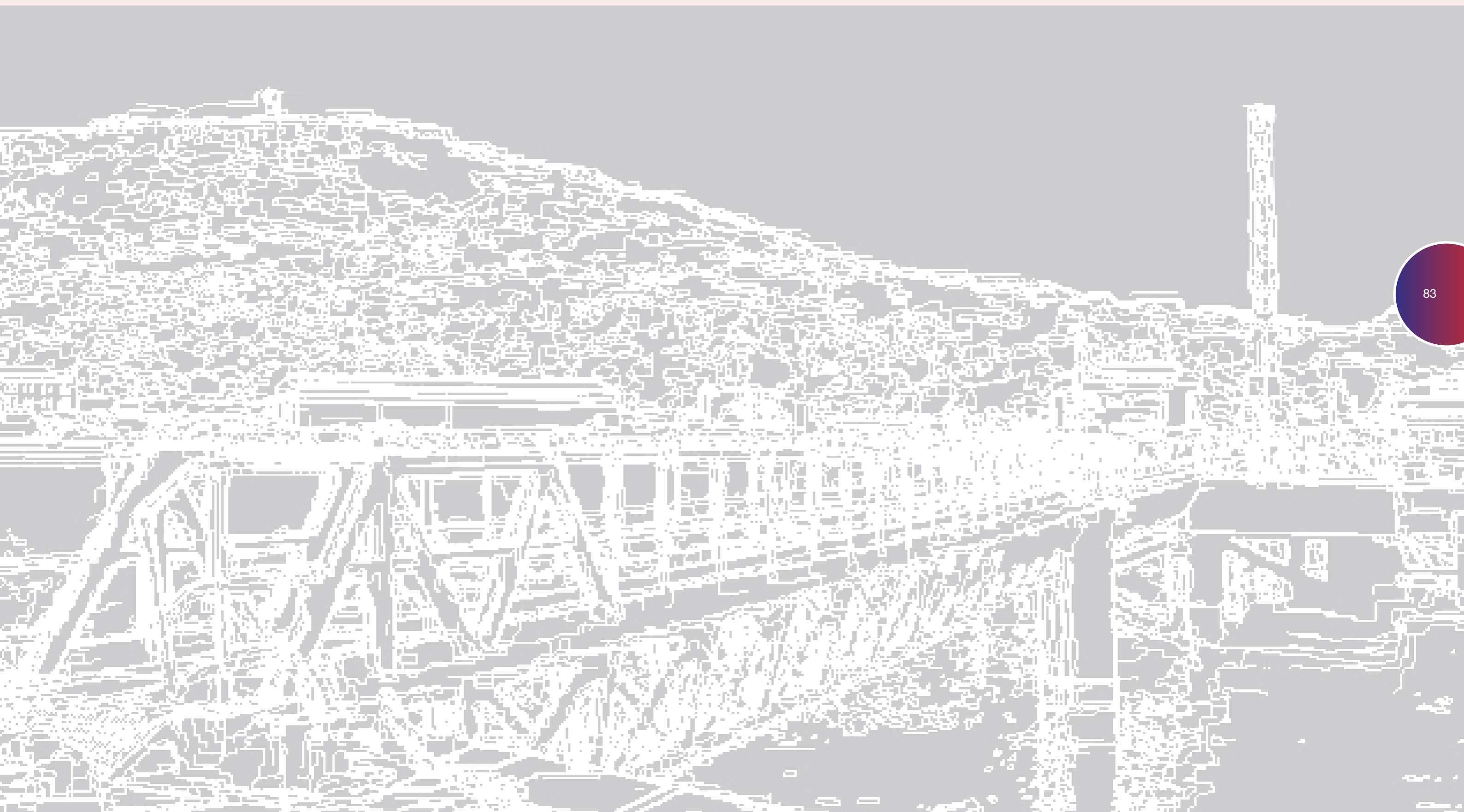


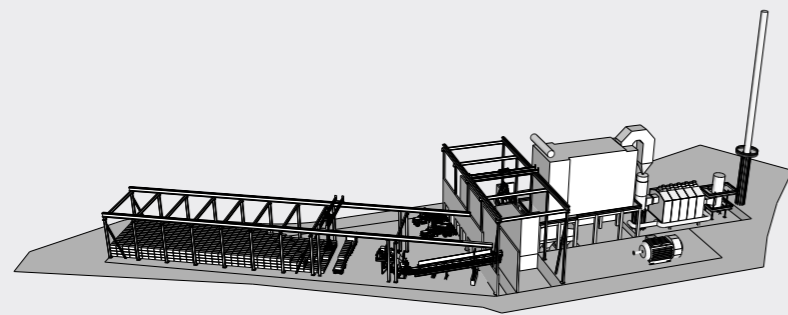
The final proposals





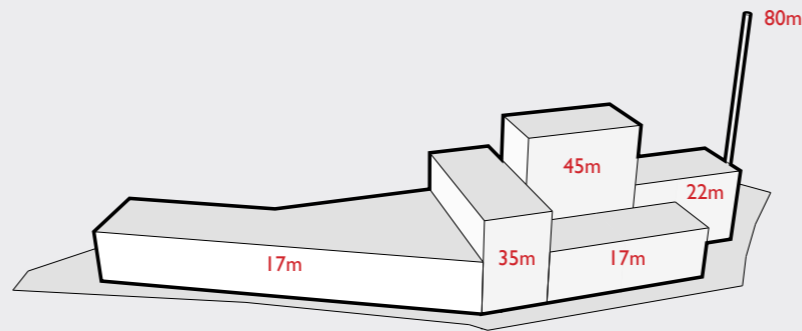
THE FINAL PROPOSALS

MASSING PRINCIPLES



I. ERF PLANT

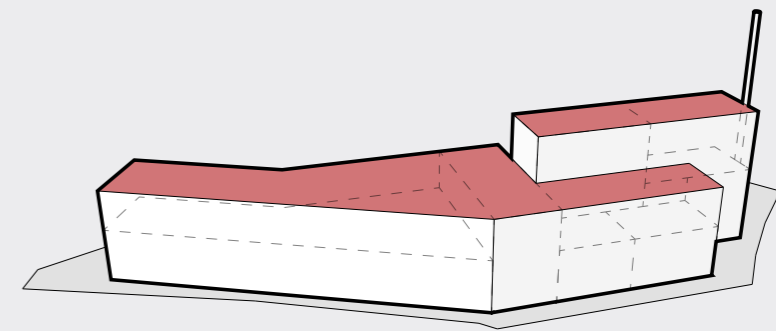
5.1.1 As set out above the functional relationships and shape of the site dictates the positioning and internal arrangement of the floor plans.



2. MINIMUM BUILDING HEIGHTS

5.1.2 Each area of the ERF plant requires a minimum area around and height above the equipment to allow the plant to efficiently operate and allow routine maintenance, as required.

