

# **Kent Minerals and Waste Local Plan 2013-30**

## **Mineral Sites Plan**

### **Options Consultation Document**

**November 2017**



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## Abbreviations

AONB	Area of Outstanding Natural Beauty
AQMA	Air Quality Management Area
BAP	Biodiversity Action Plans
GIS	Geographic Information Systems
HGV	Heavy Goods Vehicles
HRA	Habitats Regulation Assessment
KCC	Kent County Council
Km	Kilometre
KMWLP	Kent Minerals and Waste Local Plan
LAA	Local Aggregate Assessment
LNR	Local Nature Reserve
LWS	Local Wildlife Site
mtpa	Million tonnes per annum
MPA	Minerals Planning Authority
MWLP	Minerals and Waste Local Plan
NPPF	National Planning Policy Framework
PRN	Primary Route Network
SA	Sustainability Appraisal
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SPA	Special Protection Area
SPZ	Source Protection Zone
SSSI	Site of Special Scientific Interest
tpa	Tonnes per annum

## Minerals Sites Plan and the Options Consultation

- 1.1 The Kent Minerals and Waste Local Plan (KMWLP) was adopted in July 2016. It sets out the vision and objectives for Kent's minerals supply and waste management capacity from 2013 to 2030. It does not allocate specific sites for minerals and waste development except for two strategic sites - one for cement production (and related mineral reserves) at Holborough in the Medway Valley and one for hazardous waste disposal at Norwood Quarry on the Isle of Sheppey.
- 1.2 The Waste and Minerals Sites Plans were originally being produced in parallel with the KMWLP. These Plans were intended to identify allocations of land considered suitable for minerals and waste development. Stakeholders were initially invited to nominate potential sites for allocation in the Mineral Sites Plan (and the Waste Sites Plan) (known as a 'Call for Sites') in 2010, and consultation on preferred sites ('Preferred Options') took place in May 2012. However, in 2012 site identification work ceased to allow work to focus on the KMWLP. Following adoption of the KMWLP in July 2016 work on the Minerals and Waste Sites Plans recommenced.
- 1.3 A review of existing capacity and requirements to support the Sites Plan work has identified that the need for additional waste management capacity to 2030 does not justify the identification of land allocations in a separate Waste Sites Plan. To reflect this, a partial review of the KMWLP is now being undertaken. The Minerals Sites Plan is being progressed and once adopted will form part of the Development Plan for Kent, along with the KMWLP and District and Borough Local Plans.
- 1.4 The mineral site identification and assessment process is now considering sites that have emerged from a more recent 'Call for Sites' exercise that was carried out from December 2016 to March 2017. This new 'Call for Sites' was considered necessary due to:
  - Potential changes in landowner and promoter views about whether sites can be developed for minerals and waste uses. Such views are important in determining whether a site can be assessed as deliverable;
  - Changes in protected land designations, such as new or revised Sites of Special Scientific Interest (SSSI) or other constraints and opportunities which may not have previously been considered, so site suitability against them will need to be assessed;
  - A number of sites identified as potentially suitable in the 2012 Preferred Options document have since obtained planning permission and/or been developed;
  - The adopted KMWLP specifies the overall type and amount of minerals that sites identified in the Sites Plans need to accommodate. This includes separate consideration of supplies for land won soft sand and sharp sand and gravel.
- 1.5 Following the call for sites exercise and initial assessment, 9 sites have been identified as potential site options for future mineral development that will be subject to detailed technical assessment and Sustainability Appraisal. This report sets out the sites, the site assessment process and planning policy requirement. Prior to progressing to the detailed technical assessment stage views are now invited on the Site Options, so that local knowledge and expertise can be taken into account.

1.6 The potential options for allocation in the Minerals Sites Plan are for the:

- Extraction of soft sand (2 sites)
- Extraction of sharp sand and gravel (7 sites)

Details of these sites are set out in Section 3 of this document.

1.7 The 'call for sites' work involved inviting nominations for sites from parties with interests in mineral matters within the County. This included the mineral operators, trade bodies and their planning agents and those that had responded to previous 'calls for sites'. In addition, landowners of sites previously shown to have economic minerals in earlier Mineral Local Plans were identified and invited to nominate sites for consideration. In total, some 3000 parties were invited to respond to the 'call for sites'.

1.8 In summary, for a site to be considered to be a Mineral Site Option it had to:

- 
- **Align with the objectives of the adopted KMWLP and scope of the Sites Plan:** The KWMLP sets out the minerals supply needs and waste management capacity provision over the period 2013-2030 and the Sites Plan needs to identify sufficient sites to contribute to this requirement.
  - **Be justified:** The site should represent an appropriate option based on a desktop assessment of the opportunities and constraints associated with its location.
  - **Be deliverable:** Development of the site should not result in severe adverse effects that would affect its deliverability, and its development should also be supported by the landowner
- 

1.9 Further details of the Assessment methodology is set out in Section 2 below. The Mineral Site Assessment Methodology details the nature of the desktop sensitivity scoring applied. This methodology was published as a 'living draft' for consultation during the call for sites mentioned above and was subsequently updated.

### **Timetable and How Can I Get involved?**

1.10 The views of stakeholders and interested parties provide an important opportunity to influence the final Mineral Sites Plan and the detailed Technical Assessment phase. In addition, the plan making process requires various consultation stages which are undertaken in accordance with the Council's Statement of Community Involvement. Comments received as a result of the consultation on this document will be taken into account in the final selection of sites.

1.11 The stages in the development of the Mineral Sites Plan and target dates are set out in the following table.

Stage	Completed/Anticipated Date
Second Call for Sites	November 2016 - March 2017
Mineral Site Options Consultation and KMWLP Partial Review Consultation	December 2017 – March 2018
Pre-Submission Consultation	October -November 2018
Submission	January 2019
Inspector's Report	October 2019
Adoption	December 2019

1.12 Views are invited on the Mineral Sites Plan Options. **The consultation will run for twelve weeks from 19 December 2017 to 5pm 13 March 2018.**

You can comment on the mineral sites options in this consultation document and the associated Sustainability Appraisal Scoping Report as well as other supporting evidence in writing through the following options:

- comment online through our consultation portal at [xxxxxxxxxxx](#) (preferred method)
- email your comments to [mwlp@kent.gov.uk](mailto:mwlp@kent.gov.uk), or
- post your comments to

KCC Minerals and Waste Planning Policy  
 First Floor, Invicta House  
 County Hall  
 Maidstone  
 Kent  
 ME14 1XX

**Please note it will help us process comments more efficiently if they are received via our consultation portal**

**What is the next stage?**

- 1.13 Once the consultation has closed, the Minerals and Waste Policy Team will collate all the comments and prepare a commentary report summarising the representations and how these have been taken into account as part of the on-going site assessment process. The views received will be taken into account in the detailed Technical Assessment of the sites. The Mineral Sites Plan Pre-submission consultation will then be prepared. Consultation on the Pre-submission Mineral Site Plan is currently scheduled for late 2018.

## The Mineral Site Assessment Process

2.1 Sites are assessed in several stages. The assessment methodology is detailed in the Site Selection Methodology<sup>(2)</sup>. In brief, there are four stages to the assessment following the collation of a long list of sites:

1. **Alignment with KMWLP and scope of the Mineral Sites Plan** - This stage determines if the site is being promoted for the supply of a mineral that meets the requirements stipulated by the Kent MWLP.
2. **Initial Screening** – Sites are scored using a refined 'traffic light' approach based on a Red, Red-Amber, Amber, Amber-Green and Green (RAG) methodology (see Table 1 below) which provides an initial assessment of the potential effects of development at each site against a range of criteria. This process screens out the sites which are assessed as being likely to have unacceptable adverse impacts. **This document summarises the outcomes of this part of the assessment process and the Minerals Sites Options.**
3. **Consultation on Options** - Sites screened in as potentially suitable from the Initial Screening and RAG assessment are published for comments from stakeholders. Early views are sought as this provides an opportunity for local knowledge and specialist information held by stakeholders to be considered as the plan emerges. As such the views of stakeholders will benefit the subsequent detailed technical assessment stage. **These sites will then be subject to further-technical assessment which will also inform the ongoing sustainability appraisal/SEA.**
4. **Detailed Technical Assessment to Identify the Preferred Options** – Sites identified as potentially suitable from the Initial Screening and RAG assessment (which may be considered as reasonable alternatives) will then be subject to more rigorous Detailed Technical Assessment including, where appropriate:
  - Habitat Regulations Assessment;
  - Landscape and Visual Impact Assessment;
  - Transport Assessment;
  - Strategic Flood Risk Assessment;
  - Green Belt Assessment;

They will also be considered against the requirements of National Planning Policy. The Detailed Technical Assessments will inform the ongoing Sustainability Appraisal (SA). At the conclusion of Stage 4 those sites that are demonstrably acceptable against the selection criteria of the whole process will be identifiable as Preferred Options for allocation in the Mineral Sites Plan.



**Table 1 – Initial (RAG) Screening**

Sensitivity Score	Description	Possible Mitigation
Red	The impact or issue is so severe that it would be unlikely to be adequately mitigated and no evidence has been provided on the potential mitigation or any relevant exceptional circumstances test demonstrating it to be in the public interest. It is considered that the site is unlikely to be able to proceed.	Mitigation in order to make the site acceptable is unlikely
Red -amber	There is a major impact or issue which may be acceptable to mitigation as demonstrated.	Likely to require high levels of mitigation in order to make the site acceptable
Amber	There is moderate impact or issues which may be acceptable subject to mitigation as demonstrated	Likely to require medium levels of mitigation in order to make the site acceptable
Amber-green	There is a moderate impact or issue which may be acceptable subject to mitigation as demonstrated	Likely to require low levels of mitigation in order to make the site acceptable
Green	There are no impacts or issues that require Mitigation	Likely to require negligible to no mitigation in order to make the site acceptable

2.2 It should be noted that a site allocation does not guarantee development in that location, but together with the KMWLP policies provides the context for consideration of planning applications for future minerals development.

**Site Visits and GIS Mapping**

2.3 As part of the initial assessment, each proposed site was visited and information collected on the site conditions and documented with photographs. This included access consideration, the proximity to and type of adjoining land uses and potential views of the site, along with GIS mapping to identify potential site constraints. The GIS mapping considered potential impact upon:

- National and international designated sites - AONB, SSSIs, SACs, SPAs, Ramsar sites, Ancient Monuments and registered Historic Parks and Gardens.
- Local Wildlife Sites (LWS), Local Nature Reserves (LNR), Ancient Woodland and groundwater resources and flood risk.
- Location in relation to Kent's major road network, considering how sites might result in lorry movements through villages or on unsuitable minor roads.
- Green Belt – noting that temporary mineral extraction operations are not necessarily considered incompatible with the Green Belt designation.
- the site geology; and
- the proximity of any possible sensitive receptors such as residential areas and schools

### **Sustainability Appraisal and Habitats Regulation Assessment**

2.4 The Mineral Sites Plan will be subject to a Sustainability Appraisal. This will include an assessment of how each site performs against a set of social, environmental and economic objectives informed by the technical assessment of each site option. These objectives can be found in the Sustainability Appraisal Scoping Report which is being published for consultation alongside this document.

2.5 Potential sites within or close to Ramsar sites, Special Protection Areas (SPA) or Special Areas of Conservation (SAC) will also be subject to a Habitats Regulation Assessment (HRA). These sites will be assessed based upon the HRA requirements as set out in the EU Habitats Directive<sup>1</sup>.

