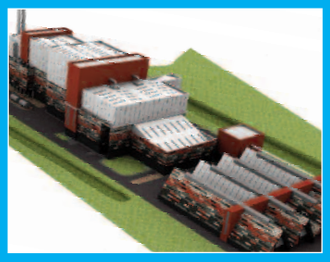

design and access statement

Sustainable Energy Plant, Kemsley Paper Mill, Sittingbourne, Kent.

'DEVELOPMENT OF A SUSTAINABLE ENERGY PLANT TO SERVE KEMSLEY PAPER MILL, COMPRISING WASTE FUEL RECEPTION, MOVING GRATE TECHNOLOGY, POWER GENERATION AND EXPORT FACILITY, AIR COOLED CONDENSERS, TRANSFORMER, BOTTOM ASH FACILITY, OFFICE ACCOMMODATION, VEHICLE PARKING, LANDSCAPING, DRAINAGE AND ACCESS.'

MARCH 2010

E.ON Energy from Waste

ST REGIS

DEVELOPMENT OF A SUSTAINABLE ENERGY PLANT.

KEMSLEY PAPER MILL, SITTINGBOURNE, KENT

ST REGIS PAPER COMPANY LIMITED & E.ON ENERGY FROM WASTE UK LIMITED

Design and Access Statement

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1 Introduction

1.1 Overview and Background to the Proposal

Need for the Sustainable Energy Plant

1.1.1 The energy requirements at Kemsley paper mill are currently met by the on site Combined Heat and Power (CHP) plant which is fuelled by natural gas, a fossil fuel based energy source and by a Waste to Energy plant which burns rejects from the paper making process. Both plants are owned and operated by E.ON. The mill is an intensive user of energy, consuming 55 MWe per hour of electricity and 150 MWth per hour of steam. The mill's energy cost is circa £50m per annum which represents around 25% of its turnover. The pricing of natural gas has been extremely volatile in the UK in recent years which, with the European market less de-regulated than the UK, has put Kemsley mill at a disadvantage to its European competitors. The UK paper industry as a whole has suffered of late from high and volatile energy prices and 22 paper mills have closed in the UK over the last 5 years, including three in Kent. Further, with the UK becoming more reliant upon imported natural gas, there is concern about the future security of supply of natural gas. Consequently, the price of natural gas is forecast to increase over the long term and will continue to be volatile.

1.1.2 Although natural gas will remain as a significant source of energy for the mill through the CHP plant (combined heat and power plant), there is a clear strategic need for Kemsley mill to diversify its fuel source and to thereby reduce its reliance on natural gas. The Sustainable Energy Plant (SEP) proposed by St. Regis Paper Mill Company Limited (St Regis) and E.ON Energy from Waste UK Limited (Eon Energy from Waste) will reduce its dependence on fossil fuel, improve the carbon footprint of Kemsley mill, ensure a greater degree of energy supply security and improve the competitive position of the mill.

1.1.3 In summary, need for the proposed SEP is demonstrated in terms of:

- Securing a sufficient and reliable energy source for a highly intensive energy user
- Significant contribution to the Regional Renewable Energy Targets
- Diversification from fossil fuel to low carbon energy source
- Utilising waste that would otherwise be land filled managing waste through recovery in the
- Waste hierarchy

The Applicants

1.1.4 The co - applicants are St Regis Paper Company Limited (St Regis) and E.ON Energy from Waste UK Limited (E.ON Energy from Waste).

1.1.5 St Regis is a wholly owned subsidiary of DS Smith Plc. Kemsley paper mill is owned and operated by St Regis, and produces circa 900,000 tonnes of recycled paper and recycled de-inked, white pulp. Every year, Kemsley paper mill takes around 1.1 million tonnes of waste paper and manufactures it into a range of high quality recycled papers and pulp.

1.1.6 The company's infrastructure of four paper mills, a recycling operation (Severnside Recycling), and a Head Office generates a turnover of more than £350 million per annum. Sales are predominantly within the UK market place; however it also has a significant export business. Overall St Regis employs approximately 1,700 people of whom 645 work at Kemsley; there are a further 205 third party contractors working full-time at Kemsley bringing the number of people working at the site to 800.

1.1.7 St. Regis' annual output of recycled paper and pulp products from its four paper mills is in the region of 1.2 million tonnes, making it by far the largest papermaker in the UK. The annual input of recovered waste paper is around 1.4 million tonnes, which means it is one of the biggest recycling operations in Europe. The waste paper is supplied predominantly by Severnside Recycling, which recovers circa 1.8m tonnes annually of waste paper grades in the UK.

1.1.8 Its corrugated grades are supplied to the packaging industry for conversion into boxes. In addition its specialist papers go into many different industries including construction, tissues sector, stationery and education. All of its products are 100% recycled and 100% recyclable.

1.1.9 E.ON Energy from Waste, the project co developer with St Regis, is a leading power and gas company, employing around 17,000 people in the UK and over 93,000 people worldwide. It generates and distributes electricity, and retails power and gas.

1.1.10 E.ON Energy from Waste in the UK is a market leader in combined heat and power, providing its customers with around 600MW of electricity and more than 1,000MW of heat at 13 sites across the country. This includes its existing gas-fired CHP plant at Kemsley Mill.

1.1.11 E.ON Energy from Waste has a strong track record in developing, building and operating Sustainable Energy Plants. The company has a portfolio of plants similar to the one proposed at Kemsley in operation or under construction in Germany, Holland and Luxembourg.

1.1.12 E.ON Energy from Waste's plants operate to the highest technical and environmental standards and in Germany have the capacity to handle nearly five million tonnes of waste per year and to produce 2,600GWh of electricity as well as 2,300GWh of heat.

1.2 This Design and Access Statement

Purpose

1.2.1 The following Design and Access Statement (DAS) is submitted in support of an application by St. Regis Paper Co Ltd and E.ON Energy from Waste to develop a Sustainable Energy Plant at the Kemsley Paper Mill, Sittingbourne.

1.2.2 The application is accompanied by an Environmental Statement which addresses the technical aspects of the assessment process.

1.2.3 The purpose of this DAS is to draw out the essence of the technical assessment and assist the local authority in making an informed and balanced decision on the application proposals. The basis of need for a DAS is that specified in Section 42 of the Planning and Compulsory Purchase Act 2004 and Article 4C of the Town and Country Planning (General Development Procedure)(Amendment)(England) Order 2006.

Format

1.2.4 The format of the DAS follows best practice guidance as set out in the CABE 2006 Guidance 'Design and Access Statements – How to write, read and use them' and the content of Article 4C.

1.2.5 The following elements are explained within this document:

Assessment and Evaluation

1.2.6 Assesses the site and its context with regard to its physical, social, environmental, economic and planning policy context.

1.2.7 This section also identifies key opportunities and constraints, and outlines our vision and how it responds to the site and its context.

Design Evolution, Consultation and Involvement

1.2.8 Establishes the design strategy which has evolved from the assessment and evaluation of the site and describes the vision for the proposed development.

1.2.9 The consultation and community engagement process will also be summarised.

Design Response

1.2.10 Provides design information encompassing the following areas:

- **Use and Amount** - Explains the land uses proposed within the site and the quantum of development.
- **Layout** - Describes the different components of the proposed development, their arrangement and relationship between them.
- **Scale** - Details the design parameters influencing scale, including height, width and length of new buildings and other related infrastructure.
- **Appearance** - Outlines the form and visual appearance of the buildings, including reference to materials.
- **Landscape** - Describes the character and design of the landscape proposals.
- **Access** - Establishes the approach to access, explaining movement into and through the site.
- **Sustainability** - Sets out the aims and approach taken to achieve sustainable design

1.2.11 This Design and Access Statement should be read in conjunction with the following drawings:

16315_P_0051 Rev - Existing Site Location Plan (Figure 1.2)

16315_P_0060 Rev B Proposed Site Location Plan (Figure 4.1)

16315_P_0065 Rev B Main Car Park and Pedestrian Walkway (Figure 4.23)

16315_P_0100 Rev E Proposed Site Layout (coloured) (Figure 4.3)

16315_P_0105 Rev D Proposed Building Layout (coloured) (Figure 4.2)

16315_P_0106 Rev B Proposed Boundary Treatment (Figure 4.22)

16315_P_0110 Rev F Proposed South East Elevation (coloured) (Figure 4.4)

16315_P_0111 Rev E Proposed North East Elevation (coloured) (Figure 4.5)

16315_P_0112 Rev F Proposed South West Elevation (coloured) (Figure 4.6)

16315_P_0113 Rev E Proposed North West Elevation (coloured) (Figure 4.7)

16315_P_0121 Rev B Proposed URC Elevations (Figure 4.13)

16315_P_0122 Rev B Proposed UEW Elevations (Figure 4.14)

16315_P_0123 Rev B Proposed UEU Elevations (Figure 4.15)

16315_P_0125 Rev B Proposed Main Building South East Elevation (Figure 4.8)

16315_P_0126 Rev B Proposed Main Building North East Elevation (Figure 4.9)

16315_P_0127 Rev B Proposed Main Building Northern South West (Figure 4.10)

16315_P_0128 Rev B Proposed Main Building North West Elevation (Figure 4.11)

16315_P_0150 Rev D Proposed 3D Visualisation 1 of 8 (Figure 4.29)

16315_P_0151 Rev D Proposed 3D Visualisation 2 of 8 (Figure 4.30)

16315_P_0152 Rev D Proposed 3D Visualisation 3 of 8 (Figure 4.31)

16315_P_0153 Rev D Proposed 3D Visualisation 4 of 8 (Figure 4.32)

16315_P_0154 Rev D Proposed 3D Visualisation 5 of 8 (Figure 4.33)

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16315_P_0156 Rev D Proposed 3D Visualisation 7 of 8 (Figure 4.35)

16315_P_0157 Rev D Proposed 3D Visualisation 8 of 8 (Figure 4.36)

16315_P_0170 Rev B Proposed UBA Floor Plans (Figure 4.16)

16315_P_0171 Rev B Proposed UYA Floor Plans (Figure 4.18)

16315_P_0172 Rev -	Proposed Gatehouse Floor Plan (Figure 4.20)
16315_P_0190 Rev A	Contextual Analysis (1 of 2)
16315_P_0191 Rev A	Contextual Analysis (2 of 2)
16315_P_0195 Rev -	Contextual Site Section
16315_200 Rev D	Site Sections (Figure 4.24)
16315_301 Rev D	Proposed Drainage Layout (Figure 4.25)
16315_600 Rev B	Proposed Levels/Site Plan (Figure 4.26)

1.3 Policy and Guidance

Policy Framework

1.3.1 The Government is committed to a plan led system, with the development plan forming the basis of all planning decisions. Accordingly, policy and plans play an important role in determining any planning application. It is normal practice therefore to include an assessment of policy considerations within the supporting documentation for the planning application.

1.3.2 Planning policies are developed at national, regional and local levels, structured upon the hierarchical policy framework of:

- European legislation and policy;
- National Planning Policy and Waste Strategy
- Regional Spatial Strategies
- County and Local Planning Guidance

1.3.3 Most legislation in the United Kingdom which concerns renewable energy and waste management development derives from European Directives. National policies set out in a series of Planning Policy Guidance notes (PPGs) and Planning Policy Statements (PPSs), provide a framework within which planning authorities are required to draw up their development plans and take decisions on individual applications. The Statutory Development Plan comprises: the South East Plan, the Kent Waste Local Plan, and the Swale Borough Local Plan. The Development plans are examined by the Secretary of State to ensure consistency with national and regional guidance. Planning Policy Statement 1: Creating

Sustainable Communities and Section 38 of the Planning Compulsory Purchase Act 2004 reaffirms the Government's commitment to the plan led system.

1.3.4 Under this approach applications for planning permission are determined in accordance with the approved development plan, unless material considerations indicate otherwise. Further, account is to be taken of whether the proposed development would cause demonstrable harm to other interests of acknowledged importance.

1.3.5 The proposal is compliant with all relevant planning policies at the national, regional and local level. It has been demonstrated through wide ranging studies and assessments that the proposal can take place in accordance with the development plan without demonstrable harm to interests of acknowledged importance.

1.3.6 It is demonstrated that the proposed development is in accordance with the statutory development plan, having regard where appropriate to the wider planning policy framework. The proposal is well located, will meet an identified need, be beneficial, sustainable, and is in accordance with the development plan.

2 Assessment and Evaluation

Figure 1.1: Aerial photo showing site location and context

2.1 The Proposal Site

Location

2.1.1 The proposed site is located to the north of Sittingbourne on the Sittingbourne Relief Road Swale Way, Kemsley. The site is neighboured by Kemsley Paper Mill to the west, Ridham Avenue to the south, Barge Way to the north and The River Swale to the east (See Figure 2.1).

Existing Land Use and Character

2.1.2 The development site consists of approximately 7ha of largely disused or previously used land and small areas of storage land at Kemsley Marshes on the northern edge of Sittingbourne. The site lies on the shores of The River Swale, the body of water which separates north Kent from the Isle of Sheppey. The majority of the site is currently disused. The southern corner of the site contains a small area of storage for materials and vehicles with associated access tracks. There are no public rights of way which cross the site.

2.1.3 There are no designated landscapes which lie within the site area.

2.1.4 The proposal site forms part of the Sittingbourne urban area which lies outside any of the landscape character areas identified within the Swale Borough Councils assessment. Therefore the settlement which lies within the study area has been divided into 2 separate townscape character areas which display distinct characteristics, Sittingbourne Industrial/Commercial and Sittingbourne Residential.

2.1.5 The following key characteristics of the townscape areas can be defined as follows;

- Large scale industrial development in flat topography adjoining The Swale.
- Complex skyline of built forms contrasting with strong vertical elements of stacks, pylons and cranes.
- Active, at times visually chaotic, townscape due to operations and construction activities.
- Noisy environment with HGV traffic and noxious odours.
- Smaller scale light industrial and commercial development adjoining Milton Creek.
- Rapidly changing and expanding character area with remnants of past industrial heritage.
- Extensive urban fringe having striking contrast with the adjoining natural landscape of The Swale.
- Linear tree belts and screens and blocks of scrub and woodland surrounding development.

- Extensively lit during night time.

2.1.6 The site lies within Historic Landscape Character Area 17: Northern Horticultural Belt. Within this area the site lies within the Historic Landscape Type 12.4: Large Scale Industry. The character area is primarily defined by its horticultural activities, in particular fruit orchards. However, the industrial nature of the site is uncharacteristic of the overall character area.

2.1.7 The site is typical of the previously developed or disused fragments of land within the urban fringes of the extensive industrial district of Sittingbourne. Disused open land rapidly becomes colonised by ruderal weeds and scrubby vegetation. These areas of land, together with built development are often of poor visual quality. The proposal site has some sensitivity to change through redevelopment of this scale and nature, however an opportunity exists to make improvements to the townscape character of Sittingbourne's industrial district.

Land Form, Visibility and Vegetation

2.1.8 The proposed site and the majority of its surroundings are relatively flat and lie at approximately 5m (Above Ordnance Datum) AOD within the coastal plain of The River Swale estuary. The site supports a mixed range of ruderal weeds and woody vegetation which have colonised most of this disused location. Dog rose (Rosa canaina), elder (Sambucus nigra), hawthorn (Crataegus monogyna) and silver birch (Betula pendula) up to approximately 3m high are scattered sporadically throughout the site.