5.1.3 Whilst these requirements dictate the base volumetric massing of the building, the visual sensitivity of the site from the Area of Outstanding Natural Beauty (AONB) dictates that built form needs to be more considered than a simple collection of geometric volumes.

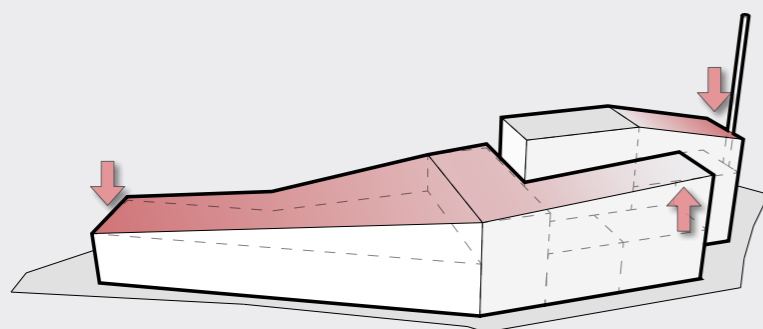


3. CLIFF FACES AND PLATEAUS

5.1.4 The massing of the building is simplified into two interlocking volumes.

5.1.5 The lower volume adjacent to Balaclava Bay wraps across the front of the taller volume behind. This partially conceals the mass of the taller element. This replicates not only the geological landscapes of cliff faces and plateaus visible behind but also the historic massing of the HM Underwater Detection Establishment (HMUDE) as indicated on page 22.

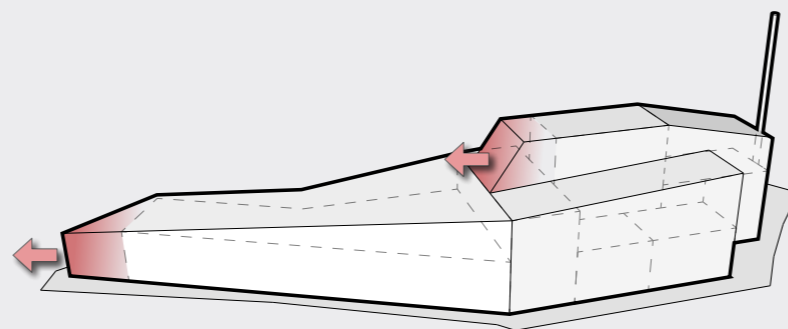
FIG 5.1
KEY MASSING PRINCIPLES



4. INSCRIBED GEOMETRY

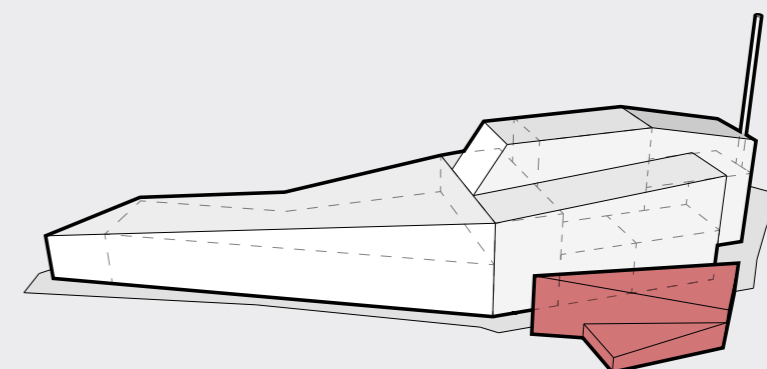
5.1.6 Whilst horizontal plateaus are typical of the north and south ends of the Isle of Portland the proposed building sits at the base of Incline Road which carves a strong diagonal feature into the side of the eastern cliff face.

5.1.7 This inscribed geometry is reflected in the massing of the building with the roofs picking up subtle angles, similar to those of Incline Road, providing a softer geometry to the building that begins to blend into the geological landscape.



5. CHAMFERED GEOMETRY

5.1.8 Small amendments are made to the end elevations to remove 90 degree angles and provide chamfered geometry to these areas that is more reflective of the geological strata found on the cliff faces behind.



6. OFFICE ACCOMMODATION

5.1.9 A small, stand-alone office building, with similar angular geometry, is located to the east of the ERF plant.

5.1.10 The lower scale of the building not only responds to the sheds and offices in the Port but layers the elevation when viewed from the AONB, diminishing the scale of the ERF Plant and contributing to the overall composition of the proposed development when seen from long distance views across the bay.



THE FINAL PROPOSALS SITE LAYOUT

SITE ARRANGEMENT

5.2.1 The internal plant is configured to ensure the building steps up in height from the water's edge in the port and Balaclava Bay to the tallest part of the building, the Boiler House, which has been located adjacent to Incline Road and undercliff of East Weare.

5.2.2 Subtle rearrangement of the original plant layout allows the building envelope to enclose all the main areas of plant in gently sloping forms that replicate the natural landscape.

5.2.3 Separated by only the width of the HGV route, the office building is located tightly against the plant building giving the impression of a single building in long distance views from the AONB and WHS in the east.

5.2.4 The angular design of the offices and use of the same materials as the plant building visually amalgamates the buildings by creating a cohesive aesthetic which helps diminish the scale of the Boiler House that sits at the back of the site to the west.

5.2.5 The linear alignment of the RDF Store, Pit, Boiler, Air Filtration and Stack allow effective and efficient plant operation.

5.2.6 The air cooled condensers are lifted onto the roof of the Turbine Hall and enclosed within the building envelope to reduce the footprint of the building and create a massing that provides the appearance of a single cohesive development.

5.2.7 The stack stands independently to the north of the plant building to improve dispersion of the filtered exhaust emissions.

5.2.8 The main service yard, silos, chemical stores and transformer compound are all located to the east

where there are largely screened from public view by the buildings.

5.2.9 A one way vehicular route running clockwise around the building is set up to minimise vehicle interactions and provide sufficient manoeuvring spaces for vehicles moving through and around the site.

5.2.10 Staff car parking is located at the eastern edge of the site allowing the office building to act as the front door to the whole complex.

5.2.11 The back up starter fuel is located at the site's eastern extent providing maximum separation from the fuel store and the buildings on the site.

5.2.12 Where the building layout allows, soft landscaping is introduced along the northern edge to create a sense of arrival for all vehicles and creating the opportunity for swales to assist with the site's SUDS strategy and as a habitat for Black Redstarts and invertebrates.

