

London Borough of Hillingdon

2013 Local Aggregates Assessment



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Executive Summary

The London Borough of Hillingdon (LBH) is a major source of aggregates (sand, gravel, crushed rock and recycled construction materials) for London and the surrounding areas. Aggregates are the vital raw ingredients for building schools, houses and roads and all the other construction projects necessary to maintain economic growth and quality of life.

LBH is one of the four London boroughs that are obliged under the London Plan¹ to make provision for maintaining a designated level of supplies annually. This is to ensure a steady future supply of aggregates to the London region in line with expected demand from new construction projects such as Crossrail, the Western Rail Access to Heathrow and local motorway improvement works.

Under the requirements of the London Plan, LBH is required to make part provision for a landbank of at least 1.75 million tonnes, based on an apportionment rate of 0.25 million tonnes per annum, until 2031. Under new planning requirements set out in the National Planning Policy Framework, LBH must monitor and review its provisions for maintaining its designated supply level. This should include a review of the previous ten years sales of sand and gravel and the need to provide a seven year landbank at all times.

This is LBH's first Local Aggregates Assessment (LAA) covering the period January – December 2013. It has been produced in consultation with adjoining boroughs and relevant commercial and public organisations involved in the supply of aggregates. Its findings are fed into the London regional aggregates planning group (London Aggregates Working Party) and thereafter to the equivalent national body (National Aggregates Coordinating Group) to monitor and manage the overall supply of aggregates in England.

In 2013 within the LBH, there were two active sand and gravel sites and three rail depots that imported crushed rock. There was no change to LBH's provisions for future sand and gravel extraction areas as identified in its Local Plan, i.e. there were no new sand and gravel operations. The granting of planning permission during the year for a large recycling facility for the production of aggregates from construction and demolition waste is expected to strengthen LBH's capability for recycling.

Over the last 10 years (2004-2013), sand and gravel sales relating to above sites within Hillingdon have been relatively constant except for significant reductions experienced during the recession from 2007 and 2009. This reflected the downturn in the construction industry and in subsequent years sales outputs have recovered to pre-recession years outputs.

Throughout this previous ten year period sales have remained below LBH's share of the London supply allocation but this does not necessarily indicate that this historic situation will prevail into the future. It is still important to plan for a potential increase in demand should this occur.

London Plan and Draft Further Alterations to the London Plan (FALP), available at: <http://www.london.gov.uk/priorities/planning/london-plan>

The current permitted reserves are not sufficient enough to provide for the seven year landbank required by the London Plan. Proposed mineral site allocations in LBH's emerging Local Plan Part 2: Site Allocations and Designation and Development Management Policies will ensure sufficient reserves for a landbank in the future.

Future demands for aggregates are not expected to be any greater than that seen previously in the London area. Therefore the current apportionment for LBH set out in the London Plan is considered an appropriate level to continue to plan for.

In conclusion, LBH has fully satisfied its obligation to make provision for the supply of land won sand and gravel aggregates in line with the London Plan.

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1 Introduction

1.1 Background

Aggregates (sand, gravel, crushed rock and recycled construction materials) are recognised under the National Planning Policy Framework (NPPF)² as essential to supporting economic growth and quality of life. The NPPF requires Minerals Planning Authorities (MPA) to produce an annual Local Aggregate Assessment (LAA) to help the MPA plan for a steady and adequate supply of aggregates. The London Borough of Hillingdon (LBH) is an MPA.

The London Borough of Hillingdon is one of the main sources of aggregates for London and the surrounding area. It is thereby one of the four London MPAs (along with Hounslow, Havering and Redbridge) which has a duty to prepare a LAA.

Under the London Plan³ there is a requirement that LBH makes provision to share the maintenance of a London permitted (i.e. has planning permission) land-won (excavated from the ground) aggregate landbank, (i.e. seven years supply) of at least 5 million tonnes (mt) throughout the plan period until 2031. The LBH apportionment is a rolling permitted landbank of at least 1.75 mt which is the equivalent to 0.25 million tonnes per annum (mtpa). Therefore LBH needs to ensure it has permitted reserves amounting to a total of 1.75 million tonnes. If the LAA shows that the Borough does not have a permitted landbank and does not have a strategy in place to address it then policies will be needed to make sites available for aggregate extraction.

This is the LBH's first LAA covering the period January – December 2013. It is therefore the LAA for 2013. It has not previously been a requirement to complete an LAA. This first LAA will be updated annually.

This LAA has been produced in line with updated guidance for the Managed Aggregate Supply System (MASS)⁴ for managing the apportionment of aggregates supply nationally, and LAAs⁵. The guidance requires an LAA to contain three key elements:

1. *“a forecast of the demand for aggregates based on both the rolling average of 10-years sales data and other relevant local information;*
2. *an analysis of all aggregate supply options, as indicated by landbanks, mineral plan allocations and capacity data; and*

² DCLG. National Planning Policy Framework. March 2012, para 145, available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

³ London Plan and Draft Further Alterations to the London Plan (FALP), available at: <http://www.london.gov.uk/priorities/planning/london-plan>

⁴ NPPF Minerals Planning Practice Guidance, Managed Aggregate Supply System, Paragraph: 060 Reference ID: 27-060-20140306, available at: <http://planningguidance.planningportal.gov.uk/blog/guidance/minerals/planning-for-aggregate-minerals/the-managed-aggregate-supply-system/>

⁵ NPPF Minerals Planning Practice Guidance, Local Aggregates Assessments available at: <http://planningguidance.planningportal.gov.uk/blog/guidance/minerals/planning-for-aggregate-minerals/local-aggregate-assessments/>

3. *an assessment of the balance between demand and supply, and the economic and environmental opportunities and constraints that might influence the situation. It should conclude if there is a shortage or a surplus of supply and, if the former, how this is being addressed.”*

There is also a duty to ensure that all relevant authorities with cross administrative boundaries have been consulted in accordance with the NPPF requirement (paragraph 178) for Duty to Cooperate (See Chapter 5 of this report).

The LAA is based on data gathered for the previous 12 months with reference to the London Aggregates Working Party (LAWP) Annual Monitoring Reports⁶.

