



## **South West Milton Keynes**

Non-Technical Summary to Addendum Environmental Statement

AUGUST 2016

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## 1. INTRODUCTION

1.1 Duplicate planning applications were submitted to Aylesbury Vale District Council (AVDC) and Milton Keynes Council (MKC) in January 2015 for the development of South West Milton Keynes (SWMK). The planning applications were accompanied by an Environmental Statement (ES) prepared in accordance with the Town & Country Planning (Environmental Impact Assessment) Regulations 2011.

1.2 The planning applications have the references 15/00314/AOP (AVDC) and 15/00619/AOP (MKC) and have been given the following descriptions of development in reflection of the elements of the proposed development that fall within the respective local authority administrative areas:

### **15/00314/AOP**

*Outline planning application with all matters reserved except for access for a mixed-use sustainable urban extension on land to the south west of Milton Keynes to provide up to 1,855 mixed tenure dwellings; an employment area (B1); a neighbourhood centre including retail (A1/A2/A3/A4/A5), community (D1/D2) and residential (C3) uses; a primary and a secondary school; a grid road reserve; multi-functional green space; a sustainable drainage system; and associated access, drainage and public transport infrastructure.*

### **15/00619/AOP**

*Physical improvements to the Tattenhoe and Bottledump roundabouts and a new Aylesbury Vale District reference 15/00314/AOP.*

1.3 The applications have been subject to consultation and the SWMK Consortium has been in negotiation with the local planning authorities through the mechanism of a planning performance agreement.

1.4 Revisions have now been proposed to the scheme to address matters raised during the formal consultation process. They are described below. These revisions have been formally submitted to both local planning authorities and are addressed in the following material:

- Revised application drawings;
- An Addendum to the submitted Environmental Statement and Non-Technical Summary;
- A new Transport Assessment (appendix to the Addendum ES);

- A Framework Travel Plan;
- A revised Landscape and Visual Impact Assessment (appendix to the Addendum ES);
- An Ecological Assessment with a particular focus on potential Bat Roosts.

1.5 This document comprises the Non-Technical Summary of the Addendum to the submitted Environmental Statement. Copies of this document may be obtained by contacting:

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1.6 The documentation will also be available to view at the offices of Aylesbury Vale District Council and Milton Keynes Council and on their respective websites. All comments on the proposed revisions to the applications should be sent to:

Head of Development Management  
Planning Division  
Aylesbury Vale District Council  
The Gateway  
Gatehouse Road  
Aylesbury  
HP19 8FF

Director of Planning and Transport  
Milton Keynes Council  
PO Box 125  
Civic Offices  
1 Saxon Gate East  
Milton Keynes  
MK9 3ZL

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## **2. ADDENDUM TO THE ENVIRONMENTAL STATEMENT**

2.1 The Addendum to the ES must be read in conjunction with the submitted ES (January 2015). There is no change in the overall approach to the assessment that is described in the submitted ES (January 2015) (Section 4). The Addendum sets out the revisions that have been made to the proposed development. In light of these the applicant in conjunction with its consultant team has identified the need to reassess the scheme with regard to the following topics of the submitted ES (January 2015):

- Section 9 – Landscape & Visual;
- Section 10 – Traffic and Transport;
- Section 11 – Air Quality;
- Section 12 - Noise & Vibration.

2.2 Advice from the consultant team has confirmed that the proposed revisions do not affect the assessment of the development in relation to the other topics as presented in the submitted ES (January 2015); and that there have been no changes to appropriate methodologies, guidance or standards since the original assessment that would indicate a need to reassess the environmental impact of the scheme in relation to these topics, notwithstanding the proposed revisions.

2.3 Topics where the revisions to the proposed scheme do not lead to a change in the assessment as described in the submitted ES (January 2015) are the following:

- Section 6 – Agricultural Land;
- Section 7 – Ecology;
- Section 8 – Drainage;
- Section 13 – Socio-Economics;
- Section 14 – Services & Utilities;
- Section 15 – Waste;
- Section 16 – Ground Conditions & Contamination.

2.4 Finally, in light of the assessment of the proposed development as revised, the Addendum ES identifies and draws appropriate conclusions on the assessment of the likely significant effects that arise.

### 3. PROPOSED REVISIONS TO THE DEVELOPMENT

#### 3.1 The proposed revisions to the scheme are as follows.

- Revisions to the proposed site access arrangements:
  - Improvements to the Bottledump Roundabout, including an equestrian crossing and links to Redway routes to the north of the A421 and within the site;
  - Revision of the proposed junction with the A421 from a 'left in and left out' arrangement to a 'left in' only arrangement and consequent amendments to the disposition of land uses immediately adjacent to the junction;
  - Revision of the proposed traffic light controlled junction with Buckingham Road to a roundabout junction;
- The incorporation of 1.69 Ha of green space (ecological corridor and land effected by archaeological constraints) situated between the proposed satellite secondary school and housing at Far Bletchley within the boundary of the school site;
- Changes to the Whaddon Road corridor to provide for a widening of the landscape corridor along the western boundary of the scheme, removal of the proposed bunding, a general increase in the extent of planting and accommodation of the Milton Keynes Boundary Walk to the internal edge of the landscape corridor;
- Changes to the corridor adjacent to the southern boundary with the relocation of the woodland planting to the northern edge of the proposed SUDs features and changes to the overall design concept for the development parcels in the south east quadrant of the site which incorporates new east-west 'ribbons' of green infrastructure;
- An increase in the number of LEAP (now 9No), the sizes of LEAP and NEAP increased to meet RoSPA guidance and their disposition across the site to maximise coverage in reflection of Fields in Trust guidance;
- Identification of a parcel of land (0.2 Ha) to the rear of the proposed neighbourhood centre to be used either for employment purposes (B1) or to accommodate a 6GP practice (D1) developed over two floors with associated car parking.

