SECTION C
MINERALS AND WASTE MANAGEMENT

Background Documents - the deposited documents; views and representations received as referred to in the reports and included in the development file for each case; and other documents as might be additionally indicated.

Item C1

Full planning application for the development of a waste to hydrogen facility with associated ancillary infrastructure, a non-residential innovation and educational facility including offices, new junction onto Manston Road, access and internal roads, boundary treatments, landscaping and other associated works at land at Manston Road, Margate, Kent, CT9 4JW - TH/26/351 (KCC/TH/0050/2026)

A report by Head of Planning Applications Group to Planning and Regulation Committee on 2 December 2026.

Application by Hydrogen TE (Manston) Limited for the development of a waste to hydrogen facility with associated ancillary infrastructure, a non-residential innovation and educational facility including offices, new junction onto Manston Road, access and internal roads, boundary treatments, landscaping and other associated works on land at Manston Road, Margate, Kent, CT9 4JW.

Recommendation: Subject to the satisfactory conclusion of a legal agreement, permission be GRANTED subject to conditions.

Local Members: Luke Evans and Amelia Randall Classification: Unrestricted

Site

1. The application site comprises approximately 6.58 hectares (ha) of agricultural land located on the western side of Manston Road, approximately 4.5km south east of Margate and 2km north of Manston Airport. The site forms part of a larger agricultural holding and is generally flat and open in character, with limited boundary vegetation consisting primarily of low-level hedgerows.

2. The site is bounded by agricultural land to the north and west. To the south lies an earth bund beyond which are storage and industrial uses associated with the wider 'District Park' employment area located on the adjoining land. To the east and south-east are further agricultural fields, together with commercial and industrial premises, including DDS Reclamation and other established industrial and storage uses fronting Manston Road.

3. There is currently no direct vehicular access into the site. Access to the wider agricultural holding is presently taken from the 'Woodchurch Track', located approximately 110 metres (m) north of the site via Manston Road, this track also shares a Public Right of Way (Bridleway reference - TM19). The proposal includes the creation of a dedicated new access road from Manston Road.

4. The surrounding area is predominantly rural in character, comprising open agricultural land interspersed with farmsteads and scattered residential properties. The nearest residential properties are located off Vincent Road c.260m to the northeast. A row of residential dwellings is situated approximately 400m south of the site along Manston Road, with other residential properties located throughout the wider area and Manston Airport is located approximately 2km to the south.

5. The site lies wholly within Flood Zone 1 and is therefore at low risk from tidal and fluvial flooding. There are areas within the site identified as susceptible to surface water flooding. The internationally designated Thanet Coast Special Area of Conservation (SAC) and the Outer Thames Estuary Special Protection Area (SPA) lie approximately 2.7km to the north. The Thanet Coast and Sandwich Bay - SPA, SAC and Ramsar sites are located approximately 3km to the south. The Sandwich Bay to Hacklinge Marshes Site of Special Scientific Interest (SSSI) also lies approximately 3km to the south. Whilst the site is not subject to any statutory landscape, ecological or heritage designations, it does fall within the Impact Risk Zone for SSSI, SPA, SAC and RAMSAR.

6. The site is identified as predominantly Grade 2 agricultural land, with a central area classified as Subgrade 3a, and as such comprises Best and Most Versatile agricultural land.

7. The area immediately surrounding the site is therefore considered to be agricultural land and open countryside but it has also experienced recent commercial and energy related development, including industrial units immediately adjacent to the site and solar energy development to the south east.

Recent Site History

8. The application site itself has no recorded planning history, however, the Planning Statement identifies several recent planning permissions on land surrounding the application site which they state demonstrates an established and growing industrial and energy-related character in the locality. These include permission granted in July 2025 for the Manston Solar Farm (2.7ha) which lies approximately 750m to the south east.

9. Permission was also granted in September 2025 for the erection of two workshop and storage buildings (Use Classes B2 and B8) together with an office building (Use Class E(g)(i)) on adjoining land south west of the application site.

10. In August 2024, approval was obtained for amendments to the adjacent District Park scheme originally approved under application F/TH/20/0590, involving changes to building layouts, heights and parking arrangements for a substantial industrial development comprising four light industrial/general industrial buildings and associated storage, parking and landscaping. The original permission for this development was granted in September 2022.

11. Further north along Manston Road, planning permission was granted in January 2018 for the change of use of land and buildings at The Mushroom Farm and the erection of four industrial buildings for mixed B1, (Offices/Research and Development/Light Industry), B2 (General Industry) and B8 (Storage and Distribution) Uses.

12. In addition to these local permissions, a Development Consent Order (DCO) was granted in August 2022 to enable the reopening of Manston Airport as a dedicated air freight facility, with subsequent non-material amendments approved in 2023 and 2025. The airport is intended to accommodate air cargo operations together with passenger, executive and aircraft engineering services.

13. Members of the Planning Applications Committee attended a site visit on Friday 11 September 2026 with Planning Officers, representatives from KCC Highways and the applicant. This was an opportunity for Members to visit the site and understand the context of the proposed development on the ground. At this meeting, Members were also provided with a report including photographic evidence from a neighbouring local resident.

Proposal

14. The application seeks full planning permission for the development of a waste to hydrogen facility and associated Innovation and Education Centre. The proposal would utilise advanced gasification and plasma treatment technologies to process residual non-recyclable waste and produce fuel cell grade hydrogen, captured carbon dioxide (CO_2) and a reusable aggregate product. The development is intended to provide an alternative to landfill and conventional waste disposal methods whilst supporting the production of low carbon hydrogen.

15. The proposed development comprises (see plans on pages C1.7-C1.9):

- A waste to hydrogen processing facility;
- Hydrogen storage and distribution infrastructure;
- Carbon capture and recovery equipment;
- An Innovation and Education Centre incorporating office accommodation, training facilities, visitor facilities and exhibition space;
- A new vehicular access from Manston Road and associated internal access roads;
- Staff, visitor and HGV parking areas; and
- Landscaping, drainage infrastructure and other ancillary works required to facilitate the operation of the development.

16. The facility would occupy the western part of the site and comprise a range of industrial buildings, processing plant, storage infrastructure and associated operational development. The facility would process up to 44,000 tonnes of residual non-recyclable waste per annum, including household waste, commercial and industrial plastics, automotive shredder residue (ASR), waste tyres, timber and decommissioned wind turbine blades. Waste feedstock would be sourced from waste providers across Kent. No waste would be sourced from overseas.

17. Waste delivered to the site would be received and stored within enclosed facilities before being transferred into a treatment process comprising a Down Draft Gasifier and Plasma Enhanced Melter. Through a high temperature thermochemical process, the waste would be converted into synthesis gas (syngas), which would subsequently undergo cooling, cleaning and purification before hydrogen is separated through a Pressure Swing Adsorption (PSA) system. The process would produce fuel cell grade hydrogen for storage and distribution. The facility would also capture carbon dioxide

generated during the process for industrial reuse and recover inorganic residues as a vitrified aggregate suitable for use within the construction sector.

18. An illustrative process flow diagram submitted by the applicant can be seen in Appendix A at the end of this report.

19. The facility is proposed to produce up to 8,000 tonnes of hydrogen per annum, equivalent to approximately 34MW of energy output. The waste to hydrogen plant would operate on a continuous 24-hour basis, with waste deliveries proposed only between 06:00 and 18:00 on weekdays and between 07:00 and 13:30 on Saturdays. Product carrying HGV movements are proposed between 06:00 and 21:00 on weekdays and between 07:00 and 13:30 on Saturdays. The emergency flares would be the tallest elements of the proposed facility and would reach approximately 30 metres in height.

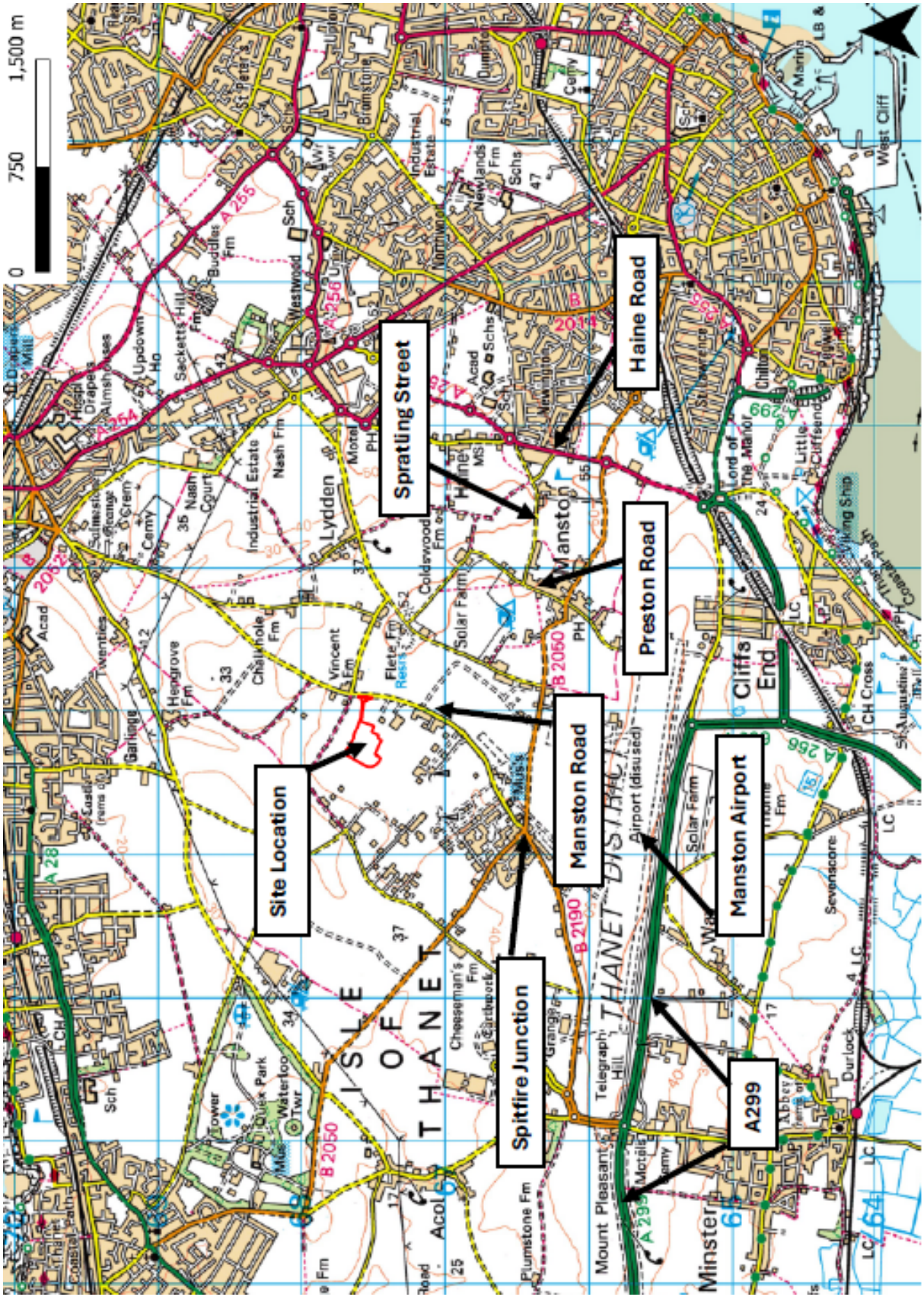
20. The Innovation and Education Centre would be located within the eastern part of the site and would provide education, research and training facilities related to hydrogen technologies and renewable energy. The building would provide approximately 1,900 square metres of internal floorspace and would accommodate offices, meeting rooms, exhibition space, a visitor centre, café and associated staff facilities. The submitted documents state that the building's design has been informed by the molecular structure of hydrogen and would incorporate sustainability measures including a green roof and rooftop photovoltaic panels.

21. Access to the site would be provided via a new priority controlled junction onto Manston Road incorporating a ghost island right turn lane. The development would provide 57 staff and visitor parking spaces, including accessible parking bays and electric vehicle charging infrastructure, together with cycle parking, servicing arrangements and dedicated parking areas for heavy goods vehicles associated with the operation of the facility.

22. The application also includes landscape planting, sustainable drainage systems, surface water management infrastructure, boundary treatments and all other associated engineering and environmental works necessary to facilitate the operation of the proposed development.

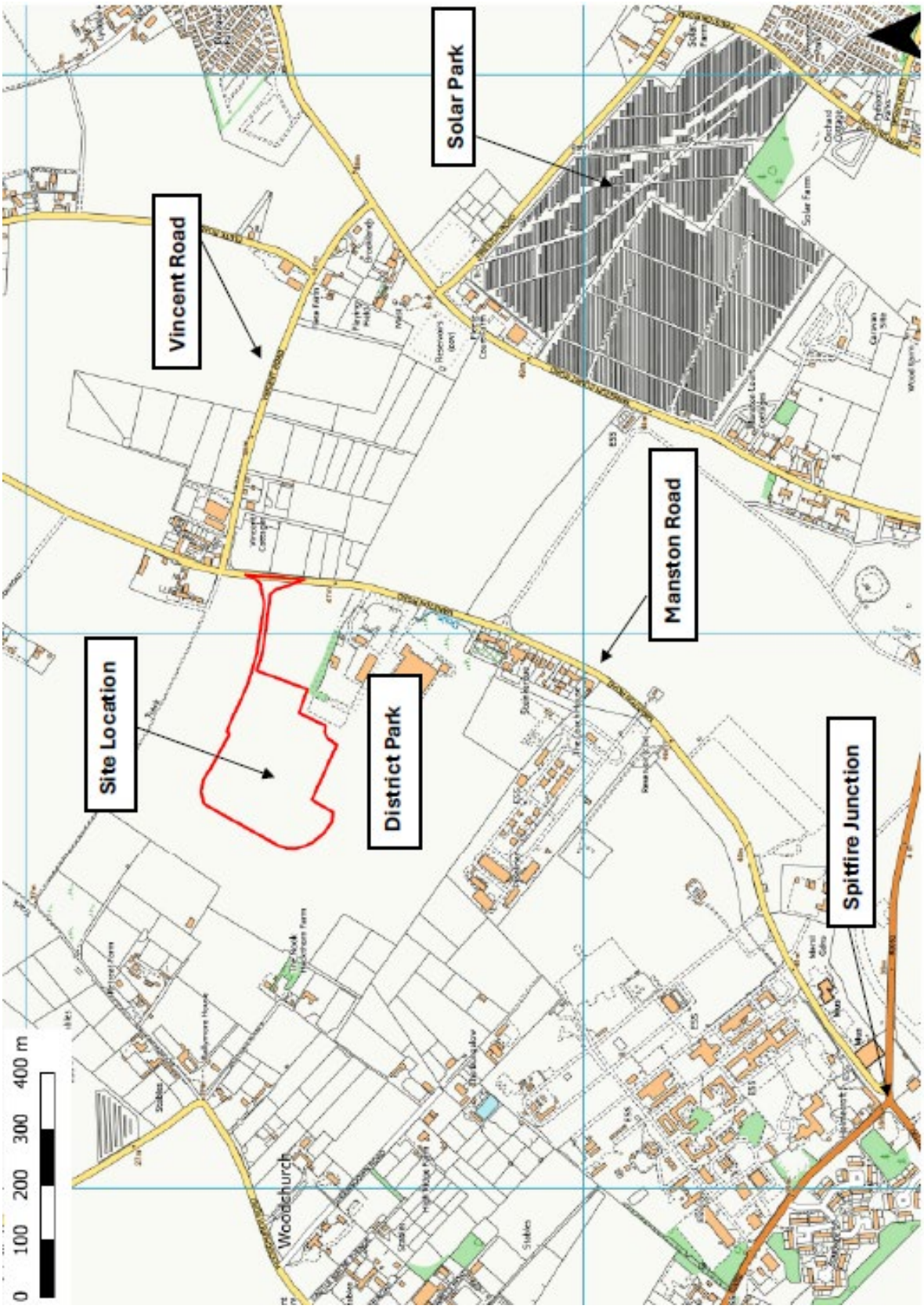
Development of a waste to hydrogen facility on land at Manston Road, Margate, Kent - TH/26/351 (KCC/TH/0050/2026)

Location Plan



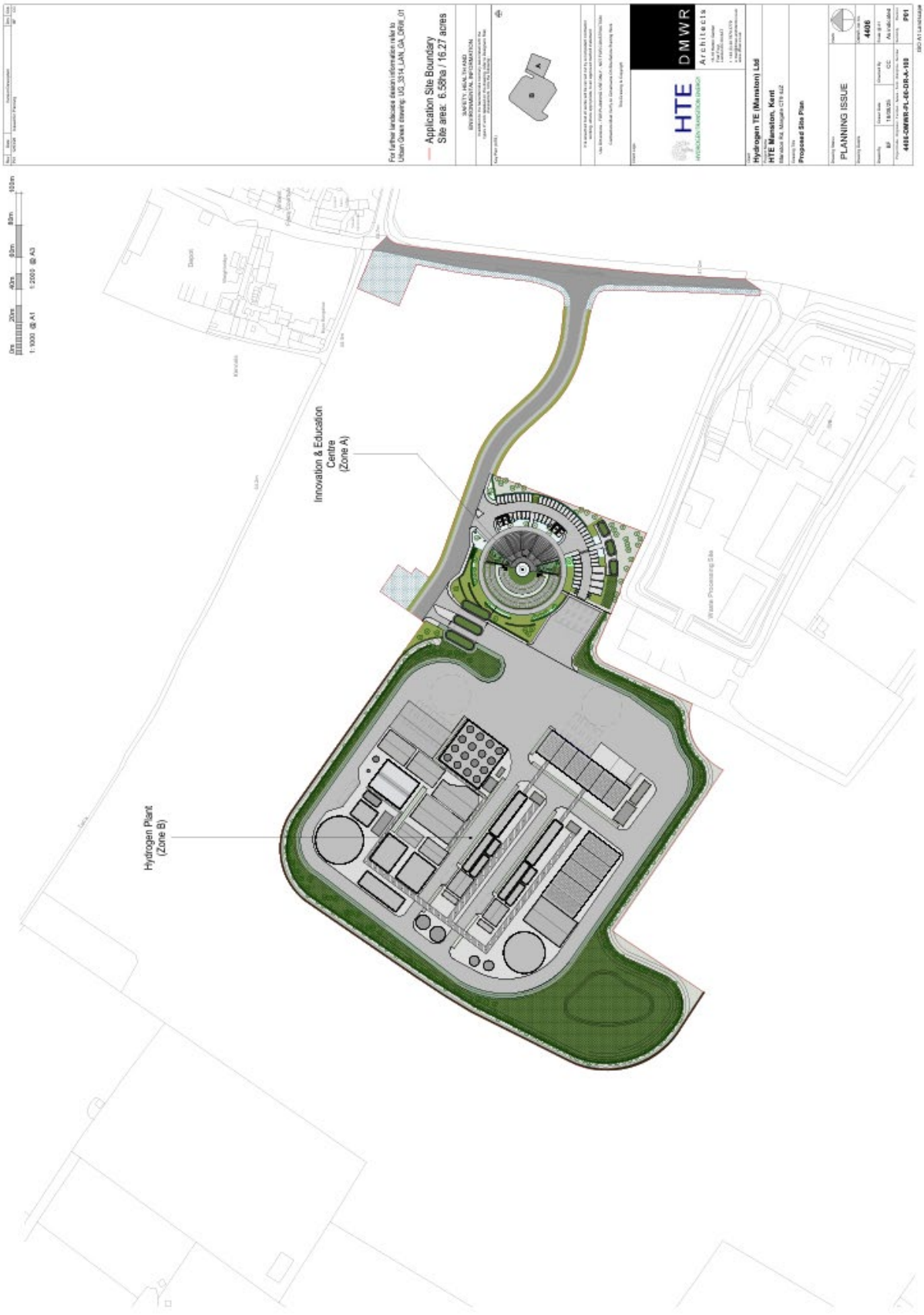
Development of a waste to hydrogen facility on land at Manston Road, Margate, Kent - TH/26/351 (KCC/TH/0050/2026)

Site Location Plan (site outline only for illustrative purposes)



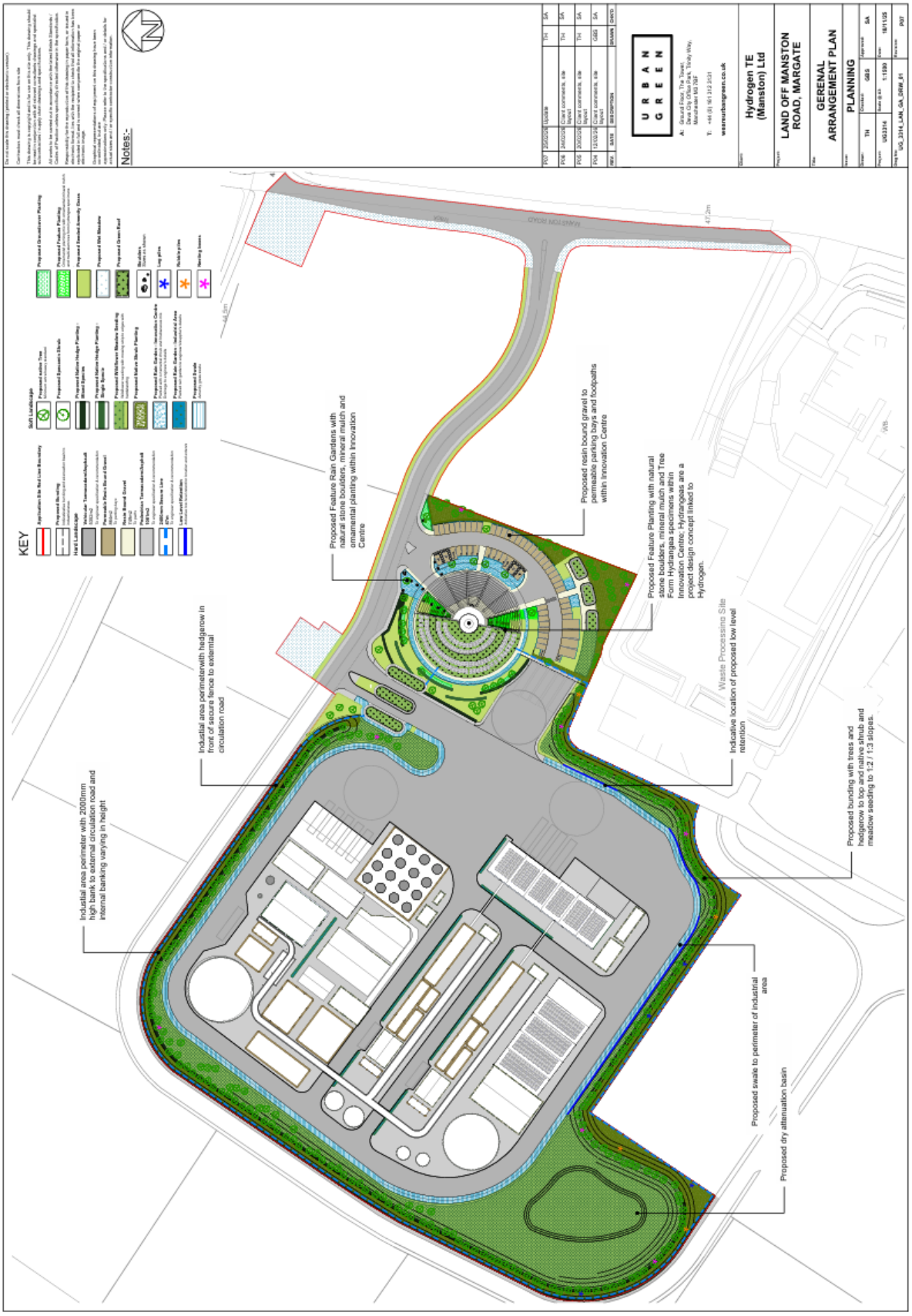
Development of a waste to hydrogen facility on land at Manston Road, Margate, Kent - TH/26/351 (KCC/TH/0050/2026)

Proposed Site Plan



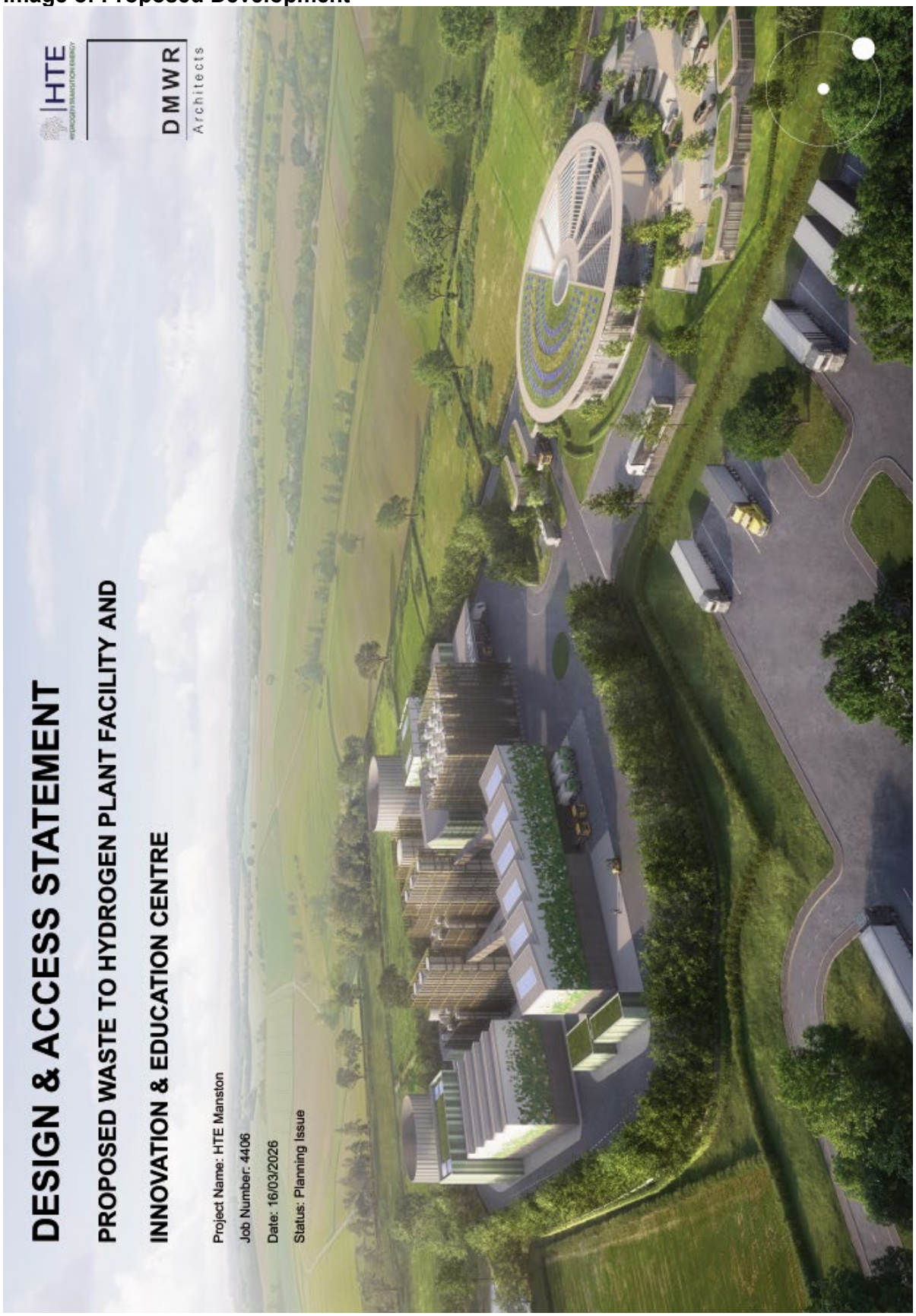
Development of a waste to hydrogen facility on land at Manston Road, Margate, Kent - TH/26/351 (KCC/TH/0050/2026)

General Arrangement Plan



Development of a waste to hydrogen facility on land at Manston Road, Margate, Kent - TH/26/351 (KCC/TH/0050/2026)

Image of Proposed Development



Planning Policy

23. The national planning policy and guidance, and development plan policies relevant to the determination of this application are summarised below:

24. **National Planning Policies** – the National Planning Policy for Waste (2014) and Noise Policy Statement for England (NPSE) are material planning considerations.

