



Clark County Water Reclamation District

Mission: To manage reclaimed water as a resource.

CLARK COUNTY WATER RECLAMATION DISTRICT

BID NO. 839-09

ADDENDUM NO. 1

SEPTEMBER 18, 2009

CCTV CAMERA TRUCKS

This addendum is part of the Invitation to Bid No. 839-09 and modifies the original Invitation to Bid issued on September 4, 2009. The following are questions and answers and changes to the General Conditions and Technical Specifications which have been made to the original bid package.

Question No. 1: Page 21 #3 and #5, Page 22 #26

Any power control unit we propose will not have a 4" LCD screen included. All functions that are apparently programmed on this small display are displayed on our system on the 20" monitors specified for system display, providing for more complete viewing. Please consider modifying these specs accordingly.

Answer No. 1:

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 2: Page 22 # 27

Our electronics systems are of a modular design, but not in a "slide out card" configuration. Please consider modifying this specification accordingly.

Answer No. 2:

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 3: Page 22 #29, page 26 #23, page 32 #19, page 35 #39

Our cameras operate on RS232 serial communication protocol rather than CAN-BUS, which is also a European technology. It is unclear exactly what "Pipe-Bus" software technology is intended to be, but a full diagnostic package is included for our system components, and systems and/or components will be upgradeable. Please consider modification of these specifications accordingly.

Answer No. 3:

(Controller Area Network bus) A rugged, digital serial bus designed for industrial environments. Introduced by Bosch in the mid-1980s for in-vehicle communications, it is used in myriad applications including factory automation, building automation, aircraft and aerospace as well as in cars, trucks and

buses. CAN bus replaced bulky wiring harnesses with a two-wire differential cable (the two wires carry inverted voltages to decrease interference). **This type of controller is non-proprietary.**

This type of technology (CAN bus) results in a lighter weight and more flexible cable than an RS232 cable. (Six wires vs. 9-25 wires)

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 4: Page 23 #16

Our cameras for the system will exceed the 3.75 Lbs. specified. Ours will be 11 lbs. Please consider modification of the specification accordingly.

Answer No: 4:

Lighter cameras are easier to maneuver and handle by staff.

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 5: Page 23 #17

Our camera will exceed the 85mm x 80mm x 80mm specified (again, indicative of a European design). Ours measures 13.75" long and has a body diameter of 2 $\frac{3}{4}$ " and head diameter of 3 $\frac{3}{4}$ ". Please consider modification of the specification accordingly.

Answer No. 5:

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 5: Page 23 #3, Page 38 #80

The cables used for our system will exceed the .19" diameter specified. The mainline cable will measure .43" in diameter, and the tag line for the lateral inspection system will measure .28" in diameter. The larger of these cables has a break strength rating of 2000 lbs., and the smaller diameter cable has a 1200 lb. break strength rating, which was determined by the size of the equipment that operates at the end of the cable. Please consider modification of the specification accordingly.

Answer No. 5:

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 6: Page 24 #4, Page 37 #66 and #68

Our systems are designed with neutral freewheeling capability for both the reel and the tractor. This freewheeling capability eliminates the need for the tension-operated "automatic" system specified here. Please consider modification of the specifications accordingly.

Answer No. 6:

To keep the cable drum and camera tractor in sync the system must incorporate the appropriate sensors to ensure this operation occurs automatically without constant operator interaction.

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 7: Page 24 #9

Our reel designed for this system configuration, when mounted in the vehicle, will far exceed the 165 lbs. specified here. Please consider the removal of this specification.

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Answer No. 7: Page 25 #6 and #18, Page 34 #28, Page 35 #35

The crawlers we will supply exceed the 12.4" length specified. It is likely that we will supply a 23" long crawler, and a launcher unit that measures 38" long. Please consider modification of the specification accordingly.

Crawlers specified are for ease of operation, maneuverability, in-stallability, and retrieval of camera system into and out of the sewer system.

