# Flintshire Local Development Plan 2015-2030 Statement of Common Ground

# STR3B Warren Hall – Aerodrome safeguarding and agreed site development extents

**July 2021** 

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#### 1. Introduction

- 1.1 This Statement of Common Ground (SoCG) has been prepared by Flintshire County Council (the Council) in conjunction with Welsh Government Department of Economy (Welsh Government), their planning consultant Tetra Tech, and Airbus Operations Limited (Airbus). It has been prepared to assist and inform the Examination of the Flintshire Local Development Plan (LDP) in respect of the strategic site allocation STR3B Warren Hall, and specifically to clarify the position with matters raised by Airbus regarding aerodrome safeguarding, at the hearing session held on 14 April 2021.
- 1.2 The purpose of the document is to demonstrate that common ground has been reached between the parties relating to aerodrome safeguarding matters, potentially affecting the principle of development.
- 1.3 Airbus are satisfied that aerodrome safeguarding matters have now been sufficiently understood at the development plan stage. Further specific aerodrome safeguarding assessments of the detailed development proposals will be required in accordance with legal requirements and validated by Civil Aviation Authority (CAA), at subsequent stages when detailed proposals come forward.
- 1.4 On this basis, the Council and Welsh Government consider that the site's allocation in the development plan is therefore acceptable and appropriate.

#### 2. Site Context and Evidence Submitted to Date

2.1 Warren Hall is one of two strategic sites allocated in the Flintshire LDP for mixed use development. It is allocated under policy STR3B of the deposit LDP which sets out the general parameters for the mix and quantum of uses proposed. From a planning perspective, the site's strategic location has been recognised for some time in successive plans by successive decision makers, but due to its green field status it has struggled to attract private investment as the requirement is for development ready serviced sites. In recognition of this issue, both by Welsh and UK Governments, funding has made available via the North Wales Economic

Ambition Board (NWEAB) to assist publicly owned sites such as Warren Hall to come forward and be delivered, and in doing so to act as an exemplar to demonstrate the place making and quality development intentions behind current national planning policy.

2.2 A significant amount of evidence has already been provided to the Examination relating to the basis, evidence and justification for the allocation of the site at Warren Hall, which is comprehensively summarized and further cross referenced in and from the statement of common ground (SOCG007) produced between the Council, Welsh Government, and the NWEAB, dated February 2021.

## 3. Discussion at LDP Examination and matters arising

- 3.1 The site has already been discussed at two hearing sessions of the LDP Examination as part of the Matter 3 consideration. The scheduled hearing session for Matter 3 was held on Wednesday 14<sup>th</sup> April 2021, but the session did not consider the Warren Hall site in detail given the amount of discussion on other matters. The Inspector did allow any third party who had not spoken at the hearing session to raise any matters in relation to the site. At this stage, Airbus raised the matter of their concern about aerodrome safeguarding, reiterating that their key concern was that the height of any development could not infringe the Obstacle Limitation Surface (OLS). At this point the Council requested that the Inspector postpone any further discussion of the Warren Hall site to allow time for the Council to meet with both Welsh Government as site owners and promoters and Airbus to clarify the position set out at the Examination, and to explore its implications for the development parameters for the site.
- 3.2 The Inspector agreed to adjourn discussions, and tentatively scheduled an additional hearing session for 22 April 2021 to resume discussions about the site. Whilst a further and detailed hearing session did take place, this dealt with a number of objectors primarily raising concerns about the deliverability of the housing element of the site, given that they were in the main promoting

- alternative/additional housing sites elsewhere in the plan. This session did not discuss the specific safeguarding matter as the discussions set out in paragraph 3.1 were not sufficiently concluded.
- 3.3 Following the above hearing session and the end of all of the programmed hearings, the Inspector has written to the Council (<u>post hearings letter</u>) where she has outlined the need to hold further hearing sessions on two unresolved issues, one of which relates to the Warren Hall site allocation. The letter contains a request for responses to questions and for further evidence and this SoCG will form part of the response being prepared to the Inspector's letter.

# 4. Joint working between interested parties and further technical work undertaken

- 4.1 Since that date, progress has been made with regular meetings taking place between all interested parties, with further technical work having been prepared by Welsh Government on the new/revised ground levels for development, which have been assessed by Airbus in terms of whether prescribed development heights infringe the OLS from the development ground levels produced. The details of the spot height levels and developable area prepared by Tetra Tech on behalf of Welsh Government, and Airbus's assessment of these against the OLS is contained in Appendix 1. This assessment has assumed a building height of 12m for employment and 8m for residential.
- 4.2 The outcome of this further work and assessment demonstrates that the principle of development remains, but also that in terms of Airbus' key concern regarding infringement of the OLS, the site is capable in principle of being developed to a slightly revised masterplan footprint with the height of development set (and retained) at agreed levels. Airbus' concerns regarding the safeguarding of the aerodrome raised at the Matter 3 hearing session 14 April 2021 will remain until such time that suitable safety assessments can be completed.