25. **The National Planning Policy Framework (August 2026) – National Development Management -** Policies S3 (Presumption in favour of sustainable development), S5 (Principle of development outside settlements),W1, W2, W3 and W4 (Securing clean energy and water), CC1, CC2 and CC3 (Meeting the challenge of climate change), P1, P2, P3, P4 and P5 (Pollution, public protection and security), E2 (Meeting the need for business land and premises), N2 (Improving the Natural Environment), TR3 (Locating development in sustainable locations), TR4 (Street design, access and parking), TR6 (Assessing Transport Impacts) and TR8 (Public Rights of Way).

26. The proposal has the potential to contribute towards national objectives relating to decarbonisation, energy security, the growth of the hydrogen economy and the transition towards a circular economy through the recovery of value from residual waste streams. The following policy and guidance documents are also relevant to the determination of the application

    - Planning Practice Guidance: Renewable and Low Carbon Energy;
    - Overarching National Policy Statement for Energy (EN-1);
    - UK Hydrogen Strategy (2021, updated 2024), which supports the development of a low-carbon hydrogen economy and deployment of hydrogen production infrastructure;
    - Net Zero Strategy: Build Back Greener, setting out the UK's pathway to achieving net zero greenhouse gas emissions;
    - British Energy Security Strategy and Powering Up Britain, which promote increased domestic clean energy production and low-carbon technologies;
    - Industrial Strategy: Clean Energy Industries Sector Plan, supporting investment in emerging clean energy sectors, including hydrogen;
    - Waste Management Plan for England (2021) and the Waste (Circular Economy) (Amendment) Regulations 2020, which encourage recovery of value from waste and support circular economy objectives;
    - Environmental Improvement Plan 2023 and the Resources and Waste Strategy for England, which promote resource efficiency, waste reduction and recovery of secondary resources;
    - The Climate Change Act 2008 (as amended), including the statutory commitment to achieve net zero carbon emissions by 2050; and
    - Relevant guidance relating to the Environmental Permitting (England and Wales) Regulations 2016, given the relationship between planning and environmental regulation for waste-derived hydrogen production facilities.

27. **Kent Minerals and Waste Local Plan 2024-39 (Adopted March 2025) -** Policies: CSW1 (Sustainable Development); CSW2 (Waste Hierarchy); CSW3 (Waste Reduction); CSW4 (Strategy for Waste Management Capacity Net Self-sufficiency and Waste Movements); CSW6 (Location of Built Waste Management Facilities); CSW7 (Waste Management for Non-hazardous Waste); CSW8 (Other Recovery Facilities for Non-hazardous Waste); DM1 (Sustainable Design); DM2 (Environmental and

Landscape Sites of International, National and Local Importance); DM3 (Ecological Impact Assessment); DM5 (Heritage Assets); DM6 (Historic Environment Assessment); DM 8 (Safeguarding Minerals Management, Transportation, Production & Waste Management Facilities); DM10 (Water Environment); DM11 (Health and Amenity); DM12 (Cumulative Impact); DM13 (Transportation of Minerals and Waste); DM14 (Public Rights of Way); DM15 (Safeguarding of Transport Infrastructure); DM16 (Information Required in Support of an Application); DM17 (Planning Obligations); DM18 (Land Stability).

28. Kent County Council Local Transport Plan 5 (2024-2037), Kent County Council Parking Standards SPD (2025) and the Kent and Medway Energy and Low Emissions Strategy, supporting local delivery of decarbonisation and low-carbon energy infrastructure.

29. **Thanet District Council Local Plan (Adopted July 2020)** – Policies: SP04 (Economic Growth); SP24 (Development in the Countryside); SP26 (Landscape Character Areas); SP27 (Green Infrastructure); SP28 (Protection of the International and European Designated Sites); SP30 (Biodiversity and Geodiversity Assets); SP35 (Quality Development); SP36 (Conservation and Enhancement of Thanet's Historic Environment); SP37 (Climate Change); SP45 (Transport Infrastructure); E13 (Development for New Business in the Countryside); E16 (Best and Most Versatile Agricultural Land); G101 (Protection of Nationally Designated Sites (SSSI) and Marine Conservation Zones (MCZ)); GI06 (Landscaping and Green Infrastructure); QD01 (Sustainable Design); QD02 (General Design Principles); QD03 (Living Conditions); HE01 (Archaeology); HE03 (Heritage Assets); CC02 (Surface Water Management); SE01 (Potentially Polluting Development); SE03 (Land Affected by Contamination); SE04 (Groundwater Protection); SE05 (Air Quality); SE06 (Noise Pollution); SE08 (Light Pollution); TP01 (Transport Assessments and Travel Plans); TP03 (Cycling); TP06 (Car Parking); and TP10 (Traffic Management).

    The Thanet District Council Landscape Character Assessment SPD (2017), on the basis that it informs the assessment of landscape and visual effects.

Consultations

30. Following the initial consultation exercise undertaken in April 2026, a number of statutory consultees requested additional information in respect of air quality, noise, ecological impacts, landscape and visual effects, lighting, cumulative impacts, and highways matters. The applicant provided the requested information, which was the subject of further consultation in August/September 2026. Following consideration of this material, additional clarification and supporting information were sought in relation to noise, air quality and highways matters. This further information was received and re-consulted upon in October/November 2026. The consultation responses are summarised below.

31. **Thanet District Council (TDC)**

    TDC commented on the application on 8 May, 18 September and 5 November. The views received are summarised as follows.

8 May
TDC noted that national energy policy identifies an urgent need for low-carbon hydrogen infrastructure and referred to the Government's commitments to clean power and net zero, the July 2025 Hydrogen Update and national Planning Practice Guidance supporting the delivery of renewable and low-carbon energy infrastructure where local environmental impacts are acceptable.

TDC noted that the application site is within the open countryside as defined by Policy SP24 of the Thanet Local Plan and that the proposal does not fall within the five types of development supported by that policy. TDC also referred to national policy supporting economic growth and enterprise in rural areas and Policy E13 of the Thanet Local Plan, which supports well-designed economic development for new businesses in sustainable locations where the scale and form are compatible with the rural location. Reference was also made to commercial and industrial development previously approved on adjoining land. TDC considered that the principle of the development was supported by national policy and that very significant weight should be given to the alternative energy benefits of the proposed development. TDC also expressed support for the potential employment opportunities within the alternative energy sector, including jobs during construction and operation, and the wider economic benefits arising out of the proposal.

TDC raised concerns regarding the loss of best and most versatile agricultural land and Policy E16 of the Thanet Local Plan. They considered that the applicant should specifically address the requirements of that policy. Concern was expressed regarding the parcel of agricultural land that would be separated from the remainder of the agricultural holding by the proposed link road and surrounding development and the implications for its future viability for agricultural use.

In respect of the Alternative Sites Assessment, TDC referred specifically to Site C2/1 adjoining Manston Business Park, which is allocated for economic development in the Thanet Local Plan. They noted that the loss of agricultural land at that site and the visual implications of development had been considered through the Local Plan allocation process.

TDC noted that Site C2/1 extends to approximately 20.9 hectares compared with the 6.58 hectares identified as required for the development and considered that this could provide scope to locate development so as to minimise impacts upon heritage assets, the public right of way and overhead power lines. Whilst noting that the proposed development would not expressly fall within the B1, B2 and B8 uses identified for the allocated site, TDC considered that the industrial nature of the proposal aligned with the aims of the allocation. TDC did not agree that Site C2/1 was less suitable than the application site and considered that its existing highway connections also weighed in its favour. TDC considered that the development appeared contrary to Policy E16 and that the loss of best and most versatile agricultural land weighed against the development.

In relation to landscape and visual impact, TDC referred to the sensitivity of Thanet's open countryside, including its limited extent, openness and flat landscape. They noted the elevated position of the application site, the scale of the proposed built development and the height of the development and considered that this would result in significant visual impacts, particularly for users of the nearby public rights of way network. TDC acknowledged the use of different building designs, scales and

materials to break up the development and add visual interest and encouraged the early establishment of landscaping.

TDC raised significant concerns regarding additional traffic using the Manston Road/Spitfire Way junction and referred to the requirements of Policy SP47. They considered that the proposal should make a proportionate contribution towards necessary highway improvements and should not rely upon improvements associated with other development being delivered before the waste-to-hydrogen facility commenced operation. TDC deferred to the County Council as Highway Authority regarding the technical assessment and the level of any contribution required. Clarification was also requested concerning the proposed link road and its potential future continuation around the site.

TDC raised concerns regarding the proposed use of off-site provision to meet Biodiversity Net Gain requirements. They referred to the preference for on-site enhancement under the BNG hierarchy and considered that the acquisition of additional land or use of biodiversity credits introduced uncertainty and could result in enhancement being provided outside the local area.

TDC also requested further information concerning the development's water requirements. They referred to the Environmental Statement, which identified an input of approximately 4.7 tonnes of water per hour and a loss of approximately 3 tonnes per hour through the waste-to-hydrogen process. Information was requested on how this demand would be met and whether sufficient capacity was available without affecting other users within the district.

TDC's Environmental Health Officer considered the submitted assessments relating to air quality, noise, contaminated land and external lighting. In respect of air quality, Environmental Health was satisfied that the development was unlikely to give rise to unacceptable effects upon residential amenity or the wider environment, subject to the identified mitigation, and noted that process emissions would also be regulated through the environmental permitting regime.

In respect of operational noise, Environmental Health noted the proposed continuous 24-hour operation, the low existing night-time background noise levels and that the unmitigated assessment identified moderate adverse daytime and major adverse night-time effects at several noise-sensitive receptors. Proposed acoustic mitigation was predicted to reduce these to negligible daytime and minor adverse night-time effects, although the development would introduce a perceptible and permanent change to the acoustic environment. Environmental Health considered it essential that mitigation was secured through appropriate planning conditions and recommended an operational noise limit of at least 5 dB below representative background levels, together with a detailed Acoustic Design Scheme, compliance verification, ongoing noise control and controls over additional fixed plant. Construction noise controls were also recommended.

Environmental Health additionally recommended conditions relating to intrusive investigation and remediation of contaminated land, fuel and chemical storage, surface water, unsuspected contamination and unexploded ordnance. A detailed external lighting scheme was also recommended addressing light spill, glare and sky glow, sensitive receptors and aviation safety.

TDC additionally requested conditions concerning archaeology, landscaping, land remediation, drainage, external materials, the continued association of the innovation and education centre with the hydrogen production facility, highway works and parking, construction environmental management and external lighting. TDC requested the opportunity to comment on relevant details subsequently submitted for approval.

18 September
Following consultation on amendments to the application, TDC advised that further information was required concerning water supply to demonstrate sufficient capacity within the district. TDC also stated that their concerns regarding Policy E16 of the Thanet Local Plan, the site layout and the Alternative Sites Assessment remained unanswered.

5 November – Latest position
Following further amendments, TDC state that the weighing of the benefits of the development against the harm is a matter of planning judgement for the decision-maker.

TDC continue to have concerns regarding compliance with Policy E16 and the effects upon the viability and sterilisation of surrounding agricultural land. Particular reference is made to the area of land between the proposed access road and the adjoining DDS site, which would be separated from the remaining agricultural land.

TDC also note that the submitted plan appears to show the continuation of the proposed internal road and request that the plan is amended if no continuation of the road is proposed as part of the application.

32. **Thanet District Council Environmental Health (TDC EH)**

30 April
TDC EH considered the submitted assessments relating to air quality, noise, contaminated land and external lighting.

In respect of air quality, emissions from the thermal oxidiser and emergency flare were assessed as making a negligible contribution to local pollution and the proposed mitigation included low-NOx plant, EV charging, travel planning, low-emission vehicles and green infrastructure. Predicted operational pollutant concentrations were below relevant air quality objectives, with odour and bioaerosol effects assessed as negligible and not significant. They also noted that process emissions would be regulated by the Environment Agency through the environmental permitting regime.

In respect of operational noise, TDC EH noted the proposed continuous 24-hour operation and the particularly low existing night-time background noise levels. The unmitigated BS 4142 assessment identified moderate adverse daytime and major adverse night-time effects at several noise-sensitive receptors. Proposed acoustic mitigation was predicted to reduce these to negligible daytime and minor adverse night-time effects, although TDC EH noted that the development would introduce a perceptible and permanent change to the acoustic environment.

TDC EH considered it essential that the proposed noise mitigation was secured through planning conditions relating to its detailed design, installation, verification and ongoing maintenance. They recommended an operational noise limit of at least 5 dB below representative background levels at noise-sensitive receptors and noted that

achieving this would require approximately 20 dB attenuation from the predicted unmitigated levels, representing a substantial and technically challenging level of attenuation. Conditions were recommended requiring a detailed Acoustic Design Scheme, compliance verification, ongoing noise control and controls over additional fixed plant.

For construction noise, TDC EH recommended application of the Category A limits within BS 5228, controls over construction hours and an updated Construction Noise Management Plan addressing predicted noise levels, mitigation, monitoring and complaints procedures.

In relation to contaminated land. They recommended conditions requiring intrusive investigation and risk assessment, remediation and verification where necessary, together with appropriate controls over fuel and chemical storage, surface water, unsuspected contamination and unexploded ordnance. TDC EH also recommended approval of a detailed external lighting scheme addressing light spill, glare and sky glow, effects upon sensitive receptors and aviation safety.

16 October – Latest position
Following consideration of further technical information and the responses to the County Council's technical consultation, TDC EH advise that they are satisfied that the clarifications relating to noise and vibration address the matters raised in the latest acoustic consultation. They support conditions requiring a Construction Noise and Vibration Management Plan, an updated Operational Acoustic Assessment and specified operational noise limits, together with operational noise compliance monitoring.

TDC EH reiterate that the facility would require an Environmental Permit and acknowledge the Environment Agency's role in controlling process emissions and applying Best Available Techniques. They advise, however, that this does not remove the need for the County Council to be satisfied that the likely environmental effects have been adequately assessed and that the proposed use is acceptable at this location.

33. **Manston Parish Council (MPC) – Objection**

4 May
Whilst supporting efforts to salvage, recycle and reuse materials, MPC considered that the proposed facility was too large in scale for its location, represented an unwelcome intrusion into a semi-rural area and raised concerns relating to traffic and highway safety, agricultural land, air and water quality and operational safety.

In respect of traffic and highways, MPC referred to existing and planned housing development around Manston and the associated increase in traffic using the village. They noted that information provided for the development identified 108 HGV movements per day, comprising 12 waste, 56 hydrogen, 28 carbon dioxide and 8 aggregate movements. MPC raised particular concern about HGVs using routes through Manston village, including Preston Road and Spratling Street, and the potential for additional noise and disturbance associated with HGV movements serving a 24-hour operation. They also questioned the suitability and condition of local roads for additional heavy traffic.

MPC specifically identified the B2050/B2190 Spitfire Way/Manston Road junction as a concern, referring to existing traffic levels, cyclists and pedestrians and the relationship with future highway works associated with Manston Airport. They questioned the assessment that the development would have a modest impact upon the local highway network and that there were no identified collision hotspots. MPC also raised questions regarding how more than 100 proposed staff would travel to the site, the availability and cost of public transport provision and whether waste could be imported through nearby ports.

MPC objected to the loss of Grade 1 agricultural land, noting its existing productive arable use and classification as excellent quality agricultural land. They raised concern regarding the permanent loss of agricultural land and open green space and questioned the suggestion that the proposed drainage arrangements would enhance local biodiversity and green space. (Members should not that the site is designated as Grade 2 and Grade 3a agricultural land).

In relation to air quality, MPC expressed concern regarding the types of waste proposed to be processed and the potential emissions arising from the thermal treatment process. They characterised the facility as an incinerator and raised concerns regarding potential fumes, odour and air quality effects upon Manston village. MPC specifically raised concern about the potential risk to human health from emissions and deterioration in air quality.

MPC also raised concerns regarding water resources and water quality, questioning whether rainwater harvesting would provide sufficient water to operate the facility and the extent to which other local water supplies would be required. They also sought assurance that waste, pollution or emissions from the process would not adversely affect groundwater and aquifers.

In respect of operational safety, MPC raised concern regarding the production and storage of hydrogen, referring specifically to the highly explosive nature of the gas. They questioned what safety and emergency measures would be in place.

MPC concluded that they were unable to support the proposal because of their concerns regarding roads and highway safety, the loss of high-quality agricultural land, potential risks to health and air quality, water resources and water quality and the safety implications associated with hydrogen.

12 November – Latest position
MPC maintain their objection to the application for the reasons previously provided and also raise further concerns regarding water conservation, referring to hotter and drier summers and expressing concern regarding the approach to water conservation within the application.

34. **Minster Parish Council (MinPC) – Concerns raised.**

5 May
Minster Parish Council (MinPC) welcome the pre-application engagement undertaken by the applicant, which they consider helpful and informative. They consider the application to be comprehensive and note that it addresses a number of matters previously raised by MinPC, with other matters addressed through the application or by statutory consultees. MinPC also consider that the applicant appears to have developed a comprehensive strategy to minimise risks and additional hazards to the

local community. Notwithstanding this, they identify a number of matters requiring further consideration.

In respect of traffic, highways and access, MinPC seek clarification that the proposed access arrangements and widening of Manston Road would ensure that business traffic enters and leaves the site via Spitfire Junction rather than travelling through surrounding communities. They raise concerns regarding the future operation and improvement of Spitfire Junction, including the relationship with the anticipated increase in traffic associated with the proposed reopening of Manston Airport.

MinPC also raise concerns regarding the proposed timing of HGV deliveries and departures, including potential noise effects upon nearby residents and the possibility of HGVs waiting on the public highway before the site opens. They suggest that weekday HGV movements could be restricted to between 07:00 and 18:00 hours.

MinPC note the uncertainties associated with future changes to Spitfire Junction, including the Manston Airport proposals and other development in the area. They note that both KCC and TDC consider that a financial contribution towards improvements to Spitfire Junction should be considered, whilst the applicant assesses the effect upon that junction as negligible to minor.

MinPC also raise concerns regarding the potential cumulative effects of additional HGV traffic upon Minster Roundabout, noting that operational and construction HGVs are expected to travel to and from the A299. They refer to other potential sources of additional traffic, including Manston Airport and the proposed North Thanet Link Road, and question whether improvements or financial contributions towards Minster Roundabout should also be considered.
MinPC identify the incomplete pedestrian footway provision along Manston Road and question whether a planning obligation associated with the development could contribute towards providing improved pedestrian connections. They also question the assumptions within the Transport Assessment regarding the anticipated origins and routes of construction personnel.

In respect of landscape screening, MinPC note the proposed bunding, landscaping and treatment of the building façades and express a preference for a bund higher than the proposed 2 metres, together with vegetation and tree planting.

In relation to foul drainage, MinPC note the limitations identified in the existing public sewer network and the intention to work with Southern Water while reinforcement works are undertaken. MinPC also note the proposed alternative arrangement involving a private wastewater pumping station and connection to the wider District Park drainage infrastructure and question whether the final drainage arrangements would be secured through an appropriate planning condition.

In respect of health and safety, MinPC recognise the proposal as a unique and innovative form of development and seek full assurance from the relevant regulatory bodies that the proposed processes and operations would comply with applicable health and safety requirements. They also refer to the Environment Agency's December 2025 review of emerging techniques for hydrogen production by gasification, pyrolysis and other emerging technologies and consider that relevant aspects of that guidance should be considered, particularly in relation to safety.

18 September and 9 November
MinPC advise that they have no further comments and reiterate their earlier views.

35. **Acol Parish Council (APC)**

APC requested information on the sites location.

36. **Monkton Parish Council – no response received** to the three consultation letters.

37. **Environment Agency (EA) – No objection, subject to conditions** covering contamination investigation, remediation, verification; unidentified contamination; surface water drainage; foul drainage; and piling/groundwater protection. The EA also provide informatives relating to surface water pollution prevention, piling, waste management and environmental permitting. Outstanding information relates to the temporary wastewater management arrangements, including the proposed method, location and capacity of any temporary storage and the volumes of wastewater requiring removal by tanker; the EA confirm in their latest response that their earlier comments on this matter have not been addressed.

20 April
In respect of groundwater and contaminated land, the EA noted that the site is located over a principal aquifer and that the previous and proposed uses presented a potential contamination risk that could be mobilised during construction and affect controlled waters. The EA considered that the submitted information demonstrated that these risks could be managed, although further detailed investigation and remediation information was required before development took place.

The EA recommended conditions requiring a contamination risk assessment and site investigation, an appropriate remediation strategy where necessary and subsequent verification of completed remediation. Provision was also sought for the assessment and remediation of any previously unidentified contamination encountered during development. The EA advised that, without these controls, they would object to the development.

In relation to surface water drainage, the EA raised no objection in principle to infiltration through soakaways but required demonstration that discharge areas were free from contamination and made ground. They recommended a condition controlling infiltration drainage and advised that only clean, uncontaminated water should drain to the surface water system, with appropriate pollution controls for runoff from roads and parking areas and no direct discharge to groundwater.

The EA also advised that any proposal to discharge wastewater to the environment could require a separate Environmental Permit and that the grant of such a permit could not be guaranteed.

The EA recommended a condition controlling piling and other penetrative foundation methods unless it could be demonstrated through an appropriate risk assessment that there would be no unacceptable risk to groundwater.

The EA also provided advice concerning the management, characterisation, reuse and disposal of waste and contaminated materials, including the relevant environmental permitting requirements.

The EA confirmed that the proposed waste-to-hydrogen activity would require an Environmental Permit. They explained that their planning comments related to the suitability of the proposed land use at this location, whilst process emissions associated with the proposed activity would be controlled separately through the environmental permitting regime.

2 September
Following consideration of proposed and amended condition wording, the EA raised no objection or comments on the proposed conditions, with one exception relating to temporary wastewater management.

The EA noted that the applicant proposed a temporary wastewater management strategy which could involve temporary storage on-site followed by removal by tanker. They advised that a septic tank would not be acceptable, as this would discharge to the environment, and indicated that any temporary storage would instead need to comprise a sealed system, such as a cesspool.

The EA advised that a temporary wastewater management strategy could be acceptable depending upon its detailed design, including the type and location of storage and the anticipated daily and monthly volumes requiring removal by tanker. They advised that these details could be secured through a pre-commencement condition. However, the EA advised that large-scale, below-ground storage of wastewater for extended periods would not be acceptable and that they would not be able to recommend discharge of a relevant condition if such an arrangement were proposed. They also noted the cost implications associated with regularly removing large volumes of wastewater by tanker.

The EA make no further comments at this stage and request re-consultation should further changes be made to the application.

38. **Kent County Council's Air Quality Consultants (Jacobs) – No objection, subject to conditions** securing detailed Odour Management and Bioaerosol Management Plans, to be submitted and approved before the facility becomes operational.

7 May
Jacobs reviewed the submitted Air Quality Assessment and supporting information covering construction dust and traffic, operational traffic and combustion emissions, odour and bioaerosols.
Jacobs considered the approach to the assessment of construction dust and construction traffic emissions to be reasonable and accepted the methodologies used for the odour and bioaerosol assessments. However, they identified a number of inconsistencies, omissions and areas requiring further clarification before the acceptability of the development on air quality grounds could be determined.

In relation to process emissions, Jacobs sought clarification on the nature of the gas combusted by the emergency flare and thermal oxidiser, whether pollutants associated with waste incineration required assessment, which emission sources had been modelled, and the assumptions relating to stack height and emission rates. Further information was also requested concerning dispersion modelling parameters and outputs and the assessment of effects upon human and ecological receptors.

Jacobs identified further matters regarding baseline conditions and road traffic modelling, including consideration of PM2.5 targets, ecological receptors and critical loads and justification of modelling parameters.

In respect of odour and bioaerosols, Jacobs requested further information on the waste streams and meaning of pre-treated waste, waste reception and handling arrangements, the enclosure and ventilation of waste handling and storage areas and the proposed odour control and abatement systems. They also sought consistency between the Odour and Bioaerosol Assessments regarding the waste handling process and proposed mitigation.

Jacobs advised that a Dust Management Plan should be submitted and agreed before development commenced. They concluded that the identified inconsistencies and outstanding information should be addressed before the acceptability of the development on air quality grounds could be determined.

21 September
Following review of the Environmental Statement Addendum and Air Quality Technical Note, Jacobs advised that some matters had been addressed but that a substantial proportion of the requested information remained outstanding or had not been provided in sufficient detail.

Outstanding matters principally concerned the nature of the gas being combusted; whether pollutants associated with waste incineration needed to be assessed; confirmation of the emission sources modelled; justification of stack and emission parameters; aspects of the dispersion modelling; and the odour and bioaerosol assessments.

Jacobs noted that the applicant had confirmed that operational road traffic and emergency flare emissions had been considered together at human and ecological receptors and had provided appropriate information on ecological critical loads and baseline nitrogen deposition. However, further information remained necessary concerning the thermal oxidiser and dispersion modelling.

Jacobs advised that the previously requested information concerning odour and bioaerosols remained outstanding, including details of waste acceptance and handling, enclosure and ventilation arrangements, odour abatement and measures to minimise fugitive emissions.

Jacobs concluded that the robustness and completeness of the Air Quality Assessment could not at that stage be verified and that the acceptability of the development on air quality grounds could not be determined until the outstanding information was provided and the identified deficiencies addressed.

3 November – Latest position
Following consideration of further information submitted on 12 October and discussions with the applicant, Jacobs confirm that additional clarification has been provided on the remaining outstanding air quality matters.

The applicant confirms that the gas combusted by the emergency flare and thermal oxidiser comprises cleaned syngas, which has passed through treatment to remove particulates, metals and other contaminants. Jacobs therefore consider that

assessment of NOx emissions is appropriate and that there is no need to assess the wider range of pollutants associated with waste incineration.

Jacobs also recognises that the thermal oxidiser and emergency flare are the only point-source emissions to air, with the thermal oxidiser operating during normal operations and the emergency flare operating under abnormal or emergency conditions. Further information is provided to justify the modelled NOx emission rate.

Some uncertainty remains regarding the dispersion modelling methodology, including the use of a single year of meteorological data and modelling parameters which Jacobs consider more representative of an urban rather than rural environment. However, Jacobs consider it unlikely that the use of additional meteorological data or different parameters would change the assessment conclusions from a not significant to a significant effect in EIA terms.

Jacobs consider the development acceptable in principle from an air quality perspective and confirm that they do not object, subject to conditions requiring detailed Odour Management and Bioaerosol Management Plans to be submitted and approved before the facility becomes operational. These should address accepted waste streams and waste acceptance procedures; waste reception, storage, handling and processing; enclosure, containment and ventilation; odour control and abatement; and operational, maintenance and monitoring requirements.

Jacobs note that some detailed design and operational matters remain to be finalised and consider that these can be addressed through the Environmental Permitting regime, which would require emissions to be appropriately controlled and the facility to operate in accordance with relevant regulatory requirements and Best Available Techniques.

39. **Kent County Council's Noise & Vibration Consultants (Jacobs) – No objection, subject to conditions** requiring a Construction Noise and Vibration Management Plan, an updated Operational Acoustic Assessment (including noise modelling files) and operational noise limits.

7 May
Jacobs reviewed the submitted Noise and Vibration Assessment and identified a number of matters requiring further information before they could confirm that the proposed facility could be constructed and operated without unacceptable noise and vibration effects.

In respect of baseline noise monitoring, Jacobs sought clarification regarding the monitoring locations, survey methodology, measurement conditions and processing of the monitoring data. They noted that the use of the 10th percentile background sound level represented a conservative approach, subject to confirmation of the underlying methodology.
For construction noise, Jacobs considered the use of the BS 5228 assessment methodology appropriate and agreed that, based upon the predicted noise levels, significant effects were unlikely. However, further information was requested on the calculation methodology and assumptions. They recommended that this was addressed through a Construction Noise and Vibration Management Plan (CNVMP). Jacobs considered significant construction vibration effects unlikely given the distances to the nearest receptors but recommended that vibration was also

considered through the CNVMP. Significant effects from construction traffic noise were considered unlikely.