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 8: Page 26 #33, Page 32 #25, Page 34 #14

We can supply a 512Hz or 9.82kHz beacon. We do not currently have 640Hz or 33Hz (likely meant to be 33kHz) frequency beacons, nor the ability to change the frequencies via the system controls. Please consider modification of the specification accordingly.

Answer No. 8:

640Hz is not specified 512Hz is 33kHz is specified, not 33Hz as in your question.

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 9: Page 26 #35, Page 36 #48

We do not currently offer a "roll sensor" system, as most experienced operators can easily avoid rollovers. Please consider modification or outright removal of the specification accordingly.

Answer No. 9:

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 10: Page 28 #10 and #11

Cummins nPower (Onan) has recommended against the use of slide-out mountings for their sound-attenuated generator models. This is due to the airflow configuration on the bottom side of the unit. Any slide out mechanism will de-optimize this airflow, which is likely very important in the Southern Nevada environment. We have developed a mounting system that Onan has recommended to other installers, and Onan has designed these units with single-side access for routine maintenance. Please consider modification of the specification accordingly.

Answer No. 11:

This is an operational feature we have currently installed and have on our other equipment.

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 12: Page 30 #40

We wire all vehicle systems to operate all 12V equipment completely separate from the 12V system of the vehicle. This is a fail-safe method of ensuring the 12V auxiliary systems will not create a scenario where the vehicle will not start, and will avoid any vehicle chassis warranty issues as well. The bi-directional charging capability specified here will not be included in our proposal. Please consider modification of the specification accordingly.

Answer No. 12:

This is an operational requirement we have of all our CCTV vehicles and will not be removed from our specification.

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 13: Page 34 #27

Our launching units are currently unavailable with a steering function. Please consider modification of the specification accordingly.

Answer No. 13:

The District's specification requires steerable tractors and will not be removed from our specification.

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 14: Page 36 #47

Our mainline-launched lateral inspection system is not currently available with an inclinometer unit. Please consider modification of the specification accordingly.

Answer No. 14:

The inclinometer is standard equipment on all mainline CCTV crawlers to facilitate capturing the slope of the main when doing the mainline inspection. This requirement will not be removed from our specification.

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 15: Page 36 #49

Our launcher unit weighs in excess of the 44 lbs. specified. Weight is variable according to the pipe size being inspected, but 44 lbs. is about our minimum weight. Please consider modification of the specification accordingly.

Answer No. 15:

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 16: Page 36 #54

Our launcher design has the drive mechanism located on the bottom of the unit. The push cable of any launcher design will lie in the bottom of the pipe following the launching unit as it drives to a lateral's position. The location of the drive mechanism on the top of the launcher will not improve debris fouling in any way, as debris can be present on the push cable as it is launched. We have developed drive rollers that are expected to operate a cable that has debris on its surface. Please consider modification of the specification accordingly.

Answer No. 17:

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 18: Page 36 #55

Our push cable requires a hex key for loading and unloading the push cable. Our design team decided against the specified locking hinged door, as its failure could lead to damage of the launching mechanism, and decided a cover fastened by screws was a more fail-safe solution. Please consider modification of the specification accordingly.

Answer No. 18:

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 19: Page 37 #59

Our launching unit is currently unavailable with a rear-viewing camera. Please consider modification of the specification accordingly.

Answer No. 19:

Rear viewing camera will not be removed from our specification.

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 20: Page 41 Section 3

Our pole camera system is not available with the "portable vest" specified in 3b, 3l, 3m, 3n, 3o, 3p, 3r, and 4d on page 42. We have instead chosen a portable display case, which exceeds the dimensional specs in 3a. This case employs the system's wireless video transmission, and has a much larger display for the operator. It also avoids a heavy and bulky vest for the operator to wear while inspecting. Please consider modification of these specifications accordingly.

Answer No. 20:

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 21: Page 41 #3

Our pole camera includes push-button momentary switches rather than the rocker style specified. Please consider modification of the specification accordingly.