3.2 The Development Framework Plan (drawing reference SWMK03-073 Revision K (July 2016)) provides a revised Land Use Budget for the scheme. It is repeated below.

**Table 1 – Land Use Budget**

<b>LAND USE</b>	<b>AREA (Ha)</b>
Allotments	1.18
Employment	2.07
Green Open Space	53.67
Grid Road Reserve	7.28
Infrastructure	4.78
Local Centre	0.67
Primary School	3.00
Secondary School	5.12
Secondary School Green Infrastructure	1.69
Water Attenuation	5.08
Residential	54.70
<b>SUB-TOTAL</b>	<b>139.26</b>
Highway Improvements	5.21
<b>TOTAL</b>	<b>144.46</b>

3.3 Other than as outlined above, the scheme parameters remain as originally submitted and described in the ES. However the following drawings have been prepared to illustrate the revisions and Table 2 below lists the drawings have been prepared and which replace the drawings that were originally submitted. For the avoidance of doubt the following drawings are not replaced:

- Constraints Plan – SWMK03-87 Rev D 11/14
- Phasing Plan – SWMK03-131 Rev B 09/14

3.4 Similarly for the avoidance of doubt, the Public Transport drawing (SWMK03-83 Rev E 07/16) has not previously been submitted.

**Table 2 - Drawings**

<b>Drawing Description</b>	<b>Reference</b>	<b>Revision</b>	<b>Date</b>
Development Framework Plan	SWMK03-073	K	07/16
Parameter Plan	SWMK03-074	N	06/16
Open Space Plan	SWMK03-076	I	07/16
Illustrative MP in Context	SWMK08-001	N/A	06/16
Application Site Boundary	SWMK03-079	E	06/16
Residential Density	SWMK03-082	E	07/16
Ground Remodelling	SWMK03-148	B	06/16
Building Heights	SWMK03-149	D	06/16
Indicative Landscape Plan	3126-L-01	J	07/16

#### **4. PLANNING POLICY CONTEXT**

- 4.1 There has been no material change in the statutory development plan context since the planning applications were submitted.
- 4.2 Milton Keynes Council is preparing a Site Allocations Plan. A draft 'preferred options' document was published by the Council for public consultation purposes in October 2015. The replacement of the adopted Core Strategy (2012), Plan:MK, is also in preparation. A 'Strategic Development Directions' consultation document was published by the Council in January 2016.
- 4.3 Aylesbury Vale District Council has published a draft of its Vale of Aylesbury Local Plan for public consultation purposes (July 2016). Policy D3 'Delivering Sites Adjacent to Milton Keynes' allocates land for 4,274 dwellings on the edge of Milton Keynes at four sites, one of which, reference NLV001, is the application site.

## **5. LANDSCAPE & VISUAL (Section 9 of submitted Environmental Statement)**

### **Introduction**

- 5.1 A revised and updated Landscape & Visual Impact Assessment (LVIA, July 2016) to reflect the changes to the Proposed Development has been prepared. This is a freestanding Appendix to the Addendum ES.
- 5.2 The purpose of the LVIA is to review landscape character and visual amenity and to assess the resulting landscape and visual effects of the Proposed Development on the receiving landscape receptors and visual receptors.

### **Assessment Methodology**

- 5.3 The Addendum ES chapter and the LVIA have been prepared using the Guidelines for Landscape and Visual Impact Assessment, GLVIA3 (Landscape Institute and the Institute of Environmental Management and Assessment, April 2013). It is also prepared in accordance with the FPCR Methodology & Assessment Criteria (2016) contained in the LVIA.
- 5.4 The baseline visual study includes an understanding of the area in which the Proposed Development may be visible. It considers the groups of people who may experience views, the viewpoints where they may be affected, and the nature of these views. Conclusions on the level of effects, and whether these are adverse or beneficial, are drawn from separate judgements on the sensitivity of the receptors and the magnitude of the effects.

### **5.5 Landscape Character Baseline Conditions**

- 5.6 The site is not covered by any landscape quality designation at either a national or local level. The village of Newton Longville lies around 0.5 km to the south-east of the site. It contains a Conservation Area and a number of Listed Buildings, as does the village of Whaddon to the north-west, around 1.8km from the site.
- 5.7 Within the urban area of Milton Keynes, to the north, are Scheduled Monuments at Tattenhoe (around 0.5km from the site) and at Howe Park Wood (around 1km from the site).

### **National Landscape Character**

- 5.8 Landscape character is assessed at a national level by Natural England through the use of National Character Area (NCA) profiles. The site lies within the extensive Bedfordshire & Cambridgeshire Claylands NCA. The key characteristics of the NCA and the Statement of Environmental Opportunity are identified in full within the LVIA.