2.1.9 The existing zone of theoretical visibility (ZTV) of the proposal site in the immediate vicinity is contained to the east, south and west by either landform or large scale industry. To the north the ZTV extends over neighbouring disused land and the corridor of The River Swale, through which the Saxon Shore Way passes. To the north east the ZTV is more extensive, crossing The River Swale to the gently rising land of Elmley on the Isle of Sheppey. Areas of high land on the Isle of Sheppey and the bridge crossings provide elevated vantage points covered by isolated areas of the ZTV.

Ecology

2.1.10 A habitat and protected species scoping survey of the proposed development site for the SEP was undertaken in 2007 and updated in 2009 to inform the ecological appraisal and impact assessment. Further surveys for invertebrates, reptiles, Water Vole and breeding birds, as well as inter-tidal birds on the nearby Swale and Milton Creek, were undertaken during 2009. The site was found to be of relatively low ecological value, consisting mainly of brownfield habitat with recently-left spoil, bare ground and areas of tall ruderal with scrub. Some small

areas of species-rich grassland were also present. The relatively low ecological value was confirmed by a desk study that revealed that the site has no recognised wildlife value. The study did identify a number of statutory and non-statutory designated sites within 10 km of the proposed development location, including the Swale and Medway Estuary and Marshes Special Protection Areas (SPA), Ramsar and Sites of Special Scientific Interest (SSSI). A review of relevant legislation and policy pertaining to the site was also undertaken. The development complies with all relevant legislation relating to ecology and biodiversity.

2.1.11 No impacts are predicted on any of the features for which the SPAs/SSSIs are designated as a result of the development, during either construction or operation. In order to further ensure that no disturbance impacts on SPA birds occur, soft-start piling (where power is ramped up over a minimum of 30 minutes) to avoid the sudden, potentially startling noise often associated with piling will be used over the winter period.

2.1.12 Around 2.1 ha of reptile, invertebrate and breeding bird habitat will be lost from the site during construction. To mitigate this, 2.36 ha of species-rich rough grassland and scrub will be planted/enhanced to provide suitable habitat to be used as a receptor site for reptiles and increase the available habitat for breeding bird/invertebrates. Topsoil from the areas of species-rich grassland to be lost during the development will be used within site landscaping to ensure that the seed bank is preserved.

2.1.13 Three species of bird listed on Schedule 1 of the Wildlife and Countryside Act (1981) were found to be breeding in a large area of reed bed 100m to the north of the SEP Application Site. The breeding territories of one of these species (Cetti's Warbler) would potentially be within the zone where noise disturbance during construction (particularly from piling) may cause abandonment of nests etc. To avoid this, during the Cetti's Warbler breeding period (April-August), piling will be avoided or achieved via vibro-piling methods that do not produce sudden, startling noises. Surface water management on site will be via two large attenuation ponds, both of which will have significant areas of Common Reed that will provide an increase in habitat for the species currently found breeding within the reed bed.

2.1.14 The attenuation ponds will also be designed to provide significant reptile and invertebrate habitat. The overall residual impact of the SEP development on ecology would be neutral.

Archaeology and Cultural Heritage

2.1.15 A search of all designated and non-designated archaeological sites has shown no sites are recorded within the site boundary. No part of the site is situated within a Conservation Area, a registered Historic Park or Garden or a Historic Battlefield.

2.1.16 There are two Scheduled Ancient Monuments within a 2km radius of the site:

- 'Castle Rough' Medieval Moated Site
- Murston Old Church, Sittingbourne

2.1.17 Including the above two sites, there are twenty Scheduled Ancient Monuments recorded within a 10km radius of the site:

Table 1.1 – Schedules Ancient Monuments within 10km radius of the site.

SAM NUMBER	NAME	EASTING	NORTHING
34297	COASTAL ARTILLERY DEFENCES ON THE ISLE OF GRAIN, IMMEDIATELY EAST AND SOUTH EAST OF GRAIN VILLAGE	589261	176119
31414	OARE GUNPOWDER WORKS	600292	162420
34309	WORLD WAR II HEAVY ANTI-AIRCRAFT GUNSITE (TS3) AT WETHAM GREEN, 460M NORTH OF RED BRICK COTTAGE	584447	168406
25462	A ROMANO-BRITISH VILLA AT BOXTED	585459	166289
34309	WORLD WAR II HEAVY ANTI-AIRCRAFT GUNSITE (TS3) AT WETHAM GREEN, 460M NORTH OF RED BRICK COTTAGE	584519	168364
34297	COASTAL ARTILLERY DEFENCES ON THE ISLE OF GRAIN, IMMEDIATELY EAST AND SOUTH EAST OF GRAIN VILLAGE	589628	176032
KE172	SHEERNESS DEFENCES	591412	175266
25474	A ROMANO-BRITISH MAUSOLEUM, AN ASSOCIATED ROMANO-BRITISH BUILDING AND A PARISH CHURCH AT STONE-BY-FAVERSHAM	599162	161329
25463	A ROMANO-CELTIC TEMPLE AT BOXTED	585152	166184
23026	NUNNERY AT MINSTER ABBEY	595629	173011
12729	`CASTLE ROUGH' MEDIEVAL MOATED SITE	591821	165963
25469	MURSTON OLD CHURCH, SITTINGBOURNE	592093	164769
34302	WORLD WAR II HEAVY ANTI-AIRCRAFT GUNSITE (TS2),	590010	168996

	300M EAST OF CHETNEY COTTAGES		
34309	WORLD WAR II HEAVY ANTI-AIRCRAFT GUNSITE (TS3) AT WETHAM GREEN, 460M NORTH OF RED BRICK COTTAGE	584617	168300
34309	WORLD WAR II HEAVY ANTI-AIRCRAFT GUNSITE (TS3) AT WETHAM GREEN, 460M NORTH OF RED BRICK COTTAGE	584515	168452
29601	SHURLAND HOUSE: EARLY 16TH CENTURY GREAT HOUSE AND ASSOCIATED REMAINS	599387	171531
25482	RINGWORK AND BAILEYS AT CHURCH FARM	584624	161622
23030	QUEENBOROUGH CASTLE	591227	172158
24359	THE MAISON DIEU, A 16TH CENTURY HOUSE INCORPORATING PART OF A MEDIEVAL HOSPITAL	600355	160853
34297	COASTAL ARTILLERY DEFENCES ON THE ISLE OF GRAIN, IMMEDIATELY EAST AND SOUTH EAST OF GRAIN VILLAGE	589242	175701

Drainage, Geology and Soils

Ground Conditions

2.1.18 A phase II site investigation undertaken by RPS in July 2009 indicates that the geological strata beneath the site comprise:

- Cohesive made ground to maximum thickness of 4.5m.
- Cohesive alluvium to maximum thickness of 3.5m
- London clays to maximum thickness of 5m.

2.1.19 These deposits overlay the solid geology associated with the Woolwich and Thanet sands and Cretaceous bedrock Chalk.

2.1.20 Historical site investigation information made available by the landowner indicates the following:

2.1.21 The area of land to the north of the site was previously used to store coal. This area is indicated as hatched on the drawings. The made ground in this area retains a residual coal element.

2.1.22 The area to the south of the site forms the Kemsley Waste Disposal Site (KWDS). This landfill area has recently been capped with clay. An access track forms the northern boundary of the KWDS. It is understood that methane monitoring stations are located along the path. Furthermore it is believed that leachate from the KWDS is discharged to a leachate collection system for removal to an effluent treatment plant. It is proposed that the path is retained on its present line such that access is maintained post development.

Ground Water

2.1.23 The site investigation groundwater monitoring indicates wide spread seepage within the made ground and alluvium layers. It is likely that this represents a perched system. A deeper groundwater system (most likely in continuity with the River Swale estuary) was encountered at a depth of 14m below existing ground level.

2.1.24 The London clay is classified as a non-aquifer. The Woolwich and Thanet sands are minor aquifers and the chalk bedrock is classified as a major aquifer.

Access to the Site

2.1.25 Two points of vehicular access are currently available to the existing Kemsley Paper Mill. The southern access is via Ridham Avenue to the south of the mill site and is used by HGVs (including those requiring use of the weighbridge) and staff and visitor cars. The main site car park is provided to the south of the site. The other site access that is less intensively used is located at the north-east corner of the site and is accessed via Barge Way. It is proposed that staff and visitors at the proposed site will use the existing southern access and car park. HGVs accessing the proposed development will use the existing northern access.

2.2 Surroundings

Physical Context, Land Use and Character

2.2.1 The context of the site is divided between the contrasting environments of the industrial townscape of Sittingbourne and the natural estuary landscape of The River Swale. The site lies on the industrial northern edge of Sittingbourne, which forms the largest settlement within the district of Swale. Development dates mainly from the 19th and 20th centuries, clustered around the A2 and railway which pass through the centre of the town. The rapidly expanding industrial and commercial district which extends from the edge of Sittingbourne north to Ridham Docks forms the immediate context to the site. Large scale industrial buildings and stacks at the St Regis Paper Mill, Kemsley form the south western site boundary, separating the location from the residential districts of Sittingbourne. To the south east lies the extensive landform of the restored landfill site at the confluence of The River Swale and Milton Creek.

To the north east the earth bund of the sea defences define the edge of The Swale, separating the site from the marshes, mud flats and body of water which comprise this habitat. The Saxon Shore Way long distance footpath follows the top of these defences. To the north west of the site lies further disused open land supporting a similar range of vegetation to the site. A waste water treatment works and further ongoing industrial development are currently expanding in this area to the north.

2.2.2 The Swale Borough Local Plan recognises that the coastal landscapes and coastal margins enhance the value of the borough's landscape. This is supported, in part, by the designation of the North Kent Marshes Special Landscape Area which extends over the River Swale and adjoining coastal landscape. This area includes the Chetney and Greenborough Marshes which adjoin the site and extend along Milton Creek. This area is valued for the open character of its landscape.

2.2.3 Other designated landscapes within the Borough include an Area of High Landscape Value approximately 1km to the south east of the site. This area of landscape lies inland of the marshes and coincides primarily with the Teynham Fruit Belt. The Kent Downs Area of Outstanding Natural Beauty lies on high land approximately 10km to the south east of the site. A second SLA on the North Downs coincides with a large area of the AONB designation.

2.2.4 The closest footpath is the Saxon Shore Way long distance path which follows the top of the sea defences which line The River Swale and Milton Creek. The path extends along the Kent coastline throughout the Swale District.

2.2.5 The landscape and townscape character context is identified at different levels, with the Countryside Character Initiative (CCI) and English Nature's Natural Areas Map (1999) providing the broader framework to determine the character of the British countryside at a national level. Within the CCI character map, the 15km radius study area lies within Character Areas 81 Greater Thames Estuary, 113 North Kent Plain and 119 North Downs.

2.2.6 The character of the local landscape within the Borough of Swale has been assessed as part of the Swale Landscape Character Assessment and Guidelines, March 2005. This assessment has identified 42 landscape character areas within the district. A local level study area based on a 3km radius has been established to assess the character of the landscape at greater detail in close proximity to the site. The following 8 character areas coincide with the ZTV within this study area;

- 01 Elmley Marshes
- 02 Elmley Island

- 06 South Sheppey Marshes and Mudflats
- 11 Chetney and Greenborough Marshes
- 12 Lower Halstow Clay Farmlands
- 14 Iwade Arable Farmlands
- 26 Teynham Fruit Belts
- 27 Luddenham and Conyer Marshes

Land Form, Landscape and Views

2.2.7 The tidal mud flats and shingle beaches of the River Swale lie beyond the sea defences to the north east. The restored landfill site immediately to the south rises to approximately 15m high. This man made landform forms an uncharacteristic and distinctive feature in the flat estuarine landscape. The land rises gradually over the Kent plains to the south before rising more steeply to form the North Downs, which rise to approximately 200m AOD 10km to the south.

2.2.8 The site is currently concealed in views from the majority of the settlement of Sittingbourne by industrial development on the edge of the town and the restored landfill mound. To the north of the site, where views are less constrained, the Saxon Shore Way long distance footpath forms the closest visual receptor as it follows the alignment of the sea defences. Views can be gained from a section of path which extends approximately 2km north along the edge of the Swale from the site. Users of this path potentially form receptors of the highest sensitivity; however there is little evidence of the path being regularly used during the site visit. Industrial development, the light railway and over ground pipelines provide physical barriers between the settlement and the Swale, making access to the path difficult. The section of the Saxon Shore Way adjacent to the site is also relatively remote from the centre of Sittingbourne and the open areas at Kingsferry Bridge which allow direct public access to the right of way. The industrial edge of Sittingbourne forms a dominant urban influence within views from this section of the path and, as a result, may be less attractive to walkers.

2.2.9 Views of the site from the premises along the industrial edge of Sittingbourne would be fragmented by intervening development and gained by people at their place of work, who are of low sensitivity. The gently rising, open landscape of the Isle of Sheppey to the north east contains several small settlements, public rights of way and roads which provide vantage points for receptors to gain views back to the site. The industrial townscape of Sittingbourne is visible as an expanse of development along The Swale, of which the site forms a small fragment of disused land.

2.2.10 The Swale forms a transport corridor which defines the edge of Sittingbourne and divides the towns' industrial edge from the salt marsh, mudflats and open water of the estuary at Elmley Reach and Clay Reach. Views from occupants of vessels would be gained towards the site with a backdrop of dominant industry at St Regis' Kemsley Paper Mill. Receptors use the Swale for both leisure and commercial purposes and would range in sensitivity from medium to low.

Ecology

2.2.11 The Swale Estuary and Medway Estuary and Marshes cover a large area of land spreading from the north west round to the south east of the site. These areas are designated Sites of Special Scientific Interest (SSSIs), Special Protection Areas (SPAs) and are also internationally designated RAMSAR sites.

2.2.12 Located approximately 0.2km from the site, The Swale SSSI, SPA and RAMSAR site is the largest remaining area of freshwater grazing marsh in Kent and a good example of estuarine habitat. The Medway Estuary and Marshes SSSI, SPA and RAMSAR site forms the largest area of intertidal habitats in Kent and is located approximately 2km from the site. Both sites are internationally important for wintering wildfowl and waders.

2.2.13 Elmley Island, a National Nature Reserve (NNR) is located to the north east on the Isle of Sheppey, approximately 0.6km from the site. It provides grazing marsh and estuarine salt marsh habitat which attracts wintering wildfowl and waders.

2.2.14 The closest area designated for its nature conservation interest is the Milton Creek, Sittingbourne Site of Importance for the Nature Conservation (SINC). The SINC is important for the existence of salt marsh, wet pasture and freshwater dykes. It lies approximately 0.2km to the south of the site at its closest point and covers a strip of land stretching southwards from the site towards Sittingbourne.

Access and Transport

2.2.15 By road, Ridham Avenue is the main access road for the paper mill and runs in an east to west direction along the southern boundary of the paper mill complex. The site is accessed from the A249 via Swale Way (Western Entrance) or from Swale Way onto Barge Way (Northern Entrance).

2.2.16 The site is accessed via the Swale Way section of the Sittingbourne Northern Relief Road which, when complete will provide a route around the north of Kemsley and Sittingbourne to join the A2 at Bapchild. Swale Way (opened in 2005) serves a number of industrial uses in

the area including Kemsley Mill and Ridham Dock. Swale Way has a junction with the B2005 (A249 (T) to Sittingbourne) approximately 1.7km west of the site. The A249 (T) (Queensborough to M2) has junctions with both the A2 (Gillingham to Faversham) and M2 (Gillingham to A2) approximately 4.8km and 7.8km south west of the site respectively.