Answer No. 21:

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 22: Page 42 #4c

Our zoom pole camera system is designed exclusively with wireless video transmission, specifically for the purpose of not using this externally-armored cable, which apparently has a significant failure rate. Please consider modification of these specifications accordingly.

Answer No. 22:

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 23: Page 42 Section 4

We have chosen not to employ the carbon fiber pole construction design specified in 4g, 4i, and 4j. This is due to static electricity safety concerns, as carbon fiber is extremely conductive. Please consider modification of these specifications accordingly.

Answer No. 23:

Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Question No. 24: Pages 42 and 43

We do not currently offer the targeting system specified in 4k, 4n, and 4o. We also do not currently offer the section 5 measurement upgrade. We have seen the unit specified, and the accuracy of these units was determined to be ineffective for practical use. At this time, we have not developed a system with the accuracy we feel an end user would require for this system. Please consider modification or outright removal of these specifications accordingly.

Answer No. 24:

- A. Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

In addition to the specifications listed above, there are some items for which we request clarification.

We are able to provide a crawler that can be used for both the medium size unit specified in section 5 on page 24 as well as the large crawler specified in section 8 on page 31. Would Clark County be willing to consider a single crawler for pipe sizes 6" to 60"? This would provide a cost saving to the County.

- B. Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Page 30 spec 45 makes reference to a 20" monitor for viewing the "Inspection Software PC." Yet, no specifications seem to be included for a computer, graphical overlay device, or any software. No video recording equipment is specified as well. These components are typically very important to the function of any inspection system. If Clark County will supply their own computer, video recorder, overlays, and/or software, please indicate the configuration of such equipment so that our configuration can accept the equipment you intend to supply. 19" rack mounted equipment is standard throughout the industry for the PC and overlay. If the County desires for the TV system to include these devices, please indicate the specifications for such equipment.

- C. Capture recording system will be procured and installed separately from the CCTV trucks requested. This is required to keep the database and platforms consistent in the District. Computers, capture software, and associated appurtenances are NOT included in this specification or bid.

The lateral launch crawler specified in the section beginning on page 34 does not appear to be the optimum unit for launching a push cable. We do offer a wheeled version of a launching unit, but it has only been sold to a few customers. A tread drive unit will have a much larger contact patch with the pipe walls. This allows for more force to be applied to the push cable before the launching unit slides back up the mainline pipe. Most of our customer base recognizes this and prefers to use a tread-drive launching unit. Please consider modification of the specification to allow a tread drive launching unit accordingly.

- D. Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

Page 38 mentions that a 10" monitor is supplied for viewing the camera output, even though a 20" monitor is specified for this purpose on page 30 #44. Our system is designed with picture-in-picture capability for the lateral inspection cameras. Would the County consider this acceptable and waive the 10" monitor requirement?

E. Strike this requirement.

Our mainline-launched lateral inspection system is proven and has been used by contractors and municipalities nationwide for over 10 years with repeated success. Other manufactures say they have a system that will perform to the expectations of your city, when their system is nothing more than a prototype model with little or no field experience. Our system is a proven product with years of successful field experience and customer satisfaction. We strongly urge you to add a list of equipment references for this bid to get an honest unbiased opinion from people who are using the products on an everyday basis.

F. Please submit, with your bid, per the "Equivalent Product" paragraph on page 20 how your product is equal to or superior to the television inspection equipment specified.

END OF QUESTIONS AND ANSWERS

**CLARK COUNTY WATER RECLAMATION DISTRICT
REVISED PER ADDENDUM NO. 1
BID NO. 839-09
SEPTEMBER 18, 2009**

GENERAL CONDITIONS AND TECHNICAL SPECIFICATION CHANGES

GENERAL CONDITIONS:

Page 14: Item C – Change the maximum delivery time from ninety (90) calendar days to two hundred eighty-five (285) calendar days. **NOTE: THE VEHICLES MUST BE DELIVERED TO THE CLARK COUNTY WATER RECLAMATION DISTRICT PRIOR TO JUNE 30, 2010. NO EXCEPTIONS.**

TECHNICAL SPECIFICATIONS:

SECTION 1.0) CONTROL UNIT:

Change Item No. 29 to read as follows: Control unit must run off of a CAN bus control protocol to allow for future upgrades to all components

SECTION 5.0) MEDIUM 6" – 24" PIPE DIAMETER STEERABLE MOTORIZED CRAWLER:

Change Item No. 23 to read as follows: Crawler shall be controlled via CAN bus technology to allow for precision control, diagnostic monitoring and future upgradeability.

