

COMMONWEALTH OF KENTUCKY TRANSPORTATION CABINET www.transportation.ky.gov/

Andy Beshear Governor Jim Gray Secretary

August 6, 2021

CALL NO. 102 CONTRACT ID NO. 211038 ADDENDUM # 1

Subject: Russell County, NHPP 9008(004) Letting August 20, 2021

- (1) Added Summary Sheet Page 58(a) of 138
- (2) Revised References Pages 81-82 of 138
- (3) Added Special Note Pages 97(a)-97(e) of 138
- (4) Revised Proposal Bid Items Pages 137-138 of 138

Proposal revisions are available at http://transportation.ky.gov/Construction-Procurement/.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

Rachel Mills,

Kachel Mille

Rachel Mills, P.E. Director Division of Construction Procurement

RM:mr Enclosures

QUEUE PROTECTION/SYSTEM SUMMARY SHEET

Russell County Cumberland Parkway SYP 8-20007.00

DESCRIPTION	UNIT	QUANTITY
QUEUE PROTECTION VEHICLE	HOUR	0
FURNISH QUEUE PROTECTION VEHICLE	MONT	0
PORTABLE QUEUE WARNING ALERT SYSTEM	MONT	6
QUEUE WARNING PCMS	MONT	36
QUEUE WARNING PORTABLE RADAR SENSORS	MONT	36
	QUEUE PROTECTION VEHICLE FURNISH QUEUE PROTECTION VEHICLE PORTABLE QUEUE WARNING ALERT SYSTEM QUEUE WARNING PCMS	QUEUE PROTECTION VEHICLE HOUR FURNISH QUEUE PROTECTION VEHICLE MONT PORTABLE QUEUE WARNING ALERT SYSTEM MONT QUEUE WARNING PCMS MONT

*Bid Items have not been carried forward to the General Summary

NOTE: See Special Note for Traffic Queue Protection Vehicle (if applicable) See Special Note for Portable Queue Warning Alert System (if applicable)

REFERENCES

- 1. *Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Edition of 2019.*
- 2. FHWA Manual on Uniform Traffic Control Devices.

3. Active Sepia List	
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Drawing No.	Drawing Name
007	Inlaid Pavement Marker Arrangements Multi-Lane Roadways
011	Inlaid Pavement Marker Arrangement Exit Gore and Off-Ramp
014	

- 014 Inlaid Pavement Marker Arrangement On-Ramp with Parallel Acceleration Lane
- 4. Kentucky Department of Highways Standard Drawings, current editions, as applicable:

RBE-060	Crash Cushion Type VI A B C (One and Two Direction)
RBE-070	Concrete Median Barrier End for Crash Cushion Type IX
RBE-070N	Concrete Median Barrier End for Crash Cushion Type IX Notes
RBE-200	Crash Cushion Type IX
RBI-001	Typical Guardrail Installations
RBI-002	Typical Guardrail Installations
RBI-003	Typical Installation for Guardrail End Treatment Type 2A
RBI-004	Installation of Guardrail End Treatment Type 1
RBI-005	Guardrail Installation at Bridge Columns
RBI-007	Crash Cushion Type IX Installation at Median Piers (Depressed Median)
RBR-001	Steel Beam Guardrail ("W" Beam)
RBR-005	Guardrail Components
RBR-010	Guardrail Terminal Sections
RBR-015	Steel Guardrail Posts
RBR-016	Timber Guardrail Posts
RBR-018	Guardrail System Transition
RBR-020	Guardrail End Treatment Type 1
RBR-025	Guardrail End Treatment Type 2A
RBR-035	Guardrail End Treatment Type 4A
RBR-055	Delineators for Guardrail
RDB-105	Sloped and Flared Box Inlet-Outlet 18" - 24" - 30" - 36" all Skews
RDB-106	Grates for Sloped and Flared Box Inlet-Outlet
RDB-110	Sloped Box Inlet or Outlet Type 1
RDB-280	Curb Box Inlet Type B (Detail Drawings)
RDB-281	Curb Box Inlet Type B (Steel Drawings)
RDB-282	Curb Box Inlet Type B (Top Phase Tables)
RDB-283	Curb Box Inlet Type B (Detail & Bar Chart for 8" Lid)
RDD-040	Channel Lining Class II & III
RDH-110	Pipe Culvert Headwall O° Skew
RDH-210	Dimensions and Quantities 30"-108" Headwalls Circular Pipe 0° Skew
RDI-001	Culvert, Entrance & Storm Sewer Pipe Types & Cover Heights
RDI-002	Culvert, Entrance & Storm Sewer Pipe Types & Cover Heights
RDI-003	Culvert & Storm Sewer Pipe Types & Cover Heights
RDI-004	Culvert & Storm Sewer Pipe Types & Cover Heights
RDI-020	Pipe Bedding for Culverts, Entrance and Storm Sewer Pipe
RDI-021	Pipe Bedding for Culverts, Entrance and Storm Sewer Reinforced Concrete Pipe
RDI-025	Pipe Bedding Trench Condition
RDI-026	Pipe Bedding Trench Condition Reinforced Concrete Pipe
RDX-160	Security Devices for Frames, Grates and Lids