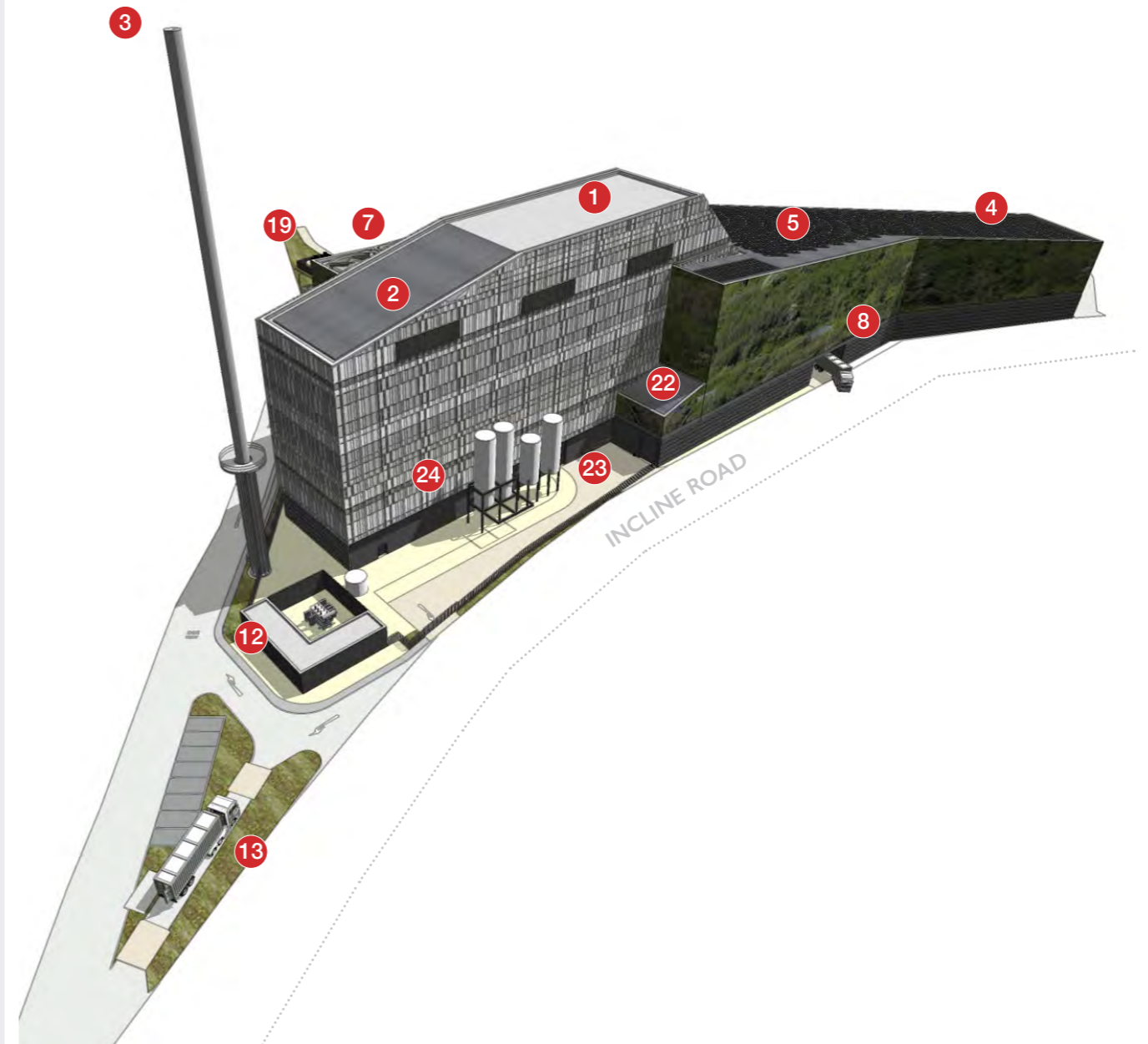


FIG 5.2
FINAL PROPOSALS 3D VISUALISATION FROM NORTH WEST

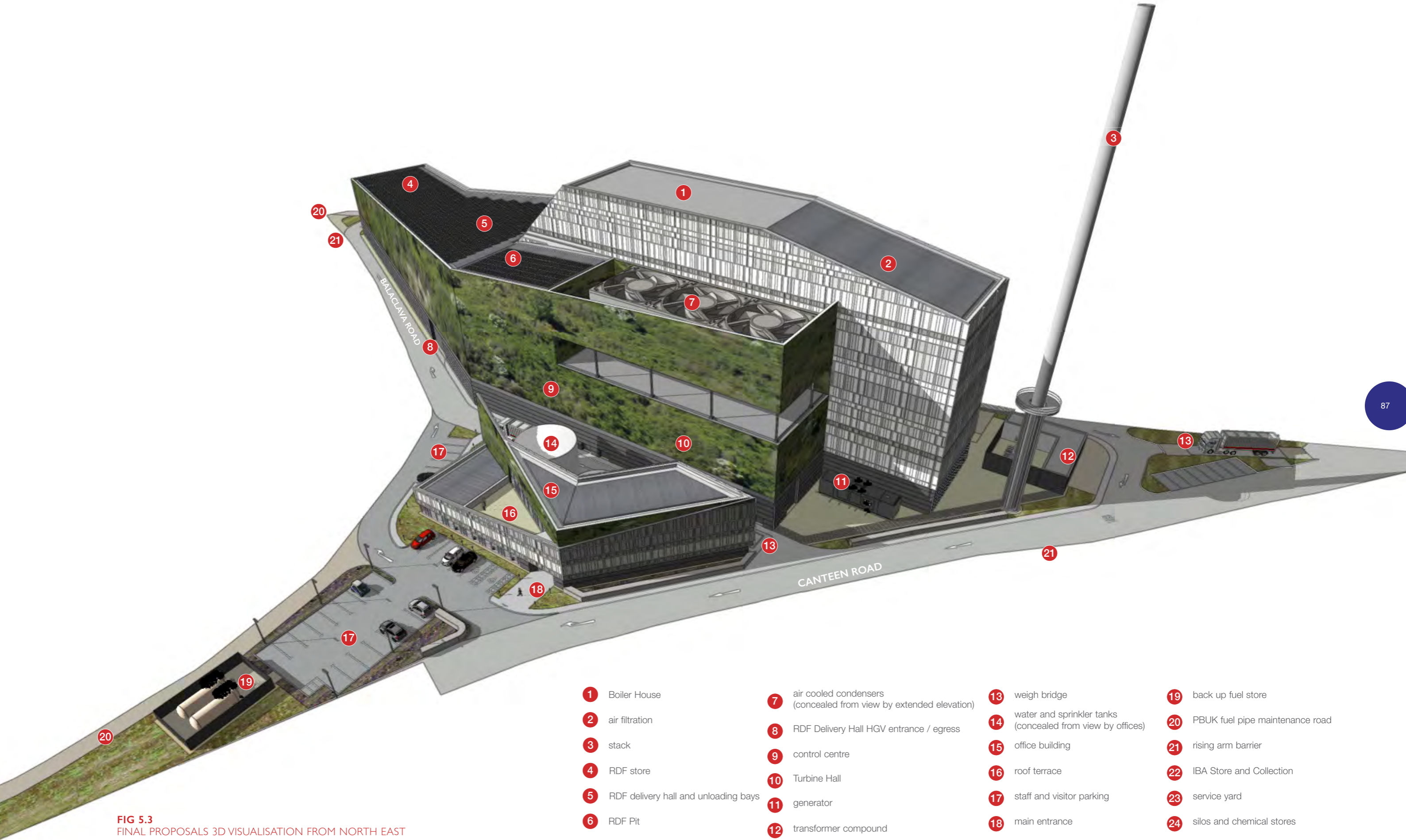
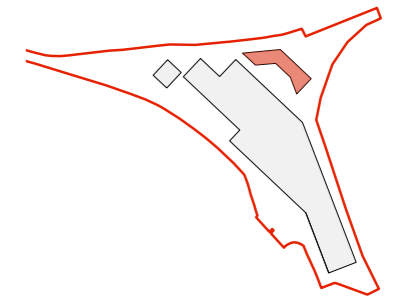


