



Transport Statement

Coleshill Green Hydrogen Facility

Ref 05040-5363223

Revision History

Issue	Date	Name	Latest changes
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Contents

1	Introduction	4
1.1	Purpose	4
1.2	Site location and existing site description	4
1.3	Proposed development	4
2	Policy context and guidance	5
2.1	Consultation	5
3	Transport route	6
3.1	Description of the route to site	6
3.2	Strategic road network assessment	6
3.2.1	A55 (North Wales Expressway)	6
3.2.2	A5119 (Northop Road / Church Street)	6
3.2.3	Aber Road	6
3.2.4	Aber Road (continuation through Aber Road Industrial Estate)	6
4	Construction traffic	7
4.1	Delivery vehicles	7
4.1.1	Civil engineering construction	7
4.1.2	Large component deliveries	7
4.1.3	Miscellaneous equipment	7
4.1.4	Staff/Workforce	7
4.2	Vehicle movements	7
4.3	Timing Restrictions	9
4.4	Programme of Works	9
5	Construction impacts and mitigation	10
5.1	Site access and entrance works	10
5.2	Construction working areas	10
5.3	Mud prevention measures	10
5.4	Pollution control	10
5.5	Emergency services	10
5.6	Local services	10
6	Operational Activity	11
6.1	Routine Operational Phase Traffic	11
6.2	Non-Routine Operational Phase Traffic	11

Appendix A	Drawings.....	12
A.1	Location Plan (05040-RES-LAY-DR-PE-001).....	12
A.2	Site Access Routes (05040-RES-ACC-DR-PT-001)	12

1 Introduction

1.1 Purpose

This Transport Statement has been prepared to support the development of the Coleshill Green Hydrogen Electrolyser Facility. The principal objective of this report is to provide details of the proposed transport management arrangements during the construction of the project and to provide details of transport movements during construction and operation of the project.

1.2 Site location and existing site description

The proposed site is located to the West of the existing Kimberly Clark Coleshill site in Flint, North Wales. The proposed site sits approx. 1km North-West of the town of Flint and 2km South-East of the town of Bagillt.

The existing site comprises an agricultural field bordered by hedgerows and woodland.

The site boundary, inclusive of utility connections, measures approximately 4.2 Hectares.

Refer to drawing 05040-RES-LAY-DR-PE-001 included in Appendix A for the site location.

1.3 Proposed development

The proposed scheme comprises containerised Hydrogen electrolyzers. In addition, the project will incorporate Hydrogen storage tanks with compressors necessary to pressurise and store the hydrogen gas, a substation compound, substation buildings, and ancillary plant and infrastructure.

During the construction phase, temporary construction facilities will include a site office, welfare areas, parking and storage areas for plant and materials.

2 Policy context and guidance

2.1 Consultation

Pre application advice has been received from Flintshire County Council:

The development will utilise the existing transport network and will not have an adverse impact on the local road network, and traffic will be restricted to operating during appropriate hours of the day.

3 Transport route

3.1 Description of the route to site

It is proposed that all equipment deliveries and construction traffic shall take the following route to site:

- From the A55, head North on the A5119 for approx. 4km,
- Turn left onto Aber Road, heading Northeast,
 - After approximately 600m, turn left through the main Kimberly Clark site entrance, or
 - After approximately 400m turn left onto Aber Road, after approximately 200m turn left through the secondary Kimberly Clark site entrance (HGV route).

In the event of any road closures on the delivery route, all vehicles will follow the designated diversion route.

A plan of the proposed construction traffic route and site entrances can be found in Appendix A.

3.2 Strategic road network assessment

3.2.1 A55 (North Wales Expressway)

The A55 is a major road in Wales and England, connecting Cheshire and North Wales. The A55 begins at junction 12, the southern end of the M53 motorway near Chester to Holyhead on Anglesey. Its entire length is a dual carriageway primary route, with the exception of the Britannia Bridge where it crosses the Menai Strait. It forms the starting point of the access to site and no significant issues with its use have been identified.

3.2.2 A5119 (Northop Road / Church Street)

The A5119 is an A-road forming a link between the A55 and Flint. Construction traffic will utilise 4km of the A5119 between the A55 and Flint, a proportion of which runs through the suburbs of Flint. No significant issues are expected due to the use of this section of road.

