



TERRESTRIA LIMITED

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ROCK COMMON QUARRY
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PLANNING AND ENVIRONMENTAL STATEMENT

NON-TECHNICAL SUMMARY

APRIL 2021
AMENDED JUNE 2021 FOR VALIDATION

SECTION 1

Introduction

This document is a non-technical summary of the main text of the Environmental Statement and has been prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended).

Part 5, Regulation 18, Paragraph 3(e) of the Regulations requires an Environmental Statement to include,

“a non-technical summary of the information referred to in sub-paragraphs (a) to (d)”

Sub-paragraphs (a) to (d) read as follows:

“(a) a description of the proposed development comprising information on the site, design, size and other relevant features of the development;

(b) a description of the likely significant effects of the proposed development on the environment;

(c) a description of any features of the proposed development, or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the Environment;

(d) a description of the reasonable alternatives studied by the developer, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the Environment”

This non-technical summary has been prepared in accordance with the above.

This is a Non-Technical Summary of the Environmental Statement that accompanies the planning application submitted by Dudman (Rock Common) Limited and the Wiston Estate to firstly, enable the continued working of the remaining reserves of sand within the quarry and, secondly, to vary the currently approved restoration scheme for the quarry by using imported, inert restoration material to infill the quarry void and provide a safe and sustainable "dry" landform.

This Non-Technical Summary seeks to provide enough information for individuals to understand,

- details of the application
- details of the proposed restoration
- a summary of the assessments undertaken in support of the application, and
- safeguards being put in place to protect local amenity

Key facts

Application area	33.64 hectares
Remaining sand reserves within currently permitted area	up to 150,000 tonnes
Total volume of restoration material to be imported	2.7 million cubic metres Approximately 5.5 million tonnes
Working hours (sand extraction and restoration)	Mon-Fri 0700-1800 Saturday 0700-1300
Period of sand extraction and restoration	8 to 10 years

A full suite of detailed development drawings are appended to the Environmental Statement, Volume 1 (Appendix 4). The following drawings are included with this Non-Technical Summary and can be found at the end of this Non-Technical Summary ,

- NTS-01 Location Plan
- NTS-02 Application Plan
- NTS-03 Restoration Stages
- NTS-04 Final Restoration

Difficulties Encountered in Preparing Environmental Statement

In preparing an Environmental Statement the applicant is required under the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2017 (as amended) to confirm whether any difficulties were encountered. It is confirmed that there were no technical difficulties or lack of knowledge encountered in the preparation and submission of the application.

The application has been prepared in accordance with pre-application advice provided by West Sussex County Council with the content of the Environmental Statement informed by a Scoping Opinion issued by the Council in November 2019.

Specialist "in-house" knowledge and third-party consultancy input has enabled the preparation of the Environmental Statement and the wider application documentation in accordance with these requirements.

SECTION 2

Context

Dudman (Rock Common) Limited operates Rock Common Quarry, Washington, West Sussex where sand is excavated and then processed to produce a range of products for use in the construction industry. The company operates under a lease from the landowner, the Wiston Estate.

As the sand reserves at the quarry come to an end both the company and the Estate have turned their attention to the final restoration of the site.

The currently approved restoration, which would result in the quarry void being allowed to flood with ground water so creating a large and very deep body of water, is considered to be unsafe and unsustainable. It has long been recognised that deep bodies of water in old quarries prove an attraction to the public, particularly during spells of hot weather and unfortunately on many occasions this has led to tragic loss of life, often of younger members of our communities.

In addition, because of the proximity of three (now closed) domestic waste landfill sites to the quarry there is the possibility of significant contamination of the lake (and consequently the groundwater) by dissolved, harmful and toxic substances produced from the landfill sites (known as "leachate").

The creation of a large body of deep water (as currently permitted) would provide little ecological interest in the long term. On the other hand, the restoration of the quarry as proposed by this application provides an opportunity to create a restored landform which will make a positive contribution to the immediate area, creating a varied range of different habitats as well as providing informal public access, by way of a network of permissive footpaths.

The unique location of the site alongside the boundary of the South Downs National Park gives the Wiston Estate the chance to regenerate the land as a vibrant, environmentally engaged site which can act as a base for people to explore and fully appreciate the special qualities of the National Park. This long term aim is recognised and developed in the Wiston Whole Estate Plan, a document which carries the support of both West Sussex County Council and the South Downs National Park Authority.

Dudman (Rock Common) Limited and the Wiston Estate have worked together to prepare this planning application, accompanied by an Environmental Statement, which would allow the remaining sand reserves to be worked (and so prevent the sterilisation of an important resource) but, more importantly, would enable the safe and sustainable restoration of the quarry void.

The planning application has been submitted to West Sussex County Council in its capacity as Minerals Planning Authority.

Because of the current COVID-19 pandemic, the requirement to comply with Government regulations and guidance, the need to prevent the spread of the virus and to ensure the safety of employees and the public the planning application and associated documents will be available for public viewing on-line. Documents will be available to download so that these can be viewed “at leisure”.

