepared and submitted
  - Pre-characterization
  - Soil management plan
- ❑ Follow-up
  - Management of displaced soil

# New Developments – Summary

## New Andrea McCoy Field – Redevelopment of Former Keith Junior High School

### New Andrea McCoy Field



#### □ Background

- Comprehensive redevelopment
- Track, fields, support building
- Drainage and parking improvements

#### □ Action Taken

- Release Abatement Measure (RAM) Plan prepared and submitted
- Pre-characterization
- Soil management and risk-reduction planning

#### □ Follow-up

- Management of displaced soil

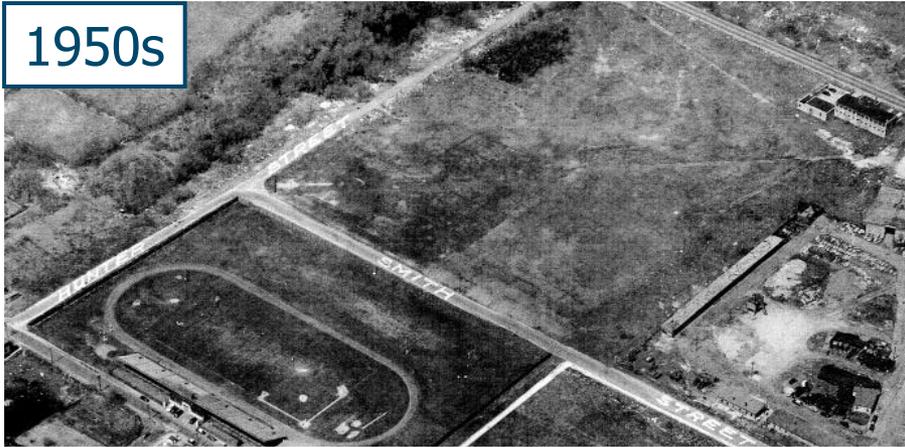
# Walsh Field



# Walsh Field – Background

## Findings from Environmental Investigation

1950s