### **Strategic Flood Risk Assessment (SFRA) Information**

2.6 The Mineral Sites Plan will be subject to a detailed Strategic Flood Risk Assessment. The initial screening process has considered potential flooding and water resource issues. This includes the identification of the relevant Flood Zone and Groundwater Source Protection Zone for each mineral site. At the Options Consultation stage, an initial desktop assessment has been undertaken of all sites at the strategic level. Sites taken forward for allocation in the Mineral Sites Plan may be require site specific flood risk assessment (in accordance with the requirements of NPPF).

### **Planning Policy**

2.7 Minerals make an important contribution to the national economy and the NPPF makes it clear that minerals are essential to support sustainable economic growth and our

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<sup>1</sup> Information on the EU Habitats Directive is available from:  
[http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index\\_en.htm](http://ec.europa.eu/environment/nature/legislation/habitatsdirective/index_en.htm)

quality of life. It requires minerals planning authorities (MPAs) to plan for a steady and adequate supply of aggregates by making provision for land-won aggregates through specific sites, preferred areas and/or areas of search and locational criteria. These sites will serve the building industry and enable construction, maintenance and repair of infrastructure. They play an important role in the growth agenda for sustainable development. Planning Practice Guidance makes it clear that the priority should be to allocate sites, in order to provide certainty as to where minerals development may be expected.

2.8 MPAs are required to maintain landbanks of reserves equivalent at least 7 years supply of sand and gravel, and 10 years supply of rock, reflecting data on reserves and sales in annual Local Aggregates Assessments (LAA), ensuring that large landbanks are not bound up in very few sites<sup>2</sup>. MPAs should maintain separate landbanks for aggregates of a specific type and quality. In Kent this applies to soft sand that is predominantly used for mortar and sharp sand and gravel that is principally used for concrete.

2.9 The allocation of mineral sites needs to meet the requirements set out in the adopted KMWLP and reflect the prevailing LAA. The types of aggregates for which site allocations are proposed is summarised in the table below:

**Mineral Supply Requirements of the Adopted Plan Policy CSM 2 and those Not Required or Not Promoted**

<b>New Allocations Required</b>	<b>No Allocations Required / Not Promoted</b>
<b>Soft Sand</b> for construction (primary land won Aggregate) principally used in mortar	<b>Secondary and Recycled Aggregates</b> (primary aggregate substitution-no new capacity promoted)
<b>Sharp Sand and Gravel</b> (primary land won Aggregate) principally used for concrete	<b>Brickearth</b> The level of the permitted reserves are considered sufficient for Plan purposes
	<b>Crushed Rock</b> (primary land won aggregate-landbank sufficient for Plan purposes)
	<b>Chalk for Agricultural and Engineering Use</b> (current landbank sufficient for Plan purposes)
	<b>Materials for Cement Manufacture</b> (industrial minerals Chalk and Clay-site no allocation - not required by Policy CSM 2, Strategic Site allocated in adopted Plan)
	<b>Silica Sand</b> (industrial sand-further site allocations not required by Policy CSM 2, supply to meet need is to be addressed by planning applications being determined on the material planning considerations, over the Plan period)

<sup>2</sup> See NPPF paragraph 145

## Land-won Soft Sand for Construction Aggregates

2.10 Soft sand is predominantly supplied from the Folkestone Beds in Kent and is a distinct aggregate material (used in mortar) for which separate landbanks are required to be maintained. Based on the 10 year average sales data, MPAs should make provision for landbanks of at least 7 years<sup>3</sup>. Requirements in the adopted KMWLP suggest a 5 million tonne shortfall to be met from sites identified in the Mineral Sites Plan. This shortfall was based on 2014 data and assumed the need to plan for a 24 year land bank (Plan period of 17 years plus 7 years at the end of the Plan period). More recent calculations<sup>4</sup> regarding supply and demand, taken together with an 18 year landbank (Sites Plan period of 11 years plus 7 years at the end of the Plan period) suggest the shortfall is now 1.922mt.

2.11 Two sites are identified as suitable for allocation for soft sand in the Options Consultation:

Site	Estimated Workable Reserve
Chapel Farm, Lenham	4mt
West Malling Sandpit, Ryarsh	3.1mt

2.12 These sites would provide a surplus of around 5mt over the Plan period. This 'surplus' is necessary as it would give flexibility to account for: sites not coming forward as anticipated; yields being lower than anticipated, or demand increasing over the Plan period. Furthermore, the adopted KMWLP recognises that soft sand supplies in Kent are relatively abundant, whereas they are scarce in other parts of the south east of England<sup>5</sup> and so additional reserves may help meet increasing demand in other areas and potential for export of materials to serve wider soft sand markets. This may become increasingly the case in the South East as soft sand resources are limited in distribution and potentially constrained by protective designations, such as National Parks.

## Sharp Sand and Gravel

2.13 Resources for sharp sand and gravel are rapidly depleting in Kent and the wider South East. The gravel reserves in Kent's traditional extraction areas of the Stour Valley between Ashford and Canterbury are close to being worked out and the Dungeness peninsula reserves are heavily constrained with internationally designated wildlife sites. Increasingly, supply is being provided from marine won sources landed at wharves in Kent.

2.14 This is recognised by the adopted KMWLP that expects at least 10.08mt to be supplied over the Plan period (to 2030) and a landbank of at least 7 years (approximately 5.46mt) to be maintained while resources allow. Maintaining a landbank of at least 7 years over the remainder of the Plan period suggests a total requirement of 10.98mt (18 years

<sup>3</sup> Paragraph 145 National Planning Policy Framework

<sup>4</sup> 10 year average sales = 0.594 mtpa; consented reserves in Kent amount to 8.77mt (as per AM 2015 data published in the LAA for 2016)

<sup>5</sup> The issue concerning soft sand supply in the south east is recognised by the South East Aggregate Working Party in its latest annual report <https://www.gov.uk/government/collections/aggregates-working-parties-annual-reports>.

(assuming adoption in 2019 until 2030 and for an additional 7 years beyond) taken together with the latest (LAA November 2016) published 10 year average sales data of 0.61mtpa). The current permitted reserves of this material are 3.79mt (2015 data published in the November 2016 LAA) giving a shortfall of 7.19mt to be identified in the Mineral Sites Plan.

2.15 The sites identified as suitable for allocation (set out in the Mineral Sites Plan Options Consultation) are as follows:-

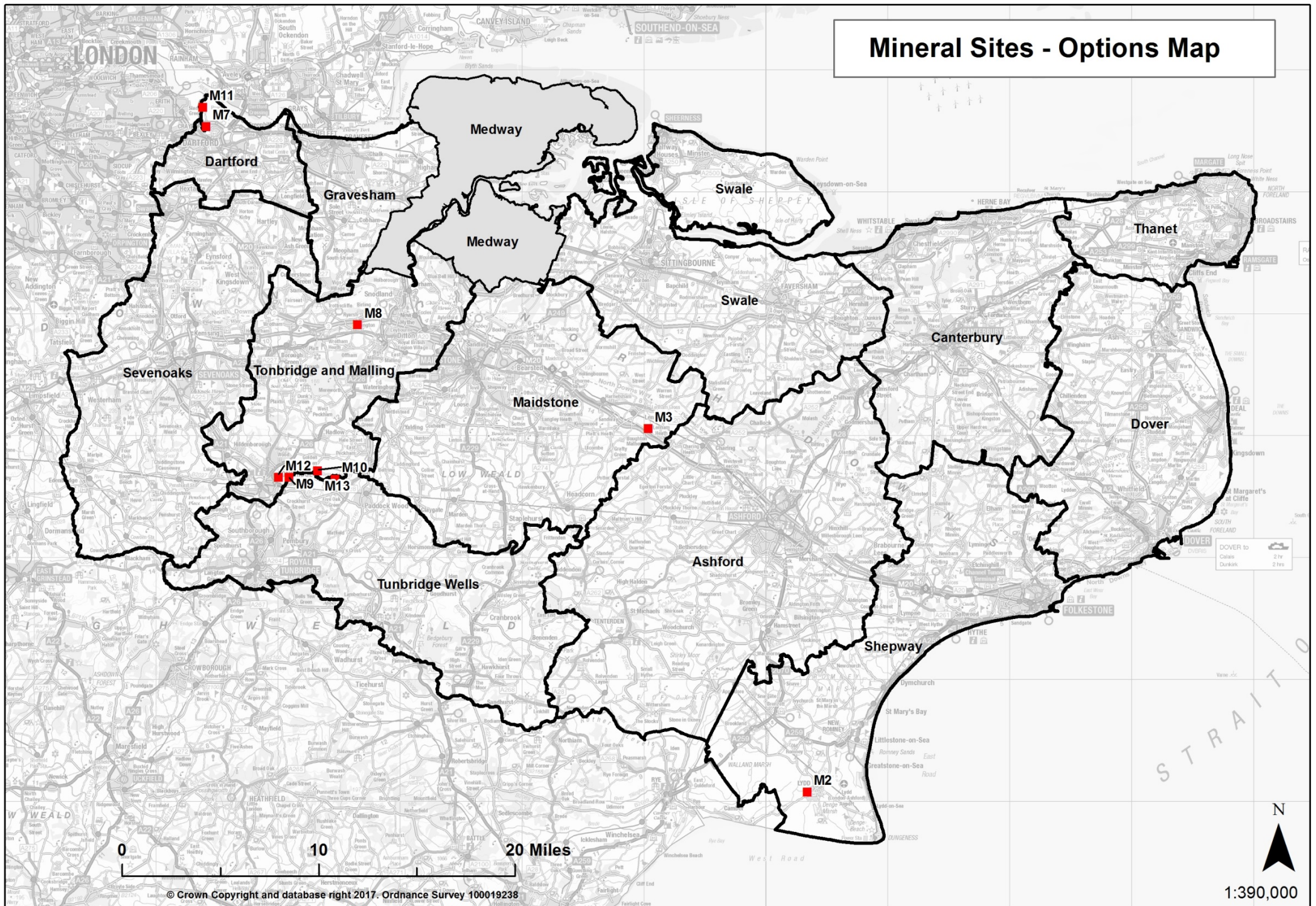
<b>Site</b>	<b>Estimated Workable Reserve</b>
Central Road, Dartford	0.9 mt;
Joyce Green Quarry, Dartford	1.5mt
Lydd Quarry/Allen's Bank Extension, Lydd -	3.1mt
Stone Castle Farm Quarry Extension, Hadlow/Whetsed	1mt
The Postern, Capel	0.6mt
Postern Meadows, Tonbridge	0.23mt
Moat Farm, Five Oak Green, Capel -	1.5mt

2.16 These sites would provide 8.83mt overall and a potential surplus of 1.64mt beyond the identified requirements to replenish currently limited landbanks. This would help provide necessary flexibility should sites and reserves not come forward as anticipated or demand increases over the Plan period. The sand and gravel options are concentrated in west Kent, plus extension areas at Lydd Quarry which will assist in providing construction materials to the south and east of the county.

2.17 Further details of the Site Options are set out in Section 3.

2.18 A number of other sites promoted through the 'call for sites' are not considered to be in alignment with the KMWLP and are not being progressed at this time. The reasons for this are set out in the Minerals Sites Selection Initial Assessment document. The sites are listed in Section 4.

