BUILD SPECIFICATIONS FOR SELF-PROPELLED EASEMENT MACHINE

INTENT:

It is the intent of these specifications to describe the minimum requirements for a self-propelled, all terrain type mounted, hose reel assembly to be used in conjunction with a High Pressure Hydraulic Sewer Cleaner. The expressed purpose of this unit is to extend the capabilities of a high pressure hydraulic sewer cleaner Into normally inaccessible areas such as but not limited to **easements, hill sides, ravines, creek beds, wooded areas and behind** homes **and buildings. Transport Trailer Is Optional**

The unit including all necessary equipment shall be furnished complete and ready for use, All parts not specifically mentioned which are required for a complete unit shall conform in design, strength, quality of material and workmanship to the highest standard of engineering practice.

GENERAL TERMS:

All equipment furnished under this contract shall be new and current production. Accessories not specifically mentioned herein, but necessary to furnish complete unit ready for use, shall also be included. Unit and shall conform to the best practice known to the body trade in design, quality of material and workmanship. The equipment furnished shall be manufactured in the USA.

PARTS MANUAL:

Bidder shall furnish complete parts, maintenance, and operator's manual with each body sold.

DELIVERY TIME: TBD

MODE OF TRAVEL: Articulated Drive Pivoting Body

Self-propelled, 4 wheel drive, with hydraulic left/right steering, Power to wheels is supplied by four hydraulic motors utilizing roller vane style rotor set, zero leak commentator, and full flow lubrication. Motors have full system pressure capable shaft seals to eliminate external leakage problems associated with similar products.

Steering is controlled by Dual sectional type directional control valve which utilizes motor port relief valves and anti-cavitation check valves. Valve to provide smooth metering from stall to full operating speed for operator safety.

The frame shall be bolt assembly style for replacement of components without replacement of frame. Frame structure to be constructed of a minimum 3/8" flat plate steel, built to accept dual wheels and outriggers also option to be delivered as a Side-Trac track easement

ENGINE:

The engine shall be an air cooled, gasoline, two cylinder rated at a minimum of 20 H.P. at 3600 PPM
Minimum displacement of 47.7 inches
12 volt ignition system with alternator.
Starter with key locking switch.
Replacement type oil filter.
Engine oil cooler

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Engine shall be supplied with a minimum of 5 gallons fuel tank.

OPERATING CONTROLS:

Water pressure gauge shall be located at the operator station.
Ignition Switch.
Throttle and choke.
Hydraulic flow control and Steering controls to be located on control panel.
Unit will be supplied with a 1” 3 way valve located at operating end of machine which will enable the operator to bypass the water going to hose reel and cut-off water to nozzle.

HYDRAULIC SYSTEM:

Hydraulic tank reservoir with a minimum 7 gallons capacity.
Reservoir shall be replaceable mounted in frame to improve cooling ability and to produce a low center of gravity which in turn improves unit's stability.
Hydraulic hose shall have a minimum pressure rating of SAE 100R2 type
All hydraulic fittings shall have pressure ratings to meet or exceed that of the hose.
Hydraulic pump shall be a fixed displacement gear pump rated at a minimum 8.7 GPM.
The hydraulic pump, which is powered by the gasoline engine, is direct driven.
Hydraulic filter and assembly shall be in-line with a spin on type replaceable filter which is accessible.
Steering valve shall be sectional body with 2 spools within a parallel flow path which permits each drive motor circuit to be operated independently or simultaneously. This valve allows for the smooth start/stop motion of machine. The 10.5 GPM Hydraulic Drive motors will be rated at 266 foot lbs of torque each at 2000 PSI.
The power beyond value will allow other Hydraulic drive equipment to be used with out having to divert the oil

2) Additional flow divider valves will provide positive traction in the drive system.

DRIVE TRAIN:

Unit will be powered by hydraulic motors which drive all four wheels giving unit forward, reverse and skid turning capabilities.
Unit will be capable of variable speeds.
Axle and hub shall be a minimum 1 1/4".
Tires will be industrial grip.

HOSE REEL ASSEMBLY:

The unit shall be equipped with a hose reel having a capacity of 600” of 1” hose.

The hose reel shall be constructed of 3/8” Steel.
The hose reel shall be dual chain driven. Units with single are direct drive will not be acceptable.

The hose reel swivel shall be greaseble.

The hose reel shall be equipped with levelwind constructed of hook openings in front and hose roller.

The hose reel shall be driven by hydraulic power in both directions. The hydraulic drive shall have sufficient power to retract the hose when fully extended into the sewer with the cleaning nozzle in operation.

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The reel shall be so constructed that there are no elbows or fittings inside the drum to hinder winding and to cause maintenance problems. The hose shall enter the reel through the side flange to permit ease in winding and to minimize the possibility of damage to the hose.

PAINTING:

Each component shall be lined separately prior to assembly.
The entire unit shall be lined with Pipehunter Speedliner.
All hydraulic, water pressure fittings and hoses shall be free of paint and paint over spray.

ACCESSORIES (TO BE INCLUDED):

400’ 1” or 400’ 3/4” Jet Hose

10’ Leader Hose

4 Adjustable Outrigger legs
Dump Pipe Valve
Transport Connections
Flat Free Tires
Articulating Hose Reel

MANUALS:

A complete operating manual shall be provided.