In accordance with the MASS process, this draft report will be submitted to the LAWP for inclusion in the 2014 Aggregates Monitoring Report and review by the National Aggregates Coordinating Group to monitor the overall provision of aggregates in England.

This LAA is structured to meet the above requirements with the following sections:

- A review of the relevant planning policy and requirements.
- A summary of the main aggregates sources, including land-won aggregates, imported crushed rock, and secondary aggregates recycled from construction, demolition and extraction and from industrial wastes and minerals by-products and current supply capacity in the Borough, (i.e. landbank) including transport infrastructure and environmental constraints.
- A review of the previous 10 years demand against sales and the Borough apportionment.
- A comparison of projected future demand for LBH aggregates against the current landbank and the Borough apportionment.

The report should be read in conjunction with the following documents:

- The Hillingdon Local Plan: Part 1- Strategic Policies, November 2012;
- The emerging Local Plan: Part 2 – Site Allocations and Designations and Development Management Policies;
- London Borough of Hillingdon UDP Saved Policies, September 2007;
- The London Plan, July 2011; and
- Revised Early Minor Alterations to the London Plan (REMA), October 2013.
- London Aggregates Monitoring reports, London Aggregates Working Party, LAWP 13/04, dated July 2013.

1.2 Planning Policy and Guidance Review

This section provides an overview of the relevant planning documents against which the LAA has been prepared.

The development plan is the primary consideration for local authorities when determining planning applications and therefore provides the overall context for future minerals planning.

⁶ London Aggregates Monitoring 2012, London Aggregates Working Party, LAWP 13/04, July 2013 available at: <http://www.london.gov.uk/sites/default/files/Aggregates%20Monitoring%202012.pdf>.

The development plan is defined under S38 (3) of the Planning and Compulsory Purchase Act 2004 (as amended) as comprising:

- The Regional Strategy (RS) for the region which the area is situated;
- The local plan documents (taken as a whole) which have been adopted or approved in relation to that area; and
- Any neighbourhood development plans which have been made in relation to the area

Each aspect of the development plan which is relevant to the LAA is set out in the sections below.

National and regional guidelines for aggregates provision in England 2005 to 2020, June 2009⁷

The National and regional guidelines for aggregates provision in England 2005 to 2020 sets out national and regional guidelines for aggregates provision in England for the period 2005 to 2020 inclusive. This guidance provides an indication of the total amount of aggregate provision the region should aim to provide and provides support to minerals planning authorities in obtaining data. The aggregate requirements in this guidance filter down into The London Plan and LBHs Local Plan.

The Regional Plan

The London Plan, July 2011

The London Plan is the overall strategic plan for London, and it sets out a fully integrated economic, environmental, transport and social framework for the development of the capital to 2031. In particular it supports the Government's objective of achieving an essential level of supply of locally sourced land-won aggregates.

Policy 5.20 AGGREGATES (C) states that *'London should make provision for the maintenance of a landbank (i.e. seven years' supply) of at least 5 million tonnes of land won aggregates throughout the plan period until 2031'*.

Policy 5.20 (D) apportions this landbank across 4 of the London boroughs with Hillingdon required to make provision for the maintenance of a seven year landbank of at least 1.75 million tonnes of land won aggregates throughout the plan period to 2031. This is equivalent to 0.25mtpa (or 250,000 tonnes per year)

Paragraph 5.94 recognises that aggregates are bulky materials and Local Plan policies should maximise their use and re-use and minimise their movement, especially by road. In particular, existing and new railhead capacity will be needed to support sustainable forms of movement. Sites for depots may be particularly appropriate in preferred industrial locations and other employment areas.

⁷ DCLG. National and regional guidelines for aggregates provision in England 2005 to 2020, June 2009, available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7763/aggregatesprovision2020.pdf

Revised Early Minor Alterations to the London Plan (REMA), October 2013

In October 2013, the Mayor published Revised Early Minor Alterations to the London Plan (REMA). These alterations to the London Plan have been adopted and form part of the development plan for Greater London. There are no changes to this document pertinent to this assessment

Draft Further Alterations to the London Plan, January 2014

On 15 January 2014, the Mayor published Draft Further Alterations to the London Plan (FALP), this is currently out to consultation so does not yet form part of the adopted Development Plan. The FALP have been prepared to address key housing and employment issues emerging from an analysis of census data released since the publication of the London Plan. The FALP also considers the National Planning Policy Framework. The key proposed change relevant to the LAA is that paragraph 5.94 states that boroughs should safeguard existing, planned and potential and new railhead capacity which will be needed to support sustainable forms of movement. New paragraph 5.94A supports the requirements set out in the NPPF for mineral planning authorities to preparing an annual Local Aggregates Assessment (LAA). The Boroughs of Havering, Redbridge, Hillingdon and Hounslow should prepare their own or joint LAAs.

The LBH Local Plan

London Borough of Hillingdon UDP Saved Policies September 2007

The Unitary Development Plan (UDP) was originally adopted in September 1998 as Hillingdon's statutory development plan. Under the Planning and Compulsory Purchase Act 2004, the UDP was replaced by a Local Development Framework (LDF). Under the NPPF and LDF then became a Local Plan. The original policies of the Borough's adopted UDP are being replaced by the Local Plan when each part is adopted, including the adopted Local Plan: Part 1- Strategic Policies.

The UDP sets out Hillingdon's long term strategic goals for land use, together with the planning policies and standards for making decisions on planning applications. Following a direction issued by the Secretary of State, some policies and proposals were deleted, and most were 'Saved' in September 2007. The remaining saved policies will continue to be part of Hillingdon's Development Plan and inform planning decisions until they have been replaced (either in full or in part) by the Local Plan or are no longer considered consistent with the NPPF.

All minerals policies in the former UDP were saved as part of the adopted Local Plan except Policy MIN2 which relates to proposals to work sand and gravel in relation to regional requirements and London wide landbanks.