Table 1.2: Suggested Acceptable Walking Distances - Source: Providing for Journeys on Foot, IHT, 2000

Definition	**Town Centres (m)**	**Commuting/ Schools (m)**	**Elsewhere (m)**
Desirable	200	500	400
Acceptable	400	1,000	800
Preferred Maximum	800	2,000	1,200

2.2.17 There are no public rights of way which cross the site. The closest footpath is the Saxon Shore Way long distance path which follows the top of the sea defences which line The Swale and Milton Creek. The path to the east of the proposal site extends along the Kent coastline throughout the Swale District.

Access on Foot

2.2.18 When the first section of the Sittingbourne Relief Road (also known as the Milton and Kemsley Distributor Road) was constructed, Ridham Avenue was closed to vehicular traffic at a point immediately west of the new roundabout linking Ridham Avenue with the Relief Road. The route remains open for pedestrians and links to the eastern residential area of Kemsley.

2.2.19 Shared pedestrian/cycle paths run along the western side of Swale Way and the northern side of Barge Way.

2.2.20 The Saxon Shore Way, a long distance footpath follows the shore of the Swale to the east of the site. This continues north towards Chertney Marshes and further to Gillingham. To the south it links into Sittingbourne and continues east towards Faversham. The route is not lit and is not generally surfaced.

2.2.21 At present the traffic flows along Ridham Avenue and Barge Way are low and vehicle speeds appear from observation to be generally low.

2.2.22 Paragraph 75 of PPG13: Transport suggests that walking is a suitable alternative to replace car trips for journeys of under 2km. The IHT publication 'Providing for Journeys on Foot' (IHT 2000) suggests acceptable walking distances for various land uses, as set out in Table 1.2 above.

2.2.23 The site lies within 1km of some residential areas to the north of Kemsley. The site also lies within the maximum walking distance of a bus stop.

Cycle Routes

2.2.24 The site is within close proximity to on and off road cycle routes which link to the wider Kemsley and Sittingbourne area. A National Cycle Network traffic free route is provided alongside the Kemsley Marsh Drain to the south west of the site which leads to a National Cycle Network on road route provided along the B2005 Grovehurst Road from Sittingbourne to Queenborough. This on road cycle route provides a direct link to Kemsley Railway Station. An additional National Cycle Network traffic free cycle route is proposed to be implemented from Milton Creek to Kemsley Marsh linking with Kemsley Marsh Drain and the B2005. Further details of existing cycle routes within the vicinity of the site can be found in the transport assessment.

Buses

2.2.25 Bus stops are located approximately 900m west of the site on Ridham Avenue which are served by bus service number 347 which provides a direct link to Sittingbourne town centre. The journey time from Kemsley to Sittingbourne is approximately 20 minutes and the service operates 4 buses per hour throughout the day. Additional bus stops are located on Grovehurst Road approximately 1.5km west of the site. These bus stops are served by service numbers, 322, 323, 324, 336, 338, 339, and 347. These bus services are summarised in Table 1.3 below.

Table 1.3: Summary of Bus Services

Summary of Bus Services						
No.	Operator	Route	Service Frequencies (per hour)			
			Monday - Friday			
			AM Peak	Off Peak	PM Peak	Evening
347	Arriva Medway Towns	Kemsley-Sittingbourne	4	4	4	4
322	Chalkwell	Sittingbourne-Elmley	2	1	-	-

	Garage and Coach Hire			service only		
323	Chalkwell Garage and Coach Hire	Sittingbourne-Sheerness	2 services per day			
324	Chalkwell Garage and Coach Hire	Canterbury-Sheerness	1 service per day Wednesday and Friday only			
336	Arriva Kent and Sussex	Maidstone-Leysdown on Sea	1 service per day Tuesday and Friday only			
338	Arriva Kent and Sussex	Leysdown on Sea-Chatham	1 service per day Monday only			
339	Arriva Kent and Sussex	Leysdown on Sea-Hempstead Valley	1 service per day Thursday only			

Rail

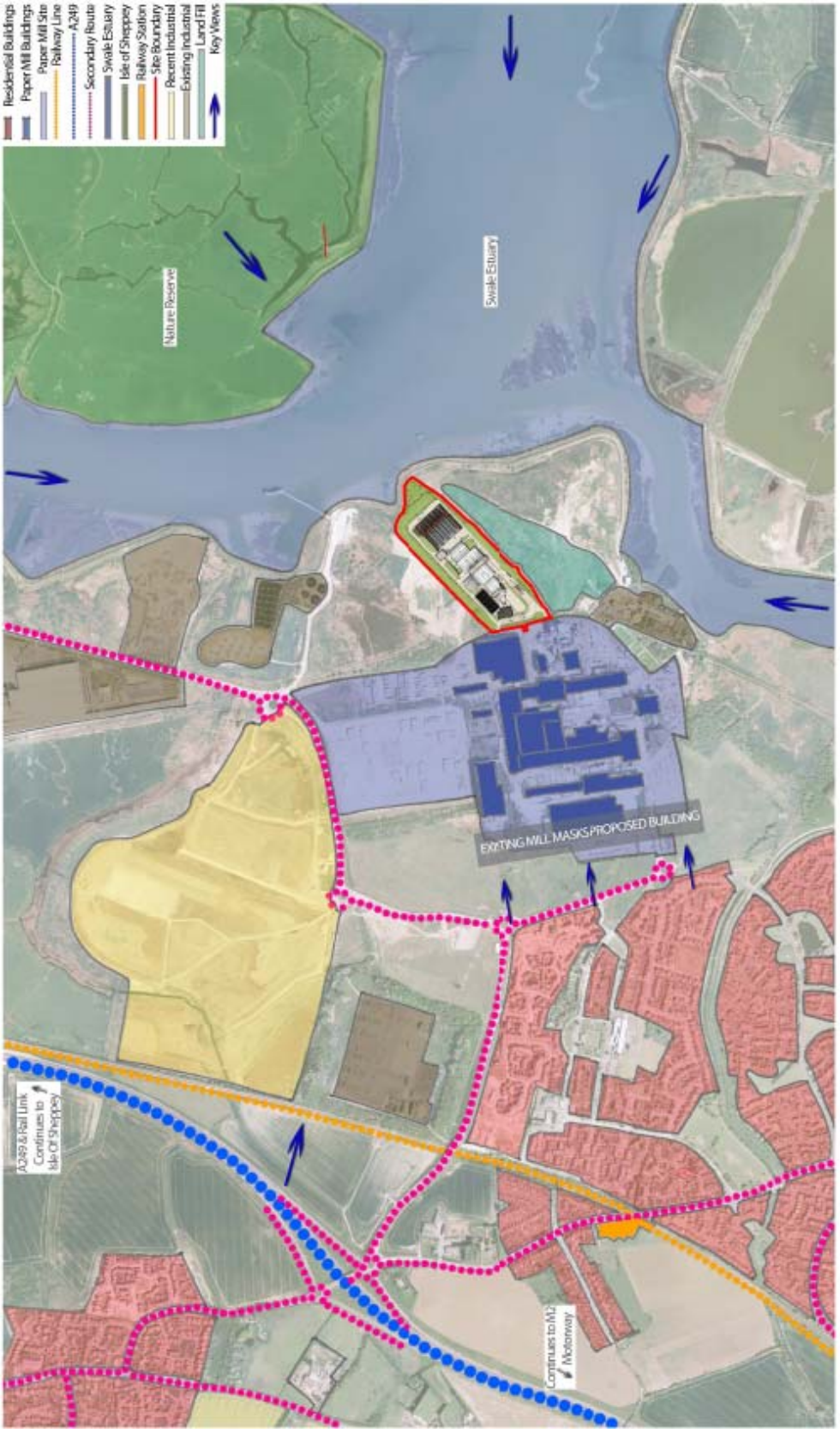
2.2.26 Kemsley Railway Station is located approximately 1.8km west of the site on Grovehurst Road. A summary of the rail services from Kemsley Rail Station can be found in Table 1.4.

2.2.27 Southeastern Trains operate all services from Kemsley Rail Station. Kemsley station has regular services to London Victoria with a service frequency of three trains per hour during the morning peak with a journey time of approximately one hour and ten minutes. Stations served on the routes include Sittingbourne, Sheerness, Faversham and Canterbury.

Table 1.4: Summary of Rail Services

Summary of Rail Services					
Operator	Route	Service Frequencies (per hour)			
		AM Peak	Off Peak	PM Peak	Evening
South-eastern	London Victoria-Chatham-Gillingham-Sittingbourne-Sheerness-Faversham-Canterbury East-Dover-Margate-Ramsgate	3	2	3	3

Figure 1.2: Contextual Analysis Diagram



2.3 Contextual Analysis

2.3.1 The initial site evaluation process identified a number of constraints and opportunities to the development of Kemsley SEP on the site. These have influenced the architectural design process.

Constraints

- Minimising the impact of the development on the surrounding area visually and physically
- Highways access and other traffic issues
- Close proximity to The River Swale
- Views directly to site from nature reserves on the Isle of Sheppey

Opportunities

- Generation of additional employment
- The large site can accommodate a major development
- Development next to existing large scale industrial facility
- The scale of the surrounding buildings and stacks are consistent with the proposed development
- The proposal will bring a derelict site into productive use
- Existing vegetation to the east will help screen the proposed plant

3 Design Evolution, Consultation and Involvement

Figure 1.3: Initial Proposals

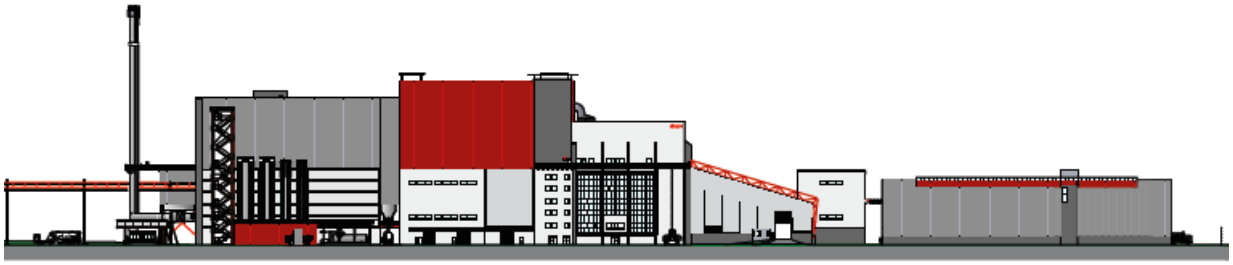


Figure 1.4 Initial concept option studies (showing introduction of additional forms to create rational elevations and various colour options)

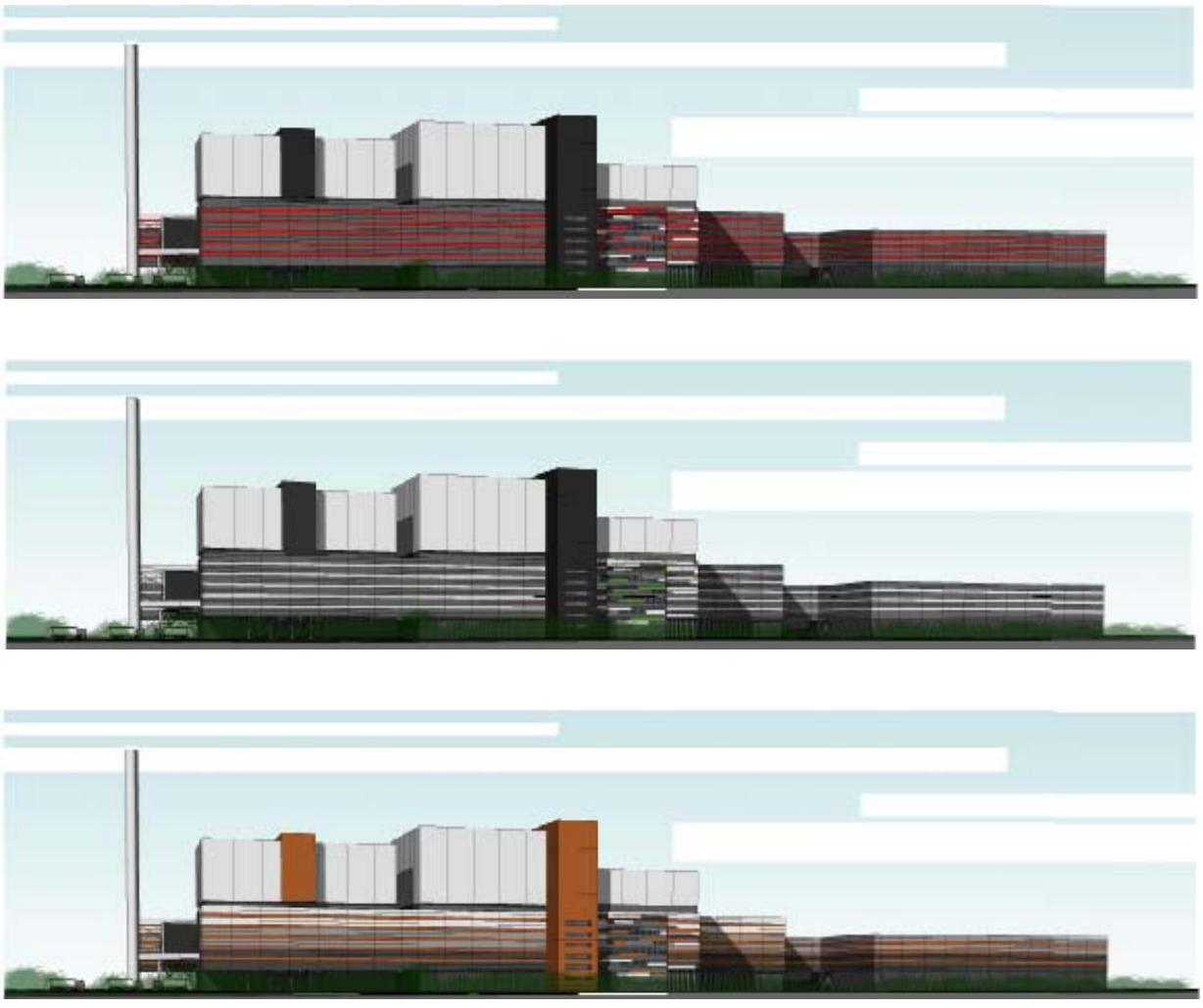
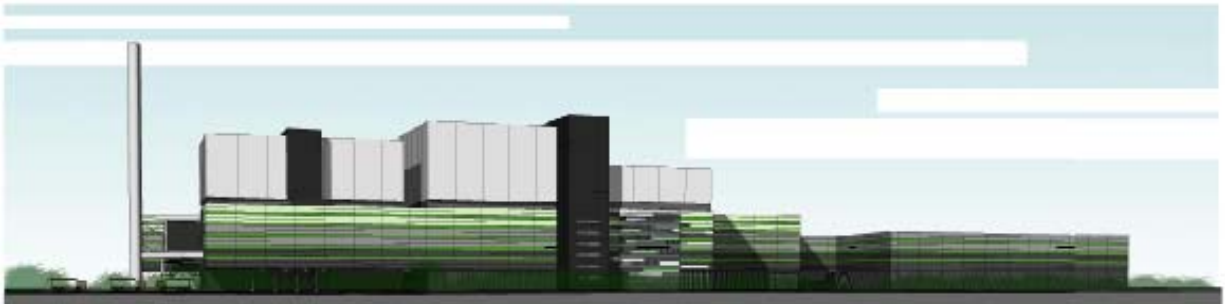


Figure 1.4: *continued*



3.1 Initial Options

3.1.1 The site layout is fundamental to the practical and safe working of the SEP and following approval of a base layout by the client and process engineer, a number of variations of an initial architectural option was put forward to the local planning office for comment.

