

PORTLAND BELGIAN BLOCKS

PROJECT BACKGROUND, ISSUES TO EXPLORE, TIMELINE & PRECEDENTS

BACKGROUND

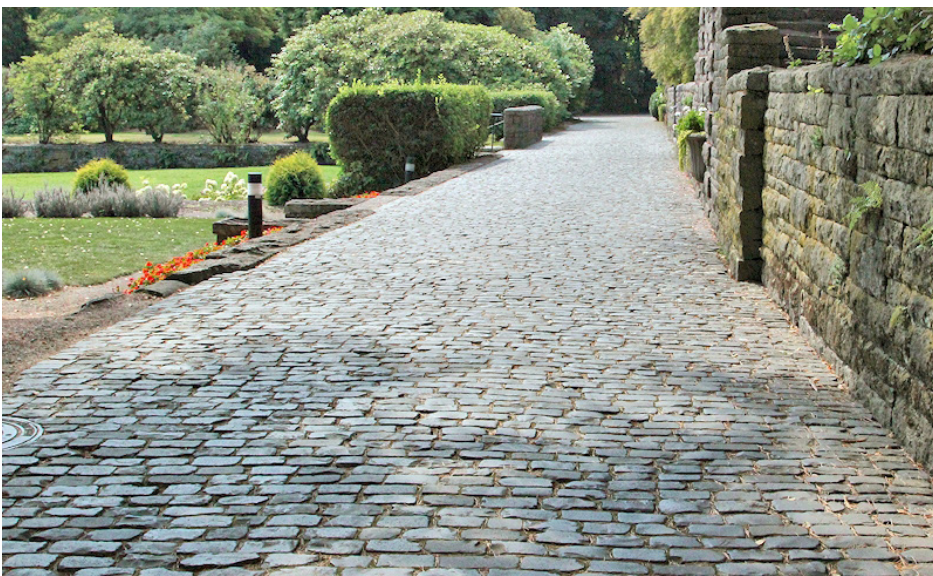
In 2019, the Bureau of Planning and Sustainability (BPS) and the Portland Bureau of Transportation (PBOT) received grant funding from the Kinsman Foundation for sorting, cleaning and storing a selection of Belgian Blocks for deployment at the Earl Blumenauer Bridge landings. City of Portland Ordinance Nos. 139670 (March 27, 1975) and 141548 (April 7, 1976) established policies and procedures for salvaging and reusing the blocks in new development projects. These policies, now embodied in [City Code Section 17.24.130](#), Preservation of Cobblestones, require that blocks uncovered by City workers or contractors in any quantity over 150 must be cleaned and stored by the Bureau of Parks and Recreation. Since 1998, record-keeping has been haphazard and often bureau staff is unclear about the responsibility for salvage, storage, and inventory.

To use the blocks, approval is needed from the Portland Historic Landmarks Commission, per deployment criteria developed by the Commission in 1975 that state:

1. Cobblestones should be reused primarily in districts or areas of the City where they were originally used. Historic Districts and Historic Landmarks where cobblestones were originally used as the paving material should receive first priority.
2. That as a general policy, cobblestones should be used for large paving areas, primarily in public pedestrian spaces where the special character of cobblestone texture would be meaningful. The use of cobblestones as small decorative elements in unrelated or isolated projects should be discouraged, as these uses are usually insignificant or inappropriate.

As these criteria were written before the passage of the American Disabilities Act, the latter has proved challenging in meeting PBOT's requirements for accessibility.

The Kinsman grant, along with the work provided by Peter Meijer Architect, are opportunities to reaffirm the commitment by the City to preserve these historic resources for future use, and to reconcile the contradictions between the existing approval criteria for deployment and real and perceived ADA accessibility requirements.



Local Examples. These two photos provide examples of the blocks in two different scenarios. The image on the left is of the blocks being utilized in a high traffic pedestrian area, at Lewis and Clark College, while the image on the right shows the blocks being used as a decorative boundary around a park bench within Cathedral Park.