The key saved Local Plan policies relevant to the LAA are:

- Policy MIN1 - Safeguarding of sand and gravel reserve
- Policy MIN12 - Proposals for extraction of clay or brick earth
- Policy MIN25 - Safeguarding of operational rail aggregate depot facilities

The Hillingdon Local Plan: Part 1- Strategic Policies

The Hillingdon Local Plan: Part 1- Strategic Policies is the key strategic planning document for Hillingdon and sets out the long-term vision and objectives for LBH. The local plan contains statements with regard to the use of land in LBH between the years 2011 – 2026. The London Plan however runs to 2031 but is not an issue for this LAA. It comprises a spatial vision and strategic objectives for the area; a spatial strategy; core policies; and a monitoring and implementation framework with clear objectives for achieving delivery and is in full conformity with the NPPF.

The objectives and core policies most relevant to the LAA are Strategic Objective SO5, which is to safeguard and promote areas of geological importance and make a proportionate contribution to West London's target to extract 0.5million tonnes (mt) of aggregates (the figure of 0.5 mt is from The London Plan (consolidated with Alterations since 2004) which was the current London Plan at adoption). This strategic objective has been identified because one of the main challenges of the borough relating to aggregates is the need to meet the London Plan mineral apportionment figures.

The most relevant policies of the Local Plan Part 1 are Policies EM9 Safeguarding Mineral Resources which safeguard mineral resources in the LBH from other forms of development that would prejudice future mineral extraction. The plan highlights three 'Preferred Mineral Areas'

Preferred Areas are defined by the Government as areas of known resources where planning permission might reasonably be anticipated by industry. These areas will contain viable mineral deposits and have been assessed against planning criteria as the least environmentally damaging sites. Applications on Preferred Areas identified in a Development Plan Document will be favourably considered subject to there being no conflict with other policies in the plan. These areas are proposed to be safeguarded in the emerging Hillingdon Local Plan: Part 2 – Site Allocations and Designation and Development Management Policies (see below).

Policy EM10: Mineral Extraction which ensures the Council will make an appropriate contribution towards the West London apportionment figure in the London Plan in the form of mineral working at the principal Broad Locations and will aim to maintain a minimum land bank equivalent to seven years production for the West London area at a rate of 0.25 million tonnes per annum.

The Emerging Hillingdon Local Plan: Part 2 – Site Allocations and Designation and Development Management Policies

LBH is due to consult on the proposed Submission Draft of its emerging Local Plan Part 2 in the spring of 2014. The Draft Local Plan Part 2 will comprise:

- Draft Proposed Site Allocations and Designations - approved by Cabinet for consultation in October 2013.
- Draft Development Management Policies and Policies Map.

Within the Draft Site Allocations and Designations section of the plan three sites are to be allocated for Mineral Safeguarding at (see Figure 1 below):

- Land to the West of Harmondsworth Quarry (yield 2.2mt)*;
- Land to the North of Harmondsworth (yield 0.75mt)*; and
- Land at Sipson Lane, East of the M4 Spur (yield 1.8mt)*.

* These yield figures are from London Borough of Hillingdon Local Development Framework Background Technical Report: Minerals April 2008 and total 4.75mt.

The report can be viewed at

<https://www.hillingdon.gov.uk/media.jsp?mediaid=12708&filetype=pdf>

There are no Neighbourhood Plans that have been made by LBH which are relevant to the LAA.

2 Aggregates Supply

This section of the assessment outlines the geological data for the area and contains a summary of the main aggregate sources and supply capacity currently, including transport infrastructure. It also highlights environmental constraints within the borough that may limit the development of new mineral sites.

2.1 Geology

The British Geological Survey (BGS) GeoIndex website⁸ (has been reviewed for information on the geology of Hillingdon. The geological mapping indicates that the majority of the south and central portions and western portions of LBH are underlain by superficial River Terrace Deposits, deposited as a result of fluvial actions between approximately 800,000 years ago and 130,000 years ago. The River Terrace Deposits form a wide tract, generally orientated on a north-west to south-east alignment, with older deposits found towards the north of LBH and younger deposits encountered towards the central and southern portions. Superficial deposits are largely absent from the northern and eastern portions of LBH.

Towards the north west of LBH in proximity to Harefield, a pocket of Gerrards Cross Gravel deposits are found. These are the oldest superficial deposits in LBH, deposited between the Cromerian (~800,000 to 500,000 years ago) and Anglian (~480,000 to 425,000 years ago) period. These are described by the BGS as “Sand and gravel, locally with lenses of silt, clay or peat and organic material” and are reported to have a thickness ranging from 1m to 10m, with an average thickness of 4m. These deposits have been eroded away from much of the surrounding area leaving this isolated pocket, underlain directly by bedrock.

Further south, west of Ickenham and surrounding much of Uxbridge and the northern portions of Hillingdon are Black Park Gravel Member deposits. These were deposited within the Anglian period and are described by the BGS as “Sand and gravel, with possible lenses of silt, clay or peat. Horizontally stratified, matrix-supported gravel with thin tabular cross-bedded sand channels. Gravel assemblage is characterised by abundant angular flint (75-89%), sparse rounded flint (3-9%), sparse vein quartz (4-10%) and sparse quartzite (1-6%)”. They have an average thickness of 3m and are underlain by bedrock.

Further south, covering southern Hillingdon and Yiewsley, are the Boyn Hill Gravel Member deposits. These are of Hoxnian Age (~425,000 to 375,000 years ago) and are described by the BGS as “Sand and gravel, with possible lenses of silt, clay or peat. Poorly sorted, stratified gravel and locally tabular cross-bedded sand beds. Gravel assemblage is characterised by abundant angular flint (77-81%), sparse rounded flint (5-10%), sparse vein quartz (4-7%), sparse quartzite (1.5-5%), sparse Greensand chert (2.5-4%) and less than 1% of other types.” They have a thickness ranging from 1 to 9m with an average thickness of 5m and are underlain in some areas by River Terrace Deposits and in other areas directly by bedrock.

The Lynch Hill Gravel is found further south, surrounding West Drayton and Stockley Park. These are of Wolstonian Age (~350,000 to 130,000 years ago) and are described by the BGS as “Sand and gravel, locally with lenses of silt, clay or

⁸ <http://www.bgs.ac.uk/geoindex/>

peat.” They have an average thickness of approximately 7m although with a range between 1m to 12m. They are underlain by bedrock.

