

Central & Eastern Berkshire Authorities

Joint Minerals & Waste Plan

Local Aggregate Assessment

December 2018



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Prepared by Hampshire Services

Hampshire County Council

www.hants.gov.uk/sharedexpertise



Table of Contents

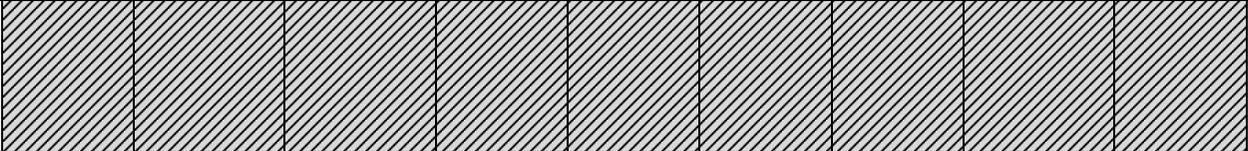
1. Introduction.....	3
2. Land Won Aggregate.....	7
3. Crushed Rock.....	12
4. Marine-won sand and gravel	14
5. Recycled/Secondary Aggregates.....	15
6. Future Aggregate Supply.....	18
7. Future provision of sand and gravel.....	21
8. Conclusions and review of the LAA.....	23

Tables and Figures

Table 1: Permitted active quarries in Central and Eastern Berkshire, 2017	9
Table 2: Land-won sand and gravel sales in Central and Eastern Berkshire, 2008-2017 (Thousand tonnes, Tt)	10
Table 3: Total consumption of Primary Aggregate in Berkshire, 2009 and 2014.....	12
Table 4: Crushed rock sales from rail depots and wharves in Berkshire (Berks) and Hampshire (Hants), 2008-2017 (Thousand tonnes, Tt)	13
Table 5: Recycled aggregate capacity, 2017	16
Table 6: Recycled and Secondary aggregate sales in Central and Eastern Berkshire, 2008-2017 (Thousand tonnes, Tt).....	17
Table 7: Central and Eastern Berkshire sand and gravel reserves and landbank 2017	20
Table 8: Total sales and estimated production capacity, 2017.....	22
Figure 1: Location of active quarries in Central and Eastern Berkshire, 2017.....	8
Figure 2: Sales of land-won Sand and Gravel in Central and Eastern Berkshire	10
Figure 3: Sales of land-won sand and gravel in South-East England and Central and Eastern Berkshire.....	11
Figure 4: Location map of active recycled aggregate sites in Central and Eastern Berkshire, 2017	17

Summary – Central and Eastern Berkshire (for the calendar year 2017)

	2017 Sales (Mt)	Average (10-yr) Sales (Mt)	Average (3-yr) Sales (Mt)	Trend (10-yr sales)	Trend (3-yr sales)	LAA Rate (Mt)	Reserve (Mt)	Landbank (years)	Capacity (Mtpa)	Comments
Soft Sand										There are no soft sand sites within the Plan area.
Sharp Sand & Gravel	-	-	-			-	-	-	-	Figures are combined with soft sand to provide 'All Sand & Gravel' figures.
All Sand & Gravel	0.49	0.60	0.57			0.71	5.8	8.2	1.13	The landbank is above the minimum 7-year requirement. However, it should be noted that this is influenced by the fact that Sheephouse Farm has a large reserve but has been effectively mothballed in recent years. Two quarries closed in 2017.
Crushed Rock										Central and Eastern Berkshire does not have any natural hard rock resources and therefore relies on imports of this material.
Recycled / Secondary Aggregates	0.13	-	0.21			-	-	-	0.28	Figures for Central and Eastern Berkshire are only available for the last 4 years as previously, these have been reported on a Berkshire-wide scale. Note that capacity is recorded capacity which is estimated to be much greater than actual capacity.
Marine Sand & Gravel										There are no wharves in Central and Eastern Berkshire. Supplies of marine sand and gravel are imported predominately from Hampshire and London.
Rock Imports by Sea										Not relevant to the Plan area.
Rail Depot Sales (Sand & Gravel)										There are no rail depots in Central and Eastern Berkshire, although the area is likely to be served by rail depots in neighbouring mineral planning areas.

Rail Depot Sales (Crushed Rock)		<p>There are no rail depots in Central and Eastern Berkshire, although likely to be served by rail depots in West Berkshire.</p>
Comments	<p>There is likely to be an increase in aggregate demand in Central and Eastern Berkshire given the increase in planned future infrastructure delivery. Therefore, the Central & Eastern Berkshire Authorities have an important role in the supply system as an exporter of land-won aggregate and in the 'securing' of imports. The LAA Rate of 0.71Mt set in 2017 has been maintained is felt to reflect the level of future demand and the current sales figures are impacted by the site closures. This situation highlights the importance of the emerging Joint Minerals & Waste Plan.</p>	

Executive Summary

Introduction

This is the Local Aggregate Assessment (LAA) for Central and Eastern Berkshire and covers the administrative areas of the plan-making partners (Bracknell Forest Council, Reading Borough Council, the Royal Borough of Windsor & Maidenhead and Wokingham Borough Council). In addition, information has been provided for Slough, where available. The purpose of the LAA is to detail the current and predicted situation in Central and Eastern Berkshire with respect to all aspects of aggregate supply.

Land-won Aggregate

Sand and Gravel

In terms of aggregates, Central and Eastern Berkshire's geology provides both sharp sand and gravel and soft sand. Aggregates used within Central and Eastern Berkshire are sourced from land-won resources, recycled aggregate and imports.

Within Central and Eastern Berkshire, there were three active quarries in 2017. There have been no operational quarries within Slough Borough Council for 10 years.

Soft sand resources in the area are generally poor quality and are no longer principally exacted within Central and Eastern Berkshire. This places a reliance on imports to address the lack of local supply.

Sales of sand and gravel increased slightly in 2017 following a decline prior to 2016. The overall trajectory of 10-year sales is increasing and the pattern of sales is broadly similar to the South East.

Crushed Rock

Central and Eastern Berkshire is dependent on imports of crushed rock predominately from Somerset who have confirmed no issues with ongoing supply.

Supply is imported via rail depots in West Berkshire. There is currently no evidence that suggests a need to increase capacity at rail depots for imports.

