

DOUGLAS COUNTY SEWER DISTRICT #1
692 EASTMONT AVE EAST WENATCHEE WA 98802
509-884-2484

08/15/2023

PLATFORM/CRANE BODY BID SPECIFICATION

CHASSIS INFORMATION: 2021 FORD F-450 C&C 60" CA

SCOPE OF WORK:

BODY

- KNAPEIDE PVMXT-93C 9' - 5" TREADPLATE STEEL DECK PLATFORM WITH STAKE POCKETS
 - LONG SILLS WITH GUSSETED CROSS MEMBERS | 5" on 12'
 - FLOORING 1/8" TREADPLATE
 - CROSS MEMBER STRUCTURE – FORMED, 11-GAUGE HIGH STRENGTH STEEL (50,000 PSI) CROSS MEMBERS SPACED ON 18" CENTERS
 - SIDE END RAILS CONSTRUCTED OF FORMED 12-GAUGE, HIGH-STRENGTH STEEL (50,000 PSI)
 - STAKE POCKETS – REINFORCED SIZED TO ACCEPT 2X4 LUMBER
 - CLEARANCE AND MARKER LIGHTS ARE LED AND MEET FMVSS 108 REQUIREMENTS
 - UNDERSIDE OF BODY CORROSION PROTECTIVE UNDERCOATING
 - CURABLE, OVEN CURED HIGH GLOSS BLACK FINISH TOP COAT

HEADBOARD

- KNAPEIDE BHR4096C
- BULKHEAD TO INCLUDE 6" TALL GOAL POST 18" FROM THE OUTSIDE EDGE ON CURB AND STREET SIDES
- MOUNTING PLATE FOR GO LIGHT ON EACH OUTSIDE CORNER
- L.E.D. WORK LIGHT REARWARD FACING ON CURB AND STREET SIDE OF BULKHEAD

TOOL BOXES

- PROTECH 60" H 36" W18" D TOOLBOX INSTALLED ON THE CURBSIDE FRONT OF THE PLATFORM. THIS TOOL BOX WILL BE RECESSED IN THE BODY TO BE FLUSH AND WILL BE 36" ABOVE THE BED. IT WILL HAVE BARN DOORS WITH A D RING HANDLE AND KEY LOCK. MADE FROM SMOOTH ALMINUM
- PROTECH 18" H 36" W 18" D TOOLBOXES MONUTED ON THE CURBSIDE FRONT OF THE PLATFORM. (1) ON TOP OF THE BED AND (1) UNDER THE BED. BOTH WILL HAVE D RING HANDLES AND KEY LOCKS. MADE FROM SMOOTH ALUMINUM

CRANE/OUTRIGGERS

- VENTURO ET16K CRANE WITH WIRELESSS CONTROLLS MOUNTED ON THE CURBSIDE CORNER OF THE PLATFORM
- VENTURO 21699-36 PEDISTAL MOUNT TO RAISE THE CRANE UP 36"
- VENTURO 20381 CRANE REST MOUNTED ON THE BULKHEAD IF POSSIBLE OR BEHIND THE TOOL BOX ON THE CURBSIDE OF THE BODY
- THE CRANE SHALL BE PAINTED WITH IMRON® 333M/42P HIGH SOLIDS POLYURETHENE ENAMEL

