



Update – Preliminary Design of Phase 1A Bank Management Areas

Clay Patmont, Anchor QEA

August 2015

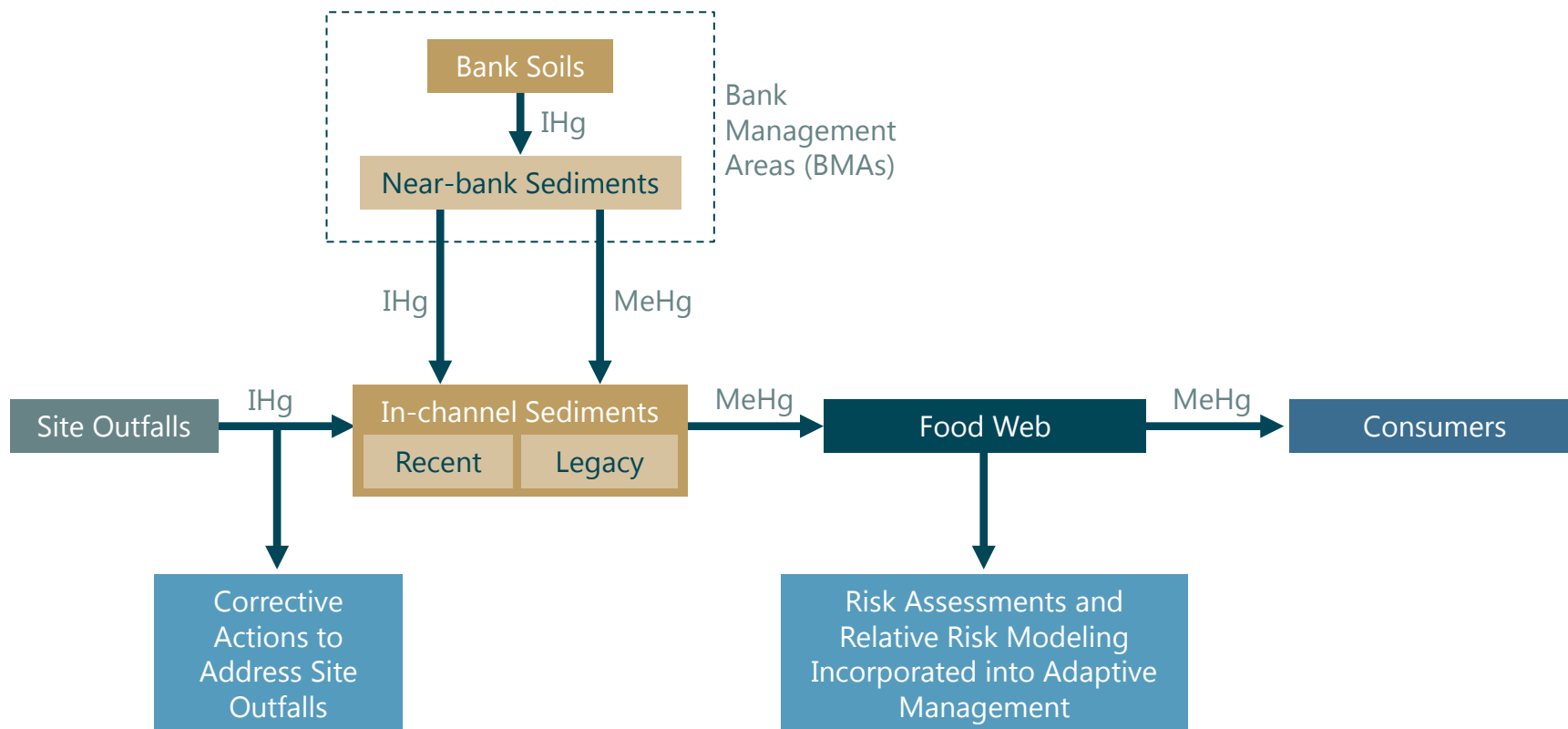


Overview

- Phased implementation
- Pre-design data collection
- Primary and secondary BMAs
- Preliminary design concepts
- Next steps



Planned Interim RCRA Corrective Actions

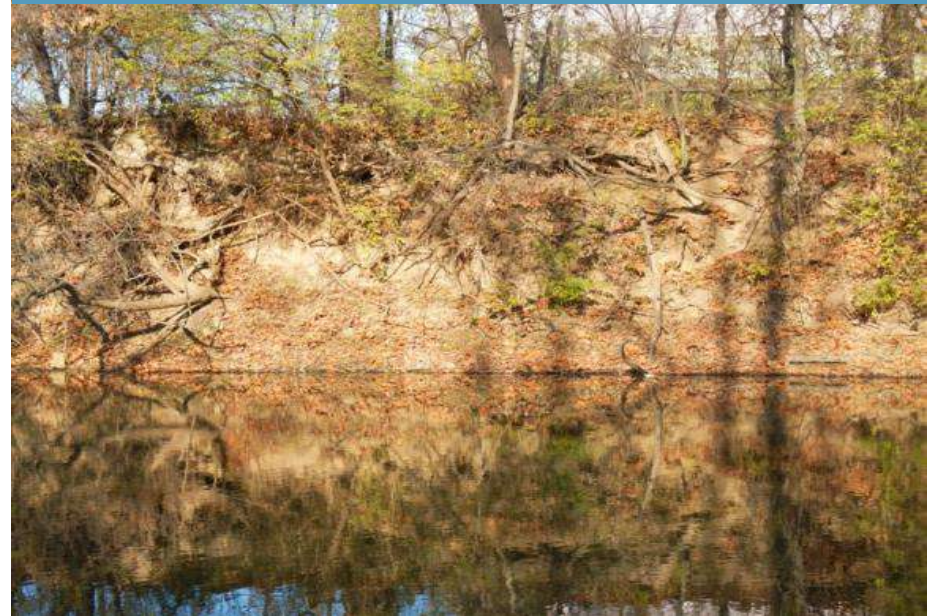


Notes:
IHg – inorganic mercury
MeHg – methylmercury

Phased Implementation in Upper 2 Miles

- Phase 1A
 - City of Waynesboro-owned bank management areas (BMAs) in upper 2 miles
 - Pre-design data collection
 - Ongoing discussions with City of Waynesboro on remedy scope
- Phase 1B
 - Non-City owned BMAs in upper 2 miles
 - Remedy scope informed by outcome of Phase 1A

