Part 1 GENERAL

1.1 RELATED SECTIONS

1. General Conditions as applicable.
2. Section 08 03 50 20: Conservation of Windows
3. Section 08 03 50 31: Wood Epoxy Patching
4. Section 09 03 01 01: Surface Preparation
5. Section 09 91 00: Painting

1.2 DESCRIPTION

1. The work in this section consists of epoxy consolidation of deteriorated wood. Generally, the areas are limited to the bottom rails of lower sash, the meeting rails of upper sash and the sills. The intention is to consolidate checks or splits resulting from removal of former repair products that have failed in their bond, prior to applying epoxy patching compound.

1.3 WORKMANSHIP

1. Work of this section shall be completed by individuals with a minimum of two (2) years experience at this type of work.
2. Follow Technical Data and Instruction sheets provided by manufacturer.

1.4 SUBMITTALS:

1. Contractor shall complete the work described in this section on one (1) sample window sill identified beforehand by the consultant. This work shall be executed under direct review by the consultant. Acceptance of the completed sample by the consultant shall be necessary before additional consolidation work proceeds.
2. Provide the consultant 5 days notice prior to undertaking work on this sample.

1.5 PRODUCT STORAGE AND HANDLING

1. Deliver the epoxies in manufacturer's original, unopened containers and store inside at room temperature or as recommended by manufacturer.
2. Do not use epoxies which have exceeded manufacturer's shelf life.
3. Epoxies that have frozen since their manufacture are not to be used and are to be removed from site.
4. Follow the safety precautions as defined by the product manufacturer. Observe good housekeeping practices when working with epoxies.

5. Flammable products may not be brought within 20 feet of historic building during hours of work or be stored overnight on site.

1.6 PROJECT CONDITIONS

1. Epoxy applications are to be performed in favorable weather conditions as defined herein and by manufacturer. The temperature range within the work area shall be between 60 to 90 degrees F.

2. Wood to be consolidated must be dry and have moisture content below 18% by weight. Protect area from moisture until epoxy has completely cured.

3. Epoxy consolidant must be within a temperature range of 60 to 90 degrees F. at the time of application. Wood within 3 inches of the consolidation area is to be within the temperature range of 45 to 90 degrees F. at the time of application. Use of a heated enclosure around the work area is acceptable. Shade the mixing and application area from direct sunlight. Provide shade to application area for minimum of 8 hours following application.

4. The work area is to be secured from public use during epoxy application. Secure areas as necessary.

5. Mask or otherwise protect surrounding or adjacent historic fabric from all activities associated with this work. No fastenings associated with hoarding or other protections shall be installed in historic material without prior approval of consultant.

PART 2 PRODUCTS

2.1 EPOXY CONSOLIDANT

1. Epoxy Consolidant: ConServ Flexible Epoxy Consolidant 100
   Available from: Conserv ™ - Contact: Bruce Wipple
   Phone (973) 579-1112

2. Alternate Epoxy Consolidant, meeting performance characteristics of that specified, may be submitted for review by Consultant.

Part 3 EXECUTION

3.1 INSPECTION

1. All existing checked, split or loose epoxy, wood or old putty repairs must be removed before the area for treatment can be accurately defined. Actual parameters for epoxy consolidation may vary for each situation. Verify conditions and proposed treatment consultant.

3.2 PREPARATION

1. All dirt, paint, loose wood, failed epoxy repairs and soft wood decay must be removed prior to application of epoxy consolidant; remove all down to sound wood. Remove all loose wood fragments and blow out all dust. Riddle checks and/or cavities with 1/8" diameter holes at ½" spacing prior to applying consolidant.

2. Remove paint from areas being treated, see Section 09 91 00 Painting and Finishing. No chemical paint strippers or open flame devices shall be permitted. Maintain polyethylene tent to keep wood dry.

3. Protect area from moisture until consolidant has been applied and has completely set. Wood to be consolidated must be dry and have a moisture content of less than 18% within 3 inches of decay area.

4. Protect vegetation and all building fabric from damage, spills or drips.

3.3 APPLICATION

1. Epoxy consolidant may be applied by pouring or with a brush.

2. Apply liberally to prepared area but not beyond. Do not allow consolidant to touch adjacent areas, materials or building components. Repeat applications 4 to 6 times or until surfaces do not accept more consolidant. Allow approximately one hour between applications.

3. Keep epoxy consolidant out of direct sunlight and at temperatures above 60 degrees F. until fully cured.

3.4 CLEAN UP

1. Following application leave all areas free and clean of epoxy. Discard unused epoxy, containers, tools and towels in accordance with any local, Provincial and Federal regulations.

End of Section 08 03 50 30