FIG 5.3
FINAL PROPOSALS 3D VISUALISATION FROM NORTH EAST

- | | | | |
|--|--|--|------------------------------------|
| 1 Boiler House | 7 air cooled condensers
(concealed from view by extended elevation) | 13 weigh bridge | 19 back up fuel store |
| 2 air filtration | 8 RDF Delivery Hall HGV entrance / egress | 14 water and sprinkler tanks
(concealed from view by offices) | 20 PBUK fuel pipe maintenance road |
| 3 stack | 9 control centre | 15 office building | 21 rising arm barrier |
| 4 RDF store | 10 Turbine Hall | 16 roof terrace | 22 IBA Store and Collection |
| 5 RDF delivery hall and unloading bays | 11 generator | 17 staff and visitor parking | 23 service yard |
| 6 RDF Pit | 12 transformer compound | 18 main entrance | 24 silos and chemical stores |



THE FINAL PROPOSALS OFFICE BUILDING LAYOUT



GENERAL ARRANGEMENT

5.3.1 The office building located in the north eastern corner of the site is cranked in plan to reflect the geometry of the boundaries.

5.3.2 The 810sqm of office accommodation is distributed over two floors. The cranked form of the building creates sufficient space for the water and sprinkler tanks between the building and HGV service road concealing them from views outside of the site.

5.3.3 The cranked form of the building occupies an area of the site approximately 55 metres long and 22 metres wide.

5.3.4 With all the staff and visitor parking located to the east of the building it acts as an entrance to the operational staff, with the reception, changing rooms and offices all accommodated in this building.

5.3.5 In addition to being the operational front of house, the office building is visually the most prominent parts of the site from both the port and AONB/WHS beyond. To reflect this the aesthetic appearance of the building uses the same architectural language and materials as the plant building behind to ensure both buildings have a cohesive appearance.

GROUND FLOOR

5.3.6 On the ground floor the open plan offices occupy the full extent of the eastern wing. The space is lined with storage rooms and its own kitchenette along the western edge and incorporates pockets of informal meeting spaces to support the range of office activities required.

5.3.7 The eastern and southern elevations of this area are lined with full height glazing which takes advantage of the beautiful views out across the water.

The glazing also ensures excellent levels of natural light and single-sided ventilation across the 7 metre deep floor plan.

5.3.8 The northern wing of the ground floor provides generous changing facilities, toilets and ancillary spaces for plant, bins and bike storage. A second entrance/egress is provided on the southern elevation of this wing allowing direct access from the changing and welfare facilities to the plant building to the west.

5.3.9 To allow the receptionist to monitor movement to all areas of the building the reception is located at the junction of the two wings. With the lift and the stair case to the first floor located directly behind the reception desk this also allows them to control access to the upper floors.

5.3.10 The main entrance comes into the reception on the north eastern corner of the building.

FIRST FLOOR

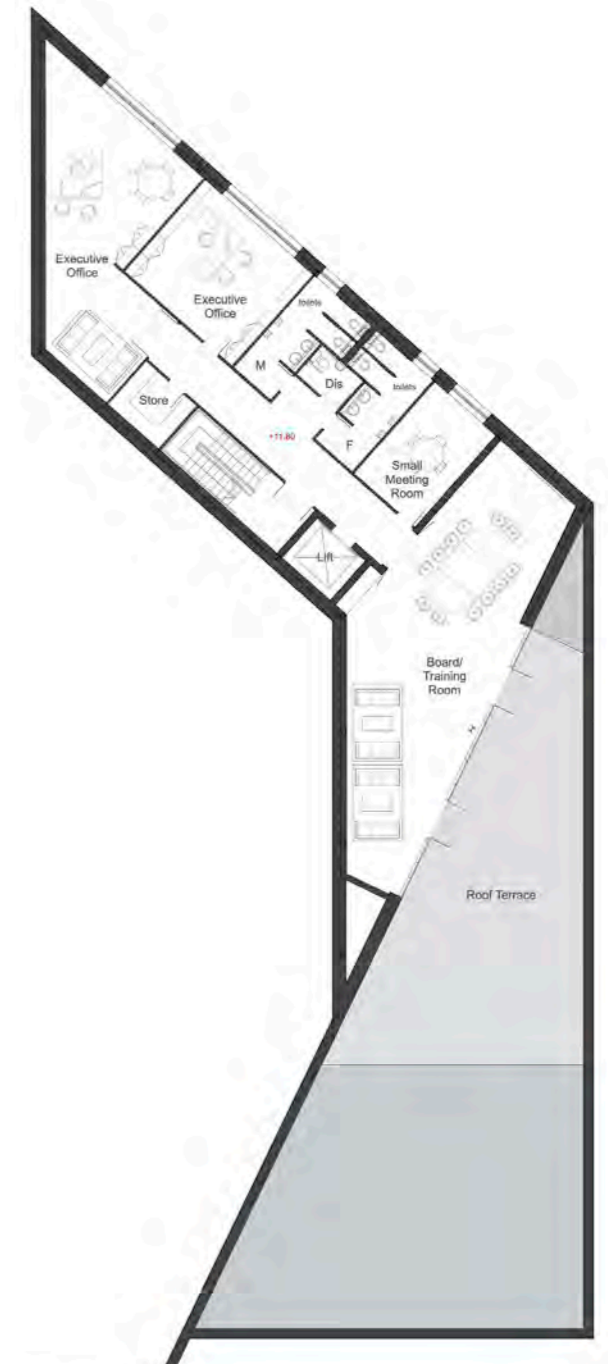
5.3.11 The first floor creates an executive suite. The elevated position exploits long distance views across the port and Weymouth Bay for the executive offices and small meeting room that line the northern elevation.