In respect of operational noise, Jacobs identified a number of matters requiring clarification within the modelling, including vehicle movements within the site, noise source data, modelling assumptions, building breakout, character corrections and the modelling standard used. They also requested the noise modelling files. Although the submitted assessment indicated that mitigation could substantially reduce operational noise, Jacobs advised that the outstanding matters should be addressed to demonstrate that the facility could operate without unacceptable noise effects. Jacobs also sought further information regarding emergency plant, including its likely frequency and duration of operation and testing. They considered building services plant capable of being controlled through appropriate design criteria and an updated acoustic assessment.

Jacobs considered significant operational road traffic noise effects unlikely but requested further consideration of traffic movements during sensitive periods together with the appropriate assessment criteria and potential cumulative effects.

Jacobs recommended that, should permission be granted, conditions required a CNVMP and an updated Operational Acoustic Assessment based upon the actual plant and materials proposed, together with operational compliance monitoring. However, at that stage they requested that the outstanding information was provided before determination.

18 September
Following consideration of the Environmental Statement Addendum and updated noise modelling, Jacobs advised that a number of previously requested matters remained outstanding.

In respect of baseline noise, further information remained necessary regarding the monitoring methodology, measurement conditions and data processing.

The updated operational noise model included on-site vehicle movements and adopted the updated ISO 9613-2 methodology. Predicted rating levels following mitigation ranged from approximately 30–34 dB(A) at residential receptors and were less than 5 dB(A) above the stated daytime and night-time background levels. Jacobs advised that this indicated significant operational noise effects were unlikely, although this could not be confirmed until the outstanding baseline information was addressed.

Jacobs advised that construction noise and vibration could be addressed through a condition requiring a CNVMP. They also recommended an updated Operational Acoustic Assessment, based upon the final plant and materials, including submission of the noise modelling files for technical review and proposals for compliance monitoring.

Further information was requested regarding operational road traffic noise, including the effects of shift changes and evening movements at noise-sensitive times. Jacobs advised that this information should be provided before determination because of the limited scope to mitigate road traffic noise once the development was operational.

Jacobs recommended that, subject to satisfactory resolution of the outstanding information, conditions addressed a CNVMP, updated Operational Acoustic Assessment and operational noise limits.

3 November – Latest position

Following submission of further technical information, Jacobs advise that sufficient information is now available regarding the baseline noise monitoring methodology and operational traffic noise assessment.

Jacobs accept the further explanation of the baseline monitoring locations and methodology. They note some increased uncertainty compared with monitoring undertaken directly at residential receptors but consider that the use of the 10th percentile LA90 values largely offsets this. They recommend that data excluding periods of adverse weather is used to establish background levels and that evening background levels are used to provide a conservative basis for daytime limits.

Jacobs confirm that construction noise, construction vibration and construction traffic noise and vibration can be addressed through a conditioned CNVMP.

For operational noise, Jacobs recommend that an updated Operational Acoustic Assessment is secured by condition and approved before construction. This should be based upon the actual plant and materials proposed, include the noise modelling files for technical review and address emergency plant, building services noise and compliance monitoring.

Jacobs recommend the following operational noise limits:

- Night-time (23:00–07:00): 35 dB LAr,15min at all noise-sensitive receptors;
- Daytime (07:00–23:00), Manston Road south of the site entrance: 43 dB LAr,1hr;
- Daytime, Woodchurch Road/Westgate Avenue: 38 dB LAr,1hr; and
- Daytime, Manston Road north of the site entrance/Vincent Road/Woodchurch Track: 40 dB LAr,1hr.

Jacobs note that the predicted operational rating levels within the Environmental Statement Addendum comply with these proposed limits.

In relation to operational traffic noise, Jacobs consider that increases are likely to remain below 3 dB(A), including during shift changes at more sensitive times of the day and evening, and are satisfied that adverse effects from site-related vehicle movements on the local highway network are unlikely.

Jacobs therefore confirm that they do not object to the application, subject to conditions requiring a Construction Noise and Vibration Management Plan, an updated Operational Acoustic Assessment including noise modelling files, and the specified operational noise limits.

40. **Kent County Council's Landscape Consultants (Jacobs)**

Overall position: Jacobs consider that significant adverse landscape and visual effects would result from the development, given its scale and the open, rural character of the landscape, together with the generally dark and tranquil environment. They advise that these effects could potentially be mitigated in the longer term and should be

considered in the overall planning balance. Jacobs recommend conditions requiring revised planting plans and a Landscape and Ecology Management Plan (LEMP).

20 April
Jacobs undertook a high-level review of the submitted Landscape and Visual Impact Assessment (LVIA) and associated landscape information. They considered that the assessment methodology was generally consistent with relevant Landscape Institute guidance, that the study area appeared appropriate and that the baseline information, landscape and visual receptors were relevant.

Jacobs nevertheless identified a number of matters requiring further clarification within the LVIA. These included reference to the latest landscape character and landscape value guidance; the assessment years, seasons and assumed planting heights; the methodology used to produce the Zones of Theoretical Visibility (ZTV); and aspects of the visualisations.

Jacobs also identified the absence of an assessment of lighting and effects upon dark skies and tranquillity during construction and operation. They considered that the reporting of visual effects by groups of receptors, rather than providing an assessment for individual viewpoints, did not provide a thorough and transparent justification for the conclusions reached.

Given the largely open and rural character of the landscape and the scale of the proposed development, Jacobs considered it surprising that the LVIA identified no significant landscape effects at any assessment stage and relatively few significant visual effects.

In relation to landscape mitigation, Jacobs considered that the proposed bunding would assist in partially screening the lower parts of the development, although it would contrast with the generally open and relatively flat landform. They also identified potential challenges in establishing and maintaining planting on raised bunds and advised that these should be addressed through the LEMP.

Jacobs considered the overall extent of planting to be appropriate and advised that it should assist in reducing the visibility of the development as it established, as well as providing potential biodiversity benefits. However, they recommended amendments to the proposed planting, including additional native trees and removal of species considered inappropriate to the local landscape or site conditions, including spiral Leyland cypress and gorse. They also sought clarification on how proposed wet meadow, swales and rain gardens would be successfully established and maintained given the permeable chalk geology and relatively low rainfall.

Jacobs recommended that revised planting plans were secured through condition and that the LEMP, including monitoring, review and long-term maintenance arrangements, was submitted and approved before development commenced.

Jacobs recommended a further review of the LVIA to address the identified matters, particularly the assessment seasons, ZTV methodology, lighting, dark skies and tranquillity, and the definition of significant effects and associated assessment conclusions.

Jacobs concluded that some significant adverse landscape and visual effects would inevitably result from the development, given the open, rural character of the

landscape and the scale of the proposal. They advised that adverse effects could potentially be mitigated in the longer term and should be weighed in the overall planning balance.

18 September
Following consideration of the Environmental Statement Addendum and updated landscape and visual information, Jacobs advise that the additional material provides greater clarity and reassurance that the LVIA has been undertaken in accordance with the latest guidance and on a worst-case basis. Some uncertainty remains regarding the precise observer height used for the ZTV, although Jacobs acknowledge that the ZTV is an indicative tool supporting the wider assessment.

Jacobs note that further assessment has been undertaken of night-time character and tranquillity, drawing upon the noise and external lighting assessments. However, they consider that the assessment provides a proportionate overview of night-time effects rather than transparently considering lighting effects upon each of the individual landscape and visual receptors. Jacobs therefore advise that it remains unclear whether the individual landscape and visual effects identified in the LVIA would increase when night-time effects are taken into account.

Jacobs note that the surrounding area is described as a generally dark and tranquil environment and consider it surprising that the updated assessment identifies no significant night-time effects during either construction or operation.

Jacobs maintain their view that some significant adverse landscape and visual effects would inevitably result from the development, given the open and rural character of the landscape, its generally dark and tranquil environment and the scale of the proposed development. They advise that these effects could potentially be mitigated in the longer term and should be weighed in the overall planning balance.

Jacobs reiterate their recommendation for landscape conditions requiring revised planting plans and a LEMP.

41. **Natural England – No comment**

23 April, 14 September and 10 November
Natural England (NE) provides substantively the same position in each of its three consultation responses. In its latest response, dated 10 November, NE advises that it has considered the application in accordance with its Operational Statement for planning advice and has determined that the proposal is not a priority case for bespoke planning advice. NE therefore does not provide a detailed assessment of the application.

NE advises that the County Planning Authority should assess the proposal against relevant national and local environmental policies, taking account of relevant Standing Advice, SSSI Impact Risk Zones, protected sites information and Habitats Regulations Assessment (HRA) guidance, together with relevant environmental information provided by other bodies and individuals.

NE advises that its SSSI Impact Risk Zones should be used to determine whether development is likely to affect a SSSI and the Special Areas of Conservation, Special Protection Areas or Ramsar sites that they underpin. It also refers to its published

guidance on protected sites and the HRA process, including the need for HRA where a proposal might affect a Habitats Site.

NE also refers to its relevant Standing Advice covering matters including protected landscapes; designated nature conservation sites; air quality effects upon protected sites; protected species; local wildlife sites and priority habitats and species; Biodiversity Net Gain; ancient woodland and veteran trees; best and most versatile agricultural land and soils; green infrastructure; and public access and rights of way. NE advises that the mitigation hierarchy should be followed and refers to the statutory requirements for Biodiversity Net Gain.

NE also refers specifically to its standing advice concerning air pollution and development, including the assessment of potential effects from pollutants such as NOx, nitrogen deposition, acid deposition and sulphur dioxide upon statutory protected sites.

NE's responses make clear that the absence of detailed or bespoke advice does not imply that there would be no impacts upon the natural environment. NE advises that responsibility remains with the County Planning Authority to determine whether the proposal is consistent with relevant national and local environmental policies.

NE advises that, where the County Planning Authority considers there are significant risks to statutory nature conservation sites or protected landscapes, the specific matters requiring further advice should be referred back to NE.

42. **Kent County Council's Ecological Advice Service (EAS)**

Overall position: EAS advise that sufficient ecological information has been provided to determine the application, subject to securing the statutory BNG condition, a Habitat Management and Monitoring Plan and off-site breeding bird mitigation through a Section 106 agreement. EAS accept the conclusions regarding reptiles and wintering birds, are satisfied that the site does not provide functionally linked land to the Thanet Coast and Sandwich Bay SPA and accept the submitted BNG metric.

18 May
EAS reviewed the submitted Preliminary Ecological Appraisals and bird survey information and noted that the ecological assessments were largely consistent. However, further reptile and breeding bird survey work had been commissioned and EAS requested that the completed reptile survey and an interim breeding bird survey were submitted before detailed comments were provided.

In relation to Biodiversity Net Gain (BNG), EAS queried whether the baseline should reflect habitats previously present on the site under the statutory site degradation provisions, rather than those present at the time of the application. In the absence of evidence confirming when previous works commenced, EAS accepted the submitted habitat baseline. Clarification was also sought as to which of the two submitted ecological assessments formed the basis of the BNG assessment.

10 August
Following submission of further ecological information, EAS advised that additional information remained necessary before determination, principally clarification regarding the extent of the reptile survey.

For protected and notable species, EAS considered that, with the exception of this reptile survey matter, the submitted surveys provided a good understanding of the ecological interest of the site and that no additional species surveys were required.

No reptiles were recorded during the surveys and EAS agreed with that survey conclusion. However, they queried why survey effort had not extended to potentially suitable habitat along parts of the eastern and southern site boundaries and sought further information before determination.

EAS were satisfied with the wintering bird surveys, required no further information and were satisfied that the site does not provide functionally linked land to the Thanet Coast and Sandwich Bay SPA.

The breeding bird surveys recorded 28 species, including 12 identified as probable or possible breeders. Skylark and linnet were recorded breeding within the site. EAS did not accept reliance upon surrounding arable fields as mitigation for the displacement of these farmland birds and advised that off-site mitigation should be provided, including skylark plots and arable margins adjacent to scrub or hedgerows. They sought confirmation before determination that off-site mitigation could be delivered.

In respect of BNG, EAS reviewed the submitted statutory metric and accepted the habitat baseline and metric calculations. The metric identifies a 24% loss of habitat units, with 4.45 additional biodiversity units required to achieve the statutory 10% BNG. EAS advised that this would need to be achieved through habitat creation on other land available to the applicant or through the acquisition of off-site biodiversity units.

EAS also reviewed the proposed lighting and noted the potential for light spill at the site boundary. They questioned whether further measures could be introduced to reduce boundary light spill whilst recognising that the proposed 24-hour operation limits the opportunities to reduce lighting within the site.

1 September

Following consideration of the further information, EAS advise that sufficient ecological information is now available to determine the planning application.
In relation to reptiles, EAS maintain that all suitable habitat should ideally have been surveyed but accept the applicant's explanation that the areas surveyed comprise the principal suitable habitats and are connected to the unsurveyed boundary features. Given that no reptiles were recorded during seven survey visits, EAS accept that reptiles are unlikely to be present within the site.

EAS remain satisfied with the wintering bird assessment, require no further information and confirm that the site does not provide functionally linked land to the Thanet Coast and Sandwich Bay SPA.

For breeding birds, EAS note that the applicant now proposes a Farmland Bird Mitigation Strategy secured through a Section 106 agreement. This includes provision of at least eight skylark plots within suitable off-site arable land, with the precise location to be agreed with a third-party landowner. EAS are also satisfied that habitat for other non-ground-nesting bird species would be created within the development and require no additional mitigation for those species.

EAS accept the submitted BNG metric and baseline, including the use of the current habitats on the site. They note that the metric identifies a 24% habitat-unit loss and that 4.45 additional biodiversity units are required to deliver the statutory 10% BNG. Where off-site units are required, these would need to be appropriately registered and legally secured for the required management period. EAS advise that a Habitat Management and Monitoring Plan (HMMP) should secure the creation, management and monitoring of the required habitats over the 30-year BNG period.

In respect of lighting, EAS note that the updated scheme identifies a maximum light spill of approximately 2.5 lux at the red-line boundary, reducing relatively quickly to 0.2 lux. They continue to question whether further measures could reduce boundary light spill, whilst recognising the constraints arising from 24-hour operation.

EAS therefore require, should planning permission be granted, a Habitat Management and Monitoring Plan and a Breeding Bird Mitigation Strategy secured through a Section 106 agreement.

43. **KCC Highways & Transportation – no objections subject to** the completion of a Section 106 Agreement securing a financial contribution of £2.5 million and planning conditions requiring a Construction Management Plan; delivery of the approved access, visibility splays, parking and turning areas; Cycle parking and electric vehicle charging provision; Travel Plan implementation and monitoring; and measures to prevent the discharge of surface water onto the highway.

The Highway Authority's position evolved throughout the processing of the application as additional evidence was provided regarding the scale of traffic impacts and the appropriate level of mitigation required to address those impacts.

12 June

The Highway Authority reviewed the submitted transport evidence and accepted that staff and visitor trips associated with the innovation and education facility would have a negligible effect on the local highway network. The proposed access arrangements, visibility splays and parking provision were also considered acceptable. However, concerns were raised regarding the forecasted generation of up to 108 HGV (54 in/54 out) movements per day and the implications for the local highway network, particularly at locations already experiencing capacity pressures. The Authority advised that the development would generate additional demand on the network and indicated that a proportionate financial contribution towards delivery of the proposed Manston to Haine Link Road and associated highway improvements would be necessary.

At this stage, no agreed mitigation package had been identified.

7 August 2026

Following discussions regarding the quantum of an appropriate contribution, the Highway Authority provided further justification for its position. It emphasised that the proposal could not be assessed in isolation given the cumulative impacts arising from committed development within the area and noted that the predominance of HGV traffic associated with the facility would have a proportionately greater impact on highway capacity than private vehicle trips. Particular concern remained focused on the Spitfire Junction and Manston Road, both of which form key elements of the wider Manston-Haine Link scheme.

12 November 2026
Following further transport assessment work and discussions with the applicant, the Highway Authority maintained its position that the development would generate a material increase in HGV traffic and that mitigation in the form of a strategic highway contribution remained necessary. The Authority concluded that a contribution towards the Manston to Haine Link Road and associated improvements met the statutory tests contained within Regulation 122(2) of the Community Infrastructure Levy Regulations 2010 (as amended), namely that the obligation would be necessary to make the development acceptable in planning terms, directly related to the development, and fairly and reasonably related in scale and kind to the development. The Authority considered that the development's traffic impacts would contribute to existing and future capacity constraints on the affected highway network and that a contribution towards the identified improvement scheme was therefore justified. Following consideration the Highway Authority accepted a contribution of £2.5 million as an acceptable and proportionate level of mitigation. Subject to the completion of a Section 106 Agreement securing the contribution and a package of planning conditions, the Highway Authority raised no objection to the application.

44. **KCC Flood and Water Management – no objections subject to conditions** requiring the submission and approval of a detailed surface water drainage scheme prior to commencement of development, together with post-construction verification of the drainage infrastructure and long-term maintenance arrangements.

6 May 2026
KCC Flood and Water Management reviewed the submitted Water Environment, Flood Risk Assessment and Drainage Strategy documentation and concluded that the proposed surface water drainage strategy is acceptable in principle and generally accords with the National Standards for Sustainable Drainage Systems (SuDS). The strategy incorporates a range of SuDS measures, including green roofs, permeable paving, rain gardens, swales, detention basins, soakaways and a rainwater harvesting system for re-use on site.

The LLFA notes that a precautionary approach has been adopted in relation to infiltration rates due to limitations in the available ground investigation data and considers that a number of technical matters remain to be addressed through detailed design. These include further infiltration testing, assessment of climate change allowances, use of an appropriate runoff coefficient, and refinements to the drainage calculations and attenuation proposals. However, it is considered that these matters are capable of being resolved through the detailed design process and the LLFA therefore raises no objection to the development, subject to suitably worded planning conditions.

27 August 2026
KCC Flood and Water Management advise that they have no additional comments to add to their previous response dated 6 May 2026.

22 October 2026
KCC Flood and Water Management advise that they have no additional comments to add to their previous response dated 6 May 2026.

45. **KCC Archaeology – no objection subject to a condition** requiring, amongst other matters, a staged programme of archaeological evaluation, investigation, recording,

preservation where appropriate, post-excavation assessment and publication of findings.

17 July 2026
KCC Archaeology advises that the application site lies within an area of considerable archaeological interest, with previous investigations in the surrounding area identifying multi-period remains, including evidence of Neolithic, Bronze Age, Iron Age, Roman and later activity, together with First and Second World War military features. The consultation response notes that known archaeological features and cropmark evidence extend into parts of the application site and that archaeological remains of at least regional significance may be present.

The Archaeological Officer considers that the proposed development has the potential to affect surviving archaeological remains through the substantial groundworks required across the site. However, having reviewed the submitted desk-based assessment, geophysical survey and archaeological watching brief, it is concluded that the archaeological implications of the development can be appropriately addressed through further investigation, evaluation and mitigation secured by planning condition. Accordingly, no objection is raised to the proposal subject to the imposition of a condition requiring a staged programme of archaeological evaluation, investigation, recording, preservation where appropriate, post-excavation assessment and publication of findings. This would ensure that any archaeological remains affected by the development are suitably identified, recorded and mitigated in accordance with national and local planning policy.

11 November
KCC Archaeology advise that they have no additional comments to add to their previous response dated 17 July 2026.

46. **KCC Public Rights of Way – no objection.**

17 April 2026
Raises no objections but advises the applicant of the following informatives:-

- No furniture may be erected on or across Public Rights of Way without the express consent of the Highway Authority.
- There must be no disturbance of the surface of the right of way, or obstruction of its use, either during or following any approved development.
- There should be no Closeboard Fencing or similar structure over 1.2 metres erected adjacent to a highway used by vehicles (including bicycles) or in any circumstance which will block out the views.
- No hedging or shrubs should be planted within 1.5 metres of the edge of the Public Path.

14 September 2026
KCC PROW advise that they have no additional comments to add to their previous response dated 17 April 2026.

20 October 2026
KCC PROW advise that they have no additional comments to add to their previous response dated 17 April 2026.

47. **Southern Water – no objections subject to conditions** requiring occupation of the development to be phased alongside water network reinforcement works, the submission of an interim Waste Water Management Strategy, approval of maintenance arrangements for the rainwater harvesting system, and the implementation of interceptor measures to protect receiving waters in accordance with the approved drainage strategy.

Southern Water have also requested an informative requiring the applicant to ensure that a Trade Effluent Consent has been obtained or a letter from Southern Water stating that Trade Effluent Concentration is not required, before the connection to the public sewerage network can be approved.

1 May 2026
Southern Water raises no objection to the proposed development, subject to the imposition of planning conditions and the implementation of identified mitigation measures. The consultation response confirms that the proposal is acceptable from a groundwater protection perspective provided that the recommendations contained within the Hydrogeological Impact Assessment are fully implemented and all monitoring and observation boreholes are appropriately decommissioned prior to the commencement of construction works.

Southern Water advises that the existing potable water and foul sewerage networks currently have insufficient capacity to accommodate the development without reinforcement works. Consequently, Southern Water requests planning conditions requiring the occupation of the development to be phased and coordinated with the delivery of any necessary water supply and wastewater infrastructure upgrades to ensure adequate network capacity is available.

In respect of surface water management, Southern Water recommends conditions requiring the submission and approval of detailed rainwater harvesting proposals, including measures to prevent contamination of the public water supply and the provision of long-term maintenance arrangements. The response also advises that any Sustainable Drainage Systems should be designed, managed and maintained in accordance with current industry guidance, with clear arrangements secured for their implementation and ongoing management.

The consultee further notes that any trade effluent discharge associated with the proposed facility would require a separate Trade Effluent Consent and requests a condition requiring such consent to be obtained prior to any connection being made to the public sewerage network. Overall, no objection is raised subject to the recommended conditions and infrastructure safeguards.

1 September 2026
The applicant had requested an amended condition wording to allow for temporary waste storage (septic tank or otherwise) on site with off-site delivery via tanker to Southern Water's STW (managed by Hydrogen TE) in the interim period while public sewer reinforcement works are ongoing, in order to not to impact the construction programme.

Following a review of the documents submitted Southern Water has no objections to the proposed amendments to the drainage conditions for this proposal.

48. **Health & Safety Executive (HSE) – Kent – no comments to make on the application.**

28 April 2026
HSE advise that they are statutory consultee for certain developments within the consultation distance of major hazard sites and major accident hazard pipelines. However, this application does not fall within any HSE consultation zones.

There is therefore no need to consult the HSE Land Use Planning (LUP) team on this planning application and the HSE LUP team has no comment to make.
26 August 2026
HSE advise that they have no further comments to make.

49. **KCC Conservation Officer**

30 April 2026
Advised that although there are no designated heritage assets within the application site and no direct impacts upon built heritage assets would arise, the proposed facility would constitute a substantial and visually prominent form of development in an elevated location. The response noted that the principal heritage effects would be experienced through changes to the setting of heritage assets within the wider landscape. Whilst concern was expressed regarding the incremental urbanisation of an historically open and rural area, the Conservation Officer concluded that the proposal would not result in a level of harm to the setting of any individual designated heritage asset sufficient to justify a heritage objection. The response also identified the potential for construction and operational traffic to affect the setting and fabric of heritage assets along local road corridors and recommended that vehicle routing and management be secured through planning controls where appropriate.

1 September 2026
Following consideration of additional information submitted in support of the application, including a visual impact assessment map, the Conservation Officer advised that the additional material did not materially alter the conclusions reached in the original consultation response. The additional assessment was considered to reinforce the extent of the facility's visibility across the Thanet landscape and highlighted the degree to which the development would be perceived on the skyline. Whilst acknowledging that the proposal would result in a notable cumulative visual effect on the wider historic landscape, the Conservation Officer maintained the position that the development would not cause harm to any individual heritage asset at a level sufficient to warrant a formal heritage objection. Nevertheless, it was considered that the cumulative impact of the development on the character and setting of the wider historic environment should be afforded weight in the overall planning balance.

9 November 2026
The Conservation Officer confirms that the conclusions and concerns expressed in the earlier consultation responses remain unchanged. Particular attention is drawn to the revised external lighting proposals, which are considered to have the potential to affect one of the remaining areas of relative darkness within Thanet due to the site's elevated and visually exposed location. The Conservation Officer advises that illumination associated with the development could have wider effects upon the nighttime landscape and the setting of surrounding heritage assets and therefore considers that external lighting should be carefully controlled. It is recommended that consideration be given to minimising lighting in non-operational areas and to the use of measures

such as timed controls and motion sensors where appropriate. Whilst maintaining concerns regarding the wider landscape and setting impacts of the proposal, the Conservation Officer does not identify any harm to designated heritage assets that would justify a formal objection and instead recommends that any permission be accompanied by robust controls over the detailed lighting strategy.

50. **KCC Head of Economy**

KCC would welcome the inclusion of the innovation and education centre as this would align with training, upskilling and workforce development aspirations set out in the Kent & Medway Local Growth Plan, Get Kent & Medway Working Plan and Kent & Medway Economic Framework. With a number of energy related developments potentially being considered in the east of the county, there is significant opportunity to boost the wider energy sector in the county and work with local skills providers (Higher Education, Further Education and independent training providers) to provide opportunities for local residents to access employment opportunities in the industry.

The commitments to the economic role of the development are positive and it would be essential for the project to connect with the Kent & Medway economic development system to ensure that local employment, training and supply chain opportunities are maximised and that the site can access locally available support around these topics. It will be important to engage with the local system during the construction and operation phase of the development to maximise opportunities for local residents and businesses.

Consideration should be given to the construction phase whereby a number of large projects are taking place in Kent & Medway so phasing to ensure that the local construction industry and workforce can support multiple developments at the right time.

51. **Kent Fire and Rescue Service (KFRS) – no objections but makes the following comments.**

14 April 2026
KFRS have reviewed the proposal in relation to emergency access requirements and raise no objection. They advise that, based on the information submitted, emergency vehicle access arrangements appear broadly acceptable. Reference is made to Section 10 of the submitted Outline Fire Management Plan, which addresses matters including fire service access, water supplies, wayfinding and site information, and is considered suitable at this stage.

KFRS request that a copy of the final Emergency Response Plan be provided once completed and recommend that a Site Specific Risk Information (SSRI) visit be undertaken following commissioning of the facility. They also note that, should planning permission be granted, the development will be subject to separate consideration under the Building Regulations process, during which fire service access and facilities will be assessed against the requirements of Approved Document B, Section B5. Compliance with the Building Regulations 2010 will be required to the satisfaction of the relevant Building Control Authority, which has a statutory duty to consult the Fire and Rescue Service on the detailed proposals.

15 September 2026
KFRS advise that they have no additional comments to add to their previous response.

9 November 2026
KFRS advise that they have no additional comments to add to their previous response.

52. **Kent Police – no objections but makes the following comments.**

27 April 2026
Kent Police, acting in its capacity as Designing Out Crime Officers (DOCOs), reviewed the application against Crime Prevention Through Environmental Design (CPTED) principles and the National Planning Policy Framework. The Police raise no objection in principle to the development but recommend that crime prevention and community safety measures are incorporated into the design and operation of the site. They advise that the development should seek to follow Secured by Design guidance and demonstrate compliance with the Authority's duties under Section 17 of the Crime and Disorder Act 1998.

The Police recommendations include the provision of secure boundary treatments, controlled access arrangements, clearly defined pedestrian routes, appropriate external lighting, CCTV surveillance, alarm systems, secure cycle parking, secure bin storage and the use of enhanced security standards for doors, windows and shutters. Advice is also provided regarding the security of roof access areas, the management of construction-phase security and measures to deter unauthorised access, anti-social behaviour, nuisance parking and fly-tipping.

Overall, the consultation response seeks the incorporation of appropriate security and surveillance measures to minimise opportunities for crime and anti-social behaviour and to promote a safe and secure operating environment for staff and visitors. No concerns are raised that would preclude the development proceeding, subject to the implementation of suitable crime prevention measures through the detailed design and operational management of the site.

25 August 2026
Kent Police advise that they have no additional comments to add to their previous response.

9 November 2026
Kent Police advise that their comments remain unchanged from the response dated 27 April 2026. Since submitting this letter earlier this year, they have met with Nick Butler from Kabsec Consultancy who is completing the Security Needs Assessment as part of the BREEAM application he also mirrors these recommendations within his report.