### **Local Landscape Character**

- 5.9 The Aylesbury Vale Landscape Character Assessment AVLCA (2008) is the most up to date landscape characterisation at a local level. The substantial majority of the site lies within the Newton Longville-Stoke Hammond Claylands Landscape Character Area (LCA), part of the much larger Undulating Clay Plateau Landscape Character Type (LCT).

### **Landscape Value**

- 5.10 Neither the site itself nor the surrounding local landscape is subject to any landscape quality designation. In all landscapes there will be variations in the level of value depending on a number of factors. GLVIA3 (§5.27) describes those factors that are generally agreed to influence value which are: landscape quality (condition), scenic quality, rarity, representativeness, conservation interests, recreation value, perceptual aspects and associations.
- 5.11 The site contains no significant or rare landscape features, displays no marked feeling of scenic quality or tranquillity and it has no known cultural associations. Its landscape fabric are considered to be generally intact and of reasonable to moderate condition. Its hedgerows and mature trees provide some local landscape value and conservation interest -albeit these are commonplace elements within this landscape.
- 5.12 The site lies alongside the settlement edge of Milton Keynes and Bletchley and, as a consequence, the landscape is influenced to varying degrees by its intervisibility and relationship with the built-up area. The site provides some recreational value with the Milton Keynes Boundary Walk and Weasel Lane forming part of a wider network of rights of way that can be found within the surrounding landscape.
- 5.13 In examination of the above factors, it is judged that the site and the immediate landscape is of *medium –low* landscape value. In conclusion, it is not assessed as being a landscape of high value, nor is it interpreted to be a ‘valued landscape’ in the context of the NPPF.

### **Visual Amenity Baseline Conditions**

- 5.14 The availability of views of the site for visual receptors has been undertaken in parallel with the baseline landscape study. This has determined those visual receptors within the landscape that have views of the site, taking into account the combination of landform, vegetation and buildings that determine actual visibility across the landscape. Visual receptors include residents, users of public rights of way, users of open spaces and recreational facilities, highways users and people at their place of work.

- 5.15 During the pre-application stage a series of suggested viewpoint locations to represent the experience for visual receptors was submitted to AVDC for consideration. There was confirmation that these were appropriate.

### **Construction Methods**

- 5.16 It is expected that all construction works would be carried out in accordance with best practice procedures to minimise adverse impact. This will include appropriate methods to protect retained trees and hedgerows following guidance contained within BS 5837.

### **Likely Significant Effects**

#### Landscape Effects

- 5.17 The Landscape Effects Table (LVIA Appendix B) provides an assessment of the landscape effects on landscape receptors. The LVIA evaluates the level of effects during the construction phase, on completion of the development and at 15 years after completion of the development. The assessment process takes into account the susceptibility to change, landscape value and the magnitude of effect. It also provides a judgment on whether effects are considered to be significant.
- 5.18 The susceptibility to change is the ability of the landscape receptor (e.g. the site) to accommodate change arising from the Proposed Development. In all landscapes there will be variances in the susceptibility to change, depending on the type of change and/or development that is proposed. It is concluded that the site and the immediate landscape is of *medium* susceptibility to change and has the capacity to accept the type of development proposed.
- 5.19 Landscape sensitivity is defined through a combination of the susceptibility of the landscape receptor to the type of change/development that is proposed, and the value that attached to the landscape. The site and the immediate landscape is judged be of *medium* susceptibility and of *medium-low landscape* value. In conclusion, it is judged that the site and its immediate landscape are of *medium–low* landscape sensitivity.
- 5.20 As a consequence of its overall scale, the level of change (and effect) on the NCA Profile of the Bedfordshire and Cambridge Claylands would be inconsequential. The Proposed Development would result in change and alteration to the characteristics and features upon part of the Newton Longville-Stoke Hammond LCA. It is judged that the degree of change would be *medium – low* and that much of the wider LCA would not be changed.
- 5.21 The key characteristics and elements across the wider landscape of the neighbouring LCAs, would not be fundamentally altered as a result of the Proposed Development

and that the overall degrees of change on the Whaddon Chase, Horwood Claylands LCAs would be *low-negligible*, and for the Mursley-Soulbury Claylands LCA this would be *negligible*.