Roughly 90% of total mercury load to first 2 river miles attributable to 25% of banks



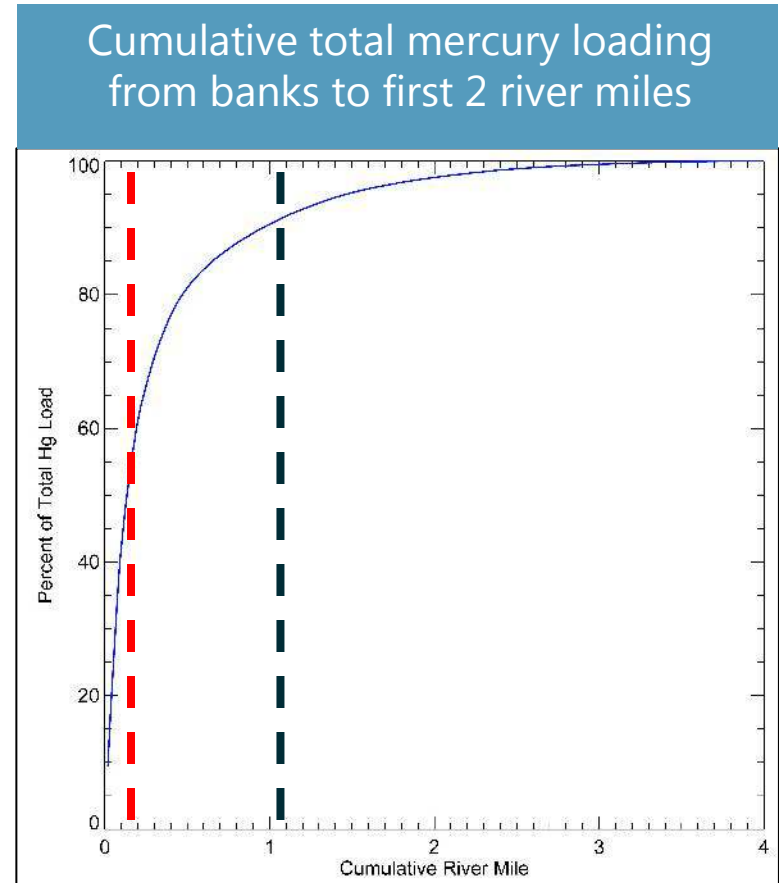
Pre-Design Data Collection

- Objectives:
 - Refine extent of Phase 1A BMAs
 - Optimize remedy elements
- Supplemental core sampling
- Geotechnical analyses
- Tree surveys
- Utility surveys

