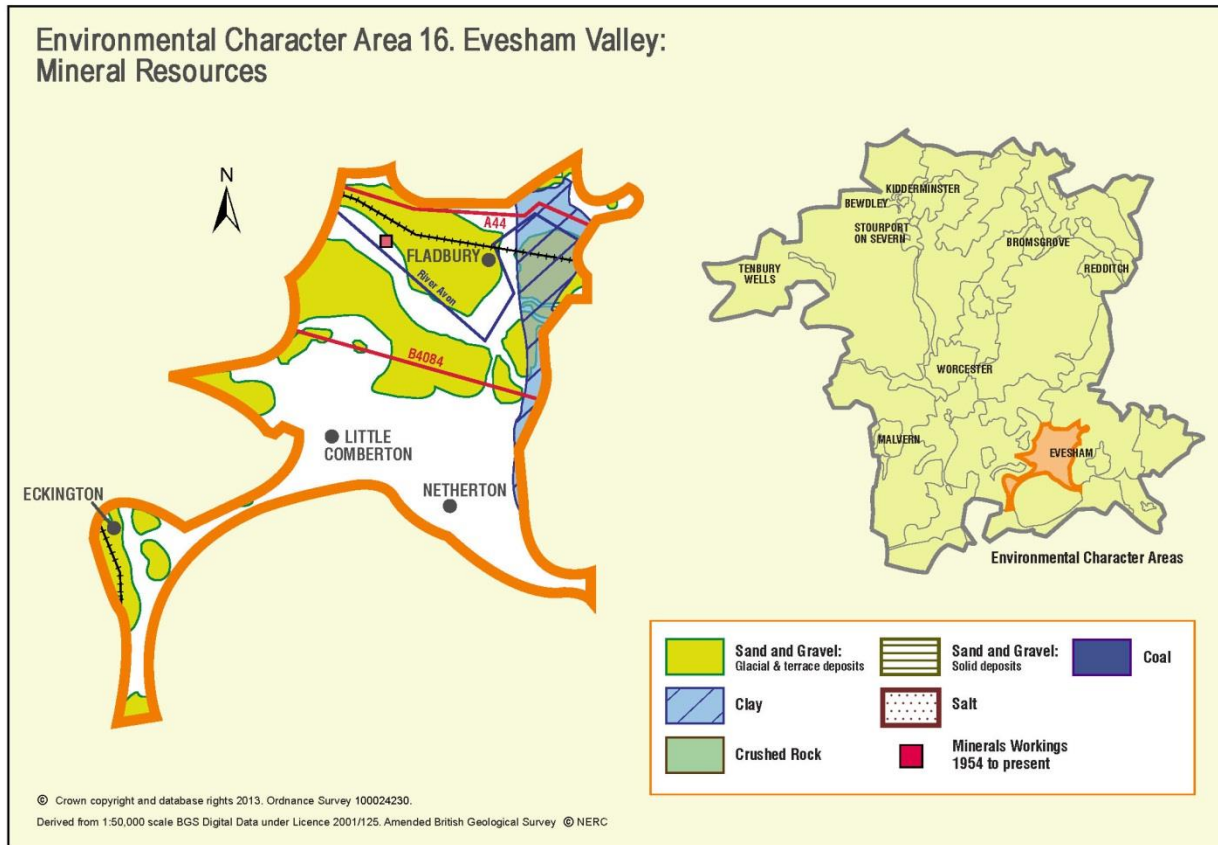


## Appendix 16: Analysis of aggregate resources in ECA 16: Evesham Valley



### ECA Summary for the Third Stage consultation on MLP (Spring 2015):

#### Sand and gravel

There are 19 resource areas identified for sand and gravel in Evesham Valley ECA:

- Key: 4
- Significant: 3
- Not significant: 5
- Compromised: 7

#### Crushed rock

There are no resource areas identified in Evesham Valley for crushed rock.

#### Non-aggregates

BGS data indicates that there are deposits of clay in this ECA.

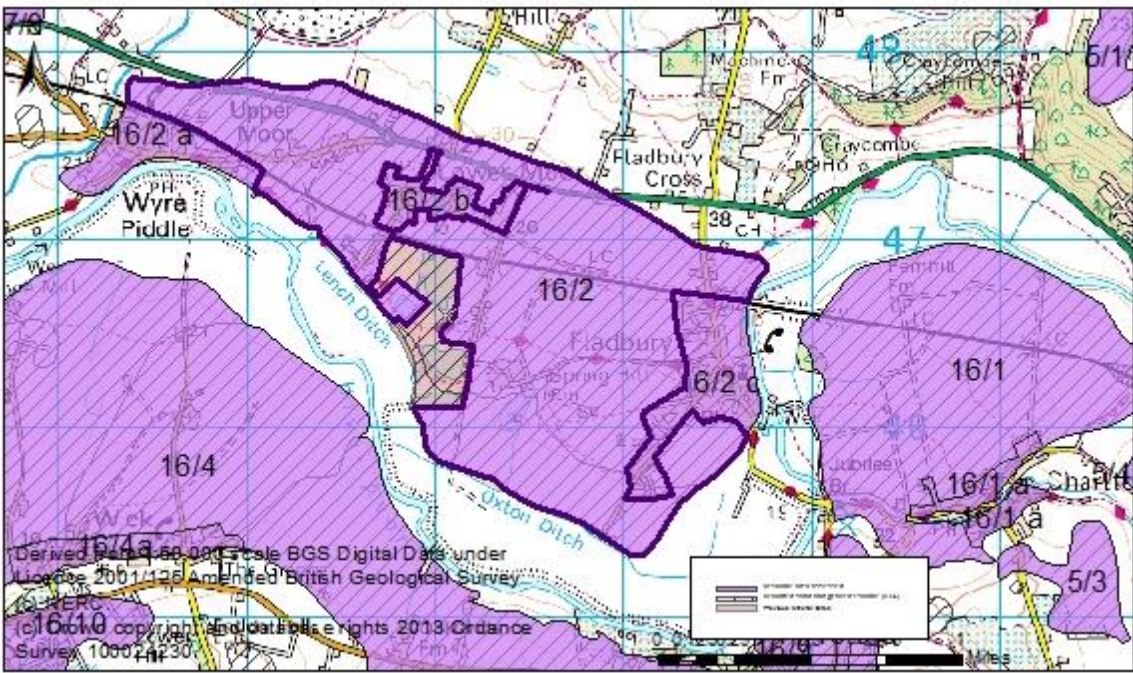
## Overview of resource assessment for ECA 16

