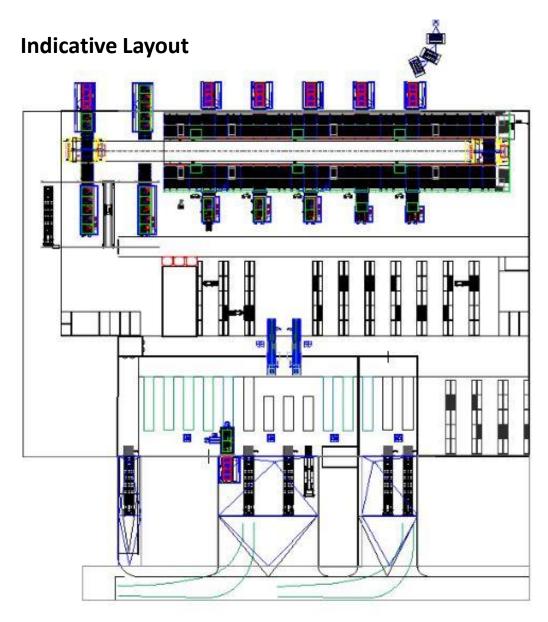
The following is an indicative layout diagram and potential equipment list proposal for the Freight Handling Facility at RAF Brize Norton. This is an extract from a wider report commissioned for the project and is a concept for information only. This layout could be subject to change and should be regarded as such.

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# **Automated Option**



#### Description

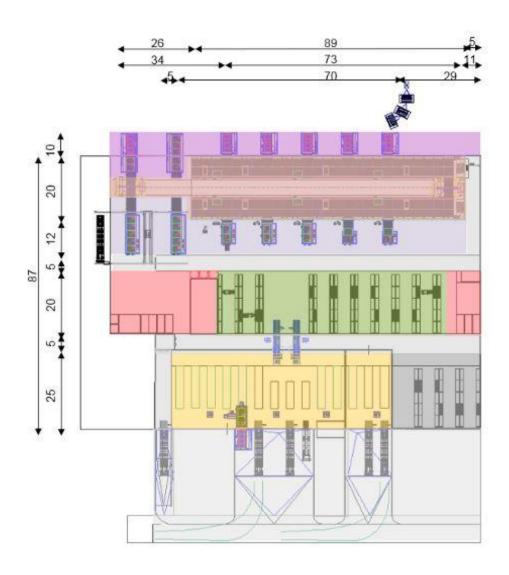
Automated option - All movements are 100% automatically facilitated, incl. the interface movement to-from the workstations

- Building width of approx. 104m (landside)/120m (airside) and approx. 87m deep
- Total handling space of approx. 9,950 m2
- 4-layer (ground + 3) storage system resulting in a clear building height requirement of approx. 14m.

#### **Characteristics**

- Build-up and breakdown activities on fixed (height adjustable) workstations for singles and doubles (2 single workstations and 3 double workstations)
- Workstations connected to the Air Craft Pallet (ACP) storage
- Weighing of ACPs on the scale on top of the Workstations.
- Turntables for ACPs in the storage system to allow to turn (single) ACPs when required
- ACP movements to/from build/break position and to/from storage locations by means of an automated operated ETV (singles, doubles, triples and quadruples)

# **Indicative Process Relationship**



Total 120 m Total 118 m Total 104 m

### Characteristics

- Airside interface (1.400 m2)
- ACP store (1.800 m2)
- Workstation area (1.600 m2)
- Export and import storage area (990 m2)
- Prebuild/post-build racking for shipments (1.500 m2)
- Reception and dispatch area (1.900 m2)
- Spare area (700 m2)
- Landside load/unload / manoeuvring (3.100 m2)

#### **External areas**

In line with requirements the following areas must be provided around the facility to facility the 420 ALEST of VAME

- Airside storage & parking area (ACHE, Aircraft ramps, deployment kits, etc.) (2.000 m2)
- VAME parking and washing area (2.500 m2)
- Vehicle ramp
- Weigh Bridge
- Landside access corridor

