

4300408 PIPE CULVERTS
COMMENTS FROM INTERNAL/INDUSTRY REVIEW

Jay Rice
SiteScope

Comments: (9-30-2014)

1. I would recommend the following be eliminated “provide a video record of the actual speed at which the camera is traveling” for the following reasons.
 - o Very few pipe video inspection firms follow this requirement. Pipe Inspection Firms which I work with navigate the pipe at 40 ft/min to 50ft/min and slow down when a deficiency is spotted. Displaying the speed on the screen will eliminate the inspection efficiency realized by advances in video technology
 - o 30 ft/min maximum will increase video length thus increasing review time and increasing video file size.
 - o Only the newest equipment shows the speed on the video output, thus industry will have to upgrade immediately and experience instant added cost.
 - Currently inspection video displays time and departure, speed can be calculated if desired.

Response:

Failure to follow current Specification requirements is grounds for rejection of the pipe inspection reports. The language requiring a video record of the camera speed has been deleted. The Contracting industry constantly upgrades equipment to meet new Standards and Specifications.

2. In speaking with one of the local video inspection firms, he brought you a good point which I would like to share with everyone.

He would like to “Recommend a requirement for "signed and sealed" inspection reports. To my knowledge, pipe video and laser profiling is the only contractor controlled inspection activity that does not require the provider to certify its work by the signature and seal of a Professional Engineer. Currently, videos are produced and viewed by the inspection company, re-viewed and submitted by the Contractor, re-viewed and submitted by the CEI, and re-viewed and accepted by FDOT. Requiring a qualified Professional Engineer, at the performance level, to accept responsibility for the videos and reports will greatly improve the quality and reliability of the information submitted. Any additional costs would be offset by reduction of the now necessary re-view time of the Contractor, CEI, and FDOT. The Department would be better served to look to Engineers, with expertise in the field, to provide responsible analysis of the pipe lines being inspected. I recommend the implementation of a system that holds the video inspection companies accountable for their work, with an FDOT/CEI directed QC/QA program.” – Jay Rice with SiteScope.

Response:

The Department is currently pursuing operator and equipment certification through independent calibration laboratories. Signed and sealed inspection reports are not needed at this time.

Anonymous

Comments: (9-30-2014)

Actual recorded separation measurement of all **rigid** pipe joints. – **Comment.** Does this mean no measurement is required for flexible pipe?

We agree with xxxxx on the comments regarding speed.

We do not agree with the last paragraph. FDOT is working on a certification program for video equipment operators and standardization of reports and we feel this is a better way to go.

Response:

Yes. The Department does not have joint gap criteria for flexible pipe types at this time so a measurement is not needed. The operator is still required to video the entire circumference of the joint and note any defects or infiltration.

Anonymous

Comments: (9-30-2014)

Nothing against P.E.s, but I agree with xx. FDOT has certification programs on almost everything else so why not for video equipment operators.

Response:

No response necessary.

Felipe Jaramillo

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Comments: (9-29-14)

I would recommend the following be eliminated “provide a video record of the actual speed at which the camera is traveling” for the following reasons. Very few pipe video inspection firms follow this requirement. Pipe Inspection Firms navigate the pipe at 40 ft/min to 50ft/min and slow down when a deficiency is spotted. Displaying the speed on the screen will eliminate the inspection efficiency realized by advances in video technology 30 ft/min maximum will increase video length thus increasing review time and increasing video file size. Only the newest equipment shows the speed on the video output, thus industry will have to upgrade immediately and experience instant added cost. Currently inspection video displays time and departure, speed can be calculated if desired.

Response:

See response above.

Neil Monkman

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Comments: (10-1-2014)

I believe that all of the proposed changes are a good improvement to the current specification with the exception of 1 item. Section 430-4.8.1 is proposing to require that the video includes the speed of the camera. I am not sure if this is a readily available function or not, but this seems very unnecessary. The specification already requires that the video produce images that can be accurately evaluated and I do not believe this is limited to just the joints. The specification also requires that the feet into the pipe run is included in the video. Therefore, if that is calibrated one could simply do the math to determine the speed. I am assuming that the intent is to prevent inspecting a joint and then "highballing" down the pipe to the next joint potentially missing anything in between. I think the bottom line is that if the reviewer cannot accurately evaluate the pipe then he/she would have just cause to reject the video. Perhaps there are other reasons for this that I am not seeing, I would be interested in knowing the precise intent.

Response:

Agree, the language has been deleted.

Katie Kehres
FDOT, D4
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Comments: (10-27-2014)

For Section 430-4.8.1 Video Report, recommend modifying the sentence that states "Film the entire circumference at each joint" to state "Film the entire circumference at each rigid joint". (Recommendation is for consistency, as "rigid" is being added as part of this Industry Review for Section 430-4.8 #2 for the separation measurement to be for "all rigid pipe joints.")

Response:

No change made. The requirement is that the operator film the entire circumference at each joint but only provide separation measurements for rigid joints. The Department does not have joint gap criteria for flexible pipe types at this time so a measurement is not needed. The operator is still required to video the entire circumference of the joint and not any defects or infiltration.

Anonymous
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Comments: (10-27-14)

Each pipe run should have its own video. Should the contractor choose to include multiple pipe runs on one video, ensure each pipe run is labeled accurately.

Response:

This is a current requirement.