RDX-225	Silt Trap Type B
RDX-230	Silt Trap Type C
RGS-002	Superelevation for Multilane Pavement
RGX-001	Miscellaneous Standards Part I
TPM-105	Pavement Marker Arrangements Multi-Lane Roadways
TPM-125	Pavement Marker Arrangements Exit Gore and Off-Ramp
TPM-130	Pavement Marker Arrangements On-Ramp with Tapered Acceleration Lane
TPM-170	Flexible Delineator Post Arrangements for Horizontal Curves
TPM-171	Flexible Delineator Post Arrangements for Interchange Ramps and Crossovers
TPM-200	Typical Entrance Ramp Markings for Interstates and Parkways
TPM-201	Typical Exit Ramp Markings for Interstates and Parkways
TPM-202	Typical Exit Ramp Markings for Interstates and Parkways
TPM-204	Typical Markings for Gore Areas
TPR-130	Rumble Strip Details Multi-Lane Roadways and Ramps
TTC-115	Lane Closure Multi-Lane Highway Case I
TTC-135	Shoulder Closure
TTD-120	Double Fine Zone Signs
TTD-125	Pavement Condition Warning Signs
TTD-130	Speed Zone Signing for Work Zones
TTS-110	Mobile Operation for Paint Striping Case III
TTS-115	Mobile Operation for Paint Striping Case IV
TTS-120	Mobile Operation for Durable Striping Case I
TTS-125	Mobile Operation for Durable Striping Case II
ERDH-110	Pipe Culvert Headwalls, 0° Skew (Layout and Steel Pattern)
ERDH-210	Dimensions and Quantities, 30" to 108" Headwalls, Circular Pipe, 0° Skew
ERDH-310	Bill of Reinforcement 30" to 90" Diameter, Circular Pipe, Headwalls, 0° Skew

5. *Kentucky Transportation Cabinet, Department of Highways, Standard Specifications for Road and Bridge Construction, Edition of 2019*, Appendix B - Supplemental Specifications, as applicable:

Special Note	11 Portable Changeable Message Signs (6/15/2012)
Special Note	Guardrail Delivery Verification Sheet
Special Note	Asphalt Milling and Texturing attached
Special Note	Fine Milling attached
Special Note	Typical Section Dimensions attached
Special Note	Before You Dig attached
Special Note	Fixed Completion Date and Liquidated Damages attached
Special Note	PVC Fold-and-Form Pipe Liner attached
Special Note	Pipe Liner Acceptance Testing attached
Special Note	Experimental KYCT and Hamburg Testing attached
Special Note	Portable Queue Warning Alert System

1.0 Description

This item shall consist of furnishing, installing, relocating, operating, servicing, and removing various components of a portable, quickly deployable, real-time automated ITS queue warning alert system (PQWAS), in accordance with the standard specifications and this special provision. The Contractor shall also provide the maintenance of the complete system for the duration of the project or as directed by the Project E n g i n e e r. The Department is willing to look at different technologies (i.e. allow the use of crowd sourcing data to be used in lieu of the portable radar sensors). Any changes to the below requirements must be submitted and approved by the Engineer.

