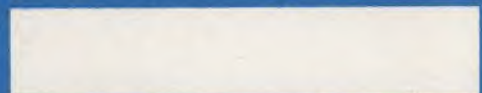




Defence
Infrastructure
Organisation

MDP WETHERSFIELD, BRAINTREE, CM7 4AZ STAGE 1 REPORT



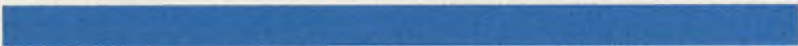
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EXECUTIVE SUMMARY



<p>Location</p>	<ul style="list-style-type: none"> ▪ Located within the Braintree District, in the county of Essex, the former RAF site sits just north of the village of Wethersfield. Braintree is located 45 miles north east of London, reachable by train within just over 1 hour, and by car in approximately 1 hour 40 minutes, via the M11 and A120. ▪ Direct access to the site is limited, with a number of small tracks connecting to minor B roads. Braintree provides the closest train station, whilst Stanstead Airport is the nearest major airport for regional and international travel.
<p>Description</p>	<ul style="list-style-type: none"> ▪ Total Site Area : 322 Ha ▪ The site is surrounded by farmland and woodland, while a few properties are situated on the fringes of the site, predominantly in the south western corner. Accommodation includes military houses plus MDPGA offices, training facilities, student accommodation, social club, chapel, and a museum, amongst others. ▪ Redundant runways, hangars and storage facilities. ▪ Rural location ▪ Considered to be as brownfield / Previously Developed Land ▪ Largely level gradient ▪ Majority of site available by 2023; remainder by 2025
<p>Planning</p>	<ul style="list-style-type: none"> ▪ Braintree District Local Plan 2033 (Section 1 – Strategic Plan for North Essex) was adopted by Full Council on 22 February 2021 and now forms part of the Statutory Development Plan for Braintree DC. ▪ Section 2 of the Local Plan 2033 (Policies, maps and sites for development, housing, employment, regeneration etc within Braintree District) is currently subject to an examination by inspectors appointed by the Secretary of State for Communities and Local Government. ▪ Hearing sessions (which are part of the overall examination) will take place between 6 July 2021 and 15 July 2021. The discussion during these sessions should be monitored. It may be the case (given the removal of two garden communities) that t that the Council are



required to undertake an immediate review of their housing supply post adoption of Section 2.

- If the Council are required to undertake an immediate review post adoption, this would present an opportunity to promote the Site for development through the Local Plan process
- An application could also be submitted as an alternative or in parallel to promotion through the local plan depending on timescales and further discussion with the MoJ on wider planning strategy.
- Proposal for a mixed-use comprehensive redevelopment scheme.
- Affordable housing policy: 40% on rural sites.
- Heritage Considerations: two listed buildings situated just outside the site boundary to the south and west.

Development Proposals

- 2 indicative masterplans worked up by the SPA teams, offering a 'min & max' range;
- 275 – 1,000 residential units;
- Up to 42 ha of commercial land;
- 2x Category-C prisons;
- Solar farms
- Agriculture land

Option 1

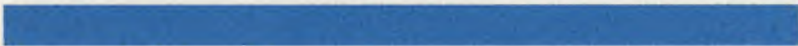


Option 2



Development Appraisals

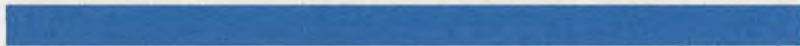
Item	Option 1			Option 2	
	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2
Land Value	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]
Rate per Hectare	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]



	Rate per Acre	£	£	£	£	£
	<i>Please refer to Development Appraisal section for detail of the options</i>					
Delivery Structures	<ul style="list-style-type: none">▪ Considerable uncertainty remains with regard to the scope of development possible at Wethersfield: before committing to certain delivery structures further planning certainty required, supported by technical evidence.▪ However, the nature of the masterplan – and proposed uses – likely to lend itself to a number of disposals, depending on the land use.					
Key Next Steps	<ul style="list-style-type: none">▪ Engage with Planning Authority: secure greater planning certainty for proposed masterplan▪ Confirm and understand MoJ / prison proposals – and impact on 'infrastructure' capacity▪ Undertake relevant due diligence, especially in terms of highways and utilities capacity together with costs▪ Subject to the above, revise masterplan and consider updated viability▪ Undertake market testing▪ Prepare detailed disposal strategy					



STRENGTHS	WEAKNESSES
OPPORTUNITIES	THREATS



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

It is understood that the vast majority of the site will be available for development by 2023, with the remainder available by 2025.

SITE TECHNICAL REVIEW

SWECO – The DIO’s technical advisors on the site – prepared an initial Risk Register for the site. This is attached at Appendix C (SETA Risk Register). It notes that the key risks associated with the site and its development are:

- [REDACTED]



• [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]



PLANNING POLICY

This Section of the Stage 1 Report outlines the planning context within which the site has been evaluated. Given the sensitive nature of the instruction, this has been based upon a desk-based assessment of the site.

NATIONAL PLANNING POLICY

The Revised National Planning Policy Framework ("the NPPF" / "the Framework") was published in February 2019 and supersedes previous iterations. The NPPF sets out the Government's planning policies for England and how these should be applied. It is a material consideration for all planning decisions, and the making of a development plan. The NPPF sets out that the purpose of the planning system is to contribute to the achievement of sustainable development, through three overarching objectives: economic, environmental and social.

The planning system should build strong, competitive and vibrant communities which protect and enhance our natural, built and historic environment. Central to this is the need to ensure that development makes effective use of land, to provide the homes and services required to meet the needs of present and future generations. At the heart of the framework is a presumption in favour of sustainable development.

Paragraphs 20-23 of the Framework relate to strategic policies, which should set out an overall strategy for the pattern, scale and quality of development. Strategic policies should look ahead over a minimum 15 year period, to anticipate and respond to long term requirements and opportunities.

Section 5 of the NPPF relates to 'Delivering a Sufficient Supply of Homes'. Greater emphasis has been placed on the delivery of new homes, with an enhanced requirement for Local Planning Authorities to maintain a supply of deliverable sites, with a minimum of 5 years supply. Strategic policies should be informed by a local housing need assessment, conducted using the standard methodology in planning guidance. The type, size and tenure of housing should be assessed and reflected in planning policies, including the provision of affordable housing which is expected to be provided on site for all major development involving the provision of housing, subject to viability.

Paragraph 72 states that the supply of large numbers of new homes can often be best achieved through planning for larger scale development, such as new settlements or significant extensions to existing villages and towns, provided they are well designed and supported by infrastructure and facilities.

Section 6 of the NPPF seeks to create a strong and competitive economy, taking into account both local business needs and wider opportunities for development. The Framework emphasises that new development should be supported by appropriate infrastructure, create well designed places which conserve the natural and historic environment.

Section 11 of the NPPF refers to making effective use of land. Paragraph 118 sets out that planning policies and decisions should promote and support the development of under-utilised land and buildings, especially if this would help to meet identified needs for housing where land supply is constrained and available sites could be used more effectively. This paragraph also encourages the planning system to encourage multiple benefits from both urban and rural land, including through mixed use schemes and taking opportunities to achieve net environmental gains. These principles are especially important for the Wethersfield site and need to be kept in mind as the masterplan develops in support of emerging Local Plan policy and planning application detail.

LOCAL PLANNING POLICY

Development Plan

The adopted development plan for Braintree District Council consists of the following documents:

- Local Plan to 2033 – Section 1 (2021)
- Core Strategy (September 2011); and
- Local Plan Review (2005).

Emerging Planning Policy – Draft Local Plan Section 2

Braintree District Council is in the process of reviewing their Local Plan which will replace both the Core Strategy (2011) and the Local Plan Review (2005). Section 2 of the Local Plan 2033 (Policies, maps and sites for development, housing, employment, regeneration etc within Braintree District) is currently subject to an examination by inspectors appointed by the Secretary of State for Communities and Local Government.

Hearing sessions (which are part of the overall examination) will take place between 6 July 2021 and 15 July 2021. The discussion during these sessions should be monitored as the proposed allocations within Section 2 will be tested at Examination. It may be the case (given the removal of two garden communities and if the Inspectors find other proposed allocations unsuitable) that the Council will be required to undertake an immediate review of their housing supply post adoption of Section 2.

If the Council are required to undertake an immediate review post adoption, this would present an opportunity to promote the Site for development through the Local Plan process.

We note from an application taken to Planning Committee in June 2021 that the Council afford 'some' weight to Section 2 in the determination of planning application. This is stated in the requisite Committee Report for an application for the erection of 19 dwellings in Gosfield (app ref: 21/00726/FUL).

Site Specific Designations

Having reviewed the Core Strategy Policy Map (September 2011), the Site has the following designations:

- Outside Town Development Boundaries and Village Envelopes (therefore general countryside policies apply); and
- Local Wildlife Site (small part of the airfield to the northern edge).

The Site lies close to two Grade II Listed Buildings, Sculpins Farmhouse to the west and Cottons Farmhouse to the east. Cottons Farmhouse was built mid-16th Century and is valued as a significant heritage asset which led to its Listing in May 1985. Sculpins Farmhouse sits to the south east of the Site and is disconnected from neighbouring buildings. Sculpins Farmhouse was built in early 17th century and alterations were carried out to the farmhouse in the 20th century. There are several Listed Buildings that are spread around the border of the wider Airfield site.

The entire Site is situated within Flood Zone 1 where there is a less than 1 in 1,000 annual probability of river and sea flooding. The Site is not located in a Conservation Area and there are not believed to be any trees subject to Tree Preservation Orders. The presence of any trees subject to Tree Preservation Orders should be confirmed with the Local Planning Authority.

The Site is not designated for a specific use in emerging policy. It does fall within a wider landscape character area (the Stambourne Farmland Plateau) within the emerging Local Plan 2033 Section 2.

As can be seen from the extract of the Draft Local Plan 2033 Section 2 Proposals Map below, it appears part of the northern section of the Site is designated as a local wildlife site (blue). The resolution of the draft proposals is poor when viewed online. We recommend confirming this designation with the Council during early pre-application engagement.



PLANNING POLICY OVERVIEW

The development plan comprises the primary planning documents for BDC, however, given the advanced stage of the Emerging Local Plan Section 2, this is also to be attributed significant weight.


Principle of Development

The site is not the subject of any specific designations for a particular use within adopted or emerging policy. It is considered to be previously developed / brownfield land in the countryside.

National policy encourages the use of previously developed land provided that it is not of high environmental value. Policy RLP2 of the Local Plan states that new development will be confined to areas within town development boundaries and village envelopes. Outside these areas, countryside policies will apply.

Core Strategy Policy CS5 (The Countryside) outlines that development outside town development boundaries, village envelopes and industrial development limits will be strictly controlled to uses appropriate to the countryside, in order to protect and enhance the landscape character and biodiversity, geodiversity and amenity. However, supporting text to this policy says that the Council identify a need to secure a sound sustainable future for rural economy that contributes to the District as a whole through tourism, agriculture and local small businesses.

The Wethersfield Airfield Museum is situated on the site and as a result of this, Policy CS11 (Infrastructure Services and Facilities) which seeks the protection of leisure and cultural uses apply. In accordance with this policy, BDC will resist proposals that result in the loss or significant reduction of these types of services and facilities unless there is sufficient evidence that they are no longer viable or needed or satisfactory alternatives are available.



Local Plan Section 1 Policy SP2 (Spatial Strategy for North Essex) states that existing settlements will be the principal focus for additional growth. Beyond the main settlements, the authorities will support the conservation and enhancement of the natural environment.

Policy LPP65 (Local Community Services and Facilities) outlines that the Council will seek the retention of all existing community facilities and services. The Council will consider the change of use of these community facilities if the facility is unviable and there is little or no prospect of being viable in the future or a replacement facility of equal or better quality is provided.

Draft Section 2 Policy LPP1 (Development Boundaries) states that development outside (development) boundaries will be strictly controlled to uses appropriate to the countryside to protect the intrinsic character and beauty of the countryside.

Principle of residential development

Local Plan Policy RLP1 (Housing Provision) was superseded in 2011 by Core Strategy Policy CS1 (Housing Provision and Delivery).

Policy CS1 states that the Council will plan for the delivery of a minimum of 4,637 dwellings between 2009 and 2026 (i.e. 15 year plan period = 309 dwellings per annum). The Policy goes on to state BDC will locate these dwellings within the District's main towns, on mixed use regeneration sites in Sible Hedingham and Silver End and at new mixed use Growth Locations at north west Braintree, south west Witham and north east Witham. The Site does not fall within these Growth Locations.

Local Plan Section 1 Policy SP3 (Meeting Housing Needs) requires the local authorities to identify sufficient deliverable sites to provide for at least five years' worth of housing against a target of 716 homes per annum for BDC. This annual target was found sound by the Inspector in his report of December 2020.

Draft Section 2 Policy LPP17 states that Council will plan, monitor and facilitate the delivery of a minimum of 14,320 new homes between 2013 and 2033. The draft policy outlines the strategic growth locations where a significant proportion of the new homes are to be focused. It should be noted that two of the largest locations (West of Braintree and Colchester Borders), totalling 3,650 new homes are to be removed from the Plan following the Inspector finding them unsound as part of the Section 1 Local Plan examination.

5 Year Housing Supply

A material consideration in the future assessment of the acceptability of residential provision on the site is the Council's current housing land supply position. In accordance with Paragraph 11 of the NPPF, if the Council does not have an up to date Local Plan, there is a requirement to calculate the housing target using the Government's Standard Methodology.

The Government's Housing Delivery Test Results were published on 19 January 2021. The results showed that BDC delivered 85% of the required 2,277 new dwellings over the past three years.

BDC have therefore been required to produce an Action Plan to demonstrate how they will meet their identified need. BDC's Housing Land Supply Statement is published in May each year. The most recent Statement (May 2021) states the council can demonstrate a 5.34 year housing supply. We note that Council have not applied a 20% buffer to their housing target which is required if there has been a persistent under delivery of housing in previous years.

It is also noted that an Officer Report pertaining to an application that was taken to Planning Committee on 15 December 2020 (app ref: 19/01025) that the Council's Housing Land Supply position has recently been challenged at a Public Inquiry concerning a proposed development at School Road, Rayne. When considering the evidence the Inspector identified seven housing sites which were the subject of dispute. The Inspector was satisfied regarding the evidence on some of the seven sites but not all, concluding that the housing land supply figure lay between 3.72 years and 4.52 years.

In summary, the Council's position is that they can demonstrate a five year housing supply (5.34 years). We recommend the evidence base that this position is based upon is interrogated further at the next feasibility stage to understand how robust this position is.

Alternative Uses - Principle of hotel accommodation

There are no explicit policies that constrain hotel provision to a certain area or provide detailed requirements in which proposals will be assessed against. The existing countryside protection policies would however apply which state that development in the countryside will be tightly controlled (Policy CS5) and a key focus will be ensuring any new development conserves or enhances the natural environment (Section 1 Policy SP2).

Policy CS4 (Provision of Employment) outlines that the Council will promote suitable new tourist development proposals in appropriate locations, in order to increase the range, quality and type of facilities available.

Paragraph 6.30 to Section 1 Policy LPP 8 (Rural Enterprise) identifies that there are numerous opportunities for tourism related development in the predominately rural District. The supporting text to the policy reinforces a balance is to be achieved between supporting the rural economy and protecting the countryside, as stated in the NPPF. Any tourist accommodation which is to be proposed will be required to include a business plan that will demonstrate the long term viability of the scheme.

Provided a proposal could overcome the countryside protection policies, and a sound business plan for such a use could be provided, there is a case to propose a hotel use on site. The strength of the argument would likely be increased if the use was linked to the prison proposals, as it would provide accommodation for visitors whilst also being an employment generator in a rural area.

Alternative Uses - Principle of Employment Use

Policy CS4 (Provision of Employment) outlines that employment uses will be mainly located on existing employment sites within development boundaries, mixed-use regeneration sites and on strategic sites. The existing countryside protection policies outlined above would also apply to office development if it is not proposed for rural workers.

Therefore, due to the sites rural location and distance of an existing main settlement, the principle of employment development on site would not be considered acceptable in principle against policy.

Nevertheless, the site is previously developed land, and does comprise a number of industrial / commercial buildings. We also note Earls Colne Airfield is identified as an appropriate location for employment use within the plan.

Earls Colne Airfield is situated to the south of Braintree and endures the same rural nature and local character as Wethersfield Airfield and thereby a case could be made for an element of employment land to be provided at this site.

Section 1 Policy LPP3 (Employment Policy Areas) outlines that there are two Airfields that have been identified as an Employment Policy Area, these are; Gosfield Airfield (5.7 ha) and Earls Colne Airfield (23.9 ha). The appropriate uses considered for these sites are business (Use class B1), general industrial (Use class B2) and storage and distribution (Use class B8).

Section 1 Policy LPP5 (Allshot's Farm, Rivenhall) in section 2 explains that due to the rural nature and setting of this location, the redevelopment of Allshot's Farm for employment use with structural landscaping would be considered appropriate.



In summary, there are clear comparisons between the Site and the two airfields that are identified as suitable for employment. Whilst the site does not benefit from an allocation for employment, there is a case for a sensitively designed commercial scheme to be put forward that does not have any greater impact on the countryside / amenity or the local highway network.

Section 1 Policy LPP35 (Specialist Housing) outlines that new specialist housing on unallocated sites in the countryside will not be supported.

Draft Section 2 Policy LPP2 (Location of Employment Land) states that all employment sites in current or recent use as an employment site will be retained for such uses where they continue to offer a viable and sustainable location for such uses.

We are aware of the potentiality that a prison complex may be brought forward for the Site, whilst technical considerations are not discussed in detail, we acknowledge the use will be a significant employment draw to the Site which will be of benefit to the vitality of the area. Given the Site's location and the high number of staff likely required, there may be a need for specialist housing / specialist housing for key workers on the Site.

In line with policy, specialist housing is not supported in the Site's location. Nonetheless, the allocated sites for speciality housing has not taken into account the possibility of a major employment draw i.e. the prison complex in this countryside location. The Council will need to accommodate the influx of key workers to the Site if proposals were submitted and approved for a prison (or prisons) on Site.