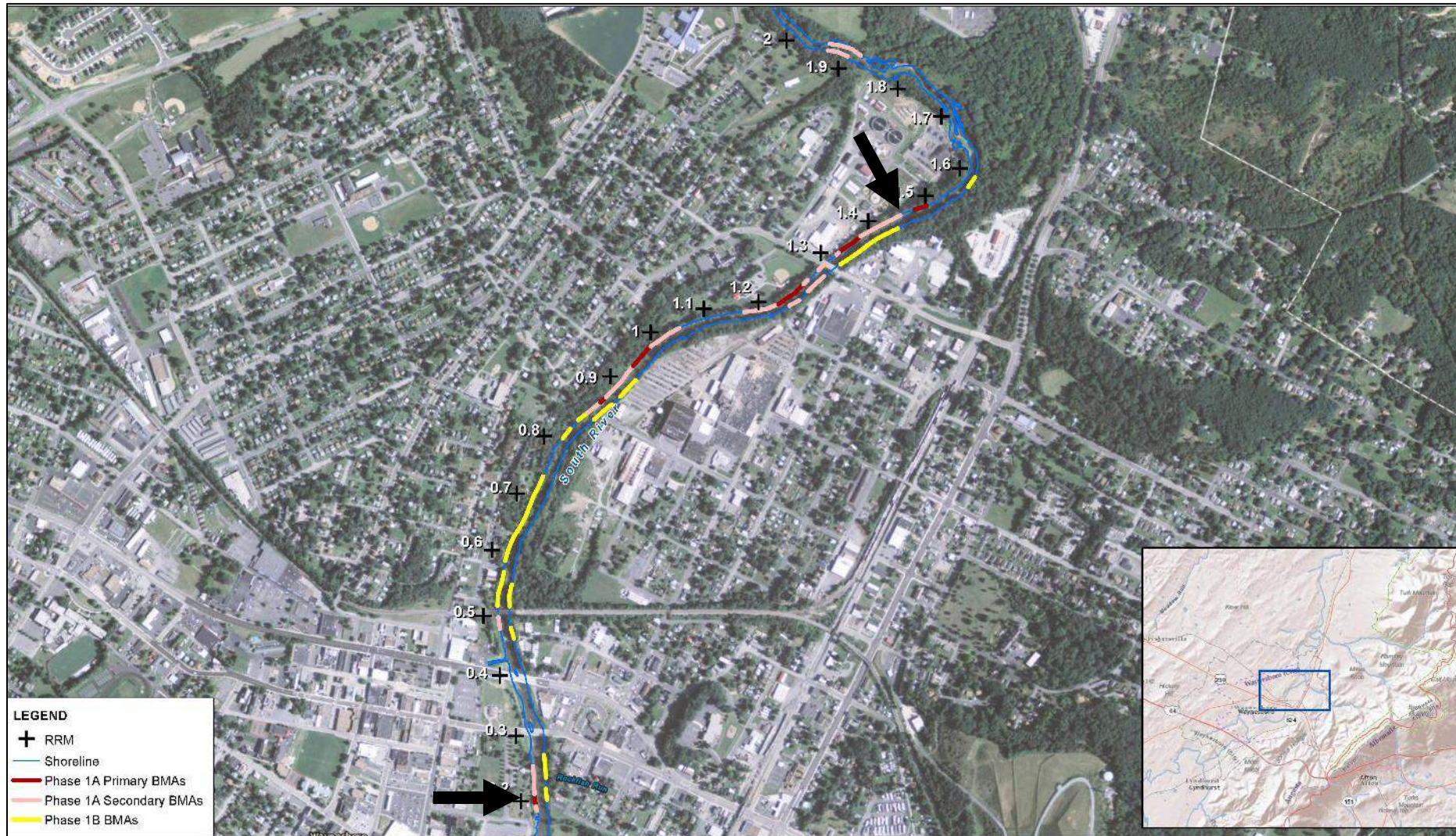


BMA Remedies Based on Mercury Loading

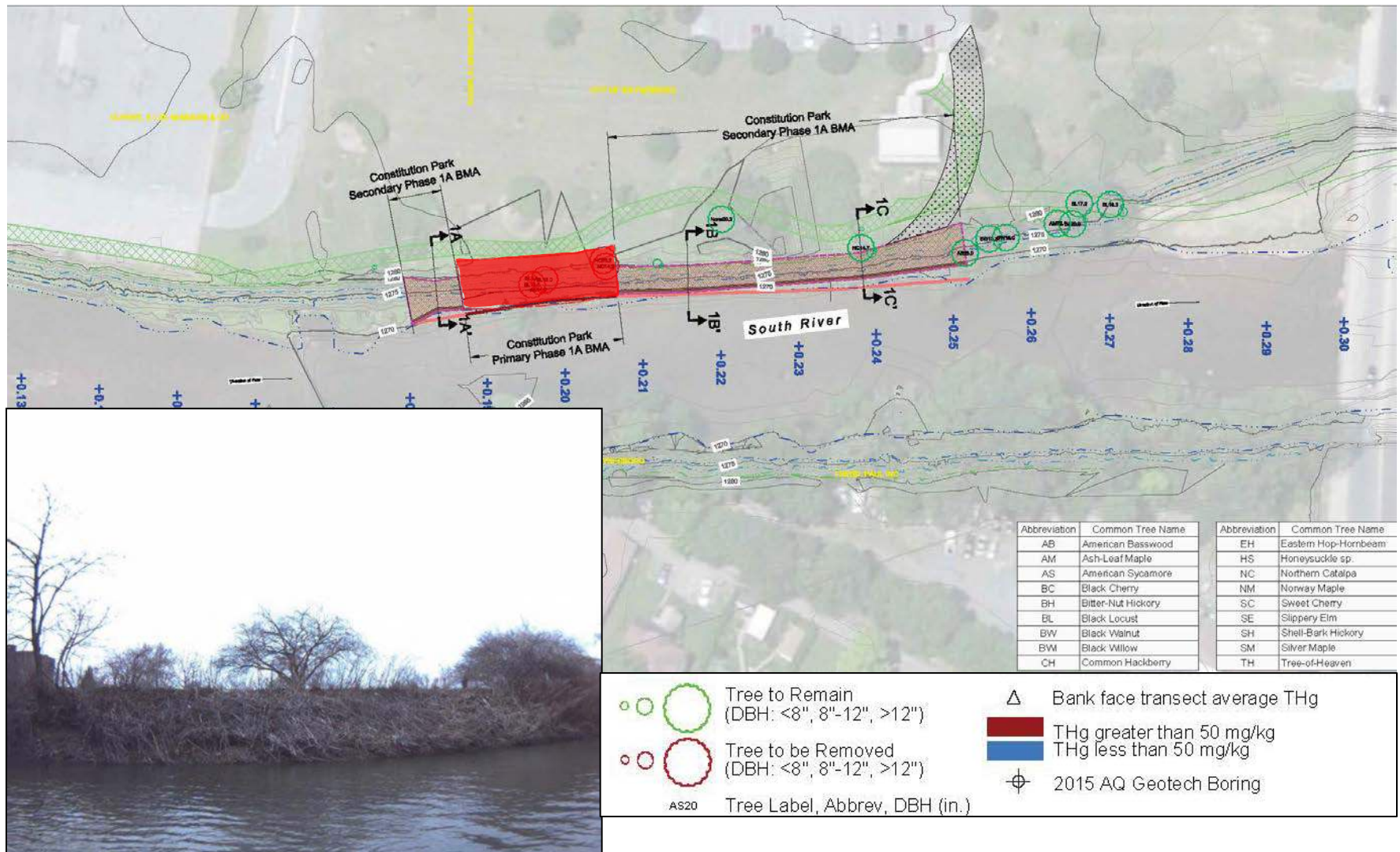
- Primary BMAs
 - Approximately 5% of banks represent roughly 50% of total Hg loading from banks
 - Localized removal and replanting
- Secondary BMAs
 - Approximately 20% of banks represent roughly 40% of total Hg loading from banks (i.e., 90% from Primary + Secondary)
 - Enhanced vegetative stabilization



