

Defence Technical College St Athan DESIGN AND ACCESS STATEMENT



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Revisions table

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- Context and Site Analysis
- Design Strategy
- Environmental Sustainability
- Movement & Access
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- **Design Influences**

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Rusiness

Park

The access to the southern part of the Aerospace

Business Park will be from a new Southern Access

Arress

Road off the B4265.

The ABP will support and build on the existing cluster of aerospace businesses in south and south-east Wales, take advantage of the skilled workforce in the area, create over 2,000 jobs, complement the Defence Technical College and provide long-term economic benefits for the region.

The ABP will be developed as a gated campus with two areas of activity either side of the existing operational runway. There would be two main types of buildings on the ABP, hangars for MRO work, which would require access to the runway, and more standard-type industrial/ employment buildings for associated aerospace uses - such as aircraft design, training and research.

In ABP South, care will be taken to lessen the visual impact of the new buildings by introducing a feature land-form and new soft landscape along the southern edge of the site.

Access

Detailed studies have shown that the existing Eglwys Brewis Road, where it comes off the B4265 and runs East, could not be suitably improved to cope with the predicted number of vehicles.

Accordingly, a new Northern Access Road will be created. This will move traffic away from the existing Eglwys Brewis Road and will include a combined cycleway and footway. The objective is to complete the Northern Access Road as early on in the construction process as possible.

Service Families' Accommodation (SFA)

The site North and South of Eglwys Brewis Road will provide a total of 142 houses for Service Families.

Service Families' Accommodation (SFA)

The third area of SFA to the west will consist of 169 properties.

The sites have been carefully selected in line with a number of key criteria, including:

- A desire to locate the SFA close to the DTC to minimise any increased pressure upon the transport network
- To enable the SFA to share the same infrastructure that will be installed to service the DTC and ABP
- The sites lie within the development boundary in
- the approved St Athan Development Brief
 The use of sites at St Athan will not deplete sites that have been allocated through the UDP to meet general demand for housing in the Vale of Glamorgan

St. Athan

Home of the Defence Technical College and Aerospace Business Park

Museum and Shop

Proposals for the site include a military museum (dedicated to REME - Royal Electrical and Mechanical Engineers) which would be open to the public. This would be an excellent educational facility and as well as attracting the general public, it is anticipated the museum will be utilised by local schools and colleges.

A retail facility will be retained on the SPAR shop site and will continue to be accessible to the public. The exact nature of this provision is still to be confirmed but, while similar in size, the shop will be fully refurbished.

Defence Technical College (DTC)

Careful consideration will be given to the DTC's appearance by creating distinctive buildings and landscaping to provide a development with character. The Technical College will be centred around the Red Dragon Hangar, ensuring that this recently built facility continues to be used appropriately.

Students who attend the Technical College will be a mix of young students and experienced professionals committed to developing their skills in a number of specialist disciplines. Accordingly, many will be based on courses in excess of six months duration, during which they will come to regard St Athan as their home.

Field Training Area (FTA)

The FTA will be used for low level/intensity military training. There will be strict regulations governing the types and scale of activity that will take place on the FTA. For example, the maximum number of people who will use the FTA at anyone time cannot exceed 100 and tracked vehicles, such as tanks, will not be used. If the MoD wishes to undertake any larger scale training exercises, these will take place away from the site. No live ammunition will be used.

The FTA will predominantly be used during the working week. Activities will predominantly be daytime based but there will be night time activities - practicing in these conditions is an essential part of military training.

Both Metrix and the MoD are keen to ensure any potential disruption to nearby residents is minimised and are already working closely with the Vale of Glamorgan Council to ensure that the activities that will take place on the FTA comply with current regulations regarding acceptable noise levels.

Service Families' Accommodation (SFA)

Castleton Farr

St Athan Village

agreed routes.

There will be clear signage and agreed routes for

construction traffic that will avoid St Athan village. Vehicles will be monitored to ensure they keep to the

172 Service Families' homes will be built on the stadium/golf course site and will result in four of the existing holes being affected. However, the MoD, Welsh Assembly Government and Metrix have been in close consultation with the RAF St Athan Golf Club throughout this process and have already committed to replacing these holes.



St Athan existing site area, looking south

Executive Summary 1.0

Introduction 1.1

facility.

The masterplan is a combination of elements which together form a set of integrated holistic proposals for a world class centre of defence technical training:

- 4. Energy Centre; and

The statement is an affirmation of the Metrix vision for the DTC and for the renewal and reinvigoration of the St Athan site in recognition of its local and regional significance. Furthermore, the proposals have been carefully considered to align with the aspirations of both the Vale of Glamorgan and Welsh Assembly Government for a high quality development, in accordance with the Vale of Glamorgan Unitary Development Plan (UDP) 1996 - 2011 and the objectives of the Vale of Glamorgan Draft Local Development Plan (LDP).

In addition to the key considerations of providing a development which is inclusive, practical, attractive and which meets the key objectives of the training mission, the masterplan further embraces design best practice in respect of sustainability through the effective and efficient use of land, enhancement of local amenities and protection and conservation of the historic, built and natural environment.

The Design and Access Statement demonstrates the design evolution of the site, the various technical constraints and the responses to them. Importantly, it provides the framework upon which more detailed design development will be based, some indicative examples of which are included to demonstrate the commitment to design quality by Metrix for this significant development.

This Design and Access Statement describes the proposed masterplan for the Defence Technical College St Athan in South Wales and underpins the outline planning application for the

1. The Defence Technical College itself (DTC); 2. Service Families Accommodation (SFA); 3. Field Training Areas (FTA); 5. Highway Improvements.