There may therefore be a case for specialist housing on the Site if it was to be proposed alongside the prison complex as these two uses could coincide and support one another. The same countryside protection policies will apply and the proposal will indeed have to demonstrate robust justification and demand for specialist housing in support of the prison.

Design Considerations

Core Strategy Policy CS8 (Natural Environment and Biodiversity) explains all proposals must have regard to the landscape and its sensitivity to change and where development is permitted it will need to enhance the locally distinctive character in accordance with a Landscape Character Assessment.

Policy CS9 (Built and Historic Environment) outlines that the Council will promote and secure the highest possible standards of design and layout in all new development and the protection and enhancement of the historic environment.

There are two Grade II Listed Buildings which lie just beyond the Site boundary to the south and east and so any development will have to be mindful and consider the impact upon the setting of the farmhouses and local views/amenity. The historical nature of the airfield itself could perhaps be considered of interest which the Council may seek protection of. This would need to be managed carefully with the Council and interested stakeholders. The policy sets out that the Council will support the sympathetic re-use of buildings, particularly where they make a positive contribution to the special character of the local environment and can contribute to the delivery of sustainable development and regeneration.

Paragraph 8.21 in the Core Strategy demands a high standards of design and layout for all new developments in the district and have regard to the Essex Urban Place Supplement and the Essex Design Guide.

Section 1 Policy LPP51 (An Inclusive Environment) outlines development must achieve the highest standards of accessible and inclusive design to ensure that they;

- Can be used safely, easily and with dignity by all;
- Are convenient and welcoming with no disabling barriers, so everyone can use them independently without undue effort, separation or special treatment;

- Are flexible and responsive taking account of the needs of different users; and
- Are maintained and managed to ensure they remain inclusive.

Section 1 Policy LPP55 (Layout and Design of Development) explains that the Council will seek a high standard of layout and design in all developments and encourage innovative design where appropriate. The policy requires proposals to reflect or enhance the area's local distinctiveness and shall be in harmony with the character in terms of the scale, layout, height and massing.

In line with the policy set out above, any new development on the Site will be required to achieve the highest standard of design including innovative approaches where appropriate. Given the location of the site, the layout and design of any new development will be required to adhere to the quality and distinctiveness of the countryside. The design will need to protect and enhance the countryside's qualities rather than harm them.

Sustainability Considerations

Section 1 Policy LPP76 (Renewable Energy Schemes) encourages renewable energy schemes where they do not result in serious harm or loss of natural landscape or other natural assets, landscape character, nature conservation, best and most agricultural land, heritage assets (including the setting), public rights of way, air traffic and safety, Ministry of Defence operations and Watercourse engineering and hydrological impact.

Moreover, the Policy LPP76 requires that the development must be capable of efficient connection to existing natural energy infrastructure, or it can be demonstrated that the energy generated would be used for on-site needs only. The policy outlines that large scale solar farms should be accompanied by a sequential assessment which considers alternative brownfield sites and lower quality agricultural land.

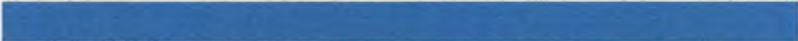
Section 1 Policy LPP77 (Renewable Energy within New Developments) sets out that all planning applications should include renewable energy technology to provide at least 20% of the projected energy requirements of major developments. In summary, new development on the site will be required to prove its capability of connecting to existing natural energy infrastructure in the District and to ensure the existing infrastructure can manage an increase of energy usage and not increase pressures or affect its current operations. Unless, the Site can demonstrate the energy generated from the new development will be used for on-site needs only.

There is potential to incorporate a renewal energy scheme within the proposal, as this is supported by BDC. However, due to the site's countryside location, the scheme has to make sure it will not result in any harm or loss of its natural landscape, character, agricultural land, heritage assets, and any Ministry of Defence operations.

A large scale solar farm could be deemed appropriate in this location given the Site's characteristics of being previously developed land, in line with emerging policy. If this was to be proposed the site would have to demonstrate the agricultural land is of low quality.

SUMMARY

The Site constitutes previously developed land. Both national and local planning policy encourages the effective use of these 'brownfield' sites to meet the future housing, employment and infrastructure needs of the local authority. The Site is located outside of defined settlement boundaries which means development is constrained by countryside protection policies. The Council's position (as of May 2021) in relation to housing is that they can demonstrate a five year housing supply (5.34 years). We recommend the evidence base that this position is based upon is interrogated further at the next feasibility stage to understand how robust this position is. The Site could be a medium / long term source of housing delivery for the Council which would assist in maintaining a positive housing supply going forward, projecting past the five year requirement.



We also note that 5.34 year supply does not include a 20% buffer which is required if there has been a persistent under delivery in previous years. A 5.34 year supply could easily slip over the course of the next 2-3 years if the pipeline of delivery is not maintained as forecasted.

In light of the above, there is a case to propose residential development on the Site. The routes to propose such a use are:

- Local Plan Promotion: BDC are required to identify sites for residential development through the Local Plan process. Section 2 of their Draft Local Plan identifies land for such uses and is with the Planning Inspectorate for assessment. The suitability of the proposed allocations will be tested and the Inspector may require BDC to undertake an immediate review of their housing supply post adoption of Section 2. This would present an opportunity to promote the Site through the local plan process. which could ultimately lead to an allocation within the Local Plan, which would be a significant material consideration in the determination of s subsequent application;
- Planning Application: The Site could provide a medium / long term source of housing for the Council which should be viewed favourably. The presence of the existing previously developed elements of the site in the south western area would be a logical location for new development as the impact of new dwellings would be weighed in the planning balance in the context of the existing massing on site, rather than against the more open areas to the north and east.
- Both: these two routes are not mutually exclusive and can be undertaken in parallel as much of the work required to support an evidence base for local plan promotion would also be required for an application and vice versa.

Notwithstanding the above, if there were a major employment draw to the site (for example via the operation of a new prison complex) there would be a case to propose an element of residential accommodation for key workers which should weigh in favour of such an application.

In relation to other uses, provided a proposal could overcome the countryside protection policies, and a sound business plan for such a use could be provided, there is a case to propose a hotel or commercial use on site. The strength of the argument would likely be increased if the use was linked to the Prison proposals provided they do not have an unacceptable impact on the countryside / amenity or the local highway network.

Finally, given the benefits outlined above in relation to potential links to the prison complex, we recommend pursuing a very close working relationship with the Ministry of Justice going forward to ensure the overall strategy is aligned to facilitate the best outcome.



While there are strong signs of an active housing market in the area, these developments typically offer far better access to the trunk road network and/or rail stations than is likely to be possible at Wethersfield, without substantial investment in the surrounding local road network. In the case of Wethersfield, we understand that there is likely to be scope for say a maximum of 300 – 350 dwellings at the site, before significant investment in the infrastructure – and especially roads would be required, thus likely rendering more substantial residential development unviable. This has been demonstrated by Homes England views on the site – that a Garden Town was not a deliverable proposition.

RESIDENTIAL COMPARABLE EVIDENCE

Montagu Evans independent research identifies that the average value of new build residential developments surrounding Wethersfield ranges between £317 and £423 per sq. ft. depending on specification. An example of a high specification development is Rayne Gardens; a Redrow development in Braintree. There is a mixture of 3, 4 and 5 bed flats and semi-detached and detached houses which have sold for the following values. Our analysis reflects an average price of £325 per sq. ft.

Average Unit Prices: Rayne Gardens	
Unit Type	Sold Price Average
3 Bed	£423,177
4 Bed	£532,217
5 Bed	Unknown

Alternatively, Oakwood Hill does not possess the same high specification of Rayne Gardens. An average value of £364 per sq. ft. has been achieved in Bloor Homes' 294 unit development of comparatively smaller 2, 3 and 4 bedroom houses. The below shows the relatively low unit price which was paid for each housing product, relative to other developments in the area, but highlights that there is demand for new build developments for a broad range of specifications. It is worth noting that the high £psf average, but relatively low total unit values here is principally down to the small size of the units. The small size of the housing products produces an inflated £psf figure, which appears disproportionate to the other comparable schemes.

Average Unit Prices: Oakwood Hill	
Unit Type	Sold Price Average
2 Bed	£280,062
3 Bed	£336,913
4 Bed	£433,058

The below comparable evidence schedule highlights the key attributes of some recent residential developments within a 20 mile radius of the Wethersfield site. On the assumption of delivering a scheme which reflects the relatively affluent demographic of Braintree, a value of around **£350 per sq. ft.** is an acceptable assumption.

Scheme	Developer	Distance From Site	Average House Price	Average £psf	Comments
Oakwood Hill	Bloor Homes	6.3 miles	£350,011	£364	292 new homes. 97% Sold as of Dec 2020. Ideal for young families being close to schools. The development is designed to accommodate everyone; downsizers, 1st time buys, commuters etc. Well-equipped properties, relatively average design and build, as is reflected in the cheaper values. Considerably smaller units compared to other schemes.
Rayne Gardens	Redrow	6.3 miles	£491,667	£325	171 new homes. Large houses, ideal for families. Each property is unique and well designed, hence higher values. Prices reflect its closer proximity to London.
Meadow Rise	Countryside	7.6 miles	£455,000	£350	Large properties but relatively average stock and layout of development.
Avondale	Bellway	8.8 miles	£396,665	£423	A range of offerings to appeal to everyone across a large development of 225 homes. Properties themselves are standard in design and appearance.
Boyton Place	Persimmon	9 miles	£310,000	£361	Basic standard of housing on a large development of 200 homes.

					Considerably smaller properties compared to the other schemes.
Nine Acres	Crest Nicholson	19 miles	£455,000	£317	Well-presented large properties in an idyllic village setting. A higher value development, furthest away from the Site and closer towards the coast and Chelmsford, hence high values.

RESIDENTIAL DEVELOPMENT LAND: COMPARABLE EVIDENCE

Having completed a search for residential development land on Land Insight and Costar, we have found that values are on average in the region of £740,000 per acre, with values ranging from c.£315,000 to over £1,000,000 per acre. We draw particular attention to both Inworth Road and The Paddocks that, although still significantly smaller, they are the most recent and largest developments within close proximity to Wethersfield.

The below table highlights the comparable development land values in the wider area, noting that these are considerably smaller sites than that of Wethersfield.

Address	Date	Price	Size (acres)	No. of units	Price per acre	Purchaser
Inworth Road	14/10/2019	£13,800,000	13.54	165	£1,019,202	Bloor Homes
The Paddocks	30/08/2019	£14,000,000	33	225	£424,242	Countryside
Strawberry Fields	16/07/2018	£1,400,000	4.44	60	£315,315	Linden Homes
Rayne Gardens (Phase 1)	14/07/2017	£11,300,000	15.27	127	£740,013	Redrow
Avondale	24/11/2017	£9,831,214	10.50	118	£936,306	Bellway
Bardfield Walk	-	£3,705,000	5.11	37	£725,049	Croudace Homes
Oakwood Hill	16/12/2016	£15,450,000	15.22	292	£1,015,112	Bloor Homes

EMPLOYMENT MARKET COMMENTARY

Given Essex's close proximity to central London and its attractive transport links and connections, the county reaps the benefits from the economic and logistic strength of the capital, but at reduced rents. The south east industrial market remains strong going into 2021 with significant growth predicted, and while the office market in Braintree has seen a recent increase in activity, the market continues to grapple with new working trends following the pandemic. However, again, the rural location of Wethersfield means it will be far less attractive to mainstream commercial property activities, and will be particularly constrained by the localised and minor nature of the road network.



OFFICES

No recorded office transactions thing has occurred traded over the past 12 months in the Braintree Submarket, and only a handful of properties generally trade in Braintree in an average year. The coronavirus remains a major disrupter to the economy at large and creates profound uncertainty in Essex. The effect of the pandemic has the potential to redefine the use of office space, as employers re-evaluate the safety and health of workers.

On account of the Sites rural location and likely limited ack of demand for office space in the current economic climate, we wouldn't not advise the development of large quantities of office -uses,, unless there is a clear demand for such a use. Nor, given the rents likely to be achieved do we anticipate that this form of development would be viable, save perhaps for some very small scale assets as [part of a wide reemployment proposition for the site. assets within this development.

On account of the Sites rural location and lack of demand for office space in the current economic climate, we wouldn't advise large quantities of office-use assets within this development.

INDUSTRIAL / LOGISTICS

The industrial market in the UK is currently and increasingly very strong, characterised by tightening yields and increasing rents following a change in shopping habits and an increase in online retailing brought on by the Pandemic and subsequent lockdowns. Essex is a very strong south east industrial and logistics market that serves greater London, yet benefits from rental discounts in not being within the London boundary. Particularly strong markets within the Essex county include but are not limited to; Basildon, Grays and Chelmsford.

Looking more closely at the Braintree submarket, nearly full occupancy has allowed for strong rent growth in recent years, and although it slowed down of late, it remains slightly over 4%. Low vacancies and strong rental gains have impacted investment in the submarket, and sales volume remained elevated over the past five years, averaging more than £20 million each year. Although activity was muted in the beginning of the crisis, investors' interest returned in recent months with the sale of Skyline 120 in October 2020. Despite positive momentum in recent years and evidence of sustained growth, average rents in Braintree remain some of the lowest in Essex and considerably lower than those in nearby London submarkets. Average industrial rents of £8.00 psf compare to about £12 psf across submarkets in the east of London and are nearly 20% lower than the Essex average of £9.80 psf.

Although rents are indeed increasing and the market is set to return strong following a somewhat subdued 2020, comparatively to its neighbouring markets, Braintree isn't as strong logistically. Furthermore, given its rural location, the Wethersfield site is unlikely to have a particularly high demand for logistic uses. The focus of demand is more likely to be on better connected south east locations.

EMPLOYMENT LAND COMPARABLE EVIDENCE

The County has strong fundamentals for the logistics and industrial sector, with its desired southeast location and advantageous transport links. Consequently, the Essex market typically see's prime industrial land deals. However, given the site's isolated location and distance from main arterial roads, we don't believe these prime land values to be replicated in Wethersfield. The rural nature of the site naturally presents significant access & logistical challenges that render it a largely unsuitable location for prime logistics.

It is similarly challenging to find any evidence of nearby retail park or office development land sales. Moreover, from our research, it is considered that there to be a large enough local employment force to support and / or sustain a considerable quantum of additional, new employment space, save perhaps if part of a wider residential led development.

In light of the above, the comparable evidence we have found within a 20 mile radius of the site suggests that employment land values will be in the broad region of £600,000 - £700,000 per acre. This is also supported by evidence from Colliers (2021), which points towards employment land values between £600,000 - £900,000 in the wider area.

The highest employment land value came from the Bradbury Park site, which was bought by Locksbridge Developments Limited in April 2018 for £6,195,000 million. The Bradbury Park site is located very close to the A120 proving access to the M11.

As the site is not immediately adjacent to the national motorway system or major trunk roads, Wethersfield would not be expected to achieve value near this range of the values which have been observed in the comparable evidence schedule, and any commercial land value is likely to be discounted very significantly from these headline values. Indeed, we consider that the values are more likely to be in the region of say £100,000 - £250,000 per hectare.

Address	Price	Size (acres)	Price per acre	Purchaser
Bradbury Park	£6,195,000	9.09 acres	£680,000	Locksbridge Developments Limited
Eastways Land	£1,425,000	2.2 acres	£647,727	Aryan Holdings

OFFICE AND INDUSTRIAL RENTS AND YIELDS: OVERVIEW

An overview of the rental tones for commercial uses is provided in the Tibbalds Stage 1 Wethersfield report – see table below (June 2018). While this overview is a little dated, our view is that this range of rental tones will largely continue to apply. Perhaps of particular note is that in a number of instances, there is no comparable evidence. This points to a weak market, and little by way of demand from occupiers. Yields too are likely to be fairly weak (again, the lack of evidence means there are challenges pinpointing this), yet for secondary stock in a location like Wethersfield, then yields could well be in excess of 10%. New build premises could command somewhat better returns, but still they are not likely to command the keener yields which are more aligned with more established employment locations. Given this weak yield and rental profile, new build commercial development is very unlikely to be a viable prospect (though there may still be potential to use existing buildings and land for storage).

Town	B1 Office		B2/B8	
	Secondary	Prime	Secondary	Prime
Braintree	£8-£12	£17-£19*	£5.50-£7	£8-£9
Stansted	£15-£18	£20*	£8-£9	£9.50
Bishops Stortford	£14-£18	£21*	£7-£8.50	£9.50
Halstead	£6-£8	£12-14*	£3-5	£6*

*Estimated – no comparable stock

Source: MDGPA Wethersfield, Stage 1 Report (June 2018)

OTHER / ALTERNATIVE USES

Based on previous work undertaken by Tibbalds in 2018 for the site, a considerable number of alternative uses were considered for the site at a high level, which we summarise below. Whilst we still consider the highest value for the land to likely be generated by residential development (though a likely cap on this due to location and very high costs of infrastructure investment, we briefly refer to alternative uses that might be considered alongside a housing scheme / if a housing scheme was not possible.

Institutional	Prison
	Boarding School
	Training Centre
Leisure	Zoo / Nature Park
	Golf Course
	Showground / Festivals
	Race Track / Drag Racing (e.g. Dunsfold)
	Rowing Lake / Sports Complex
	Recreational Airfield Use
Industrial / Commercial / Agricultural	Research & Development Facility
	Wind Farm
	Solar P.V. Farm
	Waste to Energy
	Return to Agricultural use
	Grazing Land
	Covered Storage
	Film & TV set / studio
	Open Storage
	Data Centre
	Conference Facilities and Hotel
	Pilot Training
	Storage / Hangars for Aeroplanes (Stansted)
Other	Wildlife & conservation area, ecological mitigation site (newts, farmland birds, nightingales etc.)