Marine Sand & Gravel

Marine-won sand and gravel is a small but growing proportion of the total aggregate consumed in Berkshire. Marine imports are predominately from London Wharves and Hampshire. Whilst there is no evidence to increase capacity at the rail depots, the Hampshire 2017 LAA¹ suggests that there is headroom at their wharves to serve an increase in demand.

Recycled & Secondary Aggregate

Sales in Central and Eastern Berkshire decreased in 2017. Capacity survey information indicates recycled aggregate sites are currently operating under capacity although not all facilities responded and the information conflicts significantly with the data received in 2016 which suggested sites were operating over capacity.

Future Aggregate Supply

There are a number of major infrastructure projects as well as local housing and transport projects which indicate growth and therefore, an increase in aggregate demand.

Reserves of sand and gravel in Central & Eastern Berkshire with planning permission for extraction (permitted reserves) at 31st December 2017 were 5,851,000 tonnes (discounting Star Works as this is inactive).

The total landbank for all land-won aggregate based on 10-year average is 9.7 years and on a three-year average sales the landbank is 10.3 years although the landbank is not necessarily an accurate reflection of supply. However, applying the LAA Rate (0.71Mt) the landbank is 8.2 years.

The Central & Eastern Berkshire Authorities are working together to produce a Joint Minerals & Waste Plan up to 2036. The Plan will need to allocate sufficient sites or areas of search to address the demand requirements.

Taking into account current permitted reserves (discounting Star Works) there is an additional requirement to plan for between 5,606,000 (10 years) and 4,979,000 (three year) tonnes of sand and gravel up to 2036.

A Draft Plan was subject to consultation during 2018. The Draft Plan included proposed allocations for sharp sand and gravel, an aggregate wharf and recycled aggregate sites. However, the proposals do not meet the required demands for Central and Eastern Berkshire and therefore, the sites were

¹ Hampshire 2017 LAA: <http://www3.hants.gov.uk/mineralsandwaste/pd-facts-and-figures.htm>

supported by criteria-based policies. A 'Proposed Submission' version is due to subject to consultation during 2019.

It is estimated that the demand for soft sand over the Plan period will be in the region of 1.5 million tonnes (79,000 tonnes per year). Sources will need to be secured from elsewhere.

The Draft Plan applied the LAA Rate of 0.71Mt. However, it was recognised that a change local circumstances, such as the Heathrow Expansion, could mean that the supply rate would need to be reviewed.

Conclusions

Central and Eastern Berkshire's current local aggregate provision will impact on the wider South East region as a whole if new development is not enabled to meet the forecasted demand up to 2036. Central and Eastern Berkshire is reliant on supplies from other mineral planning authority areas and as such will need to ensure consideration is given to this in other Mineral Local Plans though the duty to cooperate.

1. Introduction

- 1.1 The purpose of this Local Aggregate Assessment (LAA) is to detail the current and predicted situation in Central and Eastern Berkshire with respect to all aspects of aggregate supply.
- 1.2 The National Planning Policy Framework (NPPF)² set out the requirement for local authorities to produce an annual LAA, stating that *'Minerals planning authorities should plan for a steady and adequate supply of aggregates by preparing an annual Local Aggregate Assessment, either individually or jointly by agreement with other mineral planning authorities based on a rolling average of 10 years sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources)'*.
- 1.3 Bracknell Forest Council, Reading Borough Council, the Royal Borough of Windsor and Maidenhead and Wokingham Borough Council (collectively referred to as the 'Central & Eastern Berkshire Authorities') are working in partnership to produce the Central and Eastern Berkshire - Joint Minerals & Waste Plan. The Plan will indicate what provision of minerals is required, where these may be located; when they are to be provided and how they will be delivered during the Plan period to 2036.
- 1.4 This is the Local Aggregate Assessment (LAA) for Central and Eastern Berkshire and covers the administrative areas of the plan making partners. In addition, information has been provided for Slough, where available. The purpose of the LAA is to detail the current and predicted situation in Central and Eastern Berkshire with respect to all aspects of aggregate supply, in particular with regard to land-won aggregate provision up to 2036.
- 1.5 It is important to note that the data used in the preparation of this LAA predominantly comes from the annual monitoring of aggregates sales by the Central & Eastern Berkshire Authorities on behalf of the South East England Aggregate Working Party (SEEAWP). The Aggregate Monitoring (AM) survey is used to collect annual sales data from active mineral extraction sites, aggregate wharves, aggregate rail depots and recycled aggregate processing sites.

² National Planning Policy Framework, paragraph 207(a) (MHCLG, 2018):
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/740441/National_Planning_Policy_Framework_web_accessible_version.pdf

2. Land Won Aggregate

Geology of Central and Eastern Berkshire

- 2.1 The geology of Central and Eastern Berkshire is underlain by three main types of minerals: sand and gravel, chalk and clay. There are no deposits of crushed rock.
- 2.2 In terms of aggregates, Central and Eastern Berkshire's geology provides the following:
- Sharp sand and gravel; and
 - Soft sand.
- 2.3 Central and Eastern Berkshire has the capability of supplying aggregates from a number of sources including:
- Land-won extraction;
 - recycled and secondary aggregate; and
 - imported aggregate (via rail depots)³.
- 2.4 Further information regarding the detailed geology can be found in the *Minerals: Background Study (2018)*⁴ which was produced in support of the emerging Joint Minerals and Waste Plan.

