

Statement of community involvement

November 2017





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Chapter one

Introduction

- 1.1 This Statement of Community Involvement (SCI) has been prepared to accompany the new Cranfield University Masterplan. The purpose of this statement is to:
 - Provide an overview of the consultation process undertaken by the University in support of the Cranfield University Masterplan.
 - Provide a summary of the responses received during the consultations process along with responses to these.
 - Present the consultation material.
- 1.2 Central Bedfordshire Council's (CBC) current Local Plan designates Cranfield campus and Technology Park as 'Significant facilities within the countryside'. This policy necessitates designated sites to bring forward a masterplan, in agreement with the council, prior to significant expansions/redevelopment taking place. In line with this policy requirement the University is following an endorsed masterplan process in partnership with CBC with the end objective of having the masterplan adopted by the Council as Technical Planning Guidance.
- 1.3 The Cranfield Masterplan defines a vision for the University's physical estate, delivering a comprehensive programme of construction and renewal and importantly addressing the way the estate is structured and occupied.
- 1.4 The Masterplan is a significant step forward for the University, reflecting the aspirations set out in its Corporate Plan which recognises the need for continued investment in the built environment in order for the institution to remain competitive and successful within the higher education sector.
- 1.5 The Cranfield Masterplan is intended to provide an integrated development strategy for the University's academic, residential and Technology Park estate, providing a framework for physical and development opportunities totalling £330 million. The Masterplan contains proposals with the potential to deliver a net increase in floorspace of c. 77,000m², 400 new student resident bed spaces, parking, new streets, public squares and landscaping. All aspects will assist in raising the quality of the campus experience for students, staff and visitors.
- 1.6 Once endorsed by the Council, the Masterplan will significantly de-risk future projects, providing a greater level of development certainty for the University, local community CBC and potential investors.

Chapter two

Consultation process

- 2.1 Work on the Cranfield Masterplan has been evolving over the last three years with the University looking critically at the form and function of the existing estate. Consultation with staff, students, stakeholders, Central Bedfordshire Council and the public have all proved invaluable in identifying current challenges faced by the University and how best to address these through the masterplan process.
- 2.2 Prior to any external consultation on the Masterplan, the University undertook an internal review in early 2014 to identify a series of initial principles for future development of Cranfield campus.
- 2.3 This review firstly set out strategic drivers for development and then interrogated these through details placemaking principles:

Strategic drivers

- Taking a more thematic approach to development.
- Aligning the campus experience with the reputation of Cranfield University.
- Fostering the development of a learning community.
- Considering buildings as 'part of research'.
- Identifying opportunities for interdisciplinary working and shared facilities.

Masterplan objective

- Improve the campus arrival and navigation experience to align it with the reputation of the University.
- Create high quality pedestrian environments, including a central core to promote interaction and a sense of place.
- Deliver a connected and walkable campus that prioritises sustainable transport choices.
- Use way-finding and clear design aesthetic in urban design to provide a safe and consistent campus experience.
- Provide high quality facilities for our students, staff, commercial partners and visitors that meet the technological and sustainability objectives of the University.
- Structure the campus around the University's key research and teaching themes.
- Enhance biodiversity across the site by linking key streets to the surrounding landscape.

Consultation with Central Bedfordshire Council

- 2.4 Following the internal work undertaken by the University, consultation on the Masterplan commenced with CBC, with an endorsed masterplan process involving the University working in partnership with CBC, being agreed.
- 2.5 Over the course of 23-24th March 2016, a two-day interactive workshop was convened between the University's consultant team and CBC officers. The purpose of this exercise was to accelerate interaction and collaboration on the Masterplan between the Council and the University in a multi-disciplinary environment, to assist in shaping the overall Masterplan.



2.6 The timetable and invitees for this event are listed below:

Timetable		
Date	Programme	Attendees
23.03.16 Magellan / Drake Rooms	09.30-10.00: Arrival / briefing 10.00-11.30: Site walkover 11.30-13.00: Issues and options	All day: Turnberry, Oobe, Pearce Consulting, Applied Ecology, Curtins AM: Gareth Ellis
	13.00-14.00: Lunch	
	14.00-16.30: Landscape, SUDS, biodiversity workshop	CBC: John Ellis, Saskia Duncan (Planning), Pat Longland (Arboriculture), Alison Myers/Julie Scott (Landscape), Alys Bishop/ Sam Holder (Drainage), Liz Anderson (Ecology)
	17.30: Review/feedback with CU	If available - John Street, Tracy Flynn, Gareth Ellis
24.03.16 Lindbergh Room	9.30-12.00: Transport and parking workshop	All day: Turnberry, Oobe, Mayer Brown, Curtins (TBC) AM: Gareth Ellis CBC: Ann Rowland, Mark Cornell (Highways)
	12.30-13.00: Lunch	
	13.00-15.00: Prep for feedback session/feedback with CU	CU if available
	15.00-17.00: Feedback sessions to CBC	CBC – All officers listed below invited to session



Consultant team attendees	
Turnberry	Chris Pattison, Mckenzie O'Neill, Stephanie Gray
Pearce Consulting	Andy Pearce
Oobe	Richard Walker, Oliver Smith, Usue Ruiz Arana, Sophie Tombleson
Applied Ecology	Duncan Painter
Mayer Brown	Vera Lamont, Sarah Smart
Curtins	Gaetano Pellegrino (in place of David Weir)
Cranfield	John Street, Tracy Flynn, Gareth Ellis

CBC officer invitees	
John Ellis, Lisa Newlands – Dev Mgmt	Ann Rowland, Mark Cornell – Highways
Saskia Duncan – Policy	Alison Myers, Julie Scott – Landscape
Pat Longland – Trees	James Cushing – Economic Development
Martin Oake – Archaeology	Michelle Flynn – Footpaths
Liz Anderson – Ecology	Guy Quint – Noise
Stuart Harrison – Strategic Highways	Alys Bishop, Sam Holder – Drainage
Monika Marczevska – Sustainability	Sian Farrier c/o Saskia Duncan - Urban Design



Public Consultation

- 2.7 Public consultation on the Masterplan was delivered through a two-day public exhibition held on Thursday 13th - Friday 14th July 2017 in the Aerospace Integration Research Centre (AIRC) on campus. The exhibition was structured as follows:

Thursday 13th July

2.00pm-3.00pm: Ward member briefing session

3.00pm-7.00pm: Public exhibition

Friday 14th July

3.00pm-7.00pm: Public exhibition

- 2.8 In support of the consultation, Councillors Robert Morris, Ken Matthews and Sue Clark were invited to a stakeholder preview session from 2.00-3.00pm on the 13th July. Councillors Morris and Clark were both able to attend.
- 2.9 Each public exhibition was widely publicised both internally throughout the campus and externally. The event was publicised on both Cranfield University and CBC's websites. A press advert was placed in the Bedfordshire on Sunday and appeared in the paper on Sunday 9th July. The advert was also published on the paper's website. A copy of the press advert can be found in Appendix A.

- 2.10 Flyers were also distributed in key locations throughout Cranfield village. A copy of the flyer can be found in Appendix B and a list of places this was distributed is noted below:
- Cranfield Methodist Church, Cranfield, Bedford MK43 0DL
 - Budgens Stores Ltd, 56-57 High Street, Cranfield, Bedford, MK43 0AR
 - Parish Church St. Peter & St. Paul, Cranfield, 12 Court Road, Cranfield, Bedford, MK43 0DR
 - Cranfield Church of England Academy, Court Road, Cranfield, Bedford, MK43 0DR
 - Cranfield Church of England Academy, Braeburn Way, Cranfield, Bedford, MK43 0EH
 - Cranfield Village Hall, 13 Court Road, Cranfield, Bedford, MK43 0DR
 - Oso Coffee & Cake, 119B High Street, Cranfield, Bedford, MK43 0BS
 - Cranfield Newsagents, 128A High Street, Cranfield, Bedford, MK43 0BS
 - Holywell Middle School, Red Lion Close, Cranfield, Bedford, MK43 0JA
 - Co-op, 1 Mill Road, Cranfield, Bedford, MK43 0JG
 - Baptist Church, Bedford Road, Cranfield, Bedford, MK43 0EU
- 2.11 Cranfield Parish Council were written to advising them of the event with an invitation enclosed with the correspondence.
- 2.12 A copy of the exhibition boards can be found in Appendix C. Over the course of the two-day event a total of 43 people attended the exhibition. The majority of these were university staff with only four local residents attending. Six feedback forms were completed and the comments provided can be found in Appendix D.
- 2.13 The exhibition was followed by a four-week consultation period which ended on the 10th August 2017. During this time copies of the Masterplan were available for review at the following locations:
- www.centralbedfordshire.gov.uk/planning/policy/development-briefs/cranfield-uni.aspx (digital copy)
 - Cranfield University Reception, Cranfield campus
 - Central Bedfordshire Council Reception, Chicksands, Priory House
- 2.14 Comments received during the four-week consultation period were collated by CBC and issued to the University for review and response. All comments received during this period were from council officers, no public comments were received. A summary of these comments along with responses provided by the University detailing where updates have been made are provided in Appendix E.
- 2.15 The comments received largely seek additional information and clarification on specific detailed matters and identify formatting issues within the document. These comments have all been responded to where possible as per the table within Appendix E.