Assuming that housing cannot be brought forward at all at Wethersfield these alternative uses could then be examined in further detail for their deliverability and financial returns to the DIO. While in part, we advocate that a residential led strategy for the site is pursued, other uses which may have demand and help to increase the site value are:

- Institutional uses.** For example, prisons. There is already strong interest from MoJ on this location for up to two prisons. The site is already home to other less typical public sector institutional activities, such as training areas for Essex Fire Service and the police. Unusual uses such as these may well consider the site very favourably, as it offers expansive land in a secure location, with little prospect of bad neighbourhood uses being a concern.
- Leisure:** although this could offer a way forward, land values are typically low for these types of activities, and the weak surrounding infrastructure means any major development of this nature is likely to be unviable. This use cannot however be fully discounted, given there is such a wide range of activities captured under the broad heading of 'leisure'
- Agricultural:** Given the surrounding nature of the land around Wethersfield – agricultural – this could be part of the land use mix. This use could command a return of say £[redacted] per hectare for grazing land, up to say £[redacted] per hectare for prime arable. For forestry land, then according to the LSH valuation report (2020), plantations are in the order of £[redacted] - £[redacted].

- **Green Energy:** while subject to further technical investigation, a solar farm might be worthy of consideration, assuming there is sufficient capacity in the network (or that investment to upgrade is not prohibitive). It is understood in terms of a capital return, this could be in the region of £■■■■ per acre, though this will likely depend on the quality of the location for this type of use.

There are a number of other energy generating technologies that could be viable, but supporting infrastructure - such as battery storage - is critical to the move to a renewable and low carbon energy network and the UK's legal obligation to achieve Net Zero. The prospect of renewable energy sources of a commercial scale relies on the availability and timing of a suitable grid connection to export the power generated. The alternative already being explored is a private-wire network to support the sustainability credentials of the proposed prisons.

- **Film and Television Studios** – There is a significant need within the UK for new television and film studios. DCMS has indicated a desire to grow this industry to over £7bn GDP by 2025 and the British Film Commission are actively working with studios to source and deliver sites for new filming facilities. The location of the site in relation to London and Stansted, and lack of residential properties within the area could provide a suitable location for the creation of new soundstages and backlot facilities. This should be explored further with the BFC.
- **Biodiversity Net Gain** – There will soon be a legal obligation for all development in England to achieve a net gain in biodiversity, a position that will be easier to achieve on some sites than others. Local authorities are placing planning value on designating sites specifically for this, with many call for sites including this as a specific category for consideration. In the same way that Suitable Alternative Natural Greenspace ("SANG") is required in areas with ecological sensitivity, it is likely that sites which can deliver an excess of net gain in biodiversity will be able to monetise the provision as an off-site mitigation strategy for other developments. This should be explored further, not only in relation to the development prospects of the site, but from an ESG perspective for the DIO's wider retained and operational estate.

The challenge for many of these uses and making them deliverable hinges on the modest surrounding infrastructure, and ability to cope with significant increases in traffic (assuming major investment in the roads is unlikely) and demand on the energy network and other necessary infrastructure.

SUMMARY OF KEY MESSAGES

- Residential is likely to be the most valuable land use at Wethersfield. Opportunities to maximise housing numbers at the site should be examined carefully.
- Institutional uses have already shown significant interest in the site: where possible – and subject to these potentially not compromising residential opportunities – these should be considered.
- The potential for Green Energy (solar farming possibly) could be part of the land use 'solution' for Wethersfield, subject to technical evaluation.
- Agriculture land may form part of the land use package, but may be least valuable use considered.
- Although there could be some opportunity for leisure uses, these are hard to pinpoint through market research – and indeed land values associated with them may be very modest. This approach is more likely to be aligned with mitigating holding costs for the DIO.
- While new build commercial uses are unlikely to be viable, there could be opportunities to dispose of existing buildings and structures for employment uses – this might too include storage, including open storage – and perhaps R&D activities, though at this stage no confirmed demand has been identified.

The DIO should also be alive to other possible emerging uses, say for example film and studio uses – or bio diversity net gain potential.

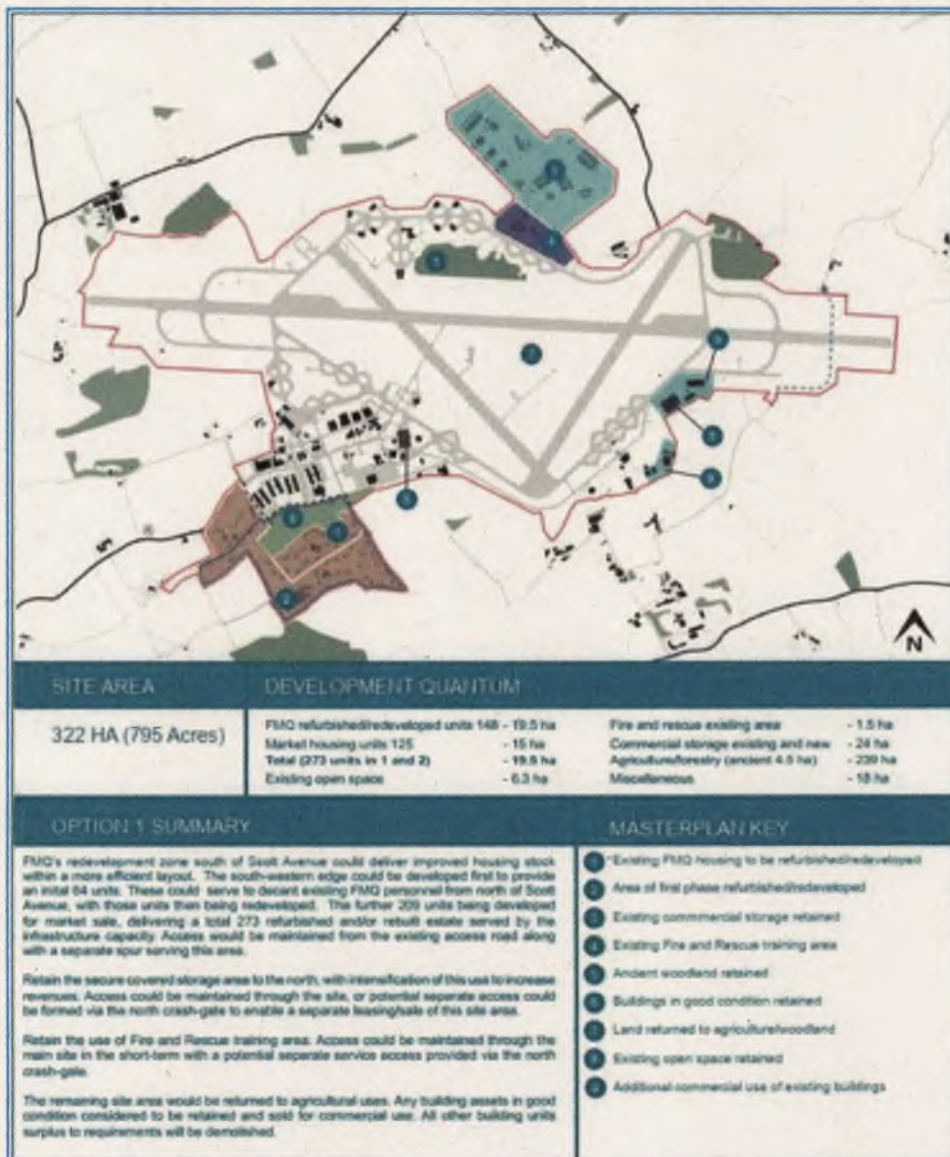
DEVELOPMENT PROPOSALS

CONCEPT MASTERPLAN

Through recent collaborative master-planning work undertaken by the DIO, SPA & SWECO, two concept masterplans have been produced for MDP Wethersfield. These masterplans set out the layout and quantum of achievable development on site. The present a minimum development position (Option 1) to a higher, more aspirational level of development (Option 2)

We outline the concept of each masterplan below.

OPTION 1



OPTION 2



These masterplans have been developed through various iterations, discussions and workshops with the client to produce what is effectively a min-max range of development capacity. We set out below the various elements and composition of each masterplan option, whilst further details on the evolution and formation of the masterplans can be found in Appendix A.

The key elements of the masterplans are a mix of existing and alternative development uses, including:

- Range of residential uses, from 275 dwellings up to 1,000 dwellings;
- Potential for 2 Category-C prisons;
- Solar farms;
- Agriculture land

It is important to note that these two concepts are indicative masterplans as there remains significant uncertainty because of the potential MoJ deal, associated land take, and supporting evidence base & technical surveys demonstrating these two masterplans are deliverable. Most importantly, there is also uncertainty around support from the Local Planning Authority where changes of use are proposed on the site.

DEVELOPMENT APPRAISALS

APPRAISAL ASSUMPTIONS

The master-planning work has been financially appraised and this work is described in this section for each masterplan in turn. Both masterplans are comprised of a number of different uses and 'plots' (further detailed below), and our approach has been to value each plot separately. Our analysis below therefore divides each masterplan into its different composition elements, and details the assumptions applied to each.

It is important to note the high level analysis undertaken at this stage. It is preliminary advice, based on a concept masterplan with only some knowledge of technical issues and their costs. This work will therefore need to be revised in due course, once more certainty is placed on a range of matters: the MoJ proposals; infrastructure capacity, and the planning position for the site.

It is extremely important to note that the cost schedules provided by Gleeds that underpin the development appraisals do not allow for any off site works. These and other caveats are set out in the cost schedules at Appendix B.

INFORMATION PROVIDED

For the purposes of our valuation, we have been provided with a range of documents and information sources which we have relied upon. These documents include:

- MDPGA Wethersfield – Building List;
- MDPGA Wethersfield – Disposal Site Plan;
- MDPGA Wethersfield – Building Numbers Plan;
- MDPGA Wethersfield 'L2 Assets' Schedule;
- MDPGA Wethersfield – 'Third Party Agreements' Tenancy Schedule (Dated April 2017);
- MDPGA Wethersfield – 'Carver Bks SFA at Wethersfield' Plan (Dated Dec 2019)

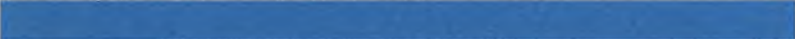
It is our understanding that the provided tenancy schedule (dated April 2017) is the most up to date tenancy schedule available. A number of comments included within make reference to various deals where Heads of Terms (HoTs) have been agreed for new leases. We have not been provided with any information relating to these agreements, and have had no sight of any engrossed documents.

SUMMARY OF FINANCIAL OUTPUTS

The below section provides considerable detail as to the appraisal of each masterplan. For ease of reference, we include below a summary of our findings and suggest that if further information is required, the relevant section below is sought out.

Item	Masterplan Option 1			Masterplan Option 2	
	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2
Land Value	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]	£ [REDACTED]

Note: the scenarios for each option reflect differing assumptions on housing delivery: and in particular, the approach taken to a number of existing dwellings, be they retained, refurbished or demolished.



In addition to this, we understand that the current negotiations between the MoJ and the DIO are for the transfer of land for the delivery of 2 prisons for a price ranging between £■■■■ and £■■■■. This prison land value will be in addition to the sums set out above. This would only apply to Option 2, as Option 1 shows no prisons.

It is also important to note that in Option 1, we have not allowed for demolition costs: were they included, this is estimated to cost in the order of £■■■■ (they have been excluded on basis that these may be no need to undertake all these demolitions).

Based upon the above, the best return to the DIO through each Option is shown to be: Scenario 3 (Option 1) and Scenario 1 (Option 2). Scenario 3 produces the highest value because it provides the highest quantum of residential development. Scenario 1 (Option 2), however, exceeds Scenario 2 (Option 2) because of the presence of refurbished units, which drives more value than the same number of units delivered as new build.

Having regard to the masterplans, Masterplan Option 1 provides a form of baseline, on basis that it is understood that it can be delivered without very significant additional abnormal costs. It needs be to recognised that while the returns are in the face of it higher under option 2, these gross returns would likely be netted down considerably once further of site costs are factored in.

Wethersfield is a complex site – and there are many options to drive value that will need to be explored more fully. However, the DIO undertook a high level assessment of the sites value around 18 months ago, and considered this to be around £■■■■. Under Masterplan Option 1, Scenario 3 (arguably a more realisable land use proposition at present), similar values are produced at c.£■■■■, excluding any return from any MoJ deal. On that basis – and whilst not a formal valuation - an indicative figure of around £■■■■ for the site value is a reasonable estimate to make at this time.

OPTION 1



Option 1 assumes a low intensity development may be forthcoming on the site, with the vast majority of the land being given over to agricultural land. The remainder of the site comprises a small scale residential development in the south west corner, retained commercial buildings / employment land to the north and south east, and an element of ancient woodland towards the northern boundary. Specifically, the plots comprising Option 1 are:

Plot	Use	Description
1	Residential	Existing FMQ housing to be refurbished
2	Residential	Area of first phase to be redeveloped
3	Commercial	Existing commercial storage retained
4	Commercial	Existing Fire & Rescue training area
5	Ancient Woodland	Ancient Woodland Retained
6	Commercial	Buildings in good condition retained
7	Agriculture	Land returned to agriculture/woodland
8	Open Space	Existing open space retained
9	Commercial	Additional commercial use of existing buildings

OPTION 2



Option 2 allows for a far more intensive development on the site. As provided by HLM, Option 2 allows for major infrastructure improvements for two new Category C prisons with linked solar farm operations, located to the west and east of the site, respectively. This is supported by further residential development in the south and south west, with capacity for up to 1,000 units, as well as an expanded northern secure storage area to provide intensification of the commercial uses. The Fire and Rescue training facilities will also remain, as well as a number of existing farming storage buildings. The plots comprising Option 2 are:

Plot	Use	Description
1	Residential	Existing FMQ housing to be refurbished
2	Residential	Area of first phase to be redeveloped
3	Commercial	Commercial/storage retained and expanded
4	Commercial	Existing Fire & Rescue training area retained
5	Ancient Woodland	Ancient Woodland Retained
6	Commercial	Buildings in good condition retained
7	Agriculture	Land returned to agriculture/forestry
8	Open Space	Cat C prisons & solar farms
9	Commercial	New residential development
10	Other	Possible new access
11	Commercial / Agriculture	Possible agriculture buildings benefiting from solar

APPRAISAL INPUTS

We outline below the inputs and assumptions we have adopted for each of the plots within the two concept masterplans.



OPTION 1

Plots 1 & 2 – Residential



HLM have provided 3 different scenarios of residential capacity on the site, as below. Each scenario assumes that 64 family married quarters (FMQ) units remain, with the quantum of refurbished housing and new build housing varying in the remaining scenarios.

We have undertaken a residual appraisal on Plots 1 and 2 in order to generate a Day 1 Residual Land Value that a residential developer may be prepared to pay for the site. As the 64 retained units would not form part of the offer that may be purchased by a developer, we have not attributed any cost or value to them, and have excluded them from the appraisal.

	Scenario 1	Scenario 2	Scenario 3
Retained	64	64	64
Refurbished	84	0	0
New Build	127	211	336
TOTALS	275	275	400

Both Scenario's 1 & 2 assume a maximum site capacity of 275 dwellings, whilst Scenario 3 assumes a maximum of 400 dwellings, owing to a slightly higher density of development.

We have appraised each of these scenarios separately, on the assumptions and unit mixes outlined below.

New Build Units

Planning policy for major housing developments in the area require a provision of 40% onsite affordable housing, and our appraisals have assumed this policy compliant level. The remaining units comprise what we believe to be a market facing private mix, as identified in the below tables. As the density increases in scenario's 2 and 3, we have altered the mix to increase the proportion of smaller dwellings, which, following our analysis of the local residential market, we believe to be representative of the current market sentiment.

Having reviewed nearby residential developments and discussed the local supply and demand dynamics with residential agents, it was determined that there was very little demand for flatted units. Consequently, it was decided that any small scale residential development forthcoming at Wethersfield would be unlikely to provide flats, and 100% of the dwellings delivered would be in the form of 2, 3 and 4 bedroom houses.

The average unit sizes applied to each dwelling are also shown in the table below. The sizes adopted are consistent with the unit sizes found at similar residential schemes we have experience of, and mirror a number of local developments as well.

Scenario 1

Unit	Proportion	Quantum	Average Unit Size (sq ft – NSA)
2 bed house	30%	23	753
3 bed house	50%	38	1,023
4 bed house	20%	15	1,238
TOTALS (AVERAGE)	100%	76	(985)

Scenario 2

Unit	Proportion	Quantum	Average Unit Size (sq ft – NSA)
2 bed house	35%	44	753
3 bed house	45%	57	1,023
4 bed house	20%	25	1,238
TOTALS (AVERAGE)	100%	127	(971)

Scenario 3

Unit	Proportion	Quantum	Average Unit Size (sq ft – NSA)
2 bed house	35%	71	753
3 bed house	45%	91	1,023
4 bed house	20%	40	1,238
TOTALS (AVERAGE)	100%	202	(971)

Refurbished Units

Scenario 1 assumes that 84 existing FMQ dwellings are to be refurbished and sold on to the open market. We have not been provided any information as to the composition of these 84 dwellings, save for an excel schedule documenting the gross areas of a number of buildings on site. We have also seen no additional information as to the quality and / or size of

these dwellings. Based upon the aforementioned excel schedule, and testament from Gleeds, we have assumed an average unit size of 1,485 sq ft (138 sqm) for each unit.

We would also note that within Scenario 2, which assumes no units are to be refurbished, no additional cost has been included for the demolition of these 84 FMQ dwellings. This will need to be factored in, as appropriate.

Using the above unit mix assumptions, the proposed Option 1 masterplan of MDP Wethersfield generates the following residential development areas, broken down into private, affordable and refurbished accommodation.

	Scenario 1	Scenario 2	Scenario 3
Private Accommodation (sq ft)	124,740	143,708	228,185
Affordable Accommodation (sq ft)	87,665	61,173	98,071
Refurbished Accommodation (sq ft)	37,430	-	-
TOTALS	249,835	204,881	326,256

We have then adopted the below inputs within our appraisals. Gleeds have also undertaken a cost assessment for the development site, based upon a review of the SETA Stage 1 reports and the development proposals, which can be seen at **Appendix B**. We summarise the cost estimates within the below table, and have shaded them blue, for reference.

It is important to note that our appraisals are based upon the assumption of Plots 1 & 2 having outline planning permission in place. It is also assumed that there are no off-site highways costs.