3.2.3 Aber Road

Aber Road forms a link between the A548 and the existing Kimberly Clarke site. The road is subject to a 30mph speed limit. There is a footway on both sides of the road.

Given the existing use, no significant issues with its use have been identified.

3.2.4 Aber Road (continuation through Aber Road Industrial Estate)

Aber Road serves an existing industrial estate. The road is subject to a 30mph speed limit. There is a footway on both sides of the road.

Given the existing use, no significant issues with its use have been identified.

4 Construction traffic

4.1 Delivery vehicles

4.1.1 Civil engineering construction

On site hardstanding areas, tracks and equipment foundations shall be constructed using stone and concrete. The majority of deliveries at this stage will use tipper lorries, concrete trucks and flatbed trucks. Plant required for the works will also be delivered on low loaders or other suitable transportation vehicles.

4.1.2 Large component deliveries

These components shall be delivered using articulated lorries. Associated goods such as smaller components, tools and other equipment will be delivered on flatbed trucks and low loaders. The majority of deliveries will fall under the UK Standard Vehicle Regulations.

Abnormal load vehicles under the Special Types General Order (STGO) may also be required for delivery of larger components. Should the need for a STGO vehicle(s) be identified during the development of the final delivery solution, the route will be fully assessed, and suitable measures implemented e.g. the use of escort vehicles, as required by law.

4.1.3 Miscellaneous equipment

Electrical and communications cables, fencing panels, drainage materials and other such miscellaneous materials will be delivered to site on flatbed trucks or low loaders. Occasional deliveries of small packages will also take place with vans and other light goods vehicles.

Site offices, welfare facilities and equipment storage containers will be delivered on flatbeds and low loaders and the facilities will be maintained on an ad-hoc basis.

Regular deliveries of fuel and water for the site plant will be made using a mini tanker and removal of chemical toilet waste will be made using a mini tanker.

4.1.4 Staff/Workforce

The daily commute of workers in cars, vans and small trucks will form a large proportion of the site traffic. However, the chosen Contractor will encourage all sub-contractors, labourers and tradesmen to car/van share for their journeys to and from the site to reduce the number of vehicle movements involved. Parking for the workforce will be fully accommodated within the existing Kimberly Clark site. Parking on, or near to, the adopted highway will not be required.

4.2 Vehicle movements

Throughout the construction phase there will be a combination of HGVs (for the component and material deliveries) and cars/vans (for construction staff), on site. HGV movements are expected to be most intense throughout the first few weeks of construction whilst car/van movements are expected to be constant throughout. The table below shows the estimated number of deliveries and movements for the main infrastructure.

Vehicle movement	Estimate total return trips over a twelve-month construction period	Indicative spread of vehicle movements during the construction phase	Maximum daily return trips
Site welfare setup	10	Month 1	5
Site clearance	10	Month 1	5
Temporary fencing delivery	5	Month 1	5
Drainage component / materials delivery	10	Months 2 - 3	3
Tipper truck (stone delivery)	350	Months 1 - 3	20
Concrete delivery	25	Months 3 - 6	8
Cable / cable bedding delivery	6	Months 3 - 6	3
Duct / cable ladder delivery	6	Months 5 - 6	3
Grid compliance equipment delivery	3	Months 5 - 6	2
Hydrogen electrolyser delivery.	9	Months 6 - 8	3
Hydrogen storage container / plant delivery	18	Months 6 - 8	4
Hydrogen pipework & supporting frame delivery	6	Months 6 - 8	3
Nitrogen store delivery	2	Months 6 - 8	2
Compressor delivery	4	Months 6 - 8	2
Spares container / office delivery	1	Months 6 - 8	1
Ancillary equipment delivery (UPS, pressure let down tanks, etc)	10	Months 6 - 8	2
Permanent fencing delivery	5	Month 7	5
Vehicle barrier delivery	3	Month 7	3
CCTV and lighting columns delivery	1	Month 8	1
Construction personnel	4000	Months 1 - 13	25
Site welfare removal	10	Month 13	5

Table 1 - Guideline Vehicle Movement Numbers and Timing

Vehicle movements can vary depending on site conditions, programming, weather restrictions, etc., and therefore these numbers should be treated as a guideline only.

