
Cypher / E Street Improvements

Environmental Planning & Compliance

Public Informational Meeting

March 23, 2023



massachusetts port authority




Cypher / E Street Improvements – Agenda

- Project Team Recap
- Construction Scope
- Schedule Summary
- Environmental Compliance
 - LSP role in construction
 - Soil boring overview
 - TSCA area history
 - Construction overview
 - Air monitoring
 - Stormwater controls
 - TSCA precautions



Cypher / E Street Improvements – Project Team




Nitsch Engineering
Project Design Lead



TETRA TECH

Environmental Planning &
Compliance



Resident Engineering



Safety

Cypher / E Street Improvements – Construction Scope

Summary

- **Richards Street** - New bicycle / pedestrian facilities
- **Cypher Street** - Roadway reconstruction including new sidewalks, roadway, bicycle facilities (to D Street) & utilities
- **Cypher Street (D Street to E Street)** – New roadway construction, sidewalks & utilities
- **E Street** – Milling/ Repaving (Asphalt Surface Restoration)
- **Fargo Street** – Roadway reconstruction including new sidewalks, roadway surface & utilities



Cypher / E Street Improvements – Schedule Summary

Pre-Characterization Phase – Soil Borings
April/ May 2023

Pre-Construction Phase
Summer 2023

Construction Phase
Summer 2023 – Early 2025



Cypher/E Improvements – Environmental Compliance

- Work will be conducted in a manner that meets all MassDEP and US EPA regulatory requirements and protocols
- Design of the project incorporated environmental conditions, increasing elevation of the roadway(in TSCA area) to reduce disturbance of soil.
- Tetra Tech Licensed Site Professional (LSP) and staff establish procedures and provide project environmental compliance oversight
- Dust controls will be implemented and monitored
- A Resident Engineer will be on-site full time
- Environmental sampling planned to start April/ May 2023 to streamline offsite disposal efforts for surplus soil

Cypher/E Improvements – Environmental Compliance

Role of the Licensed Site Professional (LSP)

- Licensed Site Professionals (LSPs) are authorized by the Commonwealth to oversee the assessment and management of contamination that has been released into the environment. LSPs are scientists, engineers, and public health specialists with significant professional expertise in oil and hazardous material contamination. LSPs are governed by the Massachusetts Board of Registration of Hazardous Waste Site Cleanup Professionals, also known as the LSP Board.
- Under the Code of State of Massachusetts Regulations 309 CMR Licensed Site Professionals (LSPs) are **required to hold paramount public health, safety, welfare and the environment** in the performance of professional services.

Pre-Characterization Phase – Soil Borings

Pre-Characterization Phase – Soil Borings

Pre-Construction Phase

Construction Phase

Purpose: Gather soil data to inform construction planning and support safe, efficient soil removal during the construction phase of the project.

Timeframe: April/ May 2023

Pre Characterization Borings

Approx. 68 soil borings, focusing on Richards, Cypher, and Fargo Streets.

- Asphalt coring/removal
- Vacuum removal
- Conventional drilling

Environmental Mitigation

- Air monitoring
- Equipment decontamination
- Asphalt removal and restoration same day.
- Vacuum excavation controls and contains soil
- Mat placed around core opening in TSCA area
- Proper handling and disposal of excess soils and waste



Existing Conditions in Toxic Substances Control Act (TSCA) Area

Areas within the project are regulated by MassDEP. The yellow highlighted area is also regulated by USEPA under more stringent TSCA regulations.

What is TSCA?

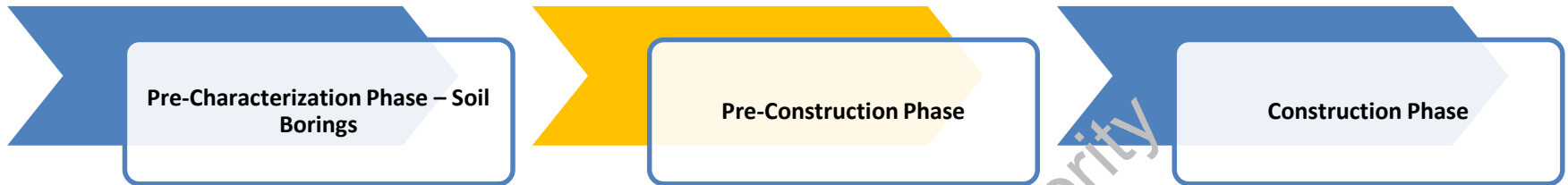
- The Toxic Substances Control Act of 1976 provides US EPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures.
- PCBs are regulated under TSCA
- Requires appropriate management and disposal of soil and other materials contaminated with PCBs.