Permitted Sites Producing Sand and Gravel in Central and Eastern Berkshire

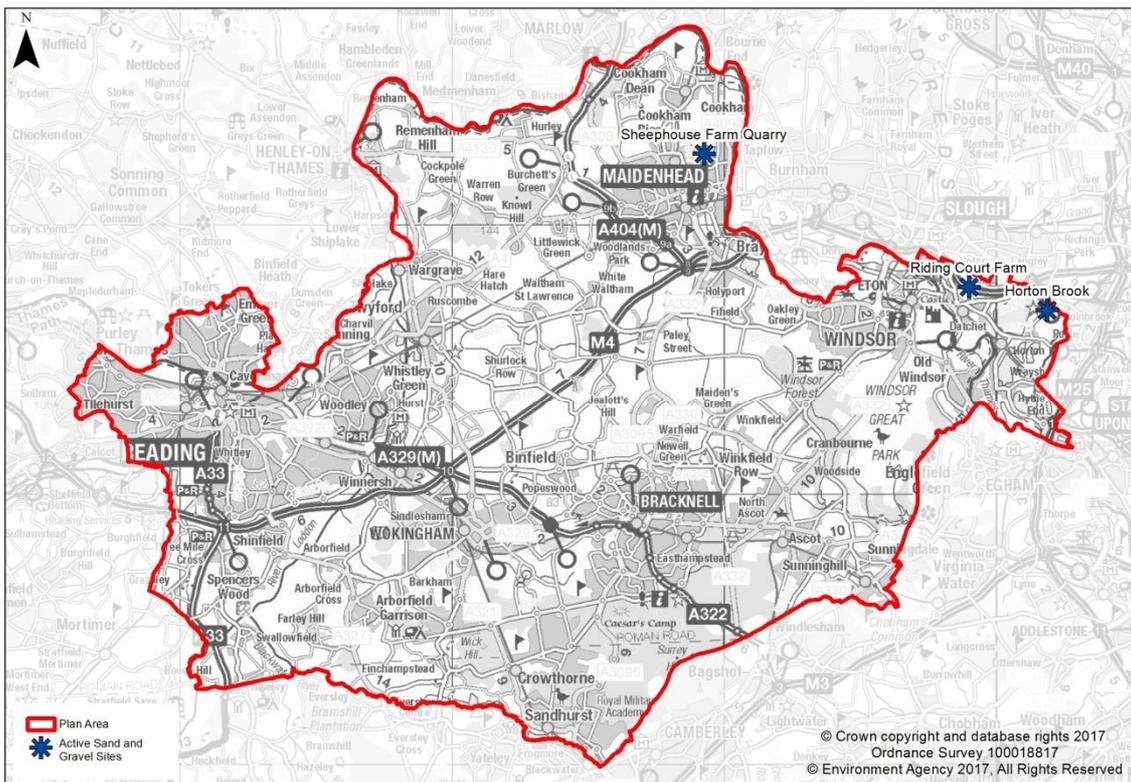
- 2.5 Figure 1 shows the location of the active quarries in Central and Eastern Berkshire in 2017 which were predominately located in the north and east within the Royal Borough of Windsor and Maidenhead. The last quarry in the south of the area closed in 2017, meaning that the supply of sand and gravel is currently produced entirely in the north east of the area.

³ Estimate of imports by road can be found in the AM 2014 National Collation.

⁴ Minerals Background Study (2018):

<http://documents.hants.gov.uk/environment/JCEBWasteBackgroundStudyDraftPlanJune2018FINAL.pdf>

Figure 1: Location of active quarries in Central and Eastern Berkshire, 2017



- 2.6 The number of extraction sites has decreased in recent years, with 2017 seeing the closure of two sites; Eversley Quarry and Kingsmead Quarry. In addition a number of sites are inactive at this time, such as Star Works and Riding Court Farm although they both contain permitted reserves.
- 2.7 Poyle Quarry, located in the Royal Borough of Windsor & Maidenhead, has previously been permitted but has not been worked for approximately 10 years. The planning permission at this quarry expired in December 2015 and so is not included in Figure 1.
- 2.8 During 2017, applications were submitted for Poyle Quarry⁵ and Bridge Farm⁶ in the borough of Wokingham. Both are yet to be determined. An application was been submitted for an extension at Horton Brook Quarry⁷ in 2018 due to greater reserves being identified.

⁵ Poyle Quarry Application: <http://publicaccess.rbwm.gov.uk/online-applications/applicationDetails.do?keyVal=OYZQ75NIOQY00&activeTab=summary>

⁶ Bridge Farm Application: <http://planning.wokingham.gov.uk/FastWebPL/detail.asp?AltRef=170433&ApplicationNumber=&AddressPrefix=&Postcode=&KeywordSearch=bridge&Submit=Search>

⁷ Horton Brook Quarry Application <http://publicaccess.rbwm.gov.uk/online-applications/applicationDetails.do?keyVal=POUNO2NIKKC00&activeTab=summary>

2.9 Extraction sites have not been operational within the administrative area of Slough Borough Council for over 10 years. Although a number of sites operate on the boundary of the area.

2.10 Soft sand resources in the area are generally poor quality with pockets of material of economic interest in a small number of areas. This is highlighted in Table 1 by the identification of only two quarries that have been producers of soft sand; Star works in the North which retains approved reserves and Kingsmead Quarry in the West. However, with the closure of Kingsmead Quarry and Star Works being inactive, there are no sites currently producing soft sand. This places a reliance on imports to address the lack of local supply. Anecdotal evidence suggests that building sand is being imported principally from Surrey and Central Bedfordshire.

2.11 In contrast, sharp sand and gravel is more widely distributed throughout Central and Eastern Berkshire.

2.12 Table 1 provides details of the aggregate extracted at each permitted extraction site.

Table 1: Permitted active quarries in Central and Eastern Berkshire, 2017

Site	Operator	Aggregate		Status in 2017
		Sharp Sand & Gravel	Soft Sand	
Horton Brook Quarry	Aggregate Industries/Jayflex Aggregates Ltd	X		Active
Riding Court Farm	CEMEX	X		Active
Sheephouse Farm	Summerleaze Ltd	X		Active

2.13 Bray Quarry is not extracting and has no remaining reserves. The site processes aggregate and therefore, does not feature in Table 1.

2.14 Sheephouse Farm and Horton Brook Quarry are located within the Green Belt. Star Works is inactive but is also located within the Green Belt.

Sand and Gravel Production and Sales

2.15 The sales of land-won sand and gravel in Central and Eastern Berkshire are shown in Table 2. Whilst the overall trajectory of sales of the last ten years has

been increasing, sales have fluctuated over the ten-year period, with sales peaking in 2011 and 2014.

2.16 More recently, sales of sand and gravel have been declining since 2014; with sales falling 282 Thousand tonnes between 2015 and 2016. The sales for 2017 are 14% lower than the average for the last 3 years and 19% lower than the 10-year average, highlighting the overall decline. However, an increase in sales in 2017 could signal a reverse in the trend.

