I. SCOPE

CIPP Liners are used for the Rehabilitation of Culvert and Storm Drain Pipe (NYSDOT Standard Specifications Section 602). This Materials Procedure establishes the two step approval process required of installation companies to get onto the NYSDOT approved list for Cured in Place Pipe (CIPP) Liner (NYSDOT Standard Specifications Section 706-09). This document also lists the requirements of approved list installation companies to maintain their residence on the approved list.

II. BACKGROUND

The process of installing CIPP involves the placement of a resin impregnated flexible liner into the existing host pipe. Induced pressure within the liner holds it in place against the existing walls of the host pipe. The resins within the flexible liner are then cured by an approved process, resulting in a rigid liner. The installation of the liner can be completed without excavating the culvert.

The installation of the liner is as critical as the material components. Therefore, the requirements for appearing on the Approved List include a review of the experience of the installation company as well as the material. Each installation company will be evaluated with their respective CIPP product.

III. APPROVAL PROCEDURE

**Step #1: Submittal, review and approval of a Technical Information Package (TIP).**

The installation company and their material supplier are required to provide the information shown on the attached CIPP Technical Information Package.
The information provided will be used to ascertain the suitability of the components of the CIPP Liner as well evaluate the experience of the installation company. The installation company is encouraged to provide a complete submittal package with sufficient detail to show competency.

Emphasis is placed on the experience of the installation company. This is in recognition of the importance of having a qualified field crew present at each installation. There are minimum requirements for experience, as stated in the technical information package.

The completed technical information package should be sent to:

New York State Department of Transportation
Materials Bureau
50 Wolf Road
Albany, NY 12232

Or can be emailed to the following address:

Materials@dot.ny.gov

If the information is deemed sufficient, approval of the first step will be granted. This will allow the installation company to begin the second step of the approval process. Approval of the first step is valid for 2 years from the date of the approval of the T.I.P., and is intended to give the installation company an opportunity to demonstrate their installation competency. If no installation is provided within the 2 years, the installation company will be required to resubmit the application. Evidence of an installation company’s attempts to secure a Department installation will be required for re-submittals.

**Step #2: On site observation by the Materials Bureau, of a liner installation.**

This step requires Materials Bureau staff to witness the installation of a liner. This installation must have adherence to the T.I.P. which was previously supplied by the installation company and granted first step approval by NYSDOT Materials Bureau. The liner to be installed must be of comparable size to those typically used on NYSDOT projects. The installation company is responsible for finding a NYSDOT project and must inform the Materials Bureau of the project’s location and anticipated schedule with sufficient lead time to allow Bureau personnel to attend the installation. A qualified NYSDOT Materials Bureau representative’s observation of the entire installation is required for final approval.

The Materials Bureau will observe the installation to insure its adherence to appropriate NYSDOT standards and the procedures provided by the installation company and/or the material supplier. Samples will be taken during or after the installation for laboratory verification of the
required materials properties. Overall competency of the field crew and equipment will also be evaluated. Completion of the second step requires the acceptance of the installation.

Final approval will only be granted after the installation and materials testing have been completed to the satisfaction of the Materials Bureau. Final approval will result in the installation company’s name and location appearing on the Bureau’s Approved List.

IV. REQUIREMENTS TO STAY ON THE APPROVED LIST

1. Any changes in materials, suppliers, key personnel or equipment that was originally listed on the technical information package must be reported to the Materials Bureau immediately.

2. If there is a change as mentioned above, the approval process described herein will be reevaluated by the Materials Bureau for that installation company.

3. Failure of an installation company to report such a change prior to acceptance of new work will result in removal of that company from the Approved List.
CIPP “Technical Information Package” (TIP) Requirements

1) Installation company’s name and Product name(s)
2) Installing Company information:
   a) Name and address
   b) Installation company’s experience including information on sizes and quantities
      (minimum 3 years, municipal and private projects)
   c) Installation company’s references (minimum 3, municipal and private)
   d) Location of Installation company’s facilities that will be utilized on NYSDOT projects
3) Contact person (name, title, and contact information)
4) Capabilities: length, diameter, thickness, on or off site impregnation, or other special
   capabilities
5) Installation company’s crew
   a) Contact information for field crew foreman that will be present at the job (include
      information for any field crew that may be working on a NYSDOT project)
   b) Experience of foreman
      i) number of years
      ii) list of projects foreman was involved in, with references
   c) List of equipment to be utilized on NYSDOT projects, include relevant information such
      as size, output and ratings of equipment utilized in the process.
6) Material Source/Supplier information:
   a) Name and address for both the material source and supplier if they are different.
   b) Material supplier’s experience including information on sizes and quantities (minimum 3
      years, municipal and private projects)
   c) Location of material supplier’s facilities that will be utilized on NYSDOT projects
7) Component information, list each component
   a) Product data sheet
   b) Material Safety Data Sheet for components
   c) Resin manufactures’ curing recommendations
8) Signed Certification of conformance to NYSDOT Specifications (Sections 602 and 706-09)
   and relevant national specifications (ASTM, AASHTO)
9) Sample Design Calculations (Liner to carry 100% of load) including program used
10) Provide detailed written installation procedures including:
    a) pre-inspection and preparation (for example; clean and inspect)
    b) installation (for example; bypass, installation, curing documentation, cooling and
       trimming)
    c) post inspection (for example; sample testing and video inspection)

(Additional information regarding submissions available by request)