Chapter three

Summary and conclusion

- 3.1 Cranfield University, in partnership with Central Bedfordshire Council, have employed a range of methods in consulting on the Cranfield University Masterplan. The purpose of this statement has been to provide an overview of the consultation process, summarise the responses received, explain how these have been addressed and present the public exhibition materials displayed.
- 3.2 Internal reviews led by the University allowed strategic drivers to be established early on in the evolution of the Cranfield Masterplan. This work then helped to identify the current challenges faced by the University leading to the identification of specific masterplan objectives and placemaking principles. Consultation with CBC has been pivotal to the masterplan process, accelerating interaction and collaboration, assisting with shaping the overall Masterplan.
- 3.3 Limited public attendance was recorded during the public exhibition and no public feedback was received during the four-week consultation period. Although public responses were limited, all those received were positive about the University's future plans. The low public response rate was however expected given the insular nature of the campus and the existing good relationship the University has with surrounding neighbours.
- 3.4 The majority of comments received during the consultation period have been from CBC officers, and largely identified grammatical or layout issues, or sought further detail on future Masterplan proposals. Responses to these comments have been provided and updates have been made to the Masterplan and its supporting documents where necessary.
- 3.5 In summary, the overall feedback received has been positive and supports the future plans of Cranfield University.

Appendix A

Public exhibition press advert



Cranfield University Campus Masterplan Public Exhibition

13–14 July 2017

3–7pm

Aerospace Integration
Research Centre,
Cranfield University,
MK43 0AL

Parking for the event is
available in the Sports
Hall car park

Central Bedfordshire Council and Cranfield University would like to invite you to a public exhibition explaining the University's draft Masterplan that will guide the long term development of Cranfield Campus.

There will also be an opportunity to look at some of the new buildings already delivered in support of the Campus Masterplan.

The logo for Central Bedfordshire Council, featuring a green circle with the text 'Central Bedfordshire' inside.

Central Bedfordshire

Central Bedfordshire Council

Appendix B

Public exhibition flyer



Cranfield University Campus Masterplan Public Exhibition

Central Bedfordshire Council and Cranfield University would like to invite you to a public exhibition explaining the University's draft Masterplan that will guide the long term development of Cranfield Campus.

There will also be an opportunity to look at some of the new buildings already delivered in support of the Campus Masterplan.



— Cranfield Campus Masterplan boundary
P Parking

13–14 July 2017, 3–7pm
Aerospace Integration Research Centre,
Cranfield University, MK43 0AL



Central Bedfordshire Council



Appendix C

Public exhibition boards

Welcome

1

Thank you for attending this exhibition which is being jointly hosted by Central Bedfordshire Council and Cranfield University.



Cranfield Campus Masterplan area

The purpose of this exhibition is to present Cranfield University's forthcoming Campus Masterplan to you, and seek your comments prior to Central Bedfordshire Council considering the formal endorsement of the Campus Masterplan as Planning Guidance. This exhibition marks the beginning of a four-week public consultation period during which your feedback is welcomed.

The Campus Masterplan is a significant step forward for the University and signals its development objectives over the coming years, setting out a framework within which future planning applications will be brought forward.

Once endorsed by the Council, the Campus Masterplan will provide a greater level of development certainty for the University, local community, Central Bedfordshire Council and potential investors.

The Campus Masterplan focuses exclusively on the University's Cranfield campus and adjacent Technology Park. The Campus Masterplan does not include the airport or airpark and any future proposals for these areas will be dealt with under a separate exercise to be progressed later this year.

Today you can:

- Find out about the proposed Masterplan for Cranfield University campus.
- Consider our proposals for the re-planning of the campus looking at new streets, car parking, drainage, public realm and landscape.
- Understand the consultation process before Central Bedfordshire Council considers the Campus Masterplan.
- Be updated on the forthcoming Airport Masterplan consultation.
- Speak to one of our representatives if you have any questions.
- Fill out a feedback form with any comments you have.

A copy of the exhibition boards you see here today can be downloaded from www.centralbedfordshire.gov.uk/planning/policy/development-briefs.

- 1 Welcome
- 2 Cranfield Campus Masterplan
- 3 Cranfield University fast facts
- 4-6 Cranfield campus site analysis
- 7-10 Cranfield Campus Masterplan opportunities
- 11 Drainage
- 12 Airport Masterplan
- 13 Next steps



Cranfield Campus Masterplan

2

The Campus Masterplan responds to the University's Corporate Plan, which sets out the following mission statement: 'To be an exclusively postgraduate University that is a global leader for education and transformational research in technology and management.'



The campus is presently comprised of three distinct zones



The above plan shows the extent of the proposed Technology Park identified in the adopted Local Plan

The Campus Masterplan covers the core academic campus and the Technology Park. It contains proposals with the potential to deliver a net increase in floorspace of c.77,000m², 400 new student resident bed spaces, parking, new streets, public squares and landscaping.

Cranfield campus and the Technology Park are designated as *Significant facilities within the countryside* by Central Bedfordshire Council. This policy designation requires the University to bring forward a Campus Masterplan to guide future development. The Technology Park is also allocated by Central Bedfordshire Council as an employment site and the land subject to the Campus Masterplan aligns with the existing allocation and does not exceed it.

The key feature of the Campus Masterplan is the blurring between academic, research

and commercial facing activity, removing their traditional physical separation in favour of bringing commercial innovation and technology into the academic campus, fostering close partnerships between academia and industry

These partnerships are already happening with the construction of the Aerospace Integration Research Centre (AIRC) – the building you are in today – which is a collaboration between Cranfield University, Rolls-Royce and Airbus.

The Campus Masterplan is supported by additional technical reports comprising a Transport Statement, Planning and Environmental Statement and Statement of Community Involvement (the latter of which will be written at the end of the four-week consultation process).

Campus Masterplan objectives

- Improve the campus arrival experience and enhance navigation across the campus.
- Deliver a connected and walkable campus which prioritises the pedestrian.
- Create high quality pedestrian environments, promoting activity and a sense of community.
- Structure the campus around the University's key teaching and research themes to support collaboration and efficient use of resources.
- Provide high quality facilities for staff, students, commercial partners and visitors which compliment the technology and sustainability objectives of the University.
- Enhance biodiversity opportunities across the campus.



Cranfield University fast facts

3

Cranfield University is a world-leading institution and is a key player in the local and regional economy.

400 new bed-spaces will be provided in the Campus Masterplan

The Campus Masterplan will deliver **77,000m²** of new teaching, research and innovation floorspace

Our oldest buildings date from **1935**

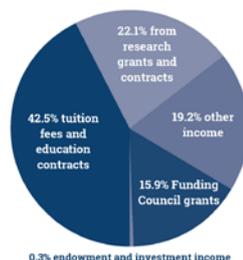
250 hectares of land

Over 1,800 parking spaces on site

c.100,000m² of academic floor space and **c.50,000m²** of residential space

The Research Excellence Framework 2014 (REF) has assessed that **81% of the research** at Cranfield University is **world leading** or internationally excellent

As at year ending July 2015, income can be split as follows:



Over 4,300 students (2015/2016)

Cranfield provide professional development to **20,000** individuals annually

Over 75% of the UK's postgraduate aerospace engineers graduate from Cranfield University

Over 1,600 staff (2015/2016)

Cranfield is one of the UK's **top five** research-intensive universities, alongside Cambridge, Oxford, Imperial College and University College London

Cranfield is a four-time winner of the prestigious **Queen's Anniversary Prize**

Top 10 International Business School MBA in the UK

The University works with over 1,500 leading businesses, including Airbus, BAE Systems, Boeing, Nissan, Rolls-Royce and Unilever.