Table 2: Land-won sand and gravel sales in Central and Eastern Berkshire, 2008-2017 (Thousand tonnes, Tt)

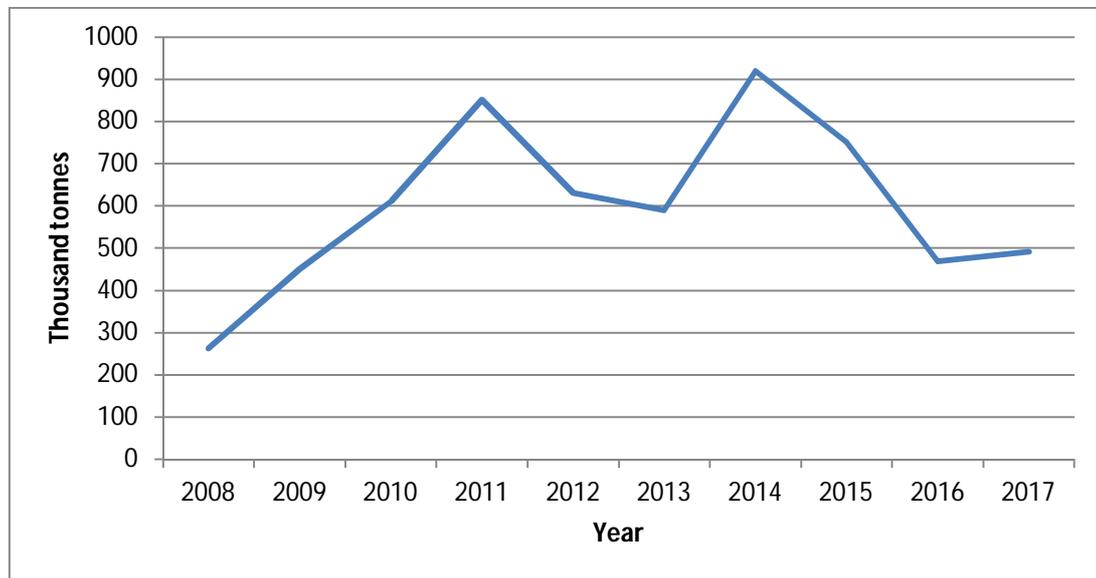
Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Last 3 yr average	Last 10 yr average
Total Sales	263	450	611	852	631	590	920	751	469	491	570	603

Footnotes

Soft sand (SS) sales are contained with the total soft sand/sharp sand and gravel figure. SS sales are so small they cannot be individually revealed

Source: Aggregate Monitoring Surveys, 2008-2017

Figure 2: Sales of land-won Sand and Gravel in Central and Eastern Berkshire

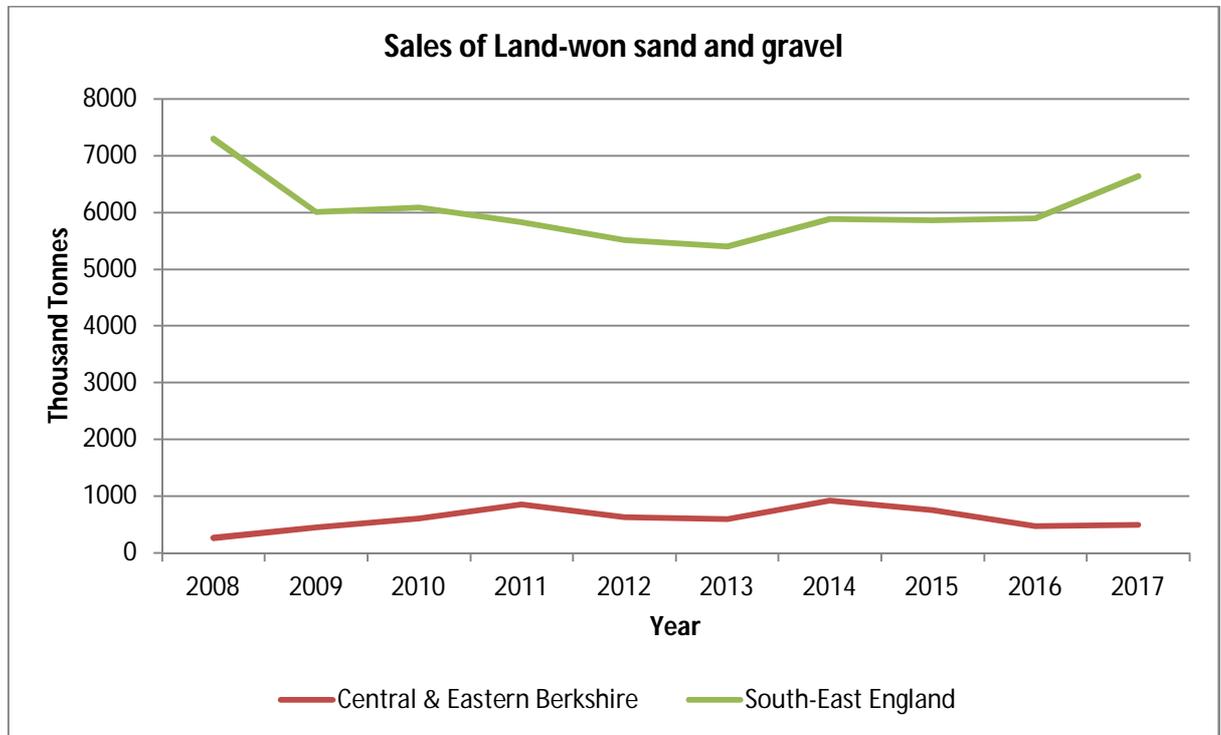


Source: Aggregate Monitoring Surveys, 2008-2017

2.17 Figure 2 shows the sales of land-won sand and gravel in Central and Eastern Berkshire since 2008. Following a period of decline, a modest increase was observed between 2016 and 2017.

2.18 When compared to the sales for South-East England (see Figure 3), the trends in Central and Eastern Berkshire appear to be broadly similar and follow the pattern.

Figure 3: Sales of land-won sand and gravel in South-East England and Central and Eastern Berkshire



Source: South-East England Aggregates Monitoring Report 2017

2.19 Sales in Central and Eastern Berkshire had been declining since 2014 but have seen a slight increase in the last year between 2016 and 2017. This is reflective of the wider trend in the South East which saw a slow decrease in sales since 2014 but have shown a marked increase since 2016. There was a 6.4% increase in sales in Central and Eastern Berkshire between 2016 and 2017, compared with a 12.6% increase in the wider South East region.

2.20 Mineral planning authority boundaries do not influence the flow of minerals. The market dictates that sand and gravel will be obtained from the cheapest location for that material. Where the demand in Central and Eastern Berkshire can be satisfied most efficiently and cost effectively from locations in other areas, such as West Berkshire, Hampshire, Oxfordshire or Buckinghamshire, then it will.