History of TSCA Area (Highlighted In Yellow)

- Boston Junk/SAK Recycling facility operated from 1947 to 1996, including scrap metal recovery of electrical equipment
- PCB and other contamination identified in soil.
- The Site has achieved Regulatory Closure.
- A Deed Restriction exists on the site, which obligates the owner to maintain the cap in perpetuity.
- Deed restriction requires environmental controls for proposed construction work within existing cap limits.



Pre-Construction Phase



Timeframe: Summer 2023

Prior to construction

- Contractor will be required to employ an environmental specialist to document how they plan to do the work and comply with the specifications.
 - Soil Management Plan
 - Dust Control Plan
 - Traffic Management Plan
 - Decontamination Plan
 - Health & Safety Plan
 - Storm Water Pollution Prevention Plan
- Submittal review – Massport and Tetra Tech will review documents to verify compliance. Work will not begin until documents are accepted.
- Massport and Tetra Tech will submit Plans to EPA (Self-Implementing Plan or SIP) and MassDEP (Release Abatement Measure Plans or “RAM Plans”)
- Dust monitoring equipment will be deployed prior to start of earthwork.
- For work in TSCA Area – Fence with scrim (dust screen) will be installed.
- Pre-construction community meeting will be held

Construction Phase



Timeframe: Entire Project: Summer 2023 through Early 2025

TSCA Segment: Fall 2023 through Spring 2024 (*Approximate*)

During construction

Full Time Resident Engineering Oversight – Keville Enterprises will provide full time oversight to enforce compliance with construction plans and specifications.

Environmental Oversight - Tetra Tech will provide oversight of TSCA soil excavation, handling, management and disposal. Activities will be described in required submittals to USEPA and MassDEP.

- Ambient Air Monitoring Program
- Dust Control
- Stormwater and Erosion Controls
- Equipment and personnel decontamination procedures
- Waste management
- Soil excavation, proper onsite management and tracking for offsite disposal
- Contractor will be required to have full time competent safety person

Construction Phase

Air Monitoring

- Air monitoring units will be set up prior to the start of work
- Air monitoring for dust and total volatile organic compounds (VOCs) during active phases of soil excavation, grading and other construction-related disturbances.
- Site-specific dust limits will be used to determine when additional dust control activities must be implemented, and when work must be stopped.



Dust Control Tools

- Within TSCA Area – Place protective covering over existing soils once asphalt removed
- Wetting agent – Water or calcium chloride applied to exposed soil
- Scrim (dust screen) along fence (TSCA area)
- Construction entrance will be constructed (crushed stone) to prevent tracking exposed underlying soil in TSCA area
- Street sweeping will be provided during heavy earthwork activities



Construction Phase – Air Monitoring

Air Monitoring

- Real Time Monitoring During Active Construction
- Graphical Depiction of Monitoring Zone
- At each work location one (1) monitor upwind, two (2) downwind will be in place

(This graphic is a sample layout and not an actual work setup)



Construction Phase – Stormwater Controls

Stormwater and Erosion Controls

The following plans and submittals establish the requirements for stormwater and erosion control measures to be implemented during the project:

- **Boston Conservation Commission – Order of Conditions (OOC)**
- **Construction General Permit (CGP)**
- **Stormwater Pollution Prevention Plan (SWPPP)**
- **Installation and Maintenance of Stormwater Erosion Controls**
 - Straw Wattle / Silt Fencing around disturbed areas
 - Catchbasin Inlet Protection (Silt Bags)
 - SWPPP and OOC Require Regular Monitoring, Repair and Replacement of Erosion Controls
 - SWPPP requires inspection after storm events
 - Erosion controls, sediment and other materials from TSCA Area will be managed as TSCA Waste



Equipment Decontamination – TSCA Segment

Decontamination within TSCA Area

- Construction, tools and other equipment will be decontaminated before it leaves the work area per 40 CFR 761.79(c) “double wash, double rinse” protocol
 - Removal of heavy soiling or impacts through scraping and brushing
 - Double washing equipment in accordance with the standard to ensure no tracking of impacted soils.
- Wash water, sediment and cleaning materials from decontamination area will be captured and placed in drums for disposal.
- Controlled entrances to be sure truck hauling ~~is~~ not track material outside the limits of the project

Regulatory Review by



Waste Management within TSCA Area

- Contaminated Personal Protective Equipment (PPE) for workers will be disposed of in drums to the proper facility.
- Decontamination rinse water, sediment and other cleaning materials will be captured and disposed of as TSCA waste

Cypher / E Street Improvements

Questions / Discussion

Contact

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