For on-line access to the application documents please email a request to mick@terrestria.co.uk

The application documents will also be available to view an/or download on the West Sussex County Council website www.westsussex.gov.uk

If you are unable to either email or access the WSCC website then you can write to the address below and request either,

(a) a copy of the application and Environmental Statement to be sent in digital format (please indicate your preference for either a CD ROM or a data stick), for which there will be charge of £75 (Seventy Five Pounds Sterling), or

(b) a paper printed copy of the application and Environmental Statement, for which there will be a charge of £750 (Seven Hundred and Fifty Pounds Sterling)

If writing to request a copy of the application and Environmental Statement then you must include payment. Cheques should be made payable to “Terrestria Limited”.

Please write to:

**The Dudman Group of Companies
Albion Wharf
Albion Street
Southwick
West Sussex BN42 4ED**

Please mark “For the attention of Mr S Dudman”

Please allow up to 14 days for your request to be dealt with.

SECTION 3

The application area and surroundings

Rock Common Quarry is an active sand quarry within the County of West Sussex and within the District of Horsham. The quarry is situated approximately 350 metres to the north-east of the village of Washington. The boundary of the South Downs National Park lies (at its closest point) some 50 metres to the south of the site on the other side of the A283.

The A283 (Shoreham to Milford Road) passes close to the southern boundary of the quarry, whilst the A24 (Worthing to Dorking Road) runs within 100 metres of the west boundary. A narrow, unclassified road (Class C), which connects the A283 and A24 and known as "The Hollow", runs along the north-east boundary of the quarry.

The sand processing plant area lies on the opposite (northern) side of The Hollow to the main quarry area. All traffic accessing the quarry does so only via the junction of The Hollow and the A24; no quarry traffic is permitted to travel along The Hollow towards or from the A283.

To the east of the quarry and of The Hollow are three former landfill sites known as The Windmill, The Rock and The Rough which have been historically land-filled with municipal, domestic waste. They are now all fully restored.

Honeybridge Stream (north flowing) passes under the A283 at a point some 250 metres to the south of the quarry before turning in a north-westerly direction and then running along the western boundary of the site until it reaches the A24. Groundwater which is pumped from the quarry is discharged (under licence) into Honeybridge Stream.

The closest residential and commercial properties include,

- Washington Towers Caravan and Camping Park which lies immediately to the west of the quarry between it and the A283.
- Sandhill Farm, which lies adjacent to the western boundary between the quarry and the A24.
- Rock House Nurseries which lies adjacent to the junction of The Hollows and the A24, close to the northern end of the quarry.
- Green Barn Farm, a mixed business comprising meeting/conference rooms, on-site butchery, corporate events and activities and catering/BBQ's, which is situated adjacent to the eastern boundary of the quarry.

Footpath 2701 travels northwards from the A283 before running around the western and northern boundaries of the quarry to join The Hollow. Footpath 2604 continues north-east and east from The Hollow skirting around the processing and operations area before continuing generally northwards.

There are 3 Scheduled Monuments in the vicinity of the site (although all of over 1 km away),

- A cross-dyke feature which is west of Chanctonbury Ring hill-fort and lies some 1.4 km south-east of the site boundary (south of the A283)
- A "bowl barrow" on Chanctonbury Hill some 200 metres west of Chanctonbury Ring hill-fort and 1.2 km south of the site boundary (south of the A283)

- A section of Roman Road (north of Rock) some 1.2km north west of the site (west of the A24)

There are a number of listed buildings within 1 km of the quarry. There are 21 Grade II listed buildings to the south of the A283, the majority of which are in the village of Washington. One cluster is some 350 metres south-west of the site boundary, with a second cluster some 630 metres from the same boundary. There is a small cluster of 4 Grade II Listed buildings some 360 metres to the north-west, on the west side of the A24.

There are no statutory designated sites either within or in the vicinity of the quarry. However, the areas of woodland generally adjacent to the northern boundary, between it and A24, along the northern section of The Hollow and on the northern side of The Hollow, immediately south of the processing and operations area are classified as Priority Habitat Inventory (Deciduous Woodland).

The application area (which totals 33.64 hectares) comprises of three areas,

- The main Rock Common Quarry extraction area (27.19 hectares)
- The sand processing area (5.52 hectares)
- The restoration material reception area (0.93 hectares)

The three areas are shown edged red on Drawing NTS-01 which can be found at the end of this Non-Technical Summary.

The main quarry and the processing area benefit from a current planning permission for the winning, working and processing of sand whilst the restoration material reception area, which will be located within the former Windmill Landfill site, is a new area proposed for the initial reception and handling of imported material.

SECTION 4

The proposed development

Rock Common Quarry has been active since the 1920's and has been the subject of many planning permissions granted for sand extraction since the 1950's. The current planning permission was granted in 2004 and allows sand to be extracted and processed until the end of 2020.

This planning application is being made,

- Firstly, to enable the recovery of the remaining currently planned reserves of sand and to continue the importation of aggregates and soils for blending, and
- Secondly, to permit the importation and placement of suitable, inert restoration material in order to change the approved restoration and create a "dry", restored landform.

As regards the working of the remaining sand reserves this will be carried out in the same manner as currently approved using mobile plant within the quarry, a conveyor to transport the raw sand to the existing processing area, and washing and grading of the raw sand using the existing sand processing plant. All road vehicles associated with sand sales will use the A24 using its access with The Hollow, as has been the case throughout the working of the quarry.