2.21 Table 3 shows the consumption of aggregate both imported from external areas and supplied from sources within Berkshire.

Table 3: Total consumption of Primary Aggregate in Berkshire, 2009 and 2014

Berkshire	Land Won Sand and Gravel		Marine Sand and Gravel		Total sand and gravel		Crushed Rock		Total Primary Aggregates	
	2009	2014	2009	2014	2009	2014	2009	2014	2009	2014
Imports (Tt)	298	353	98	152	396	505	861	1,161	1257	1,666
Consumption* (Tt)	807	601	98	152	905	753	875	1,161	1780	1,914
Consumption %	45.3%	31%	5.5%	8%	50.8%	39%	49.20%	61%	100%	100%
Imports/Consumption %	36.93%	58.7%	100%	100%	43.76%	67%	98.40%	100%	71%	87%

Source: Collation of the results of the 2009 and 2014 Aggregate Minerals survey for England & Wales (Department for Communities and Local Government).

*Consumption is determined by total sold internally plus total imported.

2.22 In 2014, Berkshire was producing 1051 Thousand tonnes (Tt) with sales split by 248 Tt sold internally within Berkshire. A further 548 Tt was sold in the South East region, the principal destinations being Surrey and Buckinghamshire (including Milton Keynes) and 255 Tt sold to locations elsewhere (predominantly West London).

2.23 There is no marine-won sand and gravel produced within Berkshire as it is land locked nor is there any crushed rock due to geological constraints. In 2014, Berkshire was also importing 353 Tt of land-won sand and gravel.

2.24 Although it is not possible to determine exactly what level of these imports reach Central and Eastern Berkshire, the movements need to be taken into consideration as a when forecasting future demand.

2.25 Table 3 shows an overall increase in supply of primary aggregates from sources within Berkshire during this period. The Table does however show that there is an increasing reliance on Primary Aggregate imports within Berkshire.

3. Crushed Rock

3.1 Central and Eastern Berkshire does not have any natural hard rock resources and therefore relies on imports of crushed rock such as limestone and granite to meet demand for this type of aggregate.

3.2 Information from the BGS shows that Somerset is the dominant source of crushed rock for Berkshire. Somerset has some 380 million tonnes of approved reserves of crushed rock (equivalent to 28.4 years landbank at the most recent

sub regional apportionment rate)⁸. While not all the quarries in Somerset whose reserves are included in the landbank have rail connections, those that do form a significant proportion of the total. Provided Somerset maintains its productive capacity it is estimated that there are sufficient reserves available to supply ongoing market demand.

- 3.3 The importation and consumption of crushed rock within Berkshire is captured within the aggregate monitoring data. Data is only available for the wider Berkshire area which shows that all the crushed rock that is imported into Berkshire is then consumed within Berkshire (see Table 3). Therefore, there is no reported evidence of further flows of crushed rock from Berkshire to other areas.
- 3.4 There are currently no operational rail depots to receive crushed rock imports within Central and Eastern Berkshire. As such, it is assumed that the area is served predominately by the rail depots in the wider Berkshire area, most notably at Theale, West Berkshire. All crushed rock is then transport by road within the plan area.
- 3.5 The West Berkshire Local Aggregate Assessment (LAA) (December 2016)⁹ identifies that a large proportion of the aggregate sold from the two rail depots at Theale is then exported out of West Berkshire by road. The LAA also states that there is sufficient capacity at the rail depots for an increase in demand should this occur in the future.
- 3.6 Whilst capacity does exist at these rail depots, Central and Eastern Berkshire is fully reliant on the continued operation of these depots and any threat to this provision would have a significant impact.
- 3.7 The crushed rock sales (from rail imports) in Berkshire and Hampshire recorded over the last 10 years are detailed in Table 4.
- 3.8 Sales of crushed rock fell between 2008 and 2013, decreasing by 21%. However, since 2013, sales have increased with a significant increase in 2017 which is likely to reflect that one of the rail depots at Theale in West Berkshire which previously imported cement has started to import aggregate¹⁰. This pattern is reflected in the higher 3-year average figure of 1605 Tt, which

⁸ Somerset Local Aggregate Assessment (Fourth Edition):

www.somerset.gov.uk/EasySiteWeb/GatewayLink.aspx?allId=124408

⁹West Berkshire Local Aggregate Assessment (December 2016) -

<https://info.westberks.gov.uk/CHttpHandler.ashx?id=43576&p=0>

¹⁰ Information provided in the West Berkshire Council response to the Draft Joint Minerals & Waste Plan consultation (17/09/2018).

indicates an increase in sales in recent years in comparison to the 10-year average.

Table 4: Crushed rock sales from rail depots and wharves in Berkshire (Berks) and Hampshire (Hants), 2008-2017 (Thousand tonnes, Tt)

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	10 yr average	3 yr average
Berks & Hants	1369	1094	1054	1215	1222	1090	1208	1565	1517	1733	1307	1605

Footnotes

Source: AM2017 Survey

In 2017, 90% of the aggregates sold were crushed rock and 10% were marine aggregate.

- 3.9 Somerset County Council have sufficient reserves to meet current needs and do not foresee any likely issues that would affect the future supply of crushed rock to the South East Region which includes Berkshire. Should future demand increase, the issue lies with the capacity of the rail depots to manage a higher level of imports, rather than with future supply.
- 3.10 The safeguarding of the rail depots at Theale, West Berkshire will be important for Central and Eastern Berkshire to ensure a supply of crushed rock, unless a suitable rail depot is located within the Plan area.

4. Marine-won sand and gravel

- 4.1 Central and Eastern Berkshire has no wharves for the landing of marine-won sand and gravel. However, the Aggregate Monitoring (AM) 2014 National Collation data (see Table 4) highlighted that Berkshire’s level of imported marine-won sand and gravel represented 5.5% of the total primary aggregate consumed in 2009 and this rose to approximately 8% in 2014¹¹.
- 4.2 Imports into Berkshire in 2009 were 98 Tt which equated to nearly 8% of the total primary aggregates. This rose to 9% in 2014 with 152 Tt of imported marine aggregate. As such, marine-won sand and gravel forms a small but growing proportion of the overall supply of aggregate to Berkshire. Although, it is not possible to determine exactly what level of this supply reaches Central and Eastern Berkshire, it needs to be taken into consideration when considering future demand.