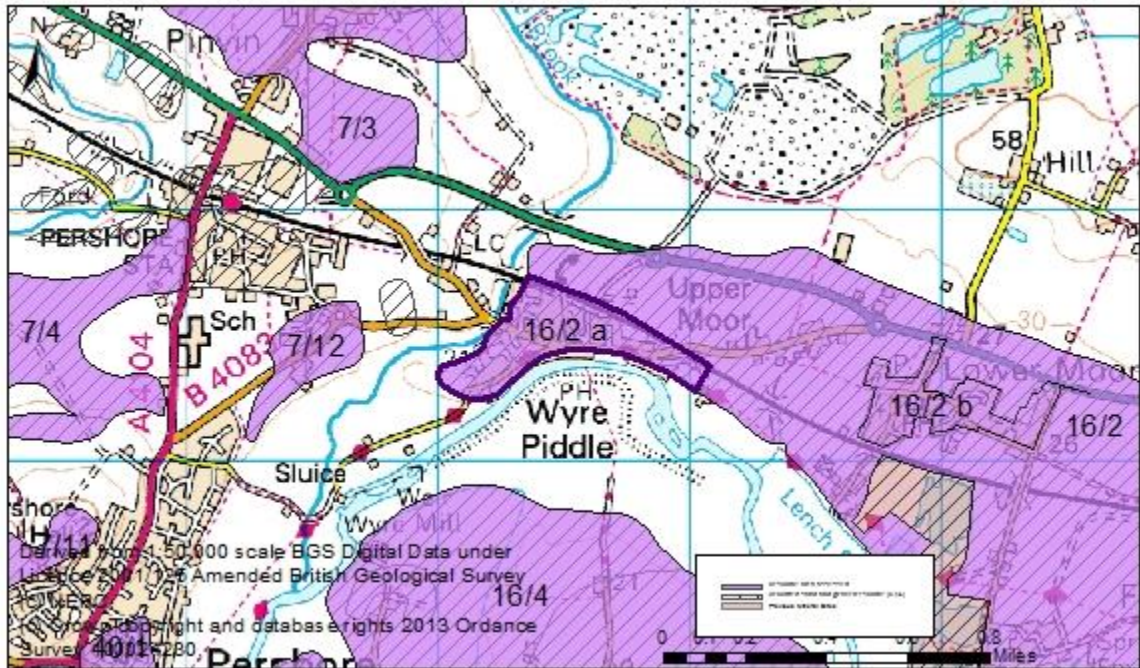
### Sand and gravel resource areas:

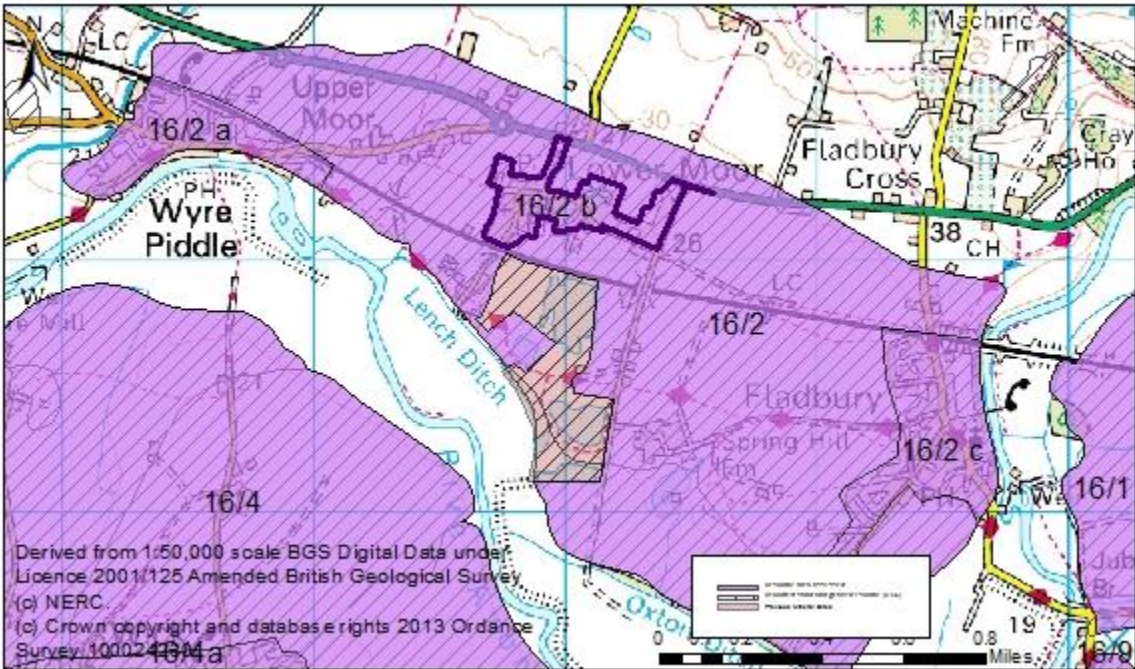
Resource number*	Second Stage Consultation		Third Stage Consultation	
	Original estimated resource tonnage (2 tonnes/m <sup>3</sup> )	Significance	Revised estimate of resource tonnage (1.65 tonnes/m <sup>3</sup> )	Significance
16/1	6,630,000	Key	5,469,750	Key
16/1 a	442,000	Compromised	364,650	Compromised
16/2	11,025,000	Key	9,095,625	Key
16/2 a	735,000	Compromised	606,375	Compromised
16/2 b	525,000	Compromised	433,125	Compromised
16/2 c	1,190,000	Compromised	981,750	Compromised
16/3	Depth unknown	Not significant	Depth unknown	Not significant
16/4	15,870,000	Key	13,092,750	Key
16/5	697,000	Significant	575,025	→ Not significant
16/6	Depth unknown	Not significant	Depth unknown	Not significant
16/7	Depth unknown	Not significant	Depth unknown	Not significant
16/7a	Depth unknown	Compromised	Depth unknown	Compromised
16/8	Depth unknown	Significant	Depth unknown	Significant
16/8a	Depth unknown	Compromised	Depth unknown	Compromised
16/9	2,392,000	Key	1,973,400	→ Significant
16/9a	520,000	Compromised	429,000	Compromised
16/10	Depth unknown	Not significant	Depth unknown	Not significant
16/11	Depth unknown	Significant	Depth unknown	Significant
16/12	3,304,000	Key	3,304,000	Key