- 5.22 As a result of the alteration from agricultural use to built development a more pronounced magnitude of change would arise on the site itself, which is judged to be *high*.
- 5.23 The landscape effects during the construction phase on the extensive landscape receptor of Bedfordshire and Cambridge Claylands NCA are assessed as being *negligible*, whilst the effects on the Whaddon Chase, Horwood Claylands and Mursley-Soulbury Claylands LCA's are considered to be no more than *minor adverse*.
- 5.24 The more marked effects during the construction phase would be restricted to direct effects upon part of the Newton Longville-Stoke Hammond LCA (assessed as being *moderate-minor adverse*), and, more particularly, upon the site itself which is judged to be *major adverse*.
- 5.25 None of these effects would be permanent and would be over the short to medium term in duration.
- 5.26 It is judged that the direct impacts on the landscape would be restricted to the site. The Proposed Development would also result in some disruption in the landscape fabric of the site with the loss of some of its landscape elements (hedges and trees), to facilitate the construction of new access junctions, and the laying out of development parcels and streets etc.
- 5.27 The proposed green infrastructure (GI) framework is imbedded within the Parameters Plan and the Proposed Development as part the primary mitigation measures to minimise landscape impact and the level of adverse effects. The approach includes:
- 5.28 It is judged that on the completion of the Proposed Development the landscape impact on the site would result in a *major- moderate adverse* effect, which is assessed as being a significant effect.
- 5.29 In the longer term (15 years after completion) the GI would be fully established and landscape habitats such as woodland, hedgerows and trees would be maturing/matured. In conclusion it is judged that the benefits provided by the GI would reduce the level of landscape effects such that the effects on the site would lessen from *major-moderate* at the outset to *moderate adverse* in the longer term.
- 5.30 Given the conclusions on the site's susceptibility to change, its landscape value and its sensitivity it is considered that the site's landscape could accommodate the

Proposed Development without resulting in any significant long term landscape harm.

### Visual Effects

- 5.31 The assessment evaluates the level of effects during the construction phase, on completion of the development and at 15 years after completion of the development. The assessment takes into account the susceptibility to change, the value of views and the magnitude of effects. It also provides a judgment on those effects that are determined to be significant.
- 5.32 A digitally generated Zone of Theoretical Visibility (ZTV) has been prepared to assist in understanding the potential visibility of the Proposed Development. The baseline fieldwork has reviewed those elements within the landscape of the ZTV that restrict or obscure views of the site for visual receptors such as mature woodland (e.g. Broadway Wood) and the built-up area of Milton Keynes and Bletchley and this results in a more refined Representative Visual Envelope. This illustrates the potential area of the landscape in which the Proposed Development is likely to be visible for those visual receptors that are within that area.
- 5.33 The RVE is comparatively limited in its size and visual receptors that would experience views of the Proposed Development would either be those within the site (e.g. rights of way users), or those within close proximity to it (e.g. residents on the edge of Bletchley).
- 5.34 Those visual receptors that have full views of the site would experience close range views of general construction activity. It is expected that all construction works would be carried out in accordance with best practice procedures to protect and to minimise, as far as practicable, adverse impacts on visual amenity during the construction phases.
- 5.35 Effects on the various receptors during the construction phase are contained within the Visual Effects Tables (LVIA Appendix C). None of the visual effects for receptors during the construction phase would be permanent and these would be over the short to medium term in duration.
- 5.36 The fieldwork has concluded that there would be limited views of the Proposed Development from receptors in the wider landscape, largely as a result of:
- The built form of Milton Keynes and Bletchley that defines and contain the site to the north and east;
  - Mature woodland within the surrounding landscape, such as at Broadway Wood, Thrift Wood, and Coddimoorhill Wood;

- Overlapping hedges and mature trees to include tree cover along the A421; and
- Gentle variations in the landform.

5.37 There are a comparatively modest number of visual receptors that would have clear views of the Proposed Development and that marked effects would be limited to localised receptors. Whilst there would evidently be a level of change and effect for some receptors, e.g. users of Weasel Lane and the Milton Keynes Boundary Walk, built development within this landscape would not be uncharacteristic element given the proximity of the site to the settlement edge of Milton Keynes and Bletchley and that built elements are often discernible within this landscape context. Furthermore, it is judged that the effects - which are deemed to be significant for some receptors on completion of the development - would reduce in the longer term on account of the containment created by scheme's maturing framework of woodland, trees and hedgerows that would assimilate the built development within the landscape. In conclusion, none of the effects on visual receptors in the longer term (15 years after completion) are judged as being significant.

#### **Night Time Effects**

5.38 In terms of existing landscape character, the urban area of Milton Keynes and Bletchley illuminates and imparts a level of sky glow on this landscape. The Proposed Development would seek to minimise the impact of lighting on the night skies by embracing best practice guidance and standards on lighting installation to minimise sky glow.

5.39 Whilst there would clearly be some degree of adverse effect, the lighting effects associated with the Proposed Development would be observed within the contextual setting of an already well-illuminated landscape on the urban edge, and, in conclusion, it is considered that Proposed Development would not lead to any significant effects on the night time landscape.

#### **Mitigation Measures**

5.40 Design and mitigation measures are adopted to ensure that the Proposed Development is appropriately and sensitively assimilated into the landscape so that the impact and consequential effects on landscape and visual receptors are minimised.

5.41 The design process has taken into account, amongst other things, the 'saved' policies of the Aylesbury Vale District Local Plan that are pertinent to landscape matters, the emerging Vale of Aylesbury Plan, the guidelines of the Aylesbury Vale Landscape Character Assessment, and the principles of the Aylesbury Vale Green Infrastructure

Strategy. The design process seeks to accord with the aspirations for good design and green infrastructure (GI) contained within the NPPF.

- 5.42 The baseline landscape and visual analysis has informed the landscape principles that prevent/avoid and mitigate landscape and visual effects through primary measures such as the masterplanning approach and GI provision. An integral part of the Proposed Development is its green infrastructure (GI) framework which covers in the order of 62 hectares or the equivalent of around 43% of the site..

