

RESTORATION PRINCIPLES

The plan shows the proposals for the northern part of the site the subject of IDO permission TP 2052. The areas of the site south of Mill Lane are the subject of permissions TM 82/1138 and TM/94/579 which supercede TP2052.

The principle areas of restoration are the central part of Isles Quarry East, the central part of Isles Quarry West and the Hassock recovery area immediatly north of Mill Lane. All existing and established trees will be retained where possible.

The restoration area at Isles Quarry East is 22,900m² and will be restored by the importation of materials to the levels shown. The soils will be imported over the bridge across Thong Lane and will be subject to screening and stockpiling as necessary. The bridge will be removed after completion of restoration. Restoration will commence at the northern corner and will proceed in a clockwise direction. The restored area will be used for informal amenity with areas of wild flora seeding and groups of tree planting designed to provide wildlife interest. Public access to this area will be made available following completion of restoration in consultation with and subject to the agreement of the planning authority

The restoration area at Isles Quarry West covers 58,160m² and will be restored to a landform consistent with the local topography by the importation of inert materials which will be subject to screening and stockpiling as necessary. Restoration will commence initially at the western perimeter to provide visual screening in distant views from the west and will then proceed from the southern end in a northerly direction. The restored area will comprise two agricultural fields. Tree planting will be undertaken at the western edge of the restored area to provide a buffer between areas of agricultural use and areas of nature conservation interest. Belts of trees will be planted around the other field boundaries to provide definition of the new landscape structure.

The restoration of the Hassock recovery area covers 16,300m² north of Mill Lane part of which is in the Site of Nature Conservation Importance. The Hassock recovery area together with the area the subject of permission reference TM/95/1698 for the electricity substation will be the subject of an ecological survey in Spring 1997. The results of the survey will guide the approach to development and restoration.

The restoration of the sites occupied by the electricity substation and the gas utilisation compound, the subject of permission, references TM/95/1698 and TM/94/434 will be intergrated with the restoration of the remaining areas the subject of the IDO. The detailed scheme will be based on a review of the condition and status of the restoration towards the end of the life of the plant and will be prepared in advance of the removal of the plant. The access road to the gas utilisation compound will be retained until the area is restored after which the function of the road will be reviewed to determine the need for and the appropriate measures of restoration.

SOILS

The site will be profiled to within 1m of final levels after which the site will be surveyed and level boards will be set out. To minimise compaction and damage of soils the top one metre of the profile will be placed by loose tipping and will be spread using an excavator or lightweight dazer when in a reasonably dry and friable condition. Routing of vehicles across the site will be designed to minimise travel over the top 1m of soils. Soils will be stockpiled on site in the areas shown on the plan in low domed mounds not exceeding 5m high. Vehicles will not travel and soils will not be placed within 1m of the trunks of trees or level with the area of the canopy whichever is the greater. The stand-off zone will be marked by a protective ribbon the location of which will be agreed onsite with the planning authority.

SPECIFICATION FOR RESTORATION TO AGRICULTURE

The top 250mm of soil in the agricultural areas will be formed using imported soil forming materials free of large stones or rocks. The soils will be stockpiled on site and will be moved and placed when in a reasonably dry and friable condition during dry weather. The soils will comply with the minimum requirements of BS3882 for economy grade topsoil.

In the areas of vehicle routing and where soils are compacted the compaction will be relieved by ripping at a depth of at least 0.5m in 2 directions when soils are in a friable condition. A disc harrow or spring tine cultivator will be used to break up clods of topsoil if this is not satisfactorily achieved during placement or grading of the soil. Further cultivations

In the areas of vehicle routing and where soils are compacted the compaction will be relieved by ripping at a depth of at least 0.5m in 2 directions when soils are in a friable condition. A disc harrow or spring tine cultivator will be used to break up clods of topsoil if this is not satisfactorily achieved during placement or grading of the soil. Further cultivations will be carried out as necessary to provide a seed bed with fine tilth.

Following placement of the topsoil testing will be carried out to determine the fertiliser requirements and the need for the addition of organic ameliorants. The use and choice of organic ameliorants if necessary will be agreed with the planning authority. After cultivation is completed on each restored area and during appropriate weather and ground conditions a grass and clover seed mix will be sown and the necessary quantities of fertiliser will be applied simultaneously from a combine drill or similar machine or as a separate operation using a broadcaster. Weed growth will be treated as necessary prior to sowing the crop. To level and consolidate the seed bed and to mix the applied seed and fertiliser two passes at right angles will be made with a chain harrow. If it is necessary to consolidate further the soil surface it will be rolled.

Following emergence of the crop the area will be checked visually and areas of poor crop establishment will be resown. Provided that suitable conditions prevail reseedling will be carried out during the same season.

During the first spring the crop will be rolled to reconsolidate the soil. An application of fertiliser will be made during April or May based on a soil analysis. The nitrogen content of the application will take account of the clover in the grassland. An analysis of the soil to establish the soil index will be used to determine the phosphate and potash demands. Either a hay cut will be taken at the appropriate stage of growth or if suitable weather conditions prevail light grazing will be arranged. An autumn dressing of fertiliser will be applied if necessary.

A spring application of fertiliser will be applied in subsequent years during the aftercare period. Hay crops will be taken or light grazing arranged and further applications of fertiliser will be made each autumn as necessary.

It is unlikely that agricultural drainage will be necessary at the site. In the event of poor drainage the restored ground will be subsoiled. In the event of ponding of surface water the surface will be regraded.