Further south still and covering almost the entirety of the southern portion of LBH the Taplow Gravel Formation deposits are encountered. These deposits have a similar composition to the Lynch Hill Gravel and are also of Wolstonian age. They have an average thickness of 5m, locally extending to up to 9m and are underlain directly by bedrock.

Across much of the central portion of LBH, extending from Cowley in the north to Sipson in the south and extending east to Hayes, the Lynch Hill Gravel and the Taplow Gravel Formation are overlain by the Langley Silt. The Langley Silt was deposited in the Devensian age (~110,000 to 12,000 years ago) and is described by the BGS as “Varies from silt to clay, commonly yellow-brown and massively bedded”. These have been extensively worked from large areas, resulting in areas where older River Terrace Deposits, which underlie the Langley Silt appear at surface.

More recent Flandrian age (12,000 years ago to present) Alluvium deposits are present in the Colne Valley along the entire length of the western boundary of LBH , and the valley of the River Pinn across the north-centre of LBH. These are described by the BGS as “Normally soft to firm consolidated, compressible silty clay, but can contain layers of silt, sand, peat and basal gravel. A stronger, desiccated surface zone may be present”. The Alluvium in the Colne Valley is underlain by River Terrace Deposits whilst those in the valley of the River Pinn will be underlain directly by bedrock.

The vast majority of LBH is underlain by bedrock comprising the London Clay. This is described by the BGS as “bioturbated or poorly laminated, blue-grey or grey-brown, slightly calcareous, silty to very silty clay, clayey silt and sometimes silt, with some layers of sandy clay. It commonly contains thin courses of carbonate concretions (‘cementstone nodules’) and disseminated pyrite. It also includes a few thin beds of shells and fine sand partings or pockets of sand, which commonly increase towards the base and towards the top of the formation. At the base, and at some other levels, thin beds of black rounded flint gravel occurs in places. Glauconite is present in some of the sands and in some clay beds, and white mica occurs at some levels.”

Towards the north and west of LBH the London Clay basin thins and in areas is eroded away leaving the older Lambeth Group deposits to either subcrop beneath the superficial deposits or outcrop at surface where superficial deposits are absent. These are described as “Vertically and laterally variable sequences mainly of clay, some silty or sandy, with some sands and gravels, minor limestones and lignites and occasional sandstone and conglomerate.”

In the far north west of LBH in the area surrounding the approximate alignment of the Grand Union Canal, the Lambeth Group deposits thin away and Cretaceous age (~145,000,000 to 66,000,000 years ago) White Chalk bedrock is found.

2.2 Primary aggregates

The section looks at the supply of primary aggregates within LBH.

2.2.1 Sand and gravel

Table 1 below is a summary of existing primary aggregate sites with planning permission and their reserve. This information on tonnage remaining was supplied by the site operator as at the end of 2013.

Operating site	Aggregate	Tonnage Remaining	Grid reference
Harlington	Sharp sand & gravel	100,000 – Permission currently unimplemented. Application Ref: 2372/APP/2005/2815	51 091 783
Sipson (including Wall Garden farm)	Sharp sand & gravel	350,000 – Planning application submitted for time extension for extraction. Application Ref: 3952/APP/2008/1176	51 075 784
Total supply		450,000	

Table 1: Active permitted aggregate operations

2.2.2 Imports of Crushed Rock

Table 2 below lists the location of railheads in LBH. According to figures provided by the operators on average they import approximately 905,000 tonnes of crushed rock per annum combined.

Operating site	Operator	Aggregate
Hayes	Lafarge Tarmac Ltd	Crushed rock
West Drayton, Tavistock Road	Lafarge Tarmac Ltd	Crushed rock
West Drayton	Hanson Aggregates	Crushed rock
West Ruislip	Yeoman Aggregates	Crushed rock

Table 2: Aggregate rail depots

2.3 Alternative/secondary aggregates

The Hayes railhead site has for many years operated an aggregate recycling facility on site, and recycles road asphalt planings imported by road for use in asphalt production on site. A significant volume of recycled material is produced for this purpose each year. However, planning permission has recently been granted for a new recycling facility in LBH (see para 4.4).

2.4 Current aggregates transport infrastructure

Road

Active sites for sand and gravel production in LBH at Harlington and Sipson farm use the strategic road network for transportation. This includes the neighbouring M4 which links to the M25 and M40 and then the M3 and M27 Southwards and the M1 Northwards.

Mineral Safeguarding Sites in LBH including land North of Harmondsworth and land to the West of Harmondsworth Quarry would also use the strategic road network for transportation.

Aggregate Rail Depots

Table 2 above lists all the aggregate rail depots in LBH.

West Drayton is operating on an import/export basis for general use. The West Ruislip Depot is used by Aggregate Industries for delivering materials specifically for use by London Underground. Hayes Depot is used by Lafarge Tarmac specifically for importing crushed rock for use in their top coat manufacturing plant. The Tavistock Road Depot in West Drayton is also run by Lafarge Tarmac and is used in asphalt production at Heathrow airport and the manufacture of ready mixed concrete.

The next closest rail depot to Hillingdon is at Brentford in Hounslow owned by Day Group Ltd. This supplies sub-bases, recycled materials, sands and gravels, drainage aggregates and cleanstones and has facilities for concrete and asphalt recycling.

Aggregate Wharves

There are no aggregate wharves in LBH. The majority of wharves in the London area are to the East along the Thames where it is at its widest. The closest wharves to LBH are in Wandsworth at Battersea Wharf and Pier Wharf both of which import marine dredged aggregates. Battersea Wharf currently produces approximately 90,000 cubic metres of concrete a year and sells approximately 100,000 tonnes of processed aggregates annually.

2.5 Environmental constraints

Figure 1 shows the key environmental constraints in relation to mineral safeguarding sites allocated in LBH's emerging Local Plan: Part 2 – Site Allocations and Designation and Development Management Policies. It shows that there are no environmental constraints that would prohibit their excavation.

Mineral Safeguarding Site Land to the West of Harmondsworth Quarry (to the South West) adjoins a conservation area which will need to be considered when planning permission is applied for.