The expected HGV volumes are based on best estimates of trips generated for similar sized renewable energy schemes (in terms of hardstand area / quantity of equipment) and will be subject to amendments based on local conditions, working practices and timing of works. At worst, during short intense periods of work, peak daily movements of HGVs are unlikely to exceed 45.

It is proposed that temporary signage would be used to highlight the entrance to the site and to direct construction traffic to the site via the local and regional roads.

4.3 Timing Restrictions

It is anticipated that all traffic movements will be carried out between 08.00 to 18.00 on Monday to Friday and 08.00 to 13.00 on Saturdays and at no time on Sundays or Bank or National Holidays unless otherwise agreed in advance with Flintshire County Council.

4.4 Programme of Works

The programme of works is anticipated to take place over a 13 month period. An initial indication of the programme of works is provided below.

Task /Activity	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13
Setup site welfare & temporary fencing	█												
Site clearance	█												
Construct site access road	█	█											
Groundworks		█	█										
Construct hardstandings		█	█	█									
Construct drainage works			█	█									
Construct substation compounds			█	█	█								
Construct hydrogen plant foundations				█	█	█							
Construct pipework foundations					█	█	█						
Install Hydrogen plant						█	█	█					
Install Hydrogen supply pipeline							█	█	█				
Install supply,foul, and surface water connections							█	█	█				
Onsite pipework connections							█	█	█				
Onsite AC cable works					█	█	█	█					
Barriers and permanent fencing							█	█					
Substations & Grid compliance installation					█	█							
Substation commissioning and testing							█						
Energisation (Grid)							█						
Energisation (Plant)								█					
Commissioning									█	█	█		
Testing											█	█	
Hand over													█

5 Construction impacts and mitigation

5.1 Site access and entrance works

No upgrades to the existing Kimberly Clark site entrances are required. No works are required within the public highway.

A private unbound stone track from the internal Kimberly Clark road network to the main site will be constructed as part of the initial works.

5.2 Construction working areas

During construction, a temporary construction working area will be set up for construction works and temporary facilities. The temporary facilities will include site offices, welfare areas, parking, a turning area for vehicles, and storage areas for plant and materials. The construction working area will be located within the site boundary. Once construction of the site is completed, all portacabins, machinery and equipment will be removed from site.

Vehicles will drive into the site forwards, turn around on site and exit forwards. Measures will be in place to manage the timing of the delivery of material and plant to the site; if the site has insufficient space to accommodate a delivery (e.g., due to an ongoing delivery or obstructive site works), the delivery vehicle will be instructed to wait in a safe location, remote from site if necessary, until suitable space is available.

5.3 Mud prevention measures

During the works, measures shall be in place to ensure that mud and debris is not spread onto the adjacent public highway. The public highway will be regularly inspected, and any deposited debris or mud will be dealt with immediately by means of a road sweeper.

5.4 Pollution control

Best practice measures will be implemented to minimise pollution due to construction. These measures are detailed in the Construction Environmental Management Plan (CEMP) which forms a separate document to this.

5.5 Emergency services

The Police, Fire and Ambulance service will be given written notice of the construction works and invited to site for an additional briefing.

5.6 Local services

During the works, measures shall be in place to ensure that there is no disruption to local services e.g., bin collections and school buses.

6 Operational Activity

6.1 Routine Operational Phase Traffic

Once operational, the facility will be remotely controlled and as such will be unmanned. There will however be a visit to the site approximately once a month by a car, van or light goods vehicle, to carry out regular inspections and route maintenance. Parking for these visits will be accommodated on site.

