SECTION 330131 STORM DRAIN TELEVISION INSPECTION

PART 1 - GENERAL

A. Television Inspection (CCTV) of the existing 18-inch and 72-inch storm drains indicated in the drawings (approximately 75 LF and 480 LF, respectively) is required as follows:

1. Perform Pre-CCTV inspection of storm drains prior to jacking and boring operation. Submit DVD copy of pre-CCTV inspection to District's Representative.

2. Perform Post-CCTV inspection of the storm drains after jacking and boring operation to confirm compliance with the contract documents. Submit DVD copy of post-CCTV inspection to District's Representative for review.

3. All cameras used shall be color units specifically designed or modified for use in sewer inspection work. The cameras shall be operable in 100% humidity conditions. The camera lens shall have not less than a 65-degree viewing angle and shall have either automatic or remote focus and iris controls. Camera lighting shall be sufficient for use with color inspection cameras. In all cases, the complete video system (cameras, lens, power, lighting, cables, monitors and recorders) shall be capable of providing a picture quality acceptable to the District, and if unsatisfactory, equipment shall be removed and no payments will be made for unsatisfactory inspections.

   The remote pipe inspections shall be permitted, using either electric or manually operated winches to pull the inspection camera through the storm drain.

   The camera shall be pulled through the storm drain in either direction at a speed not greater than 30 feet per minute, stopping as necessary to permit proper documentation of the storm drains conditions.

   In instances where manual or totally remote electric winches are used to pull the camera through the storm drain (i.e., where the recording technician does not directly control the winch's movement), constant, two-way communication shall be set up between the entrance and exit of the storm drain being inspected to permit the recording technician to communicate clearly with the crew member controlling the camera's movement.

   Accurate and continuous footage readings shall be superimposed on the video recording for each line inspected by remote inspection methods. Also shown shall be the date of inspection and a three digit manhole number

designation (coordinated with the drawings) for each manhole on the line section being inspected.

4. All video should be in DVD format playable on standard personal computers and shall be professionally labeled showing the DISTRICT, the lines recorded on the DVD, and the name of the Contractor. Video recordings shall become the property of the District and shall include an audio track recorded by the inspection technician during the actual inspection work describing the parameters of the line being inspected (i.e., its location, depth, diameter, pipe type, etc.) as well as describing connections, defects and unusual conditions observed during the inspection. The Contractor shall be responsible for having the necessary camera skids, floats, and rafts available to allow for inspection of these lines in a manner acceptable to the District under live flow conditions.

5. The following general criteria shall be followed:

   a. No inspection shall be performed where flow depths exceed 25% of the pipe diameter without prior approval of the District.

   The District makes no guarantees that the storm drain proposed to be CCTV inspected after the cleaning, are clear for the passage of the camera setup. The equipment, tools and methods(s) used for securing the passage of the camera are to be at the discretion of the Contractor, with the approval of the District's Representative.

B. Post-Televising of Completed Sections

The Contractor shall provide to the District's Representative a color video (DVD) showing the completed work including the condition of the restored service connections prior to requesting payment. Upon completion of the installation work and testing, the Contractor shall restore/clear the project area affected by his operations.

END OF SECTION