Assumption	Comment
Private Residential Sales Values (£ per sq ft)	£ [REDACTED]
Affordable Housing Sales Values (£ per sq ft)	£ [REDACTED] ([REDACTED] % of private sales values)
Refurbished Residential Sales Values (£ per sq ft)	£ [REDACTED]
Agent Fee	[REDACTED]
Legal Fee	[REDACTED]
Private Residential & Affordable Construction Cost (£ per sq ft)	£ [REDACTED] (BCIS Lower Quartile + [REDACTED] for externals)
Refurbished Unit Cost (£ per unit)	£ [REDACTED]
Reserved Matters Planning Cost (£ per unit)	£ [REDACTED]
Contingency	[REDACTED]
Fencing Works	£ [REDACTED]
Demolitions	£ [REDACTED]
Removal of Hard Surfacing	£ [REDACTED]
Form Junctions onto Existing Roads	£ [REDACTED]
General Items	£ [REDACTED]
Removal / Reconfiguration of Utilities	£ [REDACTED]
Section 106 Costs (£ per unit)	£ [REDACTED]
Professional Fees	[REDACTED]
Marketing (Private)	[REDACTED]
Sales Agent Fee (All)	[REDACTED]
Sales Legal Fee (All)	[REDACTED]
Finance Cost	[REDACTED]

Note: while higher residential sales values do occur, the presence of the prison and access arrangements will in our view depress sales values.

We have applied a blended profit margin to each Scenario, as outlined below. This profit metric represents a blend between the margins a housebuilder might typically seek on the gross development values of private units versus affordable units; which we have taken to be 22.50% and 6.00%, respectively.

	Scenario 1	Scenario 2	Scenario 3
Blended Profit Margin	█	█	█

We are also aware of an additional agreement between the DIO and the USAAF pertaining to the 148 FMQ dwellings in the south west corner of the site. It is our understanding that this agreement allows for the USAAF to be provided with an apportionment of the receipt due to the DIO should these 148 FMQ dwellings be i) redeveloped, or ii) refurbished. If these units are to be redeveloped, the USAAF will receive 10% of the land receipt due to the DIO (noting that there is some ambiguity around whether it is 10% of land receipt, or sales value). However, if the units are to be refurbished, the USAAF will receive 50% of the receipt due to the DIO.

On the basis of this agreement, the total receipt from Scenario 1 due to the DIO from the disposal of Plots 1 & 2 will therefore be the full residential residual value less 50% of the value attributable to the refurbished units. Accordingly, we have appraised the 84 refurbished units within Scenario 1 as a standalone scheme, in order to identify the land receipt specific to these dwellings. As above, we have adopted the below assumptions within our appraisal:

Assumption	Comment
Refurbished Residential Sales Values (£ per sq ft)	£ █
Agent Fee	█
Legal Fee	█
Refurbished Unit Cost (£ per unit)	£ █
Contingency	█
Professional Fees	█
Marketing (Private)	█
Sales Agent Fee (All)	█
Sales Legal Fee (All)	█
Finance Cost	█
Profit on GDV	█

Using the above assumptions, the three outlined scenarios produce residual land values between c.£█ and c.£█ which reflects a land value range between roughly £█ - £█ per acre. This is at the low end of the spectrum of anticipated returns; in part it reflects some of the value being passed to the USAAF.

	Scenario 1	Scenario 2	Scenario 3
GDV	£ █	£ █	£ █
Total Construction Costs	£ █	£ █	£ █
Profit	£ █	£ █	£ █
Residual Land Value	£ █	£ █	£ █
USAAF Apportionment	£ █	-	-
Receipt Due	£ █	£ █	£ █

We would note here that there is considerable uncertainty with regards to the mechanism that shares profits between the DIO and USAAF, depending on whether a refurbishment or redevelopment approach is taken. This requires clarification to ensure an optimum outcome is ensured for the DIO. We have looked at this agreement on 2 bases, and outline the receipt that would be generated through both approaches.

The first approach assumes that the 'full residential' scheme is split in to its component parts, with each element being appraised separately. In this case, the 'full residential' scheme is made up of i) the 'new build' element, and ii) the 'refurbished' element. The agreement with the USAAF pertains only to the 'refurbished' element, and requires that the DIO shares 50% of the land receipt with the USAAF. Conversely, there is no such agreement over the 'new build' element, meaning that the DIO will be set to receive 100% of the land receipt generated from the sale of this plot. If each of these elements is appraised separately, a land value of c.£[redacted] is generated for the 'new build', and a land value of c.£[redacted] is generated for the 'refurbished' element. Following the agreement, the total return to the DIO would therefore be: i) £[redacted] (100% of the receipt from the 'new build') + ii) £[redacted] (50% of the receipt from the 'refurbished') = £[redacted].

The second approach otherwise views the receipt to the DIO from the 'full residential' perspective, and does not split the appraisal into distinct elements. Under this approach, the total land receipt from a 'full residential' scheme (i.e. the new build and refurbished elements within the same appraisal) amounts to c.£[redacted]. The DIO would only be entitled to [redacted] of the land receipt from the refurbished units, however, which, as mentioned above, amounts to some £[redacted]. Therefore, the receipt to the DIO would be: i) The full £[redacted] less ii) £[redacted] = £[redacted].

As first mentioned, it is unclear which approach is appropriate, and further clarification is required in order to maximise the return to the DIO.

Plots 3 & 9 – Existing Commercial Storage Retained



The Option 1 masterplan includes two areas designated for employment uses; one being situated in the north (Plot 3) and the second being a smaller parcel in the south east of the site (Plot 9). The combined plots will bring forward up to 36 hectares of employment floorspace, which is currently comprised purely of the existing buildings on site.

As previously mentioned, we have been provided with a number of documents and information sources which we have relied upon in our valuation of the masterplan. Most pertinent to this element were 1) a full site plan specifying the locations of each building on site, 2) an existing tenancy schedule, and 3) an asset schedule documenting the gross floor areas of select buildings on site.

We have primarily adopted the investment method of valuation in our appraisal of these Plots, which has been based upon the assumption that any purchaser might look to acquire the existing building accommodation and re-let the space for commercial uses. We have therefore relied upon the aforementioned documents to identify the quantum of built space that exists within each Plot. This provided accommodation figures as follows:

	Plot 3	Plot 9
Existing Building Accommodation	21,743 sq ft	22,572 sq ft

Based upon the descriptions provided within the asset schedule, it is our understanding that the accommodation within both Plots is largely comprised of storage floorspace, with the existing buildings being given over to accommodation including 'General Stores', 'Warehouse Stores', 'Workshop' & 'Workshop & Store', amongst others. Having conducted a high level review of the local property market, we have assumed that this existing accommodation will remain in this use type, and have therefore assumed that there will be no repurposing of the space.

We have also cross-referenced the existing accommodation with the provided tenancy schedule, and it was determined that there were no current occupational leases to be considered within our valuation. We have therefore made the assumption that all buildings within both Plots are vacant. It is, however, worth noting that the tenancy schedule makes reference to two potential renewals within Plot 3, which we have seen no further detail on. It is therefore unclear as to whether these terms were agreed and formalised. It is suggested that HoTs have been agreed with 'Trinity Warehousing' for a 2 year renewal on buildings 275, 278 & 279, at a rent of £■■■■ pa (£■■■■ psf). It also states that HoTs have been agreed within Abbot Datastore for a renewal on building 280 at a rent of £■■■■ pa (£■■■■ psf). There is no further detail as to term length or other occupational clauses.

With no verifiable evidence of these deals having been completed and engrossed, we have made the assumption that they did not complete, and the buildings relevant to each deal are vacant.

To account for the diverse range of accommodation within each Plot, which includes a number of subterranean and part-subterranean buildings, we have made assumptions as to which units are lettable. Within Plot 3 specifically, we have assumed that all subterranean buildings are unlettable, which includes buildings 2028 – 2034, all of which are described as 'Storage Igloos'. This provided gross lettable accommodation figures as below:

	Plot 3	Plot 9
Lettable Building Accommodation	12,174 sq ft	22,572 sq ft

We have then valued each building separately, making the following assumptions within our approach. The rationale of each is explained in further detail below:

Inputs	Plot 3	Plot 9
Lettable Accommodation (GEA)	12,174 sq ft	22,572 sq ft
Efficiency Ratio	■■■	■■■
Rent £/ psf	£■■■	£■■■
Void Period	1 year	1 year
Letting Fees	■■■	■■■
Legal Fees	■■■	■■■
Capitalisation Rate	■■■	■■■
Purchasers Costs	■■■	■■■

We have approached our assessment of value on the assumption that there would be no refurbishment cost required for each building. Given the existing use of the accommodation as storage buildings, and our assumption that it will remain in this use type, it is assumed that the space is already in a condition appropriate for the local occupational market.

We have conducted research in to the local market and compiled a schedule of recent rental evidence for B2 & B8 space. Taking into account the outputs of our research, as well as the notes within the tenancy schedule detailing the terms agreed with Trinity Warehousing & Abbot Datastore, we have adopted a market rental figure of £■■■■ per sq ft.

Our valuation approach to each building within each Plot is outlined in the below tables:

Plot 3

Inputs	Building 275	Building 276	Building 278	Building 279	Building 280	Building 281
Area (GEA) (sq ft)	2,185	1,679	2,077	2,077	2,077	2,077
Efficiency Ratio	■■■	■■■	■■■	■■■	■■■	■■■
Area (GIA) (sq ft)	■■■	■■■	■■■	■■■	■■■	■■■
Rent £/ psf	■■■	■■■	■■■	■■■	■■■	■■■
Annual Rent £/ pa	■■■	■■■	■■■	■■■	■■■	■■■
Void Period (years)	1 year	1 year	1 year	1 year	1 year	1 year
PV £1	■■■	■■■	■■■	■■■	■■■	■■■
Capitalisation Rate	■■■	■■■	■■■	■■■	■■■	■■■
Gross Value	■■■	■■■	■■■	■■■	■■■	■■■
Letting Fees (10%)	■■■	■■■	■■■	■■■	■■■	■■■
Legal Fees (5%)	■■■	■■■	■■■	■■■	■■■	■■■
Purchasers Costs	■■■	■■■	■■■	■■■	■■■	■■■
Net Value	■■■	■■■	■■■	■■■	■■■	■■■

Plot 9

Inputs	Building 1003	Building 165	Building 199
Area (GEA) (sq ft)	14,703	5,716	2,153
Efficiency Ratio	■■■	■■■	■■■
Area (GIA) (sq ft)	■■■	■■■	■■■
Rent £/ psf	■■■	■■■	■■■
Annual Rent £/ pa	■■■	■■■	■■■
Void Period (years)	1 year	1 year	1 year
PV £1	■■■	■■■	■■■
Capitalisation Rate	■■■	■■■	■■■
Gross Value	■■■	■■■	■■■
Letting Fees (10%)	■■■	■■■	■■■
Legal Fees (5%)	■■■	■■■	■■■
Purchasers Costs	■■■	■■■	■■■
Net Value	■■■	■■■	■■■

The table below identifies the net values of both Plots. Using the investment method of valuation, we are of the opinion that the capital value of Plot 3 is in the region of £■■■■ and Plot 9 in the region of £■■■■.

	Plot 3	Plot 9
Net Capital Value	■■■	■■■

Say		
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We have also cross checked the results of our investment method of valuation using a comparable approach, based upon sales evidence of similar quality storage accommodation in the local area. We have attempted to capture transactions for vacant storage space to provide a true comparable, but the lack of transactions over the last few years in the near vicinity has left a limited pool of information to draw upon. We have therefore had to consider let investment transactions, with a focus upon those with a short remaining term. The evidence collected points towards a capital value of approximately £■■■■ per sq ft for poor quality, short-let investments. Considering the assumption that the units will be vacant, we would expect the price per sq ft for the accommodation in Plots 3 & 9 to sit slightly below this level. We would therefore expect a capital value per sq ft in the region of £■■■■■■ to be reasonable for these units. The results of this comparable approach can be seen below, which closely matches the output from our investment method of valuation.

Plot 3

	Building 275	Building 276	Building 278	Building 279	Building 280	Building 281
Area (GIA) (sq ft)	2,141	1,646	2,036	2,036	2,036	2,036
Capital Value £/ psf	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■
Net Value	■■■■	■■■■	■■■■	■■■■	■■■■	■■■■

Plot 9

Inputs	Building 1003	Building 165	Building 199
Area (GIA) (sq ft)	14,409	5,716	2,153
Capital Value £/ psf	■■■■	■■■■	■■■■
Net Value	■■■■	■■■■	■■■■

Plot 4 – Fire & Rescue Training Area



Plot 4 is currently arranged to be Essex County Council's Fire & Rescue training area, located towards the northern boundary of the site. The tenancy schedule notes that Essex Fire & Rescue Service previously occupied all buildings within this plot on an occupational lease that expired in December 2018. We have been unable to ascertain whether or not they are still in occupation of these premises, and have therefore made the assumption that these buildings are vacant.

As with Plots 3 & 9, we have adopted the investment method of valuation in our appraisal of Plot 4, on the assumption that an incoming purchaser might look to acquire the existing building accommodation and re-let the space for commercial uses. We have used the provided asset schedule and site plan to identify the quantum of built space that exists within this Plot, which has produced the following accommodation schedule:

Building	Description	Area (sq m)	Area (sq ft)
211	Store	142	1,528
212	Admin Building	338	3,638
215	Butler Shed	373	4,015
217	Store	142	1,528
247	Fire Extinguisher Store	44	474
		1,039	11,184

In consideration of the presence of the administration building, we have divided the existing accommodation in to B1 and B2 & B8 space, so as to accurately capture the varying rental levels that might be applied to each use class. This assumption provides for the following gross areas:

Use Type	Description	Area (sq m)	Area (sq ft)
B2 & B8	Store	142	7,545
B1	Admin Building	338	3,638
		1,039	11,184

We have then valued each use type separately, making the following assumptions within our approach:

Inputs	Storage Buildings	Admin Building
Accommodation (GEA)	7,545 sq ft	3,638 sq ft
Efficiency Ratio	■	■
Rent £/ psf	■	■
Void Period	1 year	1 year
Letting Fees	■	■
Legal Fees	■	■
Capitalisation Rate	■	■
Purchasers Costs	■	■

As before, we have approached our assessment of value on the assumption that there would be no refurbishment cost required for each building and use type. Given the existing use of the accommodation as storage and office buildings, it is assumed that the space is already in a condition appropriate for the local occupational market.

Our valuation approach to each accommodation type is outlined in the below table.

Storage Buildings

Inputs	Building 211	Building 215	Building 217	Building 247
Area (GEA) (sq ft)	1,528	4,015	1,528	474
Efficiency Ratio	■	■	■	■
Area (GIA) (sq ft)	■	■	■	■
Rent £/ psf	■	■	■	■

Annual Rent £/ pa	██████	██████	██████	██████
Void Period (years)	1 year	1 year	1 year	1 year
PV £1	██████	██████	██████	██████
Capitalisation Rate	██████	██████	██████	██████
Gross Value	██████	██████	██████	██████
Letting Fees (10%)	██████	██████	██████	██████
Legal Fees (5%)	██████	██████	██████	██████
Purchasers Costs	██████	██████	██████	██████
Net Value	██████	██████	██████	██████

Admin Building

Inputs	Building 212 (Admin Building)
Area (GEA) (sq ft)	██████
Efficiency Ratio	██████
Area (GIA) (sq ft)	██████
Rent £/ psf	██████
Annual Rent £/ pa	██████
Void Period (years)	1 year
PV £1	██████
Capitalisation Rate	██████
Gross Value	██████
Letting Fees (10%)	██████
Legal Fees (5%)	██████
Purchasers Costs	██████
Net Value	██████

Using the above assumptions and method of valuation, we are of the opinion that the value of Plot 4 is in the region of £██████. We would comment, however, that a higher receipt might be expected if the lease to Essex Fire & Rescue Service were to be renewed and formalised at the previous passing rent of £██████ per annum. The formalisation of the lease and the relative covenant strength of this public sector entity could make this a more attractive investment proposition.

Plot 5 – Ancient Woodland



Plot 5 comprises approximately 4.5 hectares of ancient woodland, situated towards the northern boundary of the site. We have appraised the Plot using the comparable method of valuation, under which we have applied an appropriate capital value per acre to the land area, which is informed via the analysis of similar woodland transactions.

For the purposes of this appraisal, we have assumed that the woodland would be sold with commercial value, and have therefore appraised the plot using comparables from commercial woodland sales (though the ancient woodland status of this asset may mean realising this value may be more challenging).

We outline our comparable approach below:

	Plot 4
Area	4.5 hectares
Rate per Hectare (per acre)	£ [REDACTED]
Gross Value	[REDACTED]

On the basis of our comparable approach, we would therefore estimate the value of Plot 5 to be in the region of £ [REDACTED].

Plot 6 – Buildings in Good Condition Retained



Plot 6 comprises two vacant hangars, located in the south west and south east of the site. It is our understanding that both hangars remain in reasonable condition, although we have been provided no information as to their construction or recent use.

We have adopted the investment method of valuation in our appraisal of these hangars, which has been based upon the assumption that a purchaser might look to acquire the existing accommodation and re-let the space for commercial purposes. As previously, we have relied upon the asset schedule to identify the size of each hangar, which we detail below.

Building	Description	Area (sq ft)
161	Hangar T2 Type	39,288
73	DTC Hangar	34,175
	1,039	73,464

Considering the quality and likelihood of the hangars remaining as a B2 / B8 use type, we have valued the units on the assumption that they will remain as storage. We used the following assumptions within our appraisal:

Inputs	Building 161	Building 73
Lettable Accommodation (GEA)	39,288 sq ft	34,175 sq ft
Efficiency Ratio	█	█
Rent £/ psf	█	█
Void Period	1 year	1 year
Letting Fees	█	█
Legal Fees	█	█
Capitalisation Rate	█	█
Purchasers Costs	█	█

On the basis of the above assumptions, we have valued each unit according to the below methodology:

Inputs	Building 161	Building 73
Area (GEA) (sq ft)	39,288	34,175
Efficiency Ratio	█	█
Area (GIA) (sq ft)	█	█
Rent £/ psf	█	█
Annual Rent £/ pa	█	█
Void Period (years)	1 year	1 year
PV £1	█	█
Capitalisation Rate	█	█
Gross Value	█	█
Letting Fees (10%)	█	█
Legal Fees (5%)	█	█
Purchasers Costs	█	█
Net Value	█	█

Using the investment method of valuation and the assumptions outlined above, it is our opinion that the capital value of Plot 6 is in the region of £█.