### **Residual Effects**

- 5.43 The residual effects consider the effects after the incorporation of mitigation measures. In the context of the landscape and visual impact assessment, the majority of these measures are an integral part of the scheme design as shown on the Parameters Plan and the residual effects are effectively described as the long term effect (at Year 15) in the preceding Operational Effects section.

### **Cumulative Effects**

- 5.44 Cumulative effects have been considered in relation to the effects of the Proposed Development in conjunction with other developments within the local environment. Two schemes have been considered which are:

- Development at Tattenhoe Park; and
- Development at Newton Leys

- 5.45 In conclusion, whilst there would be a level of change and landscape and visual effects for these developments, it is judged that the cumulative effects of the Proposed Development with the Newton Leys development and the Tattenhoe Park development would not result in any significant long term effects on landscape character and visual amenity.

### **Summary**

- 5.46 The chapter (and the LVIA) assesses landscape character and visual amenity and the resulting landscape and visual effects of the Proposed Development on landscape and visual receptors. The site and the immediate landscape are not covered by any national or local landscape designations.
- 5.47 Overall, it is concluded that the site is *medium-low* landscape value, *medium* susceptibility to change and *medium-low* sensitivity. In conclusion, visibility of the site is comparatively limited in terms of the number of visual receptors and these are generally localised to the site.

- 5.48 The Proposed Development minimises impacts on landscape and visual receptors through a responsive master planning approach and the adoption of an extensive GI framework.
- 5.49 There will be a level of change and effect on the site as a result of the alteration from agricultural land to built development. There would be permanent and irreversible loss of the site's agricultural fields and some disruption/loss in vegetation as a result of the construction of new access junctions and the provision of development parcels and streets etc. The GI proposals minimise the level of impacts by ensuring that the majority of the site's hedgerows, mature trees and rights of way are retained and that new landscape habitats are introduced to provide mitigation for disruption/losses in vegetation.
- 5.50 On the completion of the Proposed Development it is judged a *major-moderate adverse* landscape effect would occur on the site, which is concluded as being a locally significant effect.
- 5.51 In the longer term, 15 years after completion, the GI would be represented by a mature framework of overlapping woodland, trees and hedges. In addition, other elements such as sports, parks, greenspace and recreational routes would be delivering considerable environmental. It is assessed that these benefits would assist in reducing the degree of harm to *moderate adverse* and would not be significant.
- 5.52 Opportunities in which to view the Proposed Development from the wider landscape would be limited as a result of the containment that is created by the built up area of Milton Keynes and Bletchley, together with overlapping woodland and the undulating character of the landscape.
- 5.53 Marked adverse effects would be limited to receptors that are either within the site (e.g. users of Weasel Lane) or within the immediate landscape (e.g. residents on the edge of Bletchley). In the longer term, as the development's GI becomes fully established and mature, the framework of woodland, trees and hedgerows around the perimeter of the site -and within the layout - would help to 'soften' and filter views of the built form. As a result, it is concluded that the level of effects and degree of harm on all visual receptors would lessen in the longer term, and none of the visual effects on receptors are judged to be significant.
- 5.54 It is assessed that the design and mitigation approaches adopted by the Proposed Development through its master planning approach and GI provision would minimise impacts on landscape and visual receptors, and, in conclusion, the residual long term effects would not result in significant landscape and visual harm.

## **6. TRAFFIC AND TRANSPORT**

### **Introduction**

- 6.1 The Addendum ES assesses the likely environmental impacts of the Proposed Development in terms of traffic and transport. The accompanying Transport Assessment (TA) which is a freestanding Appendix to the Addendum ES provides full details of the impact of the proposed development on the local and strategic highway network.
- 6.2 The chapter describes the assessment methodology for considering the environmental impacts; the baseline conditions at the Application Site and surroundings; the nature of the impacts; the mitigation measures required to prevent, reduce or offset any significant adverse impacts; and the likely residual impacts once these measures have been employed.

### **Assessment Methodology**

- 6.3 The methodology adopted in assessing the likely traffic and transport impacts is based upon the Institute of Environmental Assessment document 'Guidance Notes No. 1: Guidelines for the Environmental Assessment of Road Traffic' (GEART), 1993, and in accordance with the Government's planning policies for England as set out in the NPPF.

### **Baseline Conditions**

- 6.4 Two separate methodologies have been used to assess the impact of traffic generated by the proposed development on the local highway network in accordance with the requirements of the highway authorities, as set out in more detail in Section 7 of the TA.
- 6.5 For Milton Keynes Council (MKC) and Highways England (HE), the Milton Keynes Traffic Model (MKTM) has been used to determine junctions of importance. Local capacity models have then been used to assess traffic flow data from the MKTM at a number of key junctions.
- 6.6 For Buckinghamshire County Council (BCC), a series of static junction models have been developed. The models include traffic survey data collected in October 2015 as a base and have been used to assess the future impact of the development on the local highway network in 2026. The network of assessments for BCC also includes a calculation of the traffic flows towards Milton Keynes and Bletchley.

### **Personal Injury Collision Data**

- 6.7 Personal injury collision data to cover the last five years have been obtained from both Buckinghamshire County Council and Milton Keynes Council.

### **Likely Significant Effects**

- 6.11 The impacts of the proposed development are described in detail in Section 9 of the TA.