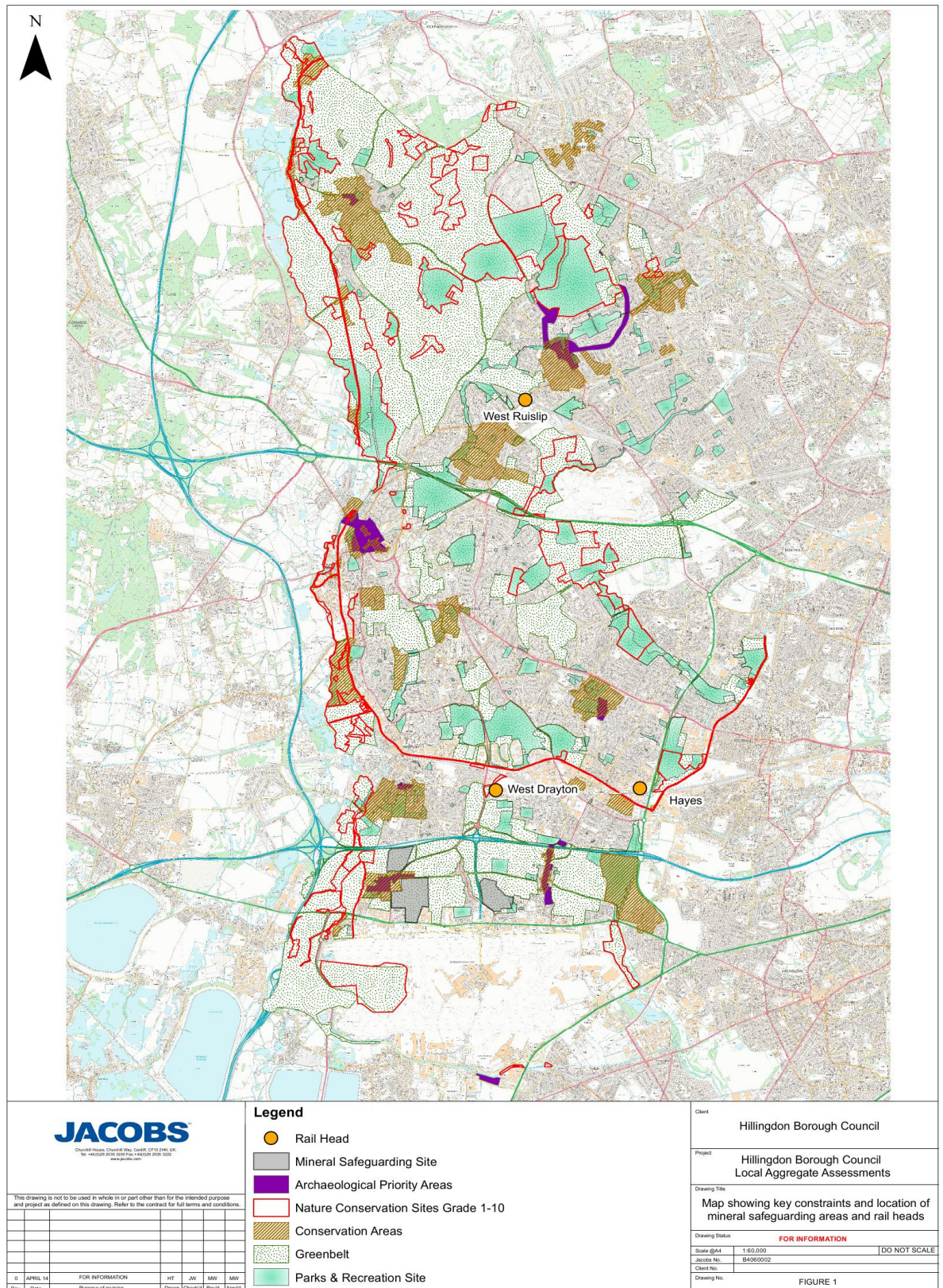


Figure 1: Key constraints, mineral safeguarding areas and rail heads

3 Past and Current Aggregate Demand and Sales

3.1 Annual historic sales 2004-2013

A LAA is required to provide a forecast of the demand for aggregates based on both the rolling average of 10-years sales data and other relevant local information. Figure 2 below shows that sales of sand and gravel in LBH have remained relatively constant over the previous 10 year period.

These figures were supplied by the site operator in March 2014 through e-mail and telephone conversation. Figures for 2004 and 2005 however were not available as the operator implemented a new financial system in 2006. They could supply estimates for these missing years which were approximately 220k tonnes for each year. The operator stated that the impact of the recession is clearly shown for the years 2007 and 2009 where the economic slowdown impacted on the construction industry and consequently the need for their aggregates.

According to the operator, the peaks in sales during 2010 and 2012 were as a result of unprecedented bulk sales of sand and were not expected again.