Plot 7 - Agriculture



Plot 7 comprises the remainder of the site and is arranged to be agricultural land. As with Plot 5, we have appraised it using the comparable method of valuation, whereby we have applied an appropriate capital value per acre to the net land area, which is informed via the analysis of similar agricultural transactions. Our appraisal is based upon the assumption that a single purchaser would acquire the entire land holding in one transaction.

Considering the arrangement of the land amongst significant swathes of hardstanding and runways, we have made a number of significant deductions to arrive at a net land area. We detail these below:

Inputs	Building 161
Gross Land Area	239 hectares
<i>Less</i>	
<i>Ancient Woodland</i>	4.5 hectares
<i>Runway Hardstanding</i>	58.6 hectares
<i>Existing Build Accommodation in the South West corner</i>	26.9 hectares
Net Land Area	149 hectares

We have then used the outputs of our comparable research to identify an appropriate value per acre that can be applied to this net land take. In light of the existing land quality, we have used poor quality grazing land as the basis of our valuation.

We have then applied a slight quantum discount to our capital value per acre, in consideration of the sheer quantity of land being purchased. This quantum discount reflects roughly a 20% decrease on our estimation of the market rate for poor quality grazing land in the local area.

We outline our comparable approach within the below table:

Item	Plot 4
Area	149 hectares
Market Rate per Hectare	£ [REDACTED]
Adjusted Rate per Hectare	£ [REDACTED]
Gross Value	£ [REDACTED]

We have also factored in a number of costs identified by Gleeds for this element of the masterplan. We detail these costs in the below table:

Item	Plot 4
Fencing Works	£ [REDACTED]
Removal / Reconfiguration of Existing Utilities	£ [REDACTED]
Demolitions	£ [REDACTED]
Gross Value	£ [REDACTED]

We have excluded the 'Demolitions' element of this cost plan on the basis that it may not be required to be undertaken in order to proceed with a sale of this agricultural land. We have therefore only adopted the remaining 'Fencing Works' & 'Utilities' works costs within our appraisal. Clearly however – the estimated demolition cost is substantial at c.£ [REDACTED], and factoring this would have a significant detrimental impact on the return to the DIO. The nature and extent of demolitions needed requires further technical use diligence.

On the basis of our comparable approach, we would estimate the value of the agricultural land (Plot 7) to be in the region of £ [REDACTED]. We would suggest, however, that a slightly higher capital receipt may be expected for this agricultural element if the land were to be split up and disposed of as a number of smaller holdings.

Aggregate Value

Using the assumptions and approaches outlined above, we estimate the aggregate value of the Option 1 masterplan to be in the range of c.£ [REDACTED] to c.£ [REDACTED], as outlined below.

Item	Residential - Scenario 1	Residential - Scenario 2	Residential - Scenario 3
Plots 1 & 2	[REDACTED]	[REDACTED]	[REDACTED]
Plot 3	[REDACTED]	[REDACTED]	[REDACTED]
Plot 4	[REDACTED]	[REDACTED]	[REDACTED]
Plot 5	[REDACTED]	[REDACTED]	[REDACTED]
Plot 6	[REDACTED]	[REDACTED]	[REDACTED]
Plot 7	[REDACTED]	[REDACTED]	[REDACTED]
Plot 8	[REDACTED]	[REDACTED]	[REDACTED]
Plot 9	[REDACTED]	[REDACTED]	[REDACTED]
Gross Value	[REDACTED]	[REDACTED]	[REDACTED]

OPTION 2

Plots 1, 2 & 9 – Residential



Figure 2 - Residential 'Plot 1'



Figure 1 - Residential 'Plot 2'

HLM have provided 2 different scenarios of residential capacity on the site, split across two separate plots, as above and below. 'Plot 1' comprises a number of land parcels in the south west of the site, whereas 'Plot 2' sits alone in the north east of the site, adjacent to the solar panels and an area of woodland.

As consistent with Option 1, both scenarios assume that 64 FMQ dwellings remain, which we have excluded from the appraisal on the same basis as previously. The quantum of refurbished and new build housing then differs between the two scenarios. As before, we have appraised these residential plots using a residual appraisal approach, in order to generate a Day 1 Residual Land Value.

	Scenario 1	Scenario 2
Retained	64	64
Refurbished	84	0
Plot 1 - New Build	802	886
Plot 2 - New Build	50	50
TOTALS	1,000	1,000

Both scenarios assume a maximum site capacity of 1,000 dwellings, split between the two plots. Scenario 2 differs only in the sense that it assumes no units will be refurbished, and thus a higher number of new build dwellings will be provided.

We have appraised both of these scenarios separately, on a plot-by-plot basis, and outline the assumptions and unit mixes below.

New Build Units

We have adopted a policy compliant affordable housing level within our appraisals, and have applied what we believe to be a market facing unit mix for the private dwellings. We outline this private mix below.

Plot 1

Scenario 1

Unit	Proportion	Quantum	Average Unit Size (sq ft – NSA)
2 bed house	40%	193	753

3 bed house	50%	241	1,023
4 bed house	10%	48	1,238
TOTALS (AVERAGE)	100%	481	(936)

Scenario 2

Unit	Proportion	Quantum	Average Unit Size (sq ft – NSA)
2 bed house	40%	213	753
3 bed house	50%	266	1,023
4 bed house	10%	53	1,238
TOTALS (AVERAGE)	100%	532	(936)

On the basis of our review of the local market and analysis of nearby residential developments, we have assumed a unit mix weighted towards 2 and 3 bedroom houses, with no provision made for flatted units. This will need to be considered further in due course through more detailed masterplanning work, given the much larger scale of residential considered in this option - and a need to provide some massing to generate design and placemaking qualities.

Plot 2

Both Scenarios

HLM draw no distinction between the two scenarios in relation to Plot 2. We have therefore applied the same private unit mix to both scenarios, as below, which, again, has a slant towards the provision of smaller units.

Unit	Proportion	Quantum	Average Unit Size (sq ft – NSA)
2 bed house	40%	12	753
3 bed house	50%	15	1,023
4 bed house	10%	3	1,238
TOTALS (AVERAGE)	100%	30	(936)

Refurbished Units

Scenario 1 assumes that 84 existing FMQ dwellings are to be retained, refurbished and sold on to the open market. We have adopted the same valuation approach and assumptions as the Option 1 appraisal, which includes an assumption of average unit size at 1,485 sq ft (138 sqm).

We would also note that within Scenario 2, which assumes no units are to be refurbished, no additional cost has been included for the demolition of these 84 FMQ dwellings. This will need to be factored in, as appropriate.

Using the above unit mix assumptions, the proposed Option 2 masterplan of MDP Wethersfield generates the following residential development areas, split between private, affordable and refurbished accommodation.

Plot 1

	Scenario 1	Scenario 2
Private Accommodation (sq ft)	450,742	498,348
Affordable Accommodation (sq ft)	300,094	331,252

Refurbished Accommodation (sq ft)	124,740	-
TOTALS	875,575	829,601

Plot 2

	Both Scenarios	
Private Accommodation (sq ft)	28,094	
Affordable Accommodation (sq ft)	18,729	
Refurbished Accommodation (sq ft)	-	
TOTALS	46,823	

Given the scale of development proposed under Option 2, we would suggest that a small commercial centre would be required to support the scheme. This would typically be comprised of a small number of retail units and some local community space, with perhaps a small scale healthcare offering. We have not included this commercial element within our appraisals, but would estimate that it would be largely cost neutral, in the sense that the value generated from it would be broadly equivalent to the cost of providing it.

We have adopted the inputs outlined below within our appraisals, which includes a number of elements drawn from Gleeds' cost assessment. Gleeds' costs amount to c.£■■■■■, which we have shaded in blue, for reference.

As with Option 1, our appraisal of this residential land is based upon the assumption that outline planning permission is in place, and that no off-site highways costs are required.

Assumption	Comment
Private Residential Sales Values (£ per sq ft)	£■■■■■
Affordable Housing Sales Values (£ per sq ft)	£■■■■■ (5■■■■■ of private sales values)
Refurbished Residential Sales Values (£ per sq ft)	£■■■■■
Agent Fee	■■■■■
Legal Fee	■■■■■
Private Residential & Affordable Construction Cost (£ per sq ft)	■■■■■ (BCIS Lower Quartile + ■■■■■ for externals)
Refurbished Unit Cost (£ per unit)	£■■■■■
Reserved Matters Planning Cost (£ per unit)	£■■■■■
Contingency	■■■■■
Fencing Works	£■■■■■
Demolitions	£■■■■■
Removal of Hard Surfacing	£■■■■■
Form Junctions onto Existing Roads	£■■■■■
General Items	£■■■■■
Removal of Existing Runways	£■■■■■
Removal of Utilities	£■■■■■
Section 106 Costs (£ per unit)	£■■■■■
Professional Fees	■■■■■
Marketing (Private)	■■■■■
Sales Agent Fee (All)	■■■■■
Sales Legal Fee (All)	■■■■■
Finance Cost	■■■■■

We have also applied a blended profit margin to each Scenario, as outlined below.

Blended Profit Margin	Scenario 1	Scenario 2
Plot 1	18.71%	18.08%
Plot 2	18.07%	18.07%

It is our understanding that the existing agreement between the DIO and the USAAF pertaining to the 148 FMQ dwellings is also applicable in this Option 2 masterplan. As discussed previously, we have therefore appraised the 84 refurbished units within Scenario 1 as a standalone scheme in order to identify the land receipt specific to these dwellings. We have adopted the same inputs and assumptions as previously outlined, which we include again below:

Assumption	Comment
Refurbished Residential Sales Values (£ per sq ft)	£■■■■
Agent Fee	■■■■
Legal Fee	■■■■
Refurbished Unit Cost (£ per unit)	£■■■■
Contingency	■■■■
Professional Fees	■■■■
Marketing (Private)	■■■■
Sales Agent Fee (All)	■■■■
Sales Legal Fee (All)	■■■■
Finance Cost	■■■■
Profit on GDV	■■■■

Using the above assumptions, the two presented scenarios produce receipts due to the DIO of roughly £■■■■ - £■■■■ (as below), which reflects a land value of circa £2■■■■ per acre.

	Scenario 1	Scenario 2
<i>Plot 1</i>		
GDV	■■■■■■■■	■■■■■■■■
Total Construction Costs	■■■■■■■■	■■■■■■■■
Profit	■■■■■■■■	■■■■■■■■
Residual Land Value	■■■■■■■■	■■■■■■■■
USAAF Apportionment	■■■■■■■■	■■■■■■■■
Receipt Due	■■■■■■■■	■■■■■■■■
<i>Plot 2</i>		
GDV	■■■■■■■■	■■■■■■■■
Total Construction Costs	■■■■■■■■	■■■■■■■■
Profit	■■■■■■■■	■■■■■■■■
Residual Land Value	■■■■■■■■	■■■■■■■■
Aggregate Receipt Due	■■■■■■■■	■■■■■■■■

Plot 3 – Commercial / Storage Area Retained & Expanded



Figure 3- Parcel 1



Figure 4 - Parcel 2



Figure 5 - Parcel 3



Figure 6 - Parcel 4

Plot 3 is made up of four distinct parcels of commercial / storage space, as per the above extracts of the masterplan. These parcels are variously comprised of employment land space and existing built accommodation, currently given over to storage / industrial uses. These four parcels are situated around the borders of the site, with two being to the direct north, one to the south east, and the last being a smaller parcel in the south west.

We have appraised each parcel in turn, and outline our approach to each below.

Parcel 1

Parcel 1 is located immediately to the north of the proposed residential area and directly to the south of the easternmost prison. There is no existing accommodation on site, with its current use being as hardstanding for a small section of the runway.

It is proposed that this parcel be sold off to a commercial developer, who will then look to build out a small scale commercial scheme on site. Accordingly, we have appraised the site on the basis of it being sold off as development land, for which we have used the comparable method of valuation. From the analysis of comparable employment land sales, we have applied an appropriate £ per acre land value to the site in order to generate a value.

We would note that the evidence for employment land sales in the local area is extremely sparse, and the limited comparables available tend to be for industrial warehouse developments in better connected locations. It is therefore very difficult to apply an accurate rate per acre to the site. Nevertheless, we outline our comparable approach below.

Parcel 1	
Area	5.48 hectares
Rate per Hectare	£ [REDACTED]
Gross Value	c.£ [REDACTED]

Parcel 2



Parcel 2 comprises 16.82 hectares of employment land to the south east of the site, located directly below the solar panel farms. The site has a small number of existing buildings on site, mostly being given over to warehouse storage, which are of nominal value. The remainder of the site comprises commercial development land.

As with Parcel 1, it is assumed that this site be sold off to a commercial developer. We have therefore taken a similar approach to above, and adopted the comparable method of valuation in our appraisal. We outline our approach below.

	Parcel 2
Area	16.82 hectares
Rate per Hectare	£ [REDACTED]
Gross Value	c.£ [REDACTED]

We have then also accounted for a number of cost items identified within Gleeds' assessment, which we detail in the below table. Significantly, we have chosen to exclude the cost for removing the existing runways on the assumption that it would not strictly be required in order for a commercial development to come forwards. We are therefore treating this as a below the line cost.

Item	Cost
Fencing	£ [REDACTED]
Demolitions	£ [REDACTED]
Removal of existing hard surfacing	£ [REDACTED]
Removal of existing Runways	£ [REDACTED]
Removal of utilities	£ [REDACTED]
Total	£ [REDACTED]
Total excl. runways	£ [REDACTED]

Given the location of Parcel 2 being directly below the solar panel farms, it is assumed that the costs outlined above can be split equally between these two elements. We have therefore attributed 50% of the costs above to Parcel 2, as summarised below.

	Parcel 2
Gross Value	£ [REDACTED]
50% Apportionment of Costs	£ [REDACTED]
Gross Value	c.£ [REDACTED]

Parcel 3

Parcel 3 is identical to 'Plot 3' in the Option 1 masterplan, which we outline fully in the above section. Given the lack of any differentiation between the two, we have adopted the exact same approach and assumptions, and our opinion of value remains consistent at £ [REDACTED].

Parcel 4

Parcel 4 sits immediately adjacent to the Essex Fire & Rescue service plot at the north of the site, and directly to the north west of the parcel of ancient woodland. The site currently comprises a number of existing 'Dutch Barns', which have historically been used for storage purposes, a 'VA Admin building', and large stretches of hard standing.

We have adopted the investment method of valuation in our appraisal of this parcel, which has been based upon the assumption that any purchaser might look to acquire the existing building accommodation and re-let the space in it's

existing use for commercial purposes. We have therefore relied upon the aforementioned asset schedule & full site plan to identify the quantum of built space that exists within the site, which has provided the below accommodation schedule:

Building	Description	Area (sq m)	Area (sq ft)
2011	Dutch Barn	374	4,026
2012	Dutch Barn	374	4,026
2013	Dutch Barn	374	4,026
2014	Dutch Barn	374	4,026
2015	Dutch Barn	374	4,026
2016	Dutch Barn	374	4,026
2017	Dutch Barn	374	4,026
2018	Dutch Barn	374	4,026
256	Office	150	1,615
257	VA Admin Building	1,000	10,764
		4,142	44,584

In order to account for the distinct type of space provided (storage & office accommodation), we have valued each type separately, making the following assumptions:

Inputs	Dutch Barns	Office Space
Accommodation (GEA)	32,206 sq ft	12,378 sq ft
Efficiency Ratio	■	■
Rent £/ psf	■	■
Void Period	1 year	1 year
Letting Fees	■	■
Legal Fees	■	■
Capitalisation Rate	■	■
Purchasers Costs	■	■

As before, we have approached our assessment of value on the assumption that there would be no refurbishment cost required for each building and use type. Given the existing use of the accommodation as both storage and office buildings, it is assumed that the space is already in a condition appropriate for the local occupational market.

Our valuation approach to each accommodation type is outlined in the below table.

Dutch Barns

Inputs	2011	2012	2013	2014	2015	2016	2017	2018
Area (GEA) (sq ft)	4,026	4,026	4,026	4,026	4,026	4,026	4,026	4,026
Efficiency Ratio	■	■	■	■	■	■	■	■
Area (GIA) (sq ft)	3,945	3,945	3,945	3,945	3,945	3,945	3,945	3,945
Rent £/ psf	■	■	■	■	■	■	■	■
Annual Rent £/ pa	■	■	■	■	■	■	■	■
Void Period (yrs)	1 year	1 year	1 year	1 year	1 year	1 year	1 year	1 year



PV £1	█	█	█	█	█	█	█	█
Cap Rate	█	█	█	█	█	█	█	█
Gross Value	█	█	█	█	█	█	█	█
Letting Fees (10%)	█	█	█	█	█	█	█	█
Legal Fees (5%)	█	█	█	█	█	█	█	█
Purchasers Costs	█	█	█	█	█	█	█	█
Net Value	█	█	█	█	█	█	█	█

Office Buildings

Inputs	Building 256	Building 257
Area (GEA) (sq ft)	█	█
Efficiency Ratio	█	█
Area (GIA) (sq ft)	█	█
Rent £/ psf	█	█
Annual Rent £/ pa	█	█
Void Period (years)	█	█
PV £1	█	█
Capitalisation Rate	█	█
Gross Value	█	█
Letting Fees (10%)	█	█
Legal Fees (5%)	█	█
Purchasers Costs	█	█
Net Value	█	█

We have also factored in a number of costs identified by Gleeds that are specific to this area of the masterplan, which we outline below.

Item	Plot 4
Fencing Works	█
Demolitions	█
Gross Value	█

On the basis of the above, we would estimate the value of Parcel 4 to be in the region of £█, once Gleeds' costs have been accounted for.