3.1.2 There are two distinct approaches to the overall appearance of this type of development. One is to express function in the form of a straightforward building of industrial appearance and the other is to present a different shape so that it appears less angular, more homogenous and thus less industrial in appearance. We appreciate that any attempt to superimpose a different appearance other than to express its bulk and form would result in an increase in its overall height and extent.

3.1.3 The initial concept proposal introduced additional forms which served to rationalise the building footprint and in turn reduce the amount of irregularity. It was felt that initial proposals where too industrial and a concept above and beyond a utilitarian grey box would be required given the context. The planning officer respected our initial proposal and favoured the natural coloured approach we had taken for the design.

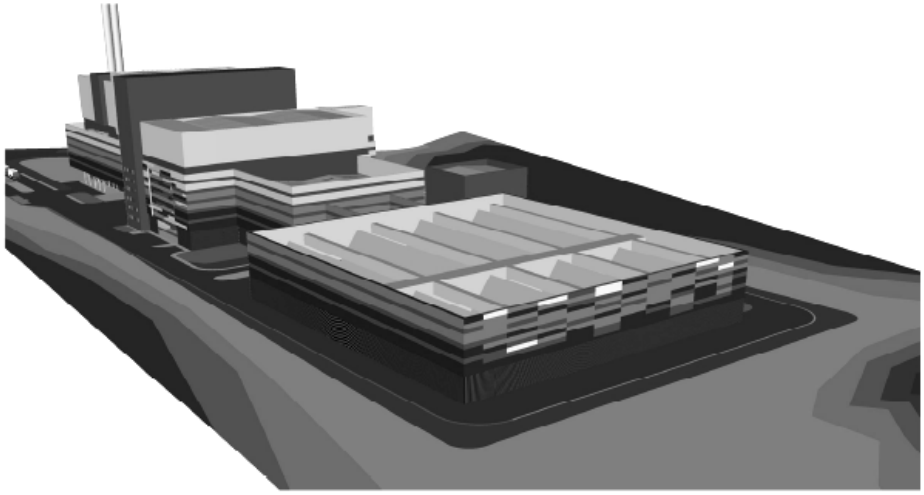
3.1.4 Additional discussions took place with the client and a decision was made to express the functional forms of the SEP rather than conceal them. There was mixed opinions regarding what form the ash residue storage building would take and a decision was made to reduce the visual impact of this building as much as possible. Consequently the additional wall elements were removed to reveal the buildings functional form.

3.1.5 The articulation of the elevations would further alter to provide an architectural cohesion throughout the SEP and although the client expressed a desire for corporate colours, natural colours were chosen relating to the context. The local planning officer favoured a natural colour scheme.

Option 1

3.1.6 This option shows a more rational building footprint created by the introduction of additional walls. This consequently increases the visual impact of the building particularly the residue storage area.

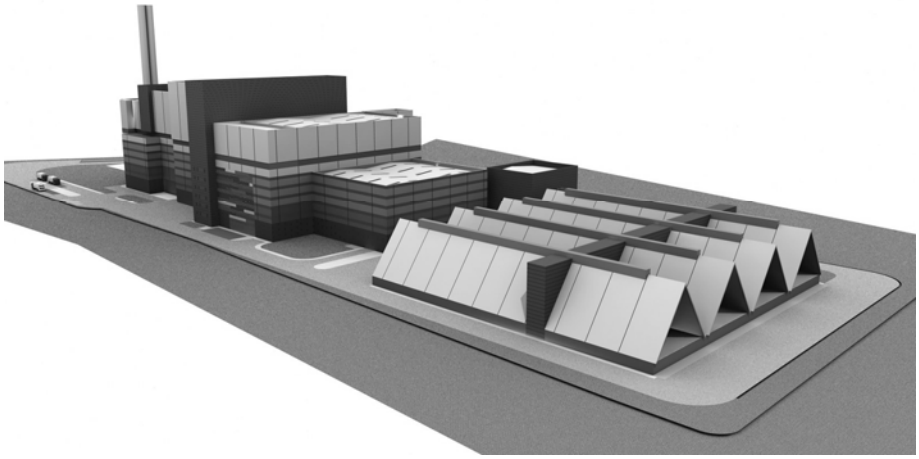
Figure 1.5: Option 1



Option 2

3.1.7 The additional walls were removed from the main plant together with the residue storage area creating more functional building forms and a reduction in building height to certain elements.

Figure 1.6: Option 2



3.2 Consultation and Involvement

Local Planning Authority

Environmental Impact Assessment

3.2.1 The planning application is accompanied by an Environmental Statement prepared in accordance with Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999.

3.2.2 The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999 specify certain types of development for which EIA is mandatory (Schedule 1 Developments).

3.2.3 Waste Treatment facilities are deemed to fall under Category 10 of Schedule 1 of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999. This identifies *"Waste disposal installations for the incineration or chemical treatment (as defined in Annex IIA to Council Directive 75/442/EEC under heading D9) of non-hazardous waste with a capacity exceeding 100 tonnes per day"* as Schedule 1 development. The Regulations require EIA in every case for Schedule 1 development.

3.2.4 The 1999 Regulations and associated guidance need to be capable of being applied to all forms of development, and not purely waste management facilities. Each development proposal, by virtue of its particular setting, design etc., is unique: the potential impacts associated with one waste management facility may not be the same as the next. Schedule 2 of the regulations identifies that Environmental Impact Assessment may be required for Energy industry development. Category 3a '*Industrial installations for the production of electricity, steam and hot water (unless included in Schedule 1)- the area exceeds 0.5 hectares.'*

3.2.5 In order to produce an adequate and focused EIA, and in the interests of transparency, formal Scoping Requests were submitted to Kent County Council in addition to topic specific consultations with the relevant bodies.

3.2.6 A copy of the Scoping Request and the resulting 'Scoping Opinion' issued by Kent County Council with related consultee responses are included as Technical Appendices to the ES 1.1 and 1.2 respectively.

Community Engagement

3.2.7 In addition to the formal scoping request to the planning authority and other topic specific consultations noted above and within specific chapters, St Regis and E.ON Energy from Waste have undertaken an extensive programme of stakeholder engagement to ensure that stakeholders were fully informed of the proposals and were given the opportunity to input into the identification of key issues to be addressed through the Environmental Impact Assessment process

3.2.8 A summary of the process is set out below:

Newsletters

3.2.9 13,987 newsletters with covering letter issued to local residents and businesses via first class Royal Mail on Thursday 11 June 2009; received Saturday 13 June 2009 and Monday 15 June 2009. A second newsletter with covering letter was circulated in mid November 2009 to a smaller distribution (6,284 addresses) based on levels of interest and feedback from the first mailing. The distribution area consists of the Swale Borough Council wards of Kemsley and Milton Regis, plus the village of Iwade. Letters and newsletters were also sent to people who had expressed an interest in the project but fell outside the area of the second mailing.

Posters

3.2.10 A4 posters advertising the public exhibitions (example attached) were displayed from Thursday 18 June 2009 in six locations in Kemsley:

- Village Stores, Ridham Avenue
- The Kemsley Arms, Ridham Avenue
- Kemsley Village Hall, Ridham Avenue
- Grovehurst Surgery, Grovehurst Rd
- Pharmacy, Grovehurst Rd
- Grovehurst Newsagents, Grovehurst Rd

3.2.11 The same locations were used to publicise the second round of exhibitions

Other letters

- Letters/emails highlighting/providing update on the project sent to:
- Swale Council officers
- Swale leader and relevant Cabinet members

- Swale ward members.
- Kent County Council ward members.
- Kent County Council Cabinet members.
- Conservative Parliamentary Candidate
- UKTI.
- Locate in Kent

Website

3.2.12 www.kemsleyenergy.co.uk went live on 13 June 2009

Press activity

3.2.13 Press releases issued to:

- Announce proposals (issued 15 June to Your Swale, KM Sittingbourne, East Kent Gazette, KM Kent Business, Kent Director, South East Business and Kent on Sunday.
- Promote public exhibitions (issued 23/6 and 24/6 to Your Swale, KM Sittingbourne, East Kent Gazette)
- Follow up on public exhibitions (issued 7/7 to Your Swale, KM Sittingbourne, East Kent Gazette)
- Promote second round of exhibitions (issued 16/11/09 to Your Swale, KM Sittingbourne, East Kent Gazette, yourcounty.co.uk and onlykent.co.uk)
- Follow up on second round of public exhibitions (issued 30/11/09 to Your Swale, KM Sittingbourne, East Kent Gazette, yourcounty.co.uk and onlykent.co.uk)

Adverts

3.2.14 Adverts to promote the first round of public exhibitions about the proposals appeared in the East Kent Gazette (24 June 2009 and 1 July 2009) and the KM Sittingbourne Extra (19 June 2009 and 26 June 2009). Adverts to promote the second round of public exhibitions about the proposals appeared in the East Kent Gazette (18 and 25 November 2009) and the KM Sittingbourne Extra (18 and 25 November 2009).

Exhibition

3.2.15 Project exhibitions where held at Kemsley Village Hall on the 2nd and 3rd of July 2009 and the 26th and 27th of November 2009. A public exhibition was held in Iwade Village Hall on 13th January 2010

Helpline

3.2.16 Free helpline (0800 8815429) went live from 1st June 2009.

Correspondence Received

- Dedicated project email set up – info@kemsleyenergy.co.uk
- Dedicated project address set up – Kemsley Energy Project, Kemsley Mill, Sittingbourne, Kent, ME10 2TD

3.2.17 With the planning application submitted to Kent County Council, a programme of post-application public engagement will be launched and will include; newsletters, existing facility site visits, and briefings for decision makers and influencers.

Figure 1.7 Conceptual sketch showing site analysis

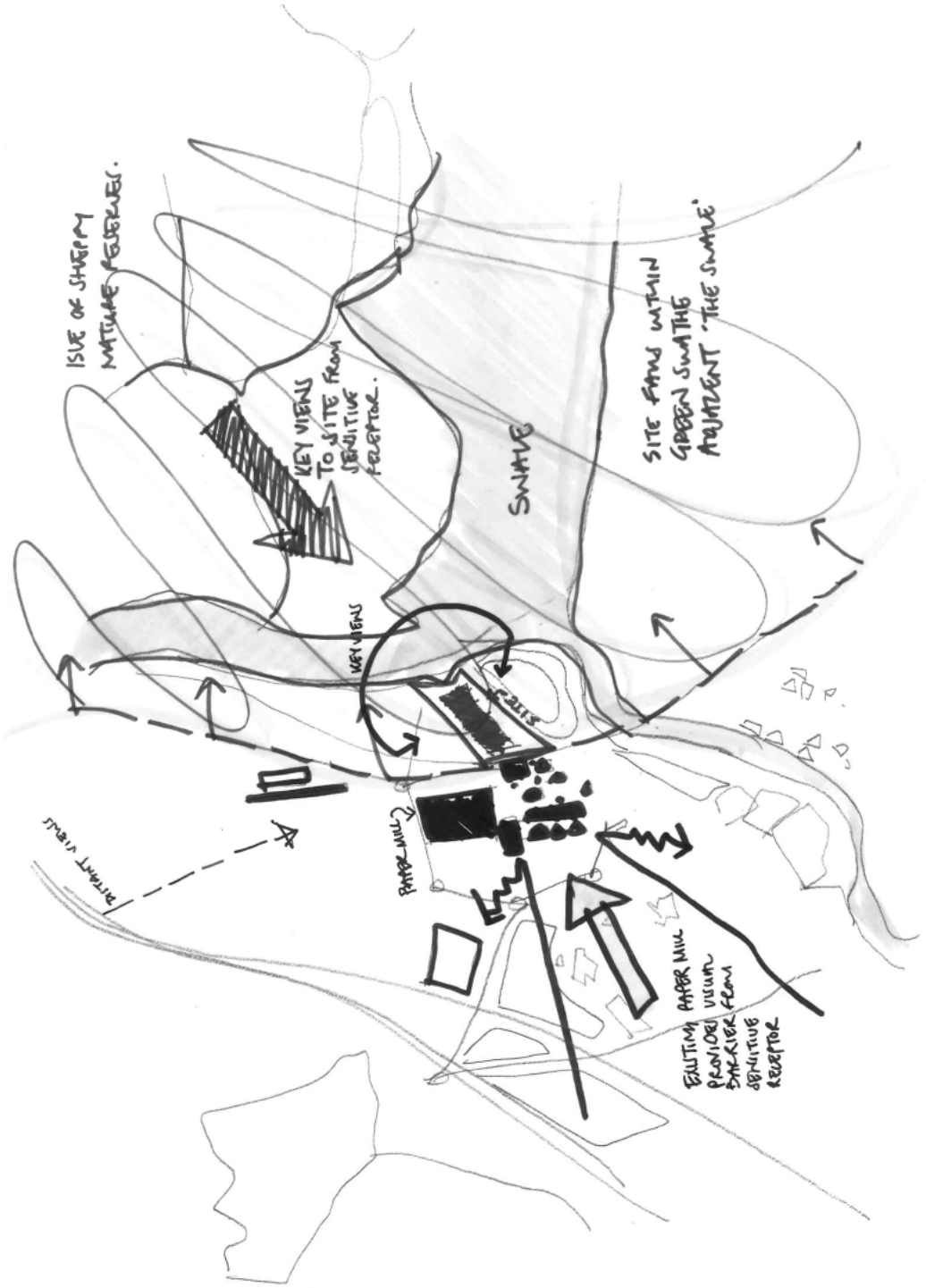
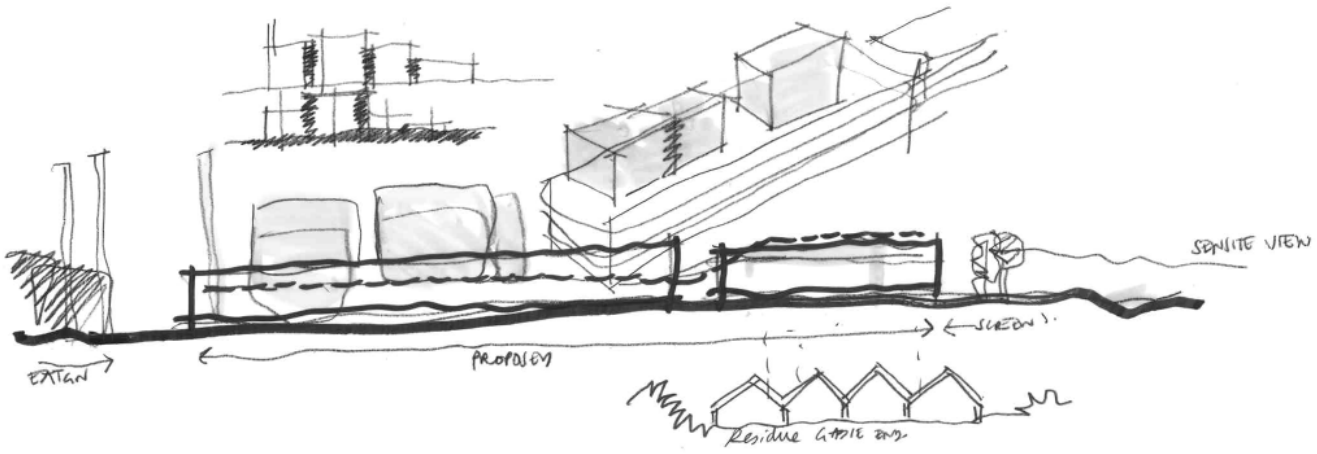


Figure 1.8 – Conceptual Sketches showing the proposed massing of the SEP



Above

3.2.18 Conceptual sketches showing the proposed massing of the SEP. Taller building elements and stack are located away from sensitive receptors and the building heights lower as they approach the River Swale to further reduce visual impact. The gable end to the residue storage area facing the Isle of Sheppey. The functional form should create an interesting focal point from distant views off the island.