It is estimated that some 100,000 to 150,000 tonnes of sand remains to be extracted within the quarry. These reserves are "permitted reserves" having been granted planning permission for extraction and subsequent processing in 2004.

Restoration material will be transported via the A283 and its junction with The Hollow and delivered to a "restoration material reception area" to be created on land within the former Windmill Landfill Site. The existing bell-mouth and former landfill access on The Hollow will be used as vehicular access to the reception area. Once the material is off-loaded it will be checked for suitability and then transferred by conveyor to a handling area within the quarry itself. The conveyor will pass underneath The Hollow making use of an existing conveyor tunnel. The material will be transported around the quarry using dump trucks.

It is important to note that there will be no "mixing" of road vehicles and no vehicles will travel along the length of The Hollow. This will be closely monitored and controlled making use of CCTV cameras positioned at the entrances to the sand processing area and the restoration material reception area, and location management software installed within individual vehicles.

In order to provide the "dry" restoration being proposed some 2.7 million cubic metres of restoration material will be required. It is proposed that this will be brought to the site over a period of 8 to 10 years.

The nature of the material to be imported (its density) will be variable and as such it is usual to express quantities as "cubic metres" rather than as "tonnes". However, if an average of 2.05 tonnes per cubic metre were assumed then this would translate to a little over 700,000 tonnes per annum.

The material will be placed in 5 metre thick, engineered layers and will be placed in the lowest part of the void starting at the southern end of the quarry. As levels are raised and as they begin to merge with adjoining, existing quarry floor levels then the "footprint" of the area of fill will increase (spread out). In this way, infilling will generally proceed south to north across the site. The void will be progressively restored similarly in a south to north direction.

The development drawings which form part of the application show in detail the stages of infilling (Environmental Statement, Volume 1 (Appendix 4)). Drawing NTS-03 (which can be found at the end of this Non-Technical Summary) illustrates the general stages of infilling. The "Stage 1" area will be progressively raised to 45 metres AOD (southern end of the area) and 47 metres AOD (northern end of the area). The "Stage 2" area will be generally raised to 52 metres AOD in order that the final restoration levels merge with the existing ground level of adjoining land.

The restoration of the site is expected to be completed within 8 to 10 years.

SECTION 5

Alternatives

The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended) require that the Environmental Statement includes a description of any alternatives to the proposed development that have been considered. This is to demonstrate that if other options have been considered, the potential for environmental effects has played a part in the decision to apply for permission for the now proposed development.

In the case of mineral extraction, alternatives are limited as essentially mineral deposits can only be worked where they are found. In the case of using imported material to restore a mineral site then similarly alternatives are limited, in this instance limited to the one site because it is the restoration of this specific site that is under consideration; the applicant is not considering which, of a choice of sites, is the one most suited for restoration.

The alternatives to the proposed development that have been considered are as follows.

The "Do Nothing" Option

In practical terms the "do nothing option" would involve stopping sand extraction on 31 December 2020 and thereafter restoring the quarry in accordance with the currently approved restoration scheme, essentially allowing the ground water to recover to its natural level so "flooding" the quarry void. This option would mean that,

- (a) the remaining reserves of sand would not be worked and therefore a valuable mineral resource would be lost;
- (b) the site would be restored in an unsafe and unsustainable way, that is, the deep water body would be a danger to human health and would be devoid of ecological interest; and
- (c) there would be the potential for contamination of the water body (and so by implication the ground water) and surface water from leachate (contaminated liquid) originating from the former domestic landfill sites

In light of the above consequences, the "do nothing" option is not a suitable alternative.

The "Restore Sooner" Option

It may be considered that the 8 to 10 year period necessary to ensure the restoration as proposed is too long a time for the local communities to be impacted by traffic, noise and dust from the development and the visual impact of the development. However, a shorter timescale implies a reduced volume of restoration material being used which would mean that there would be insufficient material to raise levels about what is the natural recovery level of the groundwater. This would result in an unsatisfactory restoration of the site, possibly only partially restored "dry" whilst the remainder would be allowed to flood or a single water body which, whilst potentially being less deep, would still represent an unsafe and dangerous restoration.

The "Continue Pumping" Option

Another alternative would be to continue pumping in order to artificially depress the groundwater level and so keep the quarry void dry. Pumping in order to depress the groundwater level has been ongoing for many years, enabling the sand to be excavated by "dry working". If this option were to be pursued then the sides and floor of the Quarry would need to be regraded and thereafter planted and seeded. At its deepest, the Quarry is over 40 metres deep. Some of the high, sand faces are unstable and liable to weathering and so would need to be made safe but this would be difficult to achieve. To restore the site as a 40 metre deep "bowl" would create a landform that would not be in keeping with the surrounding landscape.

Conclusion

The proposed infilling of the quarry to levels which are above the recovery level of the groundwater and so create a dry, restored landform which can be landscaped to produce a diverse range of habitats, which can provide informal access for the public and (most importantly) which will prevent the risk of contamination is the optimum alternative. The development as proposed is the best scheme both in terms of safety and sustainability.

SECTION 6

Environmental Impact Assessment

Independent specialist consultants have assessed each of the key environmental issues taking into account those mitigation measures that are embedded within the general design of the proposed development and any further mitigation identified as being required during the Environmental Impact Assessment process.