### **Mitigation Measures**

- 6.12 The mitigation proposed as part of the development is described and assessed in detail in Section 10 of the TA.

#### **During Construction**

- 6.13 In order to minimise construction traffic impacts, the key mitigation measure will be the implementation of a Construction Traffic Management Plan with an agreed route for construction traffic as associated with each phase. Provision will also be made for wheel wash facilities and road sweeping, in order to minimise any impacts from dust and dirt. There will be a dedicated point of contact for enquiries/complaints.

#### **Completed Development**

- 6.14 The South West Milton Keynes Consortium is committed to the implementation of the Travel Demand Management Strategy for the Proposed Development. This strategy is aimed, primarily by the implementation, maintenance and monitoring of Travel Plans for all significant generators of traffic, at reducing generated traffic from the Proposed Development below that predicted within the TA.
- 6.15 The Framework Travel Plan submitted (and agreed with BCC, MKC and Highways England) as part of the planning application includes details of the initial targets that will be set with regard to modal shift and details of the measures that will be put into place to achieve this modal shift. The Public Transport Strategy is also a key element of the mitigation strategy as is the focus on providing excellent linkages and provision for pedestrians and cyclists.
- 6.16 There will be improvements to the local highway network implemented through both a S278 Agreement under the Highways Act and a S106 under the Planning Act.

### **Residual Effects**

- 6.17 It is acknowledged that there will be an increase in traffic generation as a result of the Proposed Development. Notwithstanding this, the impact of additional traffic will be mitigated by the provision of the Travel Demand Management Strategy including the implementation, monitoring and maintenance of Travel Plans for various land uses and by the proposed highway/sustainable travel improvements. As a result of the comprehensive mitigation package agreed in principle with BCC and MKC, the residual cumulative impact of the proposed development (i.e. following the implementation of the agreed mitigation measures), would be minimal and will therefore not be significant in EIA terms.

### **Summary**

- 6.18 The assessment of the likely environmental effects of traffic generated by the Proposed Development has demonstrated that overall there will be a negligible/minor impact, both during the construction and operational phases of the development.

## **7. AIR QUALITY**

### **Introduction**

- 7.1 This chapter of the Addendum ES describes the potential air quality impacts associated with the Proposed Development. This section represents an update to the air quality chapter of the submitted ES accounting for subsequent changes to the scheme and updates to the guidance and tools used in carrying out the assessment.
- 7.2 The report describes existing local air quality conditions (2014 and 2015), and the predicted air quality in the future assuming that the proposed development does, or does not proceed. The assessment of traffic-related impacts focuses on 2018, which is the anticipated earliest year of first occupation of any of the units within the development. The assessment of construction dust impacts focuses on the anticipated duration of the works.

### **Assessment Methodology**

- 7.3 The study area for the air quality assessment is defined by the study area of the transport assessment, from which all roads potentially affected by the scheme have been identified; and in addition, any major industrial air pollution sources within a 1 km radius of the application site have also been considered.
- 7.4 Existing sources of emissions within the study area have been defined. Information on existing air quality has been obtained by collating the results of monitoring carried out by the local authority. This covers both the study area and nearby sites, the latter being used to provide context for the assessment. The construction dust assessment considers the potential for impacts within 350 m of the site boundary; or within 50 m of roads used by construction vehicles. Appendix 7.1 of the Addendum ES explains the approach in more detail.
- 7.5 Eleven existing residential properties have been identified as receptors for the assessment. Six additional receptor locations have also been identified within the new development, which represent worst-case exposure to existing sources

### **Baseline Conditions**

- 7.6 Existing conditions within the study area show good air quality, with concentrations all below air quality objectives. Monitoring results show that nitrogen dioxide concentration in and around Milton Keynes is generally very low. Measured annual mean PM<sub>10</sub> concentrations in Milton Keynes in 2014 were all below 20 µg/m<sup>3</sup>, indicating that there is very little risk of an exceedence of the PM<sub>10</sub> objectives in the study area.
- 7.7 In addition to these locally measured concentrations, estimated background concentrations in the study area have been determined for 2015 and the opening

year 2018. The estimated background concentrations are all well below the objectives.

### **Likely Significant Effects**

- 7.8 The construction works will give rise to a risk of dust impacts during earthworks and construction, as well as from track out of dust and dirt by vehicles onto the public highway.
- 7.9 Predicted annual mean concentrations of nitrogen dioxide are modelled for the “Without Scheme” and “With Scheme” scenarios. The annual mean nitrogen dioxide concentrations are well below the objective at all receptors. The percentage changes in concentrations, relative to the air quality objective (when rounded), are predicted to be 0% or 1% at all receptors. These impacts are described as *negligible*.
- 7.10 Predicted air quality conditions for residents of the proposed development are identified. All of the values are well below the objectives. Air quality for future residents within the development will thus be acceptable.
- 7.11 The operational air quality impacts without mitigation are judged to be ‘not significant’. More specifically, the judgement that the air quality impacts will be ‘not significant’ without mitigation takes account of the assessment that:
- Concentrations of all pollutants will be well below the air quality objectives for all existing receptors and all of the impacts are predicted to be *negligible*; and
  - Pollutant concentrations for future residents of the proposed development will be well below the objectives.