# Mineral Sites - Options Map



## Site M3

### Chapel Farm, Lenham

### Maidstone

**3.0** This proposed site for soft sand extraction (4mt) is located 1km to the west of the existing Lenham Quarry. The site area is currently arable and grazing farmland. It is located to the south of the Kent Downs AONB. Adjoining uses include residential properties, farmland, sewage works and nearby woodland. There is an area of Ancient Woodland adjacent to the proposed route of the suggested haul road.

#### Summary of Stage 2 RAG Assessment

This site could make a significant contribution to the KMWLP requirements in the supply of soft sand.

Overall, the assessment suggests that there are no constraints which cannot be overcome by appropriate mitigation. This site should therefore be subject to consultation as an option as well as further detailed technical assessment and Sustainability Appraisal.

Key findings of the assessment which need further attention at the detailed assessment stage are as follows:

- The site is within the setting of the Kent Downs AONB and appropriate mitigation measures would be required.

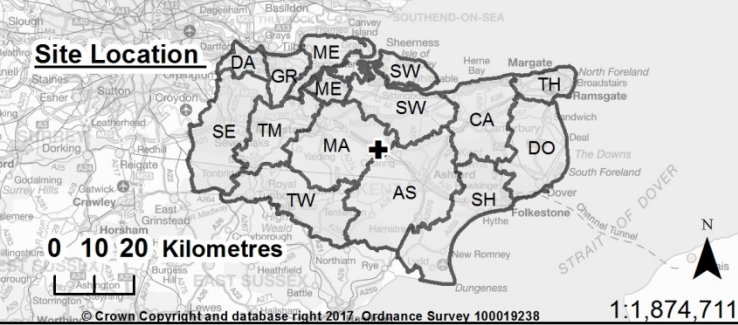
- SSSI is located within 1km of the site, Ancient Woodland is situated on the site and a number of BAP Priority Habitats and LWS are located adjacent to the site; mitigation measures would be required to prevent unacceptable adverse impacts on these designations.
- There are a number of listed buildings within 250m of the site; mitigation would be required to protect these heritage assets and their setting.
- A number of archaeological sites have been identified within the site and a full investigation would be required to prevent unacceptable adverse impacts and to preserve Kent's heritage assets.
- The site contains Grade 3 quality soil (Good to Moderate). Appropriate consideration would be required to reduce the impact on this interest.
- A number of public footpaths are located within the site or in close proximity. Impacts on these footpaths would require mitigation which would include diversion.
- Overhead electrical power lines and sewer lines located within or adjacent to the site would require appropriate consideration of rerouting and mitigation.
- There are a number of residential properties within 250m of the site. Given the close proximity, mitigation would be required to ensure there are no unacceptable adverse impacts on health and amenity.
- The surrounding area has been subject to extensive quarrying activity for a number of years. The cumulative impacts on the environment and local community, along with the impact on the highway network would need to be appropriately considered.
- An appropriate transport and access arrangement to prevent unacceptable adverse impacts on local amenity.

**Site M3  
Chapel Farm,  
Lenham,  
Maidstone**

**Minerals Site**

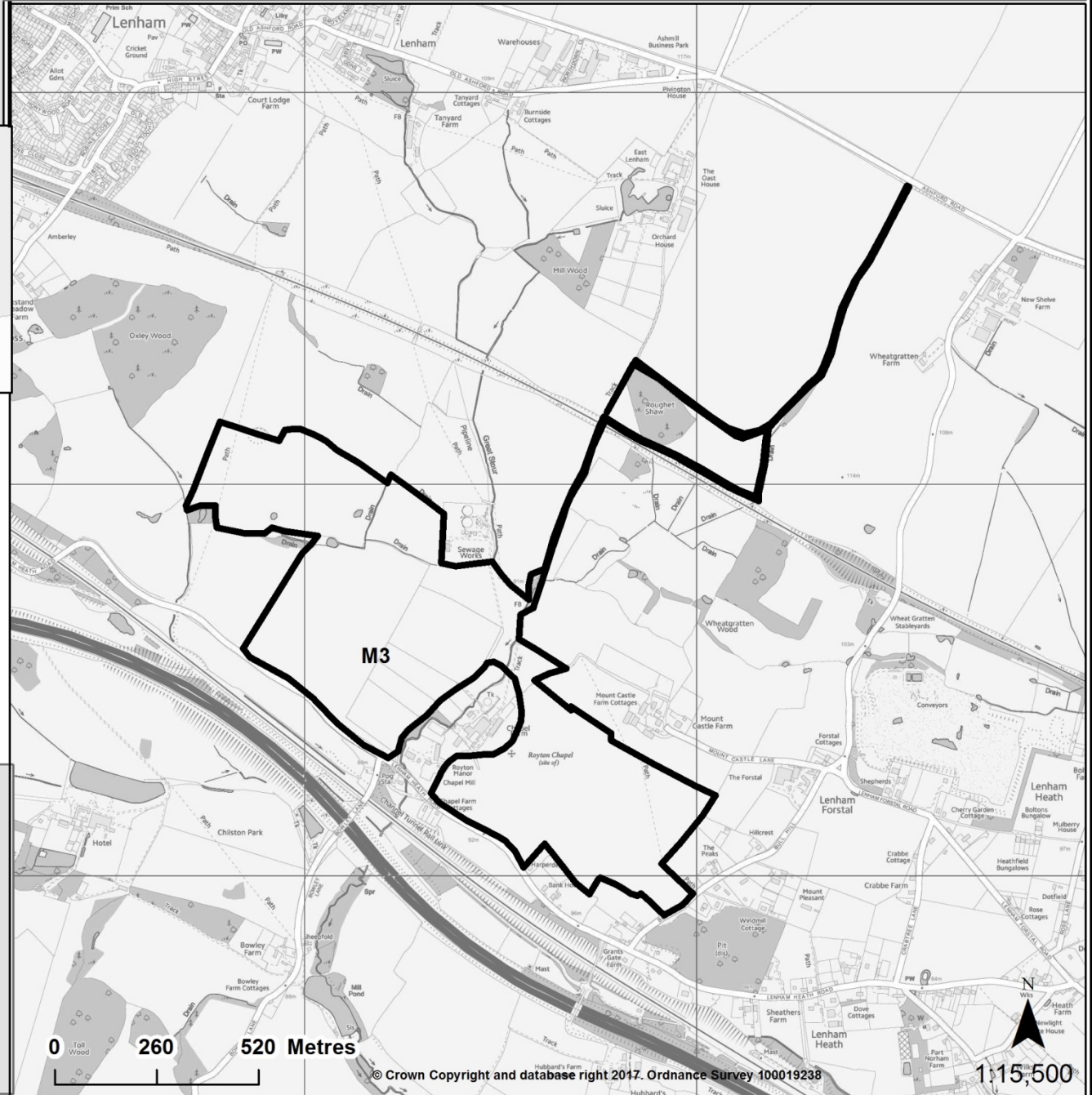
Eastings 590355  
Northings 150562

Site Area (Hectares)  
60,8



Site Information	
District/Borough	Maidstone
Parish	Lenham
Operator	Brett Aggregates Ltd
Estimated Output	150,000 tonnes per annum
Estimated Reserve	4 million tonnes
Life of Operation	26 years
Proposed Restoration	Lower level agriculture use
Access	Direct access onto the A20 Ashford Road north of site
Current Use	Arable and grazing farmland

**Option - Site Plan**





## Site M8

### West Malling Sandpit, Ryarsh

### Tonbridge and Malling

3.1 This soft sand site is currently grazing farmland. It is located to the south of the Kent Downs AONB, and can be argued to be within the setting of this landscape designation. Adjoining uses include residential properties, farmland and a golf course. There are areas of woodland within the site that are classified as Ancient Woodland. The site has 3.6mt of soft sand that includes 0.5mt of silica sand.

#### Summary of Stage 2 RAG Assessment

This site could make a significant contribution to the KMWLP requirements in the supply of soft sand.

Overall, the assessment suggests that there are no constraints which cannot be overcome by appropriate mitigation. This site should therefore be subject to consultation as an option as well as further detailed technical assessment and Sustainability Appraisal.

Key findings of the assessment which need further attention at the detailed assessment stage are as follows:

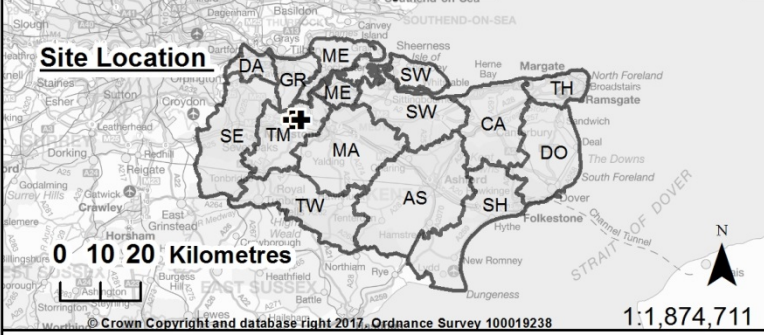
- The site is within the setting of the Kent Downs AONB and appropriate mitigation measures would be required.
- SSSI is located within 1.8km of the site, Ancient Woodland and BAP Deciduous Woodland are located within the site and the surrounding area; mitigation measures would be required to prevent unacceptable adverse impacts on these designations.
- There are a number of listed buildings within 500m of the site; mitigation would be required to protect these heritage assets and their setting.
- A number of Scheduled Monuments and Conservation Areas are within 1km of the site and a full investigation would be required to prevent unacceptable adverse impacts and to preserve Kent's heritage assets.
- Mitigation would be required to prevent unacceptable adverse impacts on the aquifers located within the site.
- The site contains Grade 3 quality soil (Good to Moderate). Appropriate consideration would be required to reduce the impact on this interest.
- Two public footpaths are located within the site. Impacts on these footpaths would require mitigation which would include diversion.
- There are a number of residential properties within 500m of the site (including the village of Addington). Given the close proximity, mitigation would be required to ensure there are no unacceptable adverse impacts on health and amenity.
- The surrounding area has been subject to extensive quarrying activity for a number of years. The cumulative impacts on the environment and local community, along with the impact on the highway network would need to be appropriately considered.
- An appropriate transport and access arrangement to prevent unacceptable adverse impacts on local amenity.