5.3.12 The angular form of the roof results in this eastern wing of the building stepping down to a single storey. This creates the opportunity for a large picture window and roof terrace to be provided to the large Board/Training room that is located on this prominent corner of the first floor.

5.3.13 The first floor includes further toilets that are stacked directly above the changing facilities allowing for the simple stacking of services and drainage runs.



Office building - Ground floor plan



Office building - First floor plan

FIG 5.4
FINAL PROPOSALS - OFFICE BUILDING FLOOR PLANS

FIG 5.5
OFFICE BUILDING AND CAR PARKING FROM NORTH EAST (INSET FROM SOUTH EAST)





THE FINAL PROPOSALS PLANT BUILDING LAYOUT

GENERAL ARRANGEMENT

5.4.1 The southern end of the plant building is occupied by the RDF store and RDF Pit.

5.4.2 RDF delivery vehicles enter the storage hall off Balaclava Road from approximately two thirds the way down the eastern elevation and exit the building in a straight line through the doors on the western elevation.

5.4.3 Once in the RDF store vehicles delivering loose RDF fuel will back up to the Pit within one of the four provide bays where they can deposit their load directly into the RDF Pit.

5.4.4 RDF bale delivery vehicles will swing to the northern side of the circulation route before reversing beneath the RDF bale overhead crane. The bales are then unloaded and stored to the south in the lower two thirds of the RDF storage hall.

5.4.5 The debaling area sits just to the south of the HGV exit on the western elevation. Here the bales are unwrapped before a conveyor belt elevates them above the vehicles and delivers the fuel to the RDF Pit.

5.4.6 The RDF Pit sits at the northern edge of the RDF storage hall. From here the overhead crane loads the fuel from the Pit into the Boiler Hopper.

5.4.7 The Boiler House, the air filtration and the stack operationally need to sit in a relatively straight line. These are also the tallest volumes of the building and so these hold the western edge of the site, adjacent to Incline Road, where their mass is lost against the cliff face and concealed by the lower spaces to the east.

5.4.8 The lower spaces to the east consist of the Turbine Hall, control centre and air cooled condensers.

5.4.9 Whilst a number of operational entrances and maintenance access are provided around the perimeter of the building the main pedestrian entrance provides access to the control centre directly opposite the rear entrance of the office building.

5.4.10 The control centre is distributed over three floors of the plant building and consists of the motor control room, technical rooms, LV Room, HV Room, stores and toilets. The main control room is located on the second floor and has a window providing a direct visual link to the RDF Pit and store.

5.4.11 At ground level the Turbine Hall is located in the north eastern corner of the plant building where it has a direct relationship to the steam pipework from the boiler to the west and the LV/HV to the south within the control centre.

5.4.12 To reduce the footprint of the building and maintain a close proximity to the other areas of the plant the air cooled condensers are lifted onto the roof of the Turbine Hall.

5.4.13 In this elevated position there was the potential for these to be visually prominent from the AONB and WHS to the east. To avoid this the building envelope was extended up to visually enclose the units. Whilst the photos below demonstrate that roof mounted ACC are achievable the units require large quantities of cool air and so the design of the elevation needed further consideration to include a linear air intake slot.

5.4.14 The elevational design of the building allows the stretch PVC mesh to be extended across the linear air intake allowing a continuity of the buildings form and appearance when viewed from long distances.

5.4.15 Out of public view to the west of the plant building, adjacent to Incline Road, the main service

yard incorporates a range of silos for chemical and ash storage.

5.4.16 The ash created in the Boiler House will be collected and transferred via a conveyor belt to the IBA store to the west of the Boiler Hall. Here it will be transferred via overhead crane to the back of the collection vehicles. As there is a potential for dust to be created during the loading process this spaces has been enclosed within the building envelope to ensure none of this escapes to the surrounding environment.

5.4.17 A transformer compound, with multiple switch-rooms, is included just to the north of the service yard.

5.4.18 Enlarged floor plans of the northern end of the plant building can be seen to the right.

5.4.19 Smaller scale plans showing the RDF store are included on pages 137 to 138.

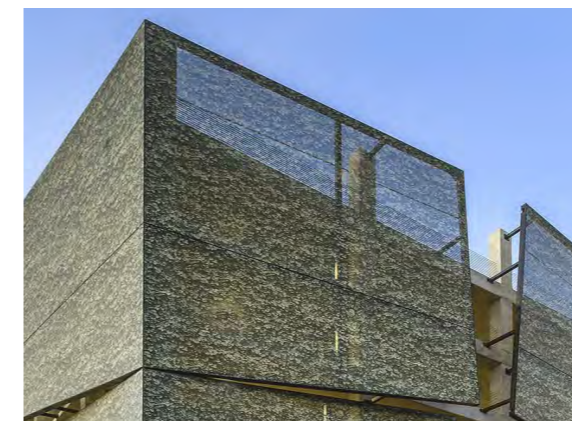
5.4.20 The detailed positioning of measures in the fuel storage areas, including partitioning, sprinklers, water canon, etc. will be agreed at a detailed design stage with the Local Authority Building Control, Dorset and Wiltshire Fire Services, Environment Agency and our insurers.



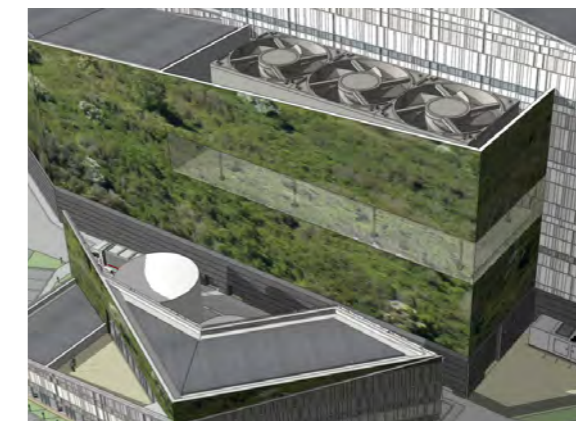
Holbrook Community Renewable Energy Centre roof mounted air cooled condensers



Holbrook Community Renewable Energy Centre air cooled condensers intake visible as linear slot on elevation