### **Mitigation Measures**

- 7.12 Measures to mitigate dust emissions will be required during the construction phase of the development in order to minimise impacts upon nearby sensitive receptors. The assessment has demonstrated that there will be no exceedences of any of the objectives in the study area, including at the new properties within the Proposed Development, and that the scheme will have an insignificant impact on local air quality.

### **Residual Effects**

- 7.13 With mitigation measures in place and effectively implemented the residual effects are judged to be insignificant. In terms of road traffic the residual impacts will be the same as those identified in the Likely Significant Effects section of this chapter.

### **Cumulative Effects**

- 7.14 The approach to the assessment of cumulative air quality effects is to allow for predicted traffic generation from a number of committed developments within the

future baseline traffic flows used in the air quality assessment. This results in the assessment being based on worst-case potential future baseline conditions.

### **Summary**

- 7.15 The construction works have the potential to create dust. During construction it will therefore be necessary to apply a package of mitigation measures to minimise dust emission. With these measures in place, it is expected that any residual effects will be 'not significant'.
- 7.16 The air quality impacts associated with the operation of the proposed development have been assessed. Existing conditions within the study area show good air quality, with concentrations well below the air quality objectives.
- 7.17 The impacts of local traffic emissions on the air quality for residents living in the proposed development are shown to be acceptable at the worst-case locations assessed, with concentrations well below the air quality objectives.
- 7.18 The overall operational air quality impacts of the development are judged to be insignificant. This conclusion, which takes account of the uncertainties in future projections, in particular for nitrogen dioxide, is based on the concentrations being well below the objectives and impacts all being negligible.

## **8. NOISE & VIBRATION**

### **Introduction**

8.1 This chapter of the ES Addendum assesses the noise and vibration impact of the proposed development as revised. It describes the methods used to assess the baseline conditions currently existing at the Application Site and within the surrounding areas, the potential direct and indirect noise and vibration impacts arising from construction activities, road traffic and noise associated with the employment uses of the development.

### **Assessment Methodology**

8.2 Predictions are necessary when forecasting future impacts. Established good practice methods are used throughout the assessment to ensure that these predictions are as accurate as possible. There are currently no details of the construction activities likely to be taking place during construction of the development. The assessment has therefore taken a qualitative approach to the assessment of construction noise.

8.3 An assessment has been carried out using the Design Manual for Roads and Bridges façade noise level at a number of sensitive receptor locations. The calculations have been undertaken in accordance with the methodology detailed in CRTN which specifies a method for predicting future noise levels from traffic by using existing and forecast traffic level data.

8.4 The potential exists for noise from the development to impact upon nearby sensitive receptors. Details of the likely occupants of the employment areas of the development are currently unknown and therefore details of the type, location and noise levels of any fixed plant are not currently available. For these reasons a qualitative rather than quantitative assessment of the potential impacts of operational noise has been undertaken.

8.5 It is not anticipated that there will be any significant sources of vibration within the development and therefore operational vibration has not been considered further within this report

### **Baseline Noise Environment**

8.6 For the purposes of this assessment, any domestic premises, hotel, hostel, temporary housing accommodation, hospital, medical clinic, educational institution, place of public worship that might be impacted in terms of noise or vibration by the proposed development can be said to be a sensitive receptor. Locations were chosen to represent the receptors most likely to be impacted by the development.

8.7 Ambient noise in the area is generally dominated by traffic on the surrounding roads. Existing noise-sensitive receptors are predominantly the residential properties to the

east of the proposed development, a property on Weasel Lane to the west and properties on Whaddon Road to the north-west. These receptors will experience both operational and construction phase noise impacts from the development.

### **Likely Significant Effects**

- 8.8 At this stage, the precise timetable and location of the construction plant and processes are not known. Due to the size of the development and the proximity of noise sensitive premises there exist a number of possible worst case scenarios of construction noise impact. It is envisaged that the main construction activities likely to generate noise will comprise ground preparation, excavations for foundations, construction of new roads and buildings and the offloading of materials.
- 8.9 Details of the precise construction methodologies to be adopted, plant to be used, when (at what stage and at what times of the day), and where (at what stage of the construction process, location on site, time of day etc.) are not presently available. Therefore a qualitative approach has been considered within this assessment.
- 8.10 However, it is not likely that all construction processes would occur simultaneously and operate continuously, but the fact that the site extends right up to the gardens of residential properties means that the noise impact during construction may be Major. As it has not been possible to undertake a quantitative assessment it is not possible to determine the significance of the noise effect. However, the impact would be of short to medium term duration only.

### **Mitigation**

- 8.11 Construction works are usually subject to control by planning conditions. If complaints are received by the Local Authority regarding construction noise then notices under Part III of the Environmental Protection Act 1990 or Section 60 of the Control of Pollution Act 1974 can be served which can restrict construction works. The following measures will be used to control and minimise noise impacts from the construction activities for the project.
- 8.12 Given the absence of detailed information regarding construction methods and programmes, it is recommended that Best Practicable Means should be employed to minimise construction impacts and the following will be incorporated into the Construction Environment Management Plan (CEMP). These are the minimum standards that should be achieved during construction: Within the constraints of efficient site operations and the requirements of the relevant British Standards, the following will be adopted:
- 8.13 Impacts from increased levels of road traffic can be minimised by the use of low-noise surfacing to the new grid road within the development. Operational noise impacts can be significantly mitigated by attention to building materials, location of

individual noise sources and use of screening and attenuation to control noise emissions.