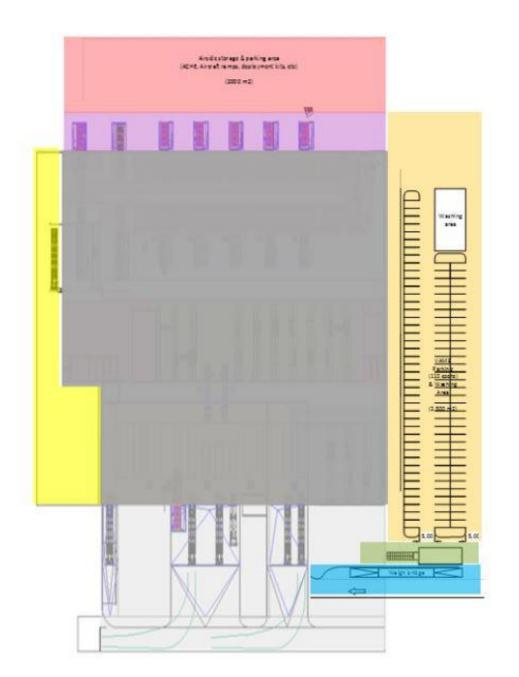
In addition to the areas identified above, a manoeuvring "corridor" needs to be provided around the facility. It is anticipated that this would amount approx. 35% of the facility footprint.

Depending on the option (manual or mechanised/automated) a different configuration of externals spaces would be required because of the different building shape and dimensions. However, the same principle and dimensions would apply to each area.

The recommended option segregates the 'dirty' areas and 'clean' areas making it easy to track what freight has gone through what processes. The VAME wash down facilities outside the building will enable all VAME to be prepared prior to departure without impacting on the throughput of freight inside the facility

The indicative composition of the externals space requirements is:

External space components	SQM
Vehicle marshalling area (minimal required)	1.440
VAME	1.875
Washing	240
Weighing Bridge	180
Vehicle ramp	138
Vehicle Storage / MT Yard	180
Equipment storage barn	120
Deployment kit 1	60
Deployment kit 2	60
ACHE parking are	1.600
Subtotal	5.893
Maneuvring (35%) around individual external space	2.062
Total	7.955



### External areas – indicative block plan

Rectangular Snin

- In line with requirements the following areas must be provided around the facility to facility the 420 ALEST of VAME
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- VAME parking and washing area (2.500 m2)
- · Vehicle ramp
- · Weigh Bridge
- · Landside access corridor
- Depending on the option (manual/mechanised/automated) a different configuration is required while using the same principle

# **Indicative Equipment List – Top Level**

- Cargo System
- Racking
- Gantry Crane 20T SWL through life support only, crane will be provided separately
- IT Software
- IT Hardware

# **Indicative Equipment List - Detailed**

- 12 x Roller Deck LO 10 ft
- 14 x Roller Deck NEL 10 ft. with Contour Control
- 22 x Roller Deck 10ft LO driven spacer
- 11 x Ramprotection
- 408 x Storage Deck 10 ft. NEL, Rear
- 10 x Height adjustable Dolly Dock 10 ft
- 2 x 10 ft. Workstation LO with Scissor Lift and Scale (-1000 - 510)
- 7 x 20 ft. Workstation LO with Scissor Lift and Scale (-1000 - 510)
- 1 x Cargo Donkey 10ft
- 5 x 15 ft Truck Dock with Scale
- 4 x Floor Scale Small
- 2 x Slave Pallet 10ft LO

- 230 x Rails ETVs
- 2 x ETV\_20ft\_LO\_3D
- 6 x Airside Dolly Dock Ram Protection
- 2 x Work Station Ram Protection WEL
- 5 x Work Station Ram Protection NEL
- 4 x Rail End Stop ETV
- 5 x Lift\_Pit\_Cover\_long\_3D\_20ft
- 2 x Pit 10 ft. workstation open LA
- 2 x Standard X- Ray Consignment Cages
- 13 x Fast action door (3000 mm) insulated
- 3 x Empty Pallet Rack
- 2 x Turntable\_10ft\_3D
- 2 x Spacer at TT, WEP
- 2 x Spacer at TT, NEP
- 416 x Steel Structure ETV Systems