Present



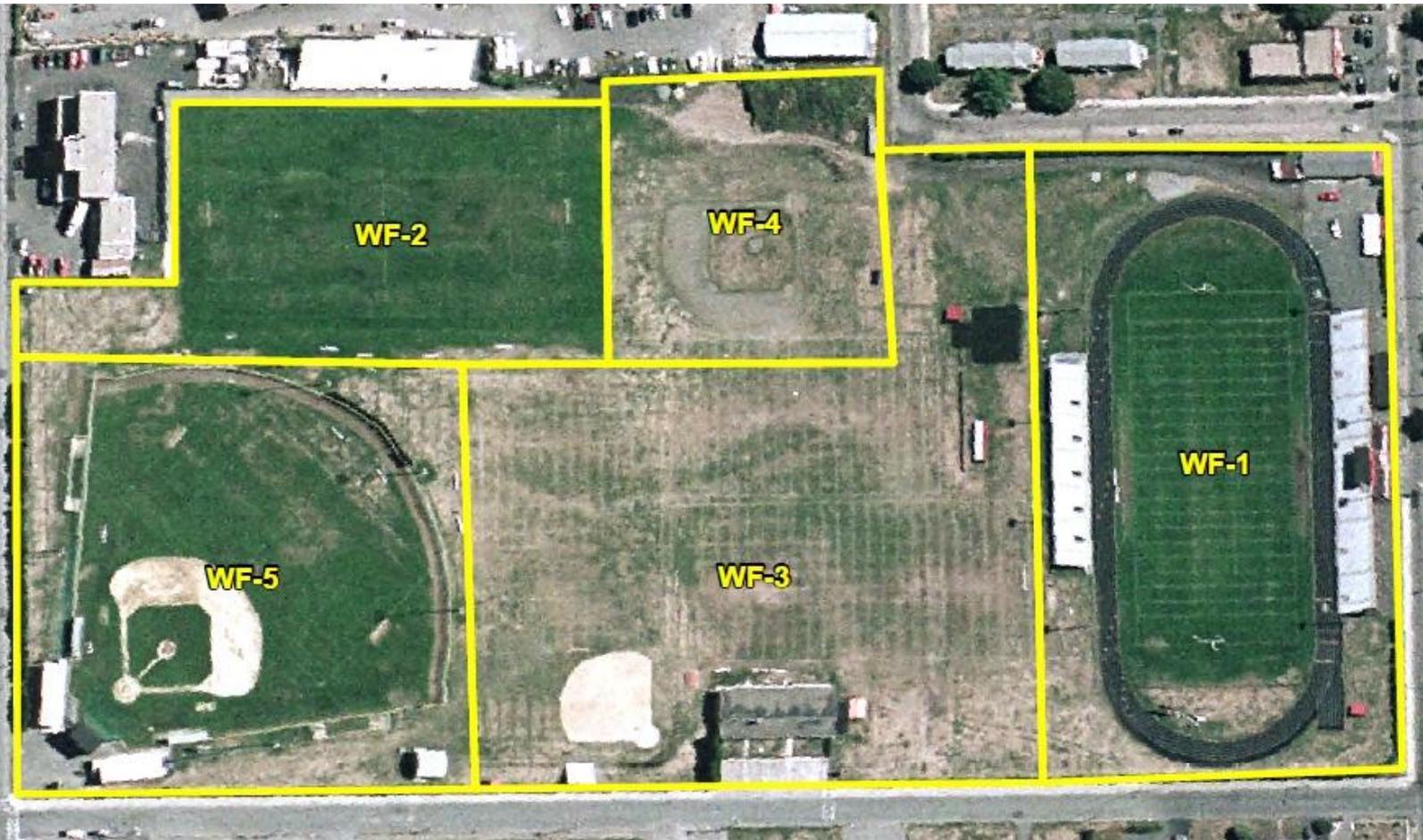
### □ Environmental Investigation

- Soil analysis –
  - Polyaromatic hydrocarbons (PAHs)
  - Polychlorinated biphenyls (PCBs)
  - Metals
- Supplemental arsenic analysis for baseball diamonds

### □ Findings

- Primarily PAH and metals
- Non-detect (ND)/low-concentration PCBs
- Localized elevated arsenic in shallow soil on baseball diamonds

# Walsh Field Exposure Areas



# Walsh Field

## Next Steps

Walsh Field – December 2008



- ❑ Design comprehensive remedy for entire field
  - Arsenic and lead driven
  - Other drivers
    - PAHs, cadmium
- ❑ Implement long-term solution
  - Before this coming winter

