



Memorandum

MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT

Reviewed by: [Signature] Date: 3/12/21
General Manager

DATE: March 12, 2021
TO: General Manager
FROM: Senior Engineer
SUBJECT: Scale Camera Project

RECOMMENDATION: That the Board authorize the General Manager to execute contracts with Paradigm Software, LLC. and Communication Cable Placement Services, Inc. for the Scale Camera Project with a project budget not-to-exceed \$35,000 (includes 5% contingency).

BACKGROUND

The scale house is currently equipped with six Point Tilt Zoom (PTZ) cameras that were installed around the year 2006. These cameras enable scale staff to read license plates and perform waste inspections of inbound loads. The cameras have reached the end of their life due to harsh conditions at the landfill and being near the ocean. In addition, the cameras are outdated, and repair parts are not available from the manufacturer. Over the past few years, several of the cameras have required repair, gotten stuck, or work intermittently. When this happens scale staff must use alternative means to obtain the information they need to complete the transaction. Information collected from the scale cameras is stored on a local DVR disk and is only available from the unit located in the scale house. The existing DVR system is not incredibly user friendly, and images are poor.

In 2019 MRWMD purchased a camera module from the scale software developer (Paradigm) that would enable MRWMD to store images in the ticket data. This allows staff to connect a transaction ticket to the images when the data is needed to settle a transaction issue. There have also been occasions when law enforcement or regulators have asked to review the scale camera data to locate a suspect vehicle for their use in performing an investigation.

The six existing cameras are only used for checking loads and are positioned such that they cannot provide remote security monitoring of the site. In addition, the existing recording system is not remotely accessible and can only be viewed while standing at the recording unit located upstairs in the scale house.

DISCUSSION

MRWMD's solution to address the old cameras and remedy the challenges noted above is to replace the existing camera system with a new load check and security camera system. The proposed camera system consists of seven PTZ cameras (to replace existing six and add an additional one for new Scale E), two in building cameras to capture customer images, two static security cameras on east and west side of scale house, and a digital recording device that would be accessible online. These cameras would enable the District to do the following:

1. Provide a reliable camera system
2. Provide higher quality imagery for load checks, enabling staff to perform more detailed inspections and catch contamination or hazardous materials and keep them out of our systems.
3. Perform remote online monitoring of inbound traffic, load checks, and security
4. Integrate images of customers and their loads into the ticket data.
5. Provide easily accessible video to investigators
6. Enhance site security with the addition of the two new security cameras
7. Enhance scale house security by monitoring customer activity and deterring theft or robbery.



Existing Pelco PTZ Load
Camera above Scale C



Existing Pelco PTZ License
Plate Cameras



Proposed Axis P5655-E
PTZ camera

FINANCIAL IMPACT

The District worked with Paradigm and Communications Cable Placement Services to obtain quotes for the work. The quotes received for equipment and installation totaled \$33,120. A 5% contingency amount has been applied to the project costs, due to possible unforeseen circumstances encountered during construction, to define the project budget of \$35,000 for the scope of work presented in the quotations. This project cost was included in the mid-year revision to the FY2020/21 budget.

CONCLUSION

The Scale Camera Project will have multiple benefits to the District's operations. This includes scale ticket photo integration, security monitoring, improved load checks, and reliable equipment. Staff therefore recommends the Board authorize the General Manager to execute contracts with Paradigm Software, LLC. and Communication Cable Placement Services, Inc. for the Scale Camera Project with a project budget not-to-exceed \$35,000 (includes 5% contingency)..

David Ramirez, P.E.

Price Quote

To: David Ramirez, Monterey Regional Waste Management District
From: Andrew Twigg, Paradigm Software, L.L.C.
Date: 03/04/2021
Re: Camera System Quote

The following price quote is presented for the requested items below as requested by Monterey Regional Waste Management District.