### **Residual Effects**

- 8.14 Mitigation and enhancement measures are proposed, for the construction phase of the development. The impact, after mitigation, is considered to be Moderate to Negligible. Mitigation and enhancement measures are proposed, for the construction phase of the development. The impact, after mitigation, is also considered to be Moderate to Negligible.

### **Cumulative Effects**

- 8.15 The only likely cumulative effect of this scheme with other schemes would be in the generation of additional traffic on local roads. All currently known committed schemes are included within the traffic model and have hence been included within the traffic noise assessment. Therefore, in relation to noise and vibration, there are not considered to be any further cumulative impacts of the proposed scheme with other schemes.

### **Summary**

- 8.16 The assessment has concluded that:
- The impact of construction noise may be Major. However, with mitigation in place the impact would reduce to a Moderate to Negligible Impact.
  - The impact of commercial/industrial noise may be Major. However, with mitigation in place the impact would reduce to a Moderate to Negligible Impact.
  - The impact of development related traffic may be Major with a moderate significance. However, with mitigation in place the significance of the impact may be reduced.
  - The impact of noise in external areas of the Application Site may be major with a major significance. However, with mitigation in place the impact would reduce to Moderate or Negligible.
  - The impact of noise in internal areas of the Application Site may be major with a major significance. However, with mitigation in place there would be no impact and no significant effect.

## **9. SIGNIFICANT INTERACTIVE & CUMULATIVE EFFECTS**

### **Introduction**

- 9.1 The submitted ES (January 2015) contained Table 17.1 that summarised the likely significant effects of the Proposed Development. The relevant sections of that table relating to landscape & visual, traffic & transport, noise and vibration are updated by Table 9.1 below to reflect the assessment of the revisions to the Proposed Development.

### **Statement of Significance**

- 9.2 Table 9.1 summarises the likely significant effects of the Proposed Development as revised in relation to the topics of landscape & visual, traffic & transport, noise and vibration.

### **Cumulative Effects**

- 9.3 Cumulative effects are impacts that result from incremental changes caused by other past, present or reasonably foreseeable actions together with the Proposed Development. The traffic modelling has included all known committed developments within and on the edge of Milton Keynes and as such the cumulative effect of traffic from these developments on air quality and noise matters has been assessed. As a result of the comprehensive mitigation package agreed in principle with BCC and MKC and outlined in the Transport Assessment (August 2016) the residual cumulative impact of the proposed development (i.e. following the implementation of the agreed mitigation measures) in terms of traffic & transport is considered to be minimal and not significant in EIA terms.
- 9.4 Cumulative landscape and visual effects of the revisions to the Proposed Development have been considered in the Landscape & Visual Impact Assessment (July 2016). It is concluded that the cumulative effects of the Proposed Development and Tattenhoe Park would not result in any significant long term effects on landscape character and visual amenity. It is similarly judged that the cumulative effects of the Proposed Development and the Newton Leys development would not result in any significant long term effects on landscape character and visual amenity.
- 9.5 There would be cumulative effects on existing residents from the impacts on landscape, air quality and noise. It is the cumulative effects on residents from changes arising from construction and road traffic noise during the construction phase and from changes to the landscape during the operational phase which would remain significant. The cumulative noise effects on residents would be temporary and the effects would be reduced by mitigation measures comprising a Construction Environmental Management Plan and noise control techniques. The cumulative landscape effects on residents would be partially mitigated through a Landscape

Strategy, comprising additional woodland, trees and hedgerows, and over time the significant adverse effects would reduce as the landscape enhancement measures become established. While residents would be exposed to construction, noise and landscape impacts all at once, it is not the case that those impacts combined would increase the significance of their effect. The identified mitigation measures e.g. the Construction Environmental Management Plan and Landscape Strategy would be implemented to address and reduce the significant environmental effects.

### **Interactive Effects**

- 9.6 Interactive effects arise where the effects of development on one environmental topic bring about changes in another topic. The interactive effects identified for the Proposed Development relate to water and are set out in Table 17.3. of the submitted ES (January 2015). The revisions to the Proposed Development do not impact on these effects.

### **Summary**

- 9.7 The Addendum ES has identified a number of Moderate Adverse and Moderate/Minor Adverse effects arising from the assessment of the revisions to the Proposed Development. Moderate Adverse effects are significant in EIA terms.

## **10. Conclusions**

- 10.1 The assessment of the revisions to the Proposed Development set out in the Addendum ES has identified a number of Moderate Adverse and Moderate/Minor Adverse effects both during the construction and the operational phases of the development. As noted above Moderate adverse effects are significant in EIA terms.
- 10.2 Mitigation measures are proposed to address or reduce these significant effects during the construction phase and on completion, e.g. a Construction Management Plan and a Framework Travel Plan; and it is expected that these would be secured by way of planning conditions.
- 10.3 However, the significant landscape and visual effects on the application site, nearby receptors and users of the public rights of way network would remain, although over time these effects would reduce as the landscape enhancement measures become established.