# Walsh Field

## Anticipated Remediation Schedule for 2009

### Date

- April 2009
- May 2009
- Summer 2009

### Action

- Conceptual design
- Dig/Haul design submittal
- Implementation

Varsity on separate time line

# Varsity Diamond

## Anticipated Remediation Schedule for 2009

### Date

- September 2009
- November 2009
- To be scheduled

### Action

- 90-percent design
- 100-percent design
- Implementation

# High School Campus



# New Bedford High School

## Soil and Groundwater Data Collection

### Exterior Soil and Groundwater

GeoProbe Rig at NBHS



#### □ Preliminary Findings

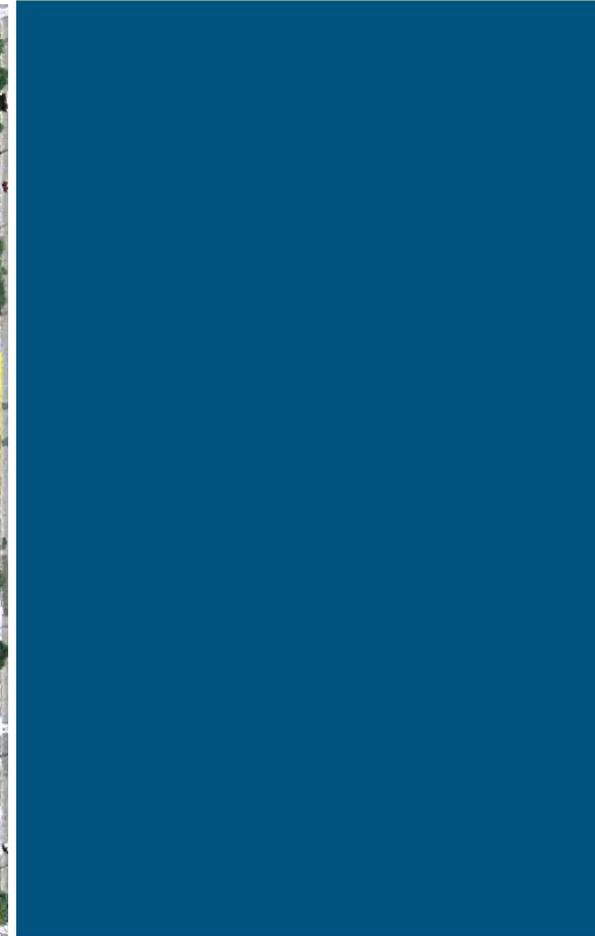
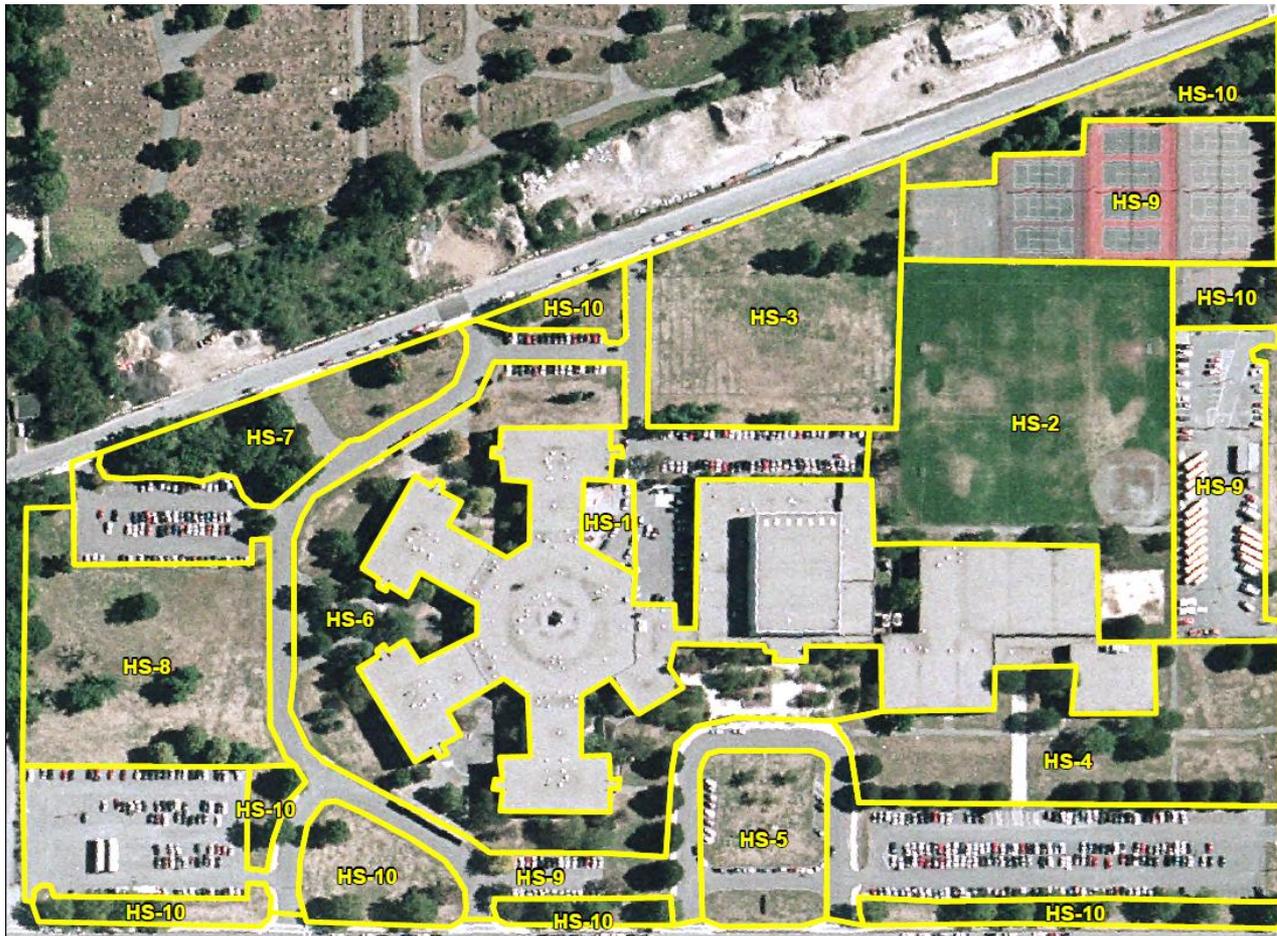
- Detected contaminants similar to BETA.
- Groundwater similar to KMS.

