

Site History and Revised Cleanup Plan

Union Pacific Railroad – Former Ashland Rail Yard

ECSI #1146

Ashland City Council Meeting
Oct. 3, 2023



Outline



Site background

Location
Photos
History



New cleanup plan

Supplemental Remedial Investigation/Feasibility Study
Impacted Areas
Cleanup considerations

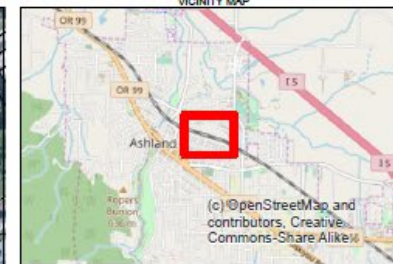


Estimated project timeline



Questions

Site vicinity map



LEGEND

- Previous Identified Property Boundary
- Property Boundary
- Parcels

Total historic Southern Pacific parcel was approximately 21 acres.

Former rail yard parcel is 11.7 acres.

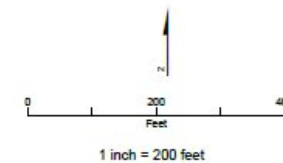


Photo of Site – Facing southeast from Clear Creek Drive



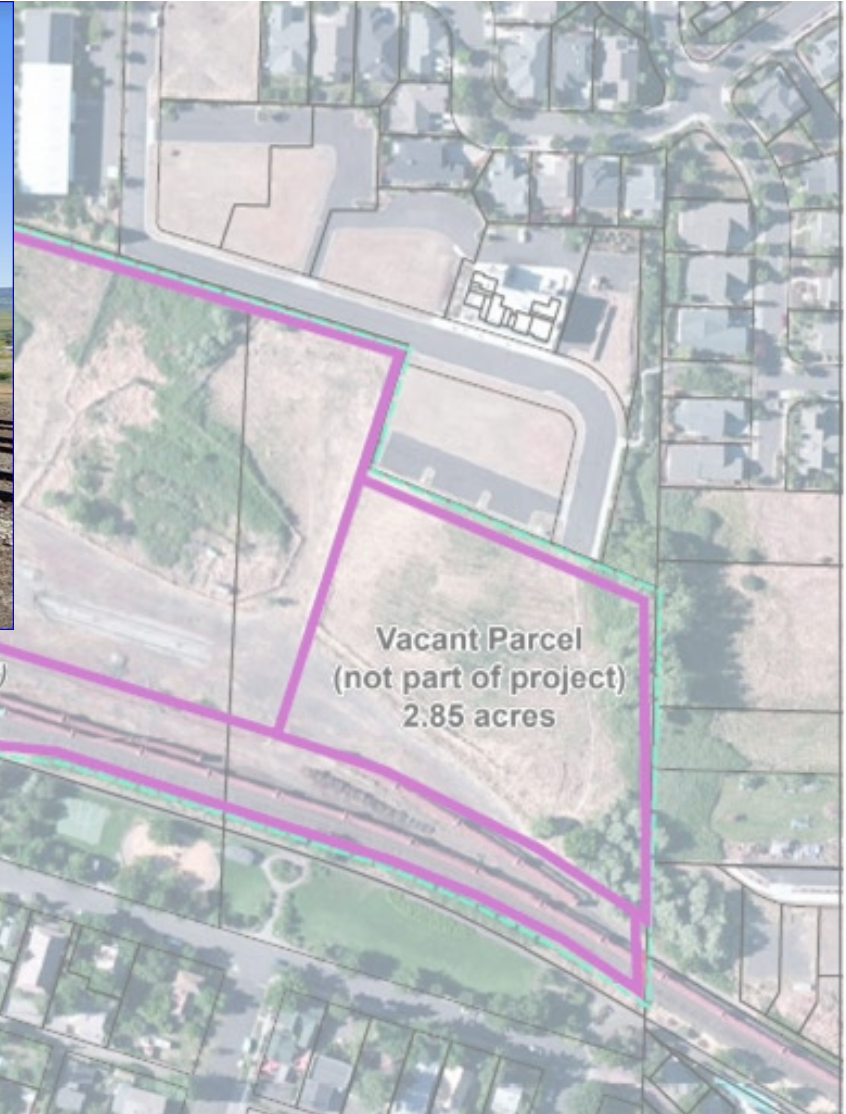
Photo of Clear Creek Drive – Facing east