Cranfield campus site analysis

4

In support of the Campus Masterplan process, internal and external consultation has proved invaluable in supporting the site analysis and identifying the challenges currently faced at Cranfield.

1. Arrival experience

There is an inconsistent arrival experience at all three access points to the University, with little to define or identify the campus as a destination. The access points do not create strong first impressions of the campus or orientate visitors.



South access



North access



West access

2. Parking

Car parking is scattered throughout the campus and dominates central areas giving cars the priority in core parts of the site. Central parking areas are consistently full leading to a

perception that there is a parking shortage on campus encouraging people to park in unmarked central areas resulting in congestion. Whilst central parking zones are at capacity, peripheral parking areas lie empty.



Existing parking distribution



Existing car parking is spread out and fragmented across the whole campus



Cranfield campus site analysis

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3. Collaborative working and suitability

Due to the incremental expansion of many original buildings, activities are now dispersed across the campus and complimentary activities are rarely located close

together. This is not an efficient use of resources and leads to a lack of cohesion on campus. The existing buildings have served the University well, but now need to transform to meet the challenges of 21st Century academic and research requirements.



University composition in 2014

- | | |
|---|---|
| ■ School of Applied Sciences | ■ Administration/central services |
| ■ School of Engineering | ■ Tinanite |
| ■ School of Management | ■ Technology park |
| | ■ Student accommodation |

4. Campus experience

The campus experience is disjointed across the site with little to differentiate between

staff only areas and key front of house spaces and routes. Social spaces and retail facilities could be increased to enhance the sense of a campus community.



Existing quality of public realm



Lower quality public realm experience



Cranfield campus site analysis

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5. Landscape

The campus sits in a unique location being adjacent to an operational airfield whilst also being set within the open countryside. The campus has a relatively good spread of tree planting and boasts recreational sports pitches.

However, open spaces and tree planting needs to be re-planned and extended to better serve the campus. Open spaces between buildings are often used for parking or left undefined and therefore not used to their full potential, and do not contribute towards the overall campus environment.



Key public/open spaces



Under-utilised open space

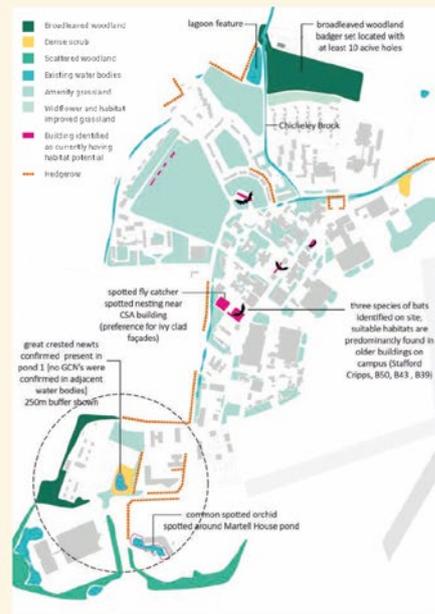


Sports fields within residential area

6. Biodiversity

The rural setting of the campus means the site has a high level of biodiversity with a habitat mix of scrub, wetland and farmland. However, the proximity of the airfield limits the compatible

forms of biodiversity. Biodiversity Action Areas have been created in a small number of locations replacing grassland with testbeds for wild flowers. The Chicley Brook runs through the south of the residential area and is not meeting its full potential.



Existing campus biodiversity plan



Existing biodiversity habitat



Cranfield Campus Masterplan opportunities

7

1. Arrival experience

The Campus Masterplan proposes to improve the arrival experience at the University in the following ways:

- Enhancing existing access points to the campus with landscaping and directional signage to clearly mark a change in environment from open countryside to University campus.
- A new main street will be created. This will unlock new building plots and ensure future development faces this new route.
- A new bus interchange will be delivered in place of the existing main bus terminus and will vastly improve the experience for those arriving on campus by public transport.



Key spaces and the links between them

2. Parking

The Campus Masterplan will rationalise parking across the site by removing parking from central areas to peripheral car parks, all within easy walking distance of campus buildings. By relocating parking to the periphery, central spaces can be repurposed in favour of pedestrian routes and public realm.

The transport implications of the Campus Masterplan have also been tested against the assumptions made for the existing campus and planned Technology Park extension. In contrast to the former Technology Park concept,

which entailed densely populated office units, the Campus Masterplan promotes larger buildings with relatively low occupancy figures. The updated transport modelling has confirmed the proposals set out within the Campus Masterplan comfortably fit within the expected traffic implications for the previously assumed Technology Park. Localised junction improvements will be brought forward in support of detailed planning applications for new growth.

The Campus Masterplan will also benefit from the University's ongoing investment in its Travel Plan which promotes sustainable methods of travel and continued investment in the UNO bus service.



Car parking will be consolidated into fewer larger car parks that are easier for visitors to find



Cranfield Campus Masterplan opportunities

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3. Collaborative working and suitability

The Campus Masterplan will support the clustering of complimentary activities wherever possible, locating these in the same building or in adjacent buildings and spaces.

This thematic organisational structure will support collaboration between teaching, research and industry.

Provision of new buildings to replace those coming to the end of their functional life will be a key part of this strategy.



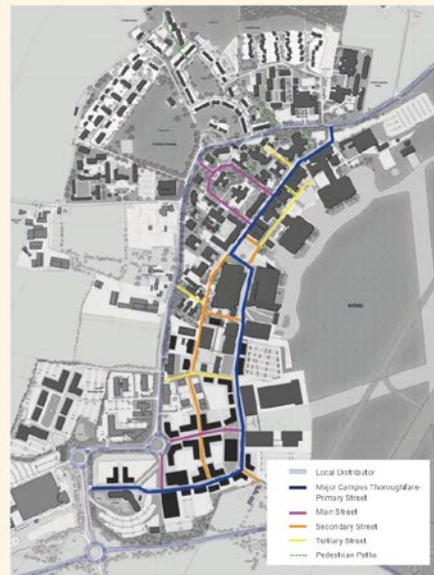
The campus will be restructured around the University's multi-disciplinary research themes

- | Campus functional zones | Campus thematic zones |
|-------------------------------------|--------------------------|
| Central teaching and administration | Aerospace |
| Commercial | Defence and Security |
| Executive education | Energy and Power |
| Estates facilities | Environment and Agrifood |
| Residential/recreational | School of Management |
| Retail | Manufacturing |
| | Transport Systems |
| | Water |
| | Connecting shuttle route |

4. Campus experience

The Campus Masterplan will deliver high quality buildings and spaces and create a series of primary, secondary and minor routes designed to deliver a welcoming and safe campus

environment. This hierarchy of routes brings order to the campus, as each route will have a specific set of materials to differentiate it from others. Students, staff and visitors will be able to select the most obvious and attractive route to their destination.



- Local Distributor
- Major Campus Thoroughfare/Primary Street
- Main Street
- Secondary Street
- Tertiary Street
- Pedestrian Path



Cranfield Campus Masterplan opportunities

5. Landscape

The Campus Masterplan landscape strategy will reinforce the importance of specific routes and spaces. The outer edges of the campus will be promoted as an

organic habitat buffer, particularly where the campus meets the woodland in the residential areas. In more central parts of the campus, landscaping will be increasingly formal to create urban squares and streets.



The campus will be restructured around key routes and spaces to improve the campus experience

- Premium space
- Premium space
- Primary route
- Landscape buffer
- Tertiary/back of house space
- Residential space
- Car park



Indicative landscape strategy

Indicative landscape strategy concepts



Woodland walk



Space for informal recreation



Secondary routes



Central campus zone



Cranfield Campus Masterplan opportunities

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6. Biodiversity

The Campus Masterplan will enhance biodiversity across the site and additional Biodiversity Action Areas will be incorporated into future development wherever possible.

Tree coverage across the site will be strengthened, with the planting strategy designed to

provide a variety of specimens, diversifying the biodiversity habitat whilst respecting Civil Aviation Authority (CAA) guidelines given the proximity of the airfield.

