

19750 Edgewood Dr Lannon, WI 53046 T: 800-381-9134 F: 262-264-0725 E: support@envirotechequipment.net **Customer** City of West Allis Brett Wollenzien 7525 W Greenfield Ave West Allis, WI 53214 Quote No. 21-0017164

Date:	10/21/2021		
Terms:	Net 30		
Delivery:	Our Truck		

FOB: Lannon

\$265,147.00

Total

ltem	Ordered	Description	Price	Total
Aries Truck	1	Aries Pathfinder TV Inspection System Mounted in a Ford Transit to Include the Following:	221,705.00	221,705.00
		TR3320 Pathfinder for 6" to 36" lines		
		PE3530 LED Wiper Pan & Tilt Camera		
		PR3320 Cable Reel with 1000' of cable		
		LETS System which includes (LE3270 6"-12" , ST920 and PE3601 (2) 150' Push Rods with wheels and accessories		
		Rack Mounted Electronics with Computer, PC5100 Master Controller (3) LCD Monitors, VL5000 Video Overlay		
		MEPS System		
		Aries Interior with Lonplate floor, Laminated Walls, Wall Heater and AC unit with Separate Operators and Equipment Rooms		
		Downhole Equipment: Poles , Tigertail and Top Roller		
		Bumper Mounted Hosit		
Chassis	1	2022 Ford Transit 350 HD extended body high roof van with 3.5L V6 gas engine	41,952.00	41,952.00
Optional Locator	1	Ridgid Scout Locator, 512 Hz with case	1,490.00	1,490.00
Browiding Customer Setisfaction		Sub-total	\$265,147.00	
Providing Customer Satisfaction Through Trusted Partnerships			Tax ()	0.00

Note: Any and all shipping and sales tax will be added to this invoice.



Pipeline Television Inspection System & Lateral Inspection System

1 2022 Ford Transit 350 HD extended body high roof van with 3.5L PFDi gas engine, 10360 GVWR.

- 1 Roadside DOT-rated safety kit including fire extinguisher, triangles, and flares
- 1 Backup alarm
- 2 Adjustable LED floodlights, mounted above rear doors
- 1 Vehicle exterior lighting package, including
 - 1 LED traffic advisor, mounted rear facing, with cab mounted controller
 - 3 Roof mounted amber LED strobe lights, (2) front and (1) rear of body
 - 1 Strobe control switch in traffic advisor controller

1 8,000W vehicle-driven power generator system, including:

- 1 Generator APU/control unit, mounted in control room
- 1 Electrical generating unit installed on vehicle engine
 - 1 Engine throttle control device
- 1 Auxiliary battery, 12V DC and case
- 1 DC converter, 45A
- 1 Electric distribution panel and circuit breaker box, 12-space
- 1 Electric supply transfer system, house power or generator system, automatic, 50A
- 1 35' cord and house power receptacle with cover
- 1 System engineering panel to include:
 - 1 Generator Voltage and frequency meter, digital
 - 1 Power system remote control device

1 Van control room interior including:

- 1 Lonplate non-skid floor covering
- 1 Pewter Formica laminated surface wall covering
- 1 White Kemlite embossed ceiling cover
- 1 Bulkhead wall with sliding Plexiglas window
- 1 Wall mounted 1500-watt heater, with wall mounted on/off switch
- 1 Modular control center, 19" rack mounted above the bulkhead window
- 1 Ergonomically contoured and finished control desk
- 1 Standard electrical upfitting package
- 1 LED lighting system with dimmer switch
- 1 Operator chair, swivel with casters
- 1 Fire extinguisher, 10lb, 4A60 B:C rating, OSHA/DOT-approved

1 Van equipment room interior including:

- 1 Lonplate non-skid floor covering
- 1 Light gray Kemlite laminated surface wall covering
- 1 White Kemlite embossed ceiling cover
- 1 Standard electrical upfitting package
- 1 LED lighting system
- 1 Set equipment storage hooks and tie down rings, shipped loose
- 1 Work bench with Lonplate worktop and 5" Vise
- 1 5-drawer machinist tool chest with locking hasp



1 Downhole pole storage tube

1 Water wash down system for equipment clean-up including:

- 1 Water storage tank, 19-gallon
- 1 Set fill, vent and drain connections
- 1 Water tank demand pump
- 1 25' retractable wash down hose with spring-loaded hand nozzle

1 Bumper mounted crane, max 1350lb. rating

- 1 Mast on driver side of vehicle
- 1 24" LCD flat panel monitor, TV/PC viewing, mounted to control room desktop
- 1 19" LCD flat panel monitor, TV/PC viewing, mounted to control room desktop
- **1** 19" LCD flat panel monitor, TV viewing, mounted to rack for rear viewing in equipment room

1 Aries VL5000 video data display including:

- 1 Data display control module, panel mounted
- 1 Alpha/numeric full QWERTY keyboard for video titling and report data input for VL5000 display
- 1 Set of interconnect cables