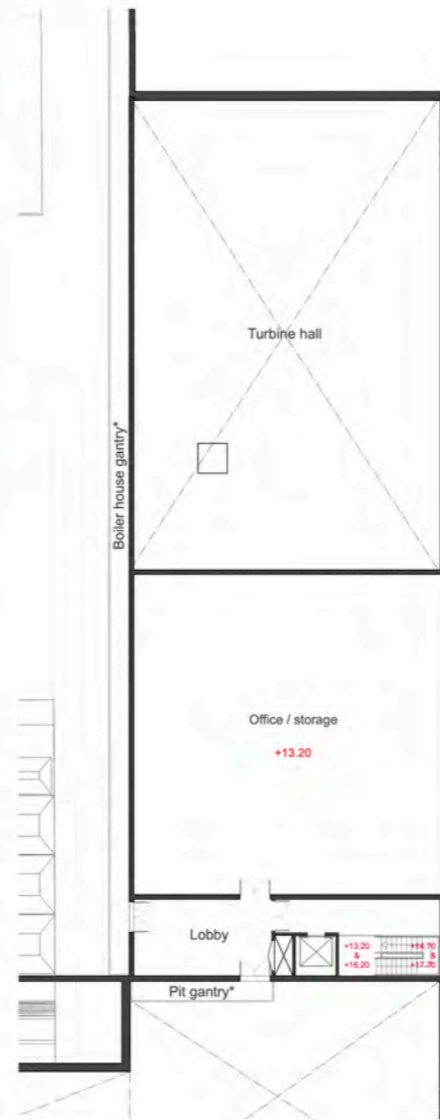
Example of printed PVC mesh screening



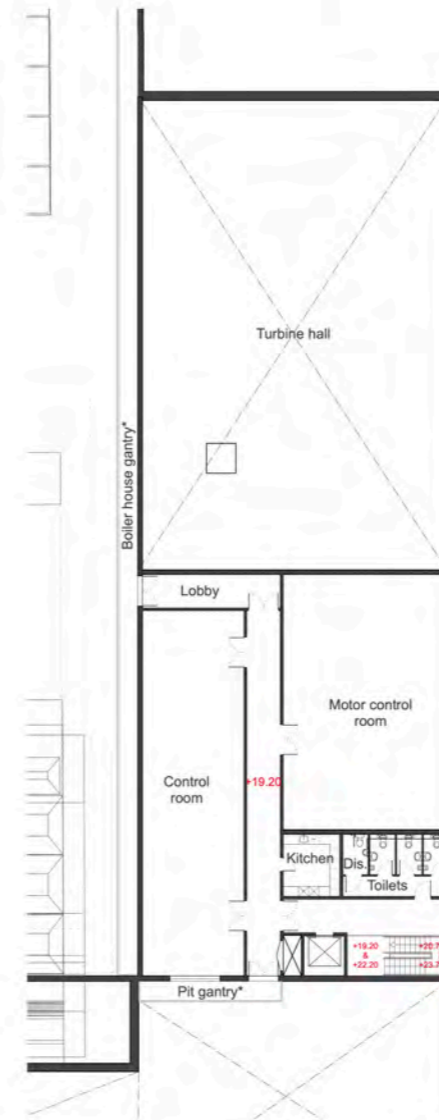
Proposed air cooled condensers concealed by printed PVC mesh



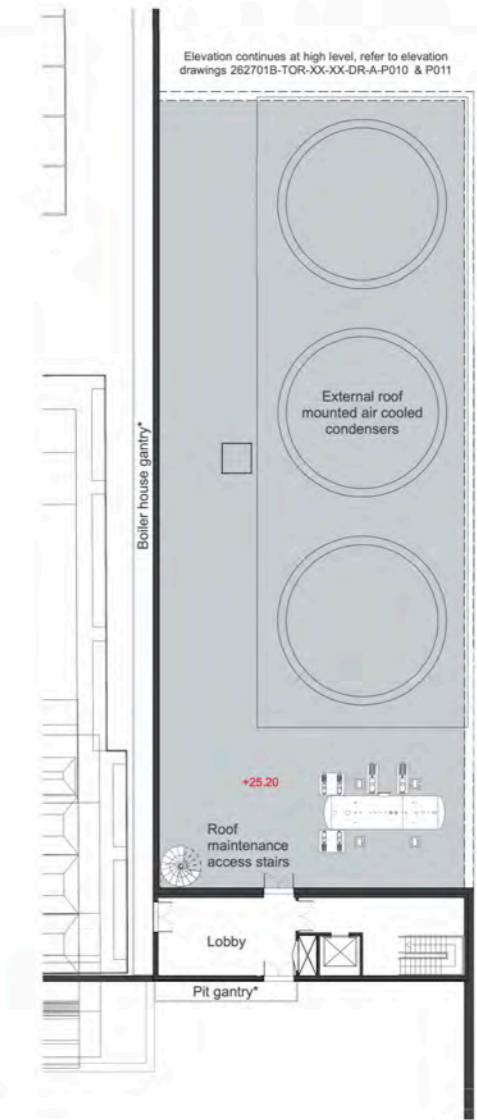
Ground floor plan



First floor plan

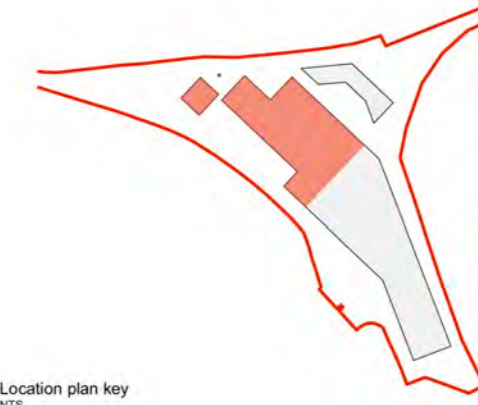


Second floor plan



Third / lower roof floor plan

Location plan key
NTS



*Gantry heights subject to final plant selection / operator

Elevation continues at high level, refer to elevation drawings 262701B-TOR-XX-DR-A-P010 & P011

Elevation continues at high level, refer to elevation drawings 262701B-TOR-XX-DR-A-P010 & P011

FIG 5.7
FINAL PROPOSALS - PLANT BUILDING FLOOR PLANS

FIG 5.8
PROPOSED VIEW FROM THE EASTERN END OF THE INNER BREAKWATER (SOUTH)





THE FINAL PROPOSALS CONCEPT ELEVATIONAL TREATMENT

FINAL PROPOSALS

5.5.1 A number of options have been considered in the development of the building's design.

5.5.2 The final design solution is summarised below and illustrated with a selection of drawings that show the final elevational composition and selection of materials.

5.5.3 The volumes of the RDF Store and the Turbine Hall wrap around the front of the taller Boiler House and air filtration plant. The green wall will be constructed from a high resolution photograph of the existing East Weare vegetation to provide a 'trompe-l'oeil' effect that will camouflage a large proportion of the building when viewed from the AONB and WHS to the east.

5.5.4 The upper extent of the Boiler House and air filtration plant hall that will still be visible from these long distance views will be clad in profiled metal cladding panels that are configured in a series of horizontal bands of various heights and colours to replicate the appearance of the exposed limestone cliff face at the top of East Weare.