53. **UK Health Security Agency (UKHSA)** (*UKHSA now has the health protection function formally managed by Public Health England*) – **no comments to make on the application and will instead comment on the Environmental Permit application.**

20 April 2026
UKHSA advise that they are not a statutory consultee and would not normally comment on this type of planning application unless there are specific chemical & environmental hazard concerns which have the potential to impact on the health of local communities. Impacts on public health from local air quality, noise and contaminated land fall under the remit of the local authority and it is their responsibility to decide whether or not to comment on these aspects of the planning application.

12 May 2026
UKHSA advise that they will comment on the Environmental Permit application, and do not also need to comment on the planning application.

25 August 2026
UKHSA confirm that as this site will be applying for an Environmental Permit and they will be commenting on the Permit application they do not consider it necessary to comment on this planning application.

54. **Department for Environment, Food and Rural Affairs (DEFRA) – No comments received.**

55. **National Planning Casework Unit – No comments received.**

56. **Manston Airport – No comments received.**

57. **Kent Wildlife Trust – No comments received**

58. **Office of Gas and Electricity Markets (OFGEM) - No comments received.**

59. **Department for Energy Security and Net Zero – No comments received.**

Local Members

60. The local County Members for Birchington & Rural Luke Evans and Amelia Randall were notified in April 2026, August 2026 and October 2026. No comments have been received.

Publicity

61. The application was publicised by the posting of site notices and advertisements in a local newspaper (Thanet Extra, 6 April 2026, 3 September 2026 & 22 October 2026).

Representations

62. The application was publicised by the posting of a site notice and an advertisement in a local newspaper and the notification of 40 of the nearest neighbouring properties for both the initial round of consultation in April 2026 and the second round of consultations in August 2026. The second consultation also involved the notification of 38 people who had already written in providing representations on the application. The third consultation in late October 2026 was sent to 60 people who had responded on the earlier consultations. The latest consultation closed on 21 November 2026.

63. In response to the publicity 93 letters/emails objecting to the application, 11 letters in support and 5 letters/emails making general comments have been received.

64. A petition has also been received titled ‘Stop the Proposed Manston Waste to Hydrogen Plant – Residents’ Petition (KCC/TH/0050/2026)’. The petition attracted 157 signatures.

The wording of the petition set out below asks Kent County Council to refuse planning permission because signatories consider that the proposal has not satisfactorily demonstrated that the development is appropriate for this location having regards to:

- The proximity of the proposed development to established residential properties;
- The proposed 24-hour operation of the facility and potential nighttime noise and disturbance;
- HGV and other operational vehicle movements and their potential effects on nearby residents and highway users;
- The reliance upon acoustic and other mitigation measures to achieve acceptable predicted effects;
- Wastewater infrastructure including the possibility of temporary on-site wastewater storage and associated tanker movement pending sewage reinforcement;
- Landscape and visual effects, external lighting and potential effects on the existing rural and nighttime character of the area;
- Ecological effects and the permanent loss of arable habitat currently used by farmland bird species;
- Cumulative environment and highway effects alongside other developments in the surrounding area;
- The extent to which aspects of mitigation and detailed design remain to be finalised; and
- The nature, permanence and local accessibility of the employment and skills benefits claimed for the development.

65. The key points raised by those making representations can be summarised as follows:

Objections

- Size and scale of the development;
- Residential amenity (noise, odour, air quality & lighting);
- Loss of agricultural land;
- Visual impacts;
- Highways impacts;
- Water environment impacts including Groundwater, drainage and firewater management concerns.
- Safety and hazardous materials including fire, explosion and public safety concerns;
- Public Rights of Way impacts;
- Hours of operation;
- Effects on equestrian interests;
- Ecological impacts;
- Inappropriate location for the development;
- Uncertain emissions assessment and air quality impacts;
- Noise impacts rely on future mitigation details;
- Alternative sites not adequately explored;
- Impact on Manston Cattery and Kennels;
- Technology considered insufficiently proven;
- Inadequate public awareness of the proposal;
- Unclear emergency response arrangements;
- Impacts on local rural businesses;
- Cumulative impact;
- Uncertain liability and accountability; and
- Application considered inadequately prepared.

Support

- Diversion of residual waste from landfill and recovery of resources;
- Production of low carbon hydrogen supporting decarbonisation, energy security and net zero objectives;
- Significant economic investment, job creation and skills development opportunities;
- Support for clean energy industries and the development of a hydrogen economy in East Kent;
- Benefits to local businesses through supply chain opportunities, hydrogen availability and potential industrial synergies;
- Potential environmental benefits through transport decarbonisation, captured CO_2 utilisation and biodiversity enhancements; and
- Highway infrastructure contributions and biodiversity improvements subject to planning conditions and legal obligations.

Discussion

66. Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that planning applications are determined in accordance with the development plan unless material considerations indicate otherwise. In the context of this application, the Kent Minerals and Waste Local Plan policies referred to in paragraph 27 and the Thanet District Council Local Plan policies referred to in paragraph 29 are particularly relevant. Material planning considerations also include the national planning policies as set out in the NPPF along with the national policy and guidance documents referred to in paragraphs 24-26.

67. The application is being reported to the Planning Application and Regulation Committee as the Nominated Officer and Nominated Member agree that at least one of the statutory tests set out in the Town and Country Planning (Discharge of Local Planning Authority Functions) (England) Regulations 2026 are satisfied. In particular, the scale, strategic nature and significance of the development raises issues of economic and environmental significance to the local area. The proposal also raises significant planning matters having regard to the development plan (particularly the Thanet Local Plan) and the National Planning Policy Framework (NPPF). Accordingly, the application cannot be determined under delegated powers and is reported to the Planning Applications Committee for determination. Whilst no longer a trigger for a committee decision, it should be noted that there are objections from Minster Parish Council, Manston Parish Council and local residents.

68. Policy CSW1 of the KMWLP and Policy S3 of the NPPF reflect sustainable development objectives and provide for applications for waste development that accord with the development plan to be approved without delay, unless material considerations indicate otherwise.

69. The proposed development falls within Part 10 of Schedule 1 of the 2017 EIA Regulations1 (as amended) as a ‘waste disposal installations for the incineration or chemical treatment (as defined in Annex I to Directive 2008/98/EC under heading D9) of non-hazardous waste with a capacity exceeding 100 tonnes per day’. All Schedule 1 developments require the submission of an Environmental Statement to accompany

the planning application and as such the application was accompanied by an Environmental Statement (ES).

70. The key material planning considerations in this case are:

- Principle & Need for the development;
- Economic Benefits;
- Environmental controls (noise, air quality and odour) including local amenity impacts;
- Landscape and visual impact;
- Highways and transportation;
- Loss of agricultural land;
- Water environment (hydrology, hydrogeology and groundwater impacts);
- Biodiversity Matters including impacts on designated sites;
- Archaeology, heritage and conservation (including impact on listed buildings); and
- Alternative Sites.

Principle & Need

71. The focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes, as in this case where an Environmental Permit would be monitored and enforced by the Environment Agency). Planning decisions should assume that these regimes will operate effectively, and Members should note that the applicant will need to secure an Environmental Permit from the Environment Agency in order to fully implement and commence the operations associated with this planning application.

72. The need for additional low carbon hydrogen infrastructure is strongly supported through both national planning policy and national energy policy. The National Planning Policy Framework (NPPF) 2026 identifies renewable and low carbon energy infrastructure as an essential component of the transition to a net-zero economy. Policy S5 confirms that energy infrastructure is an appropriate form of development outside settlement boundaries, whilst Annex B identifies hydrogen as a low carbon fuel. Furthermore, Policy W3 requires substantial weight to be given to the benefits of renewable and low carbon energy development, including its contribution towards energy security, economic growth and the transition to a net zero future. Importantly, Policy W3 also confirms that applicants should not be required to demonstrate an overall need for renewable or low carbon energy development. Nevertheless, the applicant has submitted a detailed justification which demonstrates a clear and compelling need for the proposed facility.

73. The need case is further reinforced by the revised Overarching National Policy Statement for Energy (EN-1). Whilst the proposal does not constitute Nationally Significant Infrastructure and falls to be determined under the Town and Country Planning Act, EN-1 remains a material consideration. EN-1 identifies an urgent national need for substantial new low carbon energy infrastructure to support decarbonisation, improve resilience of the energy system and maintain security of supply. It recognises hydrogen production and associated technologies as an

increasingly important component of the future energy system and highlights the requirement for significant new infrastructure if the UK is to achieve its legally binding carbon reduction targets.

74. Policy CSW1 of the KMWLP sets out that when considering waste development proposals the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the NPPF.

75. Policy CSW2 of the KMWLP requires developments to help drive waste to ascend the Waste Hierarchy whenever possible to aid the delivery of sustainable waste management solutions for Kent. Policy CSW2 also requires proposals for waste management to demonstrate how the proposed facility will manage waste at the highest level of the waste hierarchy that is practicable.

76. The application of the Waste Hierarchy is a legal requirement under the Waste (England and Wales) Regulations 2011. It seeks to ensure that waste is managed sustainably and ranks waste management options according to what is best for the environment. In the UK, the waste hierarchy prioritises waste management options as follows:

a) Prevention: Avoid creating waste in the first place.
b) Preparation for re-use: Reuse products and packaging.
c) Recycling: Recycle materials.
d) Other Recovery: Use waste for energy recovery.
e) Disposal: Landfill as last resort.

77. Policy CSW3 of the KMWLP requires new development to apply circular economy principles by minimising construction, demolition and excavation waste, retaining and reusing existing structures where possible, enabling future redevelopment and refurbishment, and maximising the use of sustainable construction methods and recycled or recyclable materials. The policy seeks to reduce waste generation and ensure that materials and resources are used efficiently throughout a development's lifecycle.

78. The application proposes the development of a waste to hydrogen facility capable of processing residual waste streams to produce low carbon hydrogen, captured carbon dioxide and inert aggregate. The proposal would comprise what the applicant describes as the first commercial scale facility of its kind in the UK. The submitted information indicates that the facility would process residual waste materials that are difficult to recycle through conventional means, including wind turbine blades, plastics, tyres, automotive shredder residue and other similar waste streams, diverting them from landfill and other disposal routes whilst generating useful low carbon energy products.

79. The facility would utilise two processing lines capable of producing approximately 8,000 tonnes of low carbon hydrogen per annum, equivalent to around 34MW of energy generation capacity. In addition to hydrogen production, the process would recover carbon dioxide for onward industrial use and produce an aggregate byproduct suitable for use within the construction sector. The proposal therefore seeks to maximise resource recovery from waste streams that would otherwise have limited beneficial use, contributing to both circular economy objectives and the movement of waste management higher up the waste hierarchy.

80. The proposed development would directly support national objectives relating to decarbonisation and climate change mitigation. Government policy recognises that hydrogen will have an important role in sectors where direct electrification is either impractical or technologically constrained, including parts of industry, transport and power generation. The proposed development would therefore make a direct contribution towards increasing domestic low carbon hydrogen production capacity and supporting the delivery of national decarbonisation objectives.

81. Significant weight is attached to the proposal's contribution towards national energy security. The facility would generate a strategic energy product from indigenous feedstocks already present within the UK's waste streams, thereby reducing reliance upon imported fuels whilst contributing to a more resilient domestic energy market. This objective is strongly supported by both EN-1 and NPPF Policies W3 and S5, which recognise the importance of diversifying and strengthening domestic energy supplies and that the proposal is a form of development that is permissible outside of settlements.

82. In waste management terms, the proposal would provide a recovery facility capable of extracting value from residual waste streams that would otherwise require disposal or lower value treatment. The development would therefore directly support the objectives of Policy CSW2 of the KMWLP by recovering value from waste at a higher level of the Waste Hierarchy. The proposal would also accord with Policy CSW3 through maximising resource efficiency, enabling the recovery of useful materials and promoting circular economy principles.

83. The proposal would further support the objectives of the Waste Management Plan for England and the wider legislative framework arising from the Waste (England and Wales) Regulations 2011 and subsequent Circular Economy reforms. By producing hydrogen, recovering carbon dioxide and generating a reusable aggregate product, the proposal would maximise resource efficiency and minimise the loss of potentially valuable materials from the economy.

84. In addition to its environmental benefits, the development would deliver significant economic benefits, which are set out in detail below. The proposal would generate employment opportunities during both the construction and operational phases of the development. These benefits have been recognised by Thanet District Council, which considers the employment and wider economic benefits associated with the proposal to weigh positively in favour of the development.

85. The scheme would also incorporate an Innovation and Education Centre intended to promote skills development, educational opportunities and awareness of hydrogen technologies and low carbon energy systems. These benefits would support the growth of the emerging hydrogen sector, help establish local skills capacity and provide wider educational opportunities associated with the transition to a low carbon economy.

86. Whilst the proposal represents a new form of development within the UK, this characteristic is not considered to weigh against it in principle. Rather, Government policy recognises that industrial decarbonisation and the transition to net zero will require technological innovation and commercial deployment of emerging low carbon technologies. The proposal has the potential to support innovation, technological advancement and investment in a sector of recognised strategic importance.

87. The development would contribute towards climate change mitigation through a number of complementary mechanisms. First, it would generate low carbon hydrogen capable of displacing higher carbon energy sources. Second, it would divert residual waste streams from disposal routes whilst recovering useful products and materials. Third, it would recover carbon dioxide for beneficial use and generate a reusable aggregate product capable of substituting primary materials. Collectively, these outcomes support national decarbonisation objectives, improve resource efficiency and advance the transition towards a more circular economy.

88. Overall, I am mindful that the proposal would deliver a combination of benefits, which are supported by national policy. In particular, substantial weight is attached to the national policy requirements set out below:

    a) the urgent national need for low carbon energy infrastructure identified within EN-1;
    b) the requirement within NPPF Policy W3 to give substantial weight to the benefits of low carbon energy development;
    c) the contribution towards national energy security;
    d) the role the development would play in supporting decarbonisation and climate change mitigation objectives; and
    e) the recovery of value from residual waste streams in accordance with circular economy principles and the waste hierarchy.

89. In addition, weight is attached to the economic, educational and innovation benefits associated with the development which benefits from national and local policy support.

90. These benefits demonstrate a clear and compelling justification for the proposal and weigh significantly in favour of the principle of the development.

91. Having regard to the national and local policy framework, I am satisfied that a clear and compelling need exists for the proposed development. I therefore conclude that the principle of the development is acceptable. The proposal would accord with Policies CSW1, CSW2 and CSW3 of the KMWLP and is strongly supported by Policies S3, S5, E2 and W3 of the NPPF. In addition, substantial weight is attached to the urgent national need for new low carbon energy infrastructure identified within EN-1. Collectively, these national and local policy considerations provide a robust and compelling justification for the proposed development and weigh significantly in favour of the proposal. However, this conclusion relates solely to the principle of development and the identified need for the proposal. The environmental controls, amenity impacts, landscape and visual impacts, highways impacts, loss of agricultural land, water environment, ecological impacts, archaeology, heritage and conservation impacts, and all other material planning considerations must be assessed separately within the subsequent sections of this report before an overall planning balance is reached.

Economic Benefits

92. The proposed development is expected to generate significant economic benefits during both the construction and operational phases. The application included an Economic Benefits Assessment which sets out that the construction phase would support approximately 400 direct and indirect full-time equivalent (FTE) jobs, comprising around 153 direct construction jobs and a further 244 indirect jobs

generated through supply chain expenditure and wider economic activity. The assessment also identifies annual economic output of approximately £16.6 million arising from the construction phase.

93. Once operational, the proposed facility is expected to employ approximately 128 people on-site. This workforce would comprise 53 plant operatives, 24 facilities staff, 32 administrative, accounts and transport staff, 16 innovation, training and outreach staff, and 3 director level management positions.

94. The applicant has additionally undertaken an assessment of the net economic impact of the proposal. Following the application of standard economic additionality assumptions, the assessment concludes that the proposal would support approximately 96 net direct FTE jobs within the local economy. It is therefore important to distinguish between the 128 jobs physically located at the site and the 96 net additional direct FTE jobs assessed as the economic benefit attributable to the development. Beyond these direct employment effects, the assessment estimates that a further 165 indirect would be supported through supply chain activities and expenditure effects. In total, the operational development is therefore anticipated to support approximately 261 direct and indirect jobs.

95. The assessment further concludes that the operational development would generate approximately £13.2 million of direct Gross Value Added (GVA) annually, together with additional indirect economic benefits across the wider economy.

96. Particular emphasis is placed on the proposed Innovation and Education Centre, which would form an integral part of the development. The applicant advises that the facility would provide workforce training, skills development, educational outreach and engagement with local schools, colleges and universities. The centre is intended to support the development of skills associated with emerging hydrogen and energy technologies, facilitate staff training and continuing professional development, and help attract and retain higher skilled employment opportunities within the district. The applicant also indicates that recruitment would seek to prioritise local employment opportunities, including positions in engineering, science, administration and related professional disciplines.

97. The submitted evidence identifies that the Thanet District experiences levels of deprivation, unemployment and skills attainment less favourably than regional and national averages. Against this background, the creation of a substantial number of operational jobs, together with opportunities for education, training and skills development, represents a potentially significant socio-economic benefit arising from the proposal.

98. The economic benefits identified above are consistent with the economic and social objectives of sustainable development within the NPPF 2026, which seeks to build a strong, responsive and competitive economy and support growth, innovation and improved productivity. The Framework further states that planning decisions should help create the conditions in which businesses can invest, expand and adapt, whilst enabling sustainable growth and productivity. In this context, the creation of employment opportunities, investment in skills and training, and the development of a

facility associated with emerging low carbon and hydrogen technologies are material benefits that weigh positively in favour of the proposal.

99. The generation of employment opportunities, support for workforce development and the potential to increase local economic activity contribute towards building a strong and responsive economy, whilst the proposed Innovation and Education Centre would assist in enhancing skills and educational opportunities within the district. These matters are of particular relevance given the identified socio-economic challenges within Thanet, including higher levels of deprivation and lower skills attainment when compared with regional and national averages.

100. As part of the consultation process the KCC Head of Economy was consulted and confirmed that they welcomed the inclusion of the Innovation and Education Centre, noting that it would support the training, upskilling and workforce development objectives identified within the Kent & Medway Local Growth Plan, the Get Kent & Medway Working Plan and the Kent & Medway Economic Framework. They also considered that the facility could provide opportunities to develop local skills and support workforce growth within the energy sector, particularly in the context of other energy related developments that may come forward in East Kent. The potential for partnership working with higher education, further education and independent training providers to help local residents access employment opportunities within the industry was also recognised as a positive factor.

101. KCC's Head of Economy also supported the commitments made in respect of the development's economic role and advises that close engagement with the Kent and Medway economic development network would be important in order to maximise local employment, training and supply chain benefits. Continued engagement during both the construction and operational phases is encouraged to ensure opportunities for local residents and businesses are fully realised. Consideration should be given to the timing and phasing of construction activities in light of other major projects anticipated across Kent and Medway. Appropriate coordination of construction programmes would assist in ensuring that sufficient local workforce capacity and construction sector resources are available to support multiple developments concurrently.

102. Whilst local residents have drawn attention to the impact on local rural businesses, at the local level, the proposal is consistent with the economic objectives of the KMWLP, including the wider sustainability principles contained within Policy CS1 and the objective of ensuring that waste development contributes positively to the economic wellbeing of the county whilst supporting sustainable growth. The provision of direct employment, wider supply-chain opportunities, investment in training and skills, and the development of specialist expertise associated with advanced energy recovery and hydrogen production technologies are matters which weigh in favour of the proposal.

103. Overall, significant weight can be attributed to the economic benefits of the proposal. These benefits include substantial construction employment, the creation of approximately 128 on-site operational jobs, the delivery of approximately 96 net additional direct FTE jobs, wider supply chain employment effects, annual economic output and GVA generation, and the provision of training and skills development opportunities through the Innovation and Education Centre. The proposal would

therefore contribute towards the economic dimension of sustainable development promoted by the NPPF 2026 and NPPF Policy E2 in relation to meeting the need for business land and premises and the economic objectives of the KMWLP. Collectively, these benefits weigh significantly in favour of the development in the overall planning balance.

Environmental controls (noise, air quality and odour) including local amenity impacts

104. Section 17 of the NPPF seeks to ensure that development is appropriate to its location, taking account of existing and potential pollution risks and other hazards. It requires the impacts of development on human health, amenity and the environment to be properly assessed and mitigated where necessary, while also ensuring that adequate provision can be made for development needed to support public protection, safety and security. Policy P3 of the NPPF seeks to ensure that development provides acceptable living conditions and safeguards human health and environmental quality. Development should not give rise to unacceptable impacts from noise, air quality, lighting, water, soil or other forms of pollution, either individually or cumulatively. Where adverse effects are identified, appropriate mitigation should be secured to ensure impacts are reduced to an acceptable level. The policy also requires proposals to support air quality objectives, minimise noise and lighting impacts, protect tranquil and dark areas, and safeguard water quality, while recognising the role of separate environmental permitting and pollution-control regimes.

Noise

105. The Noise Policy Statement for England (NPSE) similarly seeks to avoid significant adverse effects on health and quality of life, mitigate and minimise adverse effects where they cannot be avoided, and where possible contribute to improvements in health and quality of life.

106. Policy DM11 of the KMWLP requires waste development to demonstrate that it would not give rise to unacceptable adverse impacts from noise, vibration or other emissions. Policies SE01 and SE06 of the Thanet Local Plan seek to ensure that development does not result in unacceptable noise impacts and that appropriate mitigation measures are secured.

107. A comprehensive baseline noise survey was undertaken during October and November 2025, comprising both attended and unattended monitoring at representative locations surrounding the site. The monitoring informed the assessment of daytime and nighttime baseline conditions and provided the basis for both construction and operational noise modelling.

108. The Environmental Statement identifies that the prevailing acoustic environment is influenced principally by traffic using Manston Road and the wider highway network, together with existing commercial and industrial activities in the surrounding area. Away from these sources, the area experiences relatively low background noise levels, particularly during nighttime periods.

109. The nearest noise sensitive receptors comprise residential properties at Vincent Farm, Vincent Cottages, properties on Manston Road, Coldblows, Grovelodge and other

dispersed residential properties within the surrounding rural area. These receptors formed the basis of the detailed assessment.

110. Construction of the development is anticipated to take place over a period of approximately 24 months and would include site preparation works, earthworks, construction of the Innovation and Education Centre, installation of the waste facility and associated infrastructure, and landscaping works. Construction noise and vibration have been assessed in accordance with the appropriate Standards.

111. The assessment considered excavation activities, piling, crane operations, material deliveries, vehicle movements and landscaping works. The Environmental Statement concludes that predicted construction noise levels at nearby receptors would remain below the relevant BS:5228 significance thresholds and that construction vibration effects would similarly remain below levels likely to cause disturbance or damage. Construction noise and vibration effects were therefore assessed by the application documents as negligible and not significant.

112. Operational noise was identified as a principal environmental consideration due to the proposed 24-hour operation of the facility and the relatively low background noise environment experienced at nearby residential receptors during the evening and nighttime periods.

113. The noise assessment considered noise arising from:

- Waste reception and handling areas;
- Tipping and sorting activities;
- Conveyors;
- Pumps and compressors;
- Hydrogen production equipment;
- Cooling systems and fans;
- Carbon dioxide handling equipment;
- Site vehicle movements;
- Hydrogen and aggregate dispatch operations; and
- Ancillary plant and machinery.

114. Detailed three-dimensional acoustic modelling was undertaken using specialist acoustic modelling software to predict operational noise levels at all identified receptors. The Environmental Statement submitted with the application identified that, in the absence of mitigation, the development could give rise to Moderate Adverse impacts during daytime periods and Major Adverse impacts during nighttime periods at some receptors, with rating levels exceeding background sound levels by a substantial margin.

115. The assessment of operational noise was subject to extensive technical scrutiny throughout the determination of the application. In its initial consultation response, KCC's Noise Consultant raised concerns regarding aspects of the baseline monitoring methodology, operational noise modelling assumptions, treatment of vehicle movements and operational road traffic noise assessment and advised that further information was required before it could conclude that unacceptable impacts would not arise.

116. Likewise, Thanet District Council (TDC) Environmental Health acknowledged that the original assessment identified potentially significant adverse noise effects and advised that any permission would need to secure robust mitigation, verification testing, operational noise controls and ongoing monitoring through planning conditions. TDC Environmental Health also highlighted that regulation through the environmental permitting regime would not remove the need for the planning authority to be satisfied that noise impacts were acceptable in planning terms.

117. In response, the applicant submitted an addendum to the Environmental Statement which provided further clarification regarding baseline survey methodology, weather conditions, monitoring locations, operational traffic assumptions, plant design parameters and acoustic modelling inputs. The revised assessment adopted the updated ISO 9613-2:2024 propagation methodology, it incorporated all relevant onsite vehicle movements, revised assumptions concerning waste handling operations and introduced additional mitigation to the cooling tower fan. Whilst the revised modelling predicted higher unmitigated noise levels than previously reported, it confirmed that the proposed mitigation measures remained effective in reducing impacts to acceptable levels.

118. Following review of the revised evidence, KCC's Noise Consultant confirmed in its final consultation response that sufficient information had been provided to determine the application and raised no objection subject to planning conditions requiring a Construction Noise and Vibration Management Plan, an Updated Operational Acoustic Assessment, operational noise limits and compliance monitoring. Thanet District Council Environmental Health subsequently confirmed that it agreed with these conclusions and recommendations.

119. The applicant has set out a comprehensive package of embedded and additional mitigation measures which can be secured by condition, including:

- Acoustic lining to the waste processing shed;
- Acoustic treatment of conveyor systems;
- Enclosure of principal processing operations;
- Enhanced acoustic attenuation of hydrogen compressors;
- Acoustic attenuation of cooling tower pumps;
- Additional attenuation of cooling tower fans;
- Enclosed waste handling arrangements;
- Landscape bunding around operational areas; and
- Detailed acoustic design measures to be secured through subsequent design stages.

120. The Environmental Statement and subsequent revised modelling demonstrate that these measures achieve substantial reductions in operational noise emissions. Following mitigation, residual effects at all assessed receptors are predicted to reduce to Negligible to Minor Adverse and are not considered significant in EIA terms.

Operational Traffic Noise

121. Operational road traffic noise associated with staff movements, waste deliveries and product dispatches was also assessed. Following comments from KCC's Noise Consultant, additional assessment was undertaken to consider vehicle movements associated with staff shift changes and evening dispatch periods when background

traffic levels are lower. The assessment concluded that the greatest change in predicted road traffic noise would occur during the 22:00 to 23:00 period and would not exceed approximately 2.6dB(A). Most changes were significantly lower than this level. These effects remain below the level generally associated with a moderate adverse impact and below the threshold normally regarded as clearly perceptible. Following review of the revised assessment, KCC's Noise Consultant concluded that operational traffic noise would not result in significant adverse impacts.

Cumulative Noise Effects

122. The Environmental Statement considered the cumulative impact of nearby committed developments, including adjacent commercial and industrial developments and the approved solar farm. The cumulative assessment concluded that construction noise effects would remain negligible and not significant, assuming the implementation of standard construction management measures. Similarly, cumulative operational effects are predicted to remain Negligible to Minor Adverse and not significant, with no material alteration to the conclusions reached for the development in isolation.

123. Noise and vibration have been important considerations in the assessment of this application owing to the scale and nature of the proposed development, the continuous nature of the operational processes and the proximity of a number of residential receptors. The Environmental Statement identified that, in the absence of mitigation, operational activities associated with the facility could result in significant adverse noise effects at nearby receptors. Both KCC's Noise Consultant and TDC Environmental Health identified concerns regarding aspects of the original assessment and requested further information regarding the methodology, modelling assumptions and proposed mitigation measures.

124. In response, the applicant provided additional technical information, revised operational modelling and further clarification regarding the proposed acoustic mitigation strategy. The revised assessment incorporated updated modelling assumptions, additional operational noise sources and enhanced mitigation measures. The further information was subsequently reviewed by both KCC's Noise Consultant and TDC's Environmental Health. Following that review, both consultees confirmed that sufficient information had been provided to determine the application and that any residual impacts could be satisfactorily addressed through planning conditions.

125. The evidence demonstrates that whilst substantial mitigation is required, the combination of acoustic enclosure of equipment, treatment of process buildings, attenuation of external plant and operational controls would reduce residual noise effects to levels assessed as Negligible to Minor Adverse and not significant. Construction noise, vibration, operational traffic noise and cumulative noise effects are similarly assessed as not significant.

