

Maintenance and Rehabilitation of Safe, Accessible, Historic Pathways on Nantucket
Prepared by The Nantucket Historical Commission
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Nantucket is exceptional for the quantity of original 19th and early 20th century paving materials and street artifacts persisting in their original conditions and locations. Many of paved areas have endured for close to 200 years.

Maintaining the visual integrity and irreplaceable historic resources of Nantucket is a priority for tourism, culture, civic pride, and the context of our daily lives. Today, many sidewalks and cobblestone streets in the Old Historic District are in need of repair. Additionally, some sidewalks have been designated for rehabilitation under the “Complete Streets” policy developed by the Transportation Office under the guidance of the Town, the NP&EDC, and the Bicycle and Pedestrian Advisory Committee (BPAC).

Unfortunately, on Main Street by Candle Street, historic curbstones and cobblestones were removed and replaced with new material. The walks now employ forms that are not in harmony with Nantucket’s historic walkways.

To avoid these losses in the future, the Select Board requested guidelines for maintaining and altering historic and new walkways. This request was made in May 2019.

Proposed Guidelines

Sidewalks:

- Existing historic sidewalks should be retained and maintained. Replace only those portions that are deteriorated beyond repair. If replacement is necessary, the replacement shall replicate the original design.
- Maintenance includes resetting loose and splayed bricks, stone, and curbs, for safety reasons. Bricks and stones should be set in dirty sand (sand with some clay mixed in) and on a base of compacted sand for reasons of permeability and flexibility. Stone dust should be avoided, because it compacts and impedes drainage.
- Old curbstones and flagstones should not be lifted if they are secure and in good repair. If it is necessary to lift or temporarily remove historic paving, care must be taken not to damage material. Materials should be reserved appropriately and re-installed in original order.
- Concrete or other bonding should not be applied to historic stone or brick, because it can lead to the failure of the stone. In addition, concrete can compromise the reuse of historic material in the future.
- When trees roots deform pavement, a certified arborist should advise on whether or not tree roots can be trimmed to make a flat base for the

pavement. A new compacted sand base should be built up over the roots. If this is not possible for accessibility reasons, other designs should be considered based on the individual situation.

- Sourcing and pre-qualifying conservation contractors is a necessary preliminary step for working on historic pavement. The Historical Commission, working with island masons and preservation non-profits, should work with the Department of Public Works to identify and in some cases train qualified workers. Typically, general contractors lack this expertise. The involvement of a skilled mason in the planning and execution of re-laying historic paving is essential.

Sidewalk Modifications

As a matter of policy, sidewalks in the OHD should not be changed in shape or scale. If it is necessary to modify the shape and scale for reasons of safety or accessibility, preservation review by the Historical Commission or other preservation commission should be involved from the earliest stages of the discussion. Measures to retain historic materials should be required.

- Avoid re-laying historic material in modern layouts or introducing modern forms that are incongruous with a historic setting.
- Avoid creating new routes or configurations that would remove surviving historic elements or features
- Retain historic curbstones. Where these are not continuous, consolidation into one part of a street may be acceptable following agreement with the HDC or other preservation review body.
- Ensure that, where required, the widening of a footpath is a contemporary addition in sympathy with the historic one, conserving its key characteristics.
- Where strong, cement-based materials are used to point or bed new work this should not be allowed to come in contact with historic paving stones or adjacent historic buildings.
- Select new materials carefully. New granite paving often has a sawn finish. It can take generations of wear to eventually expose the grain of this material. It is recommended that careful specification and quality control be carried out to ensure a texture and color which enhances the historic streetscape, particularly where this is used in conjunction with historic pavements. In the case of brick, color and finish of the brick should be selected based on samples of existing correct brick.
- Consider the scale of new materials. For example, the use of small paving units in historic areas can lead to a tiled effect and an unsatisfactory appearance which distracts from the architectural heritage of the area.
- Existing conditions must be documented per HDC requirement.
- Abutters should be notified.

Restoration of Existing Pavement

- Where original material is damaged, it should be repaired in-kind with appropriate conservation masonry methods.
- In some cases the original historic material is cracked beyond repair or is missing. An architectural historian or preservation mason should be engaged to specify replacement salvaged stone or a suitable new material of matching color and finish
- Where original material was removed and preserved, it should be restored to its original location. Modern additions may be able to be accommodated adjacent and in harmony with historic materials (see Exhibit A).

New Sidewalks

- New Sidewalks everywhere on Nantucket should consist of materials appropriate for their setting. Depending on the location, this could be brick with granite curbing, asphalt, or concrete.
- Granite curbing should match the width and palette of existing modern curb (see pictures in Appendix A).
- Brick should be selected for beauty, durability, and harmony with existing brick.
- The HDC will approve materials and design.
- Abutters should be notified.