#### □ Current Investigative Program

- More delineation required
  - BETA data gaps (e.g., near surface)
  - Problematic BETA composite samples

- Added effort will delay remedial planning for NBHS.

# New Bedford High School Exposure Areas



# New Bedford High School

## Next Steps

NBHS Athletic Field



❑ Design comprehensive remedy for entire campus

- Five metals (arsenic, barium, cadmium, chromium, lead)
- PCBs
- Polycyclic aromatic hydrocarbons

❑ Implement long-term solution

# NBHS Campus

## Anticipated Remediation Schedule for 2009

### Date

### Action

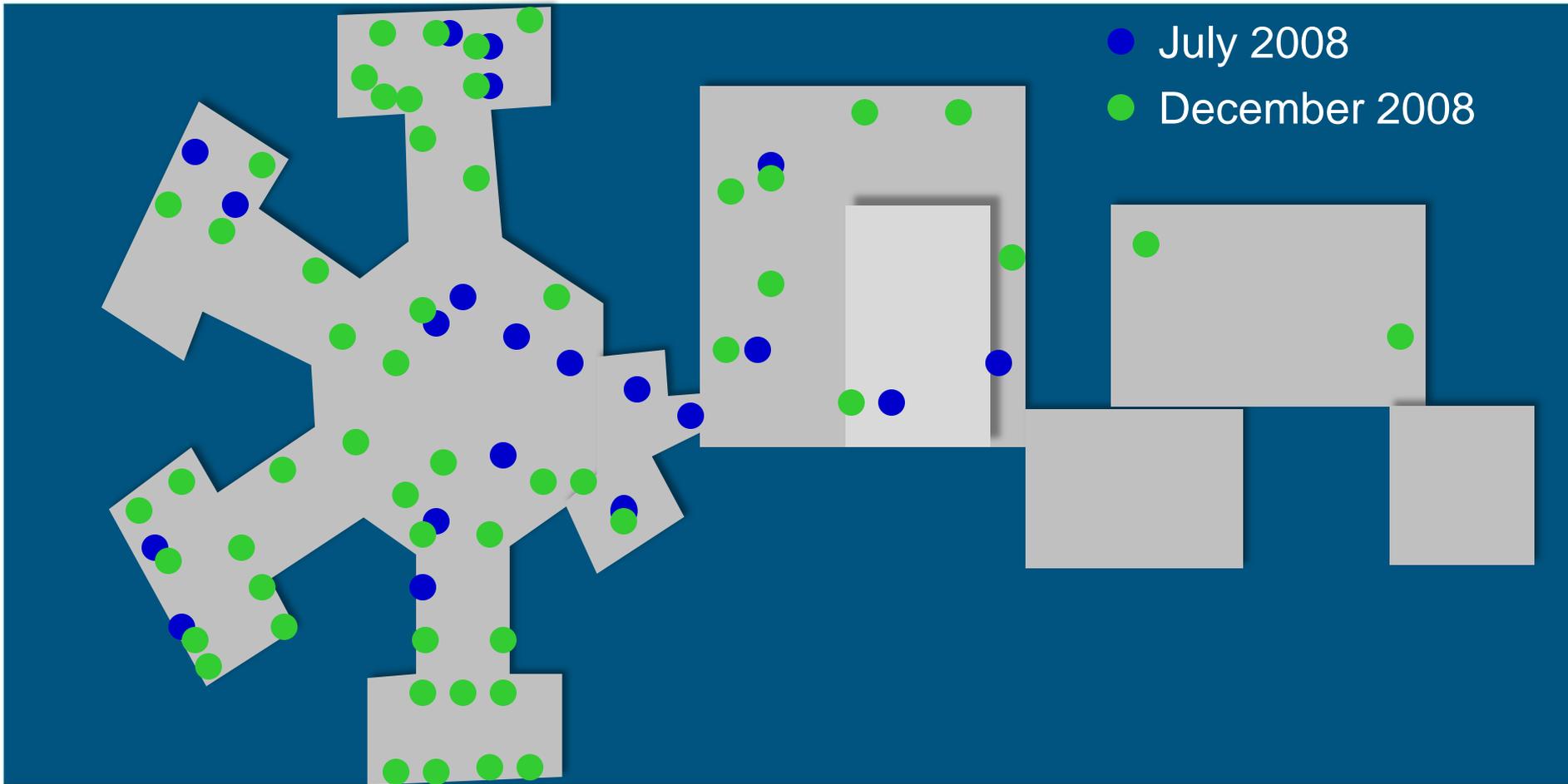
- |                  |                                |
|------------------|--------------------------------|
| ▪ June 2009      | ▪ Conceptual design            |
| ▪ September 2009 | ▪ 90-percent design            |
| ▪ September 2009 | ▪ 100-percent design           |
| ▪ September 2009 | ▪ Plans/specifications for bid |