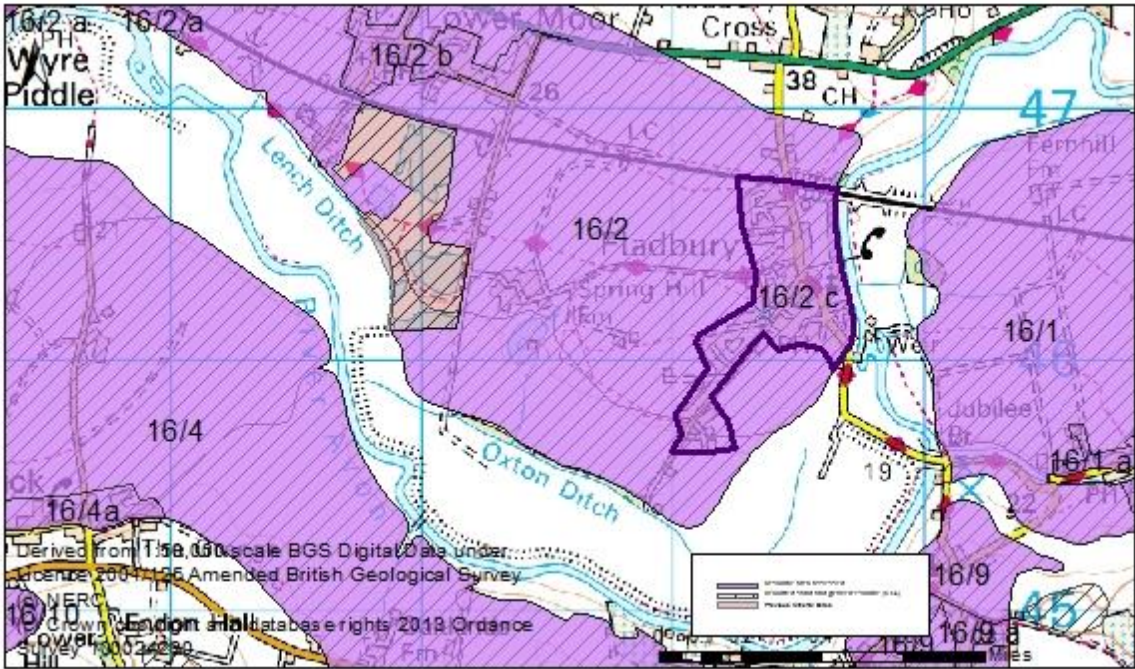
<b>Overview</b>		
<b>Resource number:</b>	16/1	
<b>Resource name:</b>	Charlton 2 <sup>nd</sup> Terrace	
<b>Resource area:</b>	195ha	
<b>Resource depth:</b>	Estimated 3.4m	
<b>Location</b>		
<b>OS sheet reference:</b>	SP 04 NW, SO 94 NE	
<b>National grid ref:</b>	400754, 246243	
<b>Resource description:</b>		
<b>Resource description:</b>	2 <sup>nd</sup> terrace sand and gravel. This deposit is divided at two levels and composed of reddish brown quartzose sands with bunter pebbles and flints. The terrace has been worked in a small pit south-east of Fernhill Farm where between 3 and 3.7m of sand and gravel are exposed on the edge of the now overgrown working. (Estimated resource depth based on median average of 3.4m)	
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>		
<b>Commentary:</b>	A medium-sized resource area, intersected by a railway line with small-scale isolated development in the resource area. The deposit extends under Charlton village to the south-east, this section is assessed as resource area 16/1a.	
<b>Crude estimate of resource:</b>	Area: 195ha x average depth: 3.4m / 2 Estimated resource volume: 3,315,000m <sup>3</sup> <b>Estimated resource tonnage (at 2 t/m<sup>3</sup>): 6,630,000 tonnes</b>	
<b>Conclusion:</b>	Significant – key resource. Use to define areas of search.	
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>		
<b>Revised estimate of resource:</b>	Area: 195ha x average depth: 3.4m / 2 Estimated resource volume: 3,315,000m <sup>3</sup> <b>Estimated resource tonnage (at 1.65 t/m<sup>3</sup>): 5,469,750 tonnes</b>	
<b>Conclusion:</b>	Significant – key resource.	

Overview	
Resource number:	16/1a
Resource name:	Charlton 2 <sup>nd</sup> Terrace a)
Resource area:	13 ha
Resource depth:	Estimated 3.4m
Location	
OS sheet reference:	SP 04 NW, SO 94 NE
National grid ref:	400933, 245643
Resource description:	
Resource description:	2 <sup>nd</sup> terrace sand and gravel. This deposit is divided at two levels and composed of reddish brown quartzose sands with bunter pebbles and flints. The terrace has been worked in a small pit south-east of Fernhill Farm where between 3 and 3.7m of sand and gravel are exposed on the edge of the now overgrown working. (Estimated resource depth based on median average of 3.4m)
Assessment of resource for the second consultation on MLP (Autumn 2013)	
Commentary:	A small resource area compromised by Charlton village. The deposit extends beyond the village to the north and west, this section is considered separately as resource area 16/1.
Crude estimate of resource:	Area: 13ha x average depth: 3.4m / 2 Estimated resource volume: 221,000m <sup>3</sup> <b>Estimated resource tonnage (at 2 t/m<sup>3</sup>): 442,000 tonnes</b>
Conclusion:	Compromised by development.
Assessment of resource for the Third Stage consultation on MLP (Spring 2015)	
Revised estimate of resource:	Area: 13ha x average depth: 3.4m / 2 Estimated resource volume: 221,000m <sup>3</sup> <b>Estimated resource tonnage (at 1.65 t/m<sup>3</sup>): 364,650 tonnes</b>
Conclusion:	Compromised by development.

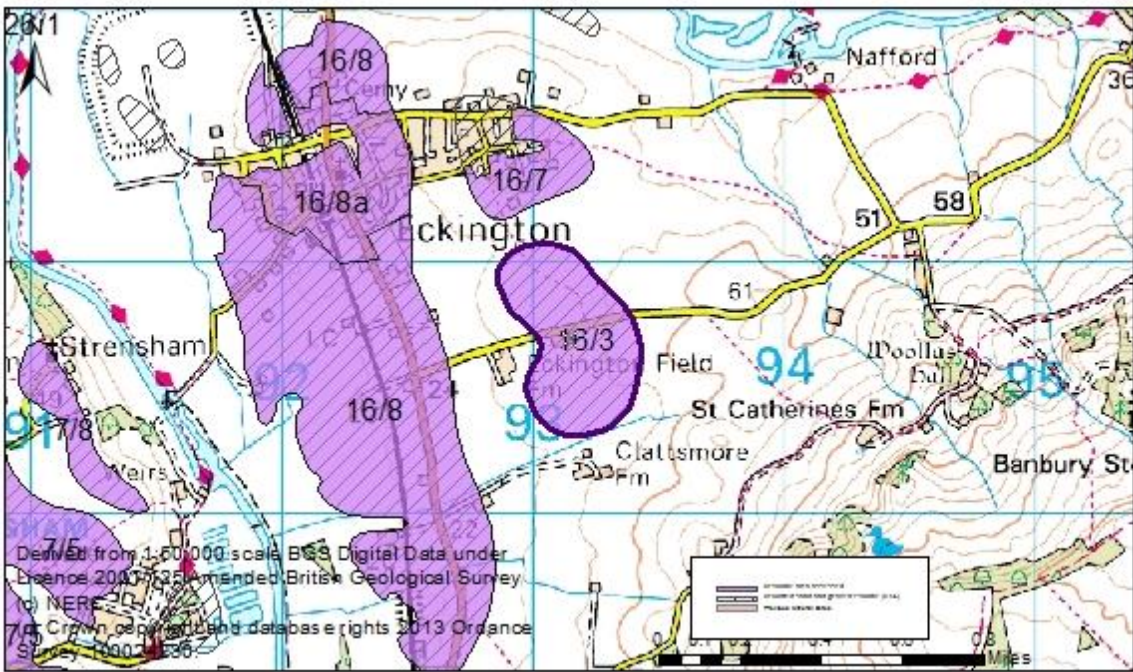
<b>Overview</b>	
<b>Resource number:</b>	16/2
<b>Resource name:</b>	Fladbury
<b>Resource area:</b>	315 ha
<b>Resource depth:</b>	Estimated 3.5m
<b>Location</b>	
<b>OS sheet reference:</b>	SO 94 NE
<b>National grid ref:</b>	398327, 246694
	
