



नेपाल सरकार
पूर्वाधार विकास मन्त्रालय
सडक विभाग
यान्त्रिक महाशाखा

ई-मेल: mechb@dor.gov.np
ईमेल : mahashakhyantrik@gmail.com
चाकुपाट, ललितपुर
कार्यालय कोड : ३३७०१३५२०

पत्र संख्या :- ४।०८३/८४
चलानी नम्बर :-

मिति:- २०८३/०३/३१

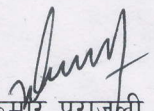
बिषय :- मुल्य खुलाई पठाईदिने सम्बन्धमा।

श्री सडक विभाग, बबरमहलको आ.व. ०८३/८४ को लागि आवश्यक पर्ने यसै पत्र साथ संलग्न Initial Draft of Specification अनुसार विभिन्न Equipment हरू खरिद गर्नु पर्ने भएको हुँदा लागत अनुमान तयारी प्रयोजनको लागि Vat बाहेक प्रति इकाई मुल्य खुलाई पठाई दिनुहुन निर्देशानुसार अनुरोध छ।

तपशिल

सि.नं.	सामानको नाम	इकाई	अनुमानित परिणाम	प्रति इकाई मुल्य(भ्याट बाहेक)	जम्मा मुल्य(भ्याट बाहेक)	कैफियत
1	Track Excavator	Pcs	8			
2	Backhoe Loader	Pcs	8			
3	Tipper Truck	Pcs	7			

Note : The supplier must fill the Initial Draft of Specification and submit the manufacturer's standard catalogue. Data missing from the catalogue must be declared in letter from the manufacturer.


महेश कुमार पराजुली
सि.डि.ई

Technical Specifications

Track Excavator



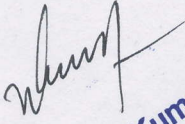
S.N.	CRITERIA	DEPARTMENTAL REQUIREMENT	OFFERED SPECIFICATION
1	General	Crawler mounted hydraulic excavator with hydraulic kit for breaker attachment , with heavy duty standard size boom and arm designed specifically for job on rocky, sandy and hilly sites. Suitable for operation under both common and or tough/ adverse climatic condition at operating altitude upto 2500 m (MSL) and ambient temperature varying between -5 ⁰ C to 50 ⁰ C.	Make: Model: Country of Origin:
2	Engine	Water-cooled, four stroke, diesel engine , developing maximum power not less than 100 kW and maximum torque not less than 550 Nm at governed rpm. Fully equipped with advance technologies and all accessories as necessary to deliver power with superior performance, fuel efficiency, lower emission and smooth operation/ controls to optimize performance of the Excavator machine applications. The engine system shall also be equipped with heavy duty radiator/ cooling system, cold starting system, heavy-duty air cleaner, heavy-duty fuel filter system, heavy duty battery and direct electrical starting system.	Make: Model:
3	Gauges	Gauges and or meters as necessary for efficient operation, maintenance and safety.	
3	Hydraulic system	Hydraulically operated swing system, travel system and work implement systems equipped with suitable capacity and adequate units of hydraulic cylinder, pumps/ motors, reservoir, sensors and all other necessary devices for efficient operations/ control and safety of hydraulic system for a maximum operating cycle without overheating.	
4	Under carriage	Track type undercarriage, heavy duty with track adjustment, sprocket, track rollers and idlers, sealed and lubricated. Track shoe: triple grouser type and Track shoe width: Not less than 500 mm Minimum Ground Clearance: Not less than 435 mm	

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S.D.E.

5	Working Range/ Performance	Maximum cutting height: Not less than 9,000 mm Maximum digging depth: Not less than 6,000 mm Maximum digging reach (Ground Level): Not less than 9,000 mm Maximum dumping height: Not less than 6,200 mm Maximum bucket breakout force: Not less than 130 KN	
6	Bucket	General-purpose bucket with bolt on teeth SAE rate capacity (nominally heaped) of (0.9-1.2) cu.m.	
7	Operating Weight	22,000 kg (±1000 kg)	
8	Cab	The cab shall be completely enclosed and equipped with tinted safety glass to provide all-round visibility. Ergonomically designed adjustable operator seat and joystick control console system.	
9	Essential Accessories	1. Service hour meter 2. Electric windscreen wipers 3. Heater and defroster 4. Working lights 5. Door locks 6. Travel Alarm To be equipped with all accessories offered in standard model but not limited to the above items.	