¹¹ Collation of the results of the 2014 Aggregate Minerals Survey for England and Wales - www.gov.uk/government/uploads/system/uploads/attachment_data/file/563423/Aggregate_Minerals_Survey_England_Wales_2014.pdf

- 4.3 The AM2014 National collation data provides details on the sources of the imported marine sand and gravel and highlights that the main source is from Greater London which suggests that this is marine dredged material that has been landed at London wharves, probably by rail. The second greatest source is Hampshire. This is material that will have been landed at Hampshire's wharves. It is likely that this material will have travelled into Berkshire by road, but it is also possible that the mineral was transported via the rail depots in Hampshire to the depots at Hillingdon.
- 4.4 Any additional provision would preferably be by rail. As with the importation of crushed rock, there is no current evidence to suggest a need for increased capacity at the rail depots surrounding and servicing Central and Eastern Berkshire, although existing capacity should be safeguarded.

5. Recycled/Secondary Aggregates

- 5.1 Data pertaining to sales of recycled or secondary aggregates is collected annually as part of the AM surveys carried out by mineral planning authorities. Figure 4 shows the location of all active recycled aggregate sites in operation in Central and Eastern Berkshire during 2017 that were surveyed. It should be noted that whilst all sites were surveyed, not all responded. As such, the results should be treated with caution and used to only indicate a general trend of what is happening.
- 5.2 There are 5 sites which have been surveyed as producers of recycled and secondary aggregates in Central and Eastern Berkshire. Of these sites, two responded. Where capacity information has not been made available Environment Permit information has been used (see Table 5).

Table 5: Recycled aggregate capacity, 2017

Facility Name	Unitary Authority	Recorded⁽¹⁾ Capacity (tonnes) 2017	Estimated⁽²⁾ Actual Capacity (tonnes) 2017
Hindhay Quarry	Windsor & Maidenhead	50,000	0
Bray Quarry	Windsor & Maidenhead	25,000	25,000
Horwoods, Kimber Lane	Windsor & Maidenhead	4,800*	4,800*
Fowles Crushed Concrete Ltd	Windsor & Maidenhead	125,000*	5,000
Fleetwood Grab Services	Reading	75,000*	5,000
Total		279,800	45,000

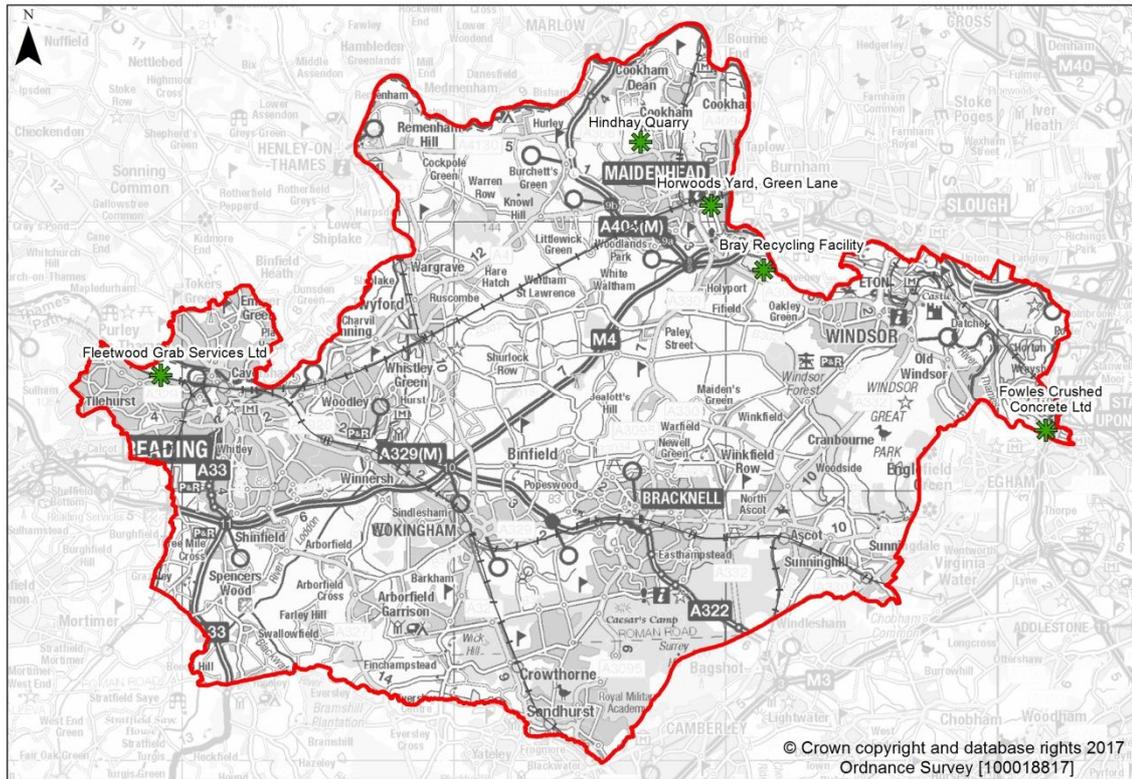
Source: (1) AM2017 returns or EA Permit (*) where no return information available.

(2) Permanent capacity only and likely operational capacity.

- 5.3 The permission at Hindhay is temporary. The operational capacity at Fleetwood and Fowles is likely to be similar to Horwoods as the capacities provided in EA Permits are given as ranges or are for all activities on a site. Should this be the case, the reality of permanent aggregate recycling capacity is likely to be approximately 45,000 tonnes.
- 5.4 In 2018, permission (subject to legal agreements) was granted for aggregate recycling at Riding Court Farm/Datchet Quarry¹² which is time limited to the life of the Quarry.
- 5.5 Figure 4 shows the location of active recycled sites in Central and Eastern Berkshire. There are no secondary aggregate sites in Central and Eastern Berkshire.

¹² Riding Court Farm/Datchet Quarry Application: <http://publicaccess.rbwm.gov.uk/online-applications/applicationDetails.do?keyVal=P5ZAR3NIJW700&activeTab=summary>

Figure 4: Location map of active recycled aggregate sites in Central and Eastern Berkshire, 2017



5.6 The sales figures of the recycled and secondary aggregate in Berkshire for the most recent 10-year period, 2008-2017 are shown in Table 6.