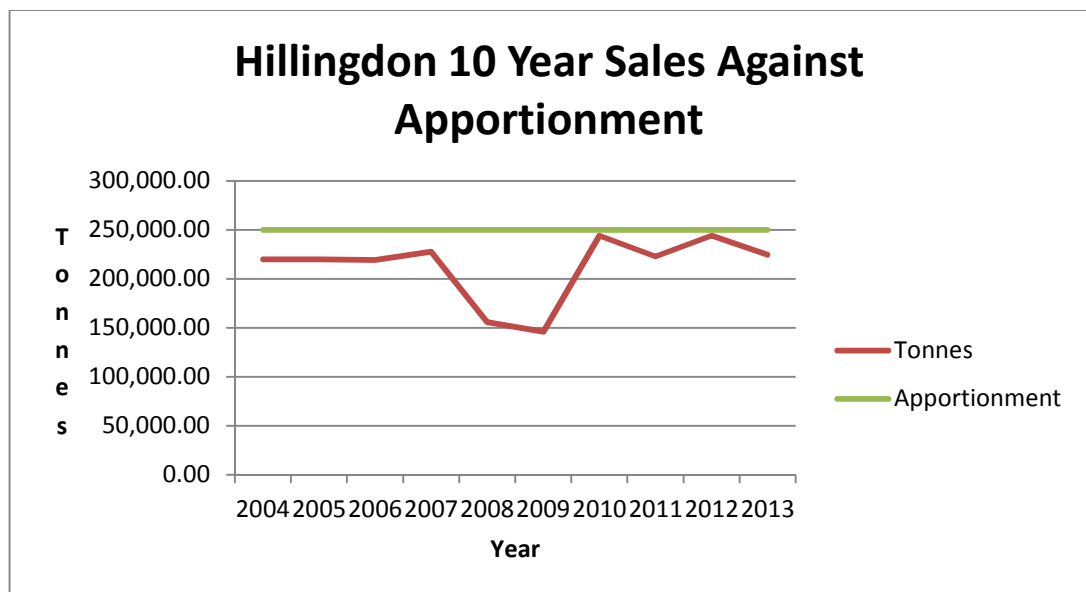


Figure 2: Graph illustrating end sales and apportionment between 2004-2013

3.2 Trends in apportionment against sales 2004 -2013

Figure 2 also compares actual aggregate sales to the annual apportionment figure of 0.25 mtpa (or 250, 000 tonnes per year) for LBH in the London Plan 2011 (as amended January 2014). The apportionment figure was the same in the previous iteration of the London Plan - The London Plan (consolidated with Alterations since 2004) which ran until 2011. The red line in the graph shows that sales for the last ten years have continually been below the apportionment figure illustrated by the green line.

4 Future Aggregates Demand and Supply

4.1 Future projected demand for LBH aggregates

A requirement of the LAA is that it must also consider other relevant local information, which seeks to look ahead at possible future demand. This is to ensure that projections of future provision are not purely based on historic past sales and look forward to identify potential requirements for aggregates linked with major infrastructure investment and developments.

To help identify future demand the following sources have been reviewed:

- National Infrastructure Plan⁹ - this sets out the UK's infrastructure needs and includes the government's priority investment projects.
- Hillingdon Local Plan
- The London Plan
- Local Transport Plan
- Adjoining authority local plans and transport plans

Future LAAs will be able to consider the emerging Long Term Infrastructure Investment Plan for London currently being prepared by the Greater London Authority. The plan will set out London's strategic infrastructure requirements to 2050 across the main aspects of infrastructure, namely public transport, roads, energy, water, waste, ICT and partially social infrastructure.

The review of these sources has identified the following major projects/developments which are likely to create a demand on Hillingdon's aggregate supply.

National Infrastructure Projects:

- High Speed 2 (HS2) - 9km of track in Hillingdon and HS2 Phase 2 - link to Heathrow. At this stage it is difficult to identify an exact start date or indeed the exact amount of aggregates that would be required for this project. However progress will be monitored through future LAAs.
- Western Rail Access to Heathrow - The Western Rail Access to Heathrow project will create a new connection with the nearby Great Western Mainline (GWML), providing a more direct rail route for passengers travelling to and from Reading, Oxford, South Wales, Bristol, Midlands and beyond. The application is expected to be submitted to the Planning Inspectorate in Sept 2015, so demand for minerals will not be until 2016 at the earliest.

⁹ HM Treasury and Infrastructure UK. The National Infrastructure Plan. 2013

- Crossrail - will travel through the southern part of Hillingdon with a new station at Heathrow and the upgrading of Hayes and West Drayton stations it is expected that these works will be undertaken during the period 2015/2016.

The National Infrastructure Plan will be monitored as an influence on demand for aggregates within LBH; however, its value in considering future aggregate requirements is limited by its lack of detail on the amount of aggregates likely to be required.

That said, in the proceeding ten years the following National Infrastructure Projects were completed when the LBH's apportionment of 0.25mtpa was the same as it is now. As this apportionment has not changed in the current London Plan it can be argued that there has not been a problem in aggregate provision historically when these projects were being constructed:

- London Olympic Games completed in 2012
- Heathrow Terminal 5 completed in 2008
- Crossrail currently still under construction.

Strategic Demand forecasts

The population of LBH in 2011 was 273,936¹⁰ residents. This is an increase of 12.7% based on the population in 2001 which was 243,006. The local plan predicts that the population is expected to increase by approximately 14% over the period up to 2026¹¹. However, this figure may be higher based on the % increases shown in the past 20 years. However, the census figures in Table 3 below show that this level of growth is not unusual for LBH particularly in the last 10 years so this is not a reason to change the current apportionment.

Census date	Population	% increase over 10 years
1991	231,602	
2001	243,006	3.7
2011	273,936	12.7

Table 3: Census Data for LBH

As shown in Table 4 below, LBH is meeting its annual dwelling completion targets as set out in the London Plan and the Local Plan, as evidenced by the number of housing completions exceeding planned provision by a total of 2910 dwellings over the last 16 years. This demonstrates that LBH has easily met its housing targets with the historic level of provision for aggregates.

This historic over-provision of housing in LBH has resulted to a certain extent from windfall sites coming forward for residential development. In terms of future provision, while it is expected that some housing will come from small non- allocated sites, LBH expects the majority of housing provision to come from sites identified in the London Housing Capacity Study and the Local Plan.

LBH's current housing target is to deliver 425 housing completions each year for the plan period 2011 – 2026, but this figure has been raised to 559 completions each

¹⁰ ONS 2011 Census

¹¹ Based on paragraph 3.3 Hillingdon Local Plan: Part 1 - Strategic Policies (Adopted November 2012)

year in the January 2014 Draft Further Alterations to the London Plan which was consulted upon between January 2014 and April 2014. The average completion rate over the 16 year period shown in Table 4 was 600 dwelling completions each year which suggests that the new draft completion target would not prove onerous in terms of the continued provision of aggregate supplies to enable the planned rate of housing growth to take place.