Change Item No. 26 to read as follows: **Tractor shall work with the following wheel sets:**

- Set of 4 common 36mm diameter by 20mm wide spacers
- (6) 3.33" (86mm) diameter rubber wheels
- (4) 4.33" (110mm) diameter grooved rubber wheels
- (4) 4.33" (110mm) diameter soft composite grease wheels with traction grit impregnation
- (4) 5.31" (135mm) diameter grooved rubber wheels
- (6) 3.33" (86mm) diameter soft composite grease wheels with traction grit impregnation
- (6) 3.33" (86mm) diameter pointed carbide wheels
- (4) 4.33" (110mm) diameter pointed carbide wheels
- (4) 5.31" (135mm) diameter soft composite grease wheels with traction grit impregnation
- (4) 5.31" (135mm) diameter pointed carbide wheels
- (4) 5.31" (135mm) diameter by 2.6" wide sediment rubber wheels

SECTION 6.0) VEHICLE CHASSIS – VIDEO MONITORS AND COMPONENTS

Change Item No. 44 to read as follows: A small camera shall be installed behind cable reel so that operator can monitor proper payout and retrieval of cable. The monitor for the camera shall be 10" or greater and mounted in operator area above desk.

SECTION 7.0) MANUALS & TRAINING

Remove "Supervision Options" in its' entirety.

SECTION 8.0) LARGE 10" – 60" PIPE DIAMETER STEERABLE MOTORIZED CRAWLER

Change Item No. 19 to read as follows: Crawler shall be controlled via CAN-bus technology to allow for precision control, diagnostic monitoring and future upgradeability. Single conductor or multi conductor systems with more

than six (6) wires in the cable will be deemed unacceptable.

SECTION 9.0) SUPERVISION ADD ON SAT / LATERAL LAUNCH SYSTEM

Remove "Supervision add-on" in its' entirety.

6" TO 24" WHEELED STEERABLE LATERAL LAUNCH CRAWLER

Change Item No. 39 to read as follows:

1. Crawler shall be controlled via CAN bus technology to allow for precision control, diagnostic monitoring and future upgradeability.

Change Item No. 40 to read as follows:

Tractor shall work with the following wheel sets:

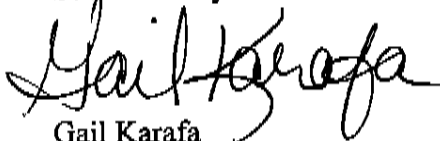
- a. Set of 4 common 36mm dia by 20mm wide spacers
- b. (6) 3.33" (86mm) dia rubber wheels
- c. (4) 4.33" (110mm) dia grooved rubber wheels
- d. (4) 4.33" (110mm) dia soft composite grease wheels with traction grit impregnation
- e. (4) 5.31" (135mm) dia grooved rubber wheels
- f. (6) 3.33" (86mm) dia soft composite grease wheels with traction grit impregnation
- g. (6) 3.33" (86mm) dia pointed carbide wheels
- h. (4) 4.33" (110mm) dia pointed carbide wheels
- i. (4) 5.31" (135mm) dia soft composite grease wheels with traction grit impregnation
- j. (4) 5.31" (135mm) dia pointed carbide wheels
- k. (4) 5.31" (135mm) dia by 2.6" wide sediment rubber wheels

SAT CABLE

MONITOR – 10" monitor or greater shall be provided to allow operator to view front view and rear view crawler cameras.

ALL OTHER TECHNICAL SPECIFICATIONS SHALL REMAIN THE SAME.

Submitted By:



Gail Karafa
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