Table 6: Recycled and Secondary aggregate sales in Central and Eastern Berkshire, 2008-2017 (Thousand tonnes, Tt)

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Last 10 yr average	Last 3 yr average
Berkshire	265	234	n/a	200	320	404	408*	400*	498	450	353	449
Central & Eastern Berkshire							85	103	128	131		121

Footnotes

Source: Aggregate Monitoring Surveys, 2008-2017

*Figures quoted are from the South East Aggregate Monitoring Report (2014 & 2015).

5.7 Sales decrease by 9.64% in 2017 although this sales figure is still greater than all other recorded annual sales figures for the past 10 years other than in 2016.

5.8 Sales data for the Central and Eastern Berkshire area is only available for a four-year period and which indicates a trend of 112 Tt per year. The Central and Eastern Berkshire sales represent an average of 25% of the Berkshire

Total. If this average was applied to the Berkshire 10-year sales, this would suggest a 10-year trend of 92 Tt per year for Central and Eastern Berkshire.

6. Future Aggregate Supply

6.1 The Central & Eastern Berkshire Authorities are working together to produce a Joint Minerals & Waste Plan to supersede the *Replacement Minerals Local Plan for Berkshire* adopted in 1995 and subsequently adopted alterations in 1997 and 2001¹³. The current adopted Minerals Local Plan covers the administrative areas covered by the Central & Eastern Berkshire Authorities, as well as Slough Borough Council and West Berkshire Council. While this plan covers the period until 2006, the Secretary of State has directed that several policies in them should be saved¹⁴ indefinitely until replaced by national, regional or local minerals and waste policies. For Central and Eastern Berkshire, these saved policies will be replaced by the Joint Minerals & Waste Plan, when it is adopted.

Construction projects demands

6.2 Infrastructure projects that are likely to place an additional demand of future aggregate demand in Central and Eastern Berkshire relate to both housing and transport projects. There are in the region of 25,000 new homes projected within the area in the next 10 years¹⁵.

6.3 The new runway proposal at Heathrow is a major future infrastructure scheme and will place significant demands on aggregate supply within the Central and Eastern Berkshire area. Proposals could include either tunnelling or significant landraising which would either increase the demand for processing and disposal or could increase demand for inert material which could impact on the restoration of extraction sites. There is not yet enough certainty or details available on this proposal, but its potential should be taken into account when reviewing capacity at depots and aggregate recycling facilities. It is recognised that the Heathrow Expansion plans have identified potential borrow pits which include sites within Central and Eastern Berkshire¹⁶.

¹³ Replacement Minerals Local Plan for Berkshire (2001) - www.bracknell-forest.gov.uk/replacement-minerals-local-plan-for-berkshire-2001.pdf

¹⁴ Mineral Local Plan Saved Policies - www.bracknell-forest.gov.uk/mineral-local-plan-saved-policies-schedule.pdf

¹⁵ The 2016-based Household Projections for England (2018) - https://lichfields.uk/media/4510/lichfields_the_2016_based_household_projections.pdf

¹⁶ Airport Expansion Consultation Document (Jan 2018): <https://www.heathrowconsultation.com/wp-content/uploads/2018/01/Expansion-Consultation-Document.pdf>

- 6.4 Other National Infrastructure projects within 30-50 miles of Central and Eastern Berkshire include Crossrail, improvements to the M25, M3 and M4, as well as the Datchet to Teddington flood defences. A distance of 30-50 miles is the estimated distance over which the majority of sand and gravel produced is transported. Whilst details on the level of demand is still to be realised, current estimates for Crossrail by the Mineral Product Association¹⁷ are in the region of 250,000 concrete segments.
- 6.5 All these projects are of significant scale and require the future demand to be accounted for in future aggregate supplies, over and above the annual infrastructure delivery programme. The emerging Infrastructure Delivery Statements contain more information on the level of future development planned for the area, which cumulatively will place additional pressure on aggregate supplies.
- 6.6 The indication is of an increase in future infrastructure delivery in the Central and Eastern Berkshire area, leading to an increase in future aggregate demand.
- 6.7 To meet future aggregate demand, including the infrastructure projects discussed above, Central and Eastern Berkshire needs to maintain a sufficient aggregate landbank and a greater emphasis should be placed on encouraging recycled and secondary aggregate sites to supply future demand.
- 6.8 Central and Eastern Berkshire is reliant on imports of aggregates, therefore looking at sales of aggregate in isolation does not represent current demand.

Landbank

- 6.9 The NPPF¹⁸ requires Mineral Planning Authorities to make provision for the maintenance of a landbank of at least seven years for sand and gravel. The seven-year landbank stipulated is the absolute minimum level of provision required and Mineral Planning Authorities should seek to maintain a landbank above this level.

Airport Expansion Consultation Document (Jan 2018): <https://www.heathrowconsultation.com/wp-content/uploads/2018/01/Expansion-Consultation-Document.pdf>
als%20%26%20Waste/Local%20Aggregates%20Assessment/LAA%202018/Planning%20Policy%20Framework%20(2018)%20(Para.%20207(f))%20-%20https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/740441/National_Planning_Policy_Framework_web_accessible_version.pdf" Planning Policy Framework (2018) (Para. 207(f)) - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/740441/National_Planning_Policy_Framework_web_accessible_version.pdf

- 6.10 Reserves of sand and gravel in Central & Eastern Berkshire with planning permission for extraction (permitted reserves) at 31st December 2017 were 5,851,000 tonnes (discounting Star Works as this is inactive).
- 6.11 Table 7 shows landbank based on 2017 sales figures is 11.9 years Sales have been significantly lower in 2016 and 2017 than previous years resulting in a higher landbank figure.
- 6.12 The total landbank for all land-won aggregate based on 10-year average is 10.3 years which is comfortably above the 7 years required by the NPPF. However, based on 3-year average sales the landbank is 9.7 years which is not far from required minimum 7 years.
- 6.13 An LAA Rate of 0.71Mt was set in the 2017 LAA. This Rate is considered to be a better representative of supply requirements than the current 3-year average as this incorporates the closure of two sites. Application of the LAA Rate results in a landbank of 8.2 years.
- 6.14 This is an issue as the calculation of the landbank is not necessarily an accurate reflection of the ability of quarries to collectively supply the construction industry, given that Sheephouse Farm has a large reserve and has effectively been mothballed in recent years. However, discussions¹⁹ with the operator indicate that activity on the site is likely to increase in the near future and the remaining reserves extracted.