West Sussex County Council provided guidance as to which environmental issues should be assessed and how to undertake the assessments. This guidance was provided to the company in November 2019 in the form of a “Scoping Opinion”. A copy of the Scoping Opinion is included at Appendix 2 to Volume 1 of the Environmental Statement.

An Environmental Impact Assessment has been undertaken of the proposed development and is communicated in an Environmental Statement in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended).

The purpose of the Environmental Statement is to ensure that,

- potential environmental effects are identified and appropriately assessed,
- appropriate mitigation measures are identified and included to avoid or reduce any impacts, and
- interested parties are given the opportunity to consider and comment on any identified potential issues.

The key environmental assessments that have been undertaken for this proposed development are,

- Landscape and visual impact
- Hydrology, hydrogeology and flood risk
- Ecological impact assessment
- Noise impact assessment
- Air quality assessment (including dust management plan)
- Transport statement
- Archaeological assessment

In addition, the Environmental Statement considers alternatives and cumulative effects along with the impact on the geological designation, climate change, population and human health. The following Section will provide a summary of the outcome of each assessment.

SECTION 7

A summary of the environmental effects

Landscape and visual impact

An assessment has been undertaken to determine whether the proposed development will have a significant effect upon the landscape and visual environment. The assessment considers whether or not the proposed development would be visually acceptable by comparing the current situation, in particular the current approved restoration, to the changes that will occur as a result of the proposed development. The full assessment is included at Appendix A, AA, AB and AC to Volume 2, Part 1 of the Environmental Statement.

The proposed development will extend operations within the quarry for a period of between 8 to 10 years during which time the remaining reserves of sand would be extracted and processed alongside the restoration of the quarry achieved by raising levels using imported material. This extended period of development will mean an extended period of visual impact but the assessment concludes that the minor impacts are outweighed by the benefits to be achieved after restoration is completed.

The proposed restoration is considered to be an improvement to the currently approved scheme. The sheer scale of the lake would be totally at odds with the surrounding landscape character. There is no precedent for such a large body of water viewed at this proximity to the escarpment, outside of the natural floodplain of major rivers such as the River Arun. The scale of the water body would disrupt, both physically and visually, the more subtle association between the wooded, low sandstone ridgeline and surrounding field patterns.

The proposed restoration will provide a gradual beneficial effect on the visual integrity, identity, scenic quality and tranquillity of the South Downs National Park associated with elevated views from the scarp to the south, looking north across the low Weald, (including from the South Downs Way to the south west). The proposed restoration will result in a mosaic of open water, heathland and woodland resulting in an integrated feature which, whilst still reasonably perceived as a restored old mineral site within elevated views, is one having a more naturalistic look within the overall landscape.

The proposed restoration scheme will integrate the site into the Wealden Greensand landscape of both the Storrington Woods and Heaths, which surrounds the site to the north, whilst extending a mosaic of habitat into the Central Scarp Footslopes which occur to the south. This would be more in keeping than the singular large lake proposed under the current, approved scheme.

The proposed restoration further develops and builds on the overall aim of the current approved scheme being *"to create an integrated ecological and amenity resource at the foot of the South Downs National Park escarpment, which integrates the site into the surrounding landscape whilst enhancing sense of place"*.

Hydrology, hydrogeology and flood risk

The currently approved restoration scheme for Rock Common Quarry is no longer considered appropriate. The approved creation of a very deep body of water will not only be dangerous and unsafe but there is significant risk that pollution from the closed domestic refuse waste sites which adjoin the site will pass into the lake and groundwater. An alternative restoration scheme is, therefore, being proposed whereby clean, inert restoration material would be imported to infill the quarry void thereby providing a safe and sustainable restored landform and (importantly) cutting off the potential pollution link with the former landfill sites.

The assessment has included the preparation of a groundwater model to provide an understanding of how groundwater is behaving both within the site and the surrounding area and to see how groundwater flows would evolve during and following the proposed restoration.

Groundwater modelling was undertaken to assess,

- Baseline conditions assuming the continued dewatering of the open unrestored quarry, and
- The restored and infilled quarry, assuming a reduction and eventual cessation of dewatering

The groundwater flows from north to south and is dominated by the current de-watering from within the quarry. The groundwater profile, because of the dewatering, takes on an inverted cone shape within the site. At its lowest point the groundwater is at around 10 metres AOD whilst just outside of the site the groundwater level is around 38/40 metres AOD.

Under the current approved scheme the intention would be to stop de-watering so allowing the groundwater to recover to its natural level of around 40 metres AOD. This would result in a deep (30 metres at the deepest point) body of water which would be dangerous and liable to contamination from the former landfill sites.

The proposal to infill the quarry void in order to raise the restored levels so that they are above the natural, groundwater recovery level will ensure a safe, "dry" restoration.

It is important to note that whilst the assessment considers a "worst case" scenario whereby the ground water will recover to its natural level in practice the current pumping arrangements will continue throughout the infilling process in order to ensure that water flow in Honeybridge Stream is maintained and the diverse ecological interest in the stream is protected. This will be achieved by constructing a well-type feature within the infill from which water can be pumped.