**Site M8**  
**West Malling Sandpit**  
**Roughetts Road,**  
**Ryarsh,**  
**Tonbridge & Malling**

**Minerals Site**

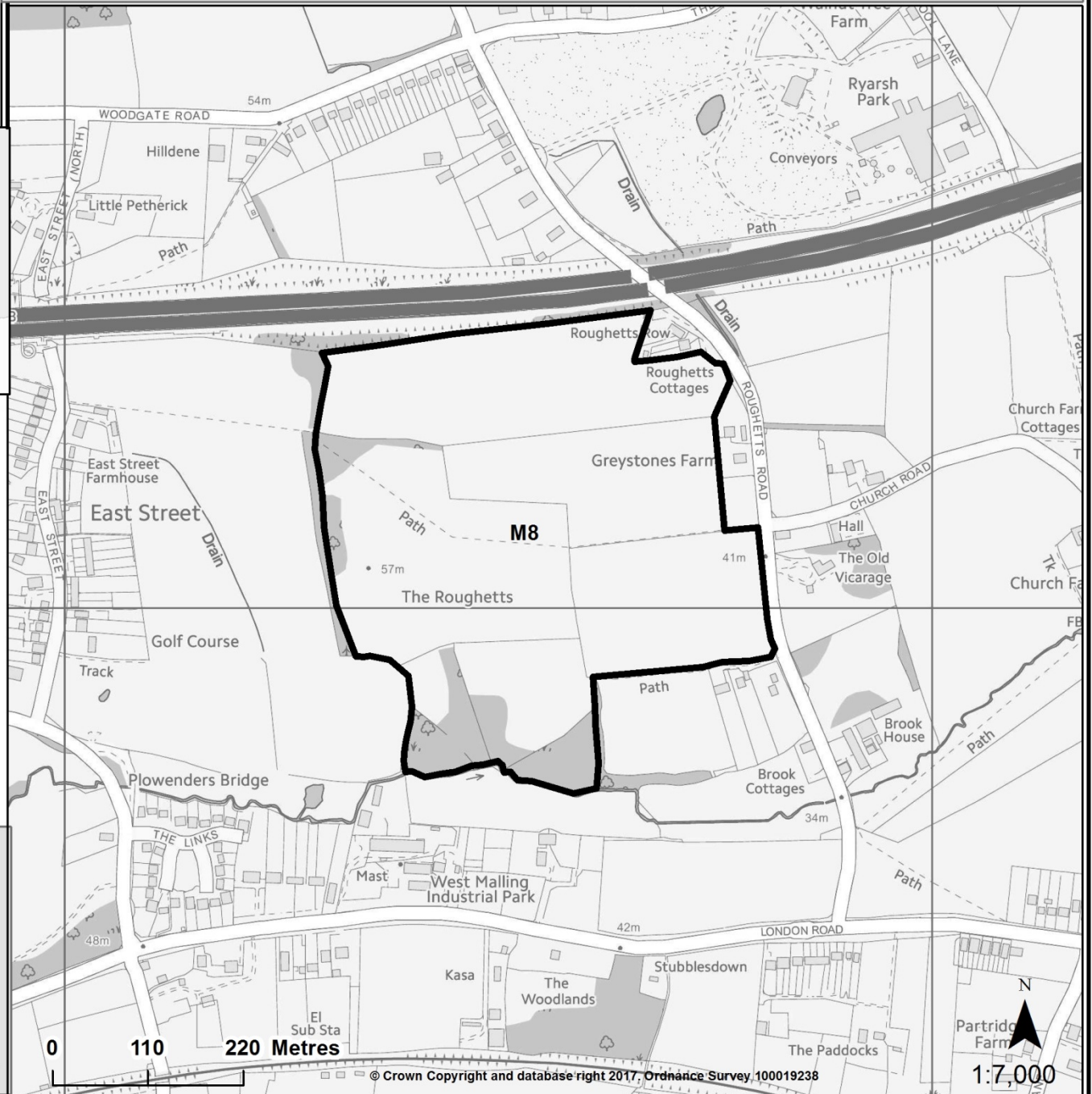
Eastings 566537  
 Northings 159087

Site Area (Hectares)  
 20.8



Site Information	
District/Borough	Tonbridge and Malling
Parish	Ryarsh
Operator	Borough Green Sandpits Ltd.
Estimated Output	150,000 tonnes per annum
Estimated Reserve	3.6 million tonnes (inc. 0.5 million tonnes of silica sand )
Life of Operation	24 years extraction plus 5 years Restoration
Proposed Restoration	Restore to Agriculture land
Access	Leaving site onto Roughetts Road then A20. Vehicles attending site to arrive from A20 to the south.
Current Use	Agriculture land

**Option - Site Plan**



## Site M2

### Lydd Quarry and Allens Bank Extension, Lydd

#### Shepway

3.3 Seven parcels of land are proposed as extensions to the existing Lydd Quarry. All of the proposed phases are within Kent, although the existing site spans across the county border into East Sussex. All seven parcels of land constitute the preferred option (shown on the map overleaf) at this site. The adjoining uses include residential properties (to the east of the settlement of Lydd), grazing land, the existing quarry and a caravan park.

#### Summary of Stage 2 RAG Assessment

This site could make a significant contribution to the KMWLP requirements in the supply of sharp sand and gravel.

Overall, the assessment suggests that there are no constraints which cannot be overcome by appropriate mitigation. This site should therefore be subject to consultation as an option as well as further detailed technical assessment and Sustainability Appraisal.

Key findings of the assessment which need further attention at the detailed assessment stage are as follows:

- The quarry extension areas are located within SSSI, adjacent to Ramsar/SPA and within 1km of SAC. BAP Priority Habitat is located within the site as well as the surrounding area.

Mitigation measures would be required to prevent unacceptable adverse impacts on these designations.

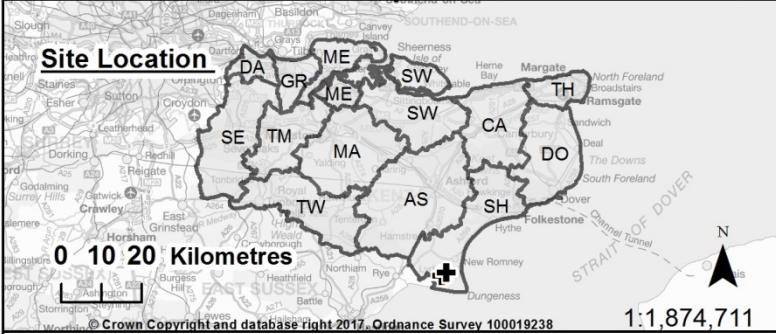
- Subject to a study of the geological and geomorphological interests of the site, restored quarry water habitat areas could contribute to the value of the designated areas.
- There are a number of listed buildings within 250m of the site; mitigation would be required to protect these heritage assets and their setting.
- The site is located within an area of Archaeological Potential and a full investigation would be required to prevent unacceptable adverse impacts and to preserve Kent's heritage assets.
- A number of public footpaths are located within the site or in close proximity. Impacts on these footpaths would require mitigation which would include diversion.
- Given the sites' distance from the Primary Route Network PRN (approximately 5km) mitigation would be required to ensure that the local road infrastructure (in particular the town of Lydd) is not adversely impacted.
- Overhead electrical power lines and sewer lines located within or adjacent to the site would require appropriate consideration of rerouting and mitigation.
- The town of Lydd lies adjacent to the site boundary. Given the close proximity, mitigation would be required to ensure there are no unacceptable adverse impacts on health and amenity.
- The surrounding area has been subject to extensive quarrying activity for a number of years. The cumulative impacts on the environment and local community, along with the impact on the highway network would need to be appropriately considered.

**Site M2  
Lydd Quarry Extns  
& Allen Bank Quarry  
Extension,  
Lydd, Shepway**

**Minerals Site**

Eastings 603665  
Northings 120984

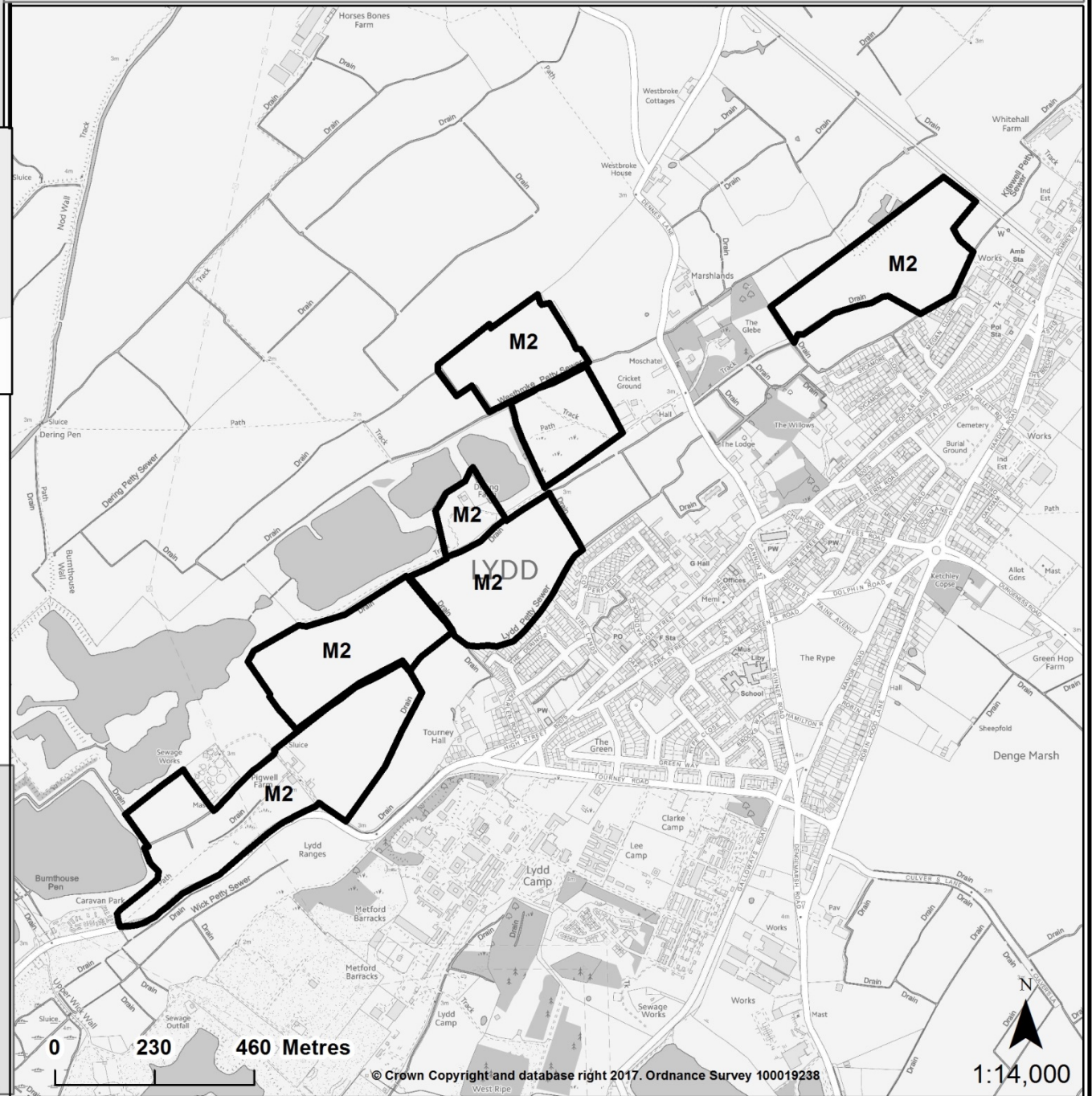
Site Area (Hectares)  
46.4



**Site Information**

<b>District/Borough</b>	Shepway
<b>Parish</b>	Lydd
<b>Operator</b>	Brett Aggregates Ltd
<b>Estimated Output</b>	250,000 tonnes per annum
<b>Estimated Reserve</b>	3.1 million tonnes
<b>Life of Operation</b>	12.4 years
<b>Proposed Restoration</b>	Open water bodies
<b>Access</b>	Existing Entrance on Jury's Gap Road
<b>Current Use</b>	Agriculture land

**Option - Site Plan**



## Site M7

**Central Road, Dartford**

**Dartford**

3.4 This site is an area of marshland at a level generally lower than the surrounding land and forms part of the Dartford Marshes. The land falls towards the River Darent that bounds the site in the east. The site is approximately 23.2 ha, is un-used and is currently subject to an ecological management plan. Dartford town centre is to the south of the site and there is residential development in close proximity to the east with B8 industrial uses immediately to the south. This site can be described as a low lying marshland area in close association with the urban area of Dartford. The land to the north is more open as this is part of the Dartford Marshes area and forms part of the functional flood plain of the River Thames. The potential reserves of sand and gravel may be in the order of 0.9mt. This site would be accessible from Central Road.