Aggregate

Using the above assumptions and methods of valuation, we are of the opinion that the value of Plot 3 is in the region of £█. This is made up of the following sums.

Parcel	Net Value
Parcel 1	█
Parcel 2	█
Parcel 3	█
Parcel 4	█
Gross Value	█



Plot 4 – Essex Fire & Rescue Service



We have appraised Plot 4 using the same approach and assumptions as used within the Option 1 Masterplan.

We would refer you back to the prior section for narrative and commentary around the appraisal of this Plot. As there has been no alteration to this Plot between Options 1 and 2, our opinion of value remains as it was.

We are therefore of the opinion that the value of Plot 4 is in the region of ██████████.

Plot 5 – Ancient Woodland



We have appraised Plot 5 using the same approach and assumptions as used within the Option 1 Masterplan.

We would refer you back to the prior section for narrative and commentary around the appraisal of this Plot. As there has been no alteration to this Plot between Options 1 and 2, our opinion of value remains as it was.

We are therefore of the opinion that the value of Plot 5 is in the region of £██████████.

Plot 6 – Buildings in Good Condition Retained





We have appraised Plot 6 using the same approach and assumptions as used within Option 1 Masterplan.

We would refer you back to the prior section for narrative and commentary around the appraisal of this Plot. As there has been no alteration to this Plot between Options 1 and 2, our opinion of value remains as it was.

We are therefore of the opinion that the value of Plot 6 is in the region of £ [REDACTED].

Plot 7 – Agricultural Land



Plot 7 comprises the agricultural element of the site. As with Plot 7 of the Option 1 masterplan, we have appraised it using the comparable method of valuation, whereby we have applied an appropriate capital value per acre to the net land area.

At the point of writing, it is still unclear as to how much land the MoJ are taking in their development of two new prisons. We have therefore made a high level assumption as to the net land area remaining for agricultural use, which we detail below.

Inputs	Building 161
Gross Land Area	130 hectares
Less, say	30 hectares
Net Land Area	100 hectares
Rate per hectare	£ [REDACTED]
Gross Value	£ [REDACTED]

We have then factored in a number of costs identified as necessary by Gleeds, as below.

Inputs	Building 161
Gross Value	£ [REDACTED]
Less	
Fencing Works	£ [REDACTED]
Removal / Reconfiguration of existing utilities	£ [REDACTED]
Removal of existing Runway Hard Surfacing	£ [REDACTED]
Gross Value	c.£ [REDACTED]

As discussed previously, we have excluded the cost for removing the existing runway on the assumption that this cost would not strictly be required for a sale of the agricultural land to progress. We are therefore treating it as a 'below the line' cost.

Based upon the above approach and assumptions, we are of the opinion that the value of the agricultural land (Plot 7) is in the region of £[REDACTED]. We would caveat this, however, by noting that this figure will be subject to change when the total area required by the MoJ is confirmed.

Plot 8 – Cat C Prisons & Solar Farms



The Option 2 masterplan provides for two new Category-C prisons to come forwards as part of the wider scheme, with both being located towards the west of the site. It is our understanding that the DIO are in direct negotiation with the MoJ over the disposal of the land required for these prisons and, at the time of writing, we have not seen any firm commitments over the land take required. On the basis that the DIO are talking directly with the MoJ, we have excluded these two new prisons from our appraisal of the site.

Plot 8 also provides for approximately 25.7 hectares of solar farms to be connected with the Category-C prisons, which will be located to the very east of the site. We have appraised this land using the investment method of valuation, on the basis that an investor may look to acquire the site and lease it to a solar farm operator.

Given their relative scarcity, rental and investment evidence for solar farm operations is typically extremely hard to source. We have therefore had to rely upon our experience of similar schemes with solar panels, and would recommend that a specialist surveyor be instructed in order to provide a more rigorous valuation of this plot.

Nevertheless, we outline our valuation approach in the below table.

Item	Plot 8
Land Area	25.7 hectares
Rent per Hectare	£[REDACTED]
Gross Annual Rent	£[REDACTED]
Cap Rate	[REDACTED]
Gross Value	c.£[REDACTED]

As mentioned within our commentary of the Plot 3 appraisal, we have also had to account for 50% of the costs identified by Gleeds for this area. These costs amounted to £1.165m (below), which is to be split equally between the solar farm and the commercial land to the south.

Item	Cost
Fencing	£ [REDACTED]
Demolitions	£ [REDACTED]
Removal of existing hard surfacing	£ [REDACTED]
Removal of existing Runways	£ [REDACTED]
Removal of utilities	£ [REDACTED]
Total	£ [REDACTED]
Total excl. runways	£ [REDACTED]

We have accounted for these costs within our appraisal, as below:

	Plot 8
Gross Value	£ [REDACTED]
50% Apportionment of Costs	£ [REDACTED]
Gross Value	c.£ [REDACTED]

On the basis of the above approach and assumptions, we are therefore of the opinion that the value of the solar farms within Plot 8 is in the region of £ [REDACTED].

Aggregate Value



Using each of the assumptions and approaches outlined above for each of the distinct plots, we estimate the aggregate value of the Option 2 masterplan to be around £ [REDACTED] to £ [REDACTED], as outlined below. Importantly, we would caveat this on the basis that the below two figures do not include an allowance for the agricultural land, which needs to be revisited once further clarity around the net land area is attained.

Item	Residential - Scenario 1	Residential - Scenario 2
Plots 1, 2 & 9	[REDACTED]	[REDACTED]
Plot 3	[REDACTED]	[REDACTED]
Plot 4	[REDACTED]	[REDACTED]
Plot 5	[REDACTED]	[REDACTED]
Plot 6	[REDACTED]	[REDACTED]
Plot 7	[REDACTED]	[REDACTED]
Plot 8	[REDACTED]	[REDACTED]
Plot 10	[REDACTED]	[REDACTED]
Plot 11	[REDACTED]	[REDACTED]
Gross Value	[REDACTED]	[REDACTED]

RESIDUAL LAND VALUES

Using the assumptions and approaches outlined in the above sections, Options 1 and 2 produce land values between c.£ [REDACTED] and c.£ [REDACTED], which equates to a per hectare range of c.£ [REDACTED] to c.£ [REDACTED] (c.£ [REDACTED] per acre and c.£ [REDACTED] per acre, respectively), assuming a site area of 322 hectares (795 acres).

Item	Option 1			Option 2	
	Scenario 1	Scenario 2	Scenario 3	Scenario 1	Scenario 2
Land Value	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Rate per Hectare	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Rate per Acre	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

In light of the comments made throughout – and especially with regard to the matter of a number of Gleeds' costings - especially that no off site works are factored in - it is not possible to comment firmly on the robustness of land value. Assessing off site needs will be required, but this needs to go in hand with understanding the MoJ off site proposals, and in parallel with discussion with the planning authority.



CONCLUSIONS

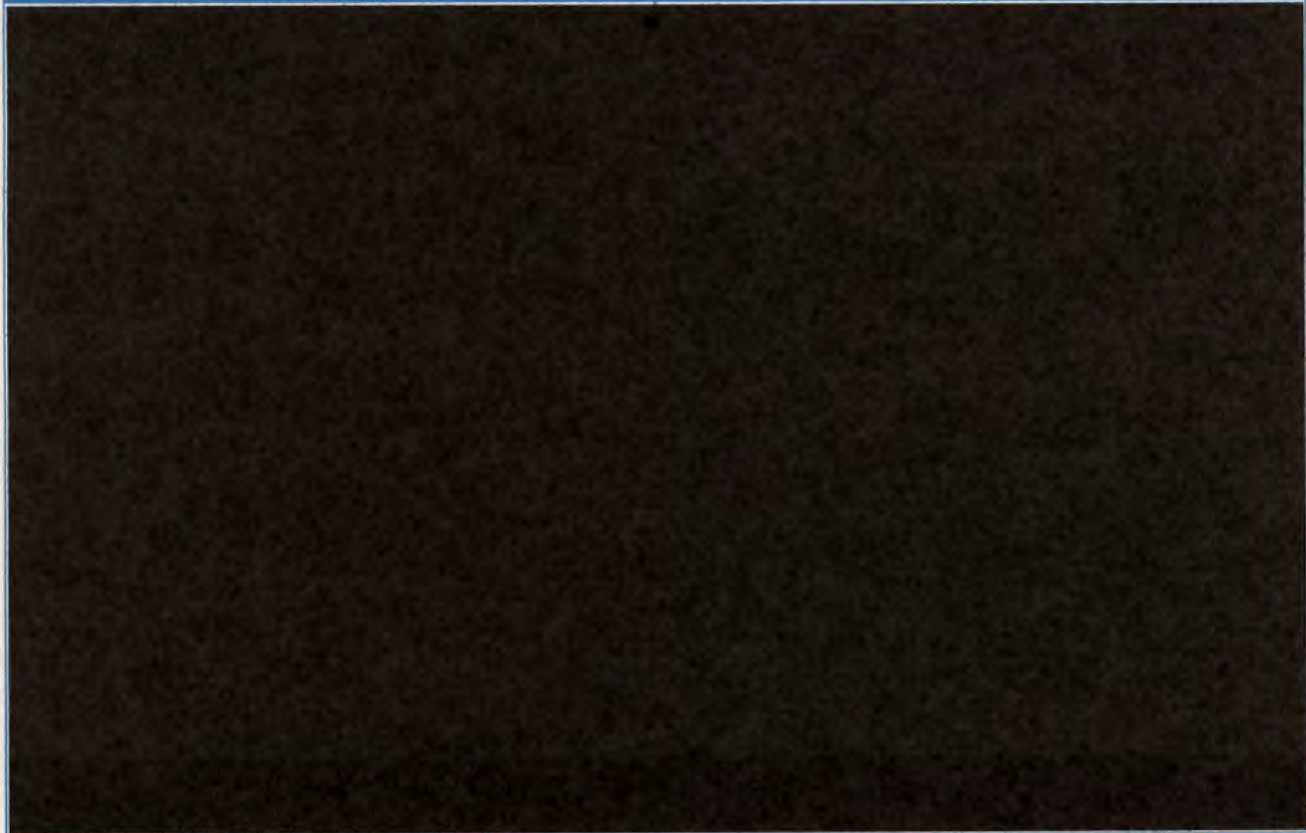
STRENGTHS

WEAKNESSES



OPPORTUNITIES

THREATS



APPENDIX A

MASTERPLAN



HLM
Architects

MDPGA Wethersfield

STAGE 1 REVIEW

Task directive - Appendix B4:
Masterplanning – Capacity and feasibility

V5 - FINAL DRAFT

10th April 2021

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13	3.0 Assessment Way forward - A concept development framework Primary land use development Small scale residential development Supporting land uses and options
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DIO-SPA-Appendix B4: Masterplanning – Capacity and feasibility

THE MASTERPLANNING REVIEW PURPOSE

Masterplanning is a key part of the SPA role: paramount to establishing feasibility by providing the design guidance, site capacity and baseline information necessary to determine the site-specific town-planning strategy that will inform the development appraisal.

Alongside the town planning and development appraisal advice it will form the basis of an objective review of the options for development.

DIO envisage the masterplan study to follow the RIBA plan of work through stages 0–2 (and on occasions RIBA stage 3, where the site requires more detailed design input), initially establishing site capacity. In some instances the masterplan scope will be tailored to specific requirements in the form of a hybrid study.

The masterplan study would also be presented in the form of design documents to be used for internal approvals and external engagement, consultation, planning promotion and planning applications, as appropriate for Local Authority approval.

It will provide the conceptual land use layout to guide future growth and development of the specific site. It will provide analysis of connectivity, buildings, social settings, environmental impacts and the site's landscape surroundings. It will also be reviewed and refined as more information becomes available from other SPA/SETA outputs.

Finally it will both inform and be guided by the commercial and planning targets which combine to form a site disposal strategy. The masterplan study would also inform prospective purchasers of the underlying potential of a site.

SPA STAGES

The SPA stages of work are set out as follows:

Stage 1

Capacity Assessment and Schedule of Accommodation;
Masterplan Options Assessment (demonstrating design evolution);
Local Plan Representations; and
Masterplan.

Stage 2

Masterplan *evolved;
Development Brief/Marketing Prospectus;
Outline Planning Application Drawings, Design and Access Statement, Public Realm, Landscape, Design Codes;
Consultation presentation documents (CGIs) as appropriate/necessary; and
Development Phasing subject to agreed programme / time scales.

*Evolved masterplan is the result of assessments made following a stage 1 process.

For this Stage 1 hybrid report an analysis review combined with land use options have been undertaken.

REVIEW SCOPE SUMMARY

Stage 1 – Hybrid

HLM Architects are appointed by the Defence Estate Optimisation Programme (DEOP) as masterplanners within the Strategic Property Advisors (SPA) Task Directive-Appendix B4 to carry out Capacity and Feasibility assessments for sites identified for review.

Two high-level scoping reports were undertaken by Tibbalds CampbellReith for Homes England to explore options for the redevelopment of the former RAF Wethersfield site. The studies completed include:

- MDPGA Wethersfield, Stage 1, Report, June 2018
- MDPGA Wethersfield, Stage 2, Final Report, July 2019

The purpose of this stage 1 report involved a high-level assessment of the site's development constraints and opportunities, as well as the preparation and appraisal of various potential land use strategies.

The purpose of the stage 2 report involved more detailed assessments of the potential Ministry of Justice requirements to locate a prison at Wethersfield, along with the potential for up to 500 new homes in addition to the existing dwellings, which are to be retained by the MoD until at least the early 2030s.

The purpose of this refreshed stage 1 report is a continuation of high-level studies to assess the masterplan feasibility. It provides a précis of key themes resulting from the Tibbalds studies, up to date land use assessment and potential options.

Braintree Local Authority adopted Local Development Plan 2013-2033 sets out ambitious housing needs for the plan period. While the viability of a large garden village located at Wethersfield was not proven, the potential to deliver residential homes at the site through the local plan still exists.

The potential options presented by the Tibbalds report viewed within the context of current and emerging planning policy still have relevance. However due to the Covid-19 pandemic, the impact on regional economies along with limited strategic connections to the site, has resulted in a new set of options being presented for consideration within this Stage 1 report.

Braintree County Council requires clarification from the DIO as to the sites future in order to consider land use options through the planning review process. Major development of the site is possible through the Ministry of Justice's proposal to locate a new prison here. This along with potential new housing benefiting from planned infrastructure improvements to serve the prison, and the need to maintain SFA on the site, increases the viability for future development at Wethersfield.

This Stage 1 hybrid review therefore provides an overview and assessment of the existing Tibbalds work undertaken, further SPA consultant team land use considerations and, a series of proposed framework land use strategies.

BACKGROUND

The purpose of this note is to provide a summary of key masterplan themes assessed within the Tibbalds Campbell Reith Stage 2 Final Report (July 2019). In addition a series of selected options have been considered and explained, accompanied by a sequence of option diagrams. Commentary is focused toward the description of land uses and their adjacency to existing elements and proposed uses. Where the Covid-19 global pandemic has impacted on commercial norms, regional market adjustments for both commercial businesses and housing have been considered in these proposals.

The sustainability agenda is far reaching and impacts on all forms of development. Where the UN council has set out 17 goals to transform our world and achieve a reduction in global warming by 2030. The Paris agreement (2015) sets out a framework for achieving this. Along with the UK's National Determined Contribution (December 2020) goals and the latest Future Homes Standard decarbonised targets all present clear guidance on decarbonising our environment. A viable case therefore exists to use the site wisely and through disposal meet some/all of the Governments key energy sectors targets.

The DIO's target for delivering best values at Wethersfield should result in:

- Strengthening economy
- Improving natural and built environment
- Benefits to the local economy
- Viable and sustainable

An additional DIO objective is to reduce the burden of costs to manage the site and any of its retained elements. Tibbalds Campbell Reith report (2019) advised Homes England and the MoD that there may be an opportunity to bring forward an application for part of the site, comprising a Category C prison for 1600 inmates and possibly up to 500 residential units. Such an application should be designed to allow the remainder of the site to come forward for development in the future. However, the report concludes 'Given the relatively modest potential receipt for residential development of 500 dwellings in comparison to the investment in a new prison, and planning risks involved, LSH would advise the key consideration should be with regard to a new prison, but allow for flexibility in plans for future residential development, and taking account of future development in the design of infrastructure and longer term design and spatial master planning of the area'.

The report also suggested a list of alternative uses which have been considered. The highlighted uses (overleaf) are considered viable and collectively could provide the correct sub-division of the site to achieve best value:

CONSIDERED USES

PLANNING CLASS USES	DESCRIPTION
Residential	Infill development around current housing
	Gypsy and Traveller provision
	Speciality housing eg. Older persons', health , related to aviation, sports facilities and woodland
	Small scale, unique villages including self-build and custom-build
	Garden Village (criteria is 1,500-10,000 homes)
Institutional	Prison
	Boarding school
	Training centre
Leisure	Zoo/nature park
	Theme park
	Golf course
	Showground/festivals
	Race track/drag racing (e.g. Dunsfold)
	Rowing lake/sports complex
	Recreational airfield use
Industrial/ commercial/ agricultural	Research and development facility
	Wind farm
	Solar P.V. farm
	Waste to energy
	Return to agricultural use
	Grazing land
	Covered storage
	Film and TV set/studio
	Open storage
	Data centre
	Conference facilities and hotel
	Pilot training
	Storage/hangars for aeroplanes (Stansted)
Other	Wildlife and conservation area, ecological mitigation site (newts, farmland birds, nightingales etc.)

List of alternative site uses considered

ANALYSIS SUMMARY

Regional development policy sets out to support housing, energy production, SME's and rural enterprises growth along with sustainable development. These are set within the guidelines of:

- Minimising visual impact
- Be suitable to the countryside
- Support rural workers
- Re-use existing buildings

Economic drivers for the local area are agriculture, public sector (defence, fire brigade and police training) along with smaller distribution, storage facilities, cottage industries and other rural enterprises. These consist of media marketing, landscape material suppliers, vehicle workshops, animal homes and riding schools to name a few. For the SME's, cottage industries and homeworking workforce, online connectivity is seen as vital to the local economy.