Qty	UM	Item/Description	Rate	Total
2.00	EA	Camera - (AXIS - M3065-V Indoor Fixed Mini DomeHDTV 1080P Multi POE Fixed Lens - This device will be installed by Chris from Communication Cable Placement Services, Inc and will operate outside of the scale software.)	\$308.67	\$617.34
2.00	EA	Camera - (AXIS - P3227-LVE DN Dome, IK10 Out VF 3.5-10MM Built-In IR 5MP@30FPS W/WDR - This device will be installed by Chris from Communication Cable Placement Services, Inc and will operate outside of the scale software.)	\$1,031.60	\$2,063.20
7.00	EA	Camera - (AXIS - PTZ Camera with Continuous 360 Pan for both In/Outdoor W/32X, P5655-E-PTZ -This device will be installed by Chris from Communication Cable Placement Services, Inc. This device will operate inside of the scale software. When WeighStation requests the image the camera's current field of view will be the image captured and stored with the transaction.)	\$2,293.85	\$16,056.95
1.00	EA	POE Network Switch - (AXIS - T8508 POE+ Network Switch EUR Managed Gigabit, 2X SFP/RJ45 8X POE+ PORTS - This device will be installed by Chris from Communication Cable Placement Services, Inc.)	\$457.85	\$457.85
1.00	EA	Digital Video Recorder - (AXIS - S2212 Camera Station Appliance 12 CH Desktop Client/Server 6 TB Storage - This device will be installed by Chris from Communication Cable Placement Services, Inc and will operate outside of the scale software.)	\$3,441.35	\$3,441.35
7.00	EA	Camera Mounting Accessories - (AXIS - T91G61 Wall Mount - For PTZ camera - Indoor/Outdoor Axis Camera Pole Mount and Conduit Box with Sealed Compartment. NOTE: Customer will be responsible for all wiring, electrical, trenching, conduit, bollards and mounting unless otherwise noted in this quote. PSLLC will configure the hardware to work with the software.)	\$228.35	\$1,598.45
7.00	EA	Camera Mounting Accessories - (AXIS - T91B57 Pole Mount - For PTZ camera - Indoor/Outdoor Axis Camera Pole Mount and Conduit Box with Sealed Compartment. NOTE: Customer will be responsible for all wiring, electrical, trenching, conduit, bollards and mounting unless otherwise noted in this quote. PSLLC will configure the hardware to work with the software.)	\$131.96	\$923.72
2.00	EA	Camera Mounting Accessories - (AXIS - T94T01D Pendant Kit - For Front Over View camera - Indoor/Outdoor Axis Camera Pole Mount and Conduit Box with Sealed Compartment. NOTE: Customer will be responsible for all wiring, electrical, trenching, conduit, bollards and mounting unless otherwise noted in this quote. PSLLC will configure the hardware to work with the software.)	\$56.22	\$112.44

2.00	EA	Camera Mounting Accessories - (AXIS - T91E61 Wall Mount - For Front Over View camera - Indoor/Outdoor Axis Camera Pole Mount and Conduit Box with Sealed Compartment.	\$44.75	\$89.50
		NOTE: Customer will be responsible for all wiring, electrical, trenching, conduit, bollards and mounting unless otherwise noted in this quote. PSLLC will configure the hardware to work with the software.)		
10.00	HR	Remote Installation - Implementation - (This time will be used to setup the PTZ cameras to work in the scale software - During normal PSLLC business hours - hours exceeding 8 per day or after business hours work will be invoiced at time and a half / hour / specialist - customer will be invoiced for time used.)	\$210.00	\$2,100.00

Project Total:	\$27,460.80
*Total Increase In Annual Support:	\$0.00
*Total Increase In Annual Service Fee:	\$0.00

All pricing and subsequent payments are in US Dollars

Mounting and wire pulling will be done by Chris Barth from Communication Cable Placement Services, Inc. He will be submitting a separate quote for his portion. Paradigm will configure the PTZ cameras to work with the software.

Paradigm requires the ability to communicate directly with the IP Camera and IP Camera must allow picture capture on demand from the software.