<b>Resource description:</b>	
<b>Resource description:</b>	<p>1<sup>st</sup> terrace (Bretford) and 2<sup>nd</sup> terrace (Wasperton) sand and gravel. The 1<sup>st</sup> terrace generally consists of a gravelly loam with varying amounts of reddish sand. Part of this deposit has previously been worked, at the Lower Moor pit, where between 2.4 and 4.6m of sand with gravelly layers were exposed consisting primarily of bunter pebbles and flints.</p> <p>(Estimated resource depth based on median average of 3.5m)</p>
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>	
<b>Commentary:</b>	A large resource area with some development. The deposit continues under the villages of Wyre Piddle (assessed as resource area 16/2a), Lower Moor (assessed as resource area 16/2b) and Fladbury (assessed as resource area 16/2c). The deposit has previously been worked at Lower Moor Pit and this section is not included as part of the resource area.
<b>Crude estimate of resource:</b>	<p>Area: 315ha x average depth: 3.5m / 2</p> <p>Estimated resource volume: 5,512,500m<sup>3</sup></p> <p><b>Estimated resource tonnage (at 2 t/m<sup>3</sup>): 11,025,000 tonnes</b></p>
<b>Conclusion:</b>	<p>Significant – key resource.</p> <p>Use to define areas of search.</p>
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>	
<b>Revised estimate of resource:</b>	<p>Area: 315ha x average depth: 3.5m / 2</p> <p>Estimated resource volume: 5,512,500m<sup>3</sup></p> <p><b>Estimated resource tonnage (at 1.65 t/m<sup>3</sup>): 9,095,625 tonnes</b></p>
<b>Conclusion:</b>	Significant – key resource.

<b>Overview</b>	
<b>Resource number:</b>	16/2a
<b>Resource name:</b>	Fladbury a)
<b>Resource area:</b>	21 ha
<b>Resource depth:</b>	Estimated 3.5m
<b>Location</b>	
<b>OS sheet reference:</b>	SO 94 NE
<b>National grid ref:</b>	396487, 247474
	
<b>Resource description:</b>	
<b>Resource description:</b>	<p>1<sup>st</sup> terrace (Bretford) and 2<sup>nd</sup> terrace (Wasperton) sand and gravel. The 1<sup>st</sup> terrace generally consists of a gravelly loam with varying amounts of reddish sand. Part of this deposit has previously been worked, at the Lower Moor pit, where between 2.4 and 4.6m of sand with gravelly layers were exposure consisting primarily of bunter pebbles and flints.</p> <p>(Estimated resource depth based on median average of 3.5m)</p>
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>	
<b>Commentary:</b>	A small resource area compromised by the village of Wyre Piddle. The deposit continues to the north and east of Wyre Piddle (assessed as resource area 16/2) and under the villages of Lower Moor (assessed as resource area 16/2b) and Fladbury (assessed as resource area 16/2c) and has previously been worked at Lower Moor Pit.
<b>Crude estimate of resource:</b>	<p>Area: 21ha x average depth: 3.5m / 2</p> <p>Estimated resource volume: 367,500m<sup>3</sup></p> <p><b>Estimated resource tonnage (at 2 t/m<sup>3</sup>): 735,000 tonnes</b></p>
<b>Conclusion:</b>	Compromised by development.
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>	
<b>Revised estimate of resource:</b>	<p>Area: 21ha x average depth: 3.5m / 2</p> <p>Estimated resource volume: 367,500m<sup>3</sup></p> <p><b>Estimated resource tonnage (at 1.65 t/m<sup>3</sup>): 606,375 tonnes</b></p>
<b>Conclusion:</b>	Compromised by development.

<b>Overview</b>	
<b>Resource number:</b>	16/2b
<b>Resource name:</b>	Fladbury b)
<b>Resource area:</b>	15 ha
<b>Resource depth:</b>	Estimated 3.5m
<b>Location</b>	
<b>OS sheet reference:</b>	SO 94 NE
<b>National grid ref:</b>	398327, 246694
	
<b>Resource description:</b>	
<b>Resource description:</b>	1 <sup>st</sup> terrace (Bretford) and 2 <sup>nd</sup> terrace (Wasperton) sand and gravel. The 1 <sup>st</sup> terrace generally consists of a gravelly loam with varying amounts of reddish sand. Part of this deposit has previously been worked, at the Lower Moor pit, where between 2.4 and 4.6m of sand with gravelly layers were exposure consisting primarily of bunter pebbles and flints. (Estimated resource depth based on median average of 3.5m)
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>	
<b>Commentary:</b>	A small resource area compromised by the village of Lower Moor. The deposit extends beyond this (assessed as resource area 16/2), under the villages of Wyre Piddle (assessed as resource area 16/2a) and Fladbury (assessed as resource area 16/2c). The deposit has previously been worked at Lower Moor Pit.
<b>Crude estimate of resource:</b>	Area: 15ha x average depth: 3.5m / 2 Estimated resource volume: 262,500m <sup>3</sup> <b>Estimated resource tonnage (at 2 t/m<sup>3</sup>): 525,000 tonnes</b>
<b>Conclusion:</b>	Compromised by development.
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>	
<b>Revised estimate of resource:</b>	Area: 15ha x average depth: 3.5m / 2 Estimated resource volume: 262,500m <sup>3</sup> <b>Estimated resource tonnage (at 1.65 t/m<sup>3</sup>): 433,125 tonnes</b>
<b>Conclusion:</b>	Compromised by development.

<b>Overview</b>	
<b>Resource number:</b>	16/2c
<b>Resource name:</b>	Fladbury c)
<b>Resource area:</b>	34 ha
<b>Resource depth:</b>	Estimated 3.5m
<b>Location</b>	
<b>OS sheet reference:</b>	SO 94 NE
<b>National grid ref:</b>	399400, 246248
	
<b>Resource description:</b>	
<b>Resource description:</b>	1 <sup>st</sup> terrace (Bretford) and 2 <sup>nd</sup> terrace (Wasperton) sand and gravel. The 1 <sup>st</sup> terrace generally consists of a gravelly loam with varying amounts of reddish sand. Part of this deposit has previously been worked, at the Lower Moor pit, where between 2.4 and 4.6m of sand with gravelly layers were exposure consisting primarily of bunter pebbles and flints. (Estimated resource depth based on median average of 3.5m)
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>	
<b>Commentary:</b>	A small resource area which is compromised by the village of Fladbury. The deposit extends beyond this (assessed as resource area 16/2), under the villages of Wyre Piddle (assessed as resource area 16/2a) and Lower Moor (assessed as resource area 16/2b). The deposit has previously been worked at Lower Moor Pit.
<b>Crude estimate of resource:</b>	Area: 34ha x average depth: 3.5m / 2 Estimated resource volume: 595,000m <sup>3</sup> <b>Estimated resource tonnage (at 2 t/m<sup>3</sup>): 1,190,000 tonnes</b>
<b>Conclusion:</b>	Compromised by development.
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>	
<b>Revised estimate of resource:</b>	Area: 34ha x average depth: 3.5m / 2 Estimated resource volume: 595,000m <sup>3</sup> <b>Estimated resource tonnage (at 1.65 t/m<sup>3</sup>): 981,750 tonnes</b>
<b>Conclusion:</b>	Compromised by development.