### **Summary of Stage 2 RAG Assessment**

This site could make a significant contribution to the KMWLP requirements in the supply of sharp sand and gravel.

Overall, the assessment suggests that there are no constraints which cannot be overcome by appropriate mitigation. This site should therefore be subject to consultation as an option as well as further detailed technical assessment and Sustainability Appraisal.

Key findings of the assessment which need further attention at the detailed assessment stage are as follows:

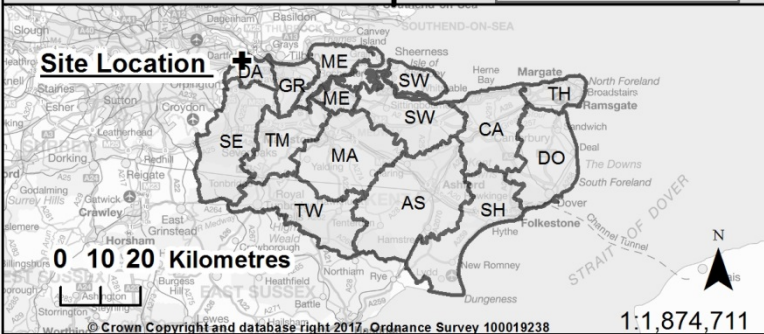
- The site is situated within the LWS Dartford Marshes, and is likely to have a significant impact on the designation. Mitigation measures would be required to prevent unacceptable adverse impacts on this designation.
- The site is located within an area of Archaeological Potential and a full investigation would be required to prevent unacceptable adverse impacts and to preserve Kent's heritage assets.
- Mitigation would be required to prevent unacceptable adverse impacts on the aquifers located within the site.
- The site is in close proximity to three AQMA's. Mitigation would be required to prevent an unacceptable adverse impact on the local air quality.
- The site contains Grade 2 (Very Good) and Grade 3 (Good to Moderate) quality soil. Appropriate consideration would be required to reduce the impact on this interest.
- The site borders a public footpath and bridleway. Impacts on these would require mitigation which could include diversion.
- An appropriate transport and access arrangement to prevent adverse impacts on local amenity.
- Overhead electrical power lines located within the site would require appropriate consideration of rerouting and mitigation.
- There are a number of residential properties to the east and west of the site. Given the close proximity, mitigation would be required to ensure there are no unacceptable adverse impacts on health and amenity.
- Substantial residential development is taking place in the nearby vicinity. Significant traffic movements need to be considered and appropriately mitigated, including the impact on the AQMA.

**Site M7**  
**Land at Central Road**  
**Dartford Fresh Marshes,**  
**Dartford**

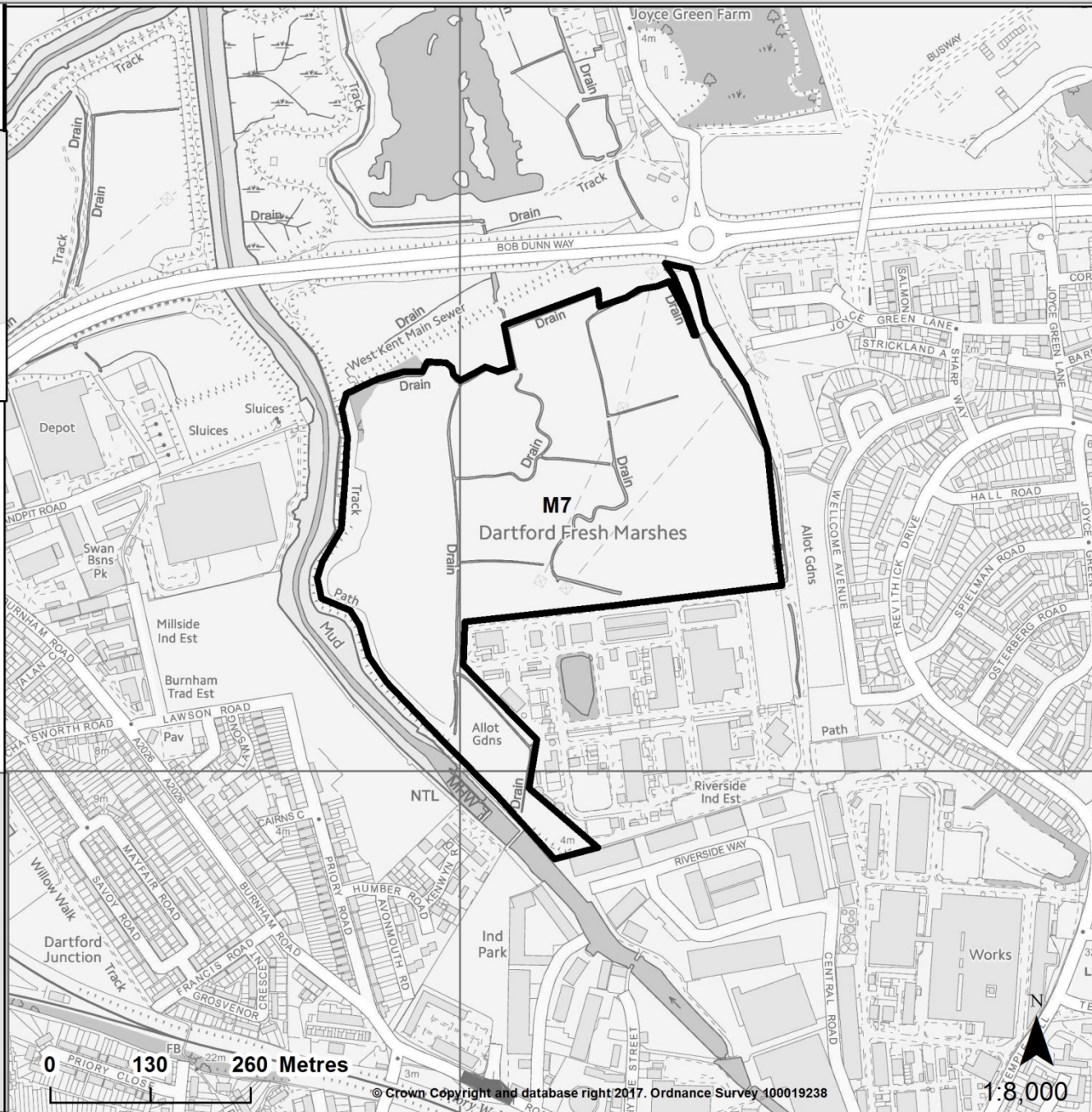
**Minerals Site**

Eastings 554111  
 Northings 175346

Site Area (Hectares)  
 22.7



**Option - Site Plan**



**Site Information**

<b>District/Borough</b>	Dartford
<b>Ward</b>	Joyce Green
<b>Operator</b>	Exton Estates Ltd
<b>Estimated Output</b>	90,000 tonnes per annum
<b>Estimated Reserve</b>	900,000 tonnes
<b>Life of Operation</b>	10 years
<b>Proposed Restoration</b>	Restoration to marshland
<b>Access</b>	Undetermined
<b>Current Use</b>	Marshland

## Site M9

### The Postern, Capel

### Tunbridge Wells

3.5 This site is part of the wider rural area to the east of the town of Tonbridge, in the functional floodplain of the River Medway. Several significant listed buildings are in close proximity to the site and the local highway network is characterised by minor rural lanes and roads. This site is in active agricultural (horticulture and arable cropping) use and mineral reserve is approximately 0.6mt.

#### Summary of Stage 2 RAG Assessment

This site could make a significant contribution to the KMWLP requirements in the supply of sharp sand and gravel.

Overall, the assessment suggests that there are no constraints which cannot be overcome by appropriate mitigation. This site should therefore be subject to consultation as an option as well as further detailed technical assessment and Sustainability Appraisal.

Key findings of the assessment which need further attention at the detailed assessment stage are as follows:

- The site is within 1km of the High Weald AONB and appropriate mitigation measures would be required.
- BAP Traditional Orchards occupy a small part of the site and Ancient Woodland is within 500m of the site; mitigation

measures would be required to prevent unacceptable adverse impacts on these designations.

- There are a number of listed buildings within 250m of the site; mitigation would be required to protect these heritage assets and their setting.
- A number of archaeological sites have been identified within 250m of the site and a full investigation would be required to prevent unacceptable adverse impacts and to preserve Kent's heritage assets.
- Mitigation would be required to prevent unacceptable adverse impacts on the aquifers located within the site.
- The site contains Grade 3 quality soil (Good to Moderate). Appropriate consideration would be required to reduce the impact on this interest.
- Nearby road networks are unlikely to be capable of accommodating HGVs; mitigation would be required to ensure that the impact upon the local road infrastructure is reasonable.
- High Pressure Gas Pipelines which cross the site would require appropriate consideration of rerouting and mitigation.
- There are a number of residential properties within 250m of the site. Given the close proximity, mitigation would be required to ensure there are no unacceptable adverse impacts on health and amenity.

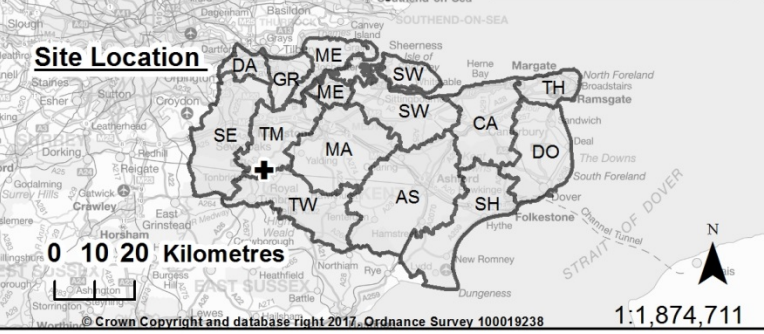
**Site M9**  
**The Postern,**  
**Postern Lane,**  
**Capel,**  
**Tunbridge Wells**