# High School Interior



# New Bedford High School

## Source/Sink Sampling



# NBHS Interior (Investigation/Remedy)

## Current Status/Recent Activities

Univent



Window Glazing



### Data analysis

- 12/08, 02/09, and 03/09

### Univent trial removal

- 03/09

### Removal/Abatement Plan

- Submitted to EPA

### Specification/Bid Package Prep.

- In progress

# Removal and Abatement Decision Matrix

PCB Concentration	Building Material Category	EPA Regulatory Classification	Required Action
PCBs $\geq$ 50 mg/kg	Source = Manufacturer	PCB Bulk Product Waste	Removal
PCBs < 50 mg/kg	Source = Manufacturer <i>Original/Unaltered</i>	Excluded PCB Product	Removal not required
	Source = Manufacturer <i>Altered/Diluted</i>	PCB Bulk Product Waste	Removal
PCBs $\geq$ 1 mg/kg	Source = Release	PCB Remediation Waste	Removal
Non-Detect	Building Materials	None	No Action

# NBHS Interior

Anticipated scope for Summer 2009



## ☐ Removal actions for Summer 2009

### ➤ Targeting PCB Bulk Product Wastes

- ✓ B-Block univents
- ✓ Laminate cabinetry (B240)
- ✓ High concentration closet paint (A-206-4)

### ➤ Other removal

- ✓ Caulking/glazing (window replacement)

### ➤ Some components contain asbestos

# NBHS Interior

## Other Activities



### ☐ Maintenance Measures

- Reduce exposure over time
  - ✓ Cover exposed mastics (example)
  - ✓ Coordinate with building renovations

### ☐ Need to clarify categories

- Paint
- Concrete
- Pushpin material

# NBHS Interior

## Anticipated Schedule for 2009

<b>Date</b>	<b>Action</b>
<b>May 6, 2009</b>	<b>Bid package to City for review.</b>
<b>May 13, 2009</b>	<b>Publication for bid.</b>
<b>May 20, 2009</b>	<b>Site walk</b>
<b>June 3, 2009</b>	<b>Bid opening</b>
<b>June 22, 2009</b>	<b>Mobilize to begin work</b>

# NBHS Interior

## Path Forward



- ❑ Schedule further abatement of materials that must be removed under EPA regulation (PCB Bulk Product waste, PCB Remediation wastes)
- ❑ Collect data to support remedial planning
- ❑ Continue Maintenance Measures
  - Incrementally reduces PCB exposures over time
  - Excluded PCB Products