4.3 The revised ground level proposal indicates that a proportion of the site is capable of development which is almost in line with the original site parameters set out in policy STR3B. That said, Airbus reserves the right to make further representations regarding the development of this site and any potential impact on the safe operations of Hawarden Aerodrome. Any development will be subject to all legal safeguarding requirements being met and validated by CAA.

#### 5. Development Parameters

- 5.1 Subject to necessary safeguarding measures being imposed and met (including strict adherence to maximum height parameters in perpetuity), the Warren Hall site is capable of accommodating some development while fully recognising the aerodrome safeguarding for Hawarden Aerodrome in accordance with the relevant national policy set out in Circular 01/2003 Safeguarding of Aerodromes, Technical Sites and Military Explosive Storage Areas; and The Town and Country Planning (Safeguarded aerodromes, Technical Sites and Military Storage Areas) Direction 2002 (updated December 2016). Policy PC8 Airport Safeguarding Zone of the LDP provides further safeguards in this respect.
- 5.2 Subject to plateau formation (based on the spot height assessment set out in Appendix 1), 20.4ha of land north of Warren Dingle is capable of accommodating employment development and commercial hub development at a maximum height of 12m, and 6.7ha of land south of Warren Dingle is capable of accommodating residential development at a maximum height of 8m. This can be achieved without infringing the approach and take off slope for Runway 04 based on current regulations. While the development would infringe the inner horizontal surface, this would probably be considered an acceptable infringement if a verified safety assessment supporting this premise is produced at the detailed design stage, following adoption of the LDP (as it has not being possible to carry out a safety assessment in the absence of a detailed layout and building design).

- 5.3 Accordingly, subject to consultation with Airbus (in accordance with the above Directive), and carrying out a full flight procedures and safeguarding assessments, the above development can be achieved with no proposed new objects or extensions of existing objects at the Warren Hall site being permitted (including but not limited to upward extensions, flags, poles, masts/aerials, etc.).
- 5.4 New objects should not be permitted except if shielded by another existing object.

  New Objects or extensions of existing objects should not be permitted above the conical surface and the inner horizontal surface except when:
  - an object would be shielded by an existing immovable object; or
  - after a safety assessment, it is determined that the object would not
    adversely affect the safety or significantly affect the regularity of operations.
    The EASA references for precision approach and take-off runways are CS
    ADR-DSN.J.480 and J.485 respectively.

#### 6. Other Matters

6.1 A number of further assessments will be required by Airbus to support the detailed design of the development of the Warren Hall site which will be carried out as part of preparing for a planning application to develop the site, following adoption of the LDP. This is to ensure that suitable safety assessments will be completed and approved in accordance with all safeguarding requirements and validated by the Civil Aviation Authority (CAA). These are set out in the response/letter from Airbus in Appendix 2 that also includes future considerations such as the removal of permitted development rights from new development on the site, which are matters that can be addressed at the Development Management stage.

#### 7. Conclusions

7.1 The Council and Welsh Government, consider that the principle of the allocation of the Warren Hall mixed use site in the LDP is appropriate.

7.2 Airbus is satisfied that Welsh Government and the Council, have taken appropriate account of aerodrome safeguarding matters insofar as they can at the development plan stage. It is also acknowledged by all parties that further work and assessment will need to be made in order to ensure that any and all development proposed on the site that comes forward via planning application(s), will also need to accord with relevant safeguarding requirements and CAA validation and any mitigation measures necessary to safeguard Hawarden Aerodrome and its operations.