Year	Total actual completions	Plan: annualised strategic allocation	Cumulative gains above target
1997/9*	* 598	440	158
1998/99	515	440	233
1999/00	323	440	116
2000/01	647	440	323
2001/02	324	440	207
2002/03	238	440	5
2003/04	705	440	270
2004/05	851	440	681
2005/06	504	440	745
2006/07	193	440	498
2007/08	495	365	628
2008/09	827	365	1090
2009/10	619	365	1344
2010/11	303	365	1282
2011/12	996	410	1868
2012/13	1467	425	2910

Table 4: Housing completions in LBH
(Average per year is 600 – 9,605 total divided by 16 years)

Summary of Growth in Hillingdon 2011-2026¹²

In summary, Table 5 below lists the strategic developments allocated in LBH's Local Plan. Annual monitoring in future LAAs will assess the impact on aggregate provision. This level of development is in-line with growth seen in the previous 10 years so current apportionment for land-won aggregates is considered appropriate.

Proposed growth during plan period	Growth figure
Total new jobs	9,000
Total new homes	To provide a minimum of 6,375 dwellings (425 per year)
New office-based jobs	6,400
New jobs in Heathrow Opportunity Area	A proportion of 12,000
New jobs in RAF Uxbridge town centre extension	Estimated 1,160 permanent direct jobs (175 indirect jobs)
New homes at RAF Uxbridge	Approximately 1,340
Total designated employment land	358 hectares
Industrial and employment land release	17.58 hectares
Newly designated industrial and employment land	13.63 hectares
Additional hotel bedrooms	3,800 - 5,600
New retail floorspace in Uxbridge	18,855 square metres

Table 5: Summary of Growth in LBH

¹² Hillingdon Local Plan: Part 1 - Strategic Policies (Adopted November 2012)

4.2 Sand & gravel landbank

Table 6 below shows the number of land bank years for three apportionment scenarios as suggested in the LAA guidance. It shows the permitted reserves as at 01/01/2014. It shows that LBH does not currently have a landbank (seven years' worth of supply) under each scenario.

LBH however has been aware of the shortfall in the landbank in producing the new Local Plan and has provided a strategy to address this. Its adopted Local Plan Part 1: Strategic Policies allocates three 'Preferred Minerals Areas'. Preferred Areas are defined by the Government as areas of known resources where planning permission might reasonably be anticipated by industry. These areas will contain viable mineral deposits and have been assessed against planning criteria as the least environmentally damaging sites. Applications on Preferred Areas identified in the Minerals DPD will be favourably considered subject to there being no conflict with other policies in the plan.

The emerging Draft Local Plan Part 2: Site Allocations and Designations and Development Management Policies allocate three sites for Mineral Safeguarding. These are:

- Land to the West of Harmondsworth Quarry (yield 2.2mt)*;
- Land to the North of Harmondsworth (yield 0.75mt)*; and
- Land at Sipson Lane, East of the M4 Spur (yield 1.8mt)*.

* These yield figures are from London Borough of Hillingdon Local Development Framework Background Technical Report: Minerals April 2008 and total 4.75mt.

The report can be viewed at

<https://www.hillingdon.gov.uk/media.jsp?mediaid=12708&filetype=pdf>

Scenario	Annual Requirement (000 tonnes)	Permitted reserves at 01/01/2014 (000 tonnes)	Landbank (years)
London Plan Apportionment	250	450	1.8
Average annual sales over past 10 years	212	450	2.1
Average annual sales over previous 3 years	230	450	1.9

Table 6: LBH sand & gravel landbank based on various output scenarios

Table 7 below however shows the potential yield from allocated sites how they will address the current lack of landbank under each scenario.

Scenario	Output (000 tonnes)	Permitted reserves at 01/01/2014 (000 tonnes)	Yield from sites in Local Plan (000 tonnes)	Total (000 tonnes)	Landbank (years)
London Plan Apportionment	250	450	2,950	3,400	14
Average annual sales over past 10 years	212	450	2,950	3,400	16
Average annual sales over previous 3 years	230	450	2,950	3,400	15

Table 7: LBH sand & gravel landbank estimated with various output scenarios

Landbank Years for Adjoining MPAs

Other London Boroughs Covered by the London Plan

London Borough of Hounslow

Hounslow neighbours Hillingdon to the South East. Hillingdon and Hounslow are two of four London Boroughs identified in the London Plan 2013 to deliver 5 mtpa of land-won aggregates throughout the plan period to 2031. For Hounslow's apportionment they need to deliver 100,000tpa meaning a landbank of 700,000 tonnes is required.

Hounslow are consulting on their Proposed Submission Local Plan in March / April 2014. The plan contains an allocation at Rectory Farm to cover their apportionment.

Redbridge Borough Council

Redbridge Borough Council has the same apportionment in the London Plan 2013 as Hounslow above (100,000tpa). The Borough adopted its Minerals Local Plan in September 2012. It shows that they have areas safeguarded for sand and gravel extraction with resources that total around 1,070,000 tonnes. This is more than enough to cover their 700,000 tonne landbank requirement.

Other Adjoining South East Authorities

Hertfordshire County Council

Hertfordshire's 2013 LAA shows that the County has a reserve of 11.4 landbank years. They are now working on updating their minerals plan which currently runs to 2016.

Buckinghamshire County Council

Buckinghamshire County Council's Adopted Minerals and Waste Core Strategy November 12 shows the County have reserves for 10 landbank years in 2010 (see para 4.27 of the plan).

Surrey County Council

Surrey County Council's October 2013 LAA shows they have 6.7 landbank years for land won aggregates. The assessment also states that the County will also increase recycled aggregate production to at least 0.8mtpa by 2016.

Slough Borough Council

Information is not currently available for Slough Borough Council. A LAA has been produced for Berkshire but is currently awaiting sign off.

4.3 Contribution of imports

The level of imported aggregates into LBH is shown in Table 2 above. Conversations with operators suggest that there may be additional capacity at some of the railheads but this would require a level of infrastructure investment and a change in working practices to be realised.

4.4 Contribution of secondary and recycled aggregates

Government guidance on LAAs published in March 2014 states that recycled aggregates, including from construction, demolition and excavation waste; and secondary aggregates, whose sources come from industrial wastes such as glass (cullet), incinerator bottom ash, railway ballast, fine ceramic waste (pitcher) and scrap tyres; and industrial and minerals by-products, notably waste from china clay, coal and slate extraction and spent foundry sand should be considered a supply option (on top of landbank requirements which are only land-won).

WRAP is a Government funded organisation that helps businesses recycle more and waste less. They produce a database which lists companies and facilities in any given area which provide recycling services.