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Tipper Truck

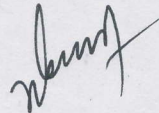
S. N.	CRITERIA	DEPARTMENTAL REQUIREMENT	OFFERED SPECIFICATION
1	General	Rear dump type tipping truck, right hand drive system with all steel rectangular body with flat bottom and heavy-duty sides decks with tailgate. Suitable for operation in rough and tough hilly road terrains of Nepal and in adverse climatic condition at operating altitude of around 50 m to 3000 m (MSL) and ambient temperature varying between -10° C to 50° C.	
2	Engine	Water cooled diesel Engine, developing maximum power output not less than 150 HP and maximum torque should not be less than 450 Nm (engine fully equipped with accessories) at governed RPM for efficient full load operation. Fully equipped with advance technologies and all accessories as necessary to deliver power with superior performance, fuel efficiency, lower emission and smooth operation/ controls to optimize performance of the tipper truck applications. The engine system shall also be equipped with heavy duty radiator/ cooling system, cold starting system, heavy-duty air cleaner, heavy-duty fuel filter system, heavy duty battery and electrical starting system.	
3	Cab	Factory built standard steel cab with insulated roof, laminated glass windscreen, wipers, glass windows on doors, proper ventilated system, comfortable seats with separate adjustable seat for driver, sun visor, and suitably located hydraulic tipping gear controls	
4	Tipper Body	Factory built Heavy Duty Type Dump body (cargo box) fitted with complete hydraulic tipping system for smooth tipping application	
5	Capacity and Performance	Cargo box Capacity: Minimum 7 Cu. M(± 0.5) Gross Vehicle weight should not be less than 14,000 kg Maximum climbing ability should not be less than 30% Minimum ground clearance should not be less than 250 mm	
6	Emission Standard	The emission standard of the offered tipper must be in compliance with or superior than the applicable Standard as prescribed by "Nepal Vehicle Mass Emission Standard" which is to be certified by Department of Transport Management.	
7	Gauges	Gauges and meters as necessary for efficient operation and maintenance.	

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8	Clutch	Heavy duty disc type	 Government of Nepal Ministry of Infrastructure Development Department of Roads Mechanical Branch Chakapat, Lalitpur
9	Transmission	Manual shift at least five forward and one reverse , all forward synchromesh.	
10	Axles	Two Axles Front: Steel I section Rear: Heavy duty, fully floating	
11	Suspension	Front: Heavy duty Semi Elliptical leaf springs with shock absorbers or equally suitable type. Rear: Semi Elliptical multi leaf springs or equally suitable type.	
12	Tires	Standard size, preferably 9 X20-16 PR Front: Single Wheel with tyre Rear: Dual Wheel with tyre	
13	Steering	Power Assisted/ Power Steering	
14	Brakes	S-Cam air brake with mechanical parking brake and engine exhaust brake.	
15	Chassis and frame	Heavy duty section channel steel	
16	Essential Accessories	Head light, tail and rear light and turn signals 2. Cabin lights 3. Front and rear toe hooks 4. Heavy duty front bumper 5. Spare wheel with tire and tube 6. Hydraulic jack with handle To be equipped with all accessories offered in standard model but not limited to the above items.	


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Technical Specifications



Backhoe Loader

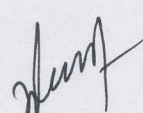
S.N.	CRITERIA	DEPARTMENTAL REQUIREMENT	OFFERED SPECIFICATION
1	General	Four-wheel drive , rigid frame backhoe loader with steel cab, suitable for operation under rough working conditions and adverse climatic condition at operating altitude ranging from 80 m to 2500 m (msl) and ambient temperature varying between -10° C to 50° C.	
2	Capacity / Size	1. Operating Weight: 8000 kg±10% 2. Loader: Multi purpose (6-in-1, to facilitate dozing, digging, grading, backfilling, grabbing and loading application) bucket with bolt on teeth of SAE rated capacity nominally heaped: Not less than 1 cu.m ➤ Shovel break out force: Not less than 5250 kgf ➤ Maximum dumping height: Not less than 2700 mm 3. Backhoe: Backhoe bucket with bolt on teeth of SAE rated capacity of 0.3 cu.m. ±10% ➤ Bucket break out force: Not less than 5400 kgf ➤ Maximum working height: Not less than 5900 mm ➤ Maximum digging depth: Not less than 4600 mm ➤ Maximum loadover height: Not less than 4000 mm ➤ Maximum digging reach: Not less than 6800 mm (From ground level to rear wheel centre) To be equipped with out riggers with controls from cabin.	
3	Engine	Water cooled, Diesel engine , developing Maximum Power not less than 90 HP (engine fully equipped with accessories) at governed RPM and Maximum Torque not less than 350 Nm for efficient full load operation of backhoe loader at operating conditions as stated in the bid document. Backhoe loader shall be equipped with heavy duty radiator, cold starting device, direct electric starting system, heavy duty battery, heavy duty air cleaner, heavy duty fuel filter, with water trap and drainage in fuel line and drain tap in fuel tank.	
4	Transmission	Torque converter with four speed synchromesh type of transmission	
5	Axles	Four-wheel drive with fixed rear axle and oscillating front axles.	
6	Steering	Power assisted	
7	Brakes	Hydraulically actuated, wet multiple disc/caliper disc type service brake and separate parking brake	

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8	Hydraulics	Suitable hydraulic system for smooth operation of all attachments Hydraulic System Pressure: Not less than 200 Bar Maximum pump flow: Not less than 115 LPM	
9	Cab	All steel enclosed FOPS cab with laminated glass windscreen insulated roof, suitably located controls for back hoe (excavator) and loader operation, rear view mirror, cabin light, wiper and adjustable cushioned seat for operator shall be provided	
10	Essential Accessories	1. Road lights, work lights and fog lights 2. Cabin lights 3. Service hour meter Equipped with all accessories offered in standard model but not limited to the above items.	


Mechanical Engineer


Maresh Kumar Parajuli
S.D.E.