126. I attach significant weight to the views of KCC's Noise Consultant and TDC Environmental Health as specialist technical consultees. Both parties are satisfied that the application can be determined on the basis of the information submitted, subject to conditions requiring a Construction Noise and Vibration Management Plan, an Updated Operational Acoustic Assessment, operational noise limits and post-installation verification monitoring.

127. Particular regard has been given to the potential impact of the development on nearby residential properties, including dwellings at Vincent Farm, Vincent Cottages, properties on Manston Road, Coldblows and Grovelodge. These receptors represent the most sensitive receptors in the assessment and have therefore formed the basis of the operational noise modelling. I acknowledge that the proposed facility would introduce a new source of continuous industrial noise into the local environment and that residents may experience changes to the existing acoustic environment. However, the assessment demonstrates that following the incorporation of mitigation measures, operational noise levels would remain within the limits assessed as acceptable under BS:4142 and residual effects would reduce to Negligible to Minor Adverse levels. Importantly, KCC's Noise Consultant and TDC Environmental Health are satisfied that, subject to the recommended conditions, the proposal would not result in unacceptable impacts on the living conditions of nearby occupiers and significant weight has been attached to this specialist advice.

128. Taking these matters into account, I am satisfied that sufficient information has been provided to demonstrate that noise and vibration impacts can be appropriately controlled and that the proposal would not result in unacceptable impacts upon residential amenity.

129. Should planning permission be granted, the following noise-related conditions are recommended:

1. Construction Noise and Vibration Management Plan (CNVMP)

   No development shall commence until a Construction Noise and Vibration Management Plan has been submitted to and approved in writing by the County Planning Authority. The Plan shall include:

   - Construction noise and vibration assessments;
   - Plant and machinery specifications;
   - Best Practicable Means measures;
   - Monitoring procedures;
   - Complaint investigation procedures;
   - Construction traffic noise controls; and
   - Mitigation measures designed to minimise impacts at nearby receptors.

   Development shall thereafter be carried out in accordance with the approved Plan.

2. Construction Working Hours

   Construction activities shall only take place between:

   - 08:00 to 18:00 Monday to Friday;
   - 08:00 to 13:00 Saturdays; and
   - No working on Sundays or Bank Holidays, unless otherwise approved in writing by the County Planning Authority.

3. Updated Operational Acoustic Assessment

Prior to commencement of development above slab level, an Updated Operational Acoustic Assessment shall be submitted to and approved in writing by the County Planning Authority.

The assessment shall:

- Reflect the final plant specification and building design;
- Include all fixed and mobile operational noise sources;
- Include emergency plant and testing regimes;
- Contain updated BS:4142 assessments;
- Provide modelling files for technical review;
- Identify any additional mitigation measures; and
- Include proposals for operational compliance monitoring.

The development shall thereafter be implemented in accordance with the approved assessment.

4. Operational Noise Limits

   Noise arising from the operation of the development shall not exceed the operational noise limits approved through the Updated Operational Acoustic Assessment and shall be demonstrated to comply with the approved BS:4142 assessment at all identified noise sensitive receptors.

5. Noise Verification Monitoring

   Following commissioning of the development, post-installation noise monitoring shall be undertaken by a suitably qualified acoustic consultant and submitted to the County Planning Authority to demonstrate compliance with approved noise limits. Where additional mitigation is identified as necessary, such measures shall be implemented in accordance with an agreed timetable.

6. Retention and Maintenance of Mitigation Measures

   All acoustic enclosures, attenuators, acoustic linings, silencers, barriers and other approved mitigation measures shall be installed prior to operation of the facility and thereafter retained and maintained throughout the lifetime of the development.

130. The proposed development has the potential to generate noise from both construction and operational activities and, due to its continuous operation, noise has been a key issue throughout the determination of the application. The original Environmental Statement identified potentially significant operational noise effects in the absence of mitigation and this resulted in detailed scrutiny by both KCC's Noise Consultant and Thanet District Council Environmental Health. Subsequent revised modelling, technical submissions and enhanced mitigation measures have been reviewed by consultees and have satisfactorily addressed the issues originally raised. The evidence demonstrates that whilst substantial acoustic mitigation is required, the identified impacts can be reduced to Negligible to Minor Adverse levels and are not significant in EIA terms. Construction noise, vibration, operational road traffic noise and cumulative noise effects are also assessed as not significant.

131. Importantly, both KCC's Noise Consultant and Thanet District Council Environmental Health have confirmed that sufficient information has been provided to determine the application and that they raise no objection on noise grounds subject to the imposition of the planning conditions set out above.

Air Quality, Odour and Bioaerosols

132. The submitted Air Quality assessment confirms that there are no Air Quality Management Areas within the vicinity of the site and that baseline concentrations of nitrogen dioxide (NO_2), PM_{10} and $PM_{2.5}$ are below the relevant national air quality objectives.

133. Sensitive human receptors comprise nearby residential properties including Vincent Farm, Vincent Road, Manston Road and other residential receptors within the surrounding rural area. Sensitive ecological receptors include Thanet Coast SSSI, Sandwich Bay SAC and Sandwich Bay to Hacklinge Marshes SSSI, all of which were assessed within the air quality modelling.

134. The Environmental Statement considered the potential for dust, particulate emissions and traffic related air quality impacts during the construction phase. Construction dust was assessed in accordance with Institute of Air Quality Management guidance and the construction traffic assessment was undertaken using recognised modelling methodologies.

135. The submitted Construction Environmental Management Plan included a comprehensive suite of mitigation measures designed to minimise construction dust and particulate emissions, including dust suppression and damping down procedures, wheel washing facilities, covering of stockpiles and haulage vehicles, speed restrictions on haul routes, dust monitoring, complaint investigation procedures and a dedicated Dust Management Plan.

136. Subject to implementation of these measures, construction phase dust and air quality effects are assessed as negligible and not significant.

137. The operational air quality assessment considered:

- Traffic-related emissions;
- Process emissions from the thermal oxidiser and emergency flare;
- Nitrogen dioxide (NO_2);
- PM_{10} and $PM_{2.5}$ concentrations;
- Effects on ecological receptors;
- Odour impacts; and
- Bioaerosol emissions.

138. A detailed dispersion modelling assessment was undertaken and considered both human and ecological receptors. Following comments from KCC's Air Quality Consultant, the applicant revisited the emergency flare emissions assumptions and remodelled emissions using a more conservative NOx emission rate based on the waste incineration emissions limit value of 200mg/Nm³ and assumed continuous operation of the emergency flare. Whilst the flare would only operate during abnormal operating conditions, maintenance or shutdown events, the revised assessment therefore represents a robust worst-case scenario.

139. All predicted concentrations remain substantially below the relevant air quality objectives and all effects at residential receptors are assessed as negligible and not significant.

140. The assessment also considered potential impacts on nearby internationally and nationally designated ecological sites through changes in NOx concentrations and nitrogen deposition.

141. A deliberately precautionary methodology was adopted, applying:

- A lower critical load of 5kgN/ha/year;
- A screening threshold of 0.05kgN/ha/year;
- The highest identified background deposition rates; and
- Combined traffic and point-source emissions.

142. The assessment demonstrates that:

- The highest predicted ecological NOx concentration is 14.46µg/m³ compared with a critical level of 30µg/m³;
- The maximum increase attributable to the development is 0.008µg/m³;
- The maximum increase in nitrogen deposition is 0.002kgN/ha/year; and
- No ecological receptor exceeds recognised 1% screening thresholds.

143. The assessment therefore concludes that there would be no significant effects on Thanet Coast SSSI, Sandwich Bay SAC or Sandwich Bay to Hacklinge Marshes SSSI arising from operational emissions. These findings are also consistent with the conclusions of the ecological assessment.

Odour and Bioaerosols

144. Odour was assessed in accordance with recognised Institute of Air Quality Management guidance and bioaerosols were assessed using relevant Environment Agency guidance. The submitted assessment concludes that odour and bioaerosol effects would be negligible and not significant.

145. The application was reviewed by both KCC's Air Quality Consultant and TDC's Environmental Health. Environmental Health advised that the submitted Air Quality Assessment had been prepared having regard to relevant legislation, planning policy and technical guidance and noted that detailed assessments had been undertaken for construction dust, traffic emissions, process emissions, odour and bioaerosols. Environmental Health accepted the applicant's conclusion that concentrations of NO_2, PM_{10} and $PM_{2.5}$ would remain below applicable air quality objectives and that bioaerosol and odour impacts would be negligible and not significant. Furthermore, they advised that the proposed development is not expected to result in significant adverse impacts on residential amenity or the wider environment, provided that the identified mitigation measures are implemented.

146. Environmental Health also noted that the facility would be subject to an Environmental Permit and that the permitting regime would provide the principal mechanism for regulating process emissions, stack emissions and operational odour controls.

147. KCC's Air Quality Consultant initially identified a number of concerns relating to point source emissions, pollutant selection, ecological assessments, odour assessments,

bioaerosol assessments and atmospheric dispersion modelling assumptions. They concluded that additional information was required before it could determine whether the proposal was acceptable from an air quality perspective.

148. Following the submission of additional Air Quality information further clarification was provided regarding the emergency flare, thermal oxidiser, pollutant selection methodology, ecological assessment methodology and atmospheric dispersion modelling assumptions. Following review of the additional information, KCC's Air Quality Consultant accepted the applicant's approach to modelling the emergency flare, the thermal oxidiser, pollutant selection methodology, emissions assumptions and atmospheric dispersion modelling. Whilst KCC's Air Quality Consultant noted that aspects of detailed odour and bioaerosol management remained to be finalised through detailed design and permitting, it concluded that these were matters capable of being addressed through planning conditions and the Environmental Permitting regime. KCC's Air Quality Consultant ultimately advised that the proposal was acceptable in principle from an air quality perspective and raised no objection subject to conditions requiring the submission of detailed Odour and Bioaerosol Management Plans.

149. Air quality, odour and bioaerosols have been important considerations in the assessment of this application given the nature of the proposed waste to hydrogen facility and its proximity to residential and ecological receptors. It is noted that the assessment has undergone substantial technical scrutiny throughout the determination of the application. Whilst TDC's Environmental Health was broadly satisfied with the conclusions of the original Air Quality Assessment, KCC's Air Quality Consultant identified a number of matters requiring clarification relating to process emissions, modelling assumptions, ecological receptors, odour and bioaerosol assessments. These concerns resulted in the submission of additional technical information, revised modelling and clarification by the applicant.

150. Particular regard has been given to the potential effects of the development on nearby residential properties, including dwellings at Vincent Farm, Vincent Road, Manston Road and other rural residential receptors surrounding the site. The proposed facility has the potential to generate emissions from operational processes, vehicle movements, dust generating construction activities and odour generating waste handling operations. These matters have therefore been assessed in detail through the submitted Air Quality Assessment, supplementary technical information and subsequent consultee review. The modelling demonstrates that concentrations of nitrogen dioxide (NO_2), particulate matter (PM_{10} and $PM_{2.5}$) and other assessed pollutants would remain substantially below relevant national air quality objectives at all residential receptors.

151. Construction dust impacts are capable of being controlled through the implementation of mitigation measures secured through the Construction Environmental Management Plan, whilst detailed odour and bioaerosol controls would be secured through planning conditions and regulated through the Environmental Permitting regime. Having regard to the submitted evidence and the conclusions of both KCC's Air Quality Consultant and TDC's Environmental Health, I am satisfied that the proposal would not result in unacceptable impacts on residential amenity, human health, living conditions or quality of life for occupiers of nearby properties

152. The additional information included a revised and more precautionary assessment of emissions from the emergency flare, adoption of conservative ecological assumptions and supplementary technical clarification regarding the operation of the thermal oxidiser, pollutant selection and atmospheric dispersion modelling. The revised modelling continued to demonstrate pollutant concentrations substantially below relevant air quality objectives and ecological screening thresholds.

153. Following review of the additional submissions, KCC's Air Quality Consultant have accepted the applicant's methodology and modelling assumptions and confirmed that the proposal is acceptable in principle from an air quality perspective subject to conditions securing Odour and Bioaerosol Management Plans. Whilst certain detailed operational controls remain to be finalised, these relate principally to matters that would be addressed through detailed design and regulated through the Environmental Permitting regime.

154. Taking these matters into account, I am satisfied that sufficient information has been provided to conclude that the proposal would not give rise to unacceptable impacts on human health, residential amenity, air quality, designated ecological sites or the wider environment. Should planning permission be granted, the following air quality conditions are recommended:

    1. Dust Management Plan to be submitted to and approved by the County Planning Authority prior to commencement of development.

    2. Construction Air Quality Mitigation Measures to be implemented in accordance with the approved Construction Environmental Management Plan.

    3. Odour Management Plan to be submitted to and approved by the County Planning Authority prior to operation of the facility. The Plan shall include waste acceptance procedures, waste handling arrangements, odour abatement systems, monitoring arrangements and maintenance procedures.

    4. Bioaerosol Management Plan to be submitted to and approved by the County Planning Authority prior to operation of the facility. The Plan shall include waste handling arrangements, building enclosure details, ventilation systems, monitoring procedures and mitigation measures.

    5. Implementation and Maintenance of Approved Odour and Bioaerosol Controls throughout the operational life of the development.

155. The proposed development has the potential to give rise to air quality, dust, odour and bioaerosol effects during both the construction and operational phases of development. These matters have been subject to detailed Environmental Impact Assessment, supplementary technical review and additional clarification throughout the determination of the application.

156. The evidence demonstrates that construction dust impacts can be appropriately managed through implementation of the Construction Environmental Management Plan and associated dust control measures. Operational modelling demonstrates that concentrations of NO_2, PM_{10} and $PM_{2.5}$ at nearby residential receptors would remain substantially below relevant air quality objectives and that impacts on designated ecological sites would remain well below recognised significance thresholds. Residual air quality effects are therefore assessed as negligible and not significant.

157. I also note that Thanet District Council Environmental Health accepted the overall findings of the Air Quality Assessment and recognised the role of environmental permitting in regulating process emissions and operational controls.

Noise, Air Quality and Odour Conclusion

158. The proposed development has the potential to give rise to noise, vibration, air quality, dust, odour and bioaerosol effects during both the construction and operational phases of development. These matters have been the subject of detailed Environmental Impact Assessment and extensive technical scrutiny throughout the determination of the application, including review by KCC's Noise and Air Quality Consultants and TDC's Environmental Health Officer.

159. The submitted assessments demonstrate that, whilst potentially significant operational noise effects could arise in the absence of mitigation, the proposed acoustic design measures are capable of reducing residual noise impacts to Negligible to Minor Adverse levels that are not significant in EIA terms. Construction noise, vibration, operational road traffic noise and cumulative noise effects are similarly assessed as not significant. Both KCC's Noise Consultant and TDC Environmental Health have confirmed that sufficient information has been provided to determine the application and raise no objection subject to the imposition of planning conditions securing detailed acoustic controls, operational noise limits, verification monitoring and ongoing management measures.

160. In relation to air quality, the evidence demonstrates that construction dust impacts can be appropriately managed through implementation of the approved construction mitigation measures, whilst operational modelling confirms that concentrations of NO_2, PM_{10} and $PM_{2.5}$ at nearby residential receptors would remain substantially below relevant air quality objectives. Furthermore, the assessment demonstrates that impacts on nearby nationally and internationally designated ecological sites would remain well below recognised significance thresholds. Residual air quality effects are therefore assessed as negligible and not significant. Whilst detailed odour and bioaerosol controls would continue to be refined through the detailed design process, it is accepted that these matters can be satisfactorily controlled through planning conditions and the Environmental Permitting regime.

161. Whilst I acknowledge the concerns raised by the Parish Councils, particular weight has been given to the effects on nearby residential properties and other sensitive receptors. Whilst the development would introduce a new industrial process into the local area, the submitted modelling demonstrates that pollutant concentrations would remain comfortably within recognised air quality standards and that impacts on nearby residents would be negligible. I also note the comments received from local residents, regarding the impact on Manston Boarding Kennels & Cattery, however, the submitted Environmental Statement assessed this site as a sensitive receptor and concluded that, following mitigation, noise impacts would be minor adverse and not significant, a view that was also agreed by KCC's Noise Consultant. Nearby residential properties, including those opposite the kennels, were also assessed as sensitive receptors, including during night-time operations. Subject to the recommended controls relating to construction dust, odour, bioaerosol management and noise mitigation, I am satisfied that the proposal would not cause material harm to residential amenity. Together with the recommended planning conditions and Environmental Permit controls, the

development would not result in unacceptable impacts on residential amenity, human health, living conditions or the wider environment. Significant weight is attached to the conclusions of KCC's Noise and Air Quality Consultants and TDC's Environmental Health as the relevant specialist technical consultees.

162. Accordingly, subject to conditions securing a Construction Noise and Vibration Management Plan, an Updated Operational Acoustic Assessment, operational noise limits, verification monitoring, a Dust Management Plan, an Odour Management Plan and a Bioaerosol Management Plan, the proposal is considered to accord with Policy P3 of the NPPF, Policy DM11 of the KMWLP and Policies SE01, SE05 and SE06 of the Thanet Local Plan. I am satisfied that the proposal would not give rise to unacceptable impacts on human health, residential amenity, air quality or designated ecological sites and therefore no objection is raised on air quality, odour or bioaerosol grounds.

Landscape and Visual Impact

163. Policy N2 of the NPPF seeks to ensure development contributes positively to the natural environment and supports nature recovery. Development should conserve and enhance biodiversity, landscapes, trees and hedgerows, strengthen ecological networks, protect agricultural land where possible, and incorporate green infrastructure and nature based solutions. Proposals should also secure long-term management of environmental enhancements and deliver any applicable biodiversity net gain requirements.

164. Policy DM1 of KMWLP requires development to avoid, minimise or appropriately mitigate adverse amenity and environmental impacts, whilst Policy DM2 seeks the protection and enhancement of environmental quality, landscape character and local distinctiveness. Policy CSW6 requires waste related development to minimise adverse environmental effects and incorporate appropriate mitigation measures.

165. Policy SP26 of the Thanet Local Plan seeks to protect, conserve and where appropriate enhance landscape character and visual quality, whilst Policy SP27 seeks to protect and enhance green infrastructure networks. Policy GI06 supports the delivery of high quality landscaping and green infrastructure and Policy QD02 requires developments to respond positively to its context and protect visual amenity.

166. The application site comprises agricultural land located to the west of Manston Road. The site forms part of a wider open arable landscape characterised by large field parcels, limited woodland cover, long distance views and a predominantly rural character. The site lies within the National Character Area 113: North Kent Plain, the Thanet Landscape Area and the Manston Chalk Plateau Landscape Character Area (A1). The Thanet Landscape Character Assessment identifies the Manston Chalk Plateau as a landscape characterised by expansive farmland, open skylines, panoramic views and a dispersed settlement pattern. The assessment highlights the importance of conserving openness, rural character, tranquillity and dark skies.

167. The site itself is relatively open in character and contains few established landscape features. Views of the site are available from surrounding roads, nearby residential properties and Public Rights of Way, including Bridleways TM15, TM19 and TM20. Whilst visibility is filtered from some locations by existing vegetation and built

development, open views towards the site remain possible from a number of sensitive receptors.

168. The application is supported by Landscape and Visual Impact Assessment (LVIA) and a landscape chapter within the submitted ES including associated visualisations and photomontages, following the initial consultation responses an updated note to the LVIA and an updated external lighting assessment were submitted.

169. The development would incorporate a comprehensive landscape strategy comprising structural landscape planting, native trees and shrubs, hedgerow planting, wildflower grassland, sustainable drainage features, landscape bunding and other green infrastructure measures. The proposed bunding and planting are intended to soften views of the development, provide visual screening, reinforce local landscape character and deliver associated biodiversity benefits.

170. The proposed landscape strategy relies upon a combination of earth bunding and structural planting to provide both immediate and longer term screening of the development. The Year 10 visual assessment assumes the following mitigation has become fully established:

Mitigation Element	Proposed / Assumed Height
Landscape Bunds	Approximately **2.0m**
Native Hedgerows	Approximately **2.0m**
Native Shrub Planting	Approximately **2.5-3.0m**
Native Tree Planting	Approximately **6.0-6.5m**
Ornamental Tree Planting	Approximately **6.5-7.0m**
Tallest Process Infrastructure	Up to **30m**

171. The principal landscape mitigation comprises approximately 2 metre high perimeter bunding of the waste to energy facility, reinforced and new native hedgerow planting, structural tree belts, native shrub planting, species-rich grassland areas, sustainable drainage features and ecological enhancement areas. The applicant's visual modelling assumes that the majority of tree planting would attain a height of between 6 and 7 metres within 10 years of planting, whilst hedgerows would reach approximately 2 metres in height and shrub planting between 2.5 and 3 metres. These assumptions form the basis of the submitted Year 10 photomontages and visual impact assessment.

172. The submitted LVIA acknowledges that the proposal would introduce substantial industrial infrastructure into a currently undeveloped agricultural landscape, including process plant and associated structures of up to approximately 30 metres in height. The proposal would therefore result in a permanent alteration to the character of the application site and the loss of part of an agricultural field parcel. The assessment concludes that the development would result in a Moderate Adverse effect on site landscape character during construction and at Year 1 of operation, reducing to Minor Adverse by Year 10 as landscape mitigation becomes established. Effects upon the wider Manston Chalk Plateau Landscape Character Area are assessed as Minor Adverse initially, reducing to Negligible at Year 10. The LVIA therefore concludes that there would be no significant landscape character effects in EIA terms.

173. The LVIA considered 24 viewpoints within a 4 kilometre study area and assessed impacts upon residential receptors, users of Public Rights of Way, road users, visitors and workers. The applicant identifies the greatest effects arising from the introduction of the waste to hydrogen facility to be within views currently characterised by open agricultural land. The assessment concluded that the most substantial visual effects would occur for nearby residents, particularly those associated with the Coldblows/Grovelodge properties, Vincent Farm development and Vincent Cottages, together with users of Bridleways TM19 and TM20.

174. Whilst these mitigation measures would substantially soften views of the development and assist in integrating the proposal within the surrounding landscape, the tallest elements of the proposed waste to hydrogen facility would extend above the anticipated height of the mature vegetation. The LVIA Update Note confirms that the Year 10 assessment assumes established landscape mitigation, with native trees anticipated to reach approximately 6 to 6.5 metres in height and shrub planting approximately 2.5 to 3 metres in height.

175. Although the proposed planting and bunding would reduce visual effects over time, the applicant's assessment accepts that the upper portions of the tallest elements of the development would remain visible following establishment of the proposed landscaping. Consequently, the LVIA concludes that there would be residual adverse visual effects at Year 10 for a number of residential and recreational receptors.

176. The application is also supported by a detailed external lighting assessment. The assessment identifies nearby residential properties, public rights of way and ecologically sensitive receptors as requiring particular consideration in the design of the lighting scheme. The lighting strategy has been developed with reference to BS EN 12464-2:2014, BS 5489-1:2020, CIBSE Lighting Guide LG6 and the Institute of Lighting Professionals Guidance Note 01 (GN01), which establish standards relating to glare, sky glow, light trespass and obtrusive lighting.

177. The submitted assessment confirms that the development would utilise downward facing luminaires, shielded fittings, warm-white LED lighting within ecologically sensitive areas, directional controls and a central management system intended to minimise light spill beyond the site. Lighting would be managed through a combination of photocells, time clocks and zoned operational controls, with illumination levels capable of being reduced during periods when areas are not actively in use. The applicant advises that some areas could be dimmed to approximately 1 lux whilst maintaining operational security requirements.

178. The lighting strategy also incorporates measures intended to minimise ecological effects, including the reduction of unnecessary illumination, maintenance of darker corridors and the use of perimeter luminaires with sharp cut-off characteristics and shielding to minimise light spill into the surrounding landscape.

179. The applicant's LVIA Update Note concludes that construction activities would result in Moderate Adverse effects on nighttime character due to temporary lighting and activity, reducing to Minor Adverse effects during operation through implementation of the proposed lighting controls and management measures. The application documents conclude that it does not consider these effects to be significant.

180. KCC'S Landscape consultant reviewed the submitted LVIA, the subsequent update note and the external lighting assessment and it was accepted that the supplementary information provided greater clarity regarding the methodology and generally demonstrated that the assessment had been undertaken in accordance with recognised guidance. Whilst KCC'S Landscape consultant accepted that the methodology and additional information generally accorded with recognised guidance, concerns were raised regarding assumptions relating to planting establishment, the assessment of night-time effects and impacts on tranquillity. They observed that the relatively dark and tranquil nature of the surrounding landscape could result in greater appreciation of lighting and industrial activity during hours of darkness than suggested by the applicant's assessment. They went on to advise that whilst these effects may reduce over time as planting matures, they represent impacts which must be weighed against the benefits of the proposal in the overall planning balance.

181. Whilst I acknowledge the comments from Minster Parish Council regarding the landscape bund being taller than 2m, I am led by the views of KCC's Landscape Consultant who did not make this recommendation, it is also recognised that the proposal incorporates a substantial package of landscape mitigation including structural planting, native hedgerows, shrub planting, species rich grassland, landscape bunding, sustainable drainage features and long-term management proposals. These measures would strengthen the site's green infrastructure network, provide biodiversity benefits and assist in integrating the development into its surroundings over time. I have considered the cumulative impact of the development in this location and am satisfied that it is appropriate in light of NPPF policy. It is therefore considered that the proposal does attract positive weight in respect of the objectives of Policies SP27 and GI06 of the Thanet Local Plan.

182. It is acknowledged that the submitted lighting strategy incorporates a range of measures intended to minimise effects on landscape character, visual amenity, ecology and dark skies. These include low-spill lighting, warm-white lighting, dimming controls, operational zoning, perimeter shielding and measures to avoid unnecessary illumination. These measures attract moderate positive weight and can be secured through appropriate planning conditions along with hours of proposed external lighting use.

183. Notwithstanding these measures, I agree with the applicant's assessment and the independent advice provided by KCC'S Landscape consultant that the proposal would introduce a noticeable change to the character and appearance of the site through the development of substantial industrial infrastructure within an existing open agricultural landscape. However, the change would be most apparent in the immediate surroundings and where the development would also be visible from some nearby residential properties and the Public Right of Way, although I do acknowledge that the proposed landscaping would help to integrate it over time.

184. It is noted in the applicant's conclusion that some significant residual visual effects could remain after ten years for certain receptors, and KCC'S Landscape consultant view that adverse landscape and visual effects would arise. These effects should, however, be considered in the context of their localised nature, the proposed mitigation and the development's relationship with the wider landscape.

185. It is therefore concluded that the proposal would generate some localised harm to landscape character and visual amenity, with more limited effects on tranquillity and nighttime character. The proposal would conflict to some extent with Policies SP26 and QD02 of the Thanet Local Plan and Policies DM1, DM2 and CSW6 of the KMWLP. In light of the localised nature of the effects and the proposed mitigation, this harm attracts moderate weight to the overall planning balance.

186. Having regard to this, it is concluded that the proposal would result in localised landscape and visual effects which would be partly mitigated through the proposed landscaping and lighting strategies and would not fundamentally undermine the wider character of the Manston Chalk Plateau Landscape Character Area. When weighed against the substantial benefits arising from low carbon energy infrastructure, waste recovery capacity, economic investment, employment and innovation facilities, it is considered that the benefits of the proposal outweigh the identified harm. Accordingly, it is not considered that there are sufficient grounds to recommend refusal of planning permission on landscape and visual grounds.

Highways and transportation

187. The overarching objective of Section 15 of the NPPF is to ensure that transport considerations are fully taken into account in both plan making and decision taking through a vision led approach, recognising the role that transport infrastructure and travel choices play in creating well-designed, sustainable, inclusive and successful places. In this regard, Policy TR3 seeks to ensure development is located where it can make effective use of existing transport infrastructure and sustainable travel opportunities. Policy TR4 requires safe and appropriate street design, access and parking arrangements. Policy TR6 requires transport impacts to be properly assessed and mitigated, whilst Policy TR8 seeks to protect and enhance Public Rights of Way and opportunities for active travel.