ISSUES TO EXPLORE

During BPS's efforts to salvage the existing blocks and use them in key locations along the proposed Green Loop and throughout the City, several issues have arisen that need to address. Specifically:

- *Surface Treatment of blocks and ADA.* PBOT engineers have stated concern about use of the Belgian Blocks relative to ADA compliance. To use these and meet regulations, PBOT will not approve their deployment location in high traffic areas. They stated that if Belgian Blocks are within the sidewalk corridor, the permittee will need to have that area tested (British Pendulum Swing) since no data for this material is available at the moment. They also indicated that they would not rule out use in the "spackel" scenario, but they would need to do testing for slip resistance, and installation procedures to prevent tripping/score line issues would need to be determined. This would be to address user issues, primarily for wheelchair users with vibration sensitivity who already have problems with deep score lines, so the Belgians would make this worse. Creative solutions are needed to understand how the Blocks can be treated or conditioned to meet these concerns.

The following ADA standard seems to be of main concern:

Surface Smoothness. The standards limit changes in level and openings in floor and ground surfaces, but they do not further address overall surface smoothness. Rough surfaces composed of cobblestones, Belgian blocks, and similar materials can be difficult and sometimes painful to negotiate with wheeled mobility aids due to the vibrations they cause. <https://www.access-board.gov/ada/guides/chapter-3-floor-and-ground-surfaces/>

- *Desired Locations conflict with Criterion 2 of Landmarks Commission approval Criteria.* Often the need to address ADA compliance results in the proposed use for the Belgian Blocks within borders, along the furnishing zone or as decorative elements. PBOT stated that they could foresee using the blocks as "boundaries" for some of these objects where pedestrians are not expected. This conflicts with desire, and requirement per Criterion 2, to place the blocks in pedestrian oriented spaces. A thorough exploration of different creative uses and locations is needed to address and reexamine the intent and wording of Criterion 2.
- *Maintenance of blocks.* PBOT has stated that they prefer that the City not be responsible for maintenance of the blocks. If someone else (not the City) took over maintenance of the blocks, and that obligation ran with the private property/frontage, the blocks might be an option for non-pedestrian through-zone/roadway/bikeway applications. If any of the blocks were installed within areas considered pedestrian zones, this area would also need to be covered with a maintenance agreement for the street. Surface treatments will need to consider maintenance and treatments that do not require continual maintenance cost.

The technical report will not directly address but should be aware of another issue:

- *Number of Blocks.* There is some concern from PBOT about specifying a large section of blocks to be used within the street because there is uncertainty about how many blocks are available. More study is needed to better understand how many blocks are available, and potential solutions should consider that the resource is finite.



Block Size and Condition.

These blocks are irregular in shape, and vary in size and condition, due to age and how they were removed. On average, they have the following dimensions:

W: 4 - 5"

L: 8 - 9"

D: 4- 5"

TIMELINE

The timeline below is provided to help identify key tasks and dates. It is important to note that this table captures the sequencing of tasks for the project and that actual dates may change.

TASK ITEM	APPROXIMATE DATE(S)
Peter Meijer Architect (PMA) begins contract work	Late February/Early March
PMA and BPS conduct joint meeting with PBOT to review approval criteria/ADA concerns	Early March
Landmarks Commission Briefing (#1): <ul style="list-style-type: none">• Status of blocks and Kinsman grant• Looking toward future use at Earl Blumenauer Bridge• Purpose of study• Re-introduction of approval criteria and challenges• Open discussion	March 22 or April 12
Work on DRAFT Technical Report	April - May
BPS review of DRAFT Technical Report.	Mid-May
Landmarks Commission Briefing (#2): <ul style="list-style-type: none">• Recap of last briefing• Walk through Technical Report• Discussion	May 24 or June 14
Finish Technical Report	Early June
Task Order Concludes	June 20, 2021

POSSIBLE SITE

Although the technical report will not need to address a specific site, the information below has been provided as background information.



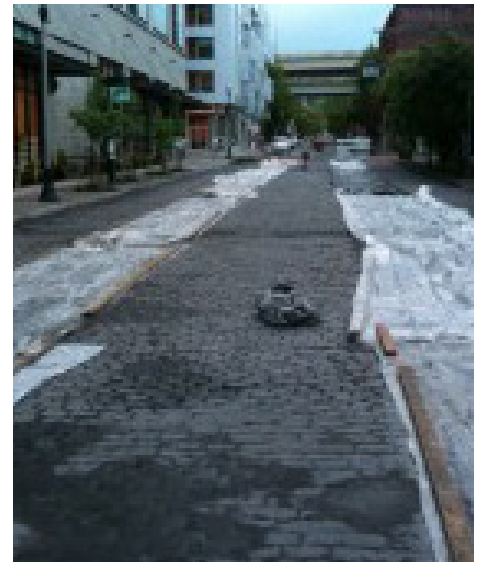
Earl Blumenauer Bridge landings.