Many trees within the historic part of the campus are nearing the end of their maturity and will be considered for replacement as future planting proposals come forward.

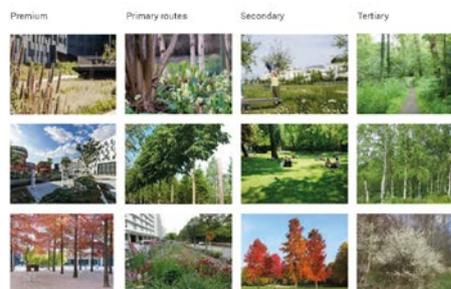


The campus will have different landscape character areas

- Formal spaces
- Formal street structure
- Informal amenity
- Woodland



Opportunities for tree planting will be increased



The airport is not included within this Campus Masterplan, however the University will be progressing a Masterplan for the airport in the future.

Cranfield University is the only university in Europe with an associated airport and airfield, allowing Cranfield to be a world leader in aviation research and technology.

The airport is a decisive advantage to the University when collaborating with research partners in the aerospace sector.

The work undertaken within the Aerospace Integration Research Centre (AIRC) and by the Facility for Airborne Atmospheric Measurements (FAAM) rely on the proximity of the airfield to allow their research to take place.

However, the airport requires continued and substantial investment to upgrade its infrastructure and to maintain it. Forthcoming upgrades include improved radar facilities, a new Fire Station,

re-organisation of taxi-ways, partial re-surfacing of runways and a new control tower.

The University research in aviation activity does not generate enough income to support the investment needed to sustain and maintain a fully operational and safe airport. The University has relied on commercial partners in the past to generate additional investment, but this has not been at a sufficient scale to attract enough investment.

The University has planning permission for an air park on the north eastern edge of the airport in order to attract investment for an operating base for small, private business jets. However, this is not large enough to attract operators in comparison to Luton, Stansted and other locations.

The University is teaming up with an external partner to bring forward a more comprehensive Masterplan for the airport that expands the air park facilities to secure the level of investment needed.

The proposals are not going to include commercial passenger services or freight and the larger planes these require. The proposals are aimed solely at the 'executive' jet market. Overall planned flight movements are likely to be half that of the airport's peak in the 2,000's when it reached around 110,000 per annum.

The Airport Masterplan will support an application for Outline Planning Permission and will be subject to a separate, forthcoming consultation process. As part of this process, a public exhibition and community planning workshops will take place. More details will be announced soon.



Airport Masterplan area



Facility for Airborne Atmospheric Measurements (FAAM)



Existing hangars at Cranfield Airport



Aerospace Integration Research Centre



The Campus Masterplan sets out an ambitious programme of development for the University over the coming years and will see the campus transform into a site fostering collaboration between academia and industry.

Crucially, the Campus Masterplan sets out a framework for development, which once endorsed by Central Bedfordshire Council, will allow the University to react quickly to emerging funding offers, capitalising on opportunities and bringing internationally significant research, innovation and high-value employment to Central Bedfordshire.

The pace and level of change on campus will ultimately be guided by the availability of resources and funding, however the University is committed to the delivery of certain 'non-building specific' projects over the next three to five years.

Some of these projects are already complete or are on site, including this building (the AIRC), the new Facility for Airborne Atmospheric Measurements (FAAM) building, the Intelligent Mobility Engineering Centre (IMEC) and sports hall car park to name a few.

These projects will deliver a vast improvement to the quality of the campus, providing a solid grounding for future development.

Phasing

Short term projects:

- | | |
|--|---|
| 1. PC labs refurbishment | 21. Commercial / Retail redevelopment |
| 2. Vincent Building alterations | 22. Transport interchange |
| 3. Building 83 extension (phase one and two) | 23. Agrifood Buildings |
| 4. Building 52 extension | 24. School of Management Building |
| 5. North South Link Road [MUEAV] | 25. Mitchell Hall new student residences |
| 6. Aerospace Integration Research Centre | 26. Digital Aviation Research and Technology Centre [DARTEC] |
| 7. Aerospace Square landscaping | Medium term projects: |
| 8. AIRC car park | 27. Air Safety Investigation Centre [ASIS] |
| 9. Sports hall car park | 28. Manufacturing Centre |
| 10. Residential car park | 29. Estates relocation |
| 11. University Square landscaping | 30. Energy Technology Centre |
| 12. Central Square landscaping | 31. New laboratories |
| 13. Facility for Airborne Atmospheric Measurements [FAAM] Building | 32. Hub phase two |
| 14. Central teaching facilities | Long term projects: |
| 15. Library extension | Continued phased expansion across the campus including possible additional student accommodation in the residential zone. |
| 16. Martell House refurbishment | |
| 17. North car park | |
| 18. Hub phase one | |
| 19. Air Tower and Fire Station relocation | |
| 20. South car park | |

Consultation

This exhibition marks the start of the consultation period for the Campus Masterplan which runs for a further four weeks until 10 August 2017. Any comments and feedback received during the consultation period will be reviewed and incorporated into the Campus Masterplan as necessary ahead of the Campus Masterplan and its supporting technical reports being submitted to Central Bedfordshire Council's Executive Committee for formal endorsement as Technical Planning Guidance.

Copies of the Campus Masterplan and its supporting reports can be viewed at the following locations:

- Cranfield University Reception, Cranfield Campus
- Central Bedfordshire Council Reception, Chicksands

It is anticipated that all documents will be submitted to Central Bedfordshire Council for endorsement by September 2017 and we welcome your comments in support of this process. Please have your say by filling out a comments sheet which are available today. Comments can also be emailed to localplan@centralbedfordshire.gov.uk or returned by post to Central Bedfordshire Council, Planning, Priory House, Chicksands, Bedfordshire, SG17 5TQ.



Indicative phasing plan



Appendix D

Feedback forms

Cranfield University Campus Masterplan – Public consultation event
13-14th July 2017, 3pm – 7pm, AIRC
Completed feedback forms

	Contact details	Comment	Cranfield University Response
1	██████████ ██████████ ██████████	With regards to the Airport Masterplan I am concerned that the scrub area along Merchants Lane is due to disappear under the Air Park. (As shown on P10 of the Masterplan Doc published in 2014). I only realised that this area is affected when Becky Shepherd said that the area is to go (on a biodiversity walk one evening about 2 weeks ago). It was only a month or two ago Alan Nelson and I found over 50 common-spotted and over 30 bee orchids (the most number of heads I have ever seen on 1 stalk). For this area to be lost would be the loss of the most biodiverse area on campus. We must survey and bear in mind the importance of this prime site. We have reported these orchids but not the exact locations.	A separate Masterplan exercise will be undertaken in support of future development of the Airport. Airpark proposals do not feature as part of the University Masterplan.
2	-	The Masterplan shows some exciting and environmentally pleasing projects. I note that long-term development indicates a possible increase in student accommodation. There should be a medical facility for students, staff researchers etc. Since the closure of the medical centre at the university undue pressure has been put on the village's medical facilities which is currently running with very short staff, many of which are locums, in a Victorian building which was deemed unfit for purpose in the early 2000's when an application to build a new facility failed because of the economic recession.	This comment is noted. The impact of additional students on local infrastructure will be reviewed in support of future detailed proposals for additional student residences.
3	██████████ ██████████ ██████████	Airport Masterplan – I learnt to fly here but have been continuously disappointed this year by the closed days due to lack of facilities – ATC not available on the weekends, ATC not available during a power cut (tower too hot and no generator) no fire cover and no working ILS currently. It is hard to recommend the GA facility here at the moment.	Noted.
4	-	Signage on road (1/2 way up hill – toward Nissan entrance) – turn off to Cranfield village to show sign to go straight ahead to Cranfield University as many people tend to dither at that junction. Signage around campus also needs updating.	Noted. Improving campus signage is a key part of the campus Masterplan.
5	-	More outside seating areas on campus please – Willow sculptures etc. More art in outside areas Approach road at Nissan roundabout needs left hand sign to say 'Nissan only' as near miss accidents on roundabout when both lanes try and turn right.	Noted. Improving campus signage, providing public art and street furniture are all aspirations of the Masterplan.
6	██████████ ██████████ ██████████ ██████████	I have every appreciation of the work and thought taken by the University in creating a better atmosphere for student living and working. I was impressed by the way Stephanie Gray fielded the odd awkward question that I threw at her and was able to give an excellent explanation of all the layouts.	Noted.