- THE BOOM SHALL TELESCOPE TO PROVIDE A HORIZONTAL REACH RANGE OF 8 FT. TO 16 FT. USING 4 FT. HYDRAULIC POWER EXTENSION SECTION AND A 4 FT. MANUAL EXTENSION SECTION.
- THE BOOM SHALL BE EXTENDED BY A DOUBLE-ACTING HYDRAULIC CYLINDER WITH AN INTEGRAL COUNTER-BALANCE VALVE TO PREVENT THE BOOM FROM RETRACTING SHOULD A LOSS OF HYDRAULIC PRESSURE OCCUR - THE CYLINDER SHALL BE MOUNTED INSIDE THE BOOM
- THE BOOM ELEVATION ANGLE RANGE SHALL EXTEND FROM 8° (DEGREES) BELOW HORIZONTAL TO 75° (DEGREES) ABOVE HORIZONTAL.
- THE BOOM SHALL BE ELEVATED BY A DOUBLE ACTING HYDRAULIC CYLINDER WITH AN INTEGRAL COUNTER-BALANCE VALE TO PREVENT BOOM FROM LOWERING SHOULD A LOSS OF HYDRAULIC PRESSURE OCCUR. - COUNTER-BALANCE VALVE INTEGRATED INTO BODY OF CYLINDER - PLUMBED EXTERNALLY IS NOT ACCEPTABLE.
- THE BOOM END LOAD HOISTING SHEAVE SHALL BE MADE OF POLYMER COMPOSITE MATERIAL HAVING A PITCH DIAMETER OF AT LEAST 18 TIMES THE / WIRE ROPE DIAMETER PER ANSI B30.5 SHEAVE BEARINGS SHALL BE MADE OF MAINTENANCE FREE COMPOSITE MATERIAL.
- THE NOMINAL WINCH PERFORMANCE SHALL BE AS FOLLOWS:

LOAD (LBS)	PART LINE	LIFTING SPED (FT/MIN)
0	1	25.0
1200	1	10.0
2250	1	8.0
2400	2	5.0
4000	2	4.0
4500	2	4.0

- WINCH DRUM FIRST LAYER WIRE ROPE PITCH DIAMETER SHALL BE AT LEAST 18 TIMES THE 5/16 WIRE ROPE DIAMETER PER ANSI B30.5.
- THE WINCH DRUM SHALL HAVE FLANGES AND GUARDS THAT PREVENT THE WIRE ROPE FROM GETTING OFF THE DRUM. THE WINCH DRUM SHALL BE AT LEAST 4-15/16" INCHES WIDE BETWEEN FLANGES. THE WINCH DRUM SHALL HAVE SUFFICIENT CAPACITY TO ALLOW UP TO 100 FEET OF 5/16 WIRE ROPE TO BE USED.
- THE STANDARD 7 X 19-5/16 INCH GALVANIZED AIRCRAFT WIRE ROPE SHALL BE 75 FT. LONG AND FITTED WITH A 1-1/2 TON CARBON STEEL EYE HOOK WITH SAFETY LATCH.
- THE WIRE ROPE SHALL HAVE A MINIMUM BREAKAGE STRENGTH OF 9800 LBS. OR MORE THAN 3-1/2 TIMES THE 2250LB. RATED SINGLE LINE CAPACITY PER ANSI B30.5. THE WIRE ROPE SHALL BE OUTSIDE OF THE BOOM SO THAT THE WIRE ROPE AND WINCH DRUM ARE VISIBLE TO THE OPERATOR.
- THE CRANE SHALL BE SUPPLIED WITH A LOAD BLOCK THAT WILL ALLOW QUICK CONVERSION FROM SINGLE TO 2-PART LINE OPERATION. THE LOAD BLOCK SHALL BE PROVIDED WITH A 3-TON CARBON STEEL SWIVEL HOOK WITH SAFETY LATCH. THE SHEAVE SHALL BE MADE OF POLYMER COMPOSITE MATERIAL AND HAVE A PITCH DIAMETER OF AT LEAST 16 TIMES THE 5/16 WIRE ROPE DIAMETER PER ANSI B30.5 - 5-1.7.5. SHEAVE BEARINGS SHALL BE MADE OF MAINTENANCE FREE COMPOSITE MATERIAL.
- THE ELECTRIC / HYDRAULIC POWERED ROTATION SYSTEM SHAL HAVE CONTINUOUS 360° ROTATION. THE ROTATION DRIVE LINE SHALL BE SELF-LOCKING. THE CRANE HOUSING SHALL ROTATE ON A SEALED TURNTABLE STYLE BEARING.
- THE CRANE SHALL HAVE A WIRELESS AND CABLED REMOTE-CONTROL PENDANT WITH ENVIRONMENTALLY SEALED SWITCHES, A SWITCH BAT GUARD, A HOOK FOR HANGING THE PENDANT. SUPPLY WITH A 25 FT. CORD. THE CORD SHALL HAVE A PLUG SO IT CAN BE UNPLUGGED WHEN NOT IN USE. THE SOCKET RECEIVING THE PLUG SHALL BE MOUNTED ON THE CRANE HOUSING. THE PENDANT SHALL BE CONVENIENT TO HOLD AND OPERATE WITH ONE HAND.