188. At the local level, Policies DM12, DM13 and DM15 of the KMWLP require waste developments to demonstrate that traffic generated can be safely accommodated on the highway network without giving rise to unacceptable impacts on highway capacity, safety, amenity or the environment. Relevant transport policies of the Thanet Local Plan, including Policy SP45 and Policies TP01 and TP10, seek to ensure that development is supported by appropriate transport infrastructure, travel planning measures and safe access arrangements. The proposal has also been assessed against the objectives of Kent County Council Local Transport Plan 5 (2024-2037) and Kent County Council Parking Standards SPD (2025).

189. The application site is located adjacent to Manston Road and benefits from direct access to the strategic highway network via the B2190 Spitfire Way and the A299 Thanet Way. These routes provide connections to Ramsgate, Margate, Canterbury, the wider Thanet area and onto the M2 motorway network towards London.

190. Traffic surveys undertaken during November 2025 and January 2026 comprised automatic traffic counts, turning counts, queue length surveys and junction capacity assessments. The scope of the assessment was agreed with the Local Highway Authority and included the following junctions:

- Proposed Site Access / Manston Road;

- Manston Road / Vincent Road Junction;
- B2050 Manston Road / B2190 Spitfire Way Junction;
- B2190 / Columbus Avenue Roundabout;
- B2190 / Minster Road Roundabout; and
- A299 / B2190 / Tothill Street Roundabout (Minster Roundabout).

191. A review of personal injury collision data for the period between July 2020 and June 2025 identified 12 injury collisions within the study area, comprising eight slight and four serious collisions. No fatal collisions were recorded and no discernible pattern of accidents was identified which would indicate any inherent deficiency in the local highway network.

192. The site occupies a rural location and consequently opportunities for travel by sustainable modes are more limited than would typically be the case within an urban area. The nearest bus stops are located on Spitfire Way approximately 1.6km from the site and provide services connecting Ramsgate, Manston, Birchington and Canterbury. Margate Station is approximately 3.9km from the site and provides rail services to London and destinations throughout Kent. Whilst the proposal is therefore likely to generate a significant proportion of trips by private vehicle, the NPPF recognises that opportunities to maximise sustainable transport options will vary according to the location and nature of development. The operational requirements of the proposed facility necessitate direct access to the strategic highway network and cannot reasonably be accommodated within a town centre or highly accessible location.

193. To encourage sustainable travel where practicable, the proposal includes:

- Covered cycle parking for up to 36 bicycles;
- Electric vehicle charging infrastructure;
- Staff changing facilities;
- Staff travel planning measures;
- Car sharing initiatives;
- Travel information packs; and
- Promotion of walking, cycling and public transport use.

194. Should Members be minded to permit the application the submission and approval of a Travel Plan would be secured through planning condition, along with measures to prohibit HGV traffic from turning left out of the site and also travelling through Manston village.

195. Access to the site would be provided via a new all movements priority controlled junction onto Manston Road. The junction includes a ghost island right-turn lane and associated carriageway widening. Visibility splays have been designed using observed vehicle speeds and exceed the minimum standards required to ensure safe operation of the junction.

196. A Stage 1 Road Safety Audit submitted with the application identified no fundamental highway safety concerns associated with the proposed access arrangements. Swept path analysis demonstrated that the access arrangements and internal road network could safely accommodate articulated HGVs, service vehicles, coaches and emergency vehicles.

197. The development includes separate operational arrangements for HGV traffic and visitor/staff traffic associated with the Innovation and Education Centre. Dedicated loading, servicing, circulation and HGV waiting facilities would be provided within the site to ensure that vehicles can be accommodated without overspill onto the public highway.

198. Parking provision comprises:

- 57 car parking spaces;
- accessible and enlarged parking bays;
- HGV waiting spaces;
- motorcycle parking spaces;
- electric vehicle charging facilities; and
- cycle parking for 36 bicycles.

199. The submitted Transport Assessment demonstrates that anticipated parking demand could be accommodated within the site with spare capacity remaining.

200. The proposed development would generate traffic associated with staff, visitors, waste deliveries and the export of hydrogen-derived products.

201. The proposed facility would receive residual waste feedstock for processing and would export hydrogen, carbon dioxide and aggregate products generated through the treatment process. Consequently, the majority of traffic generated by the development would comprise heavy goods vehicles associated with waste deliveries and product export.

202. The submitted Transport Assessment forecasts that the development would generate up to 108 HGV movements per day, comprising 54 inbound and 54 outbound HGV movements. These movements include deliveries of residual waste feedstock together with vehicles exporting hydrogen derived products, carbon dioxide and aggregate materials. It is proposed for operational waste vehicles to arrive and depart the site between the hours of 6am and 6pm on weekdays and between 7am and 1:30pm on Saturdays. For product-carrying HGVs, the operational hours are proposed to be between 6am and 9pm weekdays and between 7am and 1:30pm on Saturdays. The development would incorporate dedicated HGV parking and holding areas to ensure operational vehicles would be accommodated within the site and would not queue on the public highway.

203. In addition to HGV traffic, the development would generate staff and visitor movements associated with both the operational facility and the proposed Innovation and Education Centre. The submitted assessment identifies approximately 185 two-way staff and visitor vehicle movements per day, with increases of approximately 16 two-way vehicle movements during the AM peak period and 23 two-way vehicle movements during the PM peak period. These increases are considered by the applicant as modest in the context of the existing traffic flows on the surrounding highway network.

204. Traffic surveys undertaken on the surrounding road network recorded daily flows in excess of 10,000 vehicles per day on Spitfire Way and approximately 6,800 to 7,000 vehicles per day on Manston Road. Against this baseline, the operational traffic generated by the proposal represents a relatively small proportion of overall network

demand. The applicant's assessment concludes that increases in traffic flow generally remain below recognised environmental assessment thresholds and, following additional cumulative assessments requested by the Highway Authority, remain below the thresholds typically associated with significant transport effects.

205. Operational HGV movements would be managed through designated arrival and departure arrangements and supported by on-site holding facilities. Accordingly, the Transport Assessment concludes that the traffic generated by the development would be accommodated within the surrounding highway network without resulting in unacceptable operational impacts.

206. The application documents demonstrate that whilst the development would generate a material number of HGV movements associated with waste imports and product exports, the increase should be viewed in the context of traffic volumes already using the surrounding strategic highway network. The submitted Transport Assessment and subsequent cumulative assessments conclude that the additional traffic would not materially alter the operation of the surrounding highway network, including the B2050 Manston Road/B2190 Spitfire Way Junction, and that the resultant impact, in the applicant's view, would be negligible to minor and not severe in the context of paragraph Section 15 of the NPPF.

207. The submitted ES - Volume 1 Chapter D Highways, ES - Volume 2 Appendix D - Traffic and Transport, Appendix 9 Highways Cumulative Technical Note and Environmental Statement Addendum (August 2026) assess the impact of the development against future year traffic scenarios incorporating background growth, committed development, cumulative development and the consented reopening of Manston Airport.

208. Particular attention has been given to the B2050 Manston Road/B2190 Spitfire Way Junction owing to existing operational constraints and forecasted traffic growth. The evidence demonstrates that the junction is forecasted to experience increasing pressure in future years irrespective of the proposed development. However, the modelling indicates that the proposal would in the applicant's view result in only negligible to minor increases in queue lengths and delay and would not materially alter the operation of the junction.

209. The applicant also assessed a future scenario incorporating the anticipated conversion of the existing junction to a roundabout arrangement associated with wider strategic improvements. The modelling demonstrates that the roundabout would operate within theoretical capacity and that the effect of the development would remain negligible.

210. Following discussions with the Local Highway Authority, an additional cumulative assessment was undertaken to also consider application reference F/TH/25/1388 (for the refurbishment and extension of existing warehouse with ancillary offices, including new loading docks and the erection of four storey ancillary van storage deck) at Manston Park, Ramsgate. This assessment concluded that traffic increases attributable to the development would remain below recognised significance thresholds and would not alter the conclusions of the original transport assessment.

211. KCC Highways and Transportation (the Highway Authority) was consulted throughout the processing of the application and identified concerns regarding the cumulative impact of development traffic on the wider highway network, particularly having regard

to planned growth within the area and the proposed Manston to Haine Link Road. Notwithstanding the above, the Highway Authority considered that the development would place additional demands on the local and strategic highway network and therefore sought a financial contribution towards strategic highway infrastructure to mitigate those impacts.

212. In response, the applicant submitted further transport evidence and representations which questioned aspects of the methodology used to calculate the initial requested contribution.

213. Following discussions between the applicant and the Highway Authority, agreement was reached on an appropriate package of highway mitigation measures. The Highway Authority has now confirmed that it raises no objection to the proposal subject to the completion of a Section 106 Agreement securing a financial contribution of £2.5 million towards the delivery of the Manston to Haine Link Road and associated transport improvements, together with the imposition of a number of planning conditions. The contribution represents a proportionate and reasonable contribution towards strategic highway infrastructure having regard to the nature of the development, the forecast traffic impacts and the wider planning balance.

214. In reaching this conclusion, it is recognised that the proposal would generate additional traffic, including approximately 108 daily (54 in/54 out) HGV movements associated with waste imports and the export of hydrogen derived products. It is acknowledged that the HGV component of the development represents the principal transport consideration and that heavy goods vehicles can have a greater effect on junction operation, network resilience and carriageway wear than private vehicles.

215. It is also recognised that the proposed 108 (54 in/54 out) HGV movements per day represents a not insubstantial level of freight activity. However, this level of traffic must be considered in the context of a strategic waste management and energy recovery facility whose operation is inherently dependent upon the movement of waste materials and processed outputs. The site has been selected in part due to its proximity to the strategic highway network and its ability to accommodate such traffic movements.

216. I acknowledge the comments made by Manston Parish Council that raised particular concern about HGVs using routes through Manston village, including Preston Road and Spratling Street, and the potential for additional noise and disturbance associated with HGV movements serving a 24-hour operation. However, Members will note that the applicant would not permit HGVs to use this route and this would be controlled via a routing agreement, proposed to be secured by condition. Whilst the plant would operate 24 hours a day this does not mean there would be HGV movements 24 hours a day, these would be strictly controlled by planning condition with no movements being permitted after 21:00 on weekdays and none after 13:30 on Saturdays or anytime on Sundays, or on Bank and Public Holidays.

217. The application is supported by a comprehensive suite of transport related documents together with additional submissions provided in response to concerns raised by the Highway Authority. Collectively, these documents provide a detailed assessment of traffic generation, network impact, junction capacity, road safety and cumulative effects. The evidence demonstrates that safe and suitable access would be achievable, that adequate parking and servicing arrangements are proposed and that

the development would not give rise to unacceptable highway safety impacts. Whilst existing and forecast congestion issues are acknowledged at the Spitfire Way Junction, the evidence indicates that these issues principally arise from wider background growth and cumulative development rather than the proposal itself.

218. Significant weight is attached to the views of the Highway Authority as the Council's specialist technical adviser. Following review of the submitted information and subsequent negotiations regarding strategic mitigation, the Highway Authority is satisfied that the traffic generated by the development can be accommodated on the local and strategic highway network, subject to the agreed Section 106 financial contribution and planning conditions.

219. Subject to the imposition of the recommended planning conditions and the s106 contribution for mitigation works, it is therefore concluded that the proposal would provide safe and suitable access and would not result in an unacceptable impact on highway safety or severe residual cumulative impacts on the operation of the highway network. Should planning permission be granted, the following highway related conditions are recommended:

- Access Junction Works;
- Approval of agreed Visibility Splays;
- Parking, Turning and Servicing areas;
- Surface Water Control;
- A Construction Management Plan (CMP) ; and
- Travel Plan

220. In relation to Public Rights of Way, the development would not result in the diversion, obstruction or loss of any existing route and no Public Rights of Way pass through the application site. The nearest route, Bridleway TM19, lies approximately 150 metres from the proposed facility and would remain fully accessible during the construction and operational phases of the development. The Environmental Statement considered the potential effects of the proposal on users of nearby public rights of way including TM19, including visual, noise and traffic related impacts, and concluded, notwithstanding local objections on equestrian grounds, that these effects would not be significant. Furthermore, the majority of site traffic, including all HGV movements, would travel southwards towards the strategic highway network and away from the bridleway network located to the north of the site. Accordingly, it is considered that the proposal would not have an unacceptable impact on the safety, amenity or enjoyment of the local Public Rights of Way network and is consistent with Policy TR8 of the NPPF and Policy DM14 of the KMWLP.

221. The Highway Authority raises no objection to the proposal subject to the completion of a Section 106 Agreement securing a £2.5 million contribution towards the Manston to Haine Link Road and associated highway improvements, together with the imposition of appropriate planning conditions as set out above. Accordingly, subject to the completion of the Section 106 Agreement and the imposition of the conditions set out above, the proposal is considered to accord with Policies TR3, TR4, TR6 and TR8 of the NPPF, Policies DM12, DM13 and DM15 of the Kent Minerals and Waste Local Plan 2024-39, and Policies TP01, TP03 TP06 and TP10 of the Thanet Local Plan. No objection is therefore raised on highway and transportation grounds.

Loss of agricultural land

222. The application site extends to approximately 6.58 hectares and is currently predominantly in agricultural use with some areas laid to hard standing for storage and access roads. The submitted Agricultural Land Classification (ALC) survey confirms that the site comprises predominantly Grade 2 agricultural land, with a smaller area of Subgrade 3a land located centrally within the site. As Grades 1, 2 and 3a land are all defined as Best and Most Versatile (BMV) agricultural land, the proposal would result in the permanent loss of BMV agricultural land from agricultural production. The survey also identifies soil limitations associated with droughtiness which influence the agricultural capability of the land.

223. The loss of BMV agricultural land is a material planning consideration. Policy N2 (b) of the NPPF requires planning decisions to take into account the quality of agricultural land (including that classified as best and most versatile agricultural land, and its grade), and if significant development of agricultural land is necessary, use areas of poorer quality land where possible. At the local level, Policy E16 of the Thanet Local Plan seeks to protect Grades 1, 2 and 3a agricultural land from irreversible development unless there is an overriding need for the development and insufficient lower quality land is available.

224. In response to this issue, the applicant has undertaken an Alternative Site Assessment (ASA) examining potential sites across Thanet District. The assessment considered a range of planning, environmental and operational factors including agricultural land quality, landscape and visual impacts, heritage considerations, ecology, flood risk, accessibility, infrastructure requirements and the operational needs of the proposed waste to hydrogen facility. Six alternative sites were identified and assessed in detail.

225. I note the concerns raised by Thanet District Council and the Parish Councils regarding the loss of BMV land and the impacts in relation to Policy of E16 and note that the applicant's assessment concluded that none of the alternative sites would provide a preferable solution. Significantly, the alternative sites were found to comprise predominantly Grade 1 agricultural land, representing a higher quality agricultural resource than the application site. The alternative sites were also subject to a range of constraints including greater visual prominence, closer relationships with residential receptors, infrastructure limitations, operational constraints and potential impacts on other environmental interests. Consequently, the assessment concluded that the application site represents the most suitable and least constrained location capable of accommodating the proposed development within the search area.

226. It is also relevant that the site occupies a relatively modest area within a wider agricultural landscape and its loss would not materially undermine the continued operation of the surrounding agricultural landholding or the wider agricultural economy of this part of the district. Furthermore, whilst still BMV land the applicant contends the proposal would not result in the loss of Grade 1 agricultural land and the evidence provided with the application demonstrates that the development requirements cannot reasonably be accommodated on a preferable site of lower agricultural value within the defined search area. It is also noted that Policy S5 of the NPPF now provides for policy support for energy developments outside of settlements which in practice raises potential conflicts with agricultural land use considerations.

227. Whilst it is recognised that the proposal gives rise to a degree of conflict with Policy E16 of the Thanet Local Plan and Policy N2 of the NPPF through the loss of BMV agricultural land, the extent of harm is limited and substantial material considerations exist which outweigh that conflict. I am also mindful of the adjacent 'District Park' site originally permitted by Thanet District Council in 2022 under application F/TH/20/0590, (this permission was varied in 2024 which involved changes to building layouts, heights and parking arrangements) for an industrial development comprising four light industrial/general industrial buildings and associated storage, parking and landscaping. This development was also sited on the same standard of agricultural land and was considered to be acceptable in planning terms at the time. Having regard to the relatively limited scale of agricultural land affected, the lack of suitable alternative sites, and the significant benefits associated with the development, the loss of agricultural land is considered to be justified and is in accordance of Policy N2 of the NPPF and Policy E16 of the Thanet Local Plan. Accordingly, limited weight is attributed to this harm in the overall planning balance and the proposal is considered acceptable in respect of agricultural land impacts.

228. Overall, whilst the proposal would result in the permanent loss of approximately 6.58 hectares of BMV agricultural land, the harm arising from that loss is not considered to be significant in the context of the development proposed. The evidence submitted, including the Agricultural Land Classification Survey and Alternative Site Assessment, demonstrates that no preferable and reasonably available alternative site exists that could accommodate the development and that the majority of alternative sites assessed comprise Grade 1 agricultural land, representing a higher quality agricultural resource than the application site. The proposal therefore accords with the aims of Policy N2 (b) of the NPPF by demonstrating both the need for the development and the absence of a sequentially preferable site of lower agricultural value. In balancing the harm associated with the loss of the area of BMV agricultural land, moderate weight is afforded.

Water environment (hydrology, hydrogeology and groundwater impacts)

229. The NPPF 2026 requires planning decisions to support climate change adaptation, including taking account of flood risk, water supply and drought impacts, and ensure that developments incorporate appropriate resilience measures such as sustainable drainage systems. Policies CC1, CC2 and CC3 (Meeting the Challenge of Climate Change) require planning authorities to consider the full range of climate change impacts when assessing planning applications and to ensure that development avoids increased vulnerability to flooding and water related risks. The NPPF also contains specific policies relating to the sustainable management of water resources through Policies W1, W2, W3 and W4 (Securing Clean Energy and Water) and seeks to ensure that development does not give rise to unacceptable pollution through Policies P1, P2, P3, P4, P5 and P6 (Pollution, Public Protection and Security). In relation to flood risk, Chapter 18: Managing Flood Risk and Coastal Change establishes that development should be directed away from areas at highest risk of flooding, should be safe for its lifetime without increasing flood risk elsewhere, and should incorporate sustainable drainage systems where appropriate.

230. Policy DM10 of the KMWLP seeks to ensure that development does not adversely affect groundwater or surface water quality, water resources, Source Protection Zones or Principal Aquifers, and that flood risk is appropriately managed taking account of

climate change. Policies CC01, CC02 and SE04 of the Thanet Local Plan similarly seek to ensure that development protects water resources, prevents pollution and incorporates sustainable drainage measures.

231. The application site comprises approximately 6.58 hectares of agricultural land and lies wholly within Flood Zone 1, which represents land at low probability of flooding. The submitted Flood Risk Assessment confirms that the site is not at significant risk of flooding from fluvial or tidal sources and would remain within Flood Zone 1 under future climate change scenarios. Surface water flood mapping indicates that the majority of the site is not susceptible to surface water flooding, with only limited areas of localised ponding identified within minor topographical depressions.

232. The site is underlain by chalk and forms part of the Kent Isle of Thanet Chalk Principal Aquifer. Parts of the site fall within Groundwater Source Protection Zone 3, indicating a hydrologically sensitive environment associated with public water supply catchments. Groundwater levels are understood to occur approximately 35-36 metres below ground level, resulting in a substantial unsaturated zone between the surface and the underlying aquifer.

233. Given the above, groundwater protection represents a key environmental consideration and has been assessed through detailed hydrogeological investigations submitted in support of the application. The Environmental Statement identifies the principal water environment considerations as:

- Potential contamination of groundwater and surface water resources;
- Surface water runoff and drainage;
- Flood risk;
- Potential impacts on the underlying Principal Aquifer and Source Protection Zone; and
- Water supply and wastewater infrastructure requirements.

234. During construction, potential impacts may arise from accidental spillages of fuels, oils and chemicals, sediment mobilisation during earthworks and temporary drainage arrangements. However, the Environmental Statement concludes that these risks can be appropriately managed through the implementation of a Construction Environmental Management Plan (CEMP), including pollution prevention measures, controlled storage of hazardous substances, designated refuelling areas, emergency spill procedures and temporary drainage controls. Subject to the implementation of mitigation measures, residual construction effects are assessed as negligible and not significant. The submission of a CEMP would be required and secured by planning condition.

235. In relation to operational impacts, the submitted Hydrogeological Impact Assessment considers the potential pathways through which contaminants could reach groundwater receptors. The assessment concludes that risks to the underlying Principal Aquifer and nearby groundwater abstractions would be low, reflecting the depth to groundwater, separation distances from identified receptors and the mitigation measures incorporated within the site design.

236. The proposed drainage strategy adopts the drainage hierarchy and incorporates a comprehensive package of Sustainable Drainage Systems (SuDS) comprising:

- Green roofs;
- Rainwater harvesting;
- Permeable paving;
- Rain gardens;
- Swales;
- Detention basins; and
- Soakaways.

237. These measures provide a 'treatment train' approach whereby runoff is managed, attenuated and treated prior to infiltration. The drainage strategy has been informed by site specific infiltration testing and is designed to improve water quality whilst minimising risks to underlying groundwater resources. The Flood Risk assessment (FRA) concludes that the development would not increase flood risk on-site or elsewhere and that flood risk from all sources, including surface water, groundwater, sewer, reservoir, fluvial and tidal flooding, can be satisfactorily managed throughout the operational life of the development.

Water Supply and Groundwater Considerations

238. In its consultation response, Thanet District Council expressed concerns regarding the operational water requirements of the waste to hydrogen process and requested further information regarding the sustainability and availability of the required water supply. Concerns were also raised regarding the site's location above a sensitive groundwater environment. Manston Parish Council also raised concerns regarding water resources and water quality.

239. These matters have subsequently been addressed through additional information submitted by the applicant, including the Hydrogeological Impact Assessment and the applicant's formal response to the comments raised by Thanet District Council. The submitted information sought to demonstrate that the anticipated water demand can be accommodated without giving rise to unacceptable impacts on water resources and that the incorporation of rainwater harvesting measures would reduce demand upon potable water supplies.

240. The applicant's response further clarifies the groundwater protection measures incorporated into the development and concludes that, with the proposed design features and mitigation measures, no significant adverse impacts upon groundwater quality or groundwater resources would arise.

241. KCC Flood and Water Management (the Lead Local Flood Authority) have been consulted on the application and have considered the submitted Flood Risk Assessment and Drainage Strategy and confirmed that the proposed surface water drainage strategy is generally compliant with national SuDS standards. Whilst identifying matters requiring further consideration through the detailed design stage, they raised no objection in principle subject to conditions requiring:

- Submission of a detailed surface water drainage strategy;
- Verification of the completed drainage infrastructure; and
- Arrangements for the long-term management and maintenance of the drainage system.

242. Southern Water reviewed both the drainage and hydrogeological aspects of the proposal and raised no objection subject to conditions and informatives. Their hydrogeological specialists confirmed that the recommendations of the Hydrogeological Impact Assessment should be implemented and that groundwater monitoring boreholes should be decommissioned in accordance with relevant guidance. No objection was raised in relation to impacts on groundwater quality or public water supplies. Southern Water also advised that reinforcement of local water supply and sewerage infrastructure may be required and recommended that occupation should be appropriately phased alongside any necessary network upgrades. I am satisfied that the phased approach condition would mitigate the concerns raised by the District and Parish Councils regarding water supply matters and am also mindful that Southern Water consider that this matter relates to infrastructure capacity rather than the environmental acceptability of the proposal.

243. The Environment Agency confirmed that it has no objection to the proposed development. The Agency advised that any temporary wastewater storage arrangement should comprise a sealed system supported by an appropriate wastewater management strategy. Subject to suitable conditions, no concerns were identified regarding flood risk, groundwater protection or water quality. The EA would also need to approve an Environmental Permit before the site could operate.

244. Thanet District Council initially raised concerns regarding water demand and groundwater sensitivity, those issues have subsequently been addressed through the additional technical information submitted by the applicant and through the consultation responses of the specialist statutory consultees. Whilst Manston Parish Council also raised concerns regarding water supply and the continued hot summers that are being experienced, neither the Environment Agency nor Southern Water object to the proposal on water resource, groundwater quality or hydrogeological grounds, indicating that the identified issues can be satisfactorily managed through the proposed mitigation measures and planning controls.

245. Having regard to the submitted Environmental Statement, Flood Risk Assessment, Drainage Strategy, Hydrogeological Impact Assessment, the applicant's response to the comments of Thanet District Council, and the consultation responses received from the Environment Agency, Kent County Council Flood and Water Management, Southern Water and Thanet District Council, it is concluded that the proposed development would not give rise to unacceptable impacts on groundwater resources, surface water quality, drainage infrastructure or flood risk.

246. The site is located wholly within Flood Zone 1 and the submitted assessments demonstrate that flood risk from all sources can be appropriately managed throughout the lifetime of the development without increasing flood risk elsewhere. The proposed Sustainable Drainage System follows the drainage hierarchy, provides attenuation and water quality treatment, and has been accepted in principle by the Lead Local Flood Authority. The proposal therefore accords with the objectives of Chapter 18 of the NPPF 2026 (Managing Flood Risk and Coastal Change), which seeks to ensure that development is safe from flooding for its lifetime, does not increase flood risk elsewhere and incorporates sustainable drainage systems where appropriate.

247. The incorporation of rainwater harvesting, sustainable drainage features and climate-resilient design measures also addresses the requirements of Policies CC1, CC2 and

CC3 of the NPPF by taking account of flood risk, water resources and climate adaptation measures.

248. Detailed hydrogeological assessment demonstrates that risks to the underlying Principal Aquifer and Source Protection Zone would be low and can be adequately mitigated through the proposed drainage design, pollution prevention measures and operational controls. The proposal has been assessed by both the Environment Agency and Southern Water, neither of whom object on groundwater or water quality grounds. The proposal therefore accords with the objectives of Policies P2, P3, P4, P5 of the NPPF which seek to prevent unacceptable pollution and protect the natural environment.

249. Furthermore, the information submitted demonstrates that adequate water resources are available to serve the development and that water demand can be managed in a sustainable manner. The proposal therefore accords with the objectives of Policies W1, W2, W3 and W4 of the NPPF relating to the sustainable management and use of water resources.

250. No statutory consultee has raised an objection on flood risk, drainage, groundwater, water quality or hydrogeological grounds. Subject to the recommended planning conditions securing the detailed design, implementation, verification and long-term maintenance of the drainage and groundwater protection measures, the proposal is considered to accord with Policies CC1, CC2 CC3, W1, W2, W3 and W4 and P1, P2, P3, P4 and P5 of the NPPF 2026, Policy DM10 of the KMWLP and Policies CC01, CC02 and SE04 of the Thanet Local Plan. Accordingly, no objection is raised on water environment, drainage, groundwater, hydrogeological or flood risk grounds.

Biodiversity Matters including impacts on designated sites

251. Policy N2 of the NPPF (Improving the Natural Environment) requires developments to conserve and enhance the natural environment by protecting important habitats, landscape character, ecological networks and natural features, whilst incorporating green infrastructure and nature based solutions that deliver benefits for biodiversity, climate resilience, water management and recreation. Development should minimise impacts on biodiversity, support priority species, and secure appropriate long-term management of ecological features. The policy also supports biodiversity net gain in accordance with the statutory framework.

252. The statutory Biodiversity Net Gain (BNG) provisions introduced through the Environment Act 2021 require qualifying developments to deliver a minimum 10% biodiversity net gain maintained for a period of at least 30 years.

253. At the local level, Policies SP28 (Protection of International and European Designated Sites), SP30 (Biodiversity and Geodiversity Assets), SP37 (Climate Change), GI06 (Landscaping and Green Infrastructure) and QD02 (General Design Principles) of the Thanet Local Plan seek to protect and enhance biodiversity assets, ecological networks and designated sites whilst securing ecological enhancements. Policies DM2 (Environmental and Landscape Sites) and DM3 (Ecological Impact Assessment) of the KMWLP require ecological impacts to be appropriately assessed, avoided, mitigated and compensated where necessary.

254. The application site comprises predominantly arable agricultural land together with field margins, grassland bunds, ruderal vegetation, limited areas of scrub and a dry

ditch. Ecological surveys identify no statutory or non-statutory ecological designations within the site itself. The site contains no irreplaceable habitats, ancient woodland or veteran trees. The ecological assessments conclude that the site is generally of low ecological value for plants, invertebrates, bats and badgers and negligible ecological value for amphibians, dormice, water vole and otter. The principal ecological interest of the site relates to breeding and wintering farmland bird species associated with the existing arable habitat.