Components of Training



1.2 The Defence Training Review

The overarching mission of the Defence Training Review (DTR), to which the DTC proposals respond may be summarised by a statement from the original requirements:

> "The DTR Rationalisation Programme is a complex change management project, whose aim is to provide modern, cost effective, specialist rationalised training, better accommodation and utilisation of training facilities, in order to contribute to operational capability. By consolidating training activity onto a reduced number of sites it is expected to achieve significant savings through a more cost effective use of the residential training estate ... "

In order to translate the DTR mission into a tangible and justifiable estate requirement a comprehensive process of requirements definition and analysis is carried through. This entails:

- ٠
- ٠ requirement;
- ٠

developed.

 The MOD Statement of Training Requirement (SOTR) defines the training requirement. This SOTR is a detailed set of training throughput requirements detailed the volume of training to be delivered for the three main component streams of DTR training, i.e. Aeronautical Engineering (AE), Electromechanical Engineering (EM) and Communications and Information Systems (CIS);

The SOTR is analysed in order to establish the population of trainees and trainers to be accommodated;

• The estates standards for MOD facilities (JSP scales) are analysed and applied to the populations to inform space and facilities requirements for the living accommodation;

The training requirement is analysed to identify the requirement for specialised space to support the training

Futher analysis is carried out to establish the requirement for space to support the running of the establishment itself (establishment support).

Together, the outputs from these analyses constitute the total Estate area requirement, upon which the scheme is then

1.3 The Metrix Vision

In response to the overarching DTR training mission, Metrix has developed its own vision for the delivery of the Estate solution which is encapsulated in its Strategic Design Brief and informs the development of the emerging design proposals:

> "The creation of an attractive sustainable living environment that develops a sense of belonging to all those who use the facilities, creating a community in itself with clear wayfinding and circulation in a landscaped parkland which responds to the Military Heritage, purpose and ethos surrounding the mission of DTR and promoting excellence in training.

A high quality, total living and learning environment which respects and reinforces links and opportunities with the wider community of St Athan and beyond".



St Athan Metrix proposed solution



In response to this vision, the masterplan design sets out to create the best possible living and learning environment for the proposed Defence Technical College (DTC). It incorporates good urban design principles and the latest modern methods of construction to create a college of excellence which responds to its local environment. The traditions and culture of our armed forces are embraced within this masterplan to meet the evolutionary demands and aspirations for the future MoD training requirements.

The excellence in training will be supported by world class purpose built facilities. Metrix also recognises the importance of a sense of military community for all trainees, encouraging social interaction whilst maintaining military integrity, identity and culture.

The mutual dependence between training life and home life is recognised as the key to personal achievement and learning. This principle lies at the heart of the establishment organisation. The Masterplan layout strives to create a balance of accommodation and sports/leisure facilities which underpin these core objectives and create an exciting place to live, work and learn.

The training model is the focus for the design response and is central to the project and the campus approach. Throughout the design process specific specialists have influenced and developed the design brief. The solution focus's on the fundamental environmental conditions of each training facility whilst creating functional relationships and adjacencies that support shared knowledge principles and educational integration.

Using the existing modern facilities in the existing St Athan Defence Support Group (DSG) building the delivery of contemporary training principles creating high quality, integrated educational solutions is supported by good design. These elements will combine to deliver the best learning environment maximising the potential of the individual.



St Athan Metrix diagrammatic illustration of Application areas

The Master Plan Elements 1.4

- defence technical training:
- 1.4.1
- 1.4.2 Energy Centre Red the north of East Camp.
- 1.4.3

Service Families' Accommodation (SFA) - Orange 1.4.4 The Service Families' Accommodation is provided in support of the

- 1. Tremains Farm;
- 2. North of West Camp;
- 3.

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1.4.5 **Golf Course Reprovision Works - Brown**

The provision of SFA housing on the Stadium / Golf Course site requires the replacement of four holes on the St Athan Golf Club course which are lost or affected by the proposed development.

1.4.6 Highway Improvements - Blue

A new Northern Access Road highway is proposed as part of the application and includes additional improvement and widening works at the following locations:

- •
- St Athan Junction.

The masterplan is a combination of elements which together form a set of integrated holistic proposals for a world class centre of

The Defence Technical College (DTC) - Purple

The Defence Technical College is the main component of the Outline Application, providing military accommodation, teaching, training and recreational facilities provided at the existing east camp, Super Hangar and Picketston areas.

A new energy centre is proposed as part of the Application to power and heat the vast majority of the facility. This is located to

Field Training Area (FTA) - Green

A military Field Training Area is proposed separate from the main East camp development on the adjacent Castleton Farm site, to the east of Cowbridge Road.

military facility and is located on the four sites:

Picketston Southwest, and;

- 4. Stadium / Golf Course.
- These sites are covered in a separate document ref:

- Waycock Cross Junction;
- · Gileston to Oldmill, and;



St Athan Metrix proposed site boundary

covering:

- Design strategy • •
- •
- ٠
- Key design influences and constraints

It should be noted that all visuals and images are subject to change and are merely an indication of the proposals at this time as more detailed submissions will be made under Reserved Matters in due course.

This developing design proposals for the DTC facility which are presented here are organised to show the analysis and study work which sits behind the design and then to show the form that the design is expected to take. The contents include chapters

 Context and site analysis Sustainability strategy Movement, access and connectivity Landscape and external treatments