- THE CRANE CONTROLS SHALL HAVE A PRIORITY SYSTEM SO THAT THE OPERATOR CAN PERFORM ONLY ONE MAJOR FUNCTION AT A TIME TO LIMIT CURRENT DRAW ON THE BATTERY DURING HEAVY LIFTING THE PRIORITY OF CRANE FUNCTIONS SHALL BE AS FOLLOWS:
 - 1. WINCH SHALL TAKE PRIORITY OVER ALL OTHER FUNCTIONS
 - 2. WINCH DOWN SHALL BE ABLE TO BE OPERATED WITH ANY OTHER SINGLE FUNCTION
 - 3. HYDRAULIC FUNCTIONS (ROTATE RIGHT, ROTATE LEFT, BOOM UP, BOOM DOWN, BOOM OUT, AND BOOM IN) SHALL BE DESIGNED TO FUNCTION ONE AT A TIME
- THE CRANE SHALL HAVE AN OVERLOAD SENSING SYSTEM THAT DISABLES WINCH UP, BOOM DOWN, AND BOOM OUT WHEN AN OVERLOAD SITUATION IS ENCOUNTERED.
- AN ANTI-TWO-BLOCKING FEATURE SHALL BE PROVIDED TO PREVENT DAMAGE TO THE WIRE ROPE BY DISABLING THE WINCH UP, BOOM DOWN, AND BOOM OUT FUNCTIONS (THREE [3] FUNCTION SHUT-DOWN)
- FOR ELECTRICAL INSTALLATION, A #2 - 25 FT. BATTERY CABLE SHALL BE PROVIDED. A #2 X 8 FT. GROUND CABLE FIXED TO THE CRANE SHALL ALSO BE PROVIDED. A MASTER DISCONNECT SWITCH SHALL ALSO BE PROVIDED.
- THE CRANE BASE SHALL BE 16 IN. SQUARE AND PROVIDED WITH [8] HOLES FOR 3/4" DIAMETER BOLTS TO SPREAD THE LOAD AND MAKE IT UNNECESSARY TO USE SPECIAL HIGH STRENGTH BOLT
- VENTURO 24962-PHE MANUAL OUT AND MANUAL CRANK UP AND DOWN OUTRIGGERS INSTALLED BEHIND THE SKIRT ON THE REAR OF THE BODY
- EASY TO READ CAPACITY CHARTS WITH INDICATOR ARROWS SHOWING BOOM ANGLES AND CAPACITIES FOR VARIOUS REACHES SHALL BE LOCATED ON EACH SIDE OF THE BOOM.
- AN ELECTRIC / HYDRAULIC POWER UNIT SHALL INCLUDE A PRESSURE RELIEF VALVE AND SUPPLY FLUID TO A VALVE MANIFOLD CONTROLLING BOOM ELEVATION, ROTATION, AND EXTENSION (KX MODELS ONLY) FUNCTIONS. THE HYDRAULIC FLUID USED SHALL BE DEXRON AUTOMATIC TRANSMISSION FLUID.
- THE MANUFACTURER SHALL WARRANT THE CRANE FOR ONE YEAR FROM THE DATE OF ORIGINAL INSTALLATION. SUCCESSFUL RESPONSIBLE BIDDER SHALL WARRANT THE CRANE FOR ONE ADDITIONAL YEAR FOR A TOTAL OF TWO YEARS OF COMPLETE COVERAGE AT NO COST TO THE DISTRICT.

POSSUM BELLY

- CUSTOM FAB POSSUM BELLY AT REAR OF TAIL PANEL USING THE AREA OF THE LONG SILLS.
- ADD DIVIDER IN CENTER OF POSSUM BELLY TO CREATE TO SEPARATE AREAS
- CURBSIDE OF THE POSSUM BELLY WILL BE 7' DEEP
- STREETSIDE OF THE POSSUM BELLY WILL BE 4' DEEP
- ENSURE AS MUCH HEIGHT IS USED FOR THE POSSUM BELLY
- INSTALL A FOLD DOWN DOOR WITH A LATCH AND LOCK.