255. Whilst the site is not subject to any statutory landscape, ecological or heritage designations, it does lie within the wider zone of influence of a number of internationally designated nature conservation sites, including the Thanet Coast and Sandwich Bay Special Protection Area (SPA), Special Area of Conservation (SAC) and Ramsar Site, together with the Outer Thames Estuary SPA. In accordance with the Conservation of Habitats and Species Regulations 2017 (as amended), the County Planning Authority, as competent authority, has considered whether the proposal is likely to have a significant effect on any European site, either alone or in combination with other plans and projects.

256. The submitted ecological assessments, including wintering bird surveys, demonstrate that the application site does not support qualifying SPA bird species and does not function as important supporting habitat for qualifying bird populations associated with the nearby European sites. KCC Ecological Advice Service has reviewed the ecological evidence and confirmed its agreement with these findings. No pathways to significant effects have been identified in relation to habitat loss, disturbance, recreational pressure, air quality, hydrology or other impact mechanisms affecting the integrity of the designated sites. Having regard to the submitted information and consultation responses, it is concluded that the proposal would not be likely to have a significant effect on the Thanet Coast and Sandwich Bay SPA, SAC and Ramsar Site, the Outer Thames Estuary SPA, or any other European site, either alone or in combination with other plans or projects. Accordingly, an Appropriate Assessment is not required. In addition I note that Natural England have no specific comments on the proposal.

Designated Sites and Wintering Birds

257. Wintering bird surveys were undertaken to determine whether the application site functions as supporting habitat for qualifying species of the Thanet Coast and Sandwich Bay SPA and Ramsar Site.

258. The surveys did not record qualifying SPA species using the site and concluded that the site does not provide important supporting habitat for qualifying bird populations associated with the internationally designated sites. Following review of the survey findings and supporting ecological information. The submitted ecological information therefore concludes that the site does not provide important supporting habitat for qualifying SPA bird populations. The KCC Ecological Advice Service (EAS) were consulted on the application and have confirmed that they are satisfied with the conclusions of the wintering bird surveys and that no additional survey work was required.

Breeding Birds

259. Breeding bird surveys identified a typical assemblage of farmland species associated with open arable land and field margins. A total of 28 species were recorded, of which 12 were identified as confirmed, probable or possible breeding species.

260. Notable species included skylark and linnet breeding within the application site, together with corn bunting and grey partridge recorded within the wider survey area. These species are recognised as species of conservation concern and are characteristic of open agricultural landscapes.

261. The proposed development would result in the loss of arable land currently utilised by breeding and wintering farmland birds. The KCC EAS identified this as the principal ecological impact arising from the proposal and advised that mitigation should be secured through the provision of off-site farmland bird habitat, including skylark plots and enhanced arable margin habitat.

262. As a result of these comments, the applicant has committed to delivering a Farmland Bird Mitigation Strategy secured through a Section 106 Agreement. The strategy includes the provision of a minimum of eight skylark plots within suitable arable fields together with long-term habitat management measures designed to support skylark and other farmland bird species. Following the submission of this additional information, KCC EAS confirmed that the proposed off-site farmland bird mitigation strategy, including the provision of skylark plots, was acceptable in principle subject to being secured through a legal agreement. Furthermore, it was confirmed that no additional mitigation was required for non-ground nesting bird species. Subject to the implementation and long-term management of these measures, the impacts on breeding and wintering farmland birds are considered capable of being satisfactorily mitigated.

Reptiles and Protected Species

263. As a result of comments from the KCC EAS in the initial round of consultation a further reptile survey was undertaken between April and June 2026 following identification of suitable habitat features and historical records of reptiles within the wider area. Surveys were undertaken in accordance with recognised best practice guidance and included seven survey visits. No reptiles were recorded during the survey programme. Whilst KCC EAS initially queried whether additional areas of suitable habitat could have been included within the survey coverage, it subsequently accepted the applicant's clarification and agreed that reptiles were unlikely to be present on the site. Reptiles are therefore not considered to represent a constraint to development.

264. KCC EAS also confirmed that the submitted ecological information provides a good understanding of the ecological interest of the site and that no additional protected species surveys are required. Appropriate safeguards for protected species can be secured through a Construction Environmental Management Plan (CEMP), ecological supervision where necessary, habitat protection measures and sensitive site management during construction.

Biodiversity Net Gain

265. A Statutory Biodiversity Metric has been submitted and reviewed by KCC EAS. The metric identifies a baseline habitat value of 18.08 habitat units and confirms that no

irreplaceable habitats are present within the site. The scheme incorporates a range of ecological enhancement measures including species rich grassland, native planting, tree planting, hedgerow creation, habitat enhancement areas, sustainable drainage features and biodiverse green infrastructure.

266. Whilst these measures would provide ecological enhancements, the operational requirements of the development mean that the scheme would not achieve the mandatory Biodiversity Net Gain requirement within the application site itself. The submitted metric demonstrates an overall habitat unit deficit equivalent to approximately a 24% loss when assessed solely within the red-line boundary. Whilst I note the concerns raised by Thanet District Council regarding the proposed use of off-site provision to meet BNG requirements I must be led by the comments of KCC EAS who have reviewed the submitted metric and confirmed that it is satisfied with the methodology, baseline habitat assessment and resultant calculations. The advice confirms that additional habitat units would be required to achieve the statutory biodiversity gain objective. The applicant has confirmed that the required biodiversity units would be secured through off-site habitat provision. KCC EAS advises that this can be achieved through recognised BNG delivery mechanisms, including habitat banks, registered biodiversity gain sites, conservation covenants or planning obligations.

267. The proposal would be subject to the statutory biodiversity gain condition and development cannot lawfully commence until a Biodiversity Gain Plan has been approved demonstrating that the mandatory biodiversity gain objective would be achieved. The applicant has confirmed that the required off-site units would be secured through this statutory process. The off-site habitat provision would be supported by a Habitat Management and Monitoring Plan securing management for the required minimum period of 30 years and would be included with a S106 Legal Agreement that would be allied to planning permission for this development.

Ecological Mitigation and Enhancement

268. In addition to the Farmland Bird Mitigation Strategy and Biodiversity Net Gain measures, the proposal incorporates a range of ecological mitigation and enhancement measures including:

- Construction Environmental Management Plan (CEMP);
- Landscape and Ecological Management Plan (LEMP);
- Biodiversity Gain Plan;
- Habitat Management and Monitoring Plan;
- Sensitive lighting design;
- Native planting and habitat creation;
- Long-term management of off-site farmland bird mitigation areas; and
- Ecological monitoring and reporting.

269. These measures would ensure that ecological impacts are appropriately managed throughout both the construction and operational phases of the development.

270. The principal ecological effect of the development would arise from the loss of arable habitat currently utilised by breeding and wintering farmland bird species. However, the site contains no irreplaceable habitats, no significant protected species constraints have been identified, and the submitted surveys demonstrate that the site does not

provide important supporting habitat for qualifying bird populations associated with the Thanet Coast and Sandwich Bay SPA. KCC EAS is satisfied that sufficient ecological information has been provided to determine the application and raises no objection subject to the imposition of appropriate planning conditions and the securing of mitigation through a legal agreement.

271. The proposed Farmland Bird Mitigation Strategy, including the provision of at least eight skylark plots and long-term habitat management measures, has been accepted in principle by KCC EAS and would appropriately address the identified impacts on farmland birds.

272. In addition, whilst the proposal would not achieve the required Biodiversity Net Gain wholly within the application site, the development would be subject to the statutory Biodiversity Gain Plan process and mandatory biodiversity gain condition, which require the delivery of the statutory biodiversity gain objective before development can lawfully commence.

273. As competent authority under the Conservation of Habitats and Species Regulations 2017 (as amended), the County Council has screened the proposal for likely significant effects on European sites and is satisfied that an Appropriate Assessment is not required.

274. Subject to conditions securing a Construction Environmental Management Plan, Landscape and Ecological Management Plan, Habitat Management and Monitoring Plan, Biodiversity Gain Plan, ecological enhancement measures, ecological monitoring and a lighting strategy, together with a Section 106 Legal Agreement securing the Farmland Bird Mitigation Strategy and long-term management of compensatory habitat, the ecological impacts of the development are considered capable of being satisfactorily mitigated and compensated. Accordingly, the proposal is considered to accord with the biodiversity objectives of the NPPF, the Environment Act 2021, Policies DM2 and DM3 of the KMWLP and Policies SP28 and SP30 of the Thanet Local Plan and therefore no objections on the grounds of biodiversity matters are raised.

Archaeology, Heritage and Conservation Matters (including impact on listed buildings)

275. Section 20 of the NPPF seeks to conserve and enhance the historic environment, recognising heritage assets as an irreplaceable resource that should be conserved in a manner appropriate to their significance. The NPPF requires local planning authorities to identify and assess the significance of any heritage asset that may be affected by a proposal, including any contribution made by its setting. Great weight should be given to the conservation of designated heritage assets and any harm must be clearly and convincingly justified. The NPPF further requires planning decisions to record and advance understanding of archaeological assets where loss is justified and to make that evidence publicly accessible.

276. The proposal must also be considered against the statutory duties contained within the Planning (Listed Buildings and Conservation Areas) Act 1990, in particular Section 66(1), which requires special regard to be paid to the desirability of preserving listed buildings and their settings, and the Ancient Monuments and Archaeological Areas Act 1979, which provides protection for scheduled monuments.

277. At the local level, the proposal falls to be assessed against Policy DM5 (Heritage Assets) and Policy DM6 (Historic Environment Assessment) of the KMWLP, together with Policy HE01 (Archaeology), Policy HE03 (Heritage Assets) and Policy SP36 (Conservation and Enhancement of Thanet's Historic Environment) of the Thanet Local Plan. Collectively, these policies seek to ensure that development conserves heritage assets and their settings, appropriately assesses archaeological potential and secures mitigation where impacts cannot be avoided.

Archaeological Baseline

278. The application site lies within a recognised archaeologically sensitive landscape and falls within Thanet Archaeological Notification Area 4. The submitted Cultural Heritage Assessment, archaeological desk-based assessment, geophysical survey and archaeological watching brief identify the potential for archaeological remains spanning prehistoric, Roman, medieval, post-medieval and modern periods.

279. The site contains a number of recorded non-designated heritage assets, including medieval enclosure cropmarks, historic field boundaries and military remains associated with activities around RAF Manston. Historic Environment Record data, aerial photography and cropmark evidence indicate the presence of archaeological remains both within and immediately adjoining the site, including ring ditches, enclosure systems and military training features.

280. The archaeological potential of the wider area is well established through investigations undertaken on nearby land associated with the permitted District Park development. These investigations identified extensive multi-period remains, including Bronze Age, Iron Age and Roman settlement activity, medieval features and First and Second World War military remains. Of particular significance, investigations to the south identified what may represent a substantial Neolithic flint mine or subterranean structure, demonstrating the archaeological sensitivity of the wider landscape.

281. The submitted geophysical survey identified a series of anomalies considered likely to be archaeological in origin, including enclosure features, linear ditches and pit-type anomalies. Although interpretation in some areas was constrained by modern disturbance and demolition material, the results confirm archaeological potential across parts of the application site.

282. Further evidence was provided through an archaeological watching brief undertaken during excavation of infiltration trial pits. This identified previously unrecorded archaeological features, including possible ditch and pit features, confirming the survival of archaeological remains beneath parts of the site. The applicant's assessment concludes that the site contains archaeological remains of local significance.

Assessment of Archaeological Effects

283. The primary archaeological impacts would arise from construction activities, including site preparation, excavation for foundations, below-ground infrastructure, drainage works and service corridors. Such works have the potential to disturb or remove buried archaeological remains. The submitted Environmental Statement concludes that the development would result in direct impacts on archaeological remains within the site.

However, it also concludes that the archaeological resource can be appropriately managed through a programme of archaeological investigation and mitigation.

284. As part of the consultation process the Principal Archaeological Officer at Kent County Council Heritage Conservation was consulted and agreed that archaeological remains are likely to be present and that development has the potential to affect those remains. It was also noted that contrary to the applicant's assertions, when having regard to investigations undertaken on adjacent sites and the evidence currently available, remains of regional significance may also survive within the site. However, no objection was raised to the principle of development and it was advised that the impacts could be satisfactorily addressed through a staged programme of archaeological works secured by condition.

285. The recommended mitigation includes:

- Archaeological field evaluation prior to commencement;
- Identification and preservation in situ of significant remains where necessary;
- Archaeological excavation and recording where preservation is not achievable;
- Post-excavation assessment and analysis;
- Publication and dissemination of results; and
- Deposition of the archaeological archive.

286. This approach is consistent with the requirements of the NPPF, which seeks both the conservation of archaeological assets and the advancement of archaeological understanding where impacts are unavoidable. Whilst it is acknowledged that archaeological remains of greater than local significance may be present, there is no evidence before the County Planning Authority at this time to suggest that the site contains nationally important archaeological remains such that preservation in situ of the entire site would be required or that refusal of planning permission would be justified.

Designated Heritage Assets and their Settings

287. There are no designated heritage assets within the application site itself. The principal designated heritage assets considered within the submitted assessments comprise (approximate distance from site shown in brackets):

- Grade II Listed Flete Lodge, Vincent Road, Manston (850m);
- Grade II Listed Manston Court and adjoining boundary wall, Manston Court Road, Manston (1km);
- Grade II Listed Remains of Monastic Buildings, now Outbuilding, Manston Court Road, Manston (1km);
- Grade II Listed Granary south of Manston Court Farmhouse, Manston Court Road, Manston (1km);
- Grade II Listed Cheeseman's Farm, All and Grange Lane, Acol (1.5km);
- Scheduled Monument known as 'Settlement' (1km); and
- Heritage assets associated with Quex Park, Park Road, Birchington (c.2.5km).

288. The Cultural Heritage Assessment submitted with the application examined the potential effects of the development on the significance of these assets and the contribution made by their settings. The assessment concludes that the significance of

the designated assets derives principally from their archaeological, architectural and historic interest rather than any direct relationship with the application site.

289. The submitted Landscape and Visual Impact Assessment (LVIA), including heritage viewpoints and visualisations, provides additional assessment of setting effects. The LVIA demonstrates that views from many heritage assets are already limited by landform, mature vegetation, existing development and distance.

290. In relation to Flete Lodge and Cheeseman's Farm, the assessment concludes that the site is either screened or not materially visible, resulting in neutral effects.

291. For Manston Court, the listed granary and former monastic outbuilding, occasional filtered views of upper elements of the development may be possible. However, these views would be heavily screened by vegetation and existing built form and would not materially affect the significance of the assets or appreciation of their historic setting.

292. Similarly, although limited views of the upper portions of the development may be possible from the Scheduled Monument known as ‘Settlement’ located approximately 1km northwest of the site, the assessment concludes that the development would not alter the attributes that contribute to the monument's significance and would not result in harm to its setting.

293. The LVIA also demonstrates that the proposed landscape mitigation, including planting and bunding, would further reduce visibility over time, with the Year 10 visualisations showing appreciable additional screening. Collectively, the Cultural Heritage Assessment and LVIA conclude that the proposal would not result in harm to the significance of any listed building, scheduled monument or other designated heritage asset through changes to its setting.

294. Kent County Council’s Conservation Architect was also consulted on the application. The Conservation Officer confirms that there are no listed buildings or other designated built heritage assets within the application site which would be directly affected by the development. Whilst concerns were expressed regarding the continued industrialisation of the wider landscape and cumulative changes arising from development around the Manston area, it was concluded that the proposal would not result in significant harm to the setting or significance of any individual heritage asset. Additional landscape and visual information submitted during the course of the application was also reviewed by the Conservation Officer, who confirmed that the further material did not alter his conclusions and that no objection should be raised on heritage grounds. The Conservation Officer therefore raises no objection to the proposal subject to the wider planning balance being deemed acceptable.

295. The proposal has been assessed having regard to Section 20 of the NPPF 2026, the statutory duties contained within the Planning (Listed Buildings and Conservation Areas) Act 1990 and the Ancient Monuments and Archaeological Areas Act 1979, together with Policies DM5 and DM6 of the KMWLP and Policies HE01, HE03 and SP36 of the Thanet Local Plan.

296. The evidence submitted with the application demonstrates that the site contains archaeological interest and that archaeological remains are likely to be present. The archaeological officer has indicated that remains of regional significance may survive within parts of the site and, accordingly, significant weight should be attached to the

importance of the archaeological resource. However, neither the submitted evidence nor the advice of Kent County Council Heritage Conservation identifies the presence of nationally important remains requiring preservation of the site in its entirety or justifying refusal of planning permission. The archaeological impacts of the proposed development can be appropriately addressed through a programme of evaluation, preservation where necessary, excavation, recording, publication and archive deposition secured through planning conditions. Such an approach accords with the requirements of the NPPF in relation to the conservation and recording of archaeological assets.

297. In relation to built heritage, the application site does not contain any designated heritage assets and the submitted Cultural Heritage Assessment, Landscape and Visual Impact Assessment, verified visualisations and consultation responses all conclude that the proposal would not adversely affect the significance or setting of any listed building, scheduled monument or other designated heritage asset. Whilst the development would introduce a substantial industrial form into the wider landscape, it is not considered that it would diminish the heritage significance of surrounding assets nor undermine the contribution made by their settings to warrant refusal of the application on these grounds.

298. Accordingly, it is considered that the proposal would preserve the significance of designated heritage assets, satisfy the statutory duty under Section 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990, and appropriately mitigate impacts on archaeological remains through planning conditions. Subject to the recommended archaeological investigation and mitigation requirements, the proposal accords with the heritage objectives of the NPPF 2026, Policies DM5 and DM6 of the KMWLP and Policies HE01, HE03 and SP36 of the Thanet Local Plan.

299. No objection is therefore raised on archaeology, heritage, conservation, listed building or scheduled monument grounds. No objections have been received from consultees, on heritage grounds and I am satisfied that this application would not have an overriding negative impact on any heritage assets, and it would accord with the NPPF and KMWLP in relation to conservation and heritage assets subject to the conditions set out in the recommendation below.

Alternative Sites

300. The applicant submitted an Alternative Sites Assessment within the application documents which sought to demonstrate whether there were any reasonably available and suitable alternative sites within Thanet capable of accommodating the proposed waste to hydrogen facility and associated Innovation and Education Centre. The assessment considered planning policy, accessibility, agricultural land quality, environmental and heritage constraints, flood risk, landscape impacts and operational requirements, and identified six potential alternative sites for detailed appraisal. Following a comparative assessment, the applicant concluded that whilst all alternative sites could broadly accommodate the proposed development, each was subject to greater constraints than the application site, including higher quality Grade 1 agricultural land, closer proximity to residential properties, heritage assets, public rights of way, overhead power lines, access limitations and/or greater visual impacts. The assessment therefore concluded that the application site represented the most suitable and least constrained location for the proposed development within the defined search area and that no preferable alternative site could be identified.

301. Members will note the comments received from local residents and the District Council that have drawn attention to perceived deficiencies in the Alternative Sites Assessment process. I note that the assessment has considered a range of alternative sites and relevant planning, environmental and operational constraints. Whilst the conclusions are those of the applicant and the exercise does not in itself determine the acceptability of the proposal, the assessment demonstrates that potentially available alternatives within the search area were subject to their own constraints and no clearly preferable site could be identified.

302. In addition, it is noted that since the submission of the application and preparation of the Alternative Sites Assessment, national planning policy has changed and the site now benefits from explicit policy support for energy development under Policy S5 of the NPPF. This is a material consideration to which significant weight is attached. Whilst the Alternative Sites Assessment remains a useful examination of potentially suitable alternative locations, the subsequent policy designation reinforces the suitability of the application site for the proposed development. Having regard to both the findings of the Alternative Sites Assessment and the updated national policy position, I am satisfied that no clearly preferable or less constrained alternative site has been identified within the defined search area.

Other Matters

Response to Public Representations

303. Members will note that a number of representations from local residents objecting to the application have been received, with the general themes noted in paragraph 65 above. The technical aspects of these matters have been discussed above, however the applicant has also submitted a response to these objections addressing concerns relating to highways, residential amenity, agricultural land, biodiversity, drainage, safety, climate change, operating hours and public rights of way.

304. In relation to highways, the applicant refers to the submitted Transport Assessment and Travel Plan, which concludes that the development can be accommodated within the local highway network, including cumulative effects with other committed development. The proposed site access has been designed in accordance with Design Manual for Roads and Bridges (DMRB) standards and follows pre-application discussions with the Highway Authority. The applicant acknowledged that any necessary highway improvements or financial contributions would be considered through the statutory consultation process, which is set out in detail in the Highways section above and below.

305. Members will note that an objection was received from a local resident raising concerns regarding the proximity of the proposed development to Manston Boarding Kennels & Cattery and nearby residential properties. The objector sought clarification as to whether the applicant's environmental and noise assessments assumed the continued operation of the kennels throughout the lifetime of the development and whether any land acquisition or change in land use had been factored into those assessments. The kennels are located outside the application site boundary and whilst the question of future hypothetical land acquisition is not a relevant matter in the determination of this application, the applicant has confirmed that the site is not proposed to be acquired or incorporated into the development site. In addition the kennels site was assessed as a sensitive receptor within the Environmental Statement, with air quality effects assessed as negligible and noise effects assessed as minor

adverse and not significant following mitigation. Vincent Farmhouse and Vincent Farm Mews were also assessed as high-sensitivity noise receptors, including during night-time operations. The applicant advised that any future changes to the kennels would not alter the assessment conclusions or mitigation measures and noted that the County Council's noise consultee has raised no objection subject to appropriate planning conditions.

306. On residential amenity matters, the applicant highlights the findings of the Environmental Statement, which assessed noise, air quality, odour, lighting and visual effects. The applicant states that mitigation measures, including acoustic enclosures, plant zoning, landscape bunding and a sensitive lighting strategy, have been incorporated into the design. The applicant contends that residual effects on nearby receptors would be minor and not significant in EIA terms. The applicant also indicates a willingness to accept planning conditions relating to detailed plant noise controls.

307. Regarding landscape impacts, the applicant acknowledges that the development would introduce large scale infrastructure into a predominantly rural setting and would be visually prominent. However, it is argued that landscape mitigation, including a 2-metre landscaped bund and structural planting, would reduce visual impacts over time and that the perceived landscape harm should be weighed against the wider benefits of the proposal.

308. In response to concerns regarding the loss of agricultural land, the applicant notes that the site comprises predominantly Best and Most Versatile agricultural land but argues that alternative sites assessed were also constrained and, in some cases, consisted of higher quality agricultural land. The applicant considers the loss of agricultural land to be a matter to be weighed within the overall planning balance.

309. On biodiversity matters, the applicant refers to the extensive ecological surveys undertaken to support the application and states that no ecological constraints have been identified that would prevent development. Whilst acknowledging that not all Biodiversity Net Gain requirements can be achieved onsite, the applicant states that offsite compensation measures would be secured in accordance with the statutory BNG framework should planning permission be granted.

310. With regard to flood risk and drainage, the applicant maintains that the site is at low risk of flooding and that the development incorporates Sustainable Drainage Systems. Discussions with Southern Water are cited as confirming that infrastructure upgrades and planning conditions could ensure adequate water and wastewater capacity before the development becomes operational.

311. The applicant also responds to concerns regarding operational safety, fire risk and hazardous materials. Reference is made to the submitted Environmental Statement, Design Hazard and Risk Register and Outline Fire Safety Management Plan, which set out design and operational measures intended to minimise risks associated with construction, hydrogen production and storage activities. The applicant notes that separate environmental permitting and regulatory approvals would also be required.

312. In relation to climate change, the applicant acknowledges concerns regarding carbon emissions arising from the operation of the facility but argues that these must be considered alongside the wider benefits of hydrogen production, carbon capture technology and aggregate by products. The applicant states that, over the operational lifespan of the project, the development would result in an overall net beneficial climate

change effect through carbon savings and displacement of more carbon intensive activities.

313. The applicant confirms that the waste to hydrogen process would operate continuously on a 24-hour basis, with staff working in shifts. Waste deliveries would be restricted to specified daytime hours. The applicant contends that the associated noise effects, including during nighttime periods, would remain within acceptable limits following mitigation measures.

314. Finally, in relation to Public Rights of Way, the applicant states that the Environmental Statement considered potential effects on nearby footpaths and bridleways and concluded that there would be no significant adverse impacts. It is noted that the closest public bridleway lies approximately 150 metres from the proposed facility and that the majority of vehicle movements, and all HGVs, would travel southwards away from the routes located to the north of the site.

315. Overall, the applicant maintains that the technical assessments submitted in support of the application demonstrate that environmental and operational effects can be appropriately mitigated and that the identified benefits of the proposal outweigh the adverse impacts raised through public consultation.

Other Regulatory Approvals

316. It is noted that concerns have been raised by local residents and the Parish Councils about the potential for health and safety implications associated with the proposed hydrogen generation however, Members will be mindful that national planning policy makes clear that the focus of planning decisions should be on whether a proposed development represents an acceptable use of land, rather than on the control of processes or emissions where these are regulated under separate pollution control regimes. In this case, the operation of the facility including emergency planning and health and safety considerations, would need to be addressed in the required Environmental Permit issued and regulated by the Environment Agency. The NPPF makes it clear that decision-makers should proceed on the basis that the relevant regulatory regimes will operate effectively. The applicant would be unable to operate the facility without the necessary permit being in place. The Health and Safety Executive, UK Health Security Agency (UKHSA), Public Health England and the Department for Energy Security and Net Zero were consulted on the application and raised no objection to the proposal in planning terms. Whilst concerns have been expressed regarding the nature of the proposed facility including that it is the first of its kind in the UK, Members should note that detailed consideration of operational processes, emissions and associated health impacts falls principally within the remit of the environmental permitting regime, which is the responsibility of the Environment Agency. Indeed, the UK Health Security Agency (UKHSA) advised that it would only provide detailed comments through the Environmental Permit process not the planning application process. Accordingly, Members are required to determine whether the proposed development constitutes an acceptable use of the land having regard to the development plan and other material considerations, whilst relying on the relevant regulatory bodies to assess, control and monitor the operational processes and emissions associated with the development.

Legal Agreement (Section 106)

317. In light of the above and in the event that planning permission is granted, Members are recommended to authorise the Head of Planning Applications Group to secure, through a Section 106 Agreement:

    i. a financial contribution of £2.5 million (index linked) towards the delivery of the Manston to Haine Link Road and associated highway improvements payable at agreed trigger points;
    ii. the submission and implementation of a Farmland Bird Mitigation Strategy, including skylark mitigation measures; and
    iii. the payment of monitoring fees associated with biodiversity net gain and habitat management obligations.

318. The final drafting and triggers for the agreement shall be delegated to the Head of Planning Applications Group in consultation with the relevant consultees.

Conclusion

319. Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires planning applications to be determined in accordance with the Development Plan unless material considerations indicate otherwise. Having carefully considered the application, the Environmental Statement and supplementary information, the consultation responses received, the representations made by local residents and parish councils, and all other material planning considerations, I am satisfied that the proposal is acceptable in planning terms and that planning permission should be granted, subject to the completion of a Section 106 Agreement and the imposition of appropriate planning conditions.

320. The proposed development would deliver a strategically important waste recovery and low carbon energy facility capable of processing residual non-recyclable waste streams and generating fuel cell grade hydrogen, whilst also recovering carbon dioxide and producing an aggregate product. The development would contribute towards national objectives relating to decarbonisation, energy security, climate change mitigation, sustainable waste management and the transition towards a circular economy. The proposal would also deliver economic investment, employment opportunities, and the proposed Innovation and Education Centre, providing additional educational and skills benefits.

321. The need for additional low carbon hydrogen infrastructure is strongly supported through both national planning policy and national energy policy. The National Planning Policy Framework (NPPF) 2026 identifies renewable and low carbon energy infrastructure as an essential component of the transition to a net-zero economy. Policy S5 of the Framework confirms that energy infrastructure is an appropriate form of development outside settlement boundaries, whilst Annex B identifies hydrogen as a low carbon fuel. Furthermore, Policy W3 requires substantial weight to be given to the benefits of renewable and low carbon energy development, including its contribution towards energy security, economic growth and the transition to a net zero future. Policy S3 of the Framework provides a presumption in favour of sustainable development.