Appendix E

Cranfield Masterplan comments

Consultee		Key Issues Identified	Response
1. Place-making, public art and public realm	1.1	Given the heritage of Cranfield and recognition as a centre of innovation this needs to influence the masterplan and be employed to reinforce place making.	It is agreed that Cranfield's rich heritage should be used to inform the Cranfield Campus Masterplan and this has been communicated throughout the Masterplan document.
	1.2	<p>This is identified briefly in the introduction – 'thematic approach, campus experience, buildings as part of research' but isn't continued through the masterplan and there could be more description / vision on character and sense of place which would then be another 'hook' to inform design codes and public art plan:</p> <ul style="list-style-type: none"> • The 'edges' and 'arrival' – how will approaches and interfaces with wider setting be treated (built and soft) to create sense of place. • Key arrival nodes – will these feature artworks / bespoke landmark features? Land-art? • Legibility – highlighting key nodes would aid legibility and way marking. • Features relating to technology at Cranfield could be highlighted. • Lighting. • Street furniture. 	<p>Organising the campus in a thematic manner, improving the campus experience and ensuring buildings and spaces offer 'research opportunities' is referenced throughout the Masterplan, specifically in Chapters 4 and 5.</p> <p>The Cranfield Campus Masterplan is a strategic document, intended to set high level design principles. The six bullet points listed are considered to be relatively detailed matters and will be fully dealt with as future proposals come forward. However, text has been added on the 'opportunity' box on page 19 to assist in explaining the principles for enhancing campus arrival nodes.</p> <p>In respect of bullet point 3 (legibility), improving campus legibility is a key feature of the Masterplan. Legibility across the site is proposed to be strengthened through the landscape strategy, a consistent planting and materials palette and connected public realm to help clearly identify what is a primary route compared to secondary routes and back of house areas. In addition, signage across the campus will be improved.</p>
2. Landscape	2.1	The purpose of the document needs to be clear and there needs to be a clearer overarching vision for the site. There is not enough detail of what is proposed in the document for it to work as a masterplan.	The introduction to Chapter 1 has been re-ordered slightly to make the purpose of the Masterplan document clearer, please refer to page 8.
	2.2	Timescales of the Masterplan need to be outlined and extent of new building proposed from the outset.	Timescales for the development of the Masterplan are explained in Chapter 6. The delivery of Masterplan development is divided into three general phases: short, medium and long term, however the pace and level of change will very much be dependent on resources and funding, therefore specific timescales for development cannot be given. A number of the short-term projects are however on site or under construction.
	2.3	There needs to be a much clearer "context" map to illustrate its position in the "Oxford- Cambridge arc" .	Oxford-Cambridge Arc added to plan on page 10. This is also referenced within the text on page 8.
	2.4	Planning Policy – the CBC map and key are really hard to read and there should be references to the new Local Plan. There needs to be references to the LCA – there are relevant comments on Cranfield, the University and the plateau landscape within the "Stagsden – Cranfield Clay Farmland character area. Reference needs to be made to the location within the FMV and the planting requirements this brings.	<p>Central Bedfordshire Landscape Character Assessment (LAC) has been listed on page 12 of the Masterplan document. This document has been referenced when shaping the landscape strategy for the campus. Planting is less formal and denser on the western boundary of the campus and gradually becomes more formal and urban toward the centre of the campus. Planting is limited on the eastern boundary respecting the adjacency of the airfield. Enhancing views into and out of the campus is supported by the masterplan. Views are specifically referenced within the Planning and Environmental Statement.</p> <p>The Forest of Martson Vale designation is shown on the plan on page 13. As this is a Masterplan document it is not considered necessary to explain compliance with particular policies/designations. This designation has very much informed the landscape proposals and will be detailed where necessary in support of future relevant planning applications.</p>
	2.5	Agree with the lack of sense of identity on arrival and the poor legibility - would like to see illustrations of the type of entrance features proposed for the gateways. Trees, bespoke art, flagpoles – art linked to aircraft – something with all year impact is required.	As per the Masterplan document, wayfinding, signage, landscaping and public art will be supported to enhance entrance points to the campus. Given the strategic nature of the Masterplan document examples of the proposals have not been included as the Masterplan is not intended to be this prescriptive. The Masterplan does however indicate the intent to improve the arrival points for the campus which future proposals will respond to. Please also refer to response to point 1.2 above.
	2.6	Parking and connectivity – a parking strategy is welcomed, alongside those for enhancing pedestrian and cycle links. Parking areas provide opportunities for	Additional text added to page 20 to strengthen the importance of landscaping in peripheral car parks 'New peripheral parking zones should incorporate suitable

	landscape enhancement. The peripheral parking has to be attractive and safe for it to be successful.	landscaping where possible, delivering safe and welcoming environments.’
2.7	In terms of paths – planting and street furniture can aid legibility. A lighting strategy sympathetic to the spaces will also be required to encourage use.	Creating a safe and welcoming environment for visitors/staff and students is integral to the Masterplan. The importance of adequate street lighting is noted and will be looked at as future proposals come forward, specifically for urban realm improvements.
2.8	Campus Experience, p22 – this chapter needs to be more ambitious and should also consider public realm enhancement such as outdoor seating and play provision.	The opportunities on page 25 have been updated to include reference to the provision of street furniture and play equipment.
2.9	Chapter 5 – Landscape and Public Realm – Existing soft landscaping is described as “modest” but actually the site benefits from a range of landscape styles linked to the age of the building. Landscape within the public realm is worth investing in – to aid legibility but also to strengthen the sense of place. There is good material outlining what is planned re integration of landscape with the access hierarchy but the feel to me is that landscape is heavily associated with grounds maintenance.	‘Modest’ has been used to as a term to describe the landscape and not the range of features. Landscape maintenance is one method to assist in campus legibility. However as per the Masterplan, a hierarchical planting and materials palette also informs and enhances campus legibility and changes as one moves from the centre of the campus to more peripheral locations.
2.10	Disagree with the statement under “Opportunity“ that the approach to hard and soft landscaping should follow a common palette – albeit with a thematic approach. Using a common style for street furniture will aid cohesion but a more varied response to planting can help create specific places and local identity across the site. (are hard and soft landscaping the best terms to use?)	Text updated to refer to common hierarchical palette. The palette hierarchy is further explained within the Components of the Masterplan.
2.11	Open Spaces p24, - there is a need to recognise the spaces between the airforce buildings are critical in terms of the historic layout – this is particularly important for the frontage facing the airfield.	The importance of the historic layout and landscape of the campus is noted with the Masterplan document – this point has been strengthened on page 24. Enhancing the historic landscape is also already referenced on page 30 of the Masterplan.
2.12	Biodiversity – linked to public realm – the plans need to show “green wedges” and links between spaces – not just to the rural buffer but to enhance the campus as a whole. The plan notes the value of ivy clad walls for the spotted flycatcher but where are the proposals for green elevations, green walls or greater use of climbers to enhance poor building frontages?	The plan referred to within the comments relates to the existing site analysis which is not intended to illustrate biodiversity proposals. Please refer to Chapter 5 for further information on landscaping/biodiversity proposal. Text added on page 25 and 38 promoting provision of green walls/elevations.
2.13	The Management plan is welcomed.	Noted.
2.14	Some context for biodiversity e.g. links to the surrounding countryside would be useful.	Additional text added to page 25 to provide the wider context for surrounding biodiversity. An additional paragraph has been added to the ‘opportunity’ section noting: ‘Enhancing biodiversity links with the surrounding area should be supported where possible’.
2.15	Chapter 5 - The scale of new growth does not come across in the text but the scale of red and crimson plots on the Indicative Masterplan i.e. Proposed New Buildings and Long-Term Development is extensive. The difference between these two phases needs to be explained – there is no timescale.	The scale of development, i.e. net new floor space of 77,000m2 is referenced on page 7 of the Masterplan. Phasing has been removed from this section as Chapter 6 provides timescales for the delivery of masterplan development.
2.16	Movement and Navigation – the small plan is so detailed the key messages do not come out such as the cycle routes and connectivity to Sustrains/Cranfield, SUDS and MUEAVI proposal.	The movement strategy on page 29 has been replaced with a strategic connections plans showing the existing connections of the site. The plans on page 50 then demonstrate how the campus will connect with these links.
2.17	Public Realm and Landscape Vision – the three-fold vision is fine but limited in expression as it does not respond to the unique and innovative site. Landscape treatments could be shown to aid integration eg through “green fingers” connecting the rural edge through to the airfield.	The opportunity’s highlighted on pages 23, 24 and 25 all make reference that future buildings, landscape, public realm and biodiversity projects. Where possible, should perform a research/teaching/ living lab function. The following text has been added to page 31 to strengthen this point in terms of landscape/public realm ‘Landscape and public realm are also envisaged as testing grounds for research into innovative technologies developed by the University, in particular green and sustainable technologies.
2.18	The Landscape Vision does not reflect the “Proposed Development and Public Realm Structure” illustrated on the previous page. Where is the landscape structure for the proposed new buildings to the west of the Technology Park? Empty spaces “such as the car parks could be shown with landscape enhancement. There is no mention of landscape treatment integral to the buildings such as green roofs and walls- elements which could help provide research opportunities	All drawings have been reviewed for consistency and all landscape plans have been updated to reflect the proposed masterplan area. Landscaping within peripheral car parks has been added to the landscape strategy diagram on page 46 and also shown within the planting strategy on page 52. Car parks will incorporate landscape and SUDS features where possible. Text added on page 25 and 38 noting the provision of green