The Earl Blumenauer Pedestrian Bicycle Bridge will become the first major piece of the Green Loop to be built once completed in 2021. Spanning I-84 between the Lloyd Neighborhood and the Central Eastside, the bridge will create a new connection between two dynamic districts in Portland's Central City, with the bridge's landings will offer spaces for people to gather, interact, rest and pause. The landings are larger areas and have space that could be paved or edged with cobblestones, adding texture to the experience of biking or walking the Green Loop.

PRECEDENTS: Active and Recent Projects

To better understand the possibilities and work that has already been done using this material, BPS collected a number of precedents. The following examples are for reference and to be used for further study.

Cobble/Bike Lane Project on NW Marshall, Portland, OR



Interesting approach to providing bike lanes alongside existing cobble streets. Done by Alta Planning – they could have some good details to share.

News article about the project:

<https://bikeportland.org/2010/05/06/first-look-at-new-bike-lanes-through-cobblestones-on-nw-marshall-33121>

Gansevoort Plaza, NYC



The renovation of the Gansevoort Plaza in the Historic Meatpacking District in NYC. They were able to reconstruct the plaza using cobbles that existed there, as well as cobbles from the City's "stash" (cobblestones from other parts of the city that have been removed and put into storage). The project was recently completed, with NYC DOT approval and met their ADA standards. In 2017, the Historic Districts Council of NYC hired a landscape firm, Being Here Landscape Architecture & Environmental Design, PLLC, to conduct a technical report of how the blocks were used in this plaza, as well as the DUMBO Street Renovation project in Brooklyn. The report includes a section entitled, Historic District Best Practices (pg. 28), which offers some helpful analysis. It can be found [here](#).

News article about the plaza project:

<https://chelseacommunitynews.com/2019/08/15/new-meatpacking-district-plazas-provide-prodigious-public-space/>

Breda, Netherlands



The city authorities have pulled up all the cobblestones in the centre that surround the Grote Market and Grote Kerk marketplace and church, turned them upside-down and sliced them widthways. The result: a flat surface for those with mobility impairments, while keeping Breda's streets just as photogenic as they were before.

News article about the plaza project:

<https://www.smartcitieslibrary.com/people-arent-disabled-their-city-is-inside-europes-most-accessible-city/>

Old Port of Portland, Maine

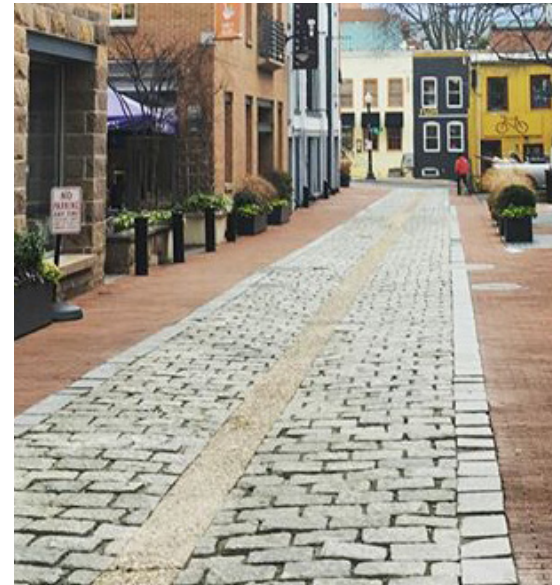


The city is trying to make a part of the walk in this area a bit easier by fixing bricks, pavers and stones on Wharf and Dana streets. It has allocated hundreds of thousands of dollars and hired a landscape architect to come up with different proposals to improve the two streets and make them more ADA compliant.

News article about the project:

<https://www.necn.com/news/local/portland-moves-to-fix-very-uneven-cobblestones-on-2-streets/2213467/>

Curbless Street Project in Philadelphia, PA



Case Study Example: Georgetown, District of Columbia

This study was undertaken by the City of Philadelphia to understand how curbless and shared street concepts could be applied to streets within the City. The study included examples of streets where materials were used to signify certain zones, including Belgian blocks. Further study of these examples may offer insight into how to resolve many of the issues previously listed.

Below is a link to the technical report:

<https://bikeportland.org/2010/05/06/first-look-at-new-bike-lanes-through-cobblestones-on-nw-marshall-33121>