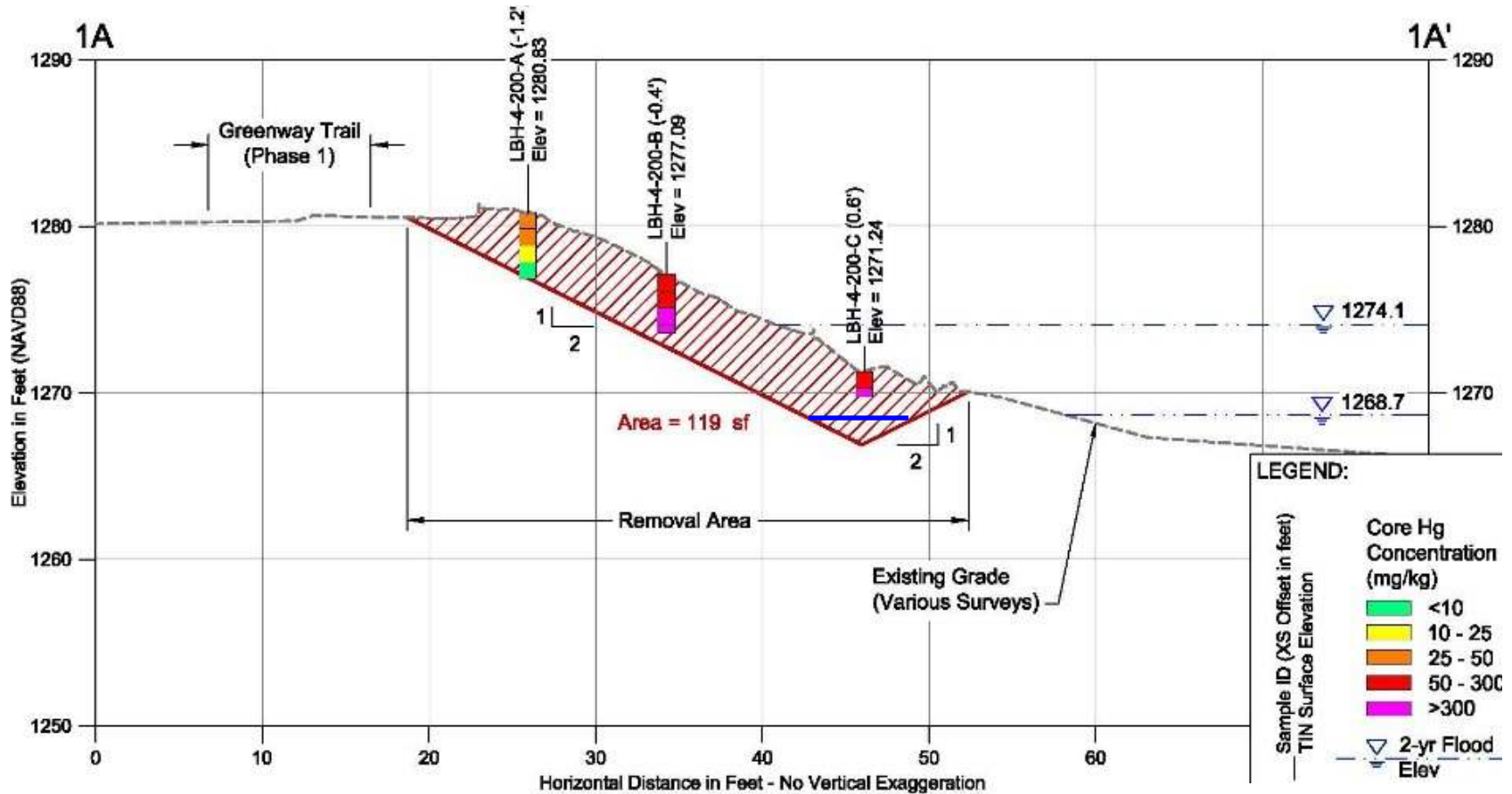
Bank Remediation Areas in Upper 2 Miles



Constitution Park BMA