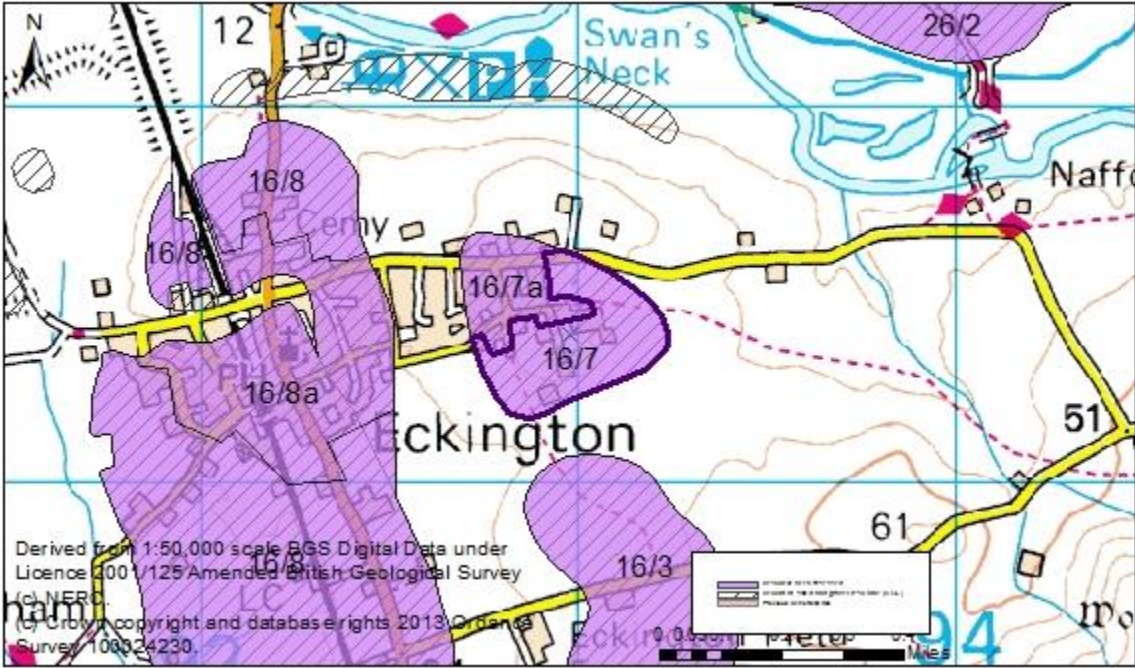


Overview	
Resource number:	16/3
Resource name:	Eckington Field Farm
Resource area:	29ha
Resource depth:	Not known
Location	
OS sheet reference:	SO 94 SW
National grid ref:	393154, 240692
	
Resource description:	
Resource description:	5 <sup>th</sup> terrace (Pershore) sand and gravel. No information on depth available.
Assessment of resource for the second consultation on MLP (Autumn 2013)	
Commentary:	A small deposit intersected by a road with adjacent small scale development.
Crude estimate of resource:	Depth not known.
Conclusion:	Not significant: Small deposit with no information to estimate the resource in this area. Not for consideration in defining areas of search.
Assessment of resource for the Third Stage consultation on MLP (Spring 2015)	
Revised estimate of resource:	No change to the assessment.
Conclusion:	Not significant.

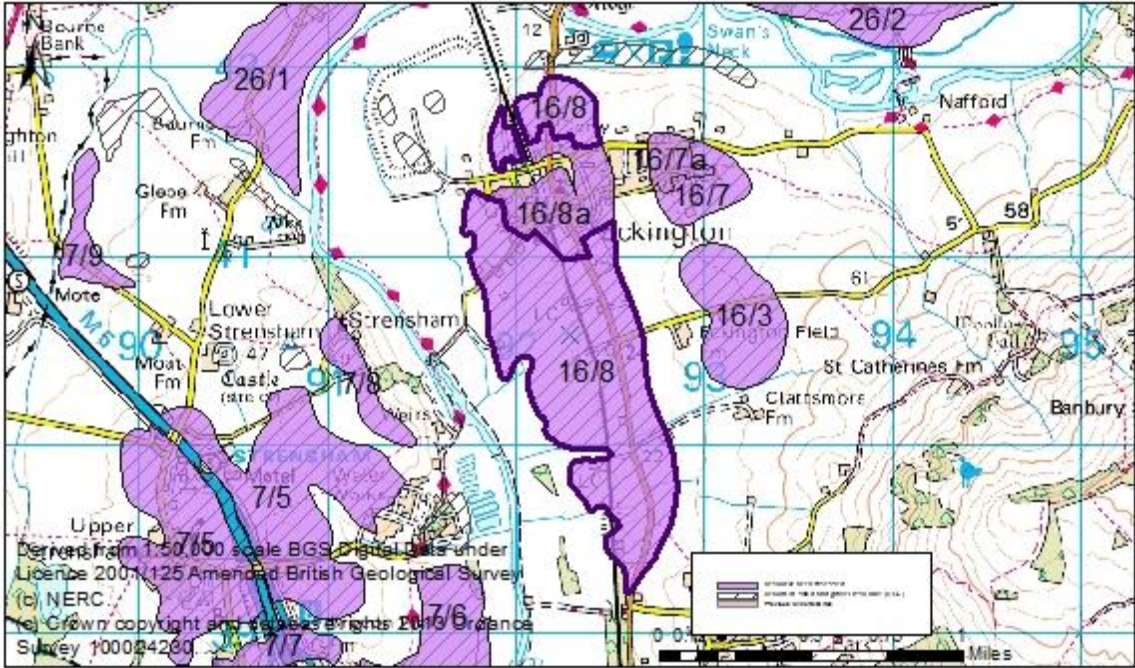
<b>Overview</b>		
<b>Resource number:</b>	16/4	
<b>Resource name:</b>	Wick	
<b>Resource area:</b>	546ha	
<b>Resource depth:</b>	Estimated 3m	
<b>Location</b>		
<b>OS sheet reference:</b>	SO 94 NE	
<b>National grid ref:</b>	397298, 245294	
<b>Resource description:</b>		
<b>Resource description:</b>	<p>1<sup>st</sup> terrace (Bretford), 2<sup>nd</sup> terrace (Wasperton), 3<sup>rd</sup> terrace (New Inn), and 4<sup>th</sup> terrace (Ailstone) sand and gravel. Field surface debris shows bunter quartzites and some flints in brown sandy soils. A pit at Old Fallows, now infilled, formerly exposed 3m of sand and quartzose flinty gravel on lias clay.</p> <p>(Estimated resource depth based on exposure of 3m).</p>	
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>		
<b>Commentary:</b>	A large deposit with small-scale dispersed development across the resource area.	
<b>Crude estimate of resource:</b>	Area: 529ha x average depth: 3m / 2 Estimated resource volume: 7,935,000m <sup>3</sup> <b>Estimated resource tonnage (at 2 t/m<sup>3</sup>): 15,870,000 tonnes</b>	
<b>Conclusion:</b>	Significant – key resource. Use to define areas of search.	
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>		
<b>Revised estimate of resource:</b>	Area: 529ha x average depth: 3m / 2 Estimated resource volume: 7,935,000m <sup>3</sup> <b>Estimated resource tonnage (at 1.65 t/m<sup>3</sup>): 13,092,750 tonnes</b>	
<b>Conclusion:</b>	Significant – key resource.	