A Flood Risk Assessment has also been prepared in accordance with the National Planning Policy Framework which states that a flood risk assessment should identify and assess the risks of all forms of flooding to and from the development and demonstrate how these flood risks will be managed so that the development remains safe throughout its lifetime, taking climate change into account.

The types of flood risk that have been considered are the risk of flooding from rivers and the sea, surface water flooding and groundwater flooding.

In summary, because the proposed restoration involves raising the level of the final restored landform then the most likely potential risk of flooding from groundwater is not considered to be significant. The finished restoration is not considered to be vulnerable.

In line with Horsham District Council's Strategic Flood Risk Assessment, the proposed development will result in either "water compatible land use" or "informal open space" within that part of the site which is designated Flood Zone 3. As a result the risk posed by flooding from either rivers or surface water is not considered significant. Overall, the flood risk posed to and by the proposed development is deemed acceptable.

The full assessment is included at Appendix B to Volume 2, Part 1 of the Environmental Statement.

Ecological impact assessment

An assessment has been undertaken to determine whether the proposed development will result in significant effects on ecology. The scoping assessment identified the need for a suite of baseline ecological surveys at the site to fully assess the impact of the proposed scheme.

Baseline ecological surveys were undertaken between April and October 2020.

The surveys revealed a breeding bird assemblage largely comprising of common and widespread species but also including peregrine falcon and a breeding colony of sand martin. In addition surveys confirmed the presence of common dormice and reptiles, a rich and diverse terrestrial invertebrate assemblage (including a range of solitary bees and wasps associated with sandy ground) and an active badger sett. The invasive non-native species New Zealand pygmy weed and false acacia were also recorded on the site together with marsh frog.

A range of mitigation measures specific to the proposed restoration scheme are outlined in the assessment that provide details of how protected and notable species or habitats will be either protected through the establishment phase of the restoration scheme or how appropriate replacement habitats or features will be created to produce positive impacts for biodiversity and/or ensure any negative effects are minimised.

The ecologist and landscape architect have worked closely together in order to produce a detailed strategy for the creation of a wide range of habitats and tree/shrub planting to ensure that that the proposed development represents a significant improvement on the currently approved restoration scheme.

The full assessment is included at Appendix C to Volume 2, Part 2 of the Environmental Statement.

Noise impact assessment

A noise impact assessment has been undertaken of the likely noise emissions from the additional plant operating within the site and of changes to road traffic noise levels due to additional HGV movements associated with the importation of the restoration material.

Current policy, legislation, guidance and standards have been followed in the assessments, combined with Local Authority consultation. A baseline noise survey has been undertaken to determine current ambient and background conditions.

The worst case noise emissions from future site activity have been calculated at the most affected residential receptors and results show that the proposal will have no significant impact and the existing noise conditions within the current planning permission for the quarry will continue to be satisfied.

The worst-case traffic noise increases on local roads have been predicted and demonstrate that there will be negligible impact which would not be significant. A cumulative scenario considering the nearby CEMEX site also shows negligible impact.

The full assessment is included at Appendix D to Volume 2, Part 2 of the Environmental Statement.

Air quality assessment and dust management plan

An assessment has been undertaken to determine whether the proposed development will have a significant effect on air quality. The assessment considers the effects of the proposed development on amenity, human health and ecology as a result of dust and fine dust particles suspended in the air.

The air quality assessment has been undertaken in accordance with the methodology set out by the Institute of Air Quality Management and takes into account the current activities already undertaken within the application area and in the locality, the distances to sensitive receptors, the proposed activities and the plant used and any measures that can be taken to reduce dust emissions.

The assessment includes a review of baseline conditions, a minerals dust assessment and a detailed road traffic assessment.

Baseline data indicates that annual NO₂ and PM₁₀ objectives are currently being met at and around the development site and are expected to continue to do so.

The minerals dust assessment identified that the proposed restoration will have, at worst, "negligible" to "moderate adverse" dust deposition effects at nearby sensitive receptors. For human health effects and ecological effects, PM₁₀ emissions from the development are predicted to be negligible and the effect not significant. The overall effect from dust, including the cumulative effects of other relevant emission sources, was found to be "slight adverse" and not significant.

The road traffic assessment demonstrated that NO₂ and PM₁₀ changes from traffic introduced by the proposed restoration, including cumulative effects, would result in negligible impacts on local air quality and the effects would be not significant.

A Dust Management Plan has been prepared in order to mitigate dust impacts on local sensitive receptors which includes implementing good practice dust control measures.

The full assessment is included at Appendix E to Volume 2, Part 2 of the Environmental Statement.

Transport statement

The Transport Statement has been prepared to assess the impact of traffic associated with the proposed development.

Vehicle movements associated with the proposal will either be related to the restoration of the quarry or the continued exportation of sand. Trips associated with the continued sale of processed sand will be unchanged from the existing use of the site. Access to and from the sand processing area will continue to be via the A24/The Hollow junction as required under the current planning permission.

Restoration material will be brought to the site by a combination of 20-tonne tippers and a variety of smaller delivery vehicles which will offload at a new "restoration material reception area" to be constructed on land which use to be part of the former Windmill Landfill site. Deliveries will only be made via the A283/The Hollow junction and using an existing access which previously served the Windmill Landfill site.