3.3 Design Concept

Site Analysis

3.3.1 A site analysis was undertaken both from within the site, and from the main visual receptors in the vicinity of the site (See Figure 1.7 and Figure 1.8). This raised the following opportunities and constraints:

3.3.2 The proposed SEP will be screened from the local residential properties to the West of the site by the existing paper mill. The new SEP will present a very limited impact on view from this area.

3.3.3 Views to the South of the proposed SEP will mainly fall upon industrial units, which again screen views from residential properties further to the South. In addition to this, these are very distant views and the impact of the proposed building on the horizon will be minimal to both.

3.3.4 To the North of the site are several small light industrial buildings, and a large Knauf production facility, with the recent addition of the Kemsley Fields distribution park to the North West. Beyond these units runs the A249, which provides the only land route to the Isle of

Sheppey for both cars and rail routes. Consideration should be given to views towards this feature.

3.3.5 Immediately to the East of the site flows the River Swale which separates the mainland with the Isle of Sheppey, and predominantly large expanses of nature reserves with a high ecological importance to the area. Views to the site from the Isle are critical to the success of the scheme.

3.3.6 The Isle of Sheppey Sailing Club operate a full programme of sailing around the Isle and surrounding waters from April to November, and as such, views from the River Swale approach to the site from both directions would also have to be considered.

3.3.7 From these initial studies, it became apparent that views from within the nature reserve on the Isle, from the A249 and from the Swale where critical to the scheme, but in different ways. When viewing the site from the nature reserve it became apparent that the landscape in which the existing paper mill is sited is very deep in colour and context. The existing building colour scheme is light metallic cladding which is very obvious on the horizon and draws attention to it and does not appear to be successful in its selection, nor does the sand coloured Knauf building, or the gradient blue colour of the Kemsley Fields distribution park, all of which are obvious in their context from this visual receptor.

Colour Scheme

3.3.8 The natural colour scheme within the landscape band consists of deep red brick colours and browns - basically natural colours, which should be replicated on views from the Isle to reduce its impact, whilst providing something of interest to the views from the Swale and the A249 providing something of a landmark rather than attempting to hide and ultimately fail due to its sheer size.

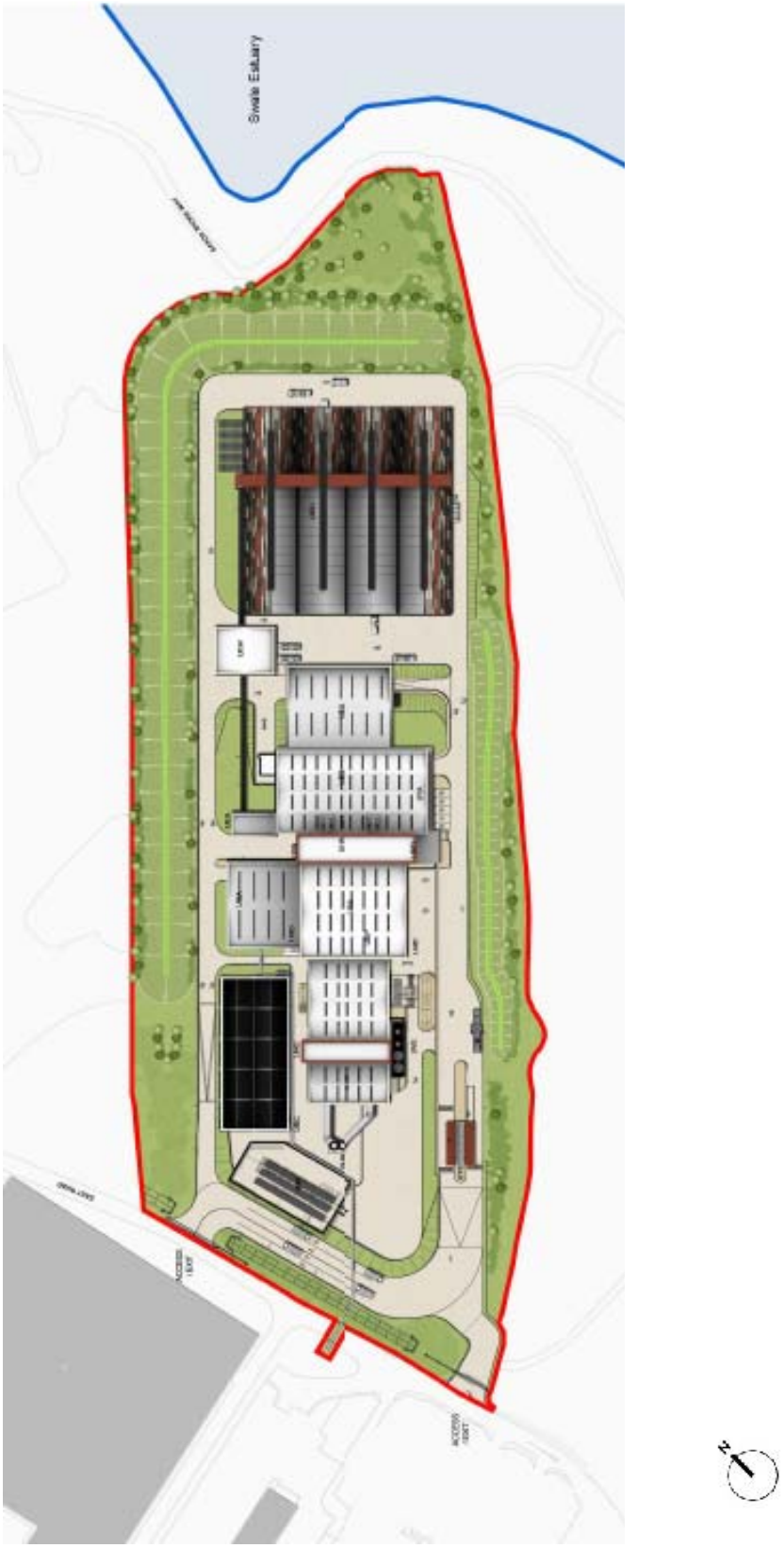
Building Mass

3.3.9 The intention is to retain the proposed footprint and incorporate the design around this, maintaining the original processes, massing and forms. The existing paper mill is by its nature extremely industrial with little architectural merit where the form certainly follows function. This approach has been retained in this scheme, where the functional working heights and mass of the structure have been retained to prevent any unwanted impact on the environment. The existing structures immediately adjacent to the proposal appear to be approximately 25metres high maximum, whilst the height of the proposal adjacent to the existing structures is approximately 43metres towards the Swale.

3.3.10 With this in mind and in an attempt to reduce the visual height of the SEP whilst providing continuity in what is a rather fragmented building composed of many facets, the concept to physically wrap the basic functional form of the building with a band of horizontal cladding panels was developed. The band will give a connection to all aspects of the building from all elevations with the focus being on this feature whilst the large elements are finished in more neutral colours to blend in with their surroundings. These shall be punctuated by the external vertical circulation shafts penetrating this band in several locations and physically wrapping around the building, giving a physical reflection of the separation of activity within, whilst providing a functional and interesting architectural feature to the Swale and the A249. This approach would be amended with respect to views to the Isle, with a more sympathetic pallet of materials and colour used to reduce the visual impact and blend in with the landscape on the horizon.

4 Design Response

Figure 1.9 – Site Layout



4.1 Site Layout

4.1.1 Refer to Figure 1.9 (Site Layout) opposite for an indication of the functional and spatial relationships of the buildings on site. The layout also highlights areas of landscaping, external yards, car parking and respective access roads together with the location of the sustainable urban drainage systems. The individual components of the site are explained in further detail below paying particular attention to the internal elements of the main plant and function.

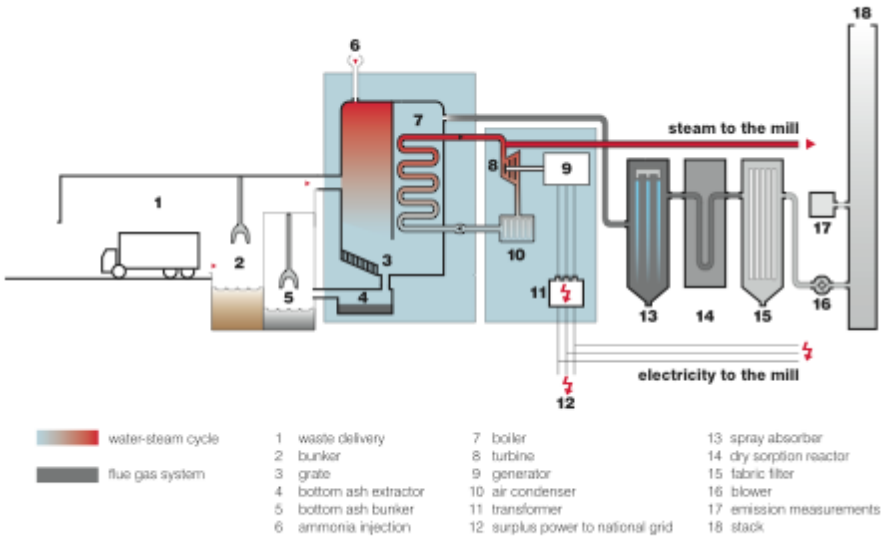
Access

4.1.2 The proposal site is located on the eastern fringe of the existing Kemsley Paper Mill plant complex. It is proposed to utilise the existing paper mill access infrastructure which serves the site. Access for the SEP by road will be taken from the northern Kemsley Paper Mill access which is some 400 metres to the north. Within the proposal site, provision is made for vehicle circulation. Car parking for staff and visitors (with the exception of Accessible parking) is located to the west within the existing arrangements which serve the Kemsley Paper Mill.

Building Elements

4.1.3 The SEP is broken down into a number of individual buildings which is in direct response to its function. We have worked closely with the clients process engineer's to ensure that the functionality of the SEP is rationalised to provide an efficient and effective site layout that responds to the design considerations identified.

Figure 1.10 - Flow diagram of Sustainable Energy Plant process

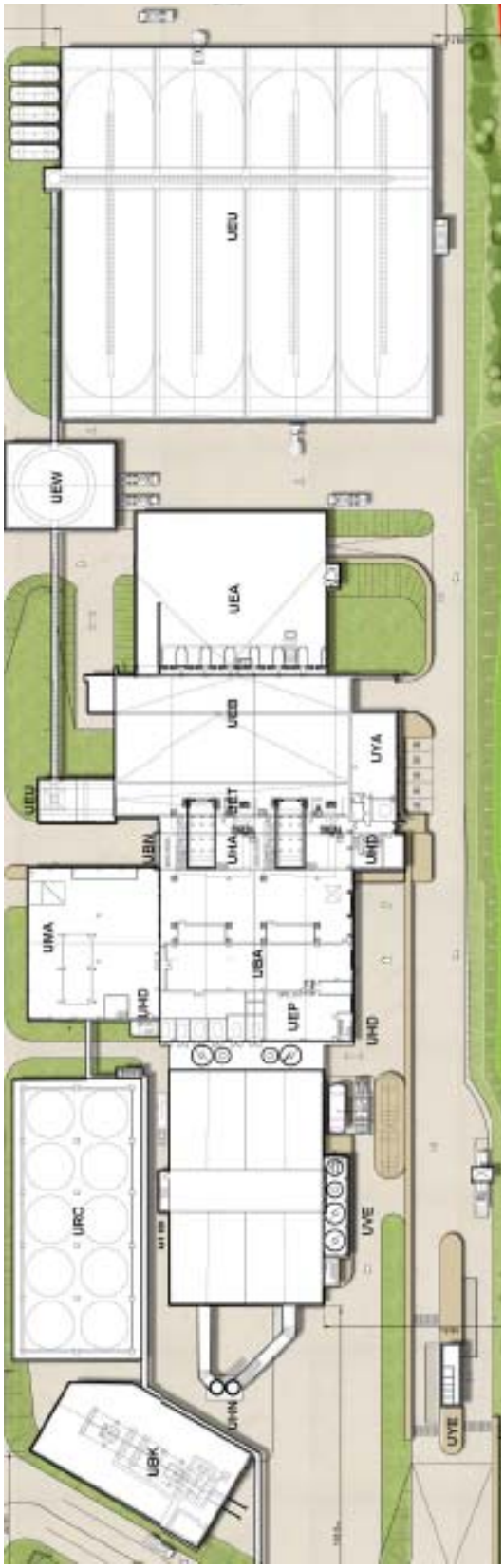


4.1.4 In summary the development will comprise:

- The capability to generate in excess of 50 MWth per hour of steam to the paper mill. Dependent upon its calorific value, the SEP will import as its feed stock approximately 500,000 to 550,000 tonnes per annum of pre treated waste comprising Solid Recovered Fuel waste, Commercial & Industrial waste and Municipal Solid Waste.
- The plant will accept up to 25,000 tonnes of waste plastics from the paper mill
- The plant is a recovery plant under the R1 calculation of the Waste Directive.
- The average net calorific value of 10.5 MJ/kg will fall within the range of 8 MJ/kg to 16 MJ/kg.
- Power generation capability of 48.5 MWe of net electricity per hour net.
- Grid connection cables to supply generated electricity to the public supply network.
- Two line moving grate with thermal combustion capacity of 100 MW per line.
- Two stacks with a height of 90 meters from ground level.
- Waste reception hall and waste storage bunker.
- Waste handling systems and feed hoppers.
- Bottom ash handling.
- Bottom ash storage and maturation facility.
- Flue gas treatment.
- Boiler, steam turbine and air cooled condenser
- Heat extraction system and infrastructure providing connectivity to adjacent paper mill.
- Weighbridge and access arrangements.
- Control room, administration building and workshop.
- Generator Transformers
- Site landscaping
- Importation of approximately 20,300m3 of clean inert fill.

4.1.5 A more detailed description of the building process and individual areas is defined within the description of Development Chapter of the planning application supporting statement. Figure 1.11 identifies the spatial relationships of the functional elements of the plant.

Figure 1.11 - Building plan identifying the spatial relationships of the functional elements of the plant.



KEY	
UBA	Switchgear building
UBN	Structure for emergency power generating sets
UEA	Structure for unloading solid fuels
UEB	Structure for storage of solid fuels
UEC	Controlling area
UEP	Residue silo
UET	Bottom ash storage
UEU	Structure for bottom ash transport
UEW	Structure for combustion residues handling
UHA	Boiler house
UHD	Staircase
UHN	Stack
UMA	Steam turbine building
URC	Structure for air cooled condenser
UVC	Structure for flue gas treatment
UVE	Structure for reagent supply
UYA	Office and staff amenities building
UYE	Gate house
UBK	Transformer

External Areas

Circulation

4.1.6 Adequate circulation for vehicles and pedestrians is provided to the perimeter of the SEP and between each building. This infrastructure will ensure a safe and efficient operation of the SEP for all staff and visitors.

Parking

4.1.7 Adequate parking will be provided for all delivery vehicles, disabled car users and cycles. The parking areas are located next to their appropriate building use to ensure a safe and efficient operation of the SEP.

4.1.8 Visitor and staff parking will be provided within the existing paper mill where adequate provision already exists. A safe foot path will be maintained from the existing car park directly to the new SEP ensuring that pedestrians are kept away from existing and proposed operative vehicles.

Landscaping

4.1.9 Landscaping is focused to the perimeter of the site in the form of substantial landscape zones. The linear attenuation ponds will be landscape to the landscape architects detail together with pockets of landscaping adjacent to the main office building and SEP entrance.