			walls/elevations could be considered in the historic campus on non-primary and blank elevations.
	2.19	Suds should be given a greater emphasis throughout and car parks will require a planting strategy incorporating Suds.	The plan on page 54 indicates that all car parks will incorporate SuDS features. This has also been strengthened in the text on page 54.
	2.20	Streets and Urban Structure p32/33 – the two sections illustrating the MUEAVI might be better for the next stage. One illustration at a larger size would be clearer, which would give space for examples of enhanced secondary or tertiary streets.	Page layout has been addressed to assist with legibility of diagrams. Unfortunately, no further sections are available at this stage.
	2.21	Architectural Form and Character p36 – 40: this needs to include text for green treatments of roofs, elevations and external spaces. Some treatments may be appropriate for the Historic Campus but are certainly relevant for the campus expansion and commercial developments.	Text added on page 25 and 38 concerning provision of green walls/elevations. Please refer to the response to point 2.18 above.
	2.22	Landscape and Public Realm Strategy – The Indicative Landscape Strategy Plan is based on the existing site and does not fully relate to the growth proposals. The landscape strategy should include some links to the surrounding landscape. It would be helpful if the Landscape Strategy Plan could indicate more clearly the differences between existing and proposed tree planting.	The plan referred to illustrates the proposed campus expansion and has been updated to include the area to the south west. Please refer to the tree planting diagram on page 52 which identifies the existing and proposed tree planting strategy.
	2.23	With the scale of growth proposed, particularly close to the airfield (and the CAA restrictions) it does not seem possible that the planting targets can be achieved on site. Cranfield may need to propose a varied response, which could include the planting of new woodland on adjacent land (if this can be secured) which would provide a resource for study and also increase the effectiveness of the rural buffer as screen mitigation for the growth proposals.	Extensive tree planting is proposed across the campus, particularly within the west and north boundaries creating a strong landscape buffer for the campus. Tree planting proposed will contribute towards the Councils planting target for the Forest of Marston Vale.
	2.24	Landscape Movement Strategy p50 – This strategy needs to reflect that residents utilise the public rights of way to Cranfield, local paths, which include the Milton Keynes Boundary Walk.	The plan on page 29 has been replaced with a strategic movement diagram showing the existing connections outwith the site and PROW. The plan on page 50 ties into the sites external connections.
	2.25	Planting and Biodiversity Strategy – Has a comprehensive arboricultural tree survey been carried out? Whilst poor specimens may be better cleared to enable redevelopment and planting for the future, the value of mature trees visually and for wildlife will usually require their protection. With the extent of redevelopment proposed, safeguarding the trees on campus will be a major issue. New tree planting will need to reflect local species but also plan for disease and climate change resilience.	The campus benefits from a large variety of tree species including a number of mature fruit trees and a small broadleaved ash woodland. An outline tree survey was produced in 2006 by <i>Amenity Tree Care Ltd</i> . The species distribution and general condition of trees across campus was recorded, however a revised tree survey will be needed to accurately inform any specific projects within campus. Arboricultural surveys will be undertaken where necessary in support of future development proposals.
	2.26	There is very little on biodiversity.	The University has a standalone Biodiversity Action Plan (BAP) for the campus which is a working document last published in 2016. Reference to this document has been added to the Masterplan. The masterplan planting and SuDS strategy has been conceived to align with the BAP which seeks to enhance and improve Biodiversity across the site.
	2.27	A stronger vision for the environment is required. The landscape strategy needs to be strengthened and developed to include more innovative features such as green roofs and walls.	Text added on page 25 and 38 concerning the use provision of green walls/elevations. Please also refer to response to point 2.18 above.
3. Ecology	3.1	Biodiversity is referred to throughout the document in a multi-functional capacity. This supports GI but mustn't lose sight of some pure biodiversity gains that could easily be achieved on site. Support the introduction of SUDS and green walls and support naturalised green spaces throughout the campus. The university is slightly constrained in its ecological aspirations due to CAA restrictions associated with prevention of bird strike, as such the masterplan needs to be creative in its provision of habitat types, focussing on pollinators, reptiles, amphibians and small mammals, all of which has done well.	Noted. No changes to Masterplan document considered necessary.
4. Green Infrastructure	4.1	The objective to enhance biodiversity is welcomed. This could usefully extend to landscape enhancement, especially given the site's location within the Forest of	Landscape enhancement is covered by the Masterplan document.

		Marston Vale.	
	4.2	Landscape and public realm section: This needs to look more at the existing open spaces, and the connectivity between them, in terms of which spaces are existing destinations / focus points, what the potential is for new and enhanced spaces, and how they can be legibly connected.	The landscape and public realm strategy aims to enhance existing public destinations and connect these to the new campus heart and public squares. Please refer to page 46.
	4.3	The landscape strategy is useful, but the connectivity section should look at open spaces and their connectivity, and habitat patches and their connectivity, not just movement from a transport point of view.	The planting strategy proposes to create a strong landscape buffer around the north and west of the campus building on the existing planting in this area, creating a landscape and wildlife route. Maintenance in this area will be minimal and focused on increasing habitat opportunities and ecological value. Public square and spaces will be linked via planting and materials to provide a connected sequence of spaces and habitat.
	4.4	Biodiversity section: A comprehensive biodiversity enhancement plan is needed. Key opportunities are the watercourse network, and the potential for integrating with SuDS and deculverting the extensive underground network or surface water conveyance pipes.	Please refer to response in 2.26 above. The University has its own standalone Biodiversity Action plan. References to this document have been strengthened within the Masterplan. Please refer to the responses provided below in respect of SuDS in 9.3-9.8 below.
	4.5	Consideration needs to be given to how to link existing habitat patches for biodiversity benefit.	The planting strategy proposes to create a strong landscape buffer around the north and west of the campus building on the existing planting in this area, creating a landscape and wildlife route. Maintenance in this area will be minimal and focused on increasing habitat opportunities and ecological value.
	4.6	In the planting and biodiversity strategy, more consideration should be given to habitat networks, with watercourses identified as key opportunities for enhancing connectivity, with deculverting, and the creation of wet woodland and meadow grassland habitats.	Please refer to the responses in 2.26 and 4.4 above.
	4.7	The recreational spaces are solely within the residential area. There's also a need for recreational space for users of the other buildings. A planned network of multifunctional green spaces should be created across the campus.	The recreational spaces shown on the plan on page 47 represent recreational sports pitches. Other forms of recreational areas are provided elsewhere in the campus in the form of amenity areas and public squares – such spaces offer a different form of recreation compared to the traditional sports pitches and will deliver functional areas of public realm for staff/students and visitors.
	4.8	Public realm / landscape vision: more detail of the palette referred to is needed. The over urbanisation of spaces should be avoided. Some of the more recent buildings have landscaping schemes which are very high maintenance, and include failing sculpted trees. While high quality landscapes are welcome, and the ambition to create a visually attractive public realm is welcomed, there needs to be a coherence in terms of landscape design, with the creation of schemes that can be effectively managed and maintained in the future.	Indicative details are provided for the materials palette on pages 49 and 51. As public realm enhancements are progressed these will come forward as planning applications to be assessed by the council. A landscape management and maintenance strategy will be progressed to support future planting. The University is not aware of any serious failing landscape, however where landscape is failing this will be reviewed and maintained as necessary.
	4.9	The cross sections on p33 are useful - but space should be included for large, mature trees. If space is not designed in at this stage, a conflict is created in future when trees are perceived as being too big for their environment, and are at risk of being removed.	The cross sections referenced relates to the new north/south link road (MUEAVI road). This area does not currently accommodate any large mature trees and is proposed to be planted with species to align with an urban tree structure which will be maintained to suit its location.
	4.10	SuDS: Much more could be done in this section, looking at the existing network, particularly how it could be improved, in terms of retrofitting features to manage water quality, and opportunities for de-culverting, with at surface conveyance and treatment. The current proposals put stormwater basins at the periphery of the site. This approach is concerning, as SuDS should be designed across the whole site, with a mix of features appropriate to the setting, including small scale attenuation features at the heart of the scheme (e.g. rain gardens, tree pits, swales). There needs to be a stronger link to the biodiversity potential of the watercourse network, with naturalistic, biodiverse SuDS throughout the campus, using landscaped features as part of the public realm design.	Please refer to comments below under 9.3-9.8.
5. Rights of Way	5.1	It would be good to retain and enhance the walking and cycling provision both within the university site and surrounding it for local residents, students and	ROW anomalies are noted and if development proposals come forward which affect these the necessary steps will be followed to divert/extend the ROW to provide a full