322. In addition to national policy support, the proposal accords with the objectives of the NPPF 2026 and the strategic objectives of Policies CSW1, CSW2 and CSW7 of the KMWLP. Substantial weight is also attached to the urgent national need for new low carbon energy infrastructure identified within EN-1. Collectively, these national and local policy considerations provide a robust and compelling justification for the proposed development and weigh significantly in favour of the proposal. They attract substantial weight in the decision making process.

323. The proposal would also deliver substantial economic benefits and attract investment into the district through the creation of employment opportunities during both the construction and operational phases, together with wider economic effects through the supply chain. The development would support some 130 on-site jobs, equating to 96 net additional direct FTE jobs, whilst also generating important new economic output and providing education, training and skills development opportunities through the proposed Innovation and Education Centre. These benefits would be of particular significance in the context of the socio-economic challenges identified within Thanet and are consistent with the economic and social objectives of sustainable development set out within the NPPF 2026 and the objectives of the Kent Minerals and Waste Local Plan. Accordingly, substantial weight is afforded to the economic benefits of the proposal in the overall planning balance.

324. The application has been subject to extensive technical scrutiny throughout its determination. Additional information was requested in respect of noise, air quality, ecology, landscape, lighting, highways and other environmental matters, and the application has subsequently been reviewed by the relevant statutory and technical consultees. Importantly, no technical consultee has maintained an objection to the development subject to the recommended mitigation measures, planning conditions and legal obligations, which are incorporated into the recommendation below.

325. In environmental terms, I am satisfied that noise, air quality, odour, bioaerosols, drainage, groundwater and ecological impacts can be appropriately controlled through a combination of embedded mitigation measures, planning conditions and the separate Environmental Permitting regime that is regulated by the Environment Agency. The evidence demonstrates that residual impacts on nearby residential and commercial properties would not be unacceptable and that the development would not give rise to significant adverse effects on human health, designated ecological sites, groundwater resources or the wider environment. Significant weight is attached to the conclusions of KCC's specialist consultants, Thanet District Council Environmental Health, the Environment Agency and other relevant technical consultees.

326. The proposal would inevitably result in some adverse effects. In particular, the development would introduce a substantial industrial facility into an open rural landscape and would result in the permanent loss of approximately 6.58 hectares of Best and Most Versatile agricultural land. Landscape and visual impacts would remain evident for some receptors, notwithstanding the extensive mitigation proposed, and these effects attract moderate weight against the proposal. Moderate weight is also attached to the loss of agricultural land. It is noted that Policy S5 of the NPPF provides for the approval, outside of settlements, of energy related developments such as this and I am satisfied that the identified harm is localised in nature, would be mitigated where possible, and does not fundamentally undermine the character of the wider area. In respect of agricultural impact, whilst the proposal would result in the loss of approximately 6.58 hectares of BMV agricultural land, the associated harm is not considered significant. The application documents demonstrate that no suitable,

available and reasonably practicable alternative site of lower agricultural value exists, with the majority of alternative sites comprising higher quality agricultural land. Having regard to the need for the development and the absence of a sequentially preferable site, the proposal is considered to accord with Policy N2(b) of the NPPF.

327. In transportation terms, the evidence demonstrates that safe and suitable access can be achieved and that the highway network is capable of accommodating the forecasted traffic generation. The agreed Section 106 contribution towards the Manston to Haine Link Road and associated highway improvements provides appropriate mitigation for the development's contribution to wider network impacts.

328. When undertaking the overall planning balance, I conclude that the substantial benefits arising from the delivery of low carbon energy infrastructure, sustainable waste recovery capacity, carbon reduction, resource efficiency, economic investment, job creation, educational opportunities and support for the emerging hydrogen sector significantly outweigh the identified adverse impacts associated with landscape change, visual effects and the loss of agricultural land. The proposal accords with the overarching objectives of the National Planning Policy Framework, National Planning Policy for Waste (2014), Noise Policy Statement for England (NPSE), Planning Practice Guidance: Renewable and Low Carbon Energy, UK Hydrogen Strategy (2021, updated 2024), Waste Management Plan for England (2021), Waste (Circular Economy) (Amendment) Regulations 2020, the Overarching National Policy Statement for Energy (EN-1) and the Kent Minerals and Waste Local Plan 2024-39 and, taken as a whole, the relevant provisions of the Thanet Local Plan.

329. Accordingly, I am satisfied that the proposed development represents sustainable development, that it accords with the Development Plan when read as a whole, and that there are no material considerations which indicate that planning permission should not be granted. I therefore recommend that planning permission be granted subject to the completion of the Section 106 Agreement and the planning conditions set out in the recommendation below.

Recommendation

330. I RECOMMEND that PERMISSION BE GRANTED, SUBJECT TO:

(1). THE COMPLETION OF A SECTION 106 AGREEMENT TO SECURE:

i. a financial contribution of £2.5 million (index linked) towards the delivery of the Manston to Haine Link Road and associated highway improvements, payable at agreed trigger points;
ii. the submission and implementation of a Farmland Bird Mitigation Strategy, including skylark mitigation measures; and
iii. the payment of monitoring fees associated with biodiversity net gain and habitat management obligations.

The final drafting and triggers for the agreement to be DELEGATED to the Head of Planning Applications in consultation with the relevant consultees, and

(2) CONDITIONS covering amongst other matters:

1. Development to be commenced within 5 years of the date of the permission.

2. Carrying out the development in accordance with the submitted plans.
3. No more than a total of 44,000 tonnes per annum of waste shall be imported to and processed at the Facility in any calendar year. Records detailing the quantities and nature of waste types imported to the site shall be maintained for the life of the facilities hereby permitted and shall be made available for inspection at any reasonable time following a request from the County Planning Authority.
4. Imported waste materials shall be limited to those set out in the application documents.
5. No waste shall be tipped into the waste reception hall until such times as all external doors are closed.
6. All loaded, open backed vehicles entering or leaving the site shall be sheeted.
7. No development shall commence until a Construction Environmental Management Plan (CEMP) has been submitted to and approved in writing by the County Planning Authority. The Plan shall include construction vehicle routing, staff parking, delivery arrangements, wheel washing facilities, traffic management measures, abnormal load management, measures to prevent mud and debris on the public highway and measures to maximise opportunities for local residents and businesses. Development shall proceed in accordance with the approved Plan.
8. Construction hours only permitted between 07:00 and 18:00 hours Monday to Friday and between 07:30 and 13:00 hours on Saturdays (with none on Sundays, Bank and Public Holidays), unless otherwise approved in writing by the County Planning Authority.
9. No development shall commence until a Construction Noise and Vibration Management Plan (CNVMP) has been submitted to and approved in writing by the County Planning Authority.
10. Prior to the commencement of the development hereby permitted an Updated Operational Acoustic Assessment shall be submitted to and approved in writing by the County Planning Authority including thereafter the retention and maintenance of all approved acoustic mitigation measures.
11. The rating level of noise from all operations, shall not exceed the following limits:

    - Night-time 2300-0700hrs at all noise sensitive receptors – 35dB LAr 15 mins
    - Daytime 0700-2300hrs:
      - Receptors on Manston Road, south of site entrance – 43dB LAr 1 hr
      - Receptors on Woodchurch Rd/Westgate Ave – 38dB LAr 1hr
      - Receptors at Manston Road north of site entrance/Vincent Road/Woodchurch Track– 40dB LAr 1hr
12. Requirement for the operator to carry out noise monitoring and recording upon completion and operation of the waste to hydrogen facility with the County Planning Authority able to review these results as necessary to ensure compliance with the noise limits in place.
13. Prior to the commencement of the development hereby permitted an Operational Odour and Bioaerosol Management Plan shall be submitted to and approved in writing by the County Planning Authority including thereafter the

retention and maintenance of all approved odour and bioaerosol control measures.

14. Prior to the commencement of the development hereby permitted a Dust Management Plan shall be submitted to and approved in writing by the County Planning Authority.
15. Prior to the commencement of site operations a detailed external lighting scheme shall be submitted to and approved in writing by the County Planning Authority.
16. No part of the development shall be brought into use until the approved vehicular access onto Manston Road, including the ghost island right-turn lane and associated highway works, has been constructed in accordance with approved details.
17. Visibility splays measuring 4.5m x 126m to the south and 4.5m x 160m to the north shall be provided prior to occupation and thereafter retained free from obstruction exceeding 1.05m in height.
18. All approved parking spaces, cycle parking, electric vehicle charging facilities, HGV parking areas, loading areas and turning facilities shall be provided prior to first use and thereafter retained for those purposes.
19. No more than a combined total of 108 HGV movements (54 in/54 out) associated with the operations hereby permitted shall enter or leave the site in any one day. Records detailing the HGV daily movements shall be maintained for the life of the facility hereby permitted and shall be made available for inspection at any reasonable time following a request from the County Planning Authority.
20. Waste deliveries are only permitted to enter the site between 06:00 and 18:00 on weekdays and between 07:00 and 13:30 on Saturdays and none on Sundays and Bank & Public Holidays.
21. Product carrying HGV movements are only permitted between 06:00 and 21:00 on weekdays and between 07:00 and 13:30 on Saturdays and none on Sundays and Bank & Public Holidays.
22. Prior to waste operations commencing a Travel Plan shall be submitted to and approved in writing by the County Planning Authority, including targets, monitoring arrangements, sustainable travel measures and identification of a Travel Plan Coordinator. The approved Travel Plan shall thereafter be implemented and maintained.
23. Details of the materials and external finishes shall be submitted and approved in writing by the County Planning Authority.
24. Details shall be submitted and approved in writing by the County Planning Authority demonstrating how surface water will be prevented from discharging onto the public highway, and the approved measures shall be implemented and maintained thereafter.
25. Development shall not begin in any relevant part until a detailed sustainable surface water drainage scheme for the site has been submitted to and approved in writing by the County Planning Authority and thereafter implemented as approved.
26. No building on any relevant part (or within an agreed implementation schedule) of the development hereby permitted shall be occupied until a Verification

Report, pertaining to the surface water drainage system and prepared by a suitably competent person, has been submitted and approved in writing by the County Planning Authority and thereafter implemented as approved.

27. Prior to the commencement of the development a Wastewater Management Strategy shall be submitted and approved in writing by the County Planning Authority setting out how wastewater will be managed on site prior to the completion of Southern Water's public reinforcement works.
28. Prior to cessation of the temporary wastewater management strategy, details shall be submitted confirming that all necessary public reinforcement works by Southern Water have been completed.
29. Prior to operation of the development, maintenance responsibilities and regimes for the rainwater harvesting system shall be submitted to and approved in writing by the County Planning Authority.
30. No surface water shall be discharged into any watercourse, surface water sewer, soakaway or Sustainable Drainage System (SuDS) unless it has first passed through an interceptor designed and constructed with capacity appropriate to the site as set out in the approved drainage strategy (AKT II, Ref: 6320l HTE Manston Drainage Strategy, dated March 2026).
31. No drainage systems for the infiltration of surface water drainage into the ground is permitted other than with the written consent of the County Planning Authority. The development shall be carried out in accordance with the approved details.
32. Occupation of the relevant part of the development is to be phased and implemented to align with the delivery by Southern Water of any network reinforcement required to ensure that adequate water network capacity is available to the development.
33. No development approved by this planning permission shall commence until a strategy to deal with the potential risks associated with any contamination of the site has been submitted to, and approved in writing by, the County Planning Authority.
34. Prior to any part of the permitted development being occupied/brought into use, a verification report demonstrating the completion of works set out in the approved remediation strategy and the effectiveness of the remediation shall be submitted to, and approved in writing, by the County Planning authority.
35. If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the County Planning Authority) shall be carried out until a remediation strategy detailing how this contamination will be dealt with has been submitted to and approved in writing by the County Planning Authority. The remediation strategy shall be implemented as approved.
36. No impact piling operations shall take place unless otherwise agreed in writing by the County Planning Authority. Any foundation design shall be undertaken using methods that do not involve piling, unless details of the proposed piling operations, together with an assessment of the likely effects on groundwater, land stability, contamination pathways, nearby structures and residential amenity, have first been submitted to and approved in writing.
37. Prior to the commencement of development a revised Landscape planting scheme shall be submitted and approved in writing by County Planning

Authority. Where practicable, this scheme shall adopt an early planting regime, in order to promote the early establishment of landscaping.

38. Prior to the commencement of development a Landscape and Ecological Management Plan (LEMP) shall be submitted and approved in writing by County Planning Authority.
39. Any casualties or failures of landscaping which occur for whatever reason, including vandalism, shall be replaced within the first available planting season and thereafter maintained.
40. Submission and approval in writing of a Biodiversity Gain Plan (to satisfy statutory BNG requirements).
41. Submission and approval in writing of a Habitat Management and Monitoring Plan.
42. Prior to any development works the applicant shall secure and have reported a programme of archaeological field evaluation works, in accordance with a specification and written timetable which has been submitted to and approved in writing by the County Planning Authority.
43. Following completion of archaeological evaluation works, no development shall take place until the applicant or their agents or successors in title, has secured the implementation of any safeguarding measures to ensure preservation in situ of important archaeological remains and/or further archaeological investigation and recording in accordance with a specification and timetable which has been submitted to and approved in writing by the County Planning Authority.
44. The archaeological safeguarding measures, investigation and recording shall be carried out in accordance with the agreed specification and timetable.
45. Within 6 months of the completion of archaeological works a Post-Excavation Assessment Report shall be submitted to and approved in writing by the County Planning Authority. Post-excavation analysis and publication of findings.
46. The Innovation and Education Centre shall remain associated with the waste to hydrogen facility for the life of the development permitted. Any proposed changes to use of the Innovation and Education Centre shall be approved in writing by the County Planning Authority.
47. Any facilities for the storage of oils, fuels or chemicals shall be provided with secondary containment that is impermeable to both the oil, fuel or chemical and water, for example a bund, details of which shall be submitted to and approved in writing by the County Planning Authority.
48. No development shall commence (including any intrusive ground investigations, trial pits, boreholes, or foundation works) until a detailed Unexploded Ordnance (UXO) Risk Mitigation Strategy has been submitted to and approved in writing by the County Planning Authority.

(3) AND informatives covering the following matters:

1. Attention is drawn to the Public Rights of Way advice as below:

   - No furniture may be erected on or across Public Rights of Way without the express consent of the Highway Authority.
   - There must be no disturbance of the surface of the right of way, or obstruction of its use, either during or following any approved development.
   - There should be no close board fencing or similar structure over 1.2 metres erected adjacent to a highway used by vehicles (including bicycles) or in any circumstance which will block out the views.
   - No hedging or shrubs should be planted within 1.5 metres of the edge of the Public Path.

2. Attention is drawn to the Southern Water advice as below:

   The applicant should ensure that Trade Effluent Consent has been obtained or a letter from Southern Water stating that Trade Effluent Concentration is not required, before the connection to the public sewerage network can be approved Kent fire and rescue service request that a copy of the final Emergency Response Plan be provided once completed and recommend that a Site Specific Risk Information (SSRI) visit be undertaken following commissioning of the facility.

3. Attention is drawn to the HSE advice as below:

   HSE do advise that under the Planning (Hazardous Substances) Act 1990 and the Planning (Hazardous Substances) Regulations 2015 (and equivalent legislation in Scotland and Wales), the presence of hazardous chemicals above specified threshold quantities requires consent from the Hazardous Substances Authority (HSA) in England and Wales, which is usually the local planning authority, in this case Kent County Council. If this proposal is to store greater than 2 tonnes of Hydrogen, a Hazardous Substances Consent must be obtained by the applicant. HSE is a statutory consultee on all hazardous substances consent applications. Its role is to consider the hazards and risks which the hazardous substance(s) would present to people in the vicinity, and on the basis of this to advise the HSA whether or not consent should be granted.

4. Attention is drawn to the Environment Agency's advice as below:

   Only clean uncontaminated water should drain to the surface water system. Roof drainage shall drain directly to the surface water system (entering after the pollution prevention measures). Appropriate pollution control methods (such as trapped gullies and interceptors) should be used for drainage from access roads and car parking areas to prevent hydrocarbons from entering the surface water system. There should be no discharge into land impacted by contamination or land previously identified as being contaminated. There should be no discharge to made ground. There must be no direct discharge to groundwater, a controlled water.

   Piling can result in risks to groundwater quality by mobilising contamination when boring through different bedrock layers and creating preferential pathways. Thus it should be demonstrated that any proposed piling will not result in contamination of groundwater. If Piling is proposed, a Piling Risk Assessment must be submitted, written in accordance with EA-supported guidance document "Piling and Penetrative

Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention, which can be found here: Piling and Penetrative Ground Improvement Methods on Land Affected by Contamination: Guidance on Pollution Prevention

5. Attention is drawn to the comments received from Kent Fire & Rescue Service:

   Upon review of the documents available on the planning portal, emergency access appears broadly compliant. I note within the 'Outline Fire Management Plan' Section 10 – 10.1 to 10.10 detailing items such as fire service access, water provisions, wayfinding and site information, which appears to be suitable at this stage. In terms of an Emergency Response Plan (ERP), we appreciate this may be an involving document, therefore please ensure we are provided with this when an ERP is finalised.

   Upon completion of the project, it would be useful and advisory to complete a Site Specific Risk Information (SSRI) visit, once the site is in operation.

   Please be aware that should this proposal be successful it would then be subject to a Building Regulations consultation where the access arrangements would again be examined under section B5.

   Fire Service access and facility provisions are a requirement under B5 of the Building Regulations 2010 and must be complied with to the satisfaction of the Building Control Authority. A full plans submission should be made to the relevant building control body who have a statutory obligation to consult with the Fire and Rescue Service.

6. Attention is drawn to the Highway Authority's advice as below:

   It is important to note that Local Planning Authority (LPA) permission does not convey any approval to carry out works on or affecting the public highway.

   Any changes to or affecting the public highway in Kent require the formal agreement of the Highway Authority, Kent County Council (KCC), and it should not be assumed that this will be a given because LPA planning permission has been granted.

   For this reason, anyone considering works which may affect the public highway, including any highway-owned street furniture or landscape assets such as grass, shrubs and trees, is advised to engage with KCC Highways and Transportation at an early stage in the design process. Across the county there are pieces of land next to private homes and gardens and near the highway that do not look like roads or pavements but are actually part of the public highway.

   Some of this highway land is owned by Kent County Council whilst some is owned by third party owners. Irrespective of the ownership, this land may have 'highway rights' over the topsoil. Works on private land may also affect the public highway. These include works to cellars, to retaining walls which support the highway or land above the highway, and to balconies, signs or other structures which project over the highway. Such works also require the approval of the Highway Authority.

   Kent County Council has now introduced a pre-application advice service in addition to a full formal technical approval process for new or altered highway assets, with the

aim of improving future maintainability. Further details are available on our website below:
https://www.kent.gov.uk/roads-and-travel/highway-permits-and-licences/highways-permissions-and-technical-guidance.

This process applies to all development works affecting the public highway other than applications for vehicle crossings, which are covered by a separate approval process. Further details on this are available on our website below:
https://www.kent.gov.uk/roads-and-travel/highway-permits-and-licences/apply-for-a-dropped-kerb/dropped-kerb-contractor-information

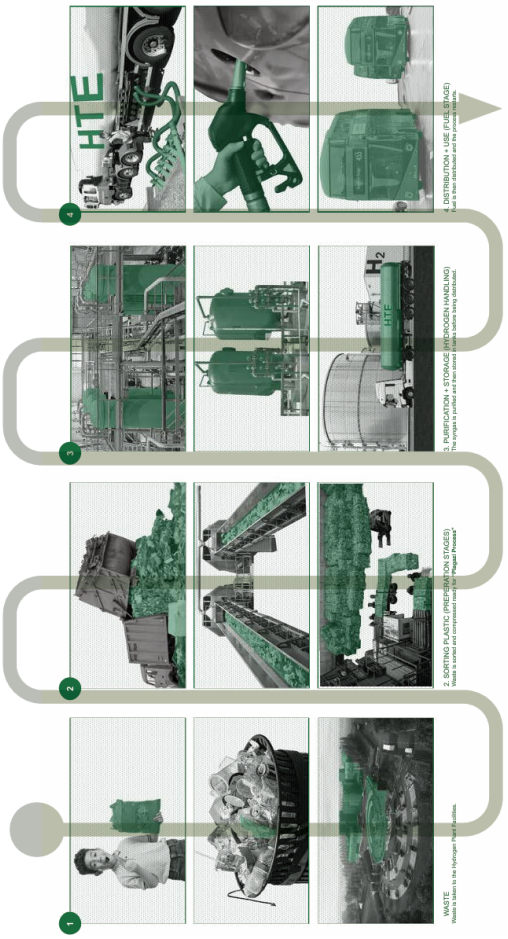
Once planning approval for any development has been granted by the LPA, it is the responsibility of the applicant to ensure that before development commences, all necessary highway approvals and consents have been obtained, and that the limits of the highway boundary have been clearly established, since failure to do so may result in enforcement action being taken by the Highway Authority.
The applicant must also ensure that the details shown on the approved plans agree in every aspect with those approved under the relevant legislation and common law.

It is therefore important for the applicant to contact KCC Highways and Transportation to progress this aspect of the works prior to commencement on site. Further guidance for applicants, including information about how to clarify the highway boundary and links to application forms for vehicular crossings and other highway matters, may be found on Kent County Council's website: https://www.kent.gov.uk/roads-and-travel/highway-permits-and-licences/highways-permissions-and-technical-guidance. Alternatively, KCC Highways and Transportation may be contacted by telephone: 03000 418181.

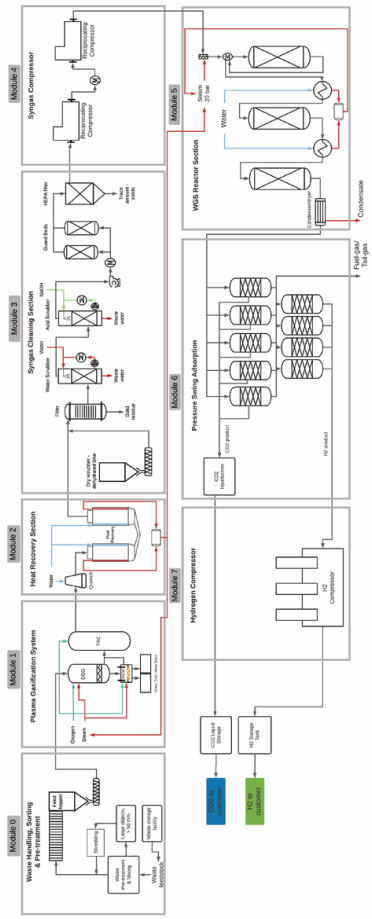
Case Officer: Adam Tomaszewski	Tel. no: 03000 410434

Background Documents: see section heading

Appendix A – Process Drawings



Above: Diagram showing the waste to hydrogen process



Above: Diagram demonstrating the Plagazi process

1.0 Introduction

1.4 The Brief - Plant Process

The proposed development comprises a waste-to-hydrogen facility that converts residual waste into high-purity hydrogen using advanced thermochemical processing.

Prepared waste feedstock is introduced into the Down Draft Gasifier (DDG), where it reacts with oxygen and steam at high temperatures (approximately 1,000°C) to produce synthesis gas (syngas). Inert materials are removed as vitrified aggregate suitable for reuse.

The syngas then passes through a Plasma Enhanced Melter (PEM), where temperatures of up to 3,000°C ensure the complete breakdown of remaining compounds and produce a clean and consistent gas.

The hot syngas is cooled and cleaned through quench systems, particulate filtration, and wet gas scrubbing to remove solids and contaminants. Further treatment within the H2S Scrubber and guard beds removes trace impurities and protects downstream equipment.

The cleaned syngas is compressed and processed through a Pressure Swing Adsorption (PSA) system, where hydrogen is separated from other gases to produce fuel-cell-grade hydrogen.

The hydrogen is then compressed, stored in pressurised tanks, and prepared for distribution. Supporting systems manage condensate, wastewater, and residual gases as part of the integrated process.

1.0 Introduction

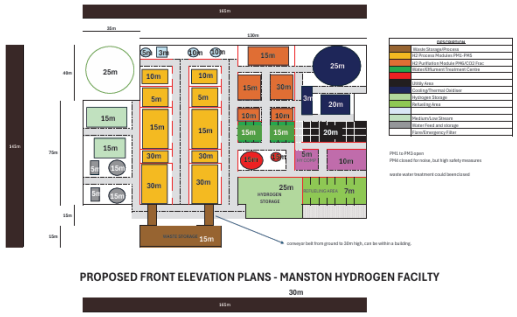
1.4 The Brief - Plant Design

The proposed Hydrogen Power Plant at Manston is designed to convert residual, hard-to-recycle waste into low-carbon, fuel-cell-grade hydrogen, supporting sustainable waste management and clean energy production in Kent. The facility directly responds to the objectives set out in the Kent Minerals and Waste Local Plan (2013–2030), which aims to achieve net self-sufficiency in waste management, divert waste from landfill, and move waste treatment higher up the Waste Hierarchy. By recovering value from residual waste and generating low-carbon energy, the scheme aligns with the National Planning Policy for Waste (2014) and contributes to the UK's Net Zero by 2050 target, as set out in the UK Hydrogen Strategy (2021). The development is therefore well placed to help Kent maintain sufficient waste management capacity, reduce greenhouse gas emissions, and support the transition towards a circular, low-carbon economy.

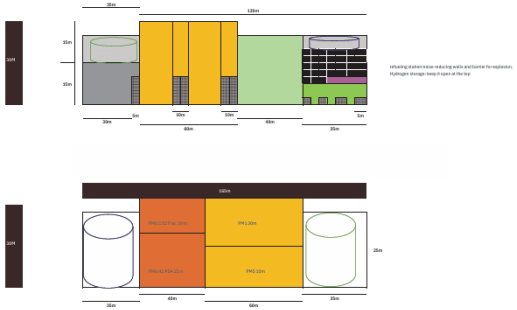
The diagram on the right shows an illustrative schematic of the HTE Process. The components and operational requirements of the proposed Plant space are described in the following section.



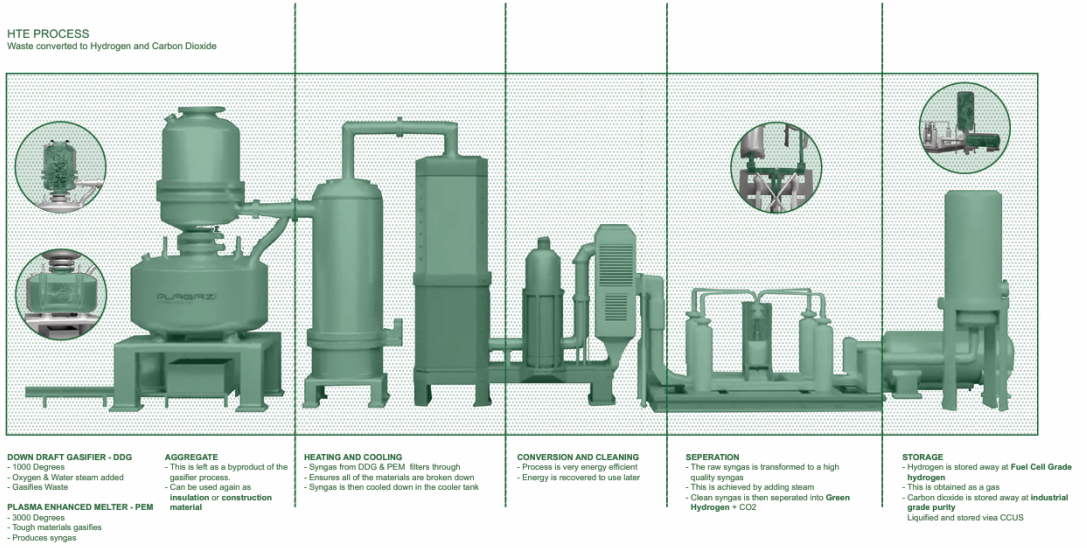
Above: HTE Proposed Site Layout



Above: HTE proposed layout diagrams



Above: HTE proposed layout diagrams



Above: HTE Process Chain diagram