ACCESSORIES/OPTIONS

- REMOVEABLE GOAL POST THAT MIRRORS THE HEADBOARD GOAL POST. IT MUST HAVE FLUSH MOUNTS AND BE AS FAR BACK AS POSSIBLE ON THE PLATFORM.
- INSTALL STORAGE POCKETS IN FLOOR OF PLATFORM AT BULKHEAD TO STOW REAR GOAL POST WHEN NOT IN USE
- (8) FLUSH MOUNTED D RINGS IN THE CARGO AREA FLOOR STREETSIDE AND CURBSIDE
 - (2) 12" FROM THE FRONT OF THE HEADBOARD ON FLOOR SS AND CS
 - (2) AS FAR TO THE REAR OF THE PLATFORM ON FLOOR SS AND CS
 - (4) REMAINDER WILL BE EVENLY SPACED FRONT TO REAR SS AND CS

- 3" RUB RAIL DOWN EACH SIDE AND ON THE REAR OF THE BODY
- FEDERAL SIGNAL STROBE 416910Z-A (2) IN THE FRONT BUMPER AND (2) IN THE REAR APRON WIRED TO THE UPFITTER SWITCH
- (2) GO LIGHT 20074GT LIGHTS AND 15420 FLOOD LENS INSTALLED ON THE BULKHEAD MOUNTING PLATES SS AND CS
- BRITE TREAD ALUMINUM ROCK GUARD INSTALLED ON THE FRONT SIDE OF THE TOOL BOXES FOR CHIP PROTECTION
- 24" X 30" MUD FLAPS
- 10" TALL REMOVABLE SIDE BOARDS WITH 1.5" TOP LIP DOWN BOTH SIDES AND THE REAR OF THE PLATFORM MADE FROM TREADPLATE ALUMINUM
- (2) CONE HOLDERS (1) ON THE REAR OF THE PLATFORM AND (1) ON THE FRONT BUMPER (LOCATION TBD AT TIME OF PRE-BUILD)
- INSTALL OEM REAR CAMREA IN THE REAR BUMPER SKIRT
- ECCO SA917N REAR BACKUP ALARM
- RIGID BC41 PIPE VISE INSTALLED ON A REMOVABLE RECIEVER TUBE MOUNTED ON THE CURBSIDE REAR CORNER OF THE BED
- GP-POWER INVERTER GP-ISW-2000-12 INSTALLED IN THE STREETSIDE TOOLBOX ABOVE THE DRAWER UNIT. TO INCLUDE (1) 110V PLUG IN THE SAME COMPARTMENT AMD (1) ON THE REAR BUMPER SKIRT
- CLASS V RECIEVER HITCH WITH 7 WAY SPADE TRAILER PLUG AND (2) 3/8" D RINGS FOR SAFETY CHAINS
- REAR TAIL SKIRT PLATFORM TO HOUSE THE LIGHTING, STROBES, BACKUP CAMREA
- FULL WIDTH TREADPLATE REAR STEP BUMPER WITH RECESS FOR HITCH
- THE COMPLETED INSTALLATION NEEDS TO BE UNDER 10' OVERALL HEIGHT
- C TECH DRAWERS INSTALLED IN THE STREETSIDE FRONT COMPARTMENT WITH (2) 7" DRAWERS, (3) 5" DRAWERS AND (3) 3" DRAWERS WITH A SHELF ON THE TOP TO MOUNT THE INVERTER
- L.E.D. STOP TAIL AND TURN LIGHTS INSTALLED IN THE REAR SKIRT AND FRONT HEADBOARD
- COMPLETE INSTALLATION.
- THIS BID WILL INCLUDE ANY MATERIALS NEEDED TO COMPLETE THE INSTALLATION OF THIS BID
- ALTERNATES OR EXCEPTIONS TO SPECIFICATION: Items specified by brand name are "basis of bid" and all bidders are required to submit bid using those items. Bidders may propose a substitute item that is of equal or better quality or strength All substitutes will be reviewed by Manager for their validity. The District reserves the right to accept or reject any substitutions to basis of bid.