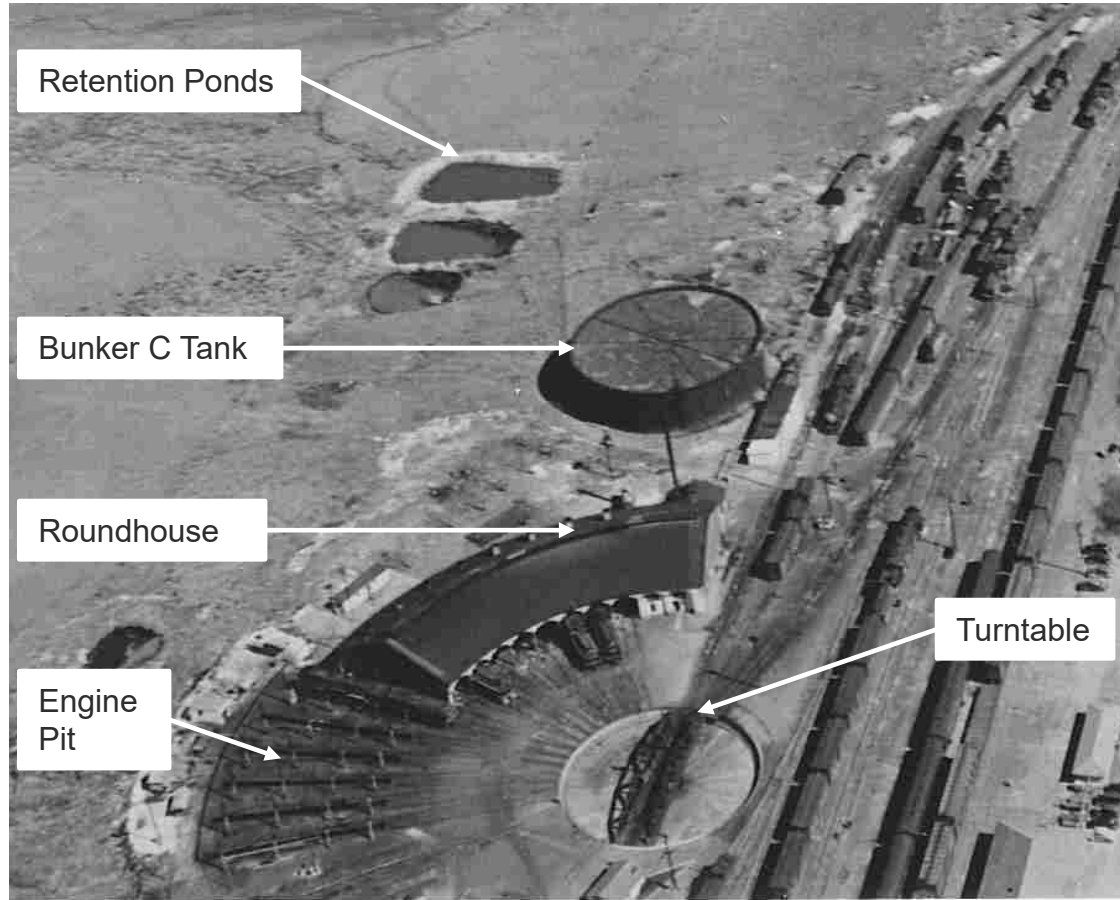
Photo of Williamson Way – Facing west



Photo North of A Street – Facing west-northwest



Site use



- 1887-1986 Locomotive fueling, maintenance, and railcar repair.
 - Petroleum hydrocarbons, polycyclic aromatic hydrocarbons (PAHs), metals
- 1980s Most buildings removed.
- Railroad is currently active but the rail yard is undeveloped and inactive.

DEQ Voluntary Cleanup Program

Releases

- Contaminants released and reported.
- Responsible party works under DEQ oversight.

Exposure

- Extent of contamination is determined.
- Contaminants of concern are identified.
- Risks to human health and environment are evaluated.

Solutions

- Protective cleanup levels are determined.
- Cleanup plans are evaluated and selected.
- DEQ confirms when cleanup is complete.