		<p>others on campus and visitors.</p> <p>Public Footpath no. 52 anomaly on the plans – needs to be acknowledged in the Masterplan.</p> <p>Consideration should also be given to whether this footpath could be upgraded to bridleway or cycleway so that it could then be used by those on bicycle to link them from the university to bridleway 48.</p> <p>Wish to see a good connection between footpath 52 and Cranfield 23 in the east.</p>	<p>connection.</p> <p>Connected ROW have been identified on the diagram on page 29.</p>
6. Sustainability	6.1	<p>Renewable energy and battery storage needs to be an early consideration to make sure that appropriate locations are identified and space is secure.</p> <p>If PV was to be installed on roof, the masterplan should consider buildings/roof orientation to maximise benefits.</p> <p>Orientation of buildings is important in passive solar design and needs an early consideration too.</p>	<p>Incorporating PV panels on flat roof buildings will be supported where possible and will likely be focused in the Campus Expansion & Commercial and Campus Airfield Frontage character areas. All installations will need to be mindful of the proximity of the airport and be CAA compliant. Text added to pages 40 and 42.</p>
7. Transport	7.1	It is positive to see that some consideration has been given to future transport related developments in the area such as East-West Rail and the Oxford- Cambridge Expressway.	Noted.
	7.2	Design consideration needed for cyclist routes as well as pedestrians- within detailed design submissions approach will need to be confirmed in terms of segregating cyclists, designing internal routes between buildings etc. to realise the aspirations for sustainable connections between campus sites.	Noted.
	7.3	Plans to improve on-site retail and leisure offer may offer a chance to reduce off site car trips for these purposes.	Agreed.
	7.4	<p>Promotion of sustainable modes:</p> <p>There is no mention of the strategic approach that will be needed to promote travel and transport related schemes to staff, visitors, students and residents. This will be required as and when the planning proposals come forward, in the form of a travel plan. This exercise was completed back in 2006- so confirmation will be needed in terms of what the approach to updating this will be going forward.</p>	Future Travel Plan measures are set out within Chapter 8 of the Transport Assessment.
	7.5	<p>Parking Strategy:</p> <p>With reference to the parking strategy referred to in the masterplan document, whilst the main aim of this document will be to provide safe and accessible parking in the right locations and enforcement of those areas that are suffering from inappropriate student parking, consideration should also be given to promoting sustainable options (with car sharing being applicable in this case) as a means to manage the demand new parking provision that will be on offer.</p>	Noted.
	7.6	<p>Off-site connectivity:</p> <p>Reference to future aspirations to utilise and connect with an improved interchange at Ridgmont station is welcomed- along with an improved transport interchange on the Cranfield site being listed as a short-term project. Early engagement with both bus operators and CBC on the usage and promotion of this new facility will be vital.</p>	Noted.
8. Planning	8.1	Chapter 1 – although figures are provided in terms of the potential increase in floorspace, are there any more details with regards to types of employment?	As referenced on page 7 of the Masterplan document the Masterplan contains proposals with the potential of delivering a net increase in floorspace of c.77,000m ² across the campus, which includes 400 new bed spaces. This net increase excludes the renewal of existing buildings which are no longer fit for purpose. Although the total floorspace on site is increasing, this is made up of a mixture of research, development and commercial spaces which tend to be large floorplate buildings with relatively low occupancy levels. There will be some conventional academic teaching space and an appropriately sized retail hub to support the campus.
	8.2	Page 23 – opportunity box – ‘to’ missing between exists and develop on the fourth line.	Corrected.
	8.3	Maps/Plans – there are differences between some of the plans of the site particularly in terms of the	Map/diagram consistency has been updated.

	8.3	Maps/Plans – there are differences between some of the plans of the site particularly in terms of the southern end. It would be useful to have the same underlying base maps.	Map/diagram consistency has been updated.
	8.4	Page 30 – references to storeys – could there be height references like on page 38	The plan on page 30 has been updated with a side wide building storey plan.
	8.5	It is a little bit disappointing that they have not guided the concept more towards high quality innovative design for the new buildings in section 2 –Architectural form and Character.	Providing high quality facilities is identified as a masterplan objective on page 26. The text on page 36 has been updated to include ‘Dynamic and innovative architecture shall be supported, reflecting the processes being undertake inside new buildings.’ Page 37 states ‘innovative design approaches and features are to be encouraged’.
	8.6	There is a typo on page 52 – should say ‘unite’ not unit?	Corrected.
Planning & Environmental Statement	9.1	This includes a section on environmental considerations, but doesn’t recognise that the site is within the Forest of Marston Vale. In this context, the statement should include a review of existing tree cover, and opportunities to contribute to the 30% tree cover target. Identifying key trees on the site, and developing a site wide tree and woodland strategy is important, and currently missing.	References to FoMV designation have been included within the Masterplan document and strengthened in the Planning & Environmental Statement. Extensive tree planting is proposed across the campus, particularly within the west and north boundaries creating a strong landscape buffer for the campus. Tree planting proposed will contribute towards the Councils planting target for the Forest of Marston Vale.
	9.2	Environmental considerations section: The ecology section looks solely at protected species. It needs to be broadened, looking at biodiversity enhancement and net biodiversity gain - suggestions are made in masterplan comments.	The Planning and Environmental Statement is intended to set out specific constraints to future masterplan development, identifying where mitigation may be required. The landscape and planning strategy has been prepared to align with the university’s existing Biodiversity Action Plan which is reviewed on an annual basis.
	9.3	The drainage section looks at the existing network, but doesn’t cover opportunities for enhancing the drainage network, in terms of enhancing SuDS features (creating at surface conveyance and treatment, e.g. rain gardens, swales rather than pipes, tree pits, ponds, wet habitats. Consideration also needs to be given to water quality.	Section 4.46 to 4.52 states the general stormwater management philosophy which advises that SuDS features will be used wherever possible in respect of the proposed Masterplan. It also identifies that there are constraints particularly within the Campus (Academic Zone) which will limit the extent to which the existing network can be modified. However, this will be done wherever technically and financially viable. Enhanced water quality is a key pillar of sustainable drainage principles.
	9.4	Point 4.32 refers to known pollution risks; SuDS features should be included to manage water quality, with pollution control features retrofitted.	SuDS features will significantly improve water quality which is key principle of sustainable drainage. Specific retrofit components such as penstocks are referred to in Section 4.82 and 5.12
	9.5	There is a significant opportunity from deculverting surface water conveyance pipes, and re-naturalising engineered channels.	Much of the existing stormwater drainage main network within the Campus area is open channels and watercourses or is piped within existing estate roads and hence there is little opportunity to de-culvert. A key principle of the proposed strategy which is reinforced throughout the document is the aspiration to re-naturalise existing channels whenever possible and integrate them within the wider landscaping scheme. This is also included within Section 5.10.
	9.6	I strongly disagree with section 4.44 which states that existing watercourses and channels will remain largely unchanged - the existing network should be reviewed, with opportunities to renaturalise channels and deculvert surface water conveyance pipes taken as much as possible. This statement should be challenged, as there is significant potential to reduce surface water flood risk, and enhance biodiversity and amenity through these measures.	The text states <i>largely unchanged hydraulically</i> . As noted above, the stormwater management philosophy states a clear aspiration to re-naturalise existing channels whenever possible and integrate them within the wider landscaping scheme. This can only be carried out within the constraints which exist within the existing Campus area and also the proposed redevelopment. Also as noted above, there is little opportunity to de-culvert however consideration will be given wherever this is feasible and appropriate bearing in mind the proximity of the airfield and the potential for water bodies to be a bird attractant. Re-profiling watercourses and channels within the existing campus area network will also create additional capacity to reduce flood risk in addition to the benefits offered by the proposed SuDS features.
	9.7	There are also opportunities to increase access to features, especially around the Lagoon area, which is extensively fenced. The need for fencing should be reviewed, and only retained where demonstrably necessary.	The document clearly supports this approach. Refer to Section 5.11 and 5.13.
	9.8	At a site level, the masterplan should be aiming to reduce surface water flood risk. Section 4.42 refers to existing risk, without the aspiration for reducing flood	Implementation of sustainable drainage principles states a clear aspiration to reduce flood risk which is a fundamental principle of SuDS. The document refers to how this could be