# Keith Middle School Monitoring and Wetland Sediment Contamination



# Keith Middle School

## LTMMIP Activities

### KMS Front Entrance (View South)



#### Conduct per LTMMIP

- Cap inspection
- Wetland inspection
- Groundwater sampling
- Air monitoring
- Personnel Training

#### Update at next quarterly PIP meeting

# Keith Middle School

## LTMMIP Suggested Modifications

KMS Courtyard (View North)



### Suggested modifications

- Reduce PCB air monitoring to twice per year
- Eliminate VOC monitoring
- Reduce cap inspections to twice per year
- Rationalize response and reporting triggers

Submitted for EPA Review Approval

# Keith Middle School

## Wetland Sediment Sampling/Monitoring - LTMMIP

KMS North Wetland  
(View South)



- ❑ Long-Term Monitoring and Maintenance Implementation Plan (LTMMIP)
- ❑ Sampled Spring 2008
- ❑ Monitoring scope
  - Four randomly collected sediment samples (base of slope)
  - Analyze samples for PCB Aroclors (Method 8082)

# Keith Middle School

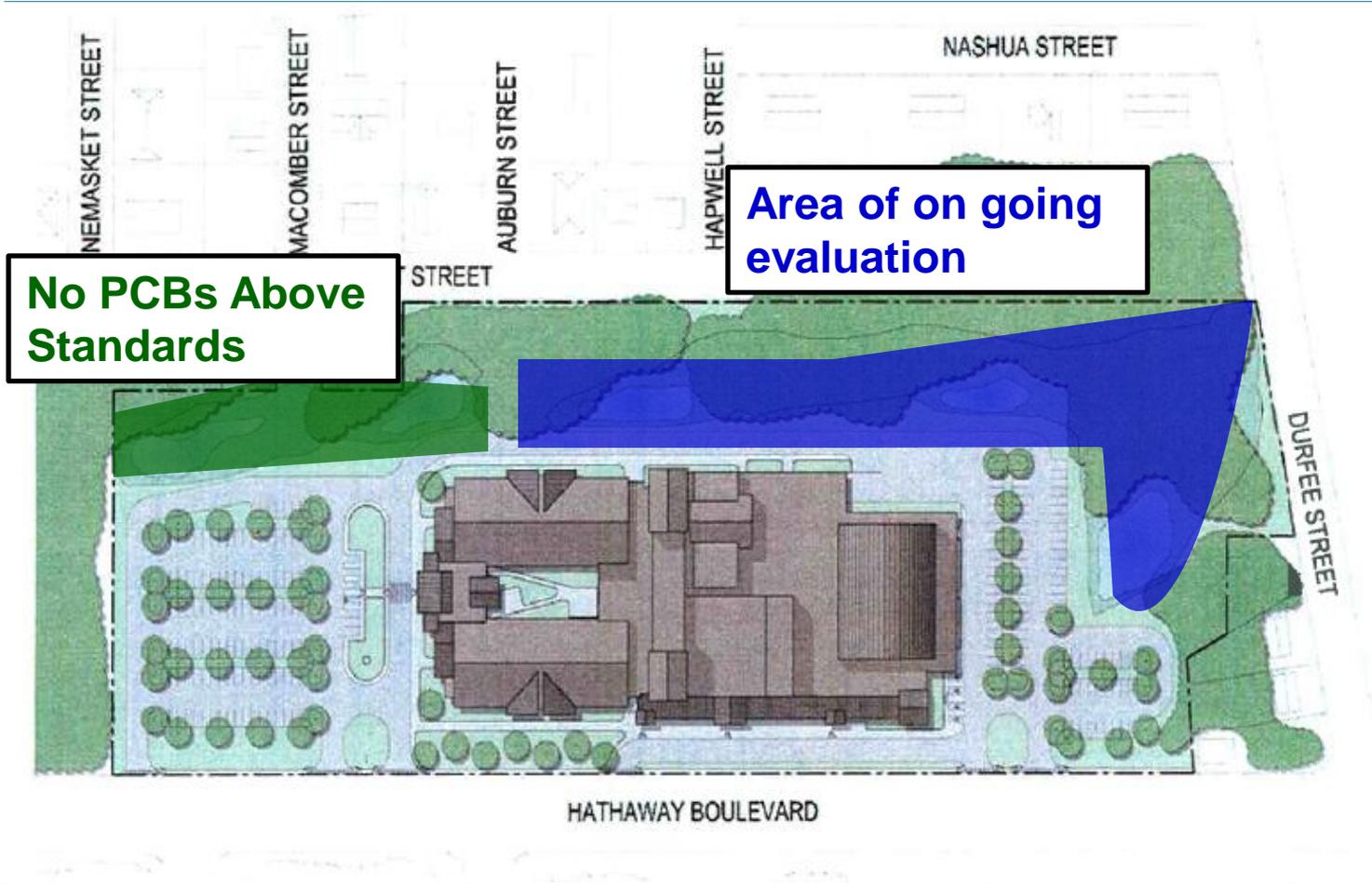
## Wetland Sediment Monitoring (continued)