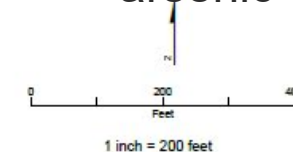
Impacted areas



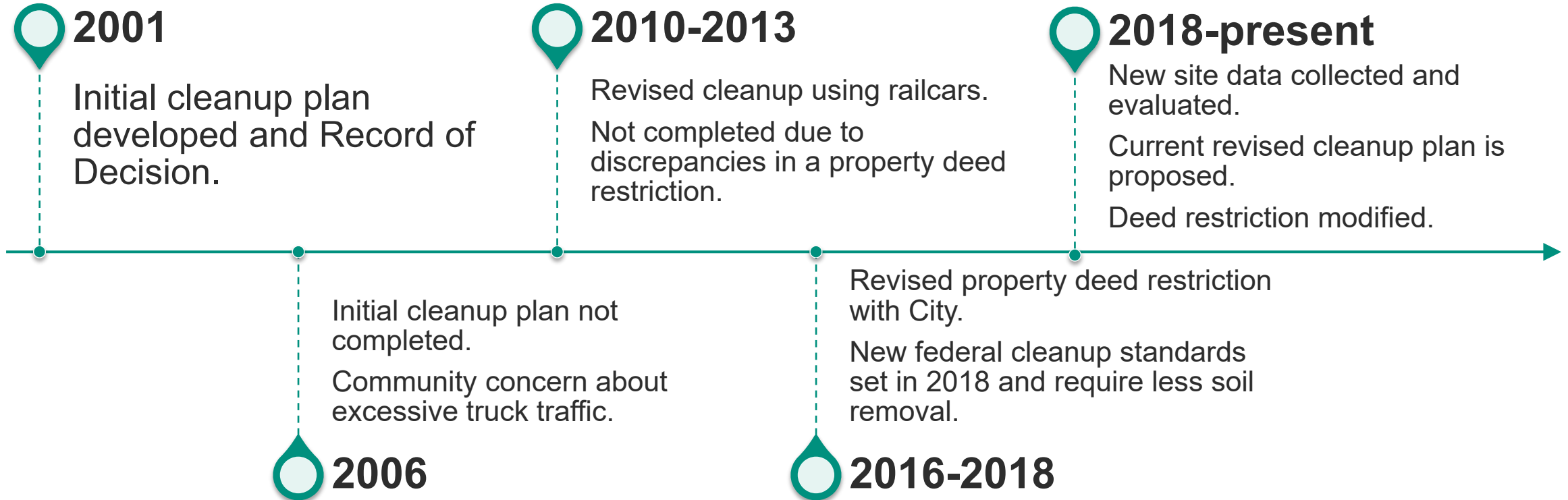
LEGEND

- Previous Identified Property Boundary
- Property Boundary
- Parcels

- **Soil**
 - Petroleum compounds from bunker C fuel and diesel
 - Lead and arsenic
 - PAHs
- **Shallow groundwater**
 - Petroleum compounds from bunker C fuel and diesel
 - arsenic



Cleanup history



2021 Supplemental Remedial Investigation/ Feasibility Study (RI/FS)

- Re-evaluated risks based on new site data, current toxicity values, and likely future exposure area settings.
- Defined areas where cleanup is required.
- Established objectives of the clean-up based on likely future use.
- Evaluated cleanup alternatives.
- Recommended a preferred cleanup alternative for the site.

Four cleanup plan options

Alternative 1 – No Action

- Required to consider by rule.
- No action to reduce contaminants.
- Not protective.

Alternative 2 - Excavation and Offsite Disposal of Shallow and Deep Soil

- Excavate and remove soil from entire 11.7 acres exceeding site-specific screening levels.
- Removal by rail car.
- No engineering controls.
- Deed restriction for single-family residential use.

Four cleanup plan options (cont'd)

Alternative 3 – Excavation and Offsite Disposal of Shallow Soil and Institutional Controls

- Excavate and remove shallow soil from entire 11.7 acres exceeding site-specific screening levels.
- Deed restriction for site use.
- Deep impacted soil left on eastern 3 acres.
- Additional deed restrictions required on eastern 3 acres.

Alternative 4 – Excavation, Consolidation, Vegetated Soil Cap and Institutional Controls

- Shallow soil exceeding site-specific screening levels excavated from western 8.7 acres.
- Deed restriction for site use.
- Excavated soil placed in low areas on eastern 3 acres.
- Soil and vegetated cap on eastern 3 acres.
- Additional deed restrictions required on eastern 3 acres.

Evaluated 6 balancing factors

1) Effectiveness

- Alt. 2 – Shallow and deep soil removal - most effective at providing protection.
- However, all alternatives adequately manage risks.