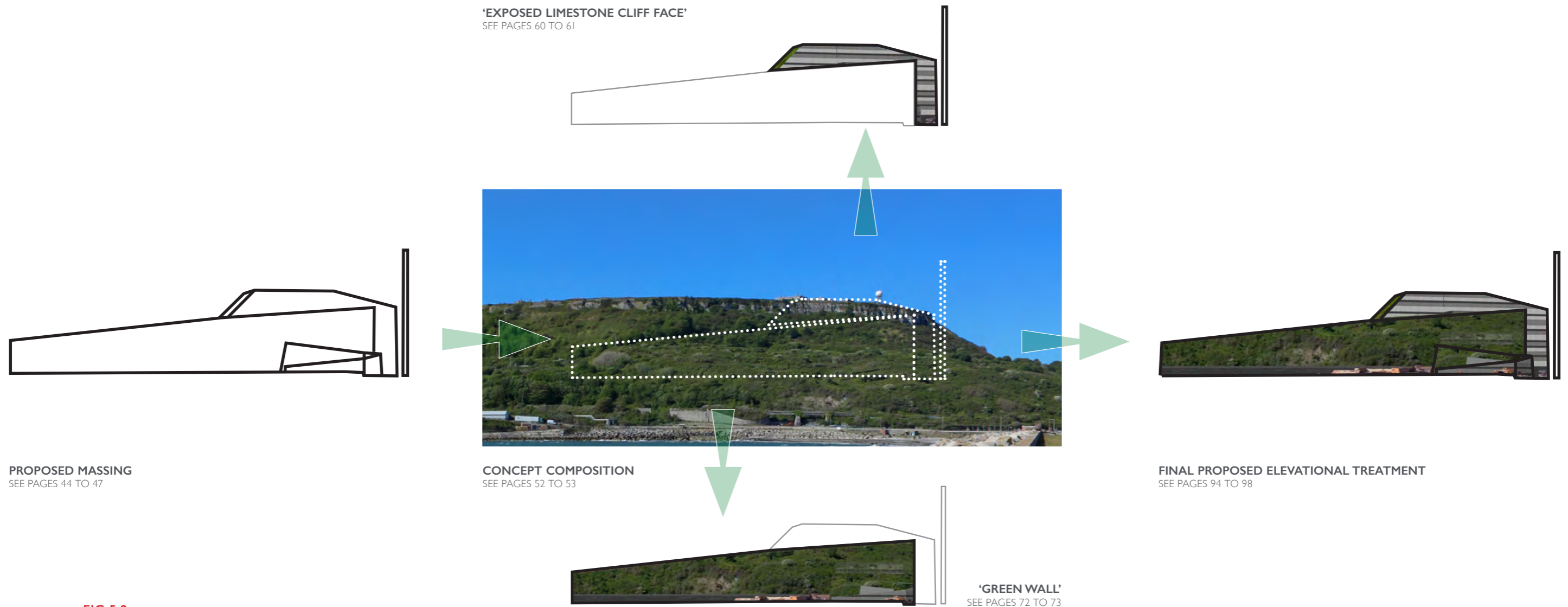


FIG 5.9
FINAL PROPOSALS - ELEVATIONAL MATERIALS CONCEPT PRINCIPLES

THE FINAL PROPOSALS MATERIALS SELECTION

5.6.1 At the base of the building a continuous louvre wall will ground the building and supply air to various areas of the building without compromising the aesthetic or composition of the elevation.

5.6.2 The cladding colours and printed image of the green wall replicate the vegetation and tones of the building's backdrop ensuring the proposals sit seamlessly in their context.

5.6.3 Short lengths of full height glazing will be provided to the eastern elevation of the office building to provide high levels of natural light and ventilation and to take advantage of the sea views.

5.6.4 The roof will be covered in photovoltaic panels generating in the region of 764MWh of electricity for use within the port or to feed back into the grid. The orientation and anti-glare coating will

prevent the panels producing glint or glare from any views to the building.

5.6.5 The composition of the building's form and materials will create a subtle addition to the landscape. This will allow them to blend into the background in the long distance views whilst providing a distinctive, landmark building up close for those visitors arriving in the port by boat.

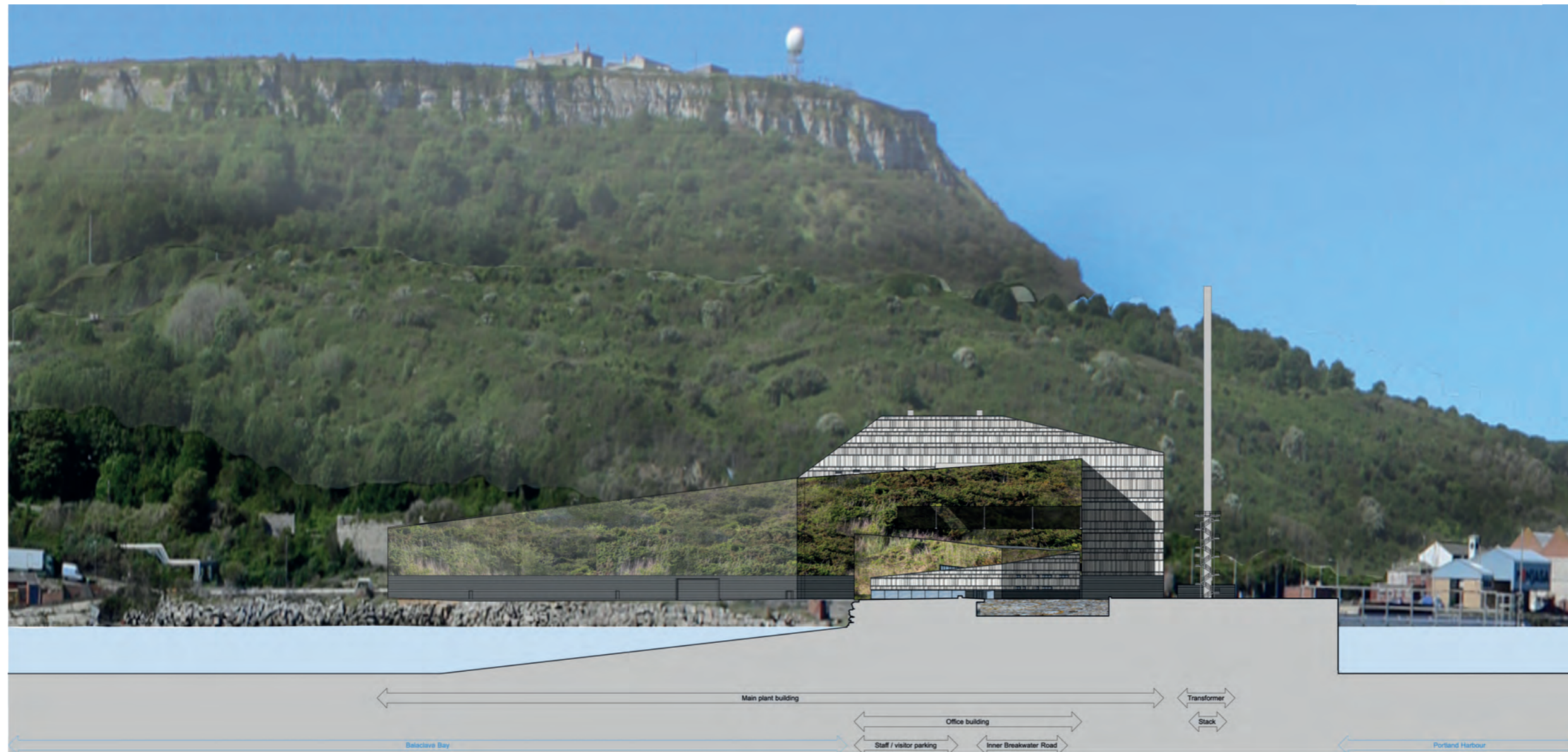
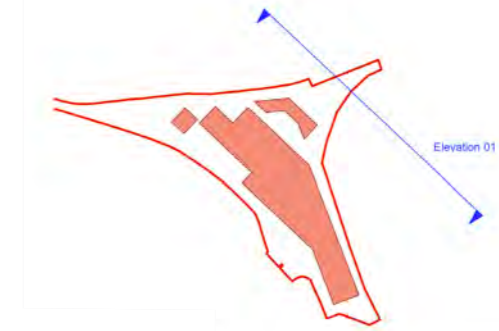