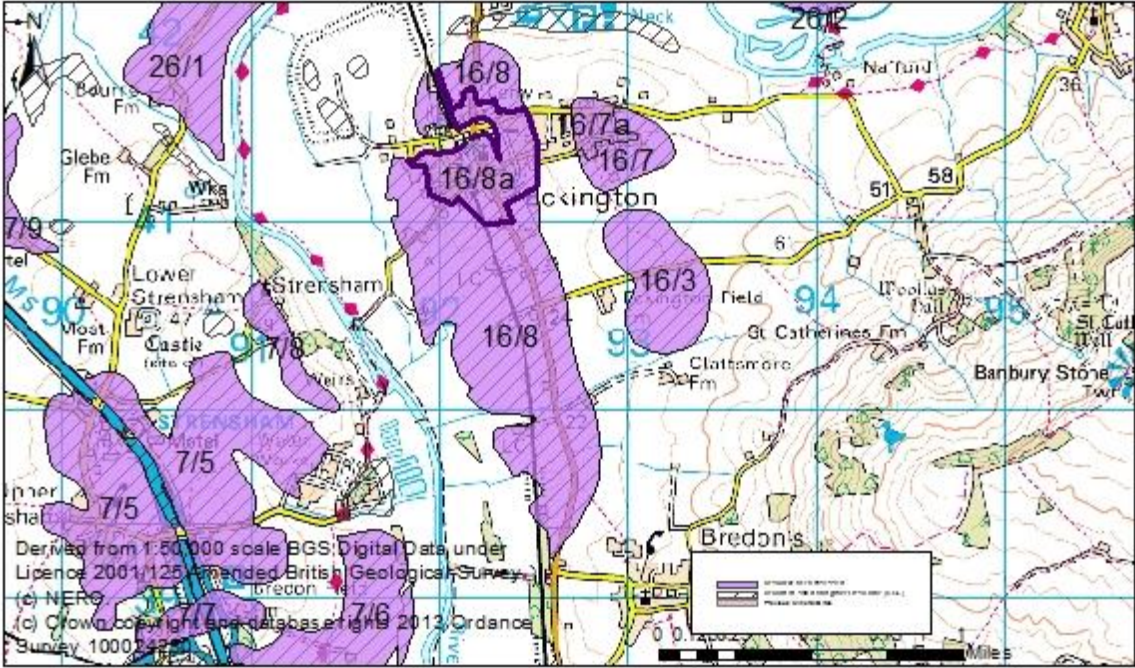
<b>Overview</b>	
<b>Resource number:</b>	16/5
<b>Resource name:</b>	West of Pensham
<b>Resource area:</b>	41ha
<b>Resource depth:</b>	1.7m
<b>Location</b>	
<b>OS sheet reference:</b>	SO 94 SW
<b>National grid ref:</b>	393520, 244150
<b>Resource description:</b>	
<b>Resource description:</b>	<p>1<sup>st</sup> terrace (Bretford) sand and gravel. This area was the site of an application by Western Aggregates Ltd dated April 1970 which identified an average thickness of 1.71m and that "the stone content is approximately 50% to 60%, which is very good for this area, and with a silt content reasonably low at between 4% and 7%." The aggregate was seen to be predominantly quartzite with some flints, cherts and rubble limestone, the sand was mainly quartz grains. The application was refused by the Secretary of State in November 1972.</p> <p>(Estimated resource depth based on application depth average of 1.7m)</p>
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>	
<b>Commentary:</b>	A small deposit with no built development in the resource area.
<b>Crude estimate of resource:</b>	<p>Area: 41ha x average depth: 1.7m / 2</p> <p>Estimated resource volume: 348,500 m<sup>3</sup></p> <p><b>Estimated resource tonnage (at 2 t/m<sup>3</sup>): 697,000 tonnes</b></p>
<b>Conclusion:</b>	<p>Significant.</p> <p>Consider in defining areas of search.</p>
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>	
<b>Revised estimate of resource:</b>	<p>Area: 41ha x average depth: 1.7m / 2</p> <p>Estimated resource volume: 348,500 m<sup>3</sup></p> <p><b>Estimated resource tonnage (at 1.65 t/m<sup>3</sup>): 575,025 tonnes</b></p>
<b>Conclusion:</b>	Change to conclusion: Not significant.

<b>Overview</b>		<p>The map displays the South Cropthorpe area with several geological formations: Oaklands Fm, Poplars Fm, Cropthorpe, Yesselt Fm, and Bos Fm. Resource areas are marked with grid numbers 16/1, 16/4, 16/6, 16/9, and 5/3. A purple shaded area indicates the resource area assessed, and a hatched area indicates recorded sand and gravel resource (BGS). A scale bar shows 0 to 0.6 miles. Text at the bottom of the map reads: 'Derived from 1:50,000 scale BGS Digital Data under Licence 3001/125 Amended British Geological Survey (c) NERC (c) Crown copyright and database rights 2013 Ordnance Survey 100024230.'</p>
<b>Resource number:</b>	16/6	
<b>Resource name:</b>	South Cropthorpe	
<b>Resource area:</b>	31 ha	
<b>Resource depth:</b>	Not known	
<b>Location</b>		
<b>OS sheet reference:</b>	SO 94 SE	
<b>National grid ref:</b>	399774, 244042	
<b>Resource description:</b>		
<b>Resource description:</b>	3 <sup>rd</sup> terrace (New Inn) sand and gravel. No information on thicknesses available.	
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>		
<b>Commentary:</b>	A small deposit with small-scale dispersed development across the north and east of the resource area.	
<b>Crude estimate of resource:</b>	Depth not known.	
<b>Conclusion:</b>	Not significant: Small deposit with no information to estimate the resource in this area. Not for consideration in defining areas of search.	
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>		
<b>Revised estimate of resource:</b>	No change to the assessment.	
<b>Conclusion:</b>	Not significant.	