6.2 Non-Routine Operational Phase Traffic

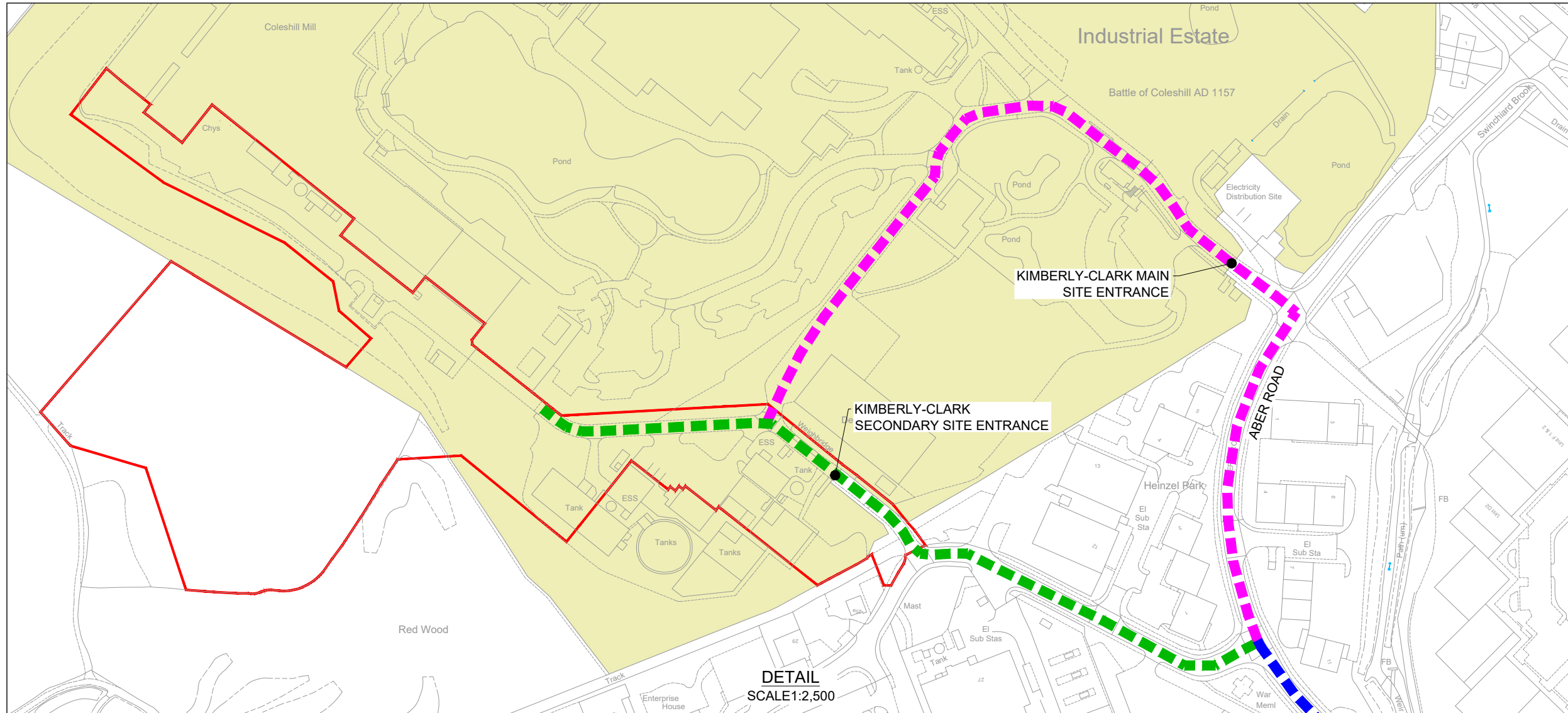
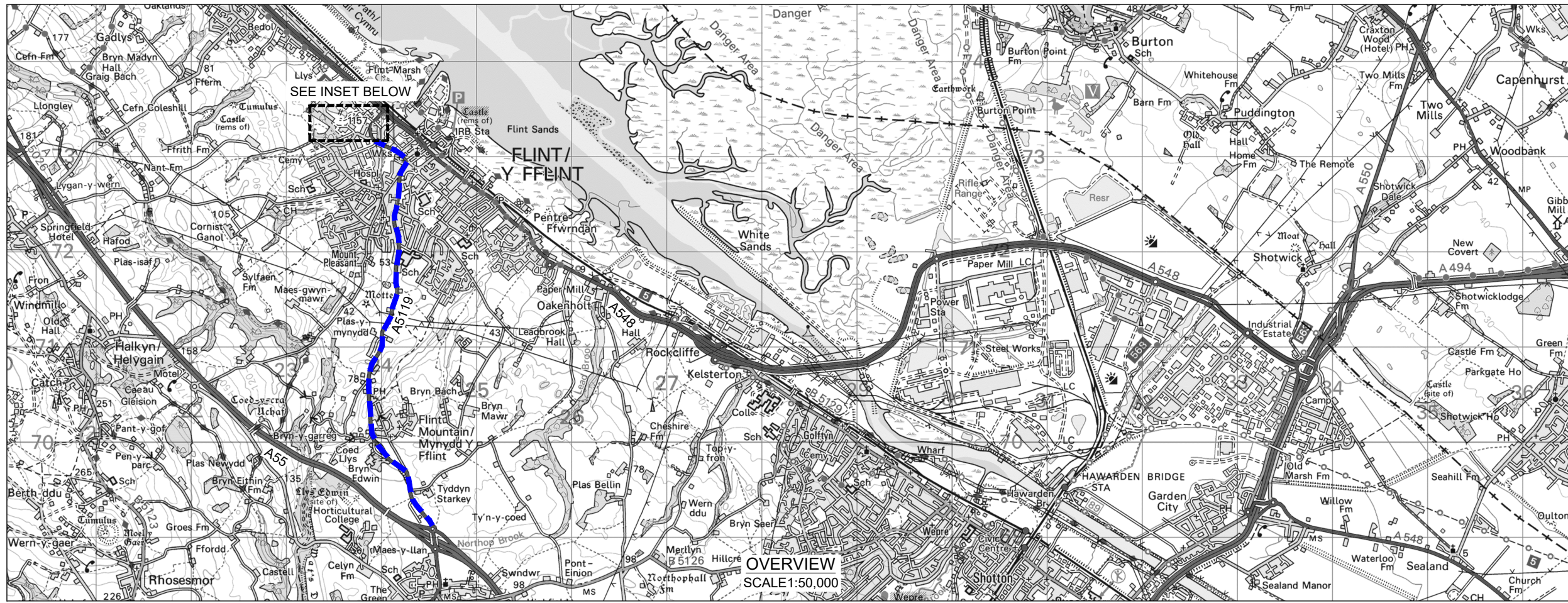
It is possible that one or more medium or large components may require replacement during the operational life of the facility. The nature of the traffic associated with such works will be similar to that used in the construction phase of the project but will be present for a much shorter duration. Should the scale of the works be such that traffic management measures would be required to manage vehicle movements to and from the site, the necessary permissions shall be sought from the local authority in line with due process.