2.0 Materials

Materials shall be in accordance as follows:

All materials used shall meet the manufacturer's specifications and recommendations.

All PQWAS materials installed on the project shall be provided by the Contractor in excellent quality condition, shall be corrosion resistant and in strict accordance with all of the details shown within Contractor's Plans approved by KYTC. The Contractor shall maintain an adequate inventory of parts and replacement units to support maintenance and repair of the PQWAS. Pre-deployment is a condition of the system's acceptance and is based on the successful performance demonstration for a (5) day continuous period in accordance to this specification and as set forth in the plans. Ensure compliance to all FCC and Department specifications.

The Contractor shall maintain this system and shall be locally available to service and maintain system components, move portable devices as necessary and respond to emergency situations. The Contractor has oversight responsibility for directing placement of devices in the project area. The Contractor is to be accessible seven (7) days a week and twenty-four (24) hours a day while the system is deployed. The Contractor shall provide contact information for the system's coordinator and others responsible for maintenance of the system prior to installation of the system. Furnish a System Coordinator for monitoring the PQWAS throughout all periods of deployment.

A. General Capabilities and Performance Requirements

- 1. Overall PQWAS capabilities and performance requirements include the following:
 - a. Furnish a system capable of providing advance traffic information to motorists when there is a queueing of traffic due to congestion resulting from lane reductions, emergency events or other conditions. The condition-responsive notification to the motorist occurs with the use of Portable Changeable Message Signs (PCMS) in accordance to the below capabilities and performance requirements, activated through real-time traffic data collected downstream of the PCMS locations. This equipment must

be a packaged system, pre-programmed and operates as a stand-alone PQWAS meeting this specification. Conditions might exist that require relocation of the portable sensors at any given time, the sensors shall be portable and shall not require re-calibration in the field for fast deployments. Due to the potential need to replace damaged sensors or to change the position of one or more sensors at any given time, sensors must be interchangeable and relocatable by an unskilled laborer. The system must continue to function if as many as half the sensors fail to function.

- b. Provide a PQWAS that consists of the following field equipment: portable radar sensors and portable changeable message signs (PCMS). Provide a system capable of withstanding inclement weather conditions while continuing to provide adequate battery power. The portable radar sensor battery, in a stand-alone state and without a solar panel for recharging, shall be capable of keeping power and capable of sending data for (10) consecutive days or longer. The system shall notify drivers of real-time queue events via specifically placed PCMS units up stream of the work zone. All predetermined/preprogrammed messages are to be approved by KYTC. The number and location of portable radar sensors and PCMS units shall be as directed by the Project Engineer. The decision to deploy or relocate field equipment is made by the Project Engineer and instrumented through the System Coordinator. The decision for equipment removal is made by the Project Engineer after work is complete. The sensors and PCMS units shall be identifiable via global positioning system (GPS) and shall contain an accelerometer to detect and alert of unauthorized movement.
- c. The portable radar sensor shall be capable of collecting traffic speed data. The processed data is used to remotely control PCMS units to display user definable, Engineer approved and locally stored messages. The message trigger state thresholds for slow and stopped speeds shall be user configurable and revisable in less than {1) hour from the Project Engineer's request. Weekly Traffic Data Reports shall be presented to the Project Engineer and shall include speed data per sensor location, travel times, and queue lengths in graphical and numerical formats. In the event the Project Engineer requires a report, other than a weekly report, for any reason; then the Contractor shall provide report within (48) hours of request. Unlimited data reports shall be included within price of system. Sensors shall require no calibration adjustments in the field. Sensor should begin transmitting data within (30) seconds of being turned on. Satellite (SAT) communications will be required when cellular service does not provide continuous communications. Contractor shall identify the most trustworthy cellular provider within the project area.
- d. Data shall be accessible through a website and the Contractor shall provide a username and password for protection. The website shall be accessible seven (7) days a week and twenty four (24) hours a day. The website shall provide historical & real-time data in graphical and numerical formats and shall have the capability of being integrated within the Department's Traffic Management Center (if requested). The website should be compatible to most hand held devices. Data shall be saved on the manufacturer's network for up to (5) years from the deployment date of system and shall be provided at the request

of the Department at any time within the (5) year window. The use of the website shall be included within the price of system.