	9.9	<p>Landscape and views section: As above, this section should consider the FoMV context, the opportunity to deliver 30% tree cover, and a review, management and enhancement plan of the existing tree and woodland resource across the campus.</p>	<p>Please refer to the responses within section 2 above regarding planting and 4.3, 9.1 above.</p> <p>The landscape and planting strategy identifies opportunities for planting across the site, particularly on the western and south boundary creating a landscape buffer for the campus. Planting is also proposed within the campus including trees to line MUEAVI road and planting in car parks. Tree planting will be supported by low level planting and under storey planting.</p>
10. Transport Assessment	10.1	<p>Summary: June 2012 – Junction modelling report – 65000 sq. m floorspace, 2750 employees.</p> <p>June 2016 – Modelling update report: This provided an update to reflect strategic improvements and travel plan with comprehensive data collection – as a result traffic flows and trip rates now shown to be less than previously predicted leading to a conclusion that more floorspace could be developed before specific junction improvements are triggered.</p> <p>The masterplan and therefore the TA include both the Technology Park and the University together leading to lower density employment use. Nissan is excluded from the masterplan and TA on the basis that it is not in the University’s ownership. Any subsequent expansion of Nissan would then need to be dealt with separately.</p> <p>The masterplan proposes 77,000 sq. m. by 2027 although it is not explicitly stated how many employees this would likely generate.</p>	<p>Noted.</p>
	10.2	<p>Comments:</p> <p>Traffic count data and Trip generation.</p> <p>CBC were consulted last year on potential data collection locations. The data has had both rat running and Nissan related traffic excluded. The resultant trip rates are therefore considered robust.</p> <p>Para. 5.3 details committed development in Cranfield, an update has been requested from CBC Strategic planning as there are recent permissions that haven’t been taken in to account and may have an impact. Any recent permission may also be providing capacity improvements which may mean that further junction modelling is required.</p> <p>Baseline traffic growth is detailed to 2027, it is assumed that this is the Masterplan timeframe although this is not explicitly mentioned.</p> <p>It is also agreed that the travel plan represents an opportunity to reduce trip rates further although this hasn’t been used to adjust trip generation predictions which therefore looks at the worst-case scenario, again this is supported.</p> <p>The TA proposes that due to the lower employment densities then particular junction improvements previously detailed can either be delayed or will not be required at all. It is proposed that the Beacroft Rd/Marston Hill junction will no longer require a roundabout – modelling output should be provided as part of the TA in order to confirm this.</p> <p>I also recall discussion as to routing options and potentially visitors and employees being encouraged to enter the site via University Way. Has any further thought been given to this, therefore lessening the requirement for additional junction improvements?</p>	<p>Noted.</p> <p>The approved expansion of the Technology Park pre-dates recent approvals in and around Cranfield. Therefore any recent developments must take account of the approved expansion as committed development, not the other way around. Although it is noted that the Masterplan proposals plans show a modest increase in floor space compared to the approved Technology Park expansion, this modest increase, as demonstrated within the TA generates a lower trip compared to the approved expansion and therefore no further modelling is considered necessary.</p> <p>Phasing and timescales are detailed within Chapter 6 of the Masterplan document.</p> <p>Noted.</p> <p>Please refer to text above in connection to committed development.</p> <p>There is generally a split between the main approaches to the University with a slight weighting towards the M1/University approach. The location of the University’s administration to this side of the campus and the provision of a strategic centralised car park is reinforcing this emphasis.</p>

	10.3	<p>Parking proposals</p> <p>To summarise: - Existing provision = 2720 spaces including 81 disabled (3%). Current demand = 2426.</p> <p>It would be useful to calculate how many spaces would be required utilising CBC parking standards for comparison purposes, these are stated but no calculations made.</p>	<p>Using CBC Parking standards on the existing site the following can be demonstrated:</p> <p>CU Staff 1170/2 = 585 Students 3046/15 = 203 Technology Park 47,176m² / 25 = 1,887</p> <p><u>585+203+1,887 = 2675 spaces required to support the existing campus.</u></p> <p>The parking beat surveys undertaken in support of the Masterplan covered the full Cranfield Campus including the academic area, residential zone and Technology Park. This survey work demonstrated that 2,720 formal parking spaces exist with a peak demand of 2,247. During peak time, a surplus of 473 spaces was recorded.</p> <p>The parking surveys identify that at 7am 493 cars were on campus, 311 of which were recorded within the residential areas. These 311 cars have been discounted from the analysis as these are considered to relate to residing students on campus. 2,247-311 = 1936 which represents the peak number of cars travelling to and parking on site on the survey day.</p> <p>The existing campus comfortably operates within CBC parking standards and has an operational surplus.</p> <p>Given the surplus, it is not considered appropriate to apply CBC standards to the Masterplan development, instead a Cranfield parking ratio has been calculated to best represent the nature of the campus and the links with industry and the technology park.</p> <p>The TA provides details of the existing floorspace on site as stated below:</p> <ul style="list-style-type: none"> • 157,114m² (non resi + tech park)/1,936 = 81.5. This represents an existing parking ratio of 1 space per 81.5m². • 77,000m² (net masterplan growth) /81.5 = 945 spaces • Adding 945 to the existing peak demand (2,247) gives a total of 3,192. <p>The TA calculates that 3,146 parking spaces will be required to support the complete masterplan development and this figure is based on a 40% uplift in floorspace. This figure is slightly lower than the figure calculated above. Neither figure takes into account Green Travel Plan measures which will decrease the overall parking requirement. Therefore, the parking assumptions within the TA are considered to provide a robust and conservative parking projection based upon the unique character of the Cranfield site. Applying CBC standards to the Masterplan development would likely deliver a skewed parking requirement which has been evidenced as not being applicable to the actual operation of site.</p>
	10.4	<p>A car parking management strategy is also mentioned but not detailed, it would be useful to have this presented in order ensure that no overspill parking outside designated areas is permitted and how it might be monitored and enforced.</p>	<p>A car parking management strategy may be progressed in the future by the University to assist with directing and managing how parking spaces are used.</p> <p>The university already operate a ticketing system for illegal parking.</p>
	10.5	<p>Comments on the travel plan have been requested from the Strategic Transport Team who have also been asked to provide any updates from the perspective of the strategic transport network.</p>	<p>No further information has been received from CBC on this point.</p>
	10.6	<p>I also assume that a formal submission will include no highway mitigation measures such as improved pedestrian and cycle routes.</p>	<p>The campus masterplan has been derived to comprehensively improve the connectivity of the campus. As masterplan projects come forward detailed plans for pedestrian and cycle routes will be provided. However, a new cycle and pedestrian connection to Cranfield is coming forward alongside the Airport development proposals.</p>



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