2) Long-term reliability

- Alt. 2 is most reliable because less reliance on institutional controls.
- Alt. 4 – Excavation, consolidation, soil cap – relies more on engineering and institutional controls.
- However, these types of controls are common at former commercial sites.

3) Implementability

- Alt. 4 is easiest to implement.
- Requires less soil removal and no export off site.

Evaluation of 6 balancing factors (cont'd)

4) Implementation Risks

- Alt. 2 and Alt. 3 (shallow soil excavation) have more short-term implementation risks than Alt. 4.
- Alt. 2 and Alt. 3 require construction of a new rail spur and transportation off site.
- Alt. 2 would require shoring for deep excavation.

5) Reasonableness of Cost

- Alt. 2 ~ \$7,240,000
- Alt. 3 ~ \$5,800,000
- Alt. 4 ~ \$1,960,000

6) Sustainability/green remediation

- Alt. 4 would have the least amount of greenhouse gas emissions - reduced truck/locomotive exhaust and fuel burned
- No waste generated with Alt. 4.

Cleanup considerations

Single-family residential development is not an option

- Current zoning is mixed commercial-residential.
- Surrounding development is all mixed commercial and high-density residential.
- City has indicated a preference for a mixed-use community.

Soil removal from eastern 3-acre area is not practical

- Large quantities of soil would need to be removed by truck or rail.
- High degree of uncertainty in soil volume and cost.
- Benefits of soil removal don't outweigh cost and implementation downsides.
- Protectiveness can be achieved by consolidation, capping and deed restrictions.

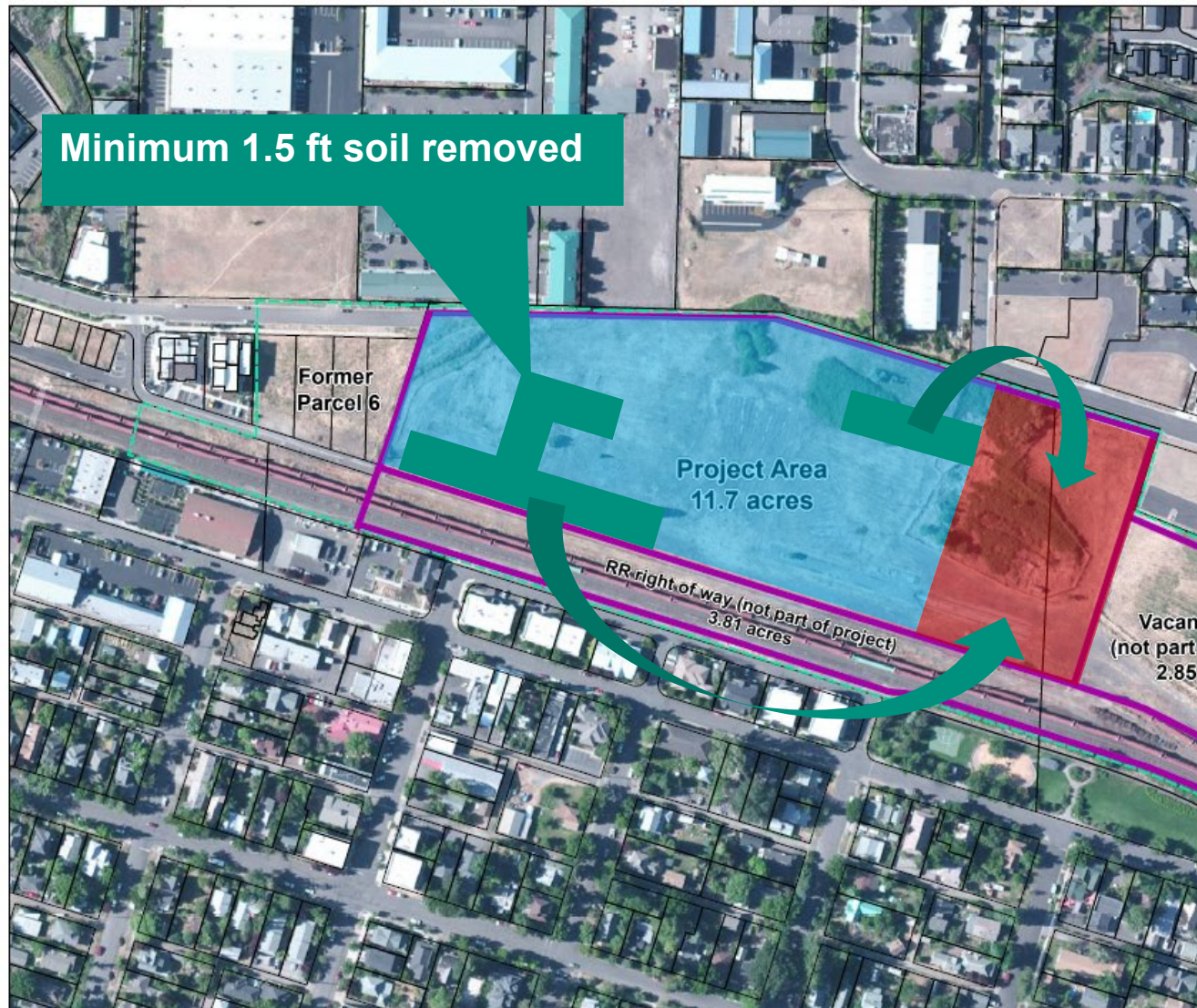
Most practical and focused cleanup scenario:

- Two separate exposure areas: **8.7 acres (west) and 3 acres (east)**.
- Most likely future exposure scenario: **Urban residential**.
- Both areas cannot be subdivided or change use without DEQ approval.

DEQ review recommended alternative

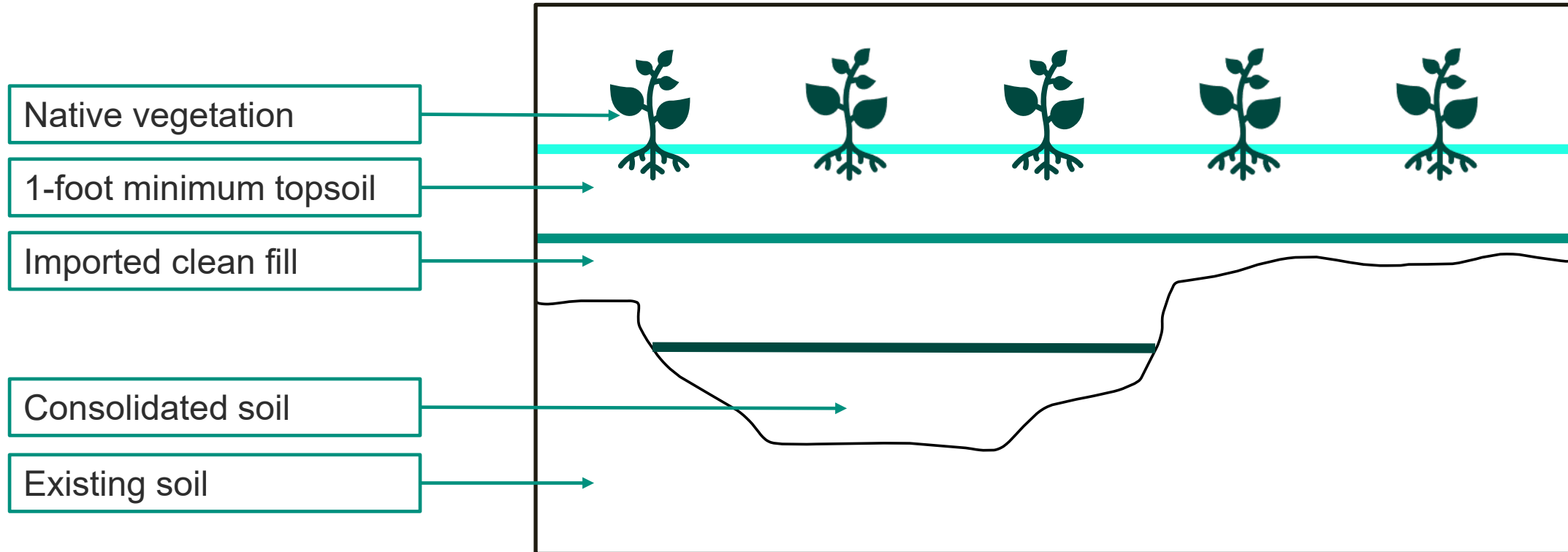
- DEQ accepted the recommended Alternative 4 (excavation, consolidation and capping) and proposed cleanup plan in 2021.
- In 2022, DEQ prepared a recommendation for the current proposed cleanup plan in the Revised Recommended Remedial Action.
- Revised Recommended Remedial Action went out for public comment in October 2022.