Surface Water Drainage

4.1.10 The surface drainage strategy for the site incorporates measures designed to minimise the effects on flood levels, water quality, river/stream morphology and habitat. The current site generally comprises undeveloped marsh land (together with a stock pile area used by the adjacent paper mill). The construction and operation of the new development will therefore significantly increase the impermeable area of the site and hence the volume of the surface water run-off from the site and potentially the nature of the run-off in terms of its capacity to pollute receiving watercourses/bodies.

4.1.11 The overall philosophy for the design of the surface water drainage system for the site development is therefore to manage surface water discharge sustainably and at source and to ensure that discharged waters do not constitute a pollution risk.

4.1.12 This overall approach is in accordance with the requirements of Appendix F of PPS 25 (Development and Flood Risk). It is anticipated that the pollution risks identified and mitigations proposed in this document will satisfy the requirements of the relevant planning consultees such as the Environment Agency and Natural England.

4.1.13 The existing site and proposed development were assessed for tidal flood risk from the Swale Estuary. Following the uplifting of the site to 5.8mAOD the proposed site will not be at risk from tidal flooding. The effect of tidal flooding on the proposed development has been assessed as negligible

4.1.14 Temporary drainage facilities are to be provided during the construction phase to ensure the controlled discharge of surface water run-off into nearby watercourses, until such time as the permanent drainage strategy is implemented. These temporary drainage facilities will prevent the ponding of surface water within the development site and ensure that the risk of localised flooding is not increased.

4.1.15 Storage ponds, gravel filter strips and water reclamation systems make up the surface water drainage solution for the site.

4.2 Design and Appearance

Building Form, Scale, Height and Massing

4.2.1 The building form is in direct response to the internal building function and clear internal heights required for the relevant process equipment together with the functional relationships required between the process elements.

4.2.2 Due to the scale of the individual buildings no attempt has been made to introduce an arbitrary form to potentially disguise the function of the building. This would not be economically viable and would only serve to increase the mass of the SEP. The SEP is broken down as a series of buildings rather than one complete built form. The taller building elevations will also be articulated to help reduce their perceived mass.

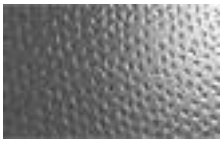
4.2.3 Whilst the proposed SEP and the associated chimney are substantial buildings, careful design of site layout, the selection of appropriate colours for the buildings and stacks, and proposed new planting has helped to minimise the potential impact on both landscape character and views.

4.2.4 The most obvious mitigation measure in terms of the visual impact of the proposed stacks would be its location towards the existing Paper Mill stacks and buildings. Careful selection of stacks colour also assists in minimising its visual impact. The taller boiler house building is also located towards the Paper Mill buildings to help reduce the visual impact and the SEP's building heights reduce in scale a mass the closer they get to the river Swale.

Figure 1.12 – Design and Appearance – Corus Colourcoats

1.

2.



3.

4.

5.

6.

Above

1. Picture of barns on the Isle of Sheppey providing a colour precedent for the proposed SEP
2. Corus Colourcoat Hamlet
3. Corus Colourcoat Merlin Grey
4. Corus Colourcoat Terracotta
5. Corus Colourcoat Anthracite
6. Extract from proposed elevations.

The above images of the Corus Colourcoat samples are not necessarily a true representation of the finished colour. Corus explain that every attempt has been made to achieve an accurate colour representation.

Architectural Design

Colour

4.2.5 Several colour schemes have been explored for the proposal ranging from an industrial palette of greys, corporate colours and eventually a palette of natural colours reflecting local context.

4.2.6 We have identified that sensitive view points from the Isle of Sheppey highlight that the majority of the SEP buildings are set below the horizon against a backdrop of the existing paper mill, town buildings and agricultural land. Only the upper two thirds of the stack and taller elements of the buildings will be seen against the backdrop of the sky from these views. A decision has therefore been made to utilise natural muted colours for the majority of the building which will potentially help the building fade into the background from the distant views. In theory the new SEP will block out the existing paper mill buildings from the Island improving the view.

4.2.7 A defined variated colour band runs around the perimeter of the SEP providing an architectural cohesion. The variation of colour and linear banding remove the physical irregularity of the building footprint when viewed from the distance and will also distort the physical extents of the SEP consequently reducing the perceived mass. The variated colour band consists of the following colours - Corus Colourcoat Terracotta, Merlin Grey, Anthracite and Hamlet.

4.2.8 The taller building elements are finished in Corus Colourcoat ‘Hamlet’ which is a light grey colour. This lighter colour will help reduce the visual impact from distant views as the building is seen above the horizon against the back drop of the sky.

Elevational Treatment

4.2.9 The main body of the SEP has been treated with the intention to break down the irregular footprint from distant views and also give the building a clear horizontality which would help reduce the perceive height of the taller buildings.

4.2.10 The variated colour banding which runs around the perimeter of the SEP lifts the development above and beyond a typical industrial building making a positive statement whilst also helping this large development blend into the landscape from the majority of distant views.

4.2.11 Terracotta coloured clad stair towers help break the mass of the taller building elements down and act as a clear definition between the internal functional areas. The darker colour set against the lighter grey main body colour of the taller building elements should give the impression that the SEP is a series of individual buildings from distant views.

4.2.12 With the exception of the variated banding, surface articulation is minimal. Flat horizontal panels and profiled metal panels together with vertical flashings are proposed. Shadow and depth helping to break up the building mass will be created by colour and building form.

Figure 1.13 – Elevational Treatment

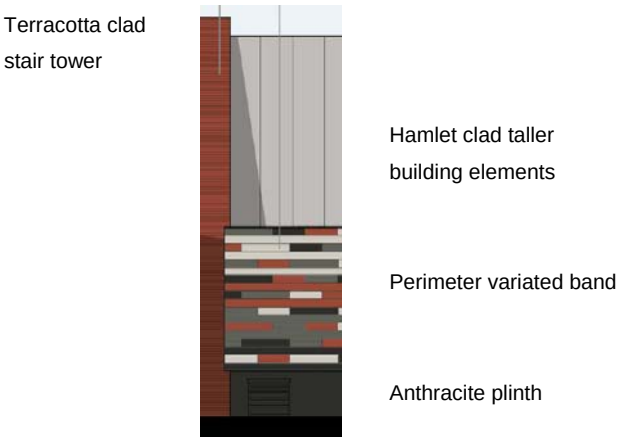


Figure 1.14 - South East Elevation

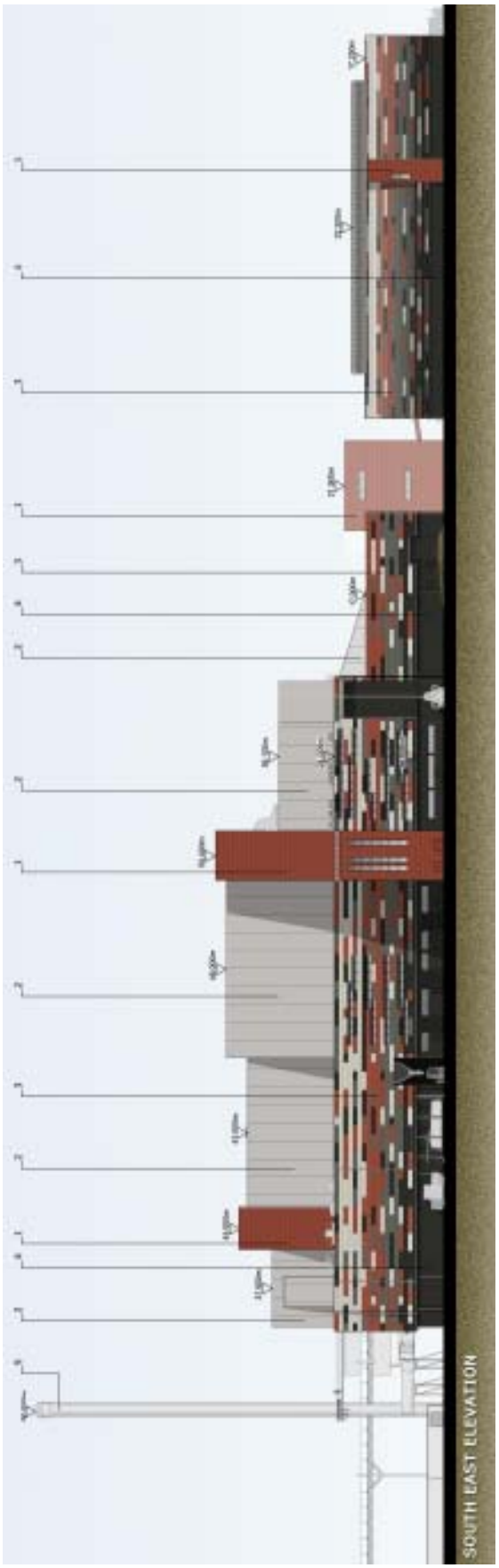


Figure 1.15 - North East Elevation

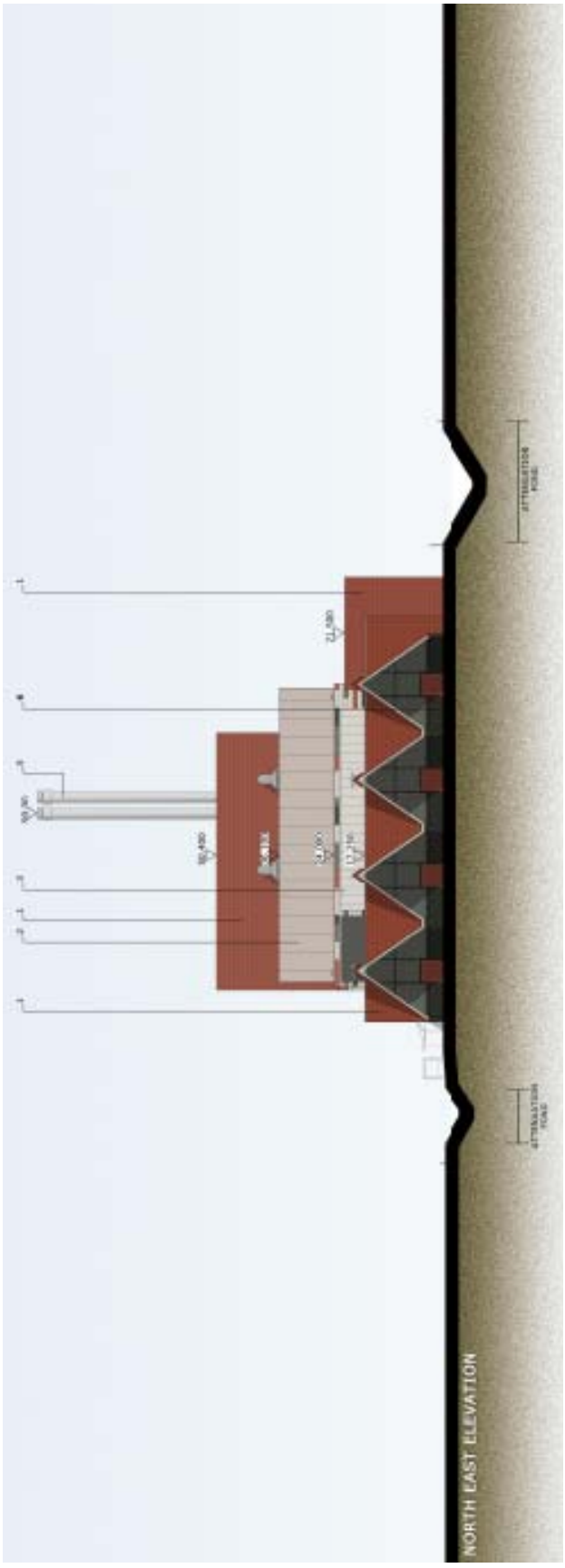


Figure 1.16 – South West Elevation

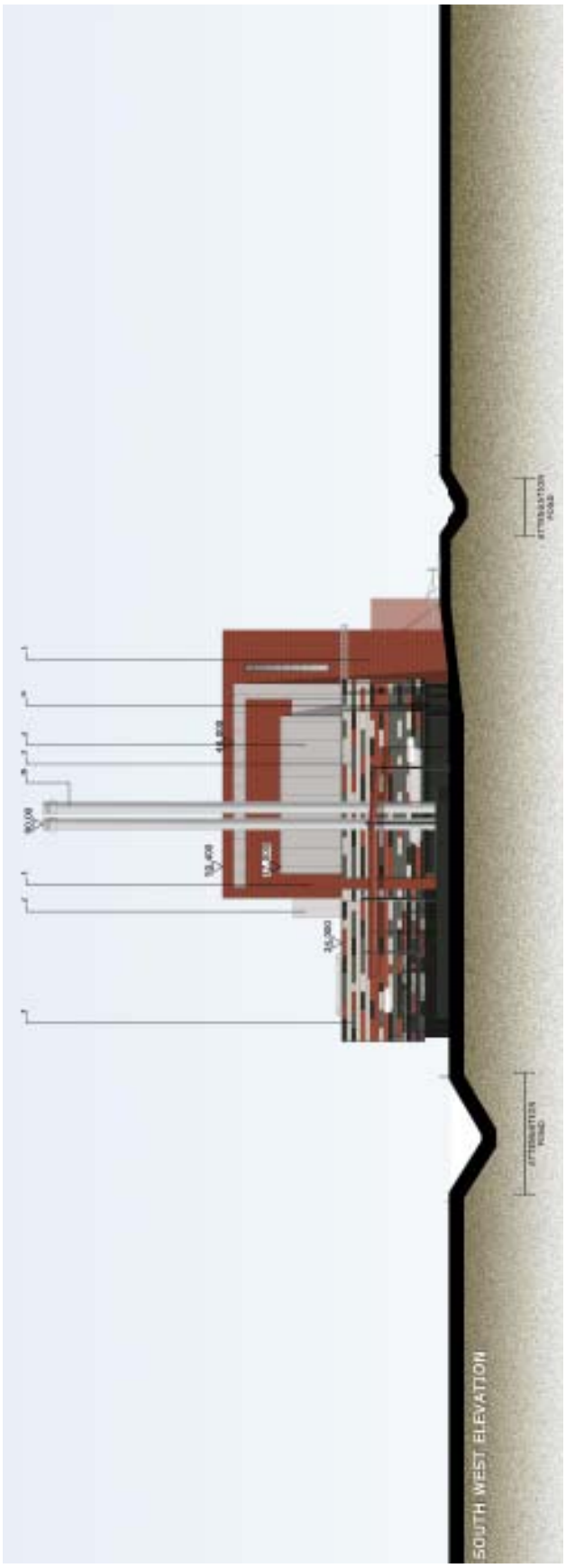
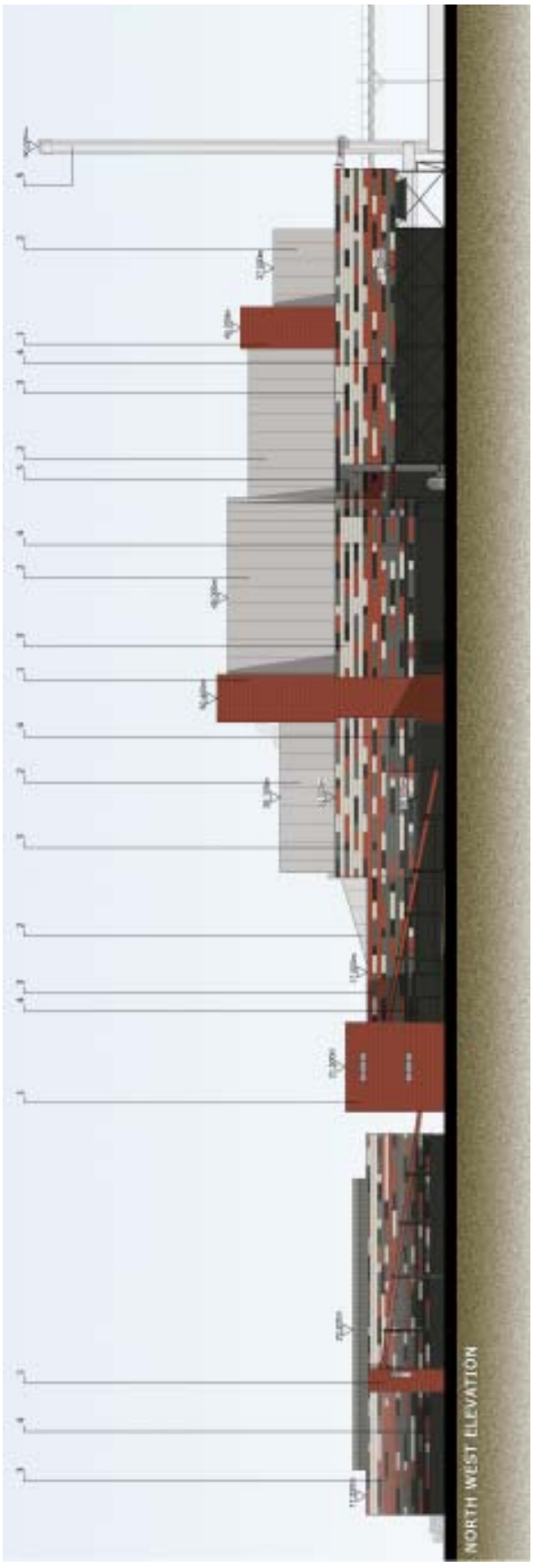


Figure 1.17 – North West Elevation



Materials

4.2.13 Materials typical to an industrial facility of this nature have been specified and consist of a profiled metal and flat panel cladding system, Corus Colour coated.