**Minerals Site**

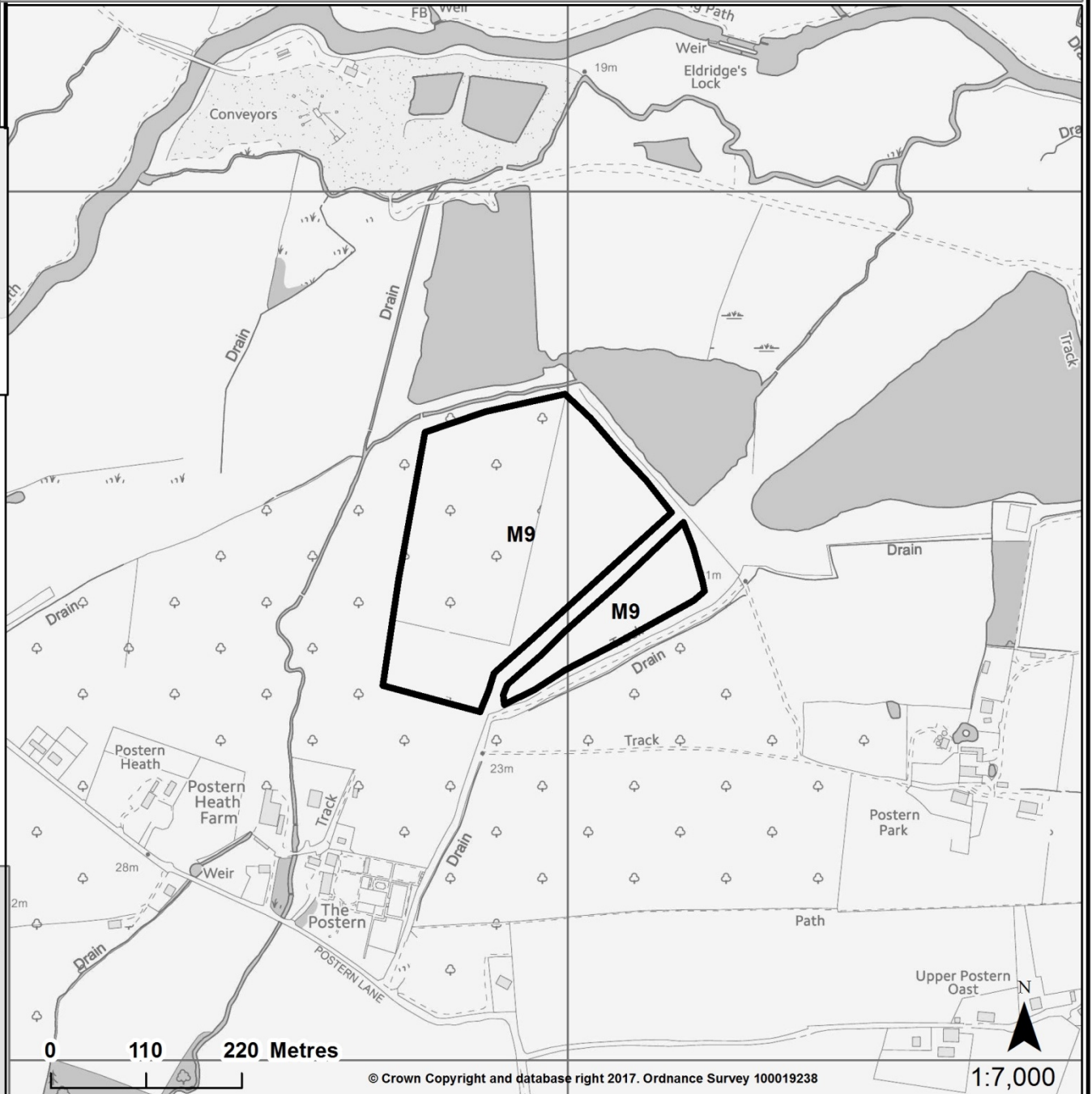
**Eastings 560988**  
**Northings 146569**

**Site Area (Hectares)**  
**8.5**

**Option - Site Plan**



Site Information	
District/Borough	Tunbridge Wells
Parish	Capel
Operator	Not yet known
Estimated Output	annual output not known
Estimated Reserve	Estimated at 600,000 tonnes (unconfirmed)
Life of Operation	Approximately 5 years
Proposed Restoration	Not yet known
Access	Access is via Postern Lane
Current Use	Agriculture





## Site M10

### Moat Farm, Five Oak Green, Capel

### Tunbridge Wells

3.6 This site is proposed for 1.5 million tonnes of sand and gravel extraction. It is currently a flat expanse of agricultural/pastoral land. Adjoining uses include Moat Farm buildings (including 10 to 12 residential caravans for agricultural workers) an existing quarry (Stonecastle Farm Quarry) access is proposed. The minerals extracted would be conveyed to the adjoining Stonecastle Farm Quarry for processing and onward transportation. This site is effectively an extension to this previous quarry operation.

#### Summary of Stage 2 RAG Assessment

This site could make a significant contribution to the KMWLP requirements in the supply of sharp sand and gravel.

Overall, the assessment suggests that there are no constraints which cannot be overcome by appropriate mitigation. This site should therefore be subject to consultation as an option as well as further detailed technical assessment and Sustainability Appraisal.

Key findings of the assessment which need further attention at the detailed assessment stage are as follows:

- The site is within 1.8km of the High Weald AONB and appropriate mitigation measures would be required.

- Ancient Woodland borders the site; mitigation measures would be required to prevent unacceptable adverse impacts on this designation.
- A listed building borders the site and a number of others are within 1km of the site; mitigation would be required to protect these heritage assets and their setting.
- Mitigation would be required to prevent unacceptable adverse impacts on the aquifers located within the site.
- The site contains Grade 3 quality soil (Good to Moderate). Appropriate consideration would be required to reduce the impact on this interest.
- A number of public footpaths are located within the site or in close proximity. Impacts on these footpaths would require mitigation which would include diversion.
- There are a number of residential properties within 1km of the site. Given the close proximity, mitigation would be required to ensure there are no unacceptable adverse impacts on health and amenity.
- The surrounding area has been subject to extensive quarrying activity for a number of years. The cumulative impacts on the environment and local community, along with the impact on the highway network would need to be appropriately considered.
- An appropriate transport and access arrangement to prevent unacceptable adverse impacts on local amenity.

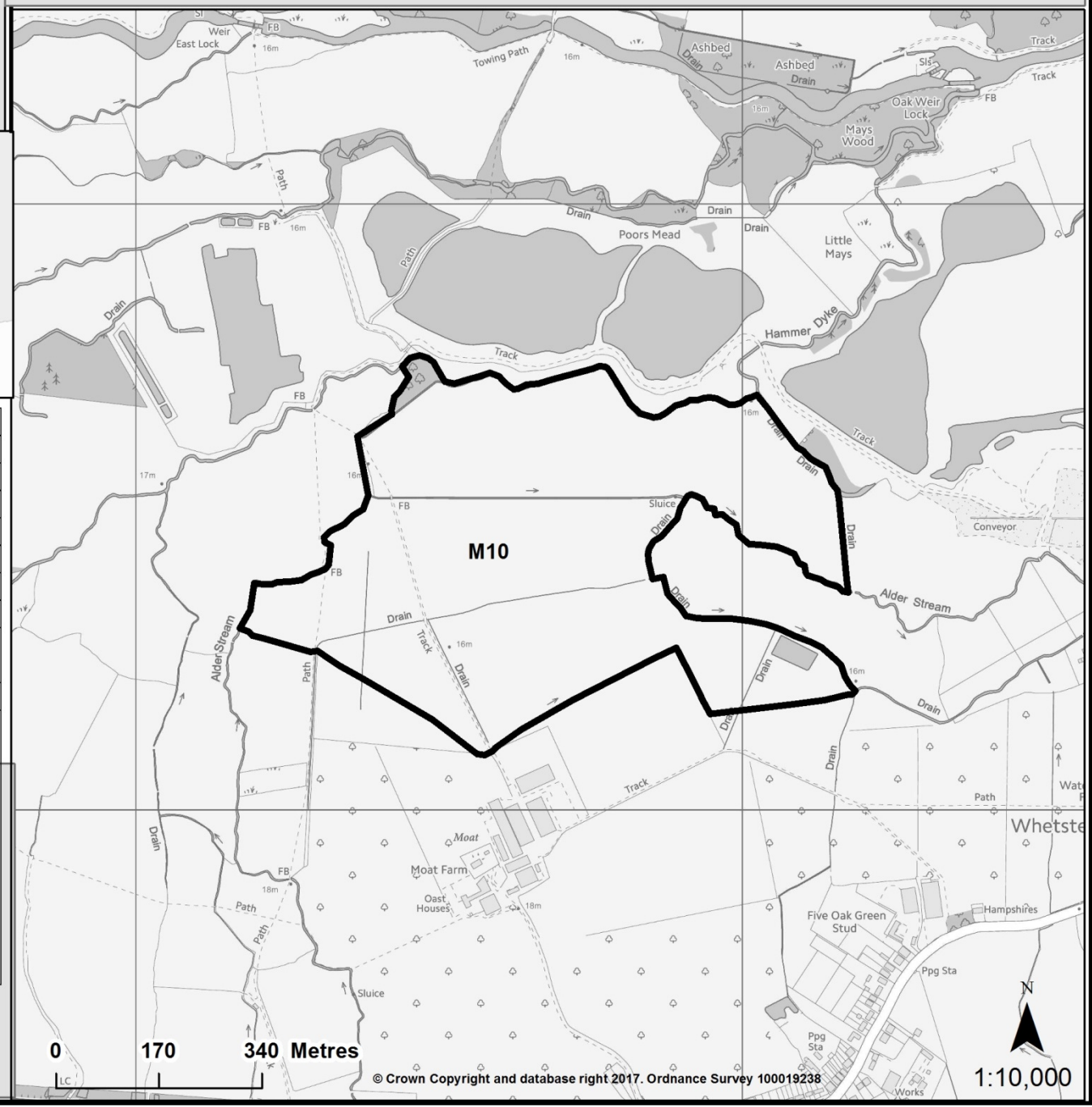
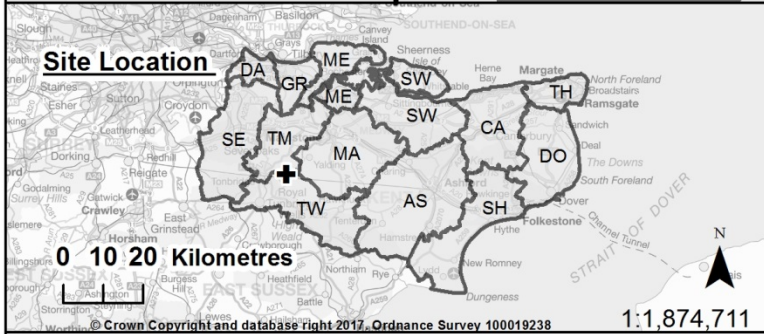
**Site M10**  
**Moat Farm,**  
**Five Oak Green,**  
**Capel,**  
**Tunbridge Wells**

**Minerals Site**

**Eastings 564689**  
**Northings 146426**

**Site Area (Hectares)**  
**38.2**

**Option - Site Plan**



**Site Information**

<b>District/Borough</b>	Tunbridge Wells
<b>Parish</b>	Capel
<b>Operator</b>	None yet identified
<b>Estimated Output</b>	100,000 tonnes per annum
<b>Estimated Reserve</b>	1.5 million tonnes
<b>Life of Operation</b>	15 years
<b>Proposed Restoration</b>	Phased wetland restoration
<b>Access</b>	Stonecastle Farm Quarry entrance on Whetsted Road(A228)
<b>Current Use</b>	Agriculture/pastoral land

## Site M12

### Postern Meadows, Tonbridge

### Tonbridge and Malling

3.7 This site is immediately east of the town of Tonbridge, in the functional floodplain of the River Medway. The site is under active agricultural use as pasture and mineral reserve is approximately 0.23mt. Access would be onto Postern Lane, with close proximity to the A26. There is proposed wet land restoration of the site.

#### Summary of Stage 2 RAG Assessment

This site could make a significant contribution to the KMWLP requirements in the supply of sharp sand and gravel.

Overall, the assessment suggests that there are no constraints which cannot be overcome by appropriate mitigation. This site should therefore be subject to consultation as an option as well as further detailed technical assessment and Sustainability Appraisal.

Key findings of the assessment which need further attention at the detailed assessment stage are as follows:

- The site is within the setting of the High Weald AONB and is bounded by industrial development; appropriate mitigation measures would be required.
- Ancient Woodland is located within 300m of the site, deciduous woodland within 500m and BAP Habitat within

600m; mitigation measures would be required to prevent unacceptable adverse impacts on these designations.