1 Rack-mounted computer and video overlay system, including:

1 Industrial hardened case with air filtering, shock mounts for hard drive and CPU fan,

peripheral cards support bar, 19" rack, 3U high

3.2GHz (Max 4.0) Intel Quad Core i7 processor, 8MB cache
8GB of RAM, DDR3
1TB SATA hard drive, 7200rpm, storage
256GB solid state hard drive, boot
(2) RJ45 ethernet ports
(10) USB ports, 4x USB3.0 + 6x USB2.0, 2x USB3.0 located on front of PC
Serial port on rear of chassis, DB9
DVD burner with Nero 12.0
Wireless network adapter

- 1 Wireless keyboard and optical mouse
- 1 Windows 10 operating system, 64-bit
- 1 1TB USB-connection external hard drive

1 Wall-mounted USB port at desktop

- 1 UPS back-up battery system, rack mount
- 1 Microphone with on/off switch for placing audio onto inspection video
- 1 Video capture device for future IT Pipes installation

1 PC1170 Color TV power control unit, multi-conductor, rack mount, including:

- 1 Camera power supply with adjustable voltage and amp level, DC amp and voltmeters, on/off switch and circuit breaker
- 1 TV camera light head intensity control with on/off switch and circuit breaker
- 1 Light head power supply with DC amp and voltmeters, switch and circuit breaker



- 1 Light head power selector switch, 5-position with light head bulb overdrive auto resetting protective circuit breaker
- 1 Set pre-wired connections for tractor and/or pan and tilt camera controllers

1 Aries PE3530 Pathfinder series zoom, pan & tilt camera w/ high-intensity LED lighting and integrated self-cleaning lens wiper system, including:

Pathfinder zoom pan and tilt camera w/ multi-axis infinite rotation Integrated on-demand self-cleaning lens wiper system 120X zoom (10X optical & 12X digital) High-resolution 480(V) x 720(H) output Auto-focus with manual override Auto-iris with manual override Maintenance-free forward-facing white LED lighting located in the camera forks Maintenance-free directional white LED lighting that follows the camera's field of view White balance optimization with (4) selectable settings High-sensitivity camera sensor for low-light applications "Starlite" low-light level amplification feature with (4) user selectable amplification steps Automatic home feature with forks at side of camera head Robust, environmentally sealed camera for use in live pipe, including: Scratch-resistant sapphire lens window Camera recessed behind forks for frontal impact protection Camera housing with hardened metal finishes and non-corrosive metals Recessed fasteners & no camera protrusions

Proportionately slowed camera movements when zooming

Fast-check internal pressure monitoring system

On-screen camera diagnostics functions including:

Camera internal pressure, temperature, operating hours, internal power regulated voltage value, camera model, serial number, firmware revision, control error recognition, LED current value.

- 1 Camera storage and transport case
- 1 Camera nitrogen recharge kit
- 1 Desktop dual mode camera controller including: joystick for axial rotation and pan and tilt angle; remote focus; zoom in/out; home, diagnostics, iris open/close, Starlite, and preset buttons
- 1 Aries TR3320 Pathfinder steerable self-propelled transporter for 6" to 36" lines, including:
 - 1 Tractor assembly with continuous duty drive motors
 - 6 Rubber wheels, 3" diameter
 - 4 Rubber wheels, 4" diameter
 - 4 Extended hub rubber wheels, 4" diameter
 - 4 Extended hub rubber wheels, 5" diameter
 - 1 Remotely-operated electric camera lifting mechanism
 - 1 Fast-check pressure monitoring system
 - 1 Rear viewing camera with LED lighting
 - 1 512 Hz internal locating beacon
 - 1 Integrated inclinometer system
 - 1 Storage and transport case



- 1 Set maintenance parts
- **1** Tractor control system, including:
 - 1 Tractor power supply and control module with volt and amp meters, circuit breakers (2), on/off switch and direction control display, rack mount location
 - 1 Hand-held Pathfinder series tractor controller
 - 1 Foot pedal controller, fwd/rev only, at rear of vehicle
- 4 Double wide "dually" extended hub wheels for larger lines, 5" diameter
- 2 Carbide impregnated high traction wheels, 4" diameter
- 2 Extended hub carbide impregnated high traction wheels, 4" diameter
- 2 Extended hub carbide impregnated high traction wheels, 5" diameter
- 1 Large diameter pipe kit with geared side rails and 8" diameter rubber tires for operation up to 36" lines
- 1 Aries PR3320 Pathfinder cable and reel assembly, including:
 - 1 1000' of lightweight low friction multi-conductor cable
 - 1 Heavy-duty frame, drum and motor assembly with clutch and cable level wind assembly
 - 1 Front control box with distance display and electrical controls, weather resistant
 - 1 Emergency hand crank arm
 - 1 Spare cable termination kit
 - 1 Sealed continuous contact collector assembly, 12 slip rings minimum
 - 1 Telescoping swivel cable guide roller assembly
 - 1 Pathfinder system test cable
 - 1 Reel controller with desktop mounting devices
 - 1 Interconnect cable to TV system electronics
 - 1 Drip pan with drain