The total number of daily movements associated with the importation of restoration material is assessed to be around 300 daily 2-way movements. Junction modelling has demonstrated that adopting a worst case, stringent assessment approach, the A283/The Hollow junction would operate well within capacity, with appropriate visibility available in both directions.

The Transport Statement concludes that the development proposals are in accordance with local and national policy and that the proposed development will not result in severe impact to traffic flow or cause issues at the key junctions.

The full assessment is included at Appendix F to Volume 2, Part 2 of the Environmental Statement.

Archaeological assessment and heritage statement

An assessment has been undertaken to determine whether the proposed development will result in any significant effects on archaeology or other heritage assets such as Scheduled Monuments and Listed Buildings.

Sand extraction has been taking place within the site area since the early 20th century, consequently, any archaeological activity and finds which may have been situated within the already worked areas would have long since been removed. Consideration of likely archaeological potential is, therefore, necessarily hypothetical.

Archaeological evaluation in 1995 and excavation in 2001 on Rock Common to the north-east of the current sand processing area identified a concentration of Mesolithic flint working activity. Whilst there may have been a potential for similar such archaeological activity and finds to be made within the application area this is unknown.

Ground surface clearance in Old Furze Field and in Sand Corner Lane Field prior to sand extraction within the main quarry located finds of Roman pottery, a 4th century AD coin and a single cremation. It is considered likely that other contemporary archaeological activity and finds from this period may also have present but would have been removed by subsequent sand extraction.

Analysis of historic maps undertaken as part of this assessment has identified evidence of former post-medieval enclosure boundaries within the area of the main quarry. The site of a post-medieval brick and tile works was situated within what is now the sand processing area. Nearly all of this identified post-medieval archaeological activity has been removed because of sand extraction and associated operations taking place within these areas.

There are a number of both designated and non-designated heritage assets from the post-medieval period situated in close proximity to the application area. However, it is considered that the proposed development will result in nil impact on any of the recorded listed or locally significant structures present within the area. It is also considered that there will be no significant modification in terms of setting/views to and from any listed building or building recorded as being of local architectural or historic interest as in all cases all of these assets cannot be directly viewed from the proposed development due to heavy, dense and mature intervening tree and hedgerow cover.

A nearby scheduled monument, a bowl barrow on Chanctonbury Hill, is situated some 1.5km to the south of the site boundary. It is considered that there will be no significant impact upon either the setting and nil impact to the fabric of this nationally important designated heritage asset from the proposed development. The proposed restoration is likely only to have a beneficial effect as regards views from the monument.

The full assessment is included at Appendix G to Volume 2, Part 2 of the Environmental Statement.

Geology, climate change, population and human health

Geology

Rock Common Quarry is a designated "Regionally Important Geological Site" (RIGS). Essentially the quarrying of the sand has provided cliff faces up to 40 metres in height which give large, clean sections through the Folkestone Formation sands, sections which but for the extraction would not be available to view. The site is also important for palaeoenvironmental studies.

The proposed development will result in the quarry void being filled and this will cover the high sand faces that are currently found in the quarry and which form the feature of interest in the RIGS designation. However, if all of the benefits of varying the restoration are to be gained (providing a safe and sustainable restored landform and the prevention of the risk of water contamination) then the retention of the high quarry faces will not be possible.

It is worth noting that the currently approved restoration which provides for the quarry void to flood would also cover the high sand faces which are the RIGS feature of interest.

The importance of the RIGS is recognised not only as a geological feature but also in terms of its educational value. It is proposed, therefore, to mitigate the loss of the sand faces by taking steps to ensure that the geology of the currently exposed high faces is properly recorded prior to infilling. The British Geological Survey and the West Sussex Geological Society will be invited to survey, photograph and examine the exposed faces in advance of these being covered during the restoration of the site.

Climate change

Climate change has become a key consideration and an important part of development proposals and of the decision making process. The Environmental Statement identifies the sources of greenhouse gas emissions associated with the development.

The applicants are conscious of the need to ensure that the impact of the development on climate change is minimised. The Dudman Group of Companies is actively looking at the options for using both electric powered vehicles and hydrogen powered plant but the development of non-diesel alternatives is in its infancy.

Additionally, discussions are on-going with the former operator of the now closed landfill sites regarding the use of energy generated from the landfill gas which is still being produced.

The proposed development will have a negative effect on climate change. Whilst the negative effect will be tiny when compared with worldwide industrial emissions nevertheless the development will likely create more carbon emissions than it removes from the atmosphere, the significant majority of which are associated with vehicles and plant and machinery. The emissions will be difficult to reduce until such time as alternative "green powered" options are readily available.

By way of mitigation, the applicants are proposing to include areas of new woodland planting as part of the landscaping of the final landform as a means of offsetting some of the impact.

Population and human health

The impact on population and health are considered in those assessments which deal specifically with issues that can have a direct impact on the amenity and health of local communities, for example noise, air quality, dust management, visual amenity and traffic.

As regards the general safety of the population then the Environmental Statement makes reference to the comprehensive accident and disaster procedures that are followed by Dudman (Rock Common) Limited.