Improvements to road infrastructure to accommodate any proposed increased load is seen as necessary. This could range from small scale junction upgrades at a local level, to widening and potential new roads within the county.

Current issues and opportunities relating to the management and closure of the site include:

Key issues

- Crichel Down rules - still to be clarified and how this is applied
- Rural location not directly served by major roads
- Existing on-site assets (buildings) need maintenance management or demolition
- Future long-term management of site and its boundaries incurring costs
- Military jobs moving from site
- Local employment in rural Essex is well balanced, with a focus on SME's, agriculture and distribution
- There is no recreational environment reason to visit site locality
- Local road network is small and has limited room for a large increase in capacity
- Local power infrastructure not immediately suited to accepting major renewables
- Minor contamination and remediation on site

Key opportunities

- Promotion of site with MOJ for a new prison
- Promotion of site for solar farm or wind turbines
- Promotion of covered and secure storage in old munitions bunkers
- Promotion of potential expansion of general storage in areas not suitable for residential or recreation
- Established agricultural farming production and supply chain in local area could expand into site
- Established ecological areas of interest that could be expanded on site
- Small scale industry pods are seen as more viable than large-scale industry
- Small scale incremental development would serve the local community more effectively
- Medium scale residential development benefiting from brownfield allocation within rural village context
- Selective demolition to remove asset liabilities
- Selective reuse of buildings to improve stock and values in short-term
- Selective new build opportunities to meet incremental increase in market demand, both for commercial and residential
- Minor extraction of runway material for local aggregate use is possible
- Potential large-scale forestry site to deliver major industry carbon off-set policies



SITE LOCATION

- Site Boundary
- Existing mature woodland
- Existing runways and on site roads
- Existing built form
- 1 Wethersfield village
- 2 Existing FMQ housing
- 3 Existing military technical site
- 4 Existing storage site

SITE AREA

PLANNING AUTHORITY

EXISTING DATA REVIEW

322 HA

BRAINTREE DISTRICT COUNCIL

SITE LOGISTICS & POTENTIAL STAKEHOLDERS

- Existing 148 family and married quarters owned by USAF to be updated and retained for military use
- Continued use by the MOD Police and Guarding Agency for HQ and raining facilities
- Some short term occupational leases to 3rd Parties including Essex police and fire service.

SITE DESCRIPTION

The site comprises some 322ha of land in a relatively isolated rural location surrounded by farmland and pockets of ancient woodland. The Site is generally flat with some undulation across the wide expanse of airfield. Boundaries of the site while fenced are visually obscured in places through roadside and field boundary vegetation. It is therefore considered well screened through the natural topography, wooded areas, hedgerows and buildings.

There is a variety of operational buildings, hangars and structures positioned towards the fringes of the site. Historic military village accommodation is concentrated in the south-west corner.

Covering an area of 322 ha (795 acres) this site is made up of technical areas (xxha) military living quarters (xx ha), community facilities (xxha), the airfield (xxha), training areas (xxha) and covered storage (xxha).

There is currently one formal secure entry point into the airfield with three potential 'crash point' entrances into the site, served from the local road infrastructure. Direct access is achieved via Wethersfield Road, Hudson Hill and the B1053. These are small two-way country lanes constrained by hedgerows and mature planting. Stansted airport and the M1 lie 17miles further west of the site. The vehicle routes used to connect from the site with Standsted start as B roads and connect with the A120 approaching Standsted.

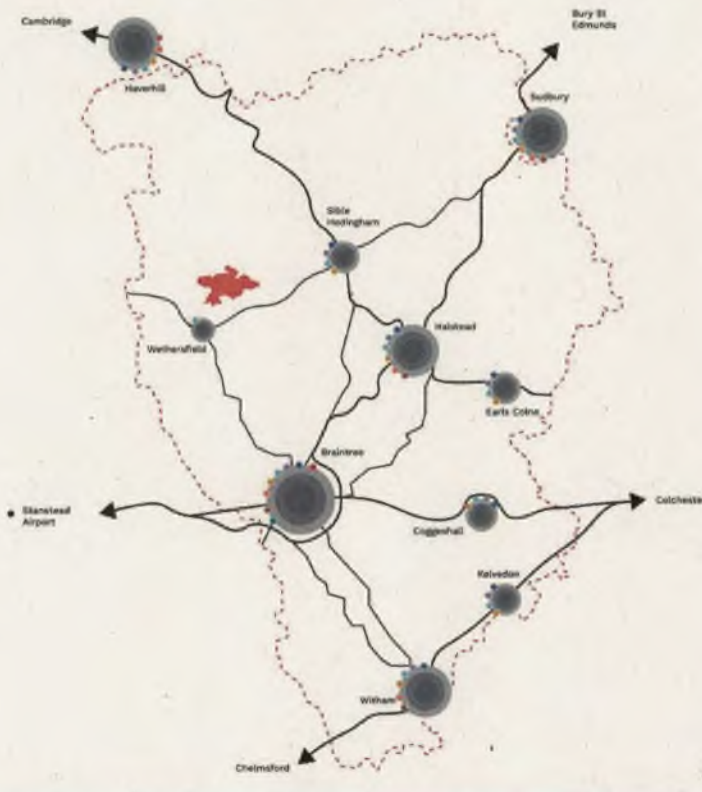
TITLE IMPLICATIONS

- Site owned in whole by the MoD
- Stopped up track to be re-instated

SITE CONDITIONS

- Former bomb disposal bunkers retained for storage
- Flat landscape lacking in biodiversity
- Southern site boundary close to wethersfield village
- Retained MoD facility on south-west boundary
- Well located for access to Stanstead airport
- Highway improvements required to access site
- Area of ancient woodland within red line boundary
- Existing runways interpreted as open space

COMMUNITY FACILITIES



KEY

- - - Braintree District Boundary
- Wethersfield site
- Surrounding settlement
- Primary school
- Convenience stores
- Medical facilities
- Restaurants and bars
- Supermarket
- High Street stores
- Hospital
- Train Station
- Stanstead airport

WIDER SITE ANALYSIS

Wethersfield village, located approximately 2 miles to the south of the site contains limited community facilities, providing a primary school and post office but little else. Convenience stores, medical facilities and public houses/restaurants are found in the villages of Great Bardfield and Sible Hedingham to the South-West and South-East but larger scale supermarkets, high street stores and larger medical facilities are located in Braintree approximately 9 miles to the South.

The site is located approximately 17 miles to the east of Stanstead Airport and its nearest train station is in Braintree providing links to the rest of the country. Colchester is the closest city and the site is located approximately 32 miles from the South-eastern coastline.

CONNECTIONS NETWORK



KEY

- Site boundary
- Surrounding connecting roads/tracks
- Entry to site
- Existing mature woodland
- Existing runways and on site roads
- Existing built form
- Nearby settlement

WIDER SITE ANALYSIS

The existing highway network is very limited surrounding the site, with the immediate road links generally being single carriageway, often single-lane, roads. The B1053 runs to the west of the site and provides access to the village of Finchingfield and routes towards Cambridge. The nearest trunk road is the A12 near Colchester, approximately 37 km from the site (40 minutes' drive). The closest primary road is the A131 (maintained by ECC) at 19 km from the site (25 minutes' drive), and this leads from Braintree to Sudbury. The closest access to the strategic road network is at Junction 9 of the M11, approximately 30 km from the site (40 minutes' drive).

Pedestrian and vehicular access to the site is available at three points; Sculpins Lane to the west, Hedingham Road to the east and an unnamed track to the north. These are all single track roads which would need improvement to cope with a larger volume of traffic.

ECOLOGY



KEY

- Site Boundary
- Existing mature woodland
- Semi-improved natural grassland
- Plantation broad-leaved woodland
- Amenity grassland
- Hardstanding
- Existing built form

SITE ANALYSIS

An Extended Phase 1 Habitat Survey, in conjunction with a Desk Study data search, was undertaken across the Wethersfield site in May 2018. The review noted that although the site does not benefit from a statutory nature conservation designation it is located within the SSSI Impact Risk Zone of Bovington Hall Woods and that a Local Wildlife site (LoWS) is located within the red line boundary within the ancient woodland shown adjacent. Three additional LoWS are located adjacent to the site boundary and seven more fall within a 2km radius. The site is therefore considered a likely area to support protected species and targeted species surveys would be required to understand the extent of protection required.

The site is largely made up of three dominant habitats; semi-improved neutral grassland, broadleaved plantation woodland and buildings and hard standing. The other habitat of note is the broadleaved semi-natural woodland found within the ancient woodland. These habitats likely support a wide range of wildlife and their variety should be maintained in any new development.

KEY

- Possible roman road alignment
- WWII and Cold War munitions stores
- Possible medieval moated enclosure
- T2 Hangars, Blister Hangars, Nissen Huts & Victor Alert Shelters
- Cold War recreational buildings

SITE ANALYSIS

Although the site contains no designated heritage assets there are a number of structures which could be considered as non-designated heritage assets:

- The WWII and Cold War Munitions Stores
- The T2 Hangars, Blister Hangars and Nissen Huts
- Gymnasium, Cinema, Chapel and Headquarters from the Cold War period
- The Victor alert shelters

Although no active listings are in place new developments should consider the potential of repurposing these assets in order to retain the WWII and Cold War heritage of the site as well as considering the potential to retain the semblance of the runways and taxi areas associated with the airfield as a marker of its historic function.

In addition to this a review of the Essex Historic Environment Record has identified that there is the potential for two below-ground archaeological non-designated heritage assets on the site consisting of:

- A possible Roman road alignment
- A possible Medieval moated enclosure

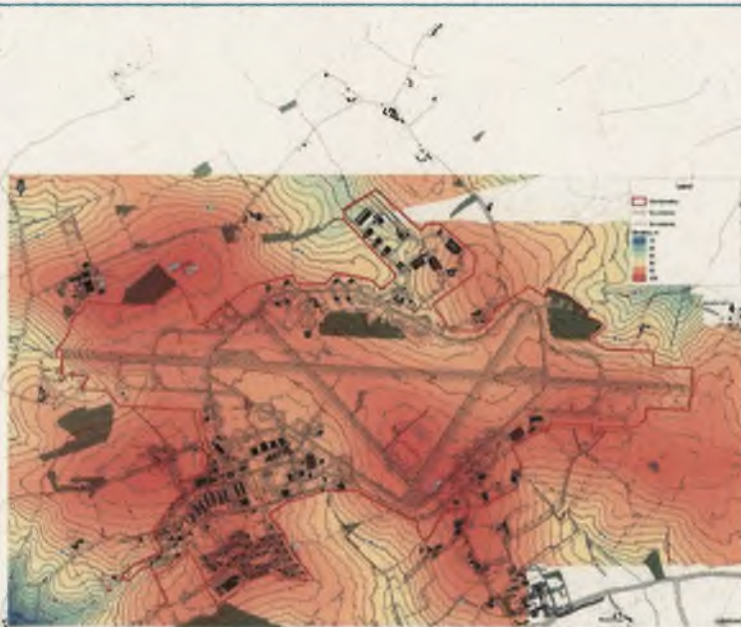
Further testing would be required to ascertain the extent of these remains and the protection they require.

Finally a number of listed buildings lie within 500m of the site boundary and will need to be duly protected if the site is developed further.

HERITAGE AND ARCHAEOLOGY



TOPOGRAPHY



KEY

- Site Boundary
- Site Contours
- 75m elevation
- 80m elevation
- 85m elevation
- 90m elevation
- 95m elevation
- 100m elevation

SITE ANALYSIS

Wethersfield is a largely flat site with datum levels of between 90-100m AOD across the wider site. As shown by the diagram the majority of the land is on a slightly higher plane than its surroundings generally rising around the perimeter and falling towards the centre and outskirts of the site.

There are several shallow valleys surrounding the site resulting in low levels of surface water flood risk however this is not viewed as a significant challenge and can be managed through the masterplan process. Overall the site lies in Flood Zone 1 and is considered a very low risk zone for flooding.

The site occupies a flat plateau in an otherwise undulating landscape which generally limits the prominence of the site and its buildings.

LANDSCAPE & VISUAL ANALYSIS



KEY

- Site boundary
- Long views to and from the site
- - -> Local views (long views curtailed)
- Existing mature woodland
- Filtered views into the site
- Visually prominent areas

SITE ANALYSIS

The platued nature of this site combined with the undulations of the surrounding landscape and natural features limit the visual prominence of the built form however there are still areas where sightlines will require consideration as demonstrated in the adjacent diagram and listed below:

- South eastern edge
- Northern edge in the viciting of the dutch barns and the ammunitions storage area
- Western end of the runway

These areas of prominence will need to be carefully considered in line with the proposals for development and in particular the western sightlines will need to be assessed in relation to their potential impact on Spains Hall Park and Garden and the conservation area around Finghingfield.

The site contains no tree preservation orders but has three named ancient woodlands adjacent to the boundary and one within the site.

GROUND CONDITIONS



KEY

- Site Boundary
- High risk of ground contamination, asbestos, munitions and UXO costs
- Training sites with high risk of contamination
- Existing military buildings - high risk of asbestos
- Incinerator waste
- Large areas of hard standing of unknown depth

SITE ANALYSIS

The site lies on natural grounds comprising Drift of the Lowestoft formation with up to 30% carbonate content. The below geology is bedrock from the Thanet formation or Lambeth group.

There are significant zones of hard surfacing of an unknown thickness and several areas where demolition costs are expected to be medium to high due to asbestos risk and or UXO costs.

The Cold War munitions store area is likely to have a high risk of UXO's as is the area to the west of this site as shown in the diagram.

Ground contamination is likely in the areas utilised heavily for training and storage as well as the area to the north where incinerator waster has been identified.

There is a risk of asbestos and leaking tanks across the site as well as potential offsite concerns. This challenges will need to be surveyed in detail as a solution for the site is progressed.

BUILT FORM ANALYSIS



KEY

- Site Boundary
- Cold War munitions store
- Essex fire service training facilities
- Essex police firing range
- MODPGA offices, training facilities, catering, student accommodation, social club, chapel, museum, third party leased storage and warehousing
- FMQ housing - 148 units
- Existing surrounding settlements

SITE ANALYSIS

Development in the airfield is concentrated in the south-western corner of the site closest to Wethersfield. This area is largely comprised of the technical training facilities, military amenity spaces such as the church, cinema and officers mess and the FMQ units.

148 FMQ units will need to be retained or replaced in the short term and the technical training facility will need to be retained until 2022.

Other developed areas around the site are related either to the Cold War munitions store or to the airfield use across the site. The T2 Hangars located in the south east and west of the site are of note for their heritage value.

OPPORTUNITIES



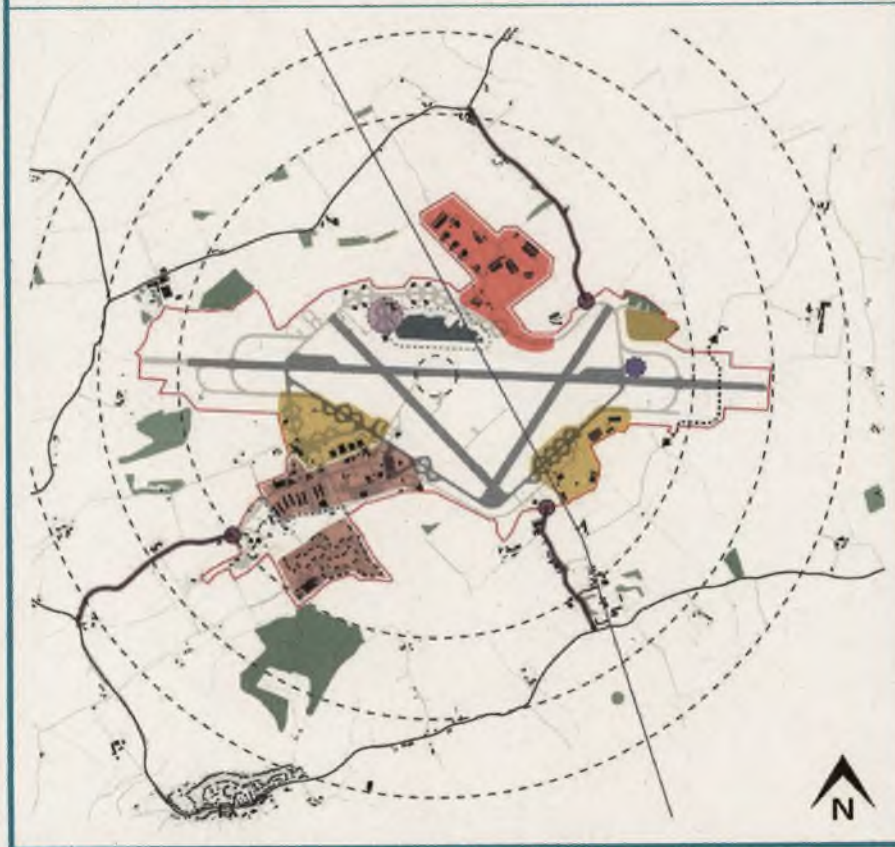
OPPORTUNITIES & CONSTRAINTS

KEY

- Site Boundary
- Opportunity to re-purpose and renew the existing FMQ and technical sites to better contribute to and compliment its surroundings
- ➔ Potential to reinstate cut off connectivity
- Potential to improve existing single track access
- Potential to provide new homes and facilities to benefit new and existing residents
- Potential to reinvigorate heritage assets such as the T2 Hangars
- Opportunity to improve and enhance existing storage facilities
- Opportunity site for new MOJ prison facilities in secluded location
- Opportunity site for agriculture or green energy infrastructure
- ➔ Opportunity to create new 'green' connections linking different areas of ancient woodland surrounding the site

The site could accommodate the delivery of employment and residential uses. Through creation of a medium scale village within the zone of existing buildings. A potential MOJ investment would also provide jobs and improve infrastructure. Some existing buildings could be reused for immediate commercial use. Other uses could include extra care or retirement living. Utilities and transportation improvements will improve local connectivity and the creation of an employment zone would generate local economic benefits. Site development would ultimately influence linkages with the wider county growth agenda. A new woodland plantation would extend existing ancient woodland and bring ecological benefits to the site. Neighbouring agricultural uses could also extend into the site to enhance local farming businesses. More high-tech industries such as solar farming could also be considered.