### ☐ Monitoring Findings

- Three out of four samples non-detect
- One sample detected PCBs (16.6 mg/kg)
- Triggered potential Imminent Hazard reporting and evaluation under the MCP (reported to MassDEP)
- Preliminary calculations indicate an Imminent Hazard exists (TRC's calculations slightly exceed the Imminent Hazard criteria set forth in the MCP under 310 CMR 40.0955)
- *Delineation and evaluation ongoing*

# Keith Middle School

## Wetland Sediment Monitoring (continued)



# Keith Middle School

## Contaminated Sediment – Path Forward

Fencing

Ecological risk characterization

Remedial design

# Public Involvement Approach

*-Update-*

# Public Involvement

- ❑ Minimum of Quarterly Public Meetings
- ❑ Periodic Milestone Meetings
- ❑ Massachusetts Contingency Plan Requirements
- ❑ On-line Posting of Data and Project Documents
- ❑ *New! – Weekly Updates of Planned Field Activities in the Newspaper (also posted on City website).*

# Investigation/Remediation Road Map

# Summary Site Overview



## ***Overall Investigation/Cleanup Status Summary***

<b>Location</b>	<b>Future Work</b>
<b>Walsh</b>	<ul style="list-style-type: none"><li>▪ Initial phase remedial design in 2009</li><li>▪ Phased implementation 2009/2010</li><li>▪ Address IRA conditions</li><li>▪ As needed delineation</li></ul>
<b>NBHS (exterior)</b>	<ul style="list-style-type: none"><li>▪ Initial phase remedial design in 2009</li><li>▪ Phased implementation 2009/2010</li><li>▪ Address IRA conditions</li><li>▪ As needed delineation</li></ul>
<b>NBHS (interior)</b>	<ul style="list-style-type: none"><li>▪ Continued specification prep (winter/spring 2009)</li><li>▪ Bid process (spring 2009)</li><li>▪ Initial phase remedy (summer 2009)</li></ul>

## Overall Investigation/Cleanup Status Summary

Location	Future Work
<b>KMS Wetland</b>	<ul style="list-style-type: none"> <li>▪ Initial phase remedial design in 2009</li> <li>▪ Address IRA condition</li> <li>▪ Implementation 2010</li> <li>▪ As needed delineation</li> </ul>
<b>Residential (city)</b>	<ul style="list-style-type: none"> <li>▪ Wrap up investigation (2009)</li> <li>▪ Pre-demo environmental sampling (2009)</li> <li>▪ Demolition (Spring 2009)</li> <li>▪ Initiate remedial planning (2009)</li> <li>▪ Initial phase remedial design in 2009</li> <li>▪ Phased implementation 2009/2010</li> <li>▪ As needed delineation</li> </ul>
<b>Residential (private)</b>	<ul style="list-style-type: none"> <li>▪ Wrap up investigation (2009)</li> <li>▪ Case-specific planning</li> </ul>

**Thank You for Your Time and Attention**

**Questions are Welcome**