When the grass ley can support stock stockproof fencing will be installed around restored areas of the site to facilitate grazing. Fencing will comprise timber posts at 2m to 3m spacings, galvanised woven wire stockproof fencing and a single strand of barbed wire across the top.

SPECIFICATION FOR RESTORATION OF AMENITY AREAS

Amenity wildflower grassland will be established on soils imported to the site. Cultivations will be carried out if necessary and practicable to provide a suitable soil structure and seedbed for the type of seeding proposed.

The seed mix used in areas of native grassland and wild flora seeding will be agreed with the planning authority based on the nature of imported soils and local ecology. The suppliers instructions for sowing and establishment will be followed.

The detailed aftercare of amenity and wildflower areas will be in accordance with the seed suppliers recommendations but is likely that it will comprise subject to soil fertility a light addition of fertiliser in the spring followed by a spring and late summer haycut with the aftermath removed. Isles Quarry East will be managed in the longterm to maintain and develop informal amenity with wildlife interest

PLANTING

Plantings will comprise two year old whips which will be notch planted at approximately 2m centres. Shrub and tree species will be planted between November and March while plants are dormant. Wherever practical planting will be undertaken before the end of December.

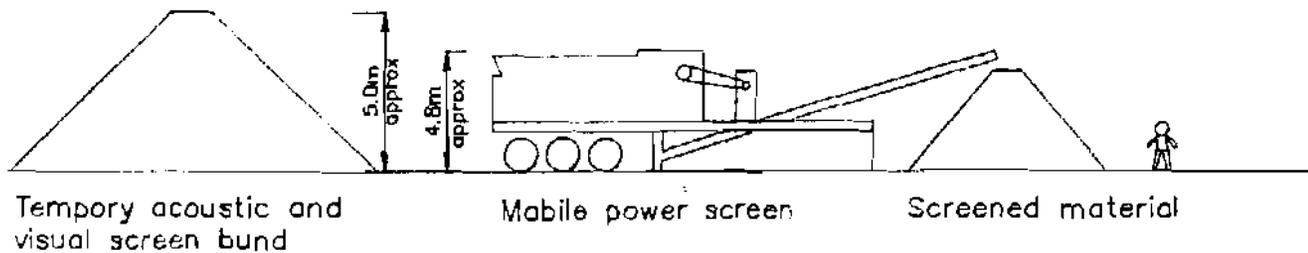
Plantings will be firmed in on planting. Tree species with lateral shoots will be pruned back to a good bud close to the main stem and shrub species trimmed back in accordance with good horticultural practice to aid establishment by creating an optimum root to shoot ratio. A measured amount of controlled release fertiliser such as Osmacote or similar and approved will be placed by the roots of each plant at the time of planting to aid early establishment and growth. All bare root plants will be root dipped in water retaining polymer gel such as Broadleaf P4 or similar and approved prior to planting in order to minimise moisture stress resulting from transplanting. Protective spiral plastic rabbit guards will be placed around each planting to prevent damage by animals.

The plantings will be inspected in the summer following planting. Dead or dying plants will be replaced during the planting season with plants of similar species and size. Regular inspections will be undertaken of the integrity of the protective guards around the plants and damaged guards will be repaired or replaced. Plants which have worked loose will be refirmed and a chemical herbicide to control weed growth will be applied carefully at a frequency and rate specified by the manufacturer.

The specification for the planting mix for trees and shrubs will be based on the Forestry Commission publication N.112 Creating New Native Woodlands and the National Vegetation Classification Woodland Type WB.

All planting will be the subject of a five year aftercare period. Weed competition in an area of 1m diameter around each new plant will be suppressed using translocated herbicide applied according to the manufacturer's instructions. During this time all plants that die, are badly diseased or damaged for any reason or are subject to vandalism will be replaced to the original specification. Natural regeneration areas and areas of scrub growth will be allowed to develop naturally through serial succession during the five year aftercare period and beyond.

Precise details of the setting out of planting areas will be agreed on site with the planning authority.



Typical arrangement of temporary mobile screening plant and temporary visual and acoustic bund (Not to scale)

Species	Stock	Number
Ash (<i>Fraxinus excelsior</i>)	60-90cm high bare root stock	10%
Blackthorn (<i>Prunus spinosa</i>)	60-90cm high bare root stock	5%
Dogwood (<i>Cornus sanguinea</i>)	60-90cm high bare root stock	5%
Elder (<i>Sambucus nigra</i>)	60-90cm high bare root stock	5%
Field Maple (<i>Acer campestre</i>)	60-90cm high bare root stock	10%
Gean (<i>Prunus avium</i>)	60-90cm high bare root stock	5%
Goat Willow (<i>Salix caprea</i>)	60-90cm high bare root stock	5%
Hazel (<i>Corylus avellana</i>)	60-90cm high bare root stock	10%
Hawthorn (<i>Crataegus monogyna</i>)	60-90cm high bare root stock	10%
Pedunculate Oak (<i>Quercus robur</i>)	60-90cm high bare root stock	10%
Rowan (<i>Sorbus aucuparia</i>)	60-90cm high bare root stock	5%
Spindle (<i>Euanymus europaeus</i>)	60-90cm high bare root stock	5%
Silver Birch (<i>Betula pendula</i>)	60-90cm high bare root stock	5%
Wayfaring Tree (<i>Viburnum lantana</i>)	60-90cm high bare root stock	5%
Wild Rose (<i>Rosa canina</i>)	60-90cm high bare root stock	5%

SPECIFICATION FOR RESTORATION TO AGRICULTURE

The top 250mm of soil in the agricultural areas will be formed using imported soil forming materials free of large stones or ricks. The soils will be stockpiled on site and will be moved