

	Exception		
10: QuickView Far Distance and Remote Confined Space Video Inspection Equipment or equivalent	Yes	No	If yes, offered Substitute
<b>1. General Requirements</b>			
a. The proposed system must be a self-contained wireless zooming camera. Camera systems that require wired connections to controls/viewers shall be deemed unacceptable.	✓		
b. <i>Warranty:</i> The system furnished in accordance with these specifications shall be covered for a period of 1 year.	✓		
c. The proposed system must be able to be operated by one person, requiring no entry into confined space areas.	✓		
d. No tools required for setting up or accessorizing the system.	✓		
<b>2. Camera Head: Module &amp; Housing</b>			
a. The camera will produce a color video image and provide a minimum of 1280x720 (2.38 megapixel) video resolution.	✓		
b. Camera construction shall include all solid-state circuitry designed to withstand shocks and vibrations	✓		
c. The camera shall have a zoom feature of 30:1 optical and a digital zoom of 12 times for a total of 360:1 magnification.	✓		
d. Camera shall have ability for auto and manual focus via control application.	✓		
e. System illumination shall be haloptic LED, dimmable for various pipe conditions.	✓		
f. The camera housing shall be made of lightweight aluminum for ease of operation.	✓		
g. Camera shall have Schrader air valve for purge and pressurization of electronic components to prevent moisture ingress.	✓		
h. Camera shall have pressure relief valve so system cannot be over-pressurized.	✓		
i. Camera shall have ability to automatically tilt via control application; minimum +10-degrees and -30-degrees from horizontal.	✓		
j. Camera shall require no wired connections to operator controls or viewing devices.	✓		

k. System shall have quick-connect camera head feature where camera head attaches mechanically to the pole via a single cam lock and collar. No tools required.			
l. Camera shall be supported in-pipe via integrated stand-off pole.			
m. Camera shall include two interchangeable battery packs and charging station.			
n. Camera and accessories shall be housed in a pelican style protective case.			
<b>3. Controller (Application, Menu System, Viewers)</b>			
a. Control application shall be available for download to Android, iOS, and Windows devices.			
b. Control application shall allow one device to control camera/recording functions and connection of multiple devices for viewing. All connections via wifi.			
c. The control application shall include controls on screen for zoom, manual/auto focus, camera tilt, light intensity/dimming, recording video, capturing still images, and show/remove on-screen text.			
d. Control application shall have indicators for battery charge level, zoom level, and light intensity level.			
e. Control application shall include on-screen text displays, including date/time and two customizable lines of text.			
f. Control application shall include ability to show GPS coordinates on screen (as determined by control tablet/hardware).			
g. Control application shall include ability to power down camera when closing the application.			
<b>4. System Hardware</b>			
a. Adjustable pole with minimum 16-ft length and ability to add pole extensions.			
b. Pole shall be stabilized by included bipod for hands-free operation.			
c. Camera standoff pole shall include gas spring with reciprocating ratchet for ease of positioning camera in 6" to 48" pipes.			