FIG 5.10
PROPOSED EASTERN ELEVATION (IN CONTEXT)

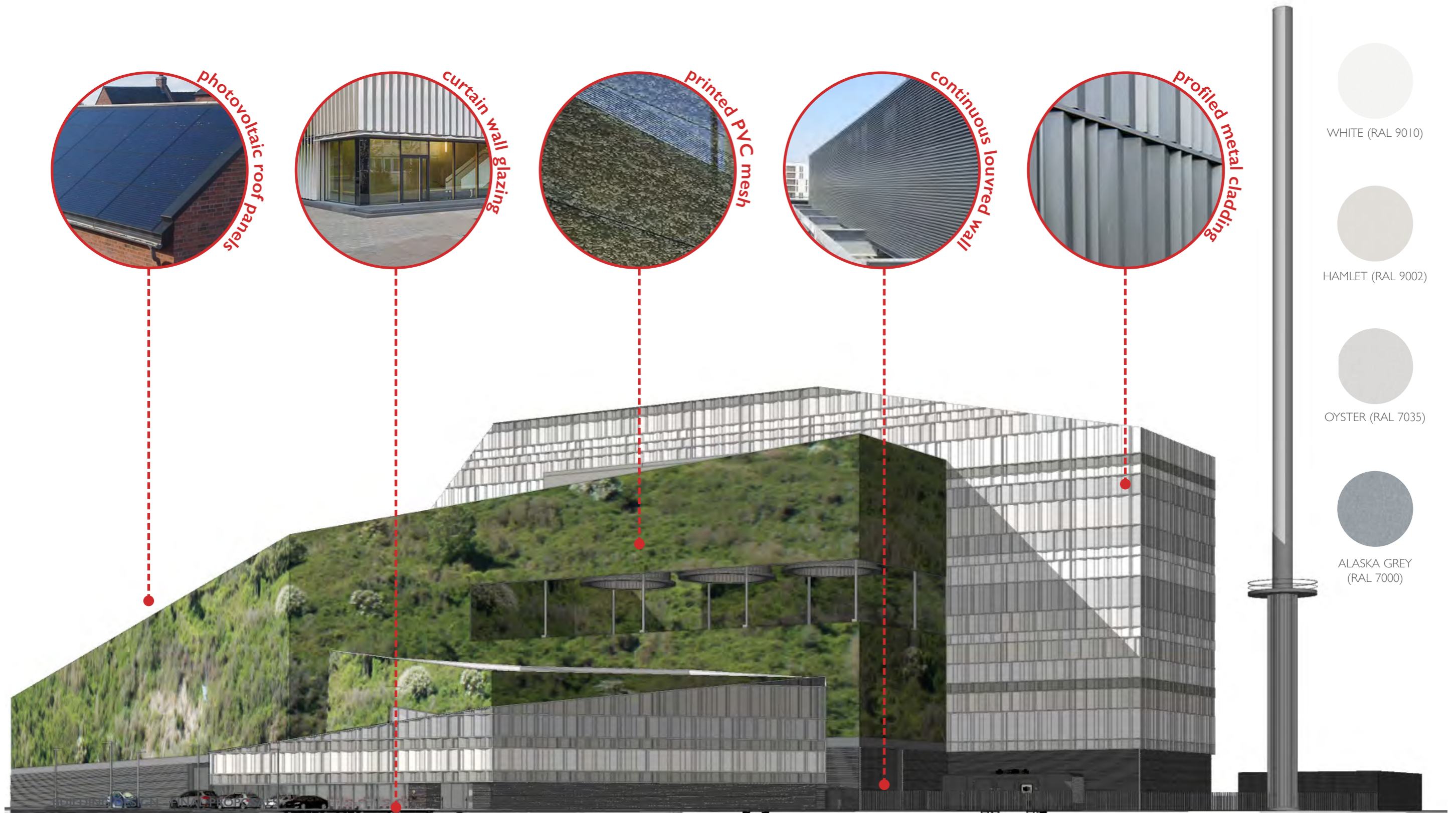


FIG 5.11
FINAL PROPOSALS SELECTED MATERIALS AND COLOURS



FIG 5.12
VP10: PROPOSED VIEW FROM NOTHE FORT



VP10: Enlarged view from Nothe Fort

THE FINAL PROPOSALS FINAL PROPOSALS IN CONTEXT



Viewpoint locations



VP8: Enlarged view from Ferrybridge Inn

FIG 5.13
VP8: PROPOSED VIEW FROM FERRYBRIDGE INN

Every effort has been taken to ensure that these images are an accurate depiction of the proposals. For fully verified photomontages that comply with the detailed methodology set out in Landscape Institute, 2019, Visual Representation of Development Proposals Landscape Institute Technical Guidance Note 06/19 (17 September 2019) please refer to the LVIA, Chapter 9 of the Environmental Statement.

THE FINAL PROPOSALS / FINAL PROPOSALS IN CONTEXT



Every effort has been taken to ensure that these images are an accurate depiction of the proposals. For fully verified photomontages that comply with the detailed methodology set out in Landscape Institute, 2019, Visual Representation of Development Proposals Landscape Institute Technical Guidance Note 06/19 (17 September 2019) please refer to the LVIA, Chapter 9 of the Environmental Statement.

FIG 5.14
VPI1: PROPOSED VIEW FROM OSMINGTON WHITE HORSE



VPI 1: Enlarged view from Osmington White Horse