4.2.14 The proposed external facing materials are as follows:

Roof

- Profiled metal cladding, Corus colourcoat finish, Goosewing Grey colour

Walls

- Low Level Plinth - Horizontally laid flat composite panel, Corus colourcoat Anthracite
- Main Building Perimeter Banding - Horizontally laid composite metal cladding, Corus colourcoat finish, colour Terracotta, Merlin Grey, Anthracite and Hamlet

Stair Towers

- Horizontally laid sinusoidal profiled metal cladding system, Corus colourcoat Terracotta.

High Level Building Elements

- Horizontally laid composite metal cladding, Corus colourcoat finish, Hamlet colour.
- Galvanised steel to external plant and support

Windows and Doors

- Polyester powder coated aluminium door and window systems are proposed, coloured to be Anthracite – RAL 7016
- Dark grey tint to window glazing.

Brise Soleil (directly above all windows facing south east)

- 1200mm proprietary brise soleil metal system polyester powder coated Anthracite grey RAL 7016.

Stack

- Painted steel colour RAL 9001

External Areas

Planting and Surfacing materials

4.2.15 Landscape proposals comprising tree, scrub and grassland establishment have been incorporated as an integral part of the project. Landscape structure planting would be included along the north west and north east perimeters of the site and would incorporate a band of shrub planting with groups of trees. Native, locally typical species would form a robust mix to filter views of the development and add visual and ecological diversity to the townscape. These proposals have been taken into account in the assessment of effects of the proposal.

4.2.16 The landscape proposals have been designed as an integral part of the scheme to provide treatments for the perimeter and internal green spaces. The design has evolved with reference to key landscape features and qualities found within the surrounding Swale Borough landscape character types. The objective of the landscape proposals is to provide a scheme that is;

- An attractive working environment for employees that is practical and fit for purpose.
- Integrated with the landscape of The Swale, reflecting aspects of local landscape character and setting.
- Uncluttered to allow easy access and flow around the site.
- Integrated into the landscape and townscape in views from receptors both locally and at distance.

4.2.17 The perimeter landscape treatments to the north western and north eastern boundaries work in conjunction with the broad flood attenuation ponds which wrap around the development. Grassland would be established on the gently sloping sides of the ponds. The inner edge of the pond would be planted with scattered trees and shrubs along the top of the slope. Species would include silver birch (Betula pendula), hawthorn (Crataegus monogyna) and

dog rose (Rosa canina) in an open mosaic habitat. A broader continuous band of scrub with clumps of trees would be established on the outer edge of the attenuation pond. Species would include goat willow (Salix caprea), aspen (Populus tremula), field maple (Acer campestre), hazel (Corylus avellana), hawthorn (Crataegus monogyna) and blackthorn (Prunus spinosa). The two linear planting treatments would combine to form a visual screen of vegetation when viewed from surrounding receptors. The base of development, including site activities, would be concealed when the planting becomes established, whilst the upper portions of the development would remain visible. The planting would also add visual diversity to the attenuation ponds.

4.2.18 A wider area of land to the north east of the scheme would be planted with an open mosaic of scrub and rough grassland, with clumps of trees. Scrub would be established on the remaining two boundaries between the site and the landfill and the existing paper mill buildings.

Lighting

Existing facility lighting

4.2.19 The site is located in an area where there are a number industrial developments. The areas surrounding the industrial developments are open spaces with a variety of vegetation, marshes, creeks, roads and to the South and West the village of Kemsley.

4.2.20 The existing external lighting on the site generally provides illuminance within the site boundary. At and beyond the boundaries there is in most cases an insignificant amount of illuminance at ground level.

4.2.21 Where there are public roads running close to the site boundary, the road lighting overshadows any effects from the site lighting, except to the north of the waste stacking area where there is a high mast column on the boundary line which is fitted with luminaires which do not direct the light effectively away from the site boundary.

4.2.22 When the mill site is viewed from the surrounding roads and vantage points direct glare from some of the site lighting is evident, the intensity of which is dependent upon the type of light source, its location and the effects of the surrounding masking vegetation and landscape. However, when viewed alongside the other industrial sites, the perception of the glare from the lighting of the mill site is no more obvious than that from the other sites. The sources of much of the visible glare are mainly building mounted luminaires which angle the light away from the buildings and badly performing or adjusted high mast mounted luminaires.

Proposed extension lighting

4.2.23 The proposed lighting will produce lighting levels within the site are an average of 15 lux. This is true for both the construction period and the operational time following construction.

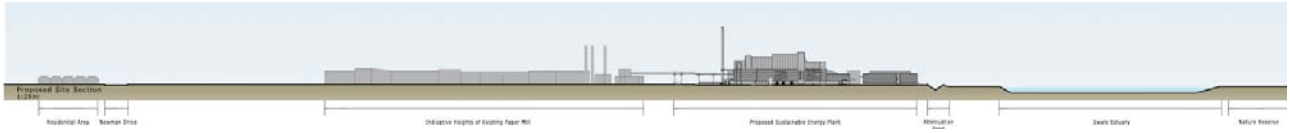
4.2.24 The off site lighting plans show that for the construction period the lighting levels will decrease fairly rapidly on moving away from the site boundary.

4.2.25 The construction period calculations indicate that at the north end of the site the lighting levels drop to 1 lux well within the site boundary.

4.2.26 The lighting will be clearly visible from all directions with the exception of the south west which is shielded by the existing plant. This situation will, however, be temporary for the duration of the construction of the new plant.

4.2.27 The street lighting fittings used will be unobtrusive from a distance due to the flat glass construction and downward profile of the light output. Building mounted floodlights have been mounted at low angles to create a similar effect and limit their visibility from a distance.

Figure 1.18 – Contextual Section through the Isle of Sheppey across The Swale, the new SEP, existing paper mill and residential properties



Relationship to Surroundings

Landscape and Views

4.2.28 The local landscape character areas of Elmley, South Sheppey, Chetney and Greenborough Marshes are primarily flat open marshlands with few trees or areas of scrub, however the Iwade Arable Farmlands and Teynham Fruit Belt contain hedgerows, tree belts, woodland and orchards. The proposal site lies within the Sittingbourne Industrial/Commercial townscape character area which typically includes linear tree belts and areas of scrub. The proposals seek to reflect the character of Sittingbourne and the surrounding landscape, establishing vegetation types using native species which will provide a transition in the landscape to connect the local areas' different urban and rural features and characteristics.

4.2.29 The landscape proposals would provide an attractive setting for the development, valuable habitats for wildlife and a means to soften the urban edge adjoining The Swale and merge development with the townscape of Sittingbourne in views from the surrounding landscape.

4.3 Safety and Security

4.3.1 Designing for community safety is a central part of Secured by Design and the following core principles have been considered within our proposal:

- Environmental Quality and Sense of Ownership
- Natural Surveillance
- Access and Footpaths
- Open Space Provision
- Lighting

4.3.2 We understand that further discussions with the local police Architectural Liaison Officer will be required to determine other relevant standards appropriate to the local area.

4.3.3 Our aim is to incorporate sensible security measures during the development of the SEP to reduce levels of crime and fear of crime and disorder.

Environmental Quality and Sense of Ownership

4.3.4 A high quality landscape setting will be provided around the perimeter of the main plant in keeping with the context. Long term maintenance and management arrangements will be in place, with ownerships, responsibilities and resources clearly identified for the upkeep and general maintenance of the landscaping and perimeter fencing.

Natural Surveillance

4.3.5 The public areas surrounding the office element of the proposal will be readily visible from the SEP itself. The landscaping between the proposed SEP and car park will be limited to ensure surveillance of the parked vehicles.

Access and Footpaths

4.3.6 The footpaths around the SEP will be of a generous width and have a suitable landscape setting avoiding narrow corridors. Our landscape proposal will demonstrate that hiding places are not created along the footpaths.

Open Space Provision

4.3.7 Open spaces which are not overlooked by buildings will be adequately lit.

4.3.8 Internal green spaces within the site would receive a simple treatment of grassland and flora with a network of mown paths. Seating areas would be defined by native fruiting trees arranged in geometric shapes to reference north Kent's heritage of orchards and fruit production.

Lighting

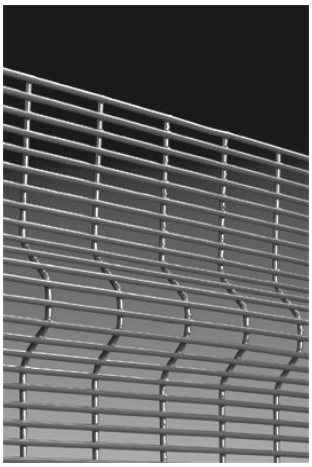
4.3.9 A lighting study and report will identify key recommendations for proposed lighting sources in consideration to different environments.

4.3.10 The principle aim of the lighting proposal is to allow safe movement of pedestrians, site operatives and vehicles within the SEP and promote the feeling of safety and well being to visitors and staff, whilst maintaining the effects of light pollution.

Boundary Treatment

4.3.11 The perimeter of the site is to be secured with a 3m high 'Anthracite Grey' RAL 7016 painted paladin fence and the extents of the site will be identified with a timber post and rail fence and hedgerows. The locations of the proposed fences are identified on our fencing layout drawing. The paladin fence which provides the necessary secure boundary to the SEP will be set back behind the proposed tree belts.

Figure 1.19 – Boundary Treatment



Above: Example of paladin fence

4.3.12 The Securifor 3D welded mesh panel system or similar will have a discreet visual appeal and a low impact on the surrounding environment. The small mesh offers a finger and toe proof profile, combining a high resistance to both climbing vandalism and attempts to attack the panel by cutting with hand tools. Specially designed steel fixing brackets are used to secure the panels to the front of the posts. The paladin fence solution is a system ideally suited for the protection of industrial developments.

4.3.13 The paladin fence will break at the point of the fuel office/gatehouse and security at this point will be provided by automatic barriers controlled by the SEP personnel.

4.4 Sustainability and Energy Efficiency

4.4.1 The following environmental information has been prepared to maintain the commitment to best practice in relation to sustainable development.

4.4.2 This section summarises the proposals to be implemented in the delivery of this development and seeks to illustrate the environmental features of the SEP, to ensure a sustainable development.

4.4.3 Environmental considerations are now firmly on the agenda for development and operation of all types of buildings. Not only legislation, but increasing environmental awareness is moving public opinion towards higher expectations in terms of environmental performance, which coupled with decreasing security of energy resources, is leading towards a realisation of the importance of considering whole life issues of our building stock. The variety of measures that can be applied to different building form is significant, and biomass combined heat and power plants raise specific issues to be addressed that differ somewhat from more usual industrial type buildings. It is fundamental that a holistic view is required to produce a balanced development that usefully maximises the positive performance of the scheme, but with the minimum of impact where reasonably possible.

4.4.4 Clearly the fundamental advantage of such a plant is in the production of useful energy. Such schemes assists in national efforts to reduce unclean energy generation, and carbon dioxide emissions, but there are numerous other areas that the impact of a plant can be reduced, whether in areas such as material use, ecology, or pollution, and delivering the most appropriate balance is often one of the most difficult design and construction issues to solve.

4.4.5 The overall scheme has undergone a project sustainability assessment as part of the initial planning and project validation process. This assessment relies on various areas of mitigation being incorporated, many of the elements within this assessment relate directly to the building fabric and operation, and it is important that these measures are carried through or improved upon to maintain the low overall impact status.

4.4.6 This statement highlights areas where positive measures have been adopted and incorporated in to the design to achieve an acceptable balance. These measures address areas of sustainability across the whole range of issues that are important to such a scheme.

4.4.7 The concept design sets out the overall parameters for the building structures, and provides good control for the likely impacts on their surrounding areas. As more detailed design progresses the fundamentals laid down in the outline design are developed and the specific

plant and technology integrated with the concept. The detail design of the SEP maintains the considerations to best practice and appropriate guidance produced by CABE and the mitigation measures detailed as part of the project sustainability assessment.

Background and Minimum requirements

International, National, Regional and Local Objectives

4.4.8 The wealth of policy and guidance of sustainability related issues can appear to be daunting and often conflicting in nature, but the fundamental premise of reducing impact in all its various forms to an acceptable level.

Agenda 21

4.4.9 This international guidance is broad ranging and informs national policy on the whole range of issues for all aspects of human activity, and particularly examines the social and economic dimensions of sustainable development. This is important to re-affirm that sustainable development is a balance of not just environmental impact, but also quality of design and financial constraints.

Securing the future

4.4.10 Are a set of nationally agreed guiding principles that distil higher agreements into 4 priority areas;

- Sustainable production and consumption
- Energy and Climate change
- Protection of natural resources and environmental enhancement
- Sustainable communities

PPS 1- Delivering Sustainable Development

4.4.11 Guidance that in general terms underpins all planning policy, and champions sustainable communities and the need for good quality design to produce attractive, usable, durable and adaptable places.

Recycled and Low Impact Materials

4.4.12 Construction materials significantly deplete finite natural resources. The specification of materials and products with high-recycled content can reduce this impact, together with materials with low processing requirements.

4.4.13 Industrial sustainable design is often a more difficult balance to achieve than in standard design as the priorities are more heavily skewed towards functionality than for a typical building. It is paramount that the functionality of the plant is not unduly compromised at the expense of utilising products and materials that are unsuitable in the longer term. Experimentation with untried technologies on a large scale would be inappropriate, as the consequences and effect on the process could outweigh the benefit of lower impact.