Finally, the proposed restoration has been, in part, driven by the need to ensure that the final landform will be safe. The currently approved scheme is not considered a safe restoration as a deep water body within the quarry void can be extremely dangerous and indeed life threatening should members of the local community be tempted to swim or make use of it for other water-based activities.

SECTION 8

Summary

This Non-Technical Summary forms part of the planning application submitted to West Sussex County Council to allow the continued extraction of sand from Rock Common Quarry and to vary the currently approved restoration of the quarry so as to provide a "dry" restored landform that will be safe and sustainable and will deliver enhanced opportunities for creating a wide range of biodiverse habitats as well as providing informal public access.

All key environmental considerations have been thoroughly assessed by specialist consultants in order to ensure that the proposal complies with all national and local policies and guidance. The specialists had input into the overall design of the development to ensure that where there was the potential for adverse environmental impacts then these could be "designed out" of the development from the start. Where impacts cannot be avoided, then appropriate mitigation has been proposed. Such measures will be fully implemented in order to minimise any impact.

The application includes a thorough review of all relevant planning policies to ensure that the proposed development complies with, and satisfies, planning policy at both national and local level. The proposed development is not contrary to planning policy.

The next stage in the process will involve circulating the application for consultation to a wide range of statutory consultees and other interested parties. Upon receipt of responses and comments the applicants will, as necessary, provide such additional information as might reasonably be required in order to supplement the initial application and support the proposed development so enabling the County Council to properly assess the proposal.

REVISED	DATE	DESCRIPTION

Legend:
 Application Area



TERRESTRIA LIMITED

TERRESTRIA LIMITED
 15, BUCKINGHAM SQUARE
 LONDON, W1A 0AA
 Tel: 020 7429 2000
 Fax: 020 7429 2001
 Email: info@terrestria.co.uk
 Website: www.terrestria.co.uk

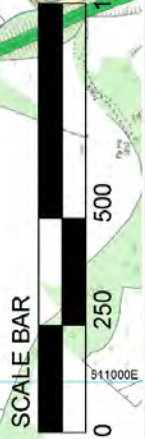
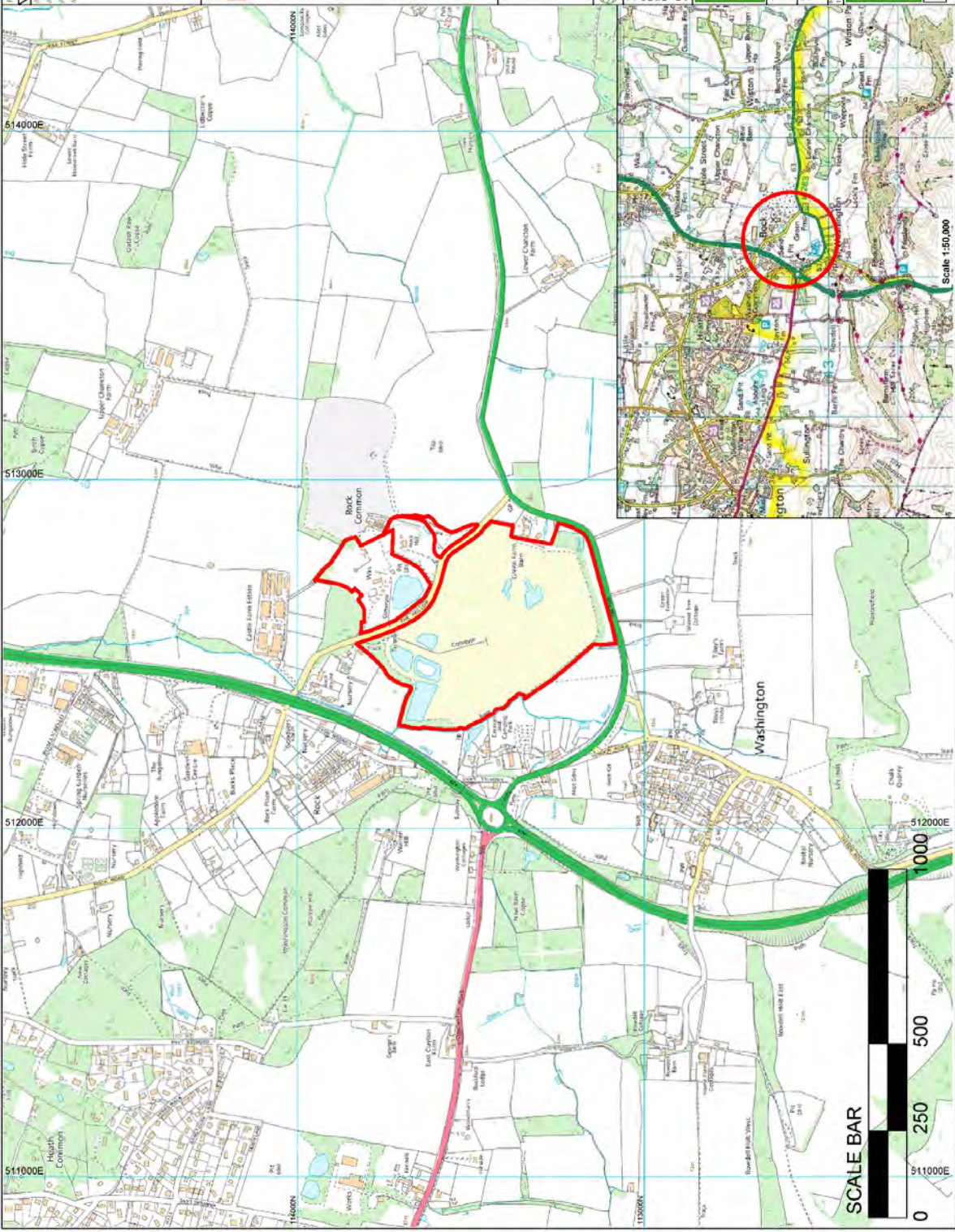
BUDMAN ROCK COMMON LIMITED