Lafarge Tarmac's railhead recycles asphalt planings. Other recycling facilities near Hillingdon include Linguard Contractors Ltd in Hanwell, Hounslow, Lowery Demolition Ltd in Slough Borough and Day Aggregates in Brentford in Hounslow. All recycle aggregates for concrete.

Planning permission was given in August 2013 to FM Conway Ltd for a new aggregate recycling facility in Hillingdon. The facility is now largely built out and is expected to be operational imminently. The plant will have a maximum process and recycle capacity of approximately 300,000tpa of waste material extracted from pavements that will otherwise have been landfilled. A condition of the permission was for the developer to carry out a feasibility study to assess the potential for moving freight from the site via the nearby canal during the occupation of the development. It has yet to be received by LBH.

4.5 Future aggregates transport infrastructure

Rail

According to the operators there may be additional capacity at some of the railheads but this would require additional investment and a change in working practices to be realised.

Road

The Highways Agency is proposing to improve the M4 Junctions 3 – 12 by making it a "smart motorway" to help relieve congestion by using technology to vary speed limits. They also allow the hard shoulder to be used as a running lane at peak times to create additional capacity. This project is not due to commence until 2015.

These improvements will help with the transportation of aggregates by road from existing sites and those safeguarded for aggregates in LBH's Local Plan.

4.6 Potential future environmental constraints

Figure 1 above shows environmental constraints in LBH. There is no indication at this point that there will be any future environmental constraints to prevent future provision of aggregates.

5 Consultation and The Duty to Cooperate

The Council will consult on this draft LAA to gain agreement on the assessment with the relevant authorities. To ensure the robustness of the assessment we will also consult with public bodies and businesses. This consultation will also fulfil the requirements of Duty to Cooperate.

The Localism Act includes a duty, at Section 110, which requires planning authorities to cooperate with each other and with other bodies (as prescribed in Section 4 of The Town and Country Planning (Local Planning) (England) Regulations 2012) in relation to plan making. Section 110 inserts a new Section 33a in Part 2 of the Planning and Compulsory Purchase Act 2004, introducing a Duty to cooperate in relation to planning of sustainable development. This new Duty to Cooperate came into force on 15 November 2011, and is now a requirement in the production of plans which relate to a strategic matter.

A strategic matter is sustainable development or use of land that has or would have a significant impact on at least two planning areas and development in a two-tier area if the development is a county matter (minerals or waste development) or has or would have a significant impact on a county matter. Any such plan submitted for examination after 15 November 2011 will be examined for compliance with the Duty. The Duty to Cooperate during plan production applies to all development plan documents, marine plans and preparatory activities for these documents.

The NPPF states, in paragraph 156, that local planning authorities should set out strategic priorities for their area in a Local Plan, including for the provision of aggregates. The NPPF at paragraph 178 refers to the Duty to Cooperate on planning issues which cross administrative boundaries, particularly in relation to strategic priorities referred to above.

A test as to whether the Duty has been complied with will be part of the formal examination of a development plan document by an Inspector. This is a test of legal compliance which must be passed; non-compliance means that a plan cannot be adopted. It is not possible to address non-compliance by modifying a plan.

The Duty to Cooperate is not a requirement to agree with other bodies; the requirement is to engage constructively, actively and on an ongoing basis. The objectives are to maximise the effectiveness of working on strategic planning issues and to achieve plans which are sustainable and based on the best available information.

Hillingdon Borough Council will consult with, and seek advice from, the London Aggregates Working Party on the content of the LAA. It will also consult with other MPAs in the London area (and elsewhere as necessary) in order to demonstrate the Duty to Cooperate requirements have been carried out.

6 Conclusions and Recommendations

Conclusions for the 2013 LAA for the London Borough of Hillingdon are:

- LBH is required by the London Plan to make provision for 0.25 million tonnes sand and gravel annually over seven year periods until 2031.
- In 2013, there were two active sand and gravel sites and three rail depots that imported crushed rock. Over the last 10 years (2004-2013), sand and gravel sales have been relatively constant except for significant reductions during the recession from 2007 and 2009. This reflected the downturn in the construction industry and in subsequent years sales outputs have recovered to pre-recession years outputs.
- Sales of aggregates in LBH over the last ten years have been below the apportionment in every year.
- The current levels of permitted reserves are not sufficient enough for a seven year landbank (currently only sufficient for 1.8 years). LBH however are proposing three Mineral Safeguarding Sites in their Local Plan Part 2 which will make up for this shortfall and provide 14 landbank years. Future improvements to the M4 will help with their transportation by road.
- Future demands for aggregates are not expected to be any greater than that seen previously in the London area. Therefore the current apportionment for LBH is considered appropriate.
- The granting of planning permission during the year for a large recycling facility for the production of aggregates from construction and demolition waste is expected to strengthen LBH's capability for recycling.

In conclusion, LBH has fully satisfied its obligation to make provision for the supply of land won sand and gravel aggregates in line with the London Plan, providing the following recommendations are considered.

Recommendations:

- The permitted reserves continue to be monitored in terms of any changes to the current planning permissions. If planning permission at the existing extraction sites does not remain extant this would impact on the landbank.
- That the duty to co-operate on the LAA is progressed in parallel with the emerging Part 2 Local Plan. It is particularly important that the other London MPAs and adjoining local authorities are invited to respond to consultation on the LAA.
- Progress of the three proposed mineral site allocations in Part 2 of the Local Plan continues to be monitored as meeting the landbank requirement can only be delivered if new mineral extraction sites are available in the future.

- The Local Plan Part 2 might consider whether policies to support new railhead infrastructure and aggregates recycling provision need to be included.

Appendix A List of Abbreviation

List of Abbreviations

DPD – Development Plan Document
LAA - Local Aggregates Assessment
LBH – London Borough of Hillingdon
LAWP - London Aggregates Working Party
MASS - Managed Aggregates Supply System
MDA - Marine Dredged Aggregates
MPA - Mineral Planning Authority
Mtpa - Million tonnes per annum
Mt - million tonnes
NPPF - National Planning Policy Framework
ONS - Office for National Statistics