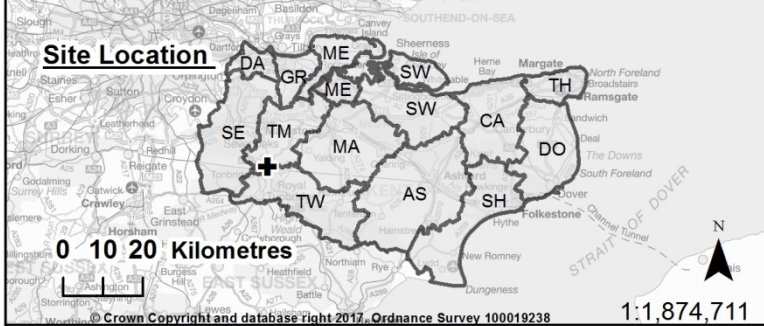
- There are a number of listed buildings within 500m of the site; mitigation would be required to protect these heritage assets and their setting.
- The site is located within an area of Archaeological Potential and a full investigation would be required to prevent unacceptable adverse impacts and to preserve Kent's heritage assets.
- Mitigation would be required to prevent unacceptable adverse impacts on the aquifers located within the site.
- The site contains Grade 3 quality soil (Good to Moderate). Appropriate consideration would be required to reduce the impact on this interest.
- A number of public footpaths are located in close proximity to the site. Impacts on these footpaths would require mitigation which would include diversion.
- Increase in vehicular movements on nearby road networks would require mitigation to ensure that the local road infrastructure is not adversely impacted.
- There are a number of properties within 250m of the site. Given the close proximity, mitigation would be required to ensure there are no unacceptable adverse impacts on health and amenity.
- Cumulative impacts in terms of increased traffic movements would need to be considered and appropriately mitigated.

**Site M12**  
**Postern Meadows,**  
**Tonbridge,**  
**Tonbridge & Malling**

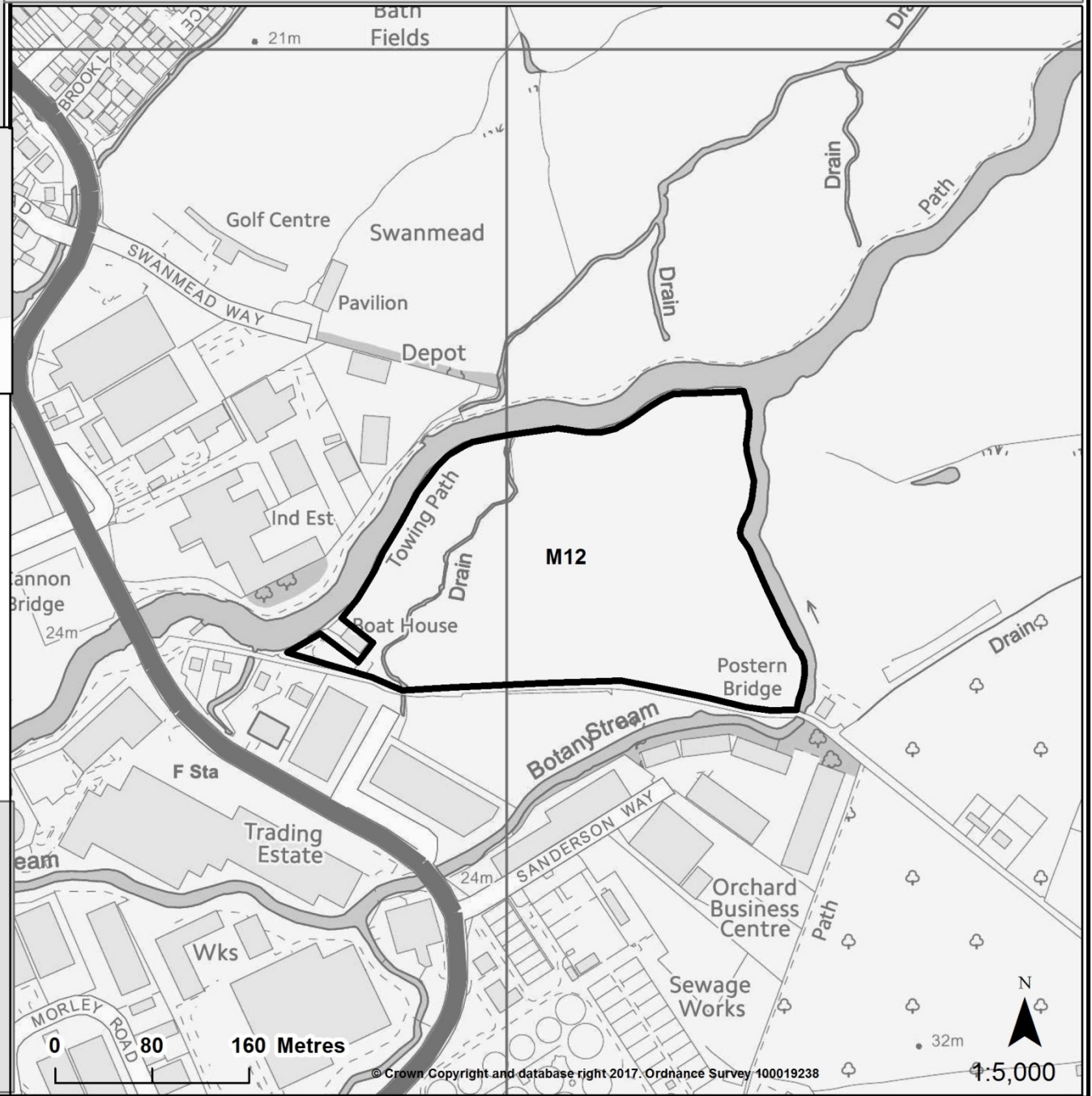
**Minerals Site**

**Eastings 560063**  
**Northings 146573**

**Site Area (Hectares)**  
**7.0**



**Option - Site Plan**



**Site Information**

<b>District/Borough</b>	Tonbridge and Malling
<b>Ward</b>	Medway
<b>Operator</b>	No operator involved at present
<b>Estimated Output</b>	75,000 tonnes per annum
<b>Estimated Reserve</b>	230,000 tonnes
<b>Life of Operation</b>	3 years
<b>Proposed Restoration</b>	Restoration to landscaped lake without any infilling and to amenity, nature conservation and recreational use
<b>Access</b>	The A26(Vale Rd.) via an existing road to an industrial estate
<b>Current Use</b>	Farmland

## Site M13

### Stonecastle Farm, Hadlow/Whetsted

### Tonbridge and Malling

**(Note access is within Whetsted, Tunbridge Wells)**

3.8 This site is within the functional flood plain of the River Medway, almost equidistant between the settlements of Tonbridge in the west and Paddock Wood in the east. The site is thought to have the potential to yield between 0.1 and 0.2mt of mineral resources. The land is currently in agricultural use, with Ancient Woodland and other woodland areas present on site.

#### Summary of Stage 2 RAG Assessment

This site could make a significant contribution to the KMWLP requirements in the supply of sharp sand and gravel.

Overall, the assessment suggests that there are no constraints which cannot be overcome by appropriate mitigation. This site should therefore be subject to consultation as an option as well as further detailed technical assessment and Sustainability Appraisal.

Key findings of the assessment which need further attention at the detailed assessment stage are as follows:

- The site is within 3km of the High Weald AONB and appropriate mitigation measures would be required.

- The site contains BAP Habitat Deciduous Woodland with Ancient Woodland adjacent to the site; mitigation measures would be required to prevent unacceptable adverse impacts on these designations.
- There are a number of listed buildings within 250m of the site; mitigation would be required to protect these heritage assets and their setting.
- Mitigation would be required to prevent unacceptable adverse impacts on the aquifers located within the site.
- The site contains Grade 3 quality soil (Good to Moderate). Appropriate consideration would be required to reduce the impact on this interest.
- A number of public footpaths are located in close proximity to the site. Impacts on these footpaths would require mitigation which would include diversion.
- Overhead electrical power lines located within the site would require appropriate consideration of rerouting and mitigation.
- There are a number of residential properties within 1km of the site. Given the close proximity, mitigation would be required to ensure there are no unacceptable adverse impacts on health and amenity.
- The surrounding area has been subject to extensive quarrying activity for a number of years. The cumulative impacts on the environment and local community would need to be appropriately considered.
- An appropriate transport and access arrangement to prevent unacceptable adverse impacts on local amenity.

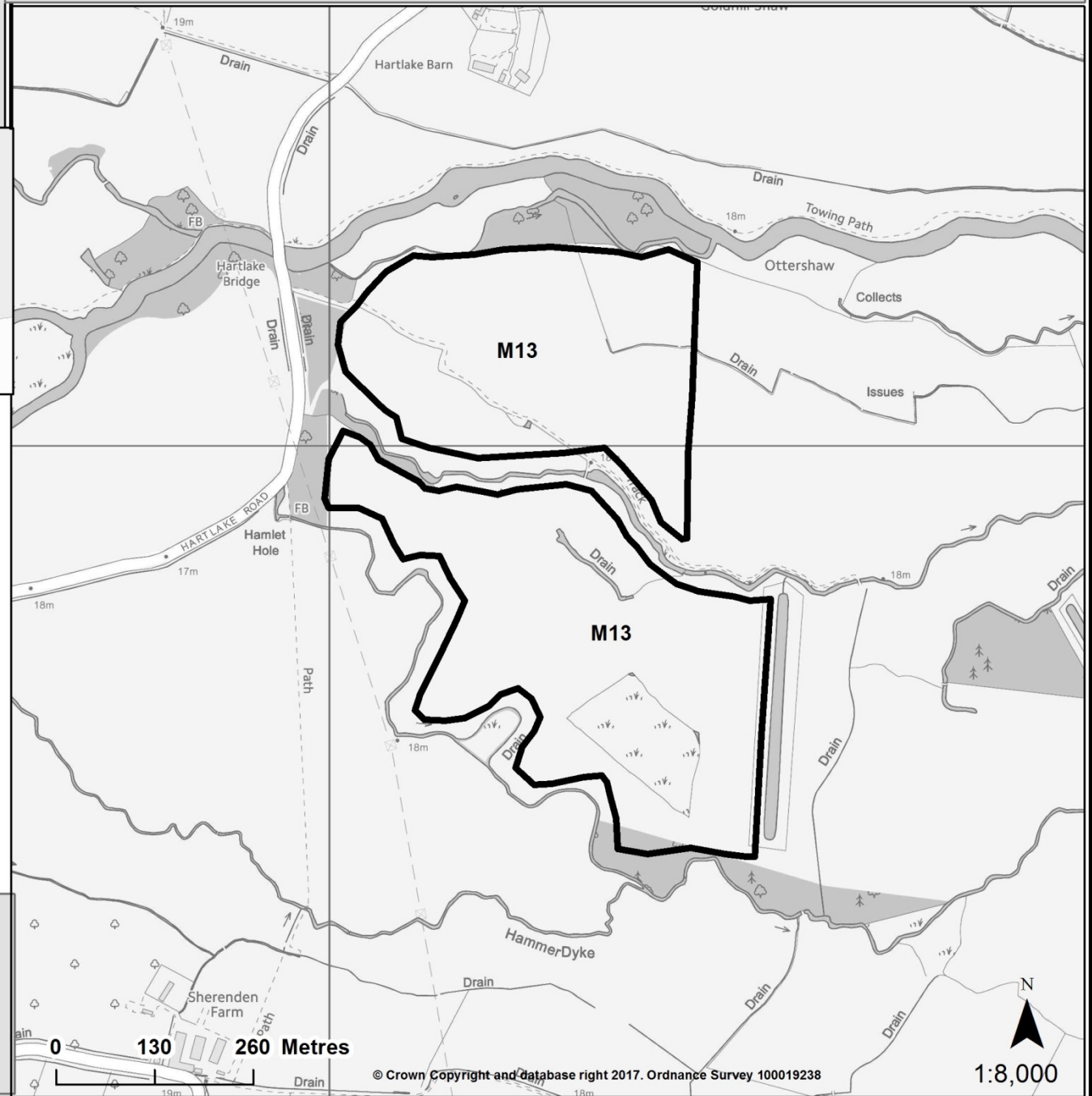
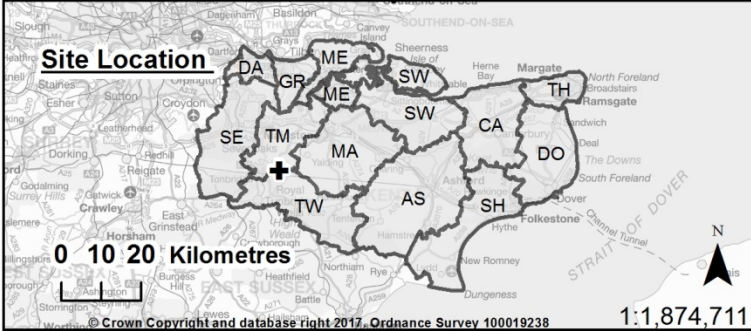
**Site M13**  
**Stonecastle Farm**  
**Quarry,**  
**Hadlow,**  
**Tonbridge & Malling**

