SHPO Masonry Guidelines

1. Historic mortars were softer because of their high-lime content and lack of Portland cement. New mortar should be soft enough to prevent damage to historic masonry materials. Work will be appropriate providing it occurs only where mortar is missing or deteriorated. Because mortar saws and grinders can damage historic brick, existing mortar shall be removed only with hand-held, non-power tools. New mortar should match the original in color, texture, tooling, size and profile of joint. The following mortar mix is recommended:

    1 part white Portland cement
    3 parts Type S hydrated lime
    6 parts sand with no admixtures.

2. When repointing at parapets, at grade, or other areas exposed to harsh weathering conditions, it may be appropriate to use a more durable new mortar. Please note that this mix should not be used at other locations. In addition, mortar saws should never be used as they damage historic brick. The following mix is recommended:

    2 parts White Portland cement
    3 parts Type S hydrated lime
    6 parts sand with no admixtures.

3. Harsh chemical or high-pressure washing can damage the protective outer coating of historic masonry. Cleaning should remove surface dirt using the gentlest methods possible. Work will be appropriate providing you use only non-ionic neutral pH detergents (not chemicals), non-metallic brushes or scrapers, and water pressures no greater than 150 psi.

4. Moisture trapped under inappropriate coatings can cause excessive masonry damage in freeze-thaw cycles. These coatings prevent the natural passage of moisture from within the wall and aggravate most existing moisture problems. Work will be appropriate providing acrylic sealers, cementitious paints, and other non-breathable coatings are not applied to historic masonry surfaces.