Payment Terms (Does not include Taxes):

Description	Percent	Total
100% Due Upon Acceptance	100%	\$25,360.80
100% Due Upon Completion	100%	\$2,100.00

Estimate

Communication Cable Placement Services, Inc.
 Placement of Fiber Optic, Copper & Coaxial Cable
 Telecommunications, Voice Mail, CCTV & Networking
 (831) 636-1455 / Fax (831) 536-1096
 License No. 855850

Date	Estimate #
3/4/2021	542

Name / Address
Monterey Regional Waste Management 14201 Del monte Blvd. Marina, CA 93933-1670

Project

Description	Qty	U/M	Cost	Total
Labor by Technician for Cable Placement: Install infrastructure for 11 CCTV cameras at Scale House; mount PTZ CCTV cameras in lanes B, C, and D for load inspection mount four PTZ CCTV cameras on pole for license plates, mount tow static CCTV cameras on the front and rear of the Scale House and mount two at the kiosks.	50		85.00	4,250.00
Labor by Technician for Cable Placement: Install POE switch, NVR and configure NVR with assistance from Paradigm	8		85.00	680.00
Mohawk LAN-Track Category 6, 4 pair UTP OSP filled	475	ft	0.36263	172.25T
Berk-Tek LANmark-6 CMR, Category: 6, Fire Rating: CMR, color light gray	200	ft	0.20	40.00T
Siemon MAX Patch Panel frame, connector type; MAX UTP, open ports; 24, rack mount units; 1	1		53.00	53.00T
Siemon MAX Cat.6 T568A/B flat color Black	11		8.00	88.00T
Siemon MAX blank module color Black	13		0.45	5.85T
8 Pos. Modular Plug Solid Core Cable	11		0.75	8.25T
Siemon Patch Cable Manager Cable Capacity 50	1		45.00	45.00T
Allen Tel Cat.6 TIA/EIA-568-B.2-1 Patch Cable 3' cable, color white	11		4.75	52.25T
Race Way H1/2' x W3/4' L6' Ivory	24	ft	2.25	54.00T
Coupling for LD3 Ivory	5		1.40	7.00T
End Cap for LD3/CD3 Ivory	1		1.50	1.50T
Inside Corner For LD3/CD3 Ivory	1		1.50	1.50T
Right Angle for LD3 Ivory	1		1.50	1.50T
Fasteners Screws, Bolts, Nuts and Washers: Cable tie mounts, Fasteners and other hardware	1		75.00	75.00
Charges for freight and handling: Ground			125.00	125.00
Terms and Conditions; 1) Due to existing building conditions additional Labor, Hardware and Equipment costs may be incurred 2) Estimate is Scalable; Some Hardware Items quantities are estimated will be billed for quantities used				
Thank you for the opportunity to prepare an estimate for your project.	Subtotal			
CCPS, Inc. 1580 Mimosa Street Hollister, CA 95023	Sales Tax (7.75%)			
	Total			

Estimate

Communication Cable Placement Services, Inc.
 Placement of Fiber Optic, Copper & Coaxial Cable
 Telecommunications, Voice Mail, CCTV & Networking
 (831) 636-1455 / Fax (831) 536-1096
 License No. 855850

Date	Estimate #
3/4/2021	542

Name / Address

Monterey Regional Waste Management
 14201 Del monte Blvd.
 Marina, CA 93933-1670

Project


Description	Qty	U/M	Cost	Total
3) Use of Articulating Boom lift 50 foot and Scissor lift will be required to install cable and cameras. Rental cost is not included in estimate. 4) Estimate not valid 30 Days from issue (03 /05/2021) Approval of estimate, terms and conditions Signature _____ Date _____				
Thank you for the opportunity to prepare an estimate for your project.	Subtotal			\$5,660.10
CCPS, Inc. 1580 Mimosa Street Hollister, CA 95023	Sales Tax (7.75%)			\$41.08
	Total			\$5,701.18

All duties and taxes regarding the shipment of the items above are the responsibility of the customer. To authorize and initiate this work, this expansion memo must be signed and dated on the appropriate line below by authorized personnel of Monterey Regional Waste Management District below. Please e-mail a signed copy to info@paradigmsoftware.com or fax to (443) 275-2509. If you have any questions, please call us at (410) 329-1300, option 3. This quote is valid for thirty (30) days from the date listed above. The signature below authorizes Paradigm Software, L.L.C. to perform the modifications specified above.

Monterey Regional Waste Management District

Paradigm Software, L.L.C.

Signature: _____

Signature:  _____

By: _____
(Please Print)

Phil Weglein
Chief Executive Officer

Title: _____

Date: 03/04/2021

Date: _____

Please provide shipping address if applicable:

Street Address (no PO Box)

City, State/Province, Zip/Postal Code