

Mobile Elevated Work Platform (Self-propelled Articulated Boom) Specification for STFC RAL

A dual/hybrid fuelled mobile elevated work platform (MEWP) of the self-propelled articulated boom type is required to support estates maintenance operations across STFC's 60 hectare RAL site at Harwell in Oxfordshire. The vehicle must meet as a minimum the following criteria;

1.0 OVERVIEW

The vehicle is to facilitate maintenance and construction activities in all areas of the estate, operating primarily externally upon made roadways and hard standing areas; however, there is also an additional requirement to drive off road with minimum damage to the landscaped environment (upon level landscaped areas). The Vehicle must be able to operate consistently in all UK weather conditions. Spares/parts and support must be readily available to support the continuous operation of the unit. The unit is to be wholly bought outright, with no elements of rental/lease. Unit cost must include the vehicle, all ancillaries necessary to operate the vehicle and delivery to S.T.F.C's RAL site (OX11 0QX).

2.0 POWER SOURCE/DRIVE

- 2.1) Have a Hybrid selectable drive source, comprising electrical (battery) and/or diesel power to facilitate indoor or outdoor use and maximise plant efficiency
- 2.2) Have a forward and reverse drive function
- 2.3) Be as quiet in operation as reasonably practical
- 2.4) Deliver even performance across the batteries discharge cycle
- 2.6) Provide braking when the accelerator is released
- 2.7) Have a method of anti-rollback to prevent the vehicle from freewheeling against the selected direction of travel
- 2.8) Include the functionality of an on board charging system (so the unit does not need to return to a specific charging point)
- 2.10) Have 4X4 drive to deliver off road capabilities; to access landscaped areas
- 2.11) Have wide footprint tyres to minimise impact to landscaped areas and increase drive efficiency
- 2.12) Be able to safely operate on a gradient of up to 40%

3.0 SAFETY FEATURES

- 3.1) Include an audible alarm (horn)
- 3.2) Have a tilt alarm
- 3.3) Automatic fail safe brakes
- 3.4) Must comply to EU Directives: 2006/42/EC – Machinery and carry a CE mark
- 3.5) Offer manual recovery (e.g. hand pumped)
- 3.6) Have dual controls (platform and bogey) with powered auxiliary descent
- 3.7) Be fitted with platform harness points

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4.0 OPERATIONAL PERFORMANCE/CHARACTERISTICS

- 4.1) Working height: $\leq 17\text{m}$
- 4.2) Working reach: $\leq 9\text{m}$
- 4.3) Rotation (slew): 360°
- 4.4) Maximum bogey width: 2m
- 4.5) Maximum bogey length: N/A
- 4.6) Operational bogey turning radius: $\leq 5\text{m}$