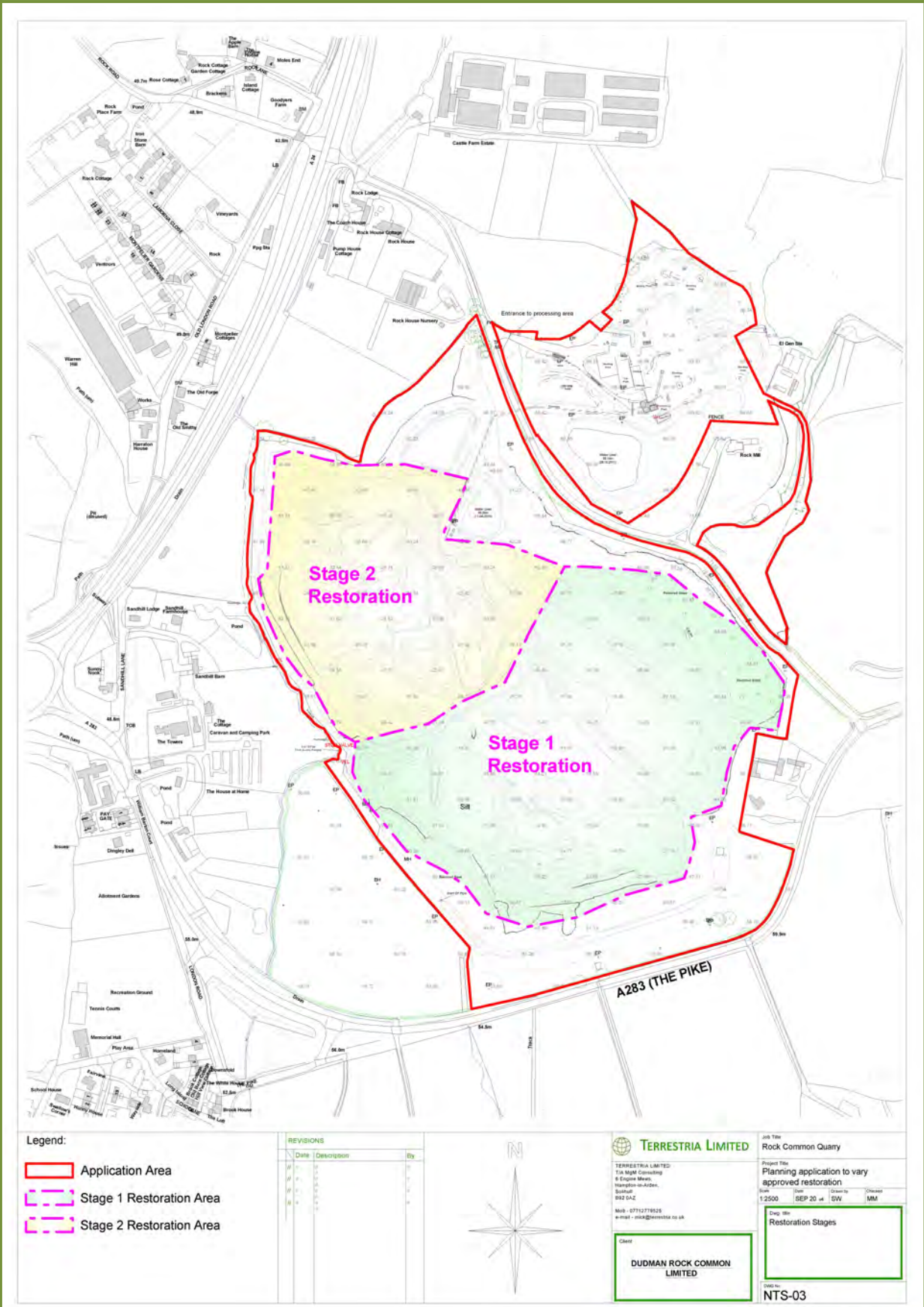
1501 THE
ROCK COMMON QUARRY

Planning application to vary
 approved association

1:15,000 Scale
 1:50,000 Scale
 Location plan

NTS-02





Legend:

- Application Area
- Stage 1 Restoration Area
- Stage 2 Restoration Area

REVISIONS		
Date	Description	By



TERRESTRIA LIMITED
 Project File
 Planning application to vary approved restoration
 1:2500 SEP 20 at SW MM
 Drawn by
 Restoration Stages

Client
DUDMAN ROCK COMMON LIMITED

JOB Title
 Rock Common Quarry

Client
DUDMAN ROCK COMMON LIMITED

Drawn by
NTS-03