Appendix A Drawings

A.1 Location Plan (05040-RES-LAY-DR-PE-001)

A.2 Site Access Routes (05040-RES-ACC-DR-PT-001)

- KEY:
- DEVELOPMENT BOUNDARY
 - KIMBERLY-CLARK SITE EXTENTS
 - - - ACCESS OPTION A & B
 - - - ACCESS OPTION A
 - - - ACCESS OPTION B (HGV ROUTE)



1	JM	BY APPD	MC	2023-04-06	First Issue
ISSUE	DRAWN	CHKD	APPD	DATE	REVISION NOTES
PURPOSE				COORDINATES	
PLANNING				OSGB 1936	
SCALE				DATUM	
AS SHOWN @A3				N/A	
LAYOUT DRAWING				T-LAYOUT NO	
N/A				N/A	

PROJECT TITLE
COLESHILL GREEN HYDROGEN FACILITY

DRAWING TITLE
ROUTE TO SITE

RES DRAWING NUMBER	REV
05040-RES-ACC-DR-PT-001	1

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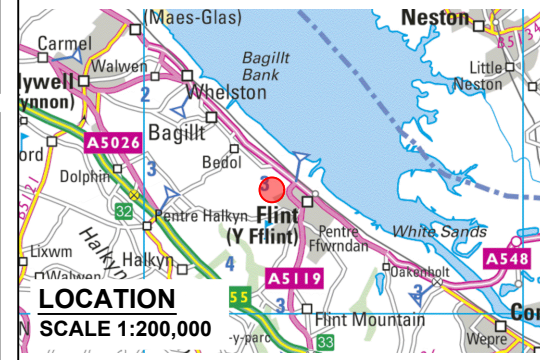
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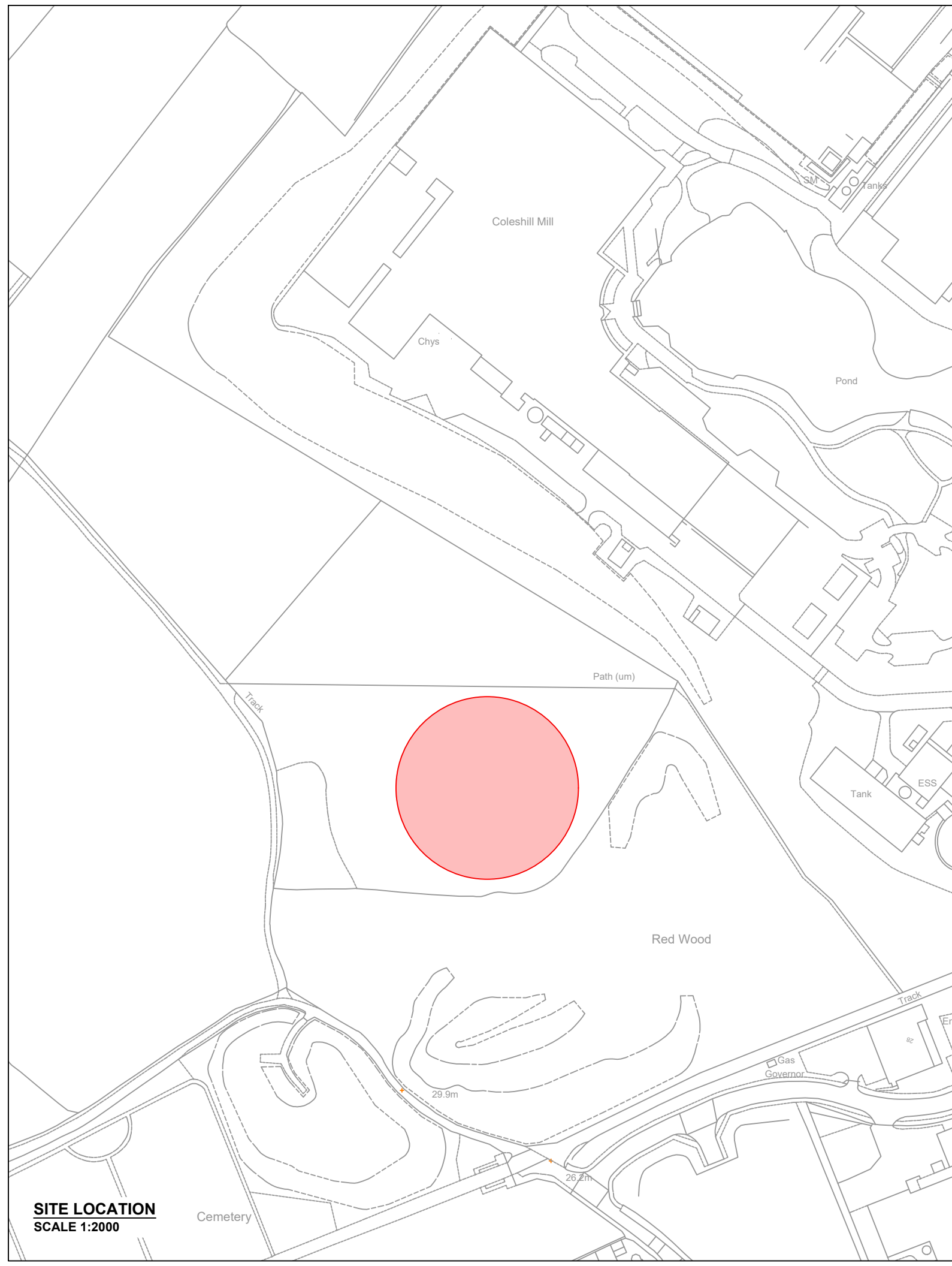
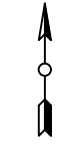
SITE LOCATION



KEY PLAN - NOT TO SCALE



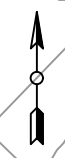
LOCATION
SCALE 1:200,000




SITE LOCATION
SCALE 1:2000



LOCATION
SCALE 1:10,000



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N/A				N/A	
PROJECT TITLE					
GREEN HYDROGEN 2 KIMBERLY CLARK COLESHILL					
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