**Minerals Site**

**Eastings 563278**  
**Northings 146963**

**Site Area (Hectares)**  
**28.0**

**Option - Site Plan**



**Site Information**

<b>District/Borough</b>	Tonbridge and Malling
<b>Parish</b>	Hadlow
<b>Operator</b>	Tarmac Ltd
<b>Estimated Output</b>	Between 100,000 to 200,000 per annum
<b>Estimated Reserve</b>	1 million tonnes
<b>Life of Operation</b>	7 years
<b>Proposed Restoration</b>	Reedbeds and lakes
<b>Access</b>	Existing quarry entrance on Whetsted Road (A228)
<b>Current Use</b>	Farmland

The site is located in the Hadlow area of Tonbridge and Malling while access would use the existing quarry access in Capel area of Tunbridge Wells.

## Site M11

### Joyce Green Quarry, Dartford

#### Dartford

3.9 This site is an area of marshland adjacent to the Dartford Creek forms part of the wider Dartford Marshes. The site is approximately 48 ha, is largely un-used and is currently subject to an ecological management plan as it is part of the Coastal and Floodplain Grazing Marsh Priority Habitat Inventory. Dartford town centre is situated to the south beyond the A206 (Bob Dunn Way) The site can be described as a low lying marshland area in close association with the built up urban mass of Dartford (to the south and to the west past the adjacent Dartford Creek and associated marshland) and is part of the functional flood plain of the River Thames. The potential reserves of sand and gravel may be in the order of 1.5mt of high value flint river terrace sand and gravels. Extraction rate may be some 150,000 tpa giving an estimated life of 10 years. The site would be accessible from Joyce Green Lane (an unclassified road) that has a junction with Bob Dunn Way (A206).

#### Summary of Stage 2 RAG Assessment

This site could make a significant contribution to the KMWLP requirements in the supply of sharp sand and gravel.

Overall, the assessment suggests that there are no constraints which cannot be overcome by appropriate mitigation. This site should therefore be subject to consultation as an option as well as further detailed technical assessment and Sustainability Appraisal.

Key findings of the assessment which need further attention at the detailed assessment stage are as follows:

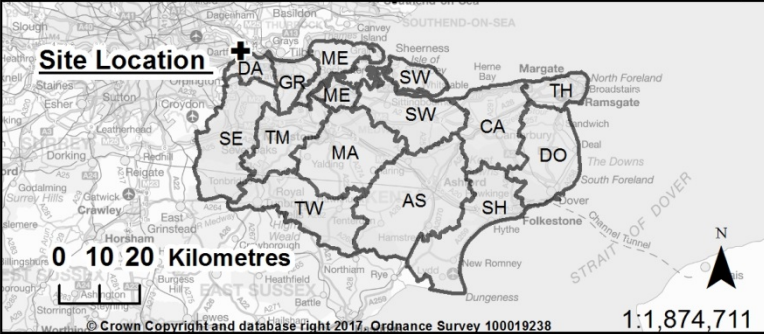
- The site covers an area of marsh grazing land and appropriate mitigation measures would be required.
- The entirety of the site is covered by LWS, SSSI is located within 2km of the site and BAP Habitats are located adjacent to the site; mitigation measures would be required to prevent unacceptable adverse impacts on these designations.
- The site is located within an area of Archaeological Potential and a full investigation would be required to prevent unacceptable adverse impacts and to preserve Kent's heritage assets.
- Mitigation would be required to prevent unacceptable adverse impacts on the aquifers located within the site.
- The site is in close proximity to several AQMA's. Mitigation would be required to prevent an unacceptable adverse impact on the local air quality.
- The site contains Grade 3 quality soil (Good to Moderate). Appropriate consideration would be required to reduce the impact on this interest.
- A number of public footpaths are located within the site or in close proximity. Impacts on these footpaths would require mitigation which would include diversion.
- Nearby road networks may be incapable of accommodating HGVs; mitigation would be required to ensure that the impact upon the local road infrastructure is reasonable.
- There are a couple of residential properties in close proximity to the site. Given the close proximity, mitigation would be required to ensure there are no unacceptable adverse impacts on health and amenity.
- The surrounding area has been subject to extensive quarrying activity for a number of years. The cumulative impacts on the environment and local community would need to be appropriately considered.

**Site M11  
Joyce Green Quarry,  
Dartford**

**Minerals Site**

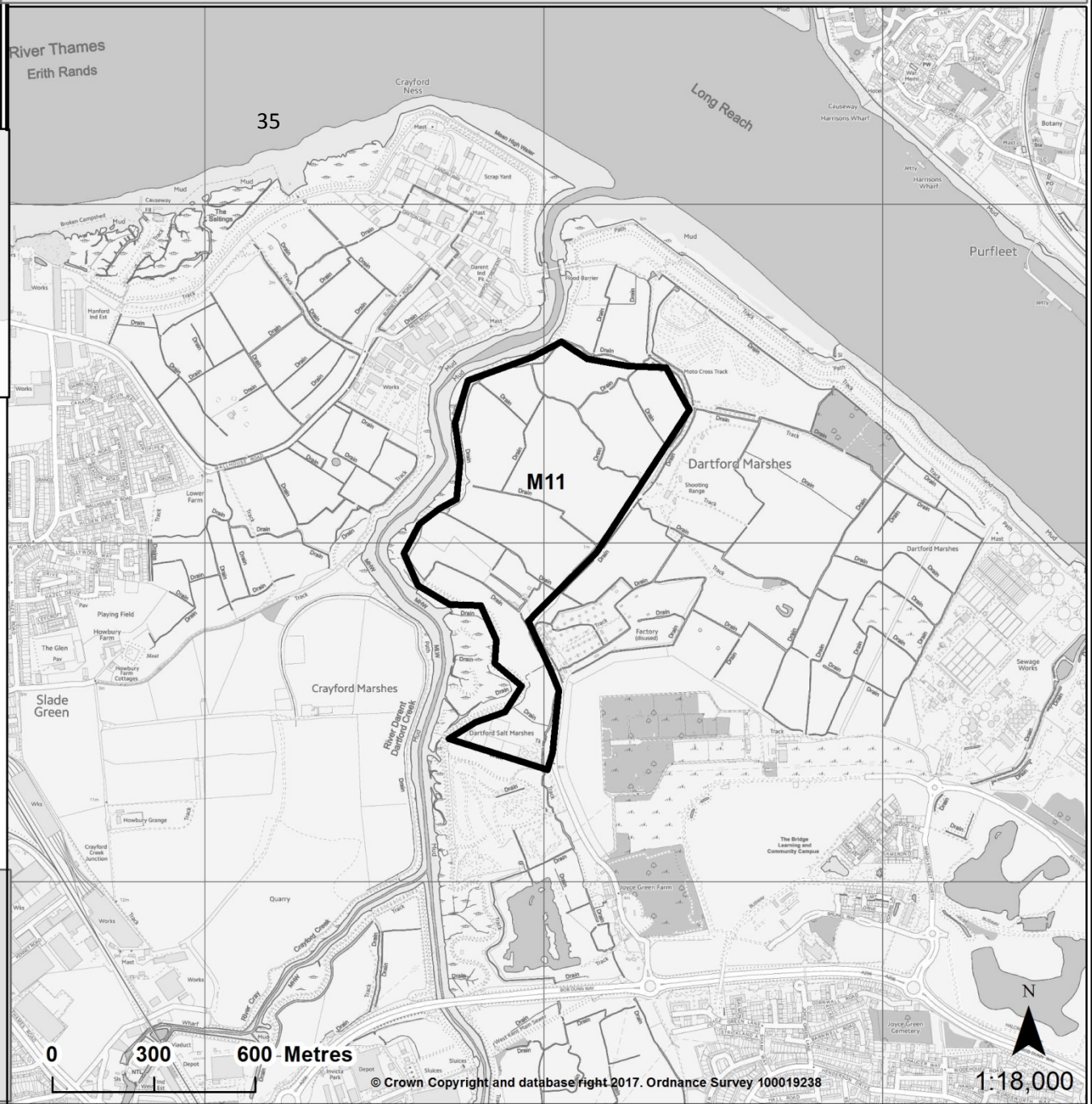
**Eastings 553984  
Northings 177099**

**Site Area (Hectares)  
48.0**



<b>District/Borough</b>	Dartford
<b>Ward</b>	Joyce Green
<b>Operator</b>	Ingrebourne Valley Ltd
<b>Estimated Output</b>	150,000 tonnes per annum
<b>Estimated Reserve</b>	1.5 million tonnes
<b>Life of Operation</b>	10 years for sand and gravel extraction for extn area
<b>Proposed Restoration</b>	Restore to water bodies with wetland edges to provide additional biodiversity and recreational use of parts of the site
<b>Access</b>	access via Joyce Green Lane to junction onto Bob Dunn Way (A206)
<b>Current Use</b>	Marsh grazing land and Agricultural Land Grade 3

**Option - Site Plan**





## **Sites Not Being Progressed**

4.1 A number of other mineral sites promoted through the 'call for sites' are not considered to be in alignment with the KMWLP and are not being progressed at this time. The specific reasons for this are set out in the Minerals Sites Selection Initial Assessment document.

4.2 The sites are:

Paradise Farm, Hartlip;

Extension to Norwood Quarry, Isle of Sheppey,

Richborough Hall, Sandwich,

Richborough Park, Ramsgate

Hegdale Quarry, Challock

Wey Street Farm, Hernhill

Collarmakers Quarry, Ash

Extension to Wrotham Quarry, Addington/Trottiscliffe

Richborough Road, Sandwich

Double Quick Farm, Charing