- e. Warning Alerts: queue events, low battery voltage warnings, sensor movement alerts, high and low speed alerts shall be provided via cellular text messaging and/or via email messaging at the request of select Contractor personnel and KYTC officials.
- f. The PQWAS system shall have the capabilities to provide alternate route messaging on specifically placed portable changeable message units and/or fixed Variable Message Systems (VMS). The intent of this service is to provide alternate route messaging to motorists before entering the project limits from all directions and giving them appropriate time to adjust their routes. Alternative routes shall be predefined and approved by KYTC. Additional PCMS units may be required for alternate route messaging and will be as per Section 5.0 of this note. KYTC's Traffic Management Center will provide detour messages via fixed VMS units during the term of the project.

B. Portable Radar Sensor Capabilities and Performance Requirements

The PQWAS shall include portable radar sensors (PRD) to monitor and detect queue events.

- 1. The Radar Sensor shall be FHWA accepted to meet NCHRP 350 test requirements
- 2. The Radar Sensor shall be locatable at all times via an internal Global Positioning System (GPS) and shall be capable of Cellular or SAT Communications.
- 3. The Radar Sensor shall have a dry-cell battery capable of powering the system for (10) consecutive days or longer
- 4. The Radar sensor shall be K-Band technology and have a line of sight up to 200 linear feet without obstruction
- 5. The Radar sensor shall have the ability to be charged in the field through adaptable solar recharging technology in the case the sensor is utilized for more than 10 consecutive days

C. PCMS Capabilities and Performance Requirements

The PQWAS shall include portable changeable message signs (PCMS) designated to relay automated messaging of queue events, alternate route messages, and caution for the work area defined by the project limits. PCMS placements shall meet the requirements set forth by the Cabinet in each direction of the National Highway System (NHS).

- 1. The PCMS unit shall be a Full Matrix 24 rows x 50 columns and shall be capable of 1 line, 2line or 3 line messages
- 2. The PCMS unit shall be legible from a distance over twelve hundred feet(1200')
- 3. The height and size of characters shall be 18" to 58"
- 4. The PCMS shall be capable of storing up to 199 pre-programmed messages and up to 199 user-defined messages
- 5. The PCMS shall have a weather tight control cabinet with back lit LCD handheld controller.
- 6. The PCMS shall utilize a hydraulic lift to raise the unit to display height
- 7. The PCMS unit shall include solar recharging ports to allow for recharging of the portable radar sensors when they are not deployed.
- 8. The PCMS shall be NTCIP compliant and shall have an active Modem with active cellular service.

- 9. The user shall have the ability to communicate and override the PCMS remotely in the event of an emergency, Amber Alert, etc.
- 10. The PCMS unit shall have a docking station to include safety rails that allow a commercial safety strap to tie down the portable radar sensors while in transport. The docking station shall hold-up to (4) sensors safely and securely at all times

3.0 Construction Requirements

All communication costs include cellular telephone services, FCC licensing, wireless data networks, satellite and internet subscription charges, and battery charging and maintenance. Additional to these requirements, the Contractor shall assume all responsibility for any and all damaged equipment due to crashes, vandalism, and adverse weather that may occur during the contract period.

The PQWAS shall operate continuously (24 hours/ 7 Days) when deployed on the project. The system is in a constant "data collection" mode when deployed. The Contractor shall provide technical support for the PQWAS for all periods of operation.

In the event communication is lost with any component of the PQWAS, provide a means and staff to manually program a PCMS message. If communication is lost for more the 10 consecutive minutes, the system shall revert to a fail-safe ROADWORK/# MILES/AHEAD message displayed on the PCMS units until communication is restored.

System Operator, local control function and remote management operation must be password protected.

The PQWAS shall be capable of acquiring traffic information and selecting messages automatically without operator intervention after system utilization. The lag time between changes in threshold ranges and the posting of the appropriate PCMS message(s) shall be no greater than (60) seconds. The system operation and accuracy must not be appreciably degraded by inclement weather or degraded visibility conditions including precipitation, fog, darkness, excessive dust, and road debris.

The system shall be capable of storing ad-hoc messages created by the System Coordinator and logging this action when overriding any default or automatic advisory message.