4.4.14 The design of the building is fundamentally assessed to ensure it is efficient, and generates the right balance between minimising resource use and providing a robust and appropriate design, within an acceptable economic framework. The construction process will be carefully managed to minimise waste, by significant prefabrication of elements where possible, and diversion of any construction waste, away from traditional streams, back to recycling facilities

4.4.15 The measures detailed below have been chosen as their performance is to a suitably high standard, but have a lower whole lifecycle impact than alternative similar materials, either by a reduction in resource use (either by design or high recycled content), or their ability to be reused or recycled.

- Steelwork is to be sourced from manufacturers that utilise a high recycled content in their process. This reduces the quantity of raw materials extracted from virgin sources throughout the world, and the subsequent reduction in power consumption, and pollution associated with mineral extraction and processing.

- Steelwork sections are to be hard stamped to indentify the quality and grade of material. This allows easy future reuse of the sections without resorting to re-smelting of the metals. This is the most appropriate recycling of the material, with significantly less energy expended because the known provenance of the material allows widespread use.

- The cladding materials are to be sourced from ‘Corus colours’, which not only operate a robust environmental management system, but through the ‘Sustain’ initiative, further compensate the energy expended during manufacture, with offsetting to truly ‘additional’ energy saving/generation schemes throughout the

world. The coatings used are the highest performing of their type, but have a lower impact due to Corus initiated measures in composition and production.

- Insulants are specified from non petroleum sources, which not only have a lower direct environmental impact, but also when used as a built up system in the cladding, allow easier dismantling for reuse or recycling.

- There are significant quantities of concrete on the project where required to ensure durability, and avoid excessive maintenance and early repair and replacement. The materials used will be sourced from recycled sources or waste materials if locally available, balanced against the impact from transportation of such materials from distant sources. Similar processes will be adopted specifically for Tarmacadam road bases and bedding materials for block paving.

- Cement is a significant consumer of energy in its production. Where possible a significant percentage of the cement in concrete products will be replaced with waste products from other heavy industries.

4.4.16 This process extends right through the design, from the major elements above to smaller components such as plasterboards in the offices, which will be manufactured from Power station waste used in the desulphurisation process, or the specification of natural Marmoleum, which performs as well as the petrochemical alternatives, or recycled yarn carpets.

Building fabric

4.4.17 This development is specifically for the generation of electricity where the purpose is to utilise as much heat as possible in order to be efficient and viable, consequently the majority of the building does not fit in to the normal category of 'U' values associated with normal building use. Insulation to the office elements will satisfy present building regulations to ensure sufficient energy conservation.

Glazing Properties and Specification

4.4.18 The proportion of window and wall will be carefully considered to balance the provision of daylight and thermal performance of the building.

4.4.19 High specification glazing shall be provided in order to reduce conductive heat losses in the winter and solar gains, consisting typically of a 6mm Antisun on clear glass outer pane, 16mm argon filled space and 6mm 'Low e' clear inner pane.

Passive Solar Design to Reduce Solar Gains

4.4.20 There are many different versions of solar shading, from the simple internal blind to modulating external devices. In essence, they are used to change the peak timing of the peak solar gain and therefore the associated cooling load within the internal space. The most efficient shading devices are located externally to the glazing such that the re-radiated solar heat does not enter the building unlike internal shading devices which radiate the solar heat back into the space.

4.4.21 The primary elevation to the main office element of the SEP faces south east and will therefore require some form of solar shading. We are proposing a brise soleil system which is identified on the elevation drawings.

Water Conservation and Recycling

4.4.22 To minimise potable water consumption a number of measures will be implemented:

- Toilets with 4/2 litre dual flushing capabilities should be used throughout the development

- All taps for hand-washing should have a spray action combined with a timed on/off restrictor.

4.4.23 Rainwater is naturally soft and essentially free from chemicals and limescale. The roof sheeting material to be specified is Corus Colorcoat Sustain HPS 200. This material has been tested to BS6920 – Test on Effect of Water Quality, and is of potable quality as it runs off the roof. Any rainwater run-off from the roof will therefore not have any detrimental effect of the quality of ground water.

Surface Water Drainage

4.4.24 With reference to Appendix F7 of PPS 25 a sustainable approach to the management of surface water drainage is to be adopted:

- The perimeter storage pond will be vegetated and will hold, slow down and contribute to treatment of the run-off water. The pond will prevent uncontrolled discharge water entering areas of land adjacent the site.
- The gravel filter strips will slow down and treat run-off water from the perimeter access road indicated on the drawings before it enters the swale.
- The water reclamation systems indicated, represent additional source control in addition to providing a useable resource.

4.5 Accessibility

Introduction

4.5.1 The A249 is located approximately 2km to the north and west of the site and is accessed via Swale Way.

4.5.2 The A249 connects with both the A2 west of Sittingbourne and the M2 at Junction 5 approximately 8km south of the site. To the north, the A249 provides access to the Isle of Sheppey.

External Areas

4.5.3 All levels within the car park will have a gradient of less than 1:25 enabling wheelchair users and ambulant disabled to access the site without difficulty.

Access

Vehicular

4.5.4 Two points of vehicular access are currently available to the existing Kemsley Paper Mill. The southern access is via Ridham Avenue to the south of the mill site and is used by HGVs (including those requiring use of the weighbridge) and staff and visitor cars. The main site car park is provided to the south of the site. The other site access that is less intensively used is located at the north-east corner of the site and is accessed via Barge Way. It is proposed that staff and visitors at the proposed site will use the existing southern access and car park. HGVs accessing the proposed development will use the existing northern access.

4.5.5 The on-site access road is approximately 7.5 metres in width, reducing to 3.8 metres in width at three locations where width restrictions are present. A pedestrian footpath is present on the southern side of the access road and routes from the visitor car park to the new SEP to the

north east of the site. The minimum width of this footway is around 1.2m. The maximum speed limit on site is 10mph, reducing to 5 mph adjacent to the existing fire station.

Pedestrian

4.5.6 When the first section of the Sittingbourne Relief Road (also known as the Milton and Kemsley Distributor Road) was constructed, Ridham Avenue was closed to vehicular traffic at a point immediately west of the new roundabout linking Ridham Avenue with the Relief Road. The route remains open for pedestrians and links to the eastern residential area of Kemsley. An on-site pedestrian footpath currently routes around the south of the Kemsley Paper Mill from the Kemsley Paper Mill visitor car park and gatehouse to the new SEP.

4.5.7 Shared pedestrian/cycle paths run along the western side of Swale Way and the northern side of Barge Way.

4.5.8 The site lies within 1km of some residential areas to the north of Kemsley. The site also lies within the maximum walking distance of a bus stop.

Cycle

4.5.9 The site is within close proximity to on and off road cycle routes which link to the wider Kemsley and Sittingbourne area. A National Cycle Network traffic free route is provided alongside the Kemsley Marsh Drain to the south west of the site which leads to a National Cycle Network on road route provided along the B2005 Grovehurst Road from Sittingbourne to Queenborough. This on road cycle route provides a direct link to Kemsley Railway Station. An additional National Cycle Network traffic free cycle route is proposed to be implemented from Milton Creek to Kemsley Marsh linking with Kemsley Marsh Drain and the B2005.

4.5.10 The quiet nature and low traffic speeds of the roads to the south west of the site linking to Kemsley are conducive to cycling. Cycling is not currently permitted on the existing Mill site for health and safety reasons. Cyclist will park in the existing car park and share the existing shelters provided.

4.5.11 Paragraph 78 of PPG13: Transport suggests cycling has the potential to substitute for shorter car journeys of under 5km. This journey distance would make Kemsley and the majority of Sittingbourne accessible by bicycle.

Figure 1.20 - Extract from the site layout drawing showing existing car park and proposed foot path route

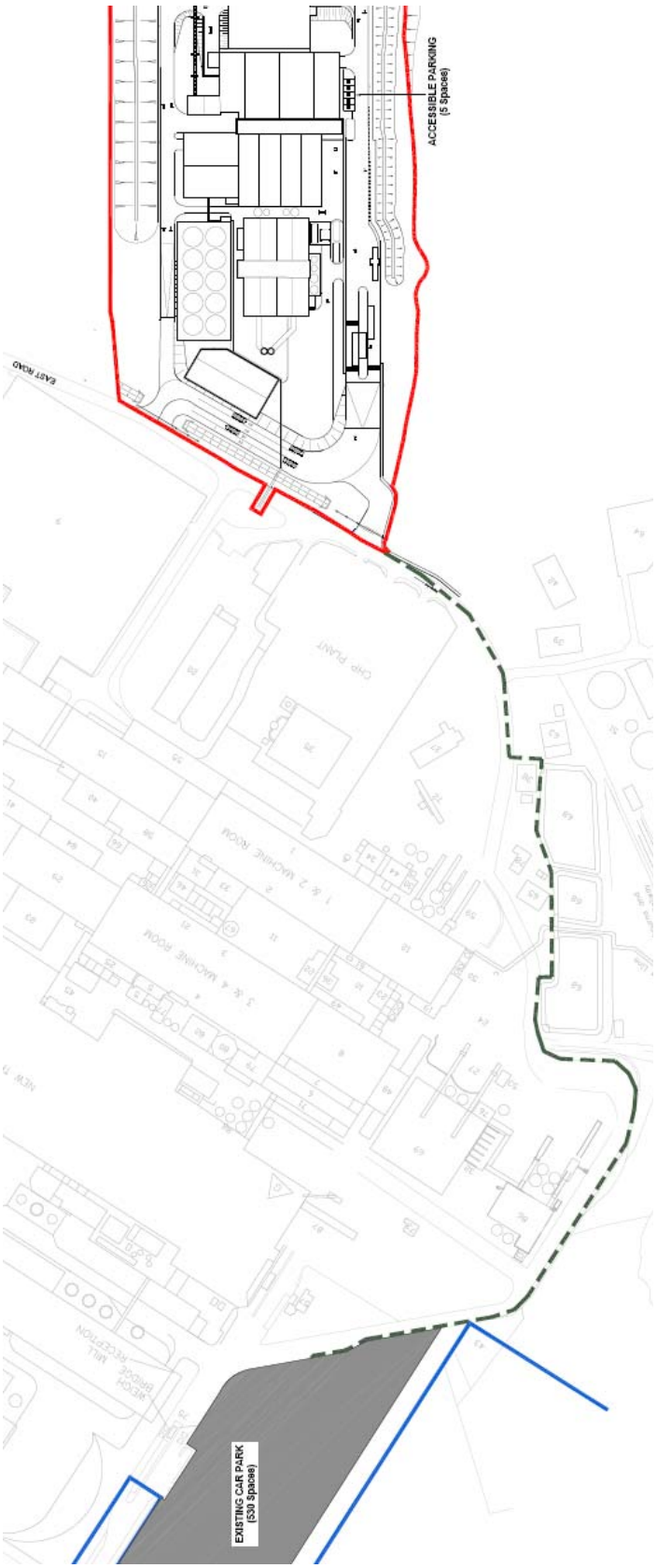


Figure 1.18 - Parking schedule

	Land Ownership Boundary
	Proposed Development Boundary
	Footpath Route

Existing Parking Schedule	
Existing Standard Spaces	503 spaces
Existing Accessible Spaces (Based on assumption of 5% provision)	27 spaces
Total Spaces	530 spaces

New Development Requirement	
Standard Spaces	95 spaces (Within Existing Car Park)
Accessible Spaces (Based on assumption of 5% provision)	5 spaces (Adjacent proposed offices)
Total Spaces (Requirement based upon 80 staff and 20 visitors)	100 spaces

Parking

(See Figure 1.20 opposite)

Delivery Vehicle

4.5.12 There will be adequate queuing for delivery vehicles prior to the weighbridge due to the provision of 2 lanes for queuing traffic.

Car

4.5.13 Vehicular parking for ambulant/non-ambulant disabled staff and visitors is provided as close to the primary building entrance as practicable.

4.5.14 Disable parking provision is provided as approximately 5% of the overall parking provision of 100 spaces. The operator will be responsible for producing a Green Travel plan to encourage workers to utilise sustainable forms of transport and car sharing.

4.5.15 100 spaces from the existing Paper Mill car park will be allocated the new SEP.

Cycle

4.5.16 Adequate Cycle and Motor cycle parking will be provided within the existing Paper Mill car park. Shower facilities will be provided within the new SEP for use by visitors and staff.

Emergency Access

4.5.17 It is proposed the emergency vehicles will have full perimeter access to the new SEP.

The Buildings

4.5.18 All main entrances into the buildings will be level entry, with automatic or manual opening doors. The doors will meet all current Building Regulations Part M requirements, with full height tubular steel handles for ease of opening. The force required to operate the doors will be below 20 Newtons and the effective opening width of each leaf will be designed to be more than 800mm.

Reception and Visitors

4.5.19 The reception areas to the main offices will be suitably sized to accommodate wheelchair users. They will include appropriate space and waiting zones. All floor finishes will be suitable for wheelchair access. All wall and floor finishes will be carefully selected to enable the visually impaired to find their way to the reception areas.

Horizontal Circulation

4.5.20 The primary entry into the Offices will be via a level approach into the reception area.

4.5.21 Internal corridors will be a minimum of 1200mm wide within the Office. All doors will have a minimum clear opening of 800mm and a maximum opening force of 20 Newtons where possible.

4.5.22 Door furniture will contrast with the background colour of the door leaf and be of either lever type at 1000mm above floor level or pull handles. Doors in corridors will be fitted with vision panels commencing at 500mm above floor level.

Vertical Circulation

4.5.23 Stairs will provide vertical access within the SEP. All staircases will be designed in accordance with Approved Document M of the building regulations, to include contrasting nosings and treads/risers suitable for ambulant disabled members of staff or visitors. Any member of staff or visitor with a visual handicap will be actively managed within the building.

Toilets

4.5.24 Toilets and shower facilities will be provided that are suitable for ambulant disabled staff. Offices will be provided with toilet provisions for male, female and unisex disabled users.

Means of Escape

4.5.25 It is recommended that the needs of individual members of all staff are to be assessed using Personal Emergency Egress Plans and management arrangements. These should be introduced as necessary following appropriate risk assessments by the end user.

5 Summary

5.1.1 As the report describes Kemsley SEP will provide an environmentally sustainable energy supply to the Kemsley Paper Mill, this will reduce its dependence on fossil fuels.

5.1.2 The SEP has been designed to be pragmatic with the site operation utilised providing the most economic layout with a linear process and form adopted. This has been reflected in the internal vehicle routes and movements, and the central location of the stacks helping to reduce its visual impact from key sensitive locations, especially within the Nature Reserve on the Isle of Sheppey.

5.1.3 The overall aesthetic of the building has been derived from various constraints, while working to the required overall mass of the SEP. Around the site are various key visual receptors all of which have been considered within the design. The fragmented arrangement of the various elements has been consolidated with a feature horizontal band wrapping around the building. The colour scheme for the building reflects those found in the locality, both in adjacent to and through views towards the site. These multicoloured bands give some continuity to the SEP but also break up the elevation centrally, giving the impression of lowering the building height. The lower elements of the building are finished in profiled Anthracite cladding to provide a solid deep base. Those elements above the horizontal banding are again in profiled cladding but coloured in a light natural colour, to help blend the large masses into the skyline. All of these are punctuated with vertical Terracotta bands which help to break the horizontal mass of the building.

5.1.4 Once all of these various constraints were addressed the outcome is a building which responds positively to its surrounding and provides the quality of industrial architecture such a delicate site demands. By not attempting to achieve perhaps the impossible and hide the building away, this building can be the visually pleasing focal point it needs to be, while maintaining the form following function and efficient approach to meet the scheme's brief.