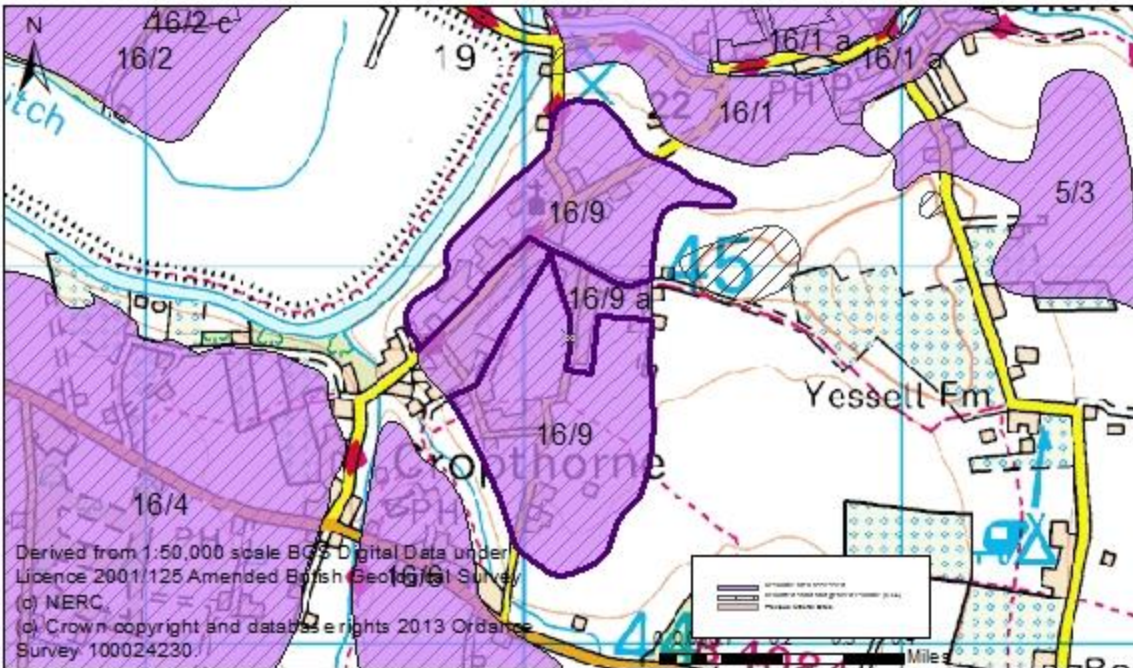
Overview	
Resource number:	16/7
Resource name:	Eckington East
Resource area:	12ha
Resource depth:	Not known
Location	
OS sheet reference:	SO 94 SW
National grid ref:	392929, 241422
	
Resource description:	
Resource description:	5 <sup>th</sup> terrace (Persnore) sand and gravel. No information on thicknesses available.
Assessment of resource for the second consultation on MLP (Autumn 2013)	
Commentary:	A small resource area, with some small scale dispersed development. The deposit extends to the north west under the village of Eckington, this section is considered as resource area 16/7a.
Crude estimate of resource:	Depth not known.
Conclusion:	Not significant: Small deposit with no information to estimate the resource in this area. Not for consideration in defining areas of search.
Assessment of resource for the Third Stage consultation on MLP (Spring 2015)	
Revised estimate of resource:	No change to the assessment.
Conclusion:	Not significant.

<b>Overview</b>		
<b>Resource number:</b>	16/7a	
<b>Resource name:</b>	Eckington East a)	
<b>Resource area:</b>	6ha	
<b>Resource depth:</b>	Not known	
<b>Location</b>		
<b>OS sheet reference:</b>	SO 94 SW	
<b>National grid ref:</b>	392929, 241422	
<b>Resource description:</b>		
<b>Resource description:</b>	5 <sup>th</sup> terrace (Persnore) sand and gravel. No information on thicknesses available.	
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>		
<b>Commentary:</b>	A small resource area compromised by the village of Eckington. The deposit extends to the south east, this section considered as resource area 16/7.	
<b>Crude estimate of resource:</b>	Depth not known.	
<b>Conclusion:</b>	Compromised by development.	
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>		
<b>Revised estimate of resource:</b>	No change to the assessment.	
<b>Conclusion:</b>	Compromised by development.	

<b>Overview</b>	
<b>Resource number:</b>	16/8
<b>Resource name:</b>	Eckington
<b>Resource area:</b>	124ha
<b>Resource depth:</b>	Not known.
<b>Location</b>	
<b>OS sheet reference:</b>	SO 94 SW & SO 93 NW
<b>National grid ref:</b>	392335, 240397
	
<b>Resource description:</b>	
<b>Resource description:</b>	2 <sup>nd</sup> terrace (Wasperton) and 3 <sup>rd</sup> terrace (New Inn) sand and gravel. No exposures. The 2 <sup>nd</sup> terrace consists of sand with bunter, flint and Jurassic limestone pebbles.
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>	
<b>Commentary:</b>	A medium-sized resource area intersected by a railway line, with small-scale dispersed development across the resource area. The deposit continues under the village of Eckington, this section of the deposit is considered as resource area 16/8a.
<b>Crude estimate of resource:</b>	Depth not known
<b>Conclusion:</b>	Significant. Consider in defining areas of search.
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>	
<b>Revised estimate of resource:</b>	No change to the assessment.
<b>Conclusion:</b>	Significant.

Overview	
<b>Resource number:</b>	16/8a
<b>Resource name:</b>	Eckington a)
<b>Resource area:</b>	26ha
<b>Resource depth:</b>	Not known
Location	
<b>OS sheet reference:</b>	SO 94 SW & SO 93 NW
<b>National grid ref:</b>	392230, 241326
	
Resource description:	
<b>Resource description:</b>	2 <sup>nd</sup> river terrace (Wasperton) and 3 <sup>rd</sup> river terrace (New Inn) sand and gravel. No exposures. The 2 <sup>nd</sup> terrace consists of sand with bunter, flint and Jurassic limestone pebbles.
Assessment of resource for the second consultation on MLP (Autumn 2013)	
<b>Commentary:</b>	A small resource area compromised by the village of Eckington. The deposit continues to the north and south of the village (considered as resource area 16/8).
<b>Crude estimate of resource:</b>	Depth not known
<b>Conclusion:</b>	Compromised by development.
Assessment of resource for the Third Stage consultation on MLP (Spring 2015)	
<b>Revised estimate of resource:</b>	No change to the assessment.
<b>Conclusion:</b>	Compromised by development.



<b>Overview</b>	
<b>Resource number:</b>	16/9
<b>Resource name:</b>	North Crophorne
<b>Resource area:</b>	46ha
<b>Resource depth:</b>	Estimated 5.2m
<b>Location</b>	
<b>OS sheet reference:</b>	SO 04 SW
<b>National grid ref:</b>	400091, 244822
	
<b>Resource description:</b>	
<b>Resource description:</b>	<p>4<sup>th</sup> terrace (Ailstone) sand and gravel. A lias clay occurs at less than 0.2m from the surface in the west of the resource. In this area at least the floor of the terrace would appear to be uneven. Abundant bunter and flint pebbles occur as surface debris in sandy and loamy soils. A bore hole in the village recorded 5.2m of gravel beneath 0.3m of cover.</p> <p>(Estimated resource depth based on borehole depth of 5.2m)</p>
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>	
<b>Commentary:</b>	A medium-sized resource area, which has significant development across parts of the area. The central area of the deposit is overlain by Crophorne village, this section of the deposit is considered as resource area 16/9a.
<b>Crude estimate of resource:</b>	<p>Area: 46ha x average depth: 5.2m / 2</p> <p>Estimated resource volume: 1,196,000m<sup>3</sup></p> <p><b>Estimated resource tonnage (at 2 t/m<sup>3</sup>): 2,392,000 tonnes</b></p>
<b>Conclusion:</b>	<p>Significant – key resource.</p> <p>Use to define areas of search.</p>
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>	
<b>Revised estimate of resource:</b>	<p>Area: 46ha x average depth: 5.2m / 2</p> <p>Estimated resource volume: 1,196,000m<sup>3</sup></p> <p><b>Estimated resource tonnage (at 1.65 t/m<sup>3</sup>): 1,973,400 tonnes</b></p>
<b>Conclusion:</b>	Change to conclusion: Significant.