The PQWAS communication system shall incorporate an error detection/correction mechanism to insure the integrity of all traffic conditions data and motorists information messages. Any required configuration of the PQWAS communication system shall be performed automatically during system initialization.

The system's acceptance is based on the successful performance demonstration of PQWAS for a (5) day continuous period in accordance to this specification and as set forth in the plans. Ensure compliance to all FCC and Department specifications.

4.0 Equipment Maintenance.

Maintain system components in good working condition at all times. Repair or replace damaged or malfunctioning components, at no cost to the Department, as soon as possible and within (12) hours of notification by the Engineer. Periodically clean PCMS units if necessary.

5.0 Measurement. The Department will measure each item below in Months. For partial months the Department will pay in 0.25 increments based on the number of calendar days in the below table.

Partial Month Payment S	Schedule
Days	Increment
0-7 days	0.25
8-14 days	0.50
15-21 days	0.75
22-31 days	1.00

5.1 Portable Queue Warning Alert System includes cellular (SAT communications will be required if cellular is not available), all supporting field equipment, website, and unlimited data reports accessible by the Engineer. It will be measured by the number of months authorized by the Engineer for use on the project.

5.2 Queue Warning PCMS will be measured by each individual unit multiplied by the number of months authorized by the Engineer for use on the project.

5.3 Queue Warning Portable Radar Sensors will be measured by each individual unit multiplied by the number of months authorized by the Engineer for use on the project. Queue Warning Portable Radar Sensors will not be measured for payment if the Contractor utilizes a system operating on crowd sourcing data. Crowd sourcing data systems will only be allowed as approved by the engineer and will be considered incidental to Portable Queue Warning Alert System.

6.0 Payment.

Code	Pay Item	Pay Unit
26136EC	Portable Queue Warning Alert System	Month
26137EC	Queue Warning PCMS	Month
26138EC	Queue Warning Portable Radar Sensors	Month

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Report Date 8/6/21

Section: 0001 - PAVING

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001	DGA BASE	13,000.00	TON		\$	
0020	00100	ASPHALT SEAL AGGREGATE	1,862.00	TON		\$	
0030	00103	ASPHALT SEAL COAT	223.00	TON		\$	
0040	00190	LEVELING & WEDGING PG64-22	500.00	TON		\$	
0050	00301	CL2 ASPH SURF 0.38D PG64-22	6,264.00	TON		\$	
0060	00336	CL3 ASPH SURF 0.38A PG76-22	28,153.00	TON		\$	
0070	00356	ASPHALT MATERIAL FOR TACK	194.00	TON		\$	
0800	02676	MOBILIZATION FOR MILL & TEXT	1.00	LS		\$	
0090	20071EC	JOINT ADHESIVE	209,682.00	LF		\$	
0100	20757ED	PAVEMENT REPAIR MAJOR	49.00	SQYD		\$	
0110	20757ED	PAVEMENT REPAIR MINOR	1,139.00	SQYD		\$	
0120	24964EC	FINE MILLING	340,948.00	SQYD		\$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0130	01982		DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	410.00	EACH		\$	
0140	02367		GUARDRAIL END TREATMENT TYPE 1	44.00	EACH		\$	
0150	02369		GUARDRAIL END TREATMENT TYPE 2A	46.00	EACH		\$	
0160	02381		REMOVE GUARDRAIL	28,837.50	LF		\$	
0170	02391		GUARDRAIL END TREATMENT TYPE 4A	2.00	EACH		\$	
0180	02562		TEMPORARY SIGNS	2,500.00	SQFT		\$	
0190	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		\$	
0200	02671		PORTABLE CHANGEABLE MESSAGE SIGN	2.00	EACH		\$	
0210	02775		ARROW PANEL	2.00	EACH		\$	
0220	02929		CRASH CUSHION TYPE IX	10.00	EACH		\$	
0230	05950		EROSION CONTROL BLANKET	1,000.00	SQYD		\$	
0240	06401		FLEXIBLE DELINEATOR POST-M/W	708.00	EACH		\$	
0250	06404		FLEXIBLE DELINEATOR POST-M/Y	15.00	EACH		\$	
0260	06511		PAVE STRIPING-TEMP PAINT-6 IN	340,386.00	LF		\$	
0270	06542		PAVE STRIPING-THERMO-6 IN W	131,121.00	LF		\$	
0280	06543		PAVE STRIPING-THERMO-6 IN Y	104,969.00	LF		\$	
0290	06546		PAVE STRIPING-THERMO-12 IN W	6,149.00	LF		\$	
0300	06600		REMOVE PAVEMENT MARKER TYPE V	1,511.00	EACH		\$	
0310	06613		INLAID PAVEMENT MARKER-B W/R	1,505.00	EACH		\$	
0320	06614		INLAID PAVEMENT MARKER-B Y/R	6.00	EACH		\$	
0330	08902		CRASH CUSHION TY VI CLASS B TL3	2.00	EACH		\$	
0340	10020NS		FUEL ADJUSTMENT	52,112.00	DOLL	\$1.00	\$	\$52,112.00
0350	10030NS		ASPHALT ADJUSTMENT	84,587.00	DOLL	\$1.00	\$	\$84,587.00
0360	20191ED		OBJECT MARKER TY 3	46.00	EACH		\$	
0370	20362ES403		SHOULDER RUMBLE STRIPS-SAWED	211,890.00	LF		\$	
0380	20411ED		LAW ENFORCEMENT OFFICER	500.00	HOUR		\$	
0390	20432ES112		REMOVE CRASH CUSHION	12.00	EACH		\$	
0400	21802EN		G/R STEEL W BEAM-S FACE (7 FT POST)	26,437.50	LF		\$	

