

SECTION 205

TELEVISIONING

205.1 DESCRIPTION

- A. General:** This work consists of the televising of sanitary sewer mains and storm sewer mains and laterals. The Televising Contractor shall furnish all labor, materials, equipment, and incidentals to provide the televising, a National Association of Sewer Service Companies (NASSCO) – Pipeline Assessment Certification Program (PACP) compliant database, a NASSCO PACP standard video recorded in Moving Picture Experts Group (MPEG)-1 format, and a NASSCO PACP certified operator. All inspections shall be in accordance with current NASSCO PACP requirements and a NASSCO PACP database shall be submitted to the Engineer. All digital video files shall be color, closed circuit TV in MPEG-1 format. The Prime Contractor shall provide all inspection data of mains, manholes, junction boxes and inlets written to a single storage device to the Engineer within 48 hours of the televising work being completed.

Each video shall be permanently labeled with the following:

1. Project name / City Job number;
2. Date of television inspection;
3. Size of sanitary sewer or storm sewer;
4. Manhole numbers and Pipe segment numbers;
5. Storm sewer inlet and junction numbers;
6. Street/easement location;
7. Name of Televising Contractor and Utility Contractor;
8. Date video submitted;
9. Video file name;
10. NAASCO Inspector Name and certificate number.

The Contractor providing the televising services, herein referred to as the Televising Contractor, shall be independent from any underground utility contractor performing work for this project. The Prime Contractor will be required to submit the name(s) and NASSCO certificate number for the personnel performing the televising to the Engineer at the preconstruction meeting.

B. Related Work:

Section 7	General Conditions
Section 9	Sanitary Sewer
Section 54	Drainage Pipe Installation

205.2 MATERIALS

A. Equipment:

1. The television unit shall have the capability of displaying in color, on the video, pipe inspection observations such as pipe defects, sags, points of root intrusion, offset joints, service connection locations, and any other relevant physical attributes.
2. The television inspection equipment shall have an accurate footage counter which displays on the monitor the exact distance of the camera from the entrance of the pipe.
3. A camera with rotating and panning lens capabilities is required.
4. The camera shall have the ability to illuminate the interior of the pipe so the full pipe is clearly visible during televising procedures.
5. The camera height shall be centered in the pipe being televised.
6. The speed of the camera through the pipe shall not exceed 40 feet per minute.
7. The Televising Contractor shall be required to have all materials, equipment, and labor force necessary to complete all videotaping on the job site prior to isolating the sewer manhole segment and beginning videotaping operations.

205.3 CONSTRUCTION REQUIREMENTS

After completion of the utility work specified in the contract documents including sanitary service taps, and any undercut or dirt work required to achieve final cross section, but prior to placement of the granular surfacing, the newly constructed or rehabilitated sanitary sewer and/or storm sewer shall be televised and all inspection data submitted to the Engineer within 48 hours. Televising shall be observed by the Engineer and utility contractor, as the camera is run through the system. The Engineer shall notify the contractor of any necessary repairs required or the approval of the infrastructure within three (3) working days from the date the video was submitted.

Televising Contractor is to coordinate the video procedures including naming schemes for pipe segments, manholes, junction boxes and inlets with the Engineer and Utility maintenance personnel prior to commencement of any work, including mobilization to the project. The database must include all the televised segments for the entire project, or for each worksite. The Televising Contractor shall provide a line diagram sketch and written log for each completed segment of videoed sewer main describing the section being televised, flow and camera direction, recorded distances to center of service connections, the clock position of service connections, description and location of any defects, overall pipe condition, weather conditions, and other significant observations.

The method(s) used for securing passage of the camera are at the discretion of the Contractor, and as approved by the Engineer. The Televising Contractor shall not be allowed to float the camera. Flow in the section being televised shall be bypassed if the pipe is in service and the flow exceeds 25% of the internal pipe diameter. The Contractor shall pay the cost of any jetting or pre-cleaning of pipe segments as needed for televising. No additional payment shall be made for additional setups required.

All lateral connections shall clearly indicate distance to the center of the service connection and which side of the sanitary sewer main it was installed from. At each manhole, junction box, inlet or other related structure the contractor shall stop the camera and provide a full pan view of each structure to show all interior surfaces. Any issues with manholes, junction boxes, inlets or other related structures shall be identified on the report. Any abnormalities such as, but not limited to, misaligned joints, cracked/defected pipe, rolled gaskets, shall be clearly identified during the video and shall be repaired by the Contractor solely at their expense.

Any sections requiring repair for any reason shall be re-televised from manhole to manhole to verify condition of repair. The Contractor is solely responsible for any damage of sewer mains as a direct result of their televising operations, jetting and/or pre-cleaning operations. Any repair required shall be the responsibility of the Contractor. No separate and/or additional payment will be made for any excavation, man entry, or any other method which may be required to retrieve video equipment that may have been hung up, destroyed, and/or lost during the operation.

If the Televising Contractor provides a video of such poor quality that it cannot be properly evaluated, the Televising Contractor shall re-televising as necessary and provide a video of good quality at no additional cost to the City. If the Contractor cannot provide a video of such good quality that can be reviewed by the City, the City may elect to televise the line at the Contractor's expense.

When the depth of flow at the upstream manhole of the pipe section being worked is above the maximum allowable for television inspection, the flow can be reduced to allowable levels by performing bypass pumping, or other methods as approved by the Engineer.

If bypass pumping is required by site conditions or as per plan note, refer to Section 9 Sanitary Sewer for bypass pumping requirements.

205.4 METHOD OF MEASUREMENT

Measurement for televising shall be made by the linear foot to the nearest whole linear foot. Measurement shall be from center of Manhole or Structure to center of Manhole or structure and shall include any appurtenances installed as part of the contract documents.

205.5 BASIS OF PAYMENT

Payment will be made for the work done on the basis of the unit bid price per linear foot (LF) for "Video Inspection, Sanitary Sewer" or "Video Inspection, Storm Sewer" for total length of the utility regardless of diameter.

No additional payment will be made for any cleaning required for televising of the mains.

No additional payment will be made for re-televising or re-cleaning of the mains.

Bypass pumping required by the Contractor to complete the televising efforts will be incidental to the unit bid price bid per LF of "Video inspection, Sanitary Sewer".

END OF SECTION