Remediation Areas

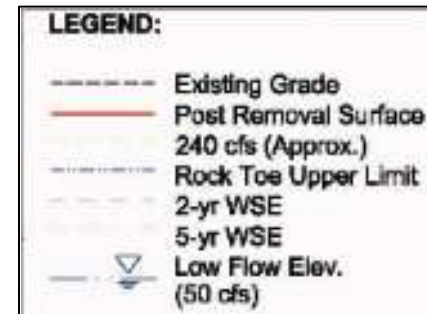
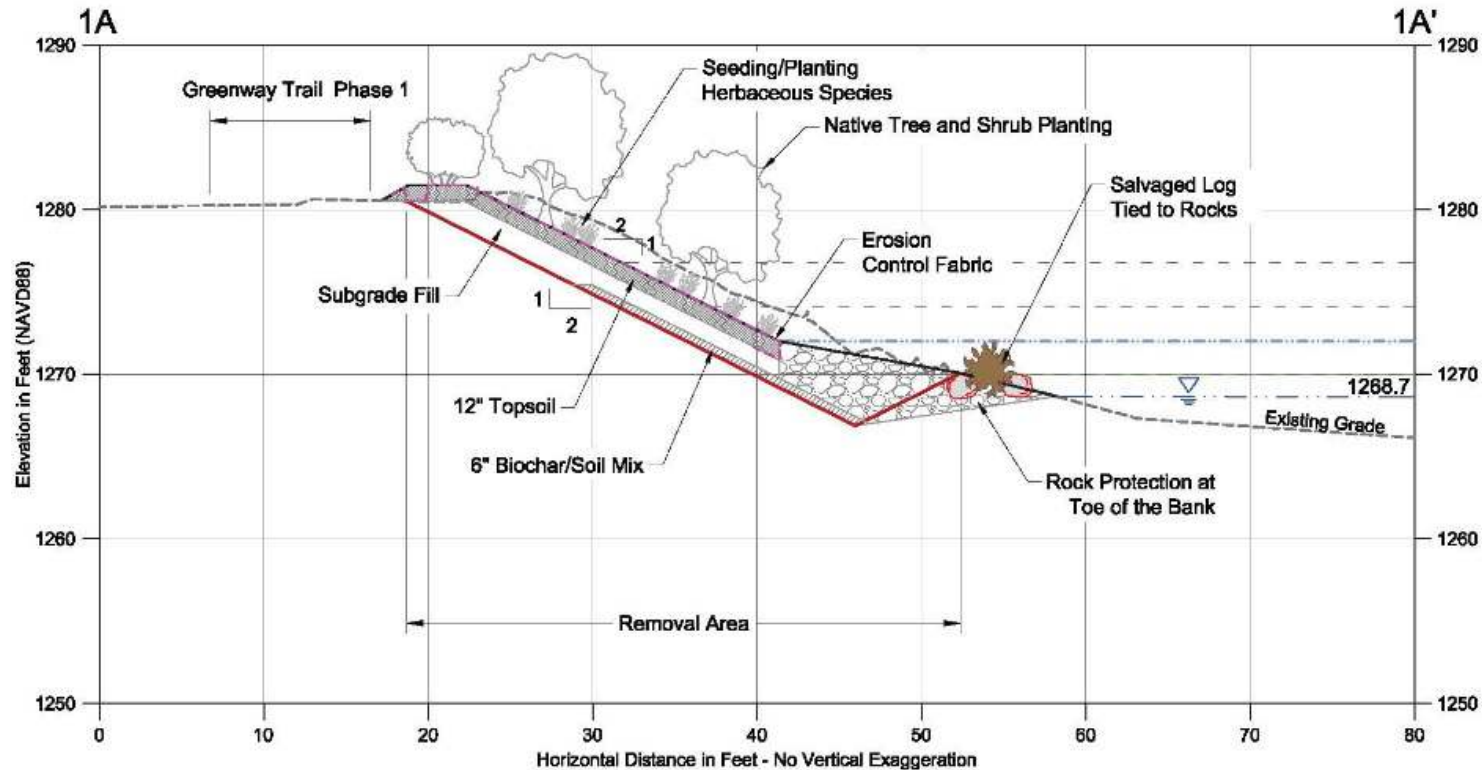