PROPOSAL BID ITEMS

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LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0410	22883EN	CONCRETE WEDGE CURB	6,130.00	LF		\$	
0420	23954EC	REMOVE EXISTING WEDGE CURB	6,130.00	LF		\$	
0430	24640ED	OBJECT MARKER TYPE 1	2.00	EACH		\$	
0440	24679ED	PAVE MARK THERMO CHEVRON	1,295.00	SQFT		\$	
0450	24683ED	PAVE MARKING-THERMO DOTTED LANE EXTEN	547.00	LF		\$	
0455	26136EC	PORTABLE QUEUE WARNING ALERT SYSTEM (ADDED 8-6-21)	6.00	MONT		\$	
0456	26137EC	QUEUE WARNING PCMS (ADDED 8-6-21)	36.00	MONT		\$	
0457	26138EC	QUEUE WARNING PORTABLE RADAR SENSORS (ADDED 8-6-21)	36.00	MONT		\$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0460	00461	CULVERT PIPE-15 IN	12.00	LF		\$	
0470	00464	CULVERT PIPE-24 IN	4.00	LF		\$	
0480	00466	CULVERT PIPE-30 IN	8.00	LF		\$	
0490	01210	PIPE CULVERT HEADWALL-30 IN	1.00	EACH		\$	
0500	01310	REMOVE PIPE	24.00	LF		\$	
0510	01432	SLOPED BOX OUTLET TYPE 1-15 IN	3.00	EACH		\$	
0520	01434	SLOPED BOX OUTLET TYPE 1-24 IN	1.00	EACH		\$	
0530	01452	S & F BOX INLET-OUTLET-30 IN	1.00	EACH		\$	
0540	01691	FLUME INLET TYPE 2	1.00	EACH		\$	
0550	02165	REMOVE PAVED DITCH	543.00	SQYD		\$	
0560	02220	FLOWABLE FILL	18.00	CUYD		\$	
0570	02483	CHANNEL LINING CLASS II	356.00	TON		\$	
0580	02625	REMOVE HEADWALL	6.00	EACH		\$	
0590	23484EC	PIPE LINER ACCEPTANCE TESTING	1.00	LS		\$	
0600	24861EC	PVC FOLD AND FORM PIPE LINER-15 IN	304.00	LF		\$	
0610	24863EC	PVC FOLD AND FORM PIPE LINER-24 IN	145.00	LF		\$	
0620	24864EC	PVC FOLD AND FORM PIPE LINER-30 IN	530.00	LF		\$	

Section: 0004 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0630	02568		MOBILIZATION	1.00	LS		\$	
0640	02569		DEMOBILIZATION	1.00	LS		\$	