Cleanup plan



- About 2,700 cubic yards of soil excavated from western area and consolidated in eastern area.
- Clean backfill/topsoil for excavations delivered by side-dump railcars for entire site.
- One-foot clean soil cap on eastern area.
- Entire site hydroseeded with native plants.
- Eastern area will be fenced and have a deed restriction.

Conceptual vegetated soil cap



Institutional controls

For the entire 11.7 acres

- DEQ review and approve any request to subdivide or develop either the western 8.7-acres or the eastern 3-acres.
- Allow urban-residential/commercial site use.

For the capped 3 acres

- Site management plan for cap maintenance and guide future development.
- DEQ review and approve of proposed activities that would affect the cap.

Potential site use after cleanup

11.7 acres ready for urban-residential mixed use

- Living spaces may be on ground floor or higher.
- Commercial spaces may be on the ground floor.

More cleanup allowed if change in site use

- DEQ oversight if subdivided.
- More cleanup can happen if site use changes to single-family residential.

Examples of capped sites

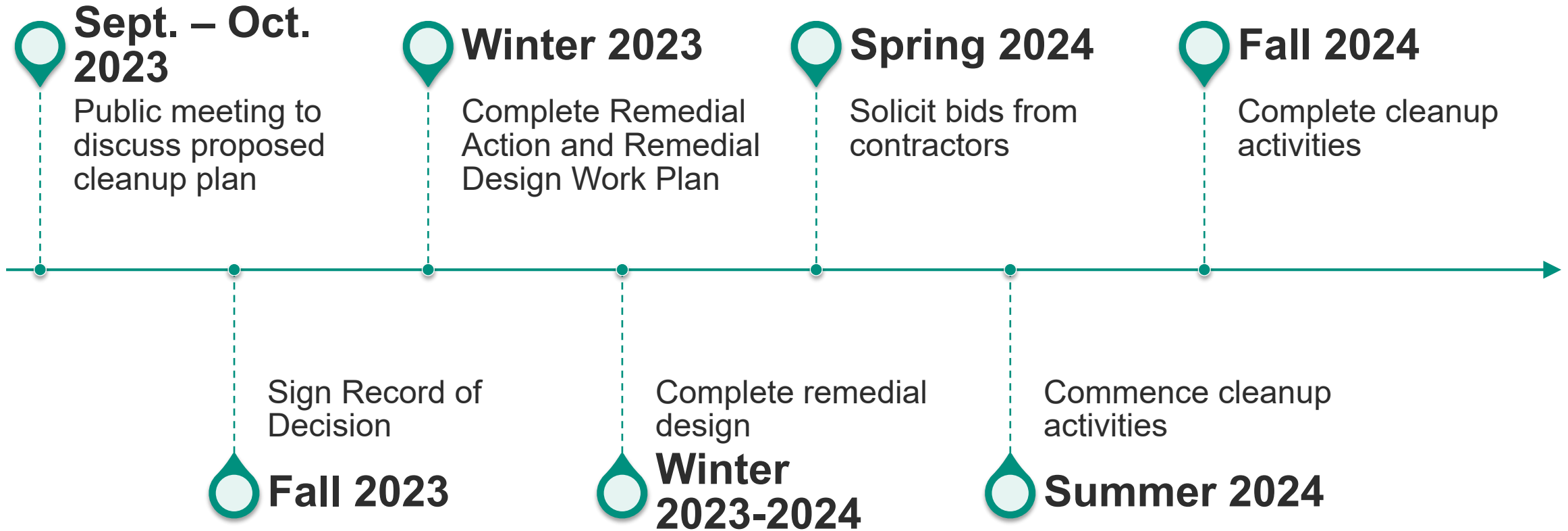
Capped sites in Oregon

- Mill Casino in North Bend along Coos Bay;
- Portions of Riverfront City Park in Salem;
- Suburban park in Tigard;
- Bridgeport Village shopping center in Tigard; and
- A former lumber yard ready for re-development in Sweet Home.

Former UPRR sites with soil caps

- An abandoned right of way into a 74-mile-long bike trail for recreational use in northern Idaho;
- One property redeveloped with a manufacturing site, community visitor center and sheriff's office; and
- A soccer field complex.

Estimated timeline



Questions



Visit the Ashland Railyard page for more information:

ordeq.org/AshlandRailYardInfo

Send questions or comments by 5 p.m. Oct. 31, 2023 to:

margaret.oscilia@deq.oregon.gov

