



## SUBMITTAL DOCUMENT

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LMT™  
(LINED MAIN TAP)

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## **LMT™ Lined Main Tap Submittal**

### **Item 1**

#### **Manufacturer**

Company Name: LMK Technologies  
Contact Individual(s): Rick Gage  
Street Address: 1779 Chessie Lane  
City, State, Zip Code: Ottawa, IL 61350  
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**Product Submittal:** This submittal is for the product called Lined Main Tap™ hereby known as LMT™. LMT™ is a PVC Saddle that is specifically designed to attach to a main line pipe that has been renewed for the purposes of connecting or reconnecting a lateral pipe.

**LMT™ by LMK®** has been used throughout the United States for the last 4 years.

**LMK Technologies, LLC, is the owner of Trademarks: LMT™ and LMK®.**

#### **Larry Kiest, Jr. CEO/President**

Inventor of more than 60 issued patents teaching methods and apparatuses for the Rehabilitation of Underground Pipes, Conduits and Structures. Mr. Kiest is a Licensed Plumber in the State of Illinois, Advisory Board Member of Trenchless Technology Center Louisiana Tech University, Member of ASCE/ PINS Lateral Committee, Board Member of NASSCO, Chairman of NASSCO Lateral Committee, Active Board Member NASSCO 2008-2010, Member of NASTT, Member of AWWA Standards Committee, Member of WEF, Member of MSTT, Active Board Member MSTT 2008-2010, Member of ASTM, and Chairman of Task Committee F17, subcommittee 17.67 standard practice for rehabilitation of a sewer service lateral using a one piece main and lateral cured-in-place liner installed by means of air inversion. Mr. Kiest has conducted business in the field of Trenchless Pipe Renewal Systems since 1985.

#### **LMK's Management Team**

Vice President: Rick Gage  
General Manager: Bruce Kamin  
Regional Sales Manager: Jake Saltzman  
Director of R&D: Jason Mathey  
Technical Field Trainer: Danny Read

## **Item 2**

### **References**

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2. Pablo San Martin, Jefferson Parish, LA  
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6. Philip Howery, City of Tulsa, OK  
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### **Item 3**

#### **1. Intent**

It is the intent of this specification to provide a cost effective installation of a sewer lateral tap to a rehabilitated mainline pipe providing a VNLC™ (verifiable non-leaking connection).

#### **2. General**

The LMT™ (Lined Main Tap) product and process consists of locating the service connection within the mainline pipe by the most effective means available to the installer. The most common method utilized and associated with the LMT™ process consists of inserting a video camera with an internal sonde either through the lateral service and pushing the camera to the mainline pipe or from main pipe to the service location. Locating the service location is achieved with a receiving unit and marked on the surface. Once the service connection has been located an access pit is made by conventional excavation exposing the main pipe at the lateral connection. Then, a 2-foot section of the original host pipe is broken away, exposing the new stand-alone mainline liner. (Pipe within a pipe, CIPP/Folded Pipe) Prepare the surface of the mainline liner by removing any excess resin or debris to provide a smooth clean surface. Grinding may be necessary. The opening in the mainline liner may be circular or elliptical to accommodate a WYE or TEE shaped LMT™ saddle. The LMT™ is connected to a new section of PVC pipe (4" or 6" SDR 26 or SDR 35) utilizing a solvent weld or a push gasket joint. An adhesive/sealant is applied to the underside of the LMT™ saddle. The LMT™/PVC pipe assembly is snapped onto the exterior of the mainline liner. The LMT™ saddle is attached to the mainline liner encompassing more than fifty percent (50%) of the mainline liner diameter. The LMT™ saddle is a self-supporting component, which allows the resin to cure without affecting the integrity of the seal to the mainline liner. The technicians may use stainless steel mechanical bands around the circumference of the host pipe and LMT™. Then the section of new PVC pipe is connected to the existing lateral pipe using a non-shear leak-free coupling. The excavated access pit is back filled and the site is restored according to the engineer's specifications. The process shall be LMT™ by LMK® Technologies or equal.

#### **3. Material**

The material shall be a molded PVC saddle sized to encompass more than 50% of the mainline liner. The saddle boss shall be either solvent welded or a push-gasket bell. The adhesive/sealant shall be designed for structurally adhering to CIPP, PVC, Modified PVC or PE pipe.

#### **4. Final Acceptance**

Upon completion, the installer will deliver an internal CCTV video of the main/lateral connection to the owner. The owners will review the documentation and the site to determine that the scope of work is complete and the work is satisfactory.

**Respectfully Submitted By:**

*Larry Kiest, Jr.,*

Larry Kiest, Jr. President, LMK Technologies, LLC.

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