Constitution Park Primary BMA Removal Section

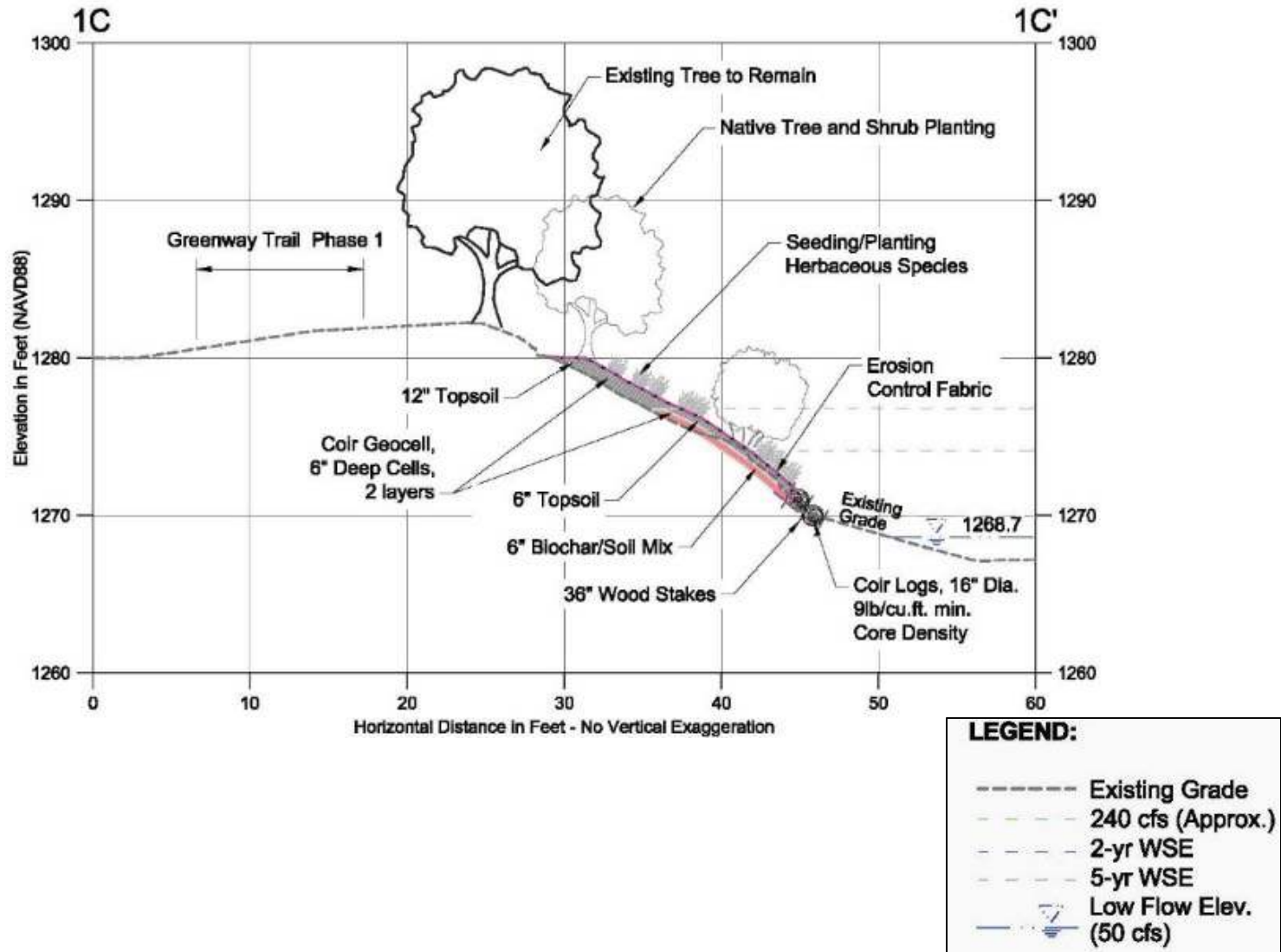


- Gravel Bed

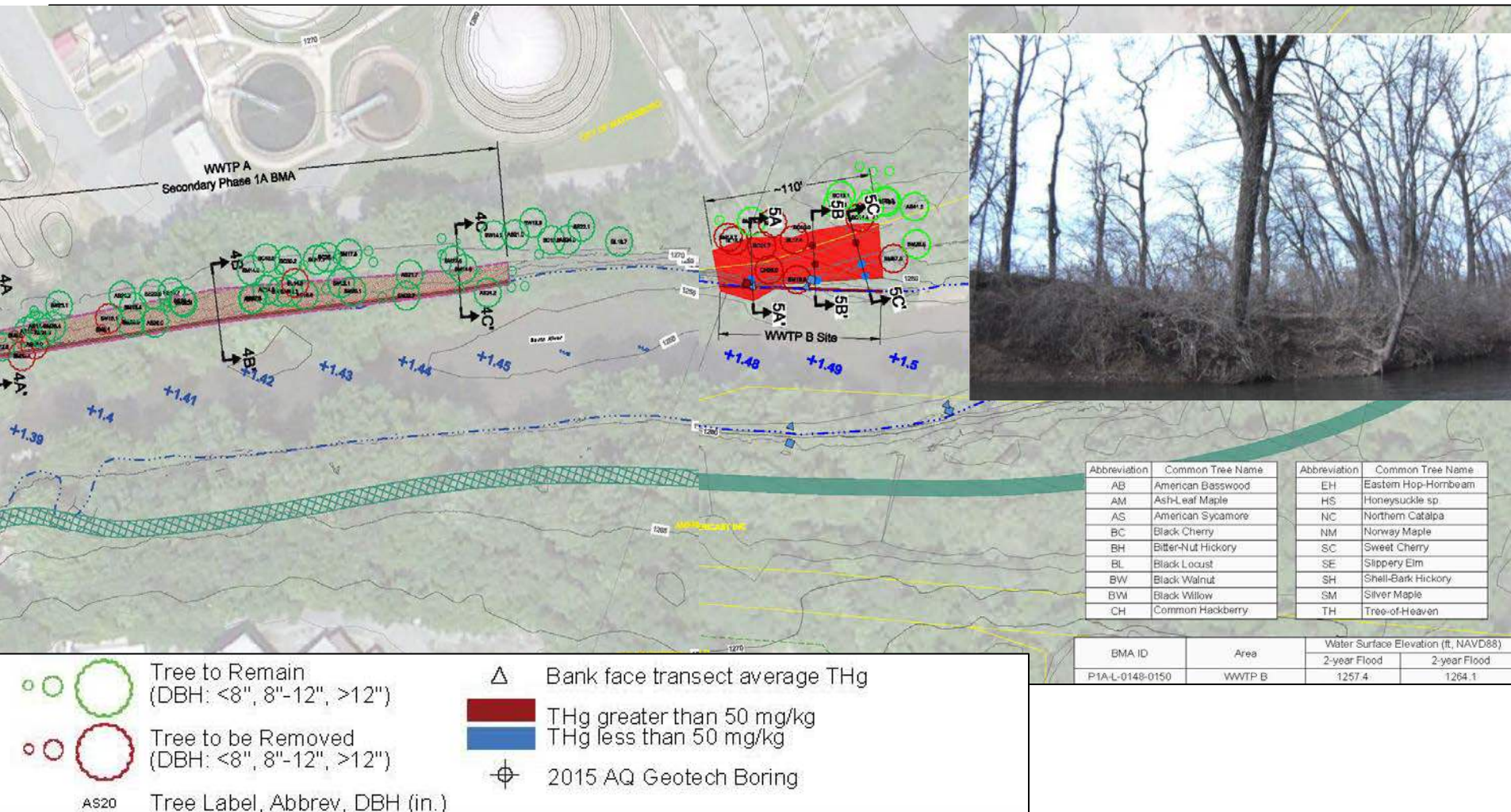
Constitution Park Primary BMA Restoration Section