Table 7: Central and Eastern Berkshire sand and gravel reserves and landbank 2017

	Permitted Reserve (Tt)	Landbank based upon 10yr average sales between 2008-2017 (years)	Landbank based upon 3yr average sale between 2015-2017 (years)	Landbank based upon 2017 sales (years)	Landbank based on LAA Rate
Total Sand & Gravel	5,851	9.7	10.3	11.9	8.2

Source: Aggregate Monitoring survey data.

¹⁹ Discussions held with the operator (Summerleaze) as part of the Draft Joint Minerals & Waste Plan Consultation (September 2018).

Future provision of sand and gravel

- 6.15 The Proposed Plan period is up to 2036. Applying the LAA Rate means an additional requirement of 7,639,000 tonnes of sand and gravel during the life of the Plan.
- 6.16 The only remaining Preferred Area from the *Replacement Minerals Local Plan for Berkshire*²⁰ that is actively being promoted is Area 12: North of Horton (Part - Poyle Quarry), which has a current estimate of 800,000 tonnes. This would not fully meet the future demand for Central & Eastern Berkshire. In addition, there is currently an application that has been submitted for the extraction of 3.6mt at land known as Bridge Farm. This is currently being considered with further information requested.
- 6.17 A Draft Plan was produced, and a Regulation 18 consultation undertaken between August and October 2018. The Draft Plan contains Development Management policies and proposed allocations. The allocations included sharp sand and gravel sites, an aggregate wharf and two aggregate recycling sites. No soft sand sites were identified for inclusion in the Draft Plan. The proposed allocations are not sufficient to meet the identified needs of Central and Eastern Berkshire and therefore, the proposed allocations are supported by criteria-based policies to enable further development proposals to come forward. The 'Proposed Submission' Draft Plan is due to be subject to consultation (Regulation 19) in 2019.
- 6.18 The Draft Plan applied the LAA Rate of 0.71Mt. However, it was recognised that a change local circumstances, such as the Heathrow Expansion, could mean that the supply rate would need to be reviewed.
- 6.19 There is no available soft sand sales data to determine what the future demand of soft sand during the Plan period will be. As such, the Central & Eastern Berkshire Authorities have used methodologies to estimate the likely demand. The initial findings suggest that the demand over the plan period will be in the region of 1.5 million tonnes (79,000 tonnes per year).
- 6.20 As the Plan area is reliant in imports, sources of this supply will need to be secured from elsewhere. However, neighbouring authorities such as West Berkshire, Hampshire and Surrey have constrained soft sand resources due to Areas of Outstanding Natural Beauty and the South Downs National Park.

²⁰ Replacement Minerals Local Plan for Berkshire. 2001 - www.bracknell-forest.gov.uk/replacement-minerals-local-plan-for-berkshire-2001.pdf

Therefore, future supply may need to be considered from alternative sources such as marine or brought into the Plan area from greater distances.

Capacity

6.21 A site capacity question is included as part of the Aggregate Monitoring 2017 survey. By understanding current capability of sites, through capacity, it is hoped that this information can be used to assist planning for future demand. The results of this are shown in Table 8. This is only the second year this type of information was collected so it is not yet possible to determine any reliable trend. This is something that can be reported on in the next LAA.

Table 8: Total sales and estimated production capacity, 2017

	Sales (Mt)	Capacity* (Mt)	% Sales / Production
Land-won Aggregate	0.49	1.13	43%
Recycled Aggregate	0.13	0.2	65%

Footnotes

Source: Aggregate Monitoring Survey, 2017. Please note collecting capacity data from operators in this manner is still in early stages and therefore the results should be treated with caution

*Capacity is based upon sales

6.22 Whilst it is not possible to determine trends in capacity this year, it is possible to compare sales with capacity to understand void production capacity. Table 8 indicates that that for land-won aggregate, there is the potential for sales to be on average over 50% higher than currently recorded, with sites currently producing at an average rate of 43% capacity. However, land-won sales are dictated by the needs of industry. But it does suggest that there is sufficient capacity to accommodate uplift in demand as a result of future development.

6.23 The returns data suggests that recycled and secondary aggregate sites are also currently operating under capacity. The findings vary significantly from those in 2016 which suggested an additional 35% recycled aggregate processed above the recorded capacity. This is likely to be a result of a difference in reported sales and site return data.

6.24 It is worth noting that not all operators returned information on capacity, and therefore the capacity data provided is not 100% accurate.

6.25 Data on recycled aggregate is notoriously difficult to determine due to the temporary nature of sites and the potential for unauthorised operations. The proposed recycled aggregate allocation at Riding Court Farm/Datchet Quarry²¹ in the Draft Plan was permitted in 2018 (subject to legal agreements). The permission (30,000 tonnes per year (maximum) is limited to the life of the quarry.

7. Conclusions and review of the LAA

- 7.1 This LAA has shown that Central and Eastern Berkshire's current local aggregate provision will impact on the wider South East region as a whole if new development is not enabled to meet the forecasted demand up to 2036. This is a key issue as Central and Eastern Berkshire is a net exporter of land-won sand and gravel but also imports and exports occur with neighbouring and non-neighbouring mineral planning authorities.
- 7.2 Several sites closed in 2017 and despite applications being in the pipeline, none were approved during this period. As such, the LAA rate has been retained at 0.71 mtpa.
- 7.3 Due to the lack of suitable resources, Central and Eastern Berkshire is reliant on supplies from other mineral planning authority areas and as such will need to ensure consideration is given to this in other Mineral Local Plans though the duty to cooperate taking into account the current sources of whilst recognising the constraints on resources in some neighbouring areas and the potential impact this may have on future supply.
- 7.4 The need for any additional infrastructure, such as the further requirement for land-won extraction, will be identified through the Joint Minerals and Waste Plan and will be monitored through LAAs. Where it is not possible to identify sufficient sites to meet the identified needs of Central and Eastern Berkshire, the Joint Plan will need to contain enabling policies to allow further opportunities to arise during the life of the Plan.

²¹ Riding Court Farm/Datchet Application: <http://publicaccess.rbwm.gov.uk/online-applications/applicationDetails.do?activeTab=summary&keyVal=P5ZAR3NIJW700>

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