

**Community Planning & Economic Development  
Planning Division**  
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**City of Minneapolis**  
*Department of Community Planning  
& Economic Development - CPED*

## MEMORANDUM

TO: Heritage Preservation Commission  
FROM: Brian Schaffer, Senior City Planner 612.673.2670  
DATE: February 15, 2011  
RE: Update Warehouse District Heritage Street Plan Project

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### **Background**

On November 30, 2010, staff provided the Heritage Preservation Commission (HPC) with an introduction to the Warehouse District Heritage Street Plan. The goal of the project is to develop a detailed street by street plan on how to preserve the remaining historic materials and industrial infrastructure, while accommodating ADA requirements and the need for street and sewer repairs. The plan covers a 23-block area of the district that retains historic paving materials and industrial infrastructure.

To complete this project CPED is working closely with Public Works and has hired a consultant team led by Bonestroo that includes MacDonald & Mack Architects, Landscape Research, and Lindberg Consulting and Glacial Ridge, a local paving contractor.

### **Update**

The project has moved from Phase I- Learning, to Phase II Generating Ideas. Some of the products of Phase I- Learning, are attached. They include a Summary of Existing Conditions, Precedent Case Studies, Design Issues and Planning Assumptions, Draft Street Paving History. This research is still being finalized into final documents and contexts on paving types in the study area. It serves as a baseline for understanding existing conditions and existing policy framework. This information is being used to inform alternative design layouts in the Phase II of the project.

One of the several key takeaways from the Phase I is the assessment of the existing condition of the pavements. This information is extremely useful in understanding how the existing pavers can be reused in future designs.

- A. It is estimated (through a variety of different paving tests and research information) that we can expect up to a minimum of 15% - 20% paver loss due to the removal process.

All paving experts and cities contacted stated that removal of the pavers needs to be done by machine. While this is more intrusive than hand removal, it is also more indicative of potential reusability of the brick. If the brick cannot survive removal by machine it will not be durable enough to survive re-installation and hold up to daily use.

- B. Streets within the project area have an average of 30%-52% of patching (variety of different materials including bituminous and concrete) of existing historic pavements.

- C. Based on visual inspection (by project team members including paving contractor, historic preservationist, civil engineer, landscape architect and notes provided by Public Works Staff) it is estimated that 85% - 90% of visible pavements are in fair to good condition.
- D. Existing quantity of pavers in the project area
  - 1. A rough estimate is that there are 173,200 sf. of pavers in the project area
  - 2. Of this total we can expect to lose approximately 15%-20% of those pavers during removal for a salvagable quantity somewhere in the range of 147,203 sf. to 138,560 sf.
  - 3. There is an estimated quantity of 18,000 sf. of historic pavers on 6th Avenue N (between 4th Street N and 5th Street N) that is outside of the district and should be removed, cleaned and reused with the district. A usable quantity of these pavers will be in the range of 14,400 sf. to 15,300 sf.
  - 4. There is an estimated 63,115 sf. of historic pavements that has been covered with patching.
  - 5. The proposed concepts presented today estimate about 165,800 sf. of historic pavements. Based on the salvagable pavers that can be reused (including the extra pavers from 6th Avenue) there is an estimated shortfall of roughly 12,800sf. of pavers.
- E. Costs to remove the patching materials from historic pavements is estimated at about \$.85 - \$1.10 per square foot (prevailing wage scale). The estimated 63,115 sf. of historic pavements that has been covered with patching would cost an estimated \$53,647 to \$69,426 to clean.
- F. Estimated costs to remove and replace historic pavements is estimated at \$5.50 to \$8.00 per square foot not including base materials.
- G. Sub-base materials (sand and aggregate) for the existing roadways is generally in poor condition (based on visual inspections of the roadways) and would need to be replaced as part of any street reconstruction project.

### **Next Steps**

The project team is working through the various design alternatives for the streets with taskforces and other stakeholder groups. On February 15<sup>th</sup> the project team and will be looking discuss and receive input on a few key design issues that are being consider in the design alternatives. This includes:

- Design alternatives to make up for estimated shortfall in historic pavers available for re-use.
  - This includes the introduction of new paving materials in the right-of-way including concrete and potential new paver systems.
- Design alternatives to allow for accessible street crossings and sidewalks.
- Design alternatives to allow for accessible access on streets with loading docks.
- Design alternatives for interpreting former rail spur street crossings.

Please be familiar with the attached materials from Phase I of the project. More information and future updates can be found on the project's website:

[http://www.ci.minneapolis.mn.us/cped/heritage\\_street\\_plan.asp](http://www.ci.minneapolis.mn.us/cped/heritage_street_plan.asp)

### **Attachments**

- Summary of Existing Conditions
- Design Issues and Planning Assumptions
- Draft Street Paving History
- Case Studies:
  - Dumbo District, Philadelphia, Rock Island, Dubuque, Wichita, and Sacramento