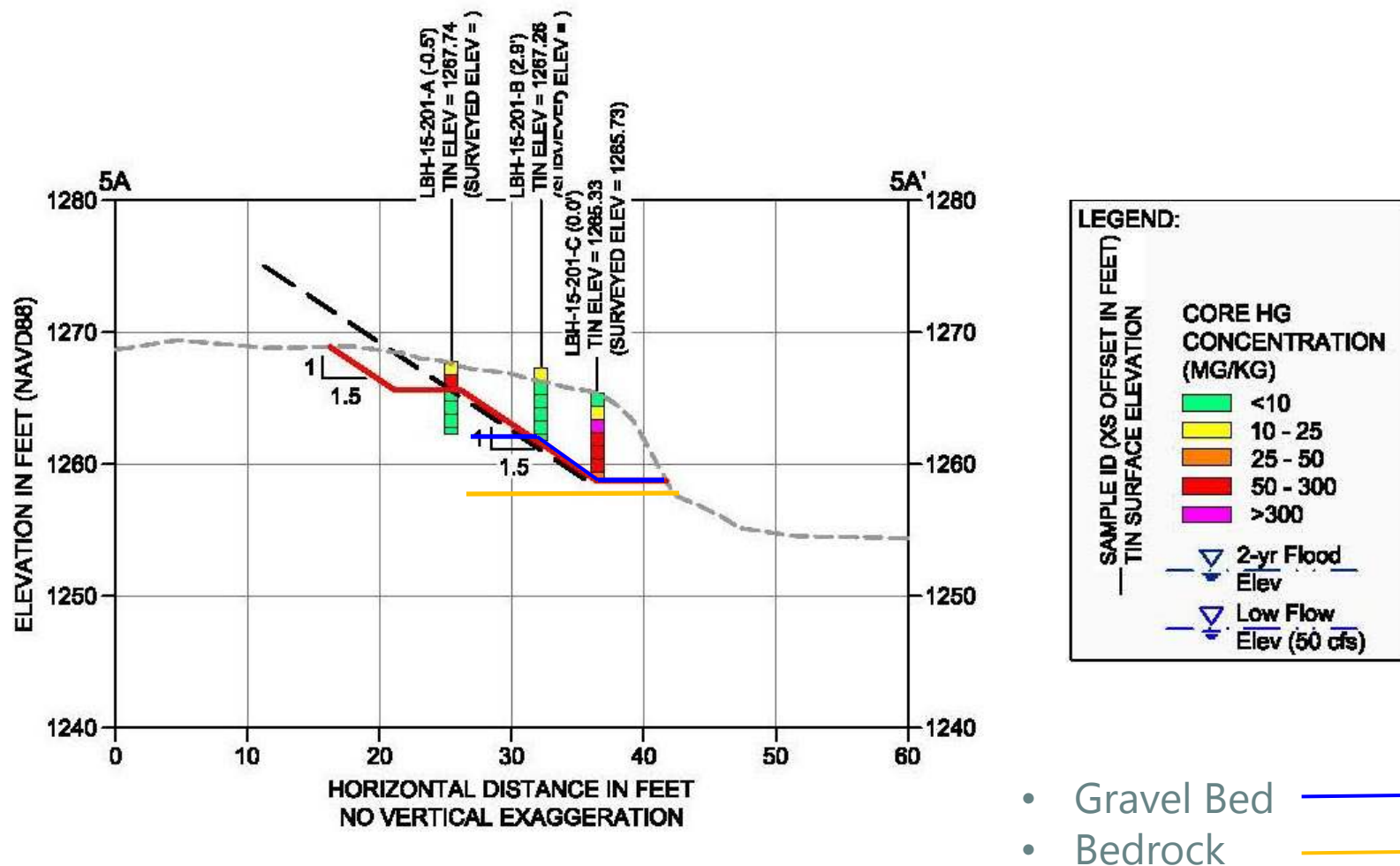
Constitution Park Secondary BMA Section



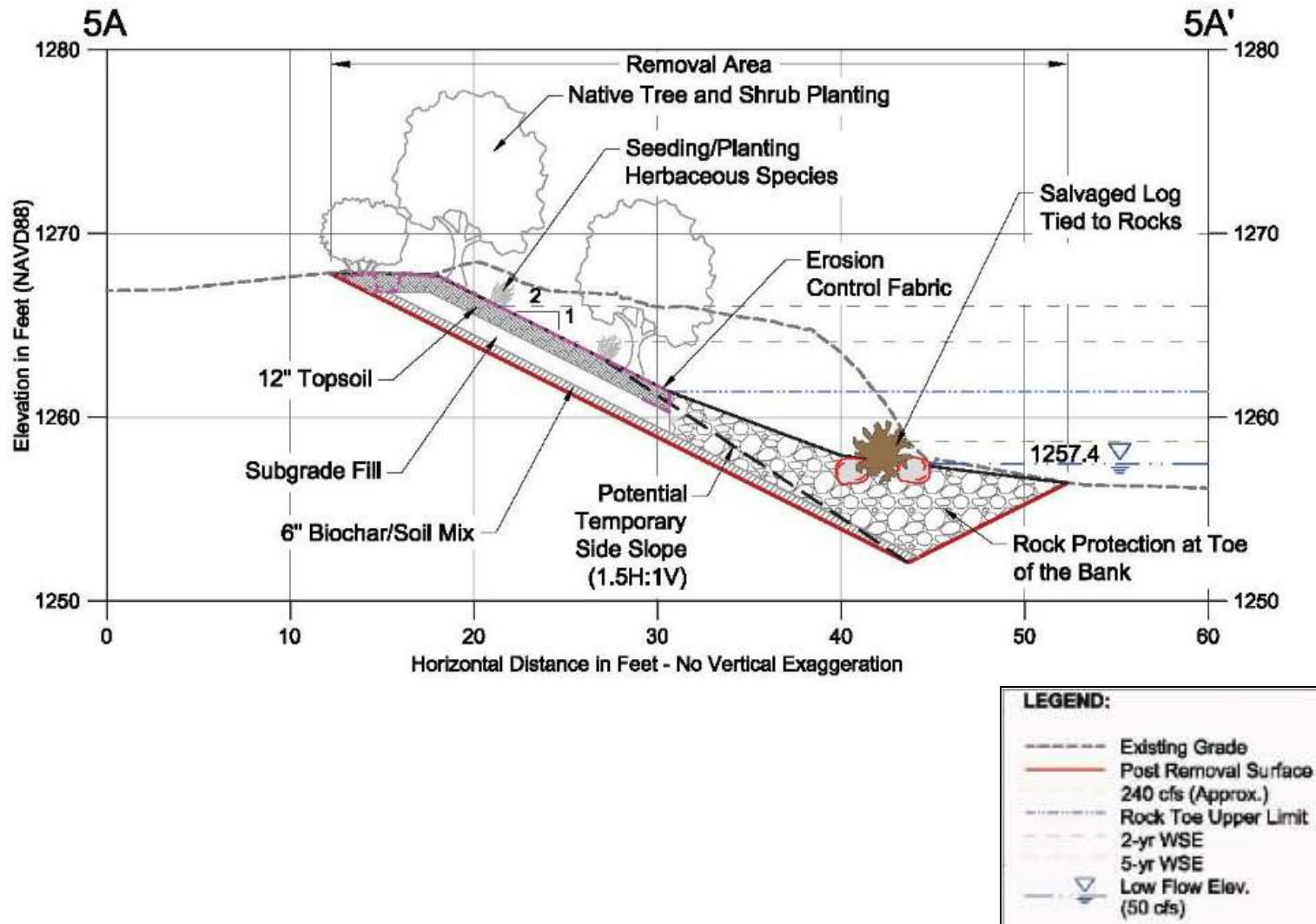
WWTP BMA Remediation Areas



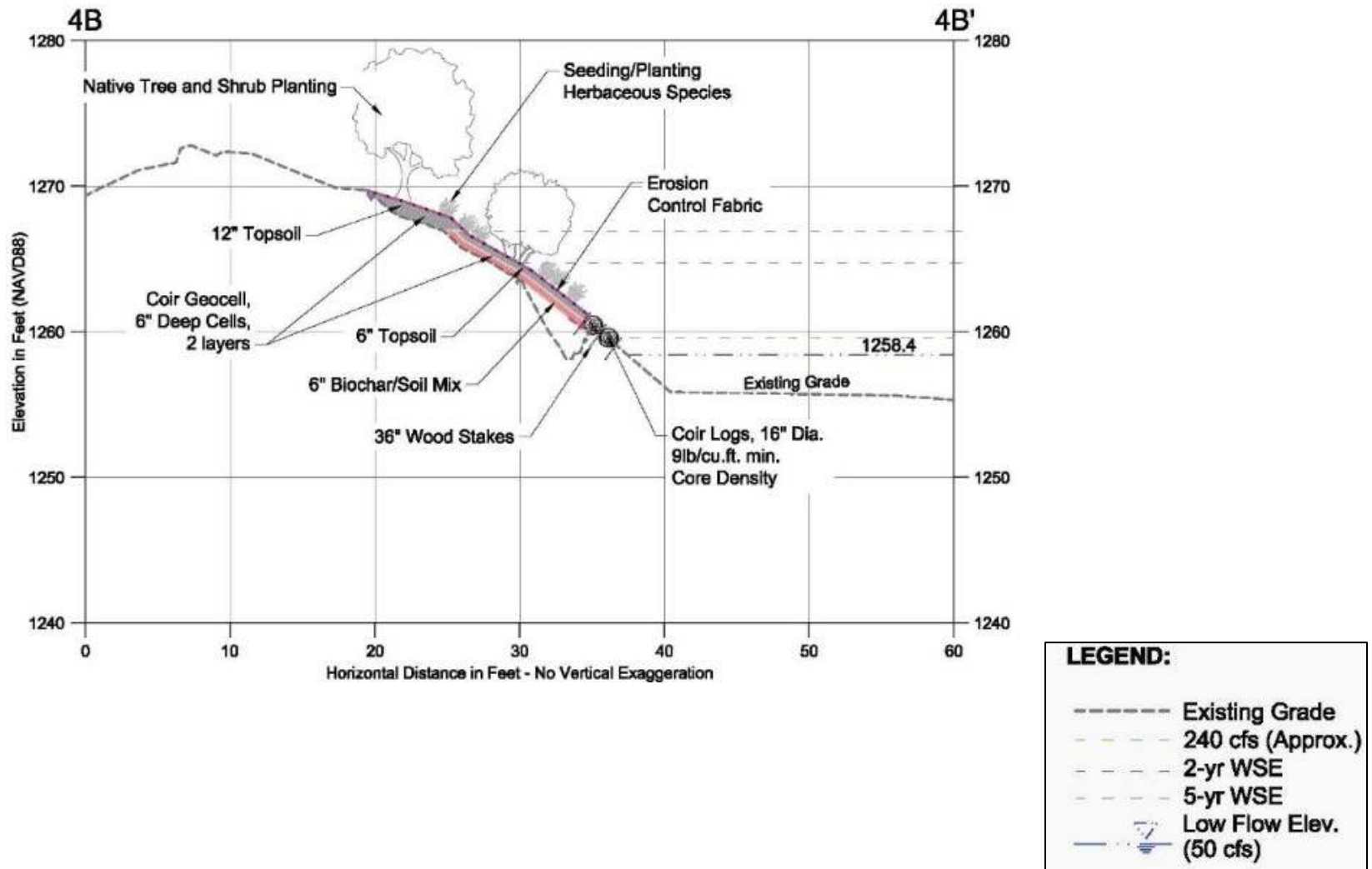
WWTP Primary BMA Removal Section



WWTP Primary BMA Restoration Section



WWTP Secondary BMA Section



Path Forward

- Ongoing conceptual design refinement with stakeholders
- Mid-September – preliminary Phase 1A design report
 - Follow-on City/Agency reviews
- Late September – pre-application permit meeting
 - Permit applications submitted by late 2015
- Early 2016 – final design, access agreements, and permitting
 - Begin construction in spring 2016



Questions/Discussion

