

Banfield Type 1 Substation Replacement Project

**Public Art Advisory Committee
Meeting 09/16/2025**

Thomas Walther – Sr. PM

14 Banfield Substations...

... power the first segment of TriMet's Light Rail System, which connected people with opportunity along a 15 mile corridor between Downtown Portland and Gresham since 1986.

Today TriMet operates about 70 substations along 60 miles of track connecting people with opportunity all around the Portland Metropolitan Area.

What are the goals of this project?

Replacement of the electrical equipment in the substation since most of it has become obsolete

- Spare parts are no longer available

Improve egress and ingress of the substation

- Current substation has one point of egress and ingress only (safety hazard)

Improve working space within the substation

- Very tight working space, equipment might block path to exit substation (safety hazard)

TriMet's project approach

Multi-year, multi-element project

- Each substation site is an individual project element with an individual budget and timeline
- Each substation site has its own challenges
- Individual design and construction approach

Standardizing TPSS design and layout

- Establish one TPSS design (Layout and Components) which will fit most sites
- Creating site specific civil design to incorporate standardized TPSS design

Substation Replacement Locations

City of Portland

City of Gresham



Design Districts

Design Phases

Central City

Design Review

Downtown Gresham

Phase 1 Phase 2



Current Banfield Line Substations

City of Portland

City of Gresham



Morrison

Steel
Bridge

Rose
Quarter

Lloyd
Center

60th

82nd

Gateway

122nd

148th

181st

Gresham
Central

Central City Design District

Design
Review

Design Review

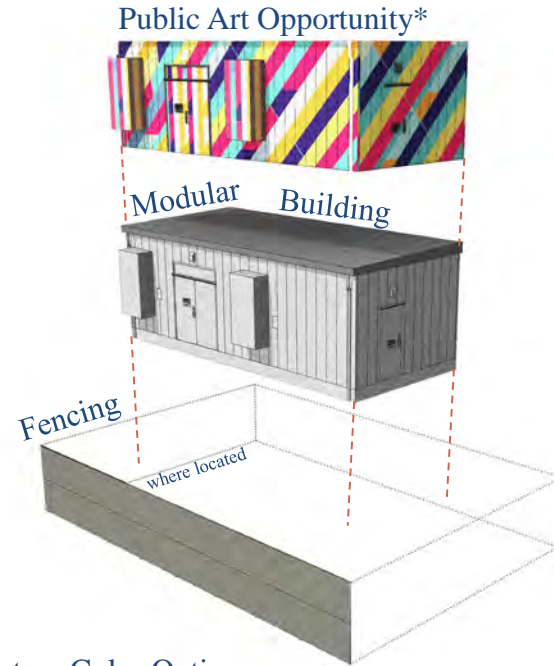
Downtown Gresham
Design District

Phase 1  Phase 2 

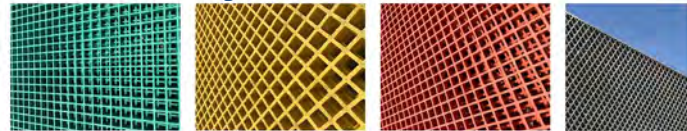
Kit of Parts CoP

Permitting Approach

- Establishing modular standard design elements that can be used throughout the MAX Blue Line Banfield Segment replacements
 - Modular Building
 - Public Art
 - Fencing – Colored
- Durable structure, including any additional finishes to the modular unit (i.e. Public Art)
- Maintain security of critical infrastructure as needed
- Design that reflects the context & neighborhood



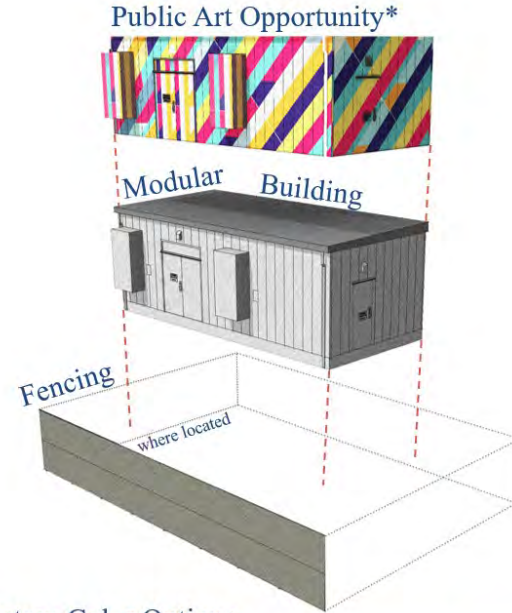
Custom Color Options



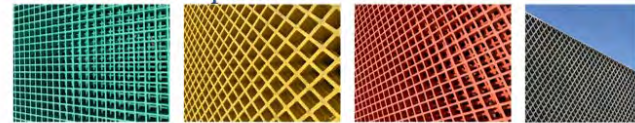
*Image not representative of design

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Custom Color Options



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Existing Public Art on these substations

- Murals on TriMet substations should be site-specific; original and related to the location, while engaging the surrounding community
- Artist selection and concept proposal approval typically occur through the Program's established public process
- Public Art can be an effective graffiti mitigation strategy. However, some sites are intractable
- Murals on existing MAX Blue Line substations at E 148th Ave and E 181st Ave



Mural examples in TriMet's Public Art Collection





Thank you