<b>Overview</b>		
<b>Resource number:</b>	16/9 a	
<b>Resource name:</b>	North Crophorne a)	
<b>Resource area:</b>	10ha	
<b>Resource depth:</b>	Estimated 5.2m	
<b>Location</b>		
<b>OS sheet reference:</b>	SO 04 SW	
<b>National grid ref:</b>	400005, 244868	
<b>Resource description:</b>		
<b>Resource description:</b>	<p>4<sup>th</sup> terrace (Ailstone) sand and gravel. A lias clay occurs at less than 0.2m from the surface in the west of the resource. In this area at least the floor of the terrace would appear to be uneven. Abundant bunter and flint pebbles occur as surface debris in sandy and loamy soils. A bore hole in the village recorded 5.2m of gravel beneath 0.3m of cover. (Estimated resource depth based borehole depth of 5.2m)</p>	
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>		
<b>Commentary:</b>	A small resource area compromised by the village of Crophorne. The deposit extends to the north and south of the village, these sections are considered as resource area 16/9.	
<b>Crude estimate of resource:</b>	<p>Area: 10ha x average depth: 5.2m / 2          Estimated resource volume: 260,000m<sup>3</sup>  <b>Estimated resource tonnage (at 2 t/m<sup>3</sup>): 520,000 tonnes</b></p>	
<b>Conclusion:</b>	Compromised by development.	
<b>Assessment of resource for the Third Stage consultation on MLP (Spring 2015)</b>		
<b>Revised estimate of resource:</b>	<p>Area: 10ha x average depth: 5.2m / 2          Estimated resource volume: 260,000m<sup>3</sup>  <b>Estimated resource tonnage (at 1.65 t/m<sup>3</sup>): 429,000 tonnes</b></p>	
<b>Conclusion:</b>	Compromised by development.	

Overview	
<b>Resource number:</b>	16/10
<b>Resource name:</b>	Pershore College of Horticulture
<b>Resource area:</b>	39 ha
<b>Resource depth:</b>	Not known
Location	
<b>OS sheet reference:</b>	SO 94 SE
<b>National grid ref:</b>	395828, 244811
Resource description:	
<b>Resource description:</b>	4 <sup>th</sup> terrace (Ailstone) sand and gravel. No information on thicknesses available.
Assessment of resource for the second consultation on MLP (Autumn 2013)	
<b>Commentary:</b>	A small deposit with concentrated development in the centre of the resource and some small-scale development on the periphery.
<b>Crude estimate of resource:</b>	Depth not known.
<b>Conclusion:</b>	Not significant: Small deposit with no information to estimate the resource in this area. Not for consideration in defining areas of search.
Assessment of resource for the Third Stage consultation on MLP (Spring 2015)	
<b>Revised estimate of resource:</b>	No change to the assessment.
<b>Conclusion:</b>	Not significant.

Overview	
Resource number:	16/11
Resource name:	Mill End Farm
Resource area:	63ha
Resource depth:	Not known
Location	
OS sheet reference:	SO 93 NW
National grid ref:	392835, 237672
Resource description:	
Resource description:	4 <sup>th</sup> terrace (Crophorne) sand and gravel. No information on thicknesses available.
Assessment of resource for the second consultation on MLP (Autumn 2013)	
Commentary:	A medium-sized deposit, intersected by a railway line and roads, with small-scale dispersed development across west of the resource area.
Crude estimate of resource:	Depth not known.
Conclusion:	Significant. Consider in defining areas of search.
Assessment of resource for the Third Stage consultation on MLP (Spring 2015)	
Revised estimate of resource:	No change to the assessment.
Conclusion:	Significant.

<b>Overview</b>	
<b>Resource number:</b>	16/12
<b>Resource name:</b>	Pensham
<b>Resource area:</b>	118ha
<b>Resource depth:</b>	Estimated 2.8m
<b>Location</b>	
<b>OS sheet reference:</b>	SO 94 SW
<b>National grid ref:</b>	394569, 243988
<b>Resource description:</b>	
<b>Resource description:</b>	<p>1<sup>st</sup> terrace (Bretford) and 2<sup>nd</sup> terrace (Wasperton) sand and gravel. The 1<sup>st</sup> terrace to the west (resource area 16/5) was the site of an application by Western Aggregates Ltd dated April 1970 which identified an average thickness of 1.71m and that "the stone content is approximately 50% to 60%, which is very good for this area, and with a silt content reasonably low at between 4% and 7%." The aggregate was seen to be predominantly quartzite with some flints, cherts and rubbly limestone, the sand was mainly quartz grains. The application was refused by the Secretary of State in November 1972.</p> <p>The 2<sup>nd</sup> and 2st terraces are generally contiguous in this area. Recorded thicknesses for the 2<sup>nd</sup> Avon terrace vary from 0.5m to 6.1m but 2m-5m is probably the common range. The deposit varies from gravel to sand with some pebbles and is similar to the 4<sup>th</sup> and 5<sup>th</sup> terraces in composition.</p> <p>Estimated resource depth based on mean average of: a) application average: 1.71m, b) recorded thicknesses for 2<sup>nd</sup> terrace: (median average of 0.5m to 6.1m = 3.3m), c) common range for 2<sup>nd</sup> terrace: (median average of 2m to 5m = 3.5) / 3 = 2.8m</p>
<b>Assessment of resource for the second consultation on MLP (Autumn 2013)</b>	
<b>Commentary:</b>	A medium-sized deposit with some ribbon development across the centre of the resource area.
<b>Crude estimate of resource:</b>	<p>Area: 118ha x average depth: 2.8m / 2</p> <p>Estimated resource volume: 1,652,000 m<sup>3</sup></p> <p><b>Estimated resource tonnage (at 2 t/m<sup>3</sup>): 3,304,000 tonnes</b></p>
<b>Conclusion:</b>	Significant – key resource.

Use to define areas of search.

**Assessment of resource for the Third Stage consultation on MLP (Spring 2015)**

**Revised estimate of resource:** Area: 118ha x average depth: 2.8m / 2  
Estimated resource volume: 1,652,000 m<sup>3</sup>  
**Estimated resource tonnage (at 1.65 t/m<sup>3</sup>): 2,725,800 tonnes**

**Conclusion:** Significant – key resource.