Historic Streets

Nantucket has several streets entirely paved with cobblestone, as well as a street of yellow vitrified brick, and several of Belgian Block. In addition, other streets that are now paved with asphalt have early cobblestone paving that survives beneath the asphalt.

- Cobblestone streets, curbs and walks work together as a system, with the curbs holding the cobblestones in place. Restoration of significant streets such as Upper Main Street should be considered as a system.
- Cobblestones are traditionally set on a compacted sand base, and set in sand. This provides a flexible surface and proper drainage important for long life of the road. A permeable surface also aids in storm water management and is critical to the health of trees. However, they will deform under very heavy loads.
- Cobblestones should not be set in stone dust, which compacts and does not drain water. Accumulated water leads to frost damage and ejected stones.
- Cobblestones, like historic curbing, should not be set in concrete.
- The benefits of introducing a more rigid sub-base can be weighed against the drawbacks, which include a risk to trees and foundations, more difficulty servicing utilities, and storm water management.
- Cobblestone paving is a skill and workmen must be properly trained. An expert pavior must be sourced (see exhibit B).
- Utility access is a source of damage for cobblestone Main Street. Ideally, an

inspection system would ensure all contractors properly fill in and repave after service.

- Historic Streets and walks should not be marked with paint, unless the paint can be safely removed when work is complete.

Review and Approval Process

Repairs to existing walks and streets may proceed without review by the HDC in all cases where the repairs are not changing the shape or materials of the walk or street. Guidelines for repair and material handling should be followed.

New construction, lifting and rebuilding, and redesign of walkways requires a Certificate of Appropriateness or a Waiver from the HDC. Work should follow the Nantucket guidelines for sidewalk repair. Existing conditions should be documented. Abutters should be notified.

The HDC and DPW will find it desirable to streamline approvals, especially where historic materials are not involved. HDC staff may issue a Certificate of Appropriateness or a Waiver administratively.

In the case of walkway rebuilding or redesign in the Old Historic District, the Historical Commission should be consulted prior to application with the HDC. This is necessary by law when state and federal funds are being used (requiring Massachusetts Historical Commission review), but will be helpful to the HDC and the DPW in all cases. The HDC may decide to issue a Certificate of Appropriateness administratively based on a recommendation from the Nantucket Historical Commission.

If conflicts arise between the Massachusetts Architectural Access Board standards for accessibility, and the preservation needs of the sidewalk, a joint discussion with the Commission on Disabilities and Historical Commission is in order, and a waiver can be requested.



Historic flagstones and kerbs re-laid in an incongruous modern layout



A widened pavement has left the original flags in situ while constructing the new section in a compatible material. The final appearance would have been improved if the sizes and pattern of the new and old flags also matched and the joint between old and new was tighter and filled with a more appropriate pointing material

From Paving: The Conservation of Historic Ground Surfaces

Don't lift and relay historic material in modern forms.

Do accommodate modern demands while leaving historic pavement intact and identifiable. Use patterns and materials that are harmonious with what is existing.



Brick crosswalks with stone slab borders are the standard crossing Main Street, and date to the 19th and early 20th century. The unique crosswalk on the right was unnecessarily removed and replaced with a modern “anytown” crosswalk, by the Pacific Club. While not unattractive, it is not unique or historic. The sidewalk was widened to a scale out of proportion with the location.



The mortar in this modern bi-level walk outside the Macy Warehouse is too wide and the bi-level walkway is not harmonious with the area or expected by pedestrians in this crowded area.



Fair Street at Judith Chase Lane: an example of poor reconstruction practice.

19th Century Schist curbing was excavated in Fall 2019. They were reset in concrete. The dirty sand bedding was disposed of, and bricks were set in a bed of compacted stone dust. These curbs will never be able to be reused.



This new curb behind the Dreamland Theatre has an appropriate scale and color for Nantucket.

Sources

U.S. Park Service, Department of the Interior: Guidelines for working with historic material

¹ <https://www.nps.gov/tps/standards/rehabilitation.htm>

and <https://www.nps.gov/tps/how-to-preserve/briefs.htm>

City of New Bedford ¹ <http://www.newbedford-ma.gov/planning/standards-and-guidelines-for-the-bedford-landing-waterfront-historical-district/>

City of Baltimore: ¹

https://chap.baltimorecity.gov/sites/default/files/CHAPDesignGuidelines_2019.02.15_small.pdf

Paving: The Conservation of Historic Ground Surfaces

[http://www.buildingsofireland.ie/FindOutMore/Paving%20-](http://www.buildingsofireland.ie/FindOutMore/Paving%20-%20The%20Conservation%20of%20Historic%20Ground%20Surfaces%20(2015).pdf)

[%20The%20Conservation%20of%20Historic%20Ground%20Surfaces%20\(2015\).pdf](http://www.buildingsofireland.ie/FindOutMore/Paving%20-%20The%20Conservation%20of%20Historic%20Ground%20Surfaces%20(2015).pdf)