1 Combined TV and LETS cable reel, clutched electric motor drive, to include:

- 1 Heavy duty aluminum frame
- 1 Footage meter on TV reel level wind assembly with local footage readout and encoder for footage signal to remote video data display system
- 1 Sealed continuous contact collector assembly, 12 slip rings minimum
- 1 Drop down cable guide assembly
- 1 Local reel mount electrical controls with emergency stop
- 1 Remote desktop electrical controls
- 1 Mainline combination TV transmission and tow cable assembly, .43" diameter, Kevlar™ armored, 2,000 lb. rating, 1,000' Red Maxx, to include:
 - 1 Cable terminal connector, 12-pin molded
 - 1 Dummy plug, 12-pin
 - 1 Tow/tag line bridle set, multi-conductor cable
 - 1 Clam-shell style strain relief
 - 1 Cable termination repair kit
- 1 Lateral combination TV transmission and push cable assembly, including:
 - 1 1000' multi-conductor cable



- 1 Field termination kit for cable
- 2 Push cable assemblies (.52"), 120', for 3", 4" and 6" laterals

1 Removable drip pan

1 24-pin switchover and test cable system

1 Aries LE3270 Lateral Evaluation Televising System (LETS), including:

- 1 Tractor/launcher assembly with
 - Front viewing camera
 - Rear viewing camera
 - Tip-up connector
 - Lateral launcher with rotation and insertion angle positioners, and push cable drive Lateral footage encoder
 - 6 Each of 3", 4" and 5" diameter rubber wheels for 6" to 12" sewer lines
 - 6 3" diameter carbide high traction wheels
 - 1 Launch chute for use in 6" and 6" relined pipe
 - 1 Launch chute for use in 8"-12" sewer lines
- 1 Maintenance tool kit
- 1 Set of test cables
- 1 "Tigertail" downhole guide tube
- 1 Set of video A/B switching equipment for PIP operation

2 5" Carbide impregnated high traction wheels

2 Push cable assemblies (.52"), 150', for 3", 4" and 6" laterals

1 LE540 control box including:

Insertion/retraction control for push camera Variable push speed control with auto resetting overload circuit breaker Set volt and amp meters Joystick insertion control for elevation and rotation PIP selector control Footage pop-up and reset control Camera selector switch, lateral push, forward, or rearward viewing cameras Interconnect cable, control box to power control unit

1 Tractor control system, including:

- 1 Desktop transporter controller with speed adjustment and forward/reverse
- 1 Foot pedal controller, rear of vehicle

1 ST930 push camera, color, self-leveling, with lighthead, 512Hz beacon, spring neck, skid, and case

1 Aries PE3601 pan and tilt camera w/ high intensity LED light ring, including:

- 1 Pan and tilt camera w/ infinite axial and pan/tilt rotation
- 1 Maintenance-free true color warm white directional LED directional lighting system with internal regulators for inspecting up to 6" pipelines
- 1 Remote focus (continuous)
- 1 Internal beacon electronics (On/off control)
- 1 "Smart Upright Home" circuitry (electronic gravity sensor)



- 1 Lens/light wiper to clear obstructions
- 1 Camera storage and transport case
- 1 Spare parts / camera recharge kit

1 Long steering probe, PE3601

1 Cable manhole guide system including:

- 1 Manhole top roller assembly
- 1 Tigertail guide assembly
- 1 Insertion and extractor pole assembly and tractor adapter
 - 3 Quick lock extension poles, fiberglass
- 5 Additional fiberglass extension poles

2 Operation / maintenance and spare parts manuals

- 1 Maintenance tool kit
- 1 One year warranty, TV system



<u>REF Vehicle</u>

Chassis

Ford Transit 350 High Roof Extended Length, 148" Wheelbase 3.5L PFDi V6 gas engine, 275hp@ 6500rpm, 262lb ft @ 3750rpm 250A alternator Dual 12VDC 70A h 610CCA batteries GVWR 10360 FAWR 4130 RAWR 7275 Tires (6) 205/75R16C A/S Front axle with MacPherson suspension with stabilizer bar Rear axle with parabolic leaf springs and heavy-duty gas shock absorbers Limited slip rear differential, 4.10 ratio 25-gallon fuel tank 4-wheel disc antilock brakes 10-speed automatic transmission with overdrive and SelectShift Engine block heater

<u>Interior / Exterior</u> Vinyl reclining bucket seats Cab air conditioner Heater - manually operated with defroster and window defoggers AM/FM stereo including rear view camera display Analog instrument panel including speedometer, odometer/trip, fuel gauge, voltmeter, engine temp, and oil pressure Convex combination outside rearview mirrors Intermittent windshield wipers with pulse washers Paint: oxford white Dimensions = 172.2" long load space, 81.5" interior height, width 45.4" at wheel wells, 70.2" maximum interior