CONSTRAINTS



OPPORTUNITIES & CONSTRAINTS

KEY

- Site Boundary
- High risk of ground contamination, asbestos, munitions and UXO costs
- Training sites with high risk of contamination
- Existing military buildings - high risk of asbestos
- Area of incinerator waste with unknown contamination
- Large areas of hard standing of unknown depth which could be costly to demolish
- Possible Roman road alignment
- Possible medieval moated enclosure
- Narrow access links which may be costly to improve
- Limited surrounding facilities
- Technical site boundary - to be retained until 2025

Asbestos and other site contamination requires removal. Infrastructure upgrade costs are significant with local access and services not capable of supporting major development. The local authority is not in support of a major garden-village development. Legal support on title and covenant restrictions need to be cleared enabling public access in the future. Retained Service Family Accommodation needs to be upgraded and managed in perpetuity. Its continued provision sanitises parts of the site from redevelopment. The runways are over-scaled for reuse and partial removal is likely to incur significant infrastructure cost. There is a potential conflict of land use perception between a considered MOJ site opportunity and any residential provision. Commercial business activity is limited within the local area, so generating market demand in the future could be difficult.

WAY FORWARD – A CONCEPT DEVELOPMENT FRAMEWORK

To deliver one primary use over the whole site is not an option. The values associated with a large-scale housing provider or new airport, for example, are not applicable for this region of Essex, with the required highway upgrades and proposals being cost prohibitive.

The Tibbalds Campbell Reith Stage 2 Final Report sets out five scenarios' that have been explored and here we look to build upon a combination of these.

Primary land use development

Wethersfield has been considered by the MOJ to be a suitable location for a category C prison for 1600 inmates. This allocation would have formed part of the MOJ's Prison Estates Transformation Program (PETP) of delivering six new prisons across the country, five before 2020. This programme was retired in 2018, superseded by the Government's new investment of up to £2.5 Billion in a programme to deliver 10,000 prison places. It should be noted this was the same as the PETP.

The prison land take is approximately 20 hectares with an additional proposed 14 hectare solar farm, providing some of the necessary power load to ensure power security. Additional infrastructure would be required to access and serve this facility.

With a potential option to allocate another prison on the site, initial analysis and spatial framework plans have identified how two prisons could be arranged.

This primary use for the Site would not be connected to the existing rural economy. Where synergy exists is in the need for 800 staff per prison, associated construction industry services and an on-going supply chain required for a prison. While no immediate housing is needed within this 20 hectare allocation, it could be calculated that an allowance of new homes developed on Wethersfield could serve the new staff needed for this facility.

Further analysis (to be quantified ME) suggests that additional land uses within Wethersfield must be connected to the existing rural and economic context. Local industry and enterprise could benefit from the available land and the local workforce could support a growth in existing business. Furthermore new investment would enable Wethersfield to be marketed as a potential local growth hub opportunity.

Agreeing to the prison as a primary land use for the site will drive forward other development. The creation of employment would then facilitate a natural secondary wave of uses which would benefit from the primary functions.

Small scale residential development - creating a unique village including custom-build homes

An existing 148 married quarters are located on the southern boundary of the Site. Currently used by the military there is an existing requirement to update the accommodation and maintain the accommodation for military use. A viability assessment produced by ME will look at two methods of achieving this. Firstly, through refurbishment of this housing stock and intensifying where possible. Secondly through wholesale redevelopment of the residential FMQ area.

The latter would be achieved through a phased process of housing delivery and decanting until all stock is replaced. With both options the technical training facilities could be fenced off and managed in the short-term until the full decommissioning of Wethersfield. We are advised that if the FMQ houses are sold 50% of the receipt will go to USAF who built them. If the FMQ are demolished and rebuilt then this DIO liability drops to 10%. Our initial thoughts rest with a wholesale redevelopment of the FMQ area with a proposed mix of residential and commercial land uses being considered.

It is also considered that with localised improvements to the road infrastructure and upgrades to utility services, a further larger number of homes and business facilities could be delivered at Wethersfield.

We have been advised of the following:

- Existing 148 unit's – no utility upgrades
- An additional 125 unit's – no utility upgrades
- Over 275 new units – water reinforcement upgrade (circa £2m)
- Over 500 new units – electrical and primary substation required (This could be provided as part of the prison development)

Supporting land uses and options

Regional economic security for employment could be achieved through coordinating a circular economy within this local area. With or without a prison of economic benefit, a combination of other commercial activities that are inter-related could form a new self-sustaining economy from Wethersfield. Existing industries and enterprises would benefit from promotion of a commercial sustainable hub with further investment flowing into the Sites new uses thus establishing further economic security. Uses that have been considered along with those suggested within the Tibbalds Campbell Reith report (2019) have been considered as follows:

1) Uses associated with **regional food security**

- providing technological advancement in food production and supply
- supporting education in future methods of sustainable food production
- established local agricultural output alongside traditional poly-tunnel food growth and potential new hydroponic farming practices

2) Uses associated with **regional construction products**

- the advancement of building technology and sustainable methods of construction, MMC production circular waste management
- investment in the skills to deliver infrastructure and buildings that support a primary use industry

3) Uses associated with **energy**

- local energy provision via solar, ground source heat, wind and waste-to-energy
- bio-fuels through growth of non-edible crops produced within and for the UK market of bioenergy. (Ref 'Crops Grown for Bioenergy in the UK: 2017, DEFRA, Jan 2019).

4) Uses associated with **secure, covered and open commercial storage**

5) Uses associated with **large scale data storage facility**

6) Uses associated with **forestry to meet carbon off-set policies**

- There is potential to utilise the site as a large carbon off-set forest project. 200-300 hectare's would enable a critical mass of investment from a major multi-national company to form a substantial forestry project. Potentially this could be linked with tourism or forestry, timber business.

7) Uses associated with **hydroponic farming and sustainably grown food.**

The world-wide industry is globally worth £1.72 bn (2018) with investment and future demand projected to see a rise to 9bn by 2026. With the Covid-19 global pandemic transforming global processes and disrupting traditional markets, there is now a more focused need to look at food security. Key issues currently are:

- The global environmental impact of food production
- Demand for healthy and safe food, locally grown or regionally sourced
- Reduced reliance on imports
- Legislation on food quality and provenance

Typically a high-tech hydroponic farm will produce twenty times as much produce per acre (Houwells Hot House Group, LA, USA), with less waste, circa 2% stock rejection and seasonal supply security.

In the UK, Edinburgh Shockingly Fresh, Ocado (in partnership with Infinite Acres) and Thanet Earth (part of Fresca Group) have all invested heavily in this industry. While size is not necessarily the key focus to this form of farming produce output, there are gains to be made through economies of scale. With Thanet Earth investing in 91 ha of hydroponic farming, the 322 ha Wethersfield site provides a very realistic opportunity to contribute to this growing market.

8) Uses associated with **farming tourism**

A farming tourism concept links the production of food with the experience of being involved and learning about the methods and skills required to maintain food supply. Farming tourism would also be linked to the construction techniques required to deliver sustainable development.

Where traditional methods give way to computer software for farm management, waste management, energy production and automated harvesting, the complex systems of modern farming are seen as an area where education and new skills can be promoted.

The personal benefits of healthy living, being outside, staying on a farm, working alongside a team and of course eating fabulous food is considered a market people are interested in.

A farming tourism economic model therefore requires the following:

- A reason to visit – Areas of ecological interest, futuristic farming methods, animal and land management, healthy eating, earthy produce, and high quality food
- Activities – Old and new farming skills, building and craft courses, re-use of buildings for indoor sports, and all outdoor activities
- Places to stay – historic farms, caravans, camping, new environmentally friendly buildings, new homes, MMC made passiv-haus and off-grid ecological holiday's
- Employment – farming, high-tech support, leisure, hospitality, services associated with managing a community

There is a potential synergy here with providing a skills village for ex-service personnel, or as rehabilitation for prison inmates.

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MDPGA WETHERSFIELD

LOCATION

MDPGA WETHERSFIELD
BRAINTREE
CM7 4AZ

WETH

4.0 SWOT ANALYSIS

GRID REFERENCE:
51.969341, 0495254
COORDINATES
51°58'09.6"N 0°29'42.9"E

STRENGTHS

OPPORTUNITIES



WEAKNESSES

THREATS



MASTERPLAN OPTIONS

The accompanying drawings set out a series of framework land use options for the Wethersfield Site. Each option is subject to commercial assessment and valuation to determine its viability and the potential market demand to support these initial proposals.

Masterplan framework - option 1

(Zones R1,R2,R3)

FMQ's redevelopment zone south of Scott Avenue could deliver improved housing stock within a more efficient layout. The south-western edge could be developed first to provide an initial 64 units. These could serve to decant existing FMQ personnel from north of Scott Avenue, with those units then being redeveloped. The further 209 units being developed for market sale, delivering a total 273 refurbished and/or rebuilt estate served by the infrastructure capacity. Access would be maintained from the existing access road along with a separate spur serving this area.

Retain the secure covered storage area to the north, with intensification of this use to increase revenues. Access could be maintained through the site, or potential separate access could be formed via the north crash-gate to enable a separate leasing/sale of this site area.

Retain the use of Fire and Rescue training area. Access could be maintained through the main site in the short-term with a potential separate service access provided via the north crash-gate.

The remaining site area would be returned to agricultural uses. Any building assets in good condition considered to be retained and sold for commercial use. All other building units surplus to requirements will be demolished.

Masterplan framework - option 2

(Zones R3,R4,R5,R6,R7, x2 Prisons, x2 Solar farms)

Major infrastructure improvements needed for two prisons with linked solar farm operations. Infrastructure upgrades could also enable a provision of up to 1000 homes.

Residential housing within plots R3-R7 would create a lineal village utilising the two existing site access roads. This would create some amenity use along with formal open spaces to support a new village community. Upgrades to existing access or realignment of road into the site could be incorporated at this stage.

Expand northern secure storage area to provide more commercial facilities subject to market demand.

Permanent opening of south-east crash gate to enable intensification of commercial uses within a smaller hub where existing good condition commercial building can be repurposed.

Delivery of two category C prisons, circa 20 ha each. Including 28 ha of solar farm to provide necessary energy support for these facilities. All necessary infrastructures to serve the prison to be served from the south of the site.

The Fire and Rescue training facilities are expected to be retained in area C1. This could be enhanced to cater for expanded need where necessary.

Opportunity exists for farming storage buildings to be included, benefiting from on-site solar farming energy supply.

A more comprehensive approach to the energy cascade resulting from the prison construction would be undertaken to ensure the site achieves a balanced energy generation use and decarbonised targets in construction.



SITE AREA

322 HA (795 Acres)

DEVELOPMENT QUANTUM

FMQ refurbished/redeveloped units 148 - 19.5 ha
Market housing units 125 - 15 ha
Total (273 units in 1 and 2) - 19.5 ha
Existing open space - 6.3 ha

Fire and rescue existing area - 1.5 ha
Commercial storage existing and new - 24 ha
Agriculture/forestry (ancient 4.5 ha) - 239 ha
Miscellaneous - 18 ha

OPTION 1 SUMMARY

FMQ's redevelopment zone south of Scott Avenue could deliver improved housing stock within a more efficient layout. The south-western edge could be developed first to provide an initial 64 units. These could serve to decant existing FMQ personnel from north of Scott Avenue, with those units then being redeveloped. The further 209 units being developed for market sale, delivering a total 273 refurbished and/or rebuilt estate served by the infrastructure capacity. Access would be maintained from the existing access road along with a separate spur serving this area.

Retain the secure covered storage area to the north, with intensification of this use to increase revenues. Access could be maintained through the site, or potential separate access could be formed via the north crash-gate to enable a separate leasing/sale of this site area.

Retain the use of Fire and Rescue training area. Access could be maintained through the main site in the short-term with a potential separate service access provided via the north crash-gate.

The remaining site area would be returned to agricultural uses. Any building assets in good condition considered to be retained and sold for commercial use. All other building units surplus to requirements will be demolished.

MASTERPLAN KEY

- 1 Existing FMQ housing to be refurbished/redeveloped
- 2 Area of first phase refurbished/redeveloped
- 3 Existing commercial storage retained
- 4 Existing Fire and Rescue training area
- 5 Ancient woodland retained
- 6 Buildings in good condition retained
- 7 Land returned to agriculture/woodland
- 8 Existing open space retained
- 9 Additional commercial use of existing buildings



SITE AREA

DEVELOPMENT QUANTUM

322 HA (795 Acres)

FMQ existing reprovide USAF 68 units - 4.5 ha
Market housing 1000 units - 49 ha
Fire and rescue existing area - 1.5 ha
Commercial storage existing and new - 43 ha

Cat C prisons x2 - 48 ha
Cat C prison solar farms - 28 ha
Agriculture/woodland (ancient 4.5 ha) - 130 ha
Miscellaneous - 18 ha

OPTION 2 - SUMMARY

MASTERPLAN KEY

Major infrastructure improvements needed for two prisons with linked solar farm operations. Infrastructure upgrades could also enable a provision 1000 homes. Residential housing within plots R3-R7 would create a lineal village utilising the two existing site access roads. This would create some amenity use along with formal open spaces to support a new village community. Upgrades to existing access or realignment of road into site possible. Expand northern secure storage area to provide more facilities subject to market demand. Permanent opening of south-east crash gate to enable intensification of commercial uses within a smaller hub. Existing good condition commercial building can be repurposed. Delivery of two category C prisons, circa 20 ha each. Including 28 ha of solar farm to provide necessary energy support for these facilities. All necessary infrastructures to serve the prison to be served from the south of the site. The Fire and Rescue training facilities are expected to be retained in area C1. This could be enhanced to cater for expanded need where necessary. Opportunity exists for farming storage buildings to be included benefiting from on-site solar farming energy supply. A more comprehensive approach to the energy cascade resulting from the prison construction would be undertaken to ensure the site achieves a balanced energy generation use and decarbonised targets in construction.

- 1 Existing FMQ housing to be refurbished/redeveloped
- 2 Area of first phase refurbished/redeveloped
- 3 Commercial/storage retained and expanded
- 4 Fire and rescue training retained
- 5 Ancient woodland retained
- 6 Buildings in good condition retained
- 7 Land returned to agriculture/forestry
- 8 Cat C prisons and solar farms
- 9 New residential redevelopment
- 10 Possible new access
- 11 Possible agriculture buildings benefiting from solar

SUMMARY**Building on existing markets and repurposing existing assets for local businesses**

The final framework masterplan (option 2) offers a comprehensive subdivision of the Site, intended to be delivered over an assumed ten year period. Within this masterplan the land uses are organised to make best use of the Sites infrastructure, existing structures, landscape and access.

As indicated in the Tibbalds Campbell Reith report (2019) reports, the site offers an excellent location for the provision of a prison. The long-term vision from MOJ is to plan for two prisons on site, with all necessary infrastructure improvements being implemented in a phased strategy. This approach and capital cost projection would need to be considered more fully by Sweco as part of the phase 1 review. The investment in upgrading infrastructure for the prisons would potentially enable a wider consideration of uses to be combined on the site.

Overall the redevelopment opportunities would be linked to provision of the following:

- Land allocated for MOJ future prison requirements
- Land allocated for commercial business opportunities
- Land retained for the purposes of maintaining married quaters accommodation
- Land allocated to the provision of new market and affordable housing
- Land enabling the creation of self-build/custom build development
- Buildings repurposed or utilised to support agriculture and farming
- Buildings repurposed or utilised to provide new indoor activity centres for training opportunities

MOJ prisons

At the time of writing, plans have been illustrated to show the progression of two prisons, with their intended location on site being fixed. While only a single prison may be delivered in the first phase, all other masterplan considerations should take account of the impacts and benefits being associated with the delivery of these MOJ facilities.

Way forward

The proposals presented require further design strategy examination along with detailed viability assessments undertaken for each considered land use.

The masterplan would then be revised to rationalise what boundaries will be formed in the division of the site, taking account of the MOJ land requirements, Crichel Down rules –should they be applied– and where and what technical buildings or buildings of heritage interest, would be considered suitable to retain for commercial uses, or demolished, such as the Airfield Chapel. This early assessment work will be further supported by the wider SPA consultant team to deliver this Stage 1 report for Wethersfield.



HLM
Architects



SITE AREA

DEVELOPMENT QUANTUM

322 HA (795 Acres)

FMQ existing reprove USAF 68 units - 4.5 ha
Market housing 1000 units - 49 ha
Fire and rescue existing area - 1.5 ha
Commercial storage existing and new - 43 ha

Cat C prisons x2 - 48 ha
Cat C prison solar farms - 28 ha
Agriculture/woodland (ancient 4.5 ha) - 130 ha
Miscellaneous - 18 ha

OPTION 2 - SUMMARY

Major infrastructure improvements needed for two prisons with linked solar farm operations. Infrastructure upgrades could also enable a provision 1000 homes.
Residential housing within plots R3-R7 would create a lineal village utilising the two existing site access roads. This would create some amenity use along with formal open spaces to support a new village community.
Upgrades to existing access or realignment of road into site possible.
Expand northern secure storage area to provide more facilities subject to market demand.
Permanent opening of south-east crash gate to enable intensification of commercial uses within a smaller hub.
Existing good condition commercial building can be repurposed.
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The Fire and Rescue training facilities are expected to be retained in area C1. This could be enhanced to cater for expanded need where necessary.
Opportunity exists for farming storage buildings to be included benefiting from on-site solar farming energy supply.
A more comprehensive approach to the energy cascade resulting from the prison construction would be undertaken to ensure the site achieves a balanced energy generation use and decarbonised targets in construction.

MASTERPLAN KEY

- 1 Existing FMQ housing to be refurbished/redeveloped
- 2 Area of first phase refurbished/redeveloped
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- 4 Fire and rescue training retained
- 5 Ancient woodland retained
- 6 Buildings in good condition retained
- 7 Land returned to agriculture/forestry
- 8 Cat C prisons and solar farms
- 9 New residential redevelopment
- 10 Possible new access
- 11 Possible agriculture buildings benefiting from solar