#### On behalf of the Council

Andrew Roberts, Service Manager Strategy 28/07/2021

#### On behalf of Welsh Government

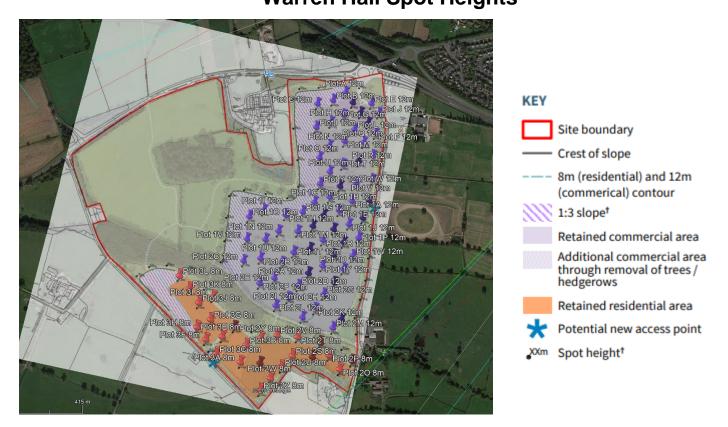
Peter Waldren, Tetra Tech, Planning Agents for Welsh Government 28/07/2021
Tim Howard, Deputy Director Property 28/07/2021
Richard Baker, Deputy Director Land Division 28/07/2021

#### On behalf of Airbus Operations Ltd

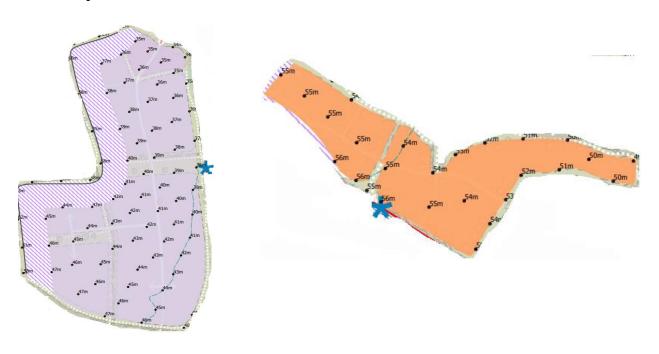
Alison Adams, HO Legal Affairs – Commercial Operations & Finance UK & Company Secretary, Airbus Operations Limited 28/07/2021

Appendix 1 – Airbus Assessment of Spot Heights and OLS Surface

Warren Hall Spot Heights



# Based on 12m high commercial and 8m high residential development



## **Commercial Area**

## **Residential Area**

Location	Eastings	Northings	Build	Ground	Infringement	Infringement
			Height	Level	No/Yes	Surface
			(m)	(m)		
Comi		<mark>velopment l</mark>				
Plot A	332630.04	362994.93	12	35	No	
Plot B	332592.55	362957.75	12	36	No	
Plot C	332541.67	362932.82	12	37	No	
Plot D	332542.16	362967.43	12	35	No	
Plot E	332725.25	362975.66	12	34	No	
Plot F	332694.57	362934.37	12	35	No	
Plot G	332637.83	362915.08	12	36	No	
Plot H	332600.19	362880.38	12	37	No	
Plot I	332554.27	362851.97	12	38	No	
Plot J	332756.60	362946.48	12	34	No	
Plot K	332726.85	362904.86	12	35	No	
Plot L	332684.61	362873.32	12	36	No	
Plot M	332659.22	362825.15	12	37	No	
Plot N	332611.10	362797.70	12	38	No	
Plot O	332585.72	362750.47	12	39	Yes	Inner Horizontal 0.9m
Plot P	332759.12	362874.43	12	35	No	
Plot Q	332725.13	362835.35	12	36	No	
Plot R	332765.08	362796.77	12	36	No	
Plot S	332719.91	362768.36	12	37	No	
Plot T	332668.87	362744.66	12	38	No	
Plot U	332629.92	362709.66	12	39	Yes	Inner Horizontal 0.9m
Plot V	332777.67	362714.08	12	37	No	
Plot W	332726.63	362691.30	12	38	No	
Plot X	332673.93	362669.18	12	39	Yes	Inner Horizontal 0.9m
Plot Y	332605.85	362662.72	12	40	Yes	Inner Horizontal 1.9m
Plot Z	332781.84	362640.77	12	38	✓	
Plot 1A	332724.24	362627.05	12	39	Yes	Inner Horizontal 0.9m
Plot 1B	332646.18	362624.44	12	40	Yes	Inner Horizontal 1.9m
Plot 1C	332598.98	362596.98	12	41	Yes	Inner Horizontal 2.9m
Plot 1D	332772.04	362578.17	12	39	Yes	Inner Horizontal 0.9m
Plot 1E	332687.07	362586.16	12	40	Yes	Inner Horizontal 1.9m
Plot 1F	332638.58	362559.65	12	41	Yes	Inner Horizontal 2.9m
Plot 1G	332566.44	362555.72	12	42	Yes	Inner Horizontal 3.9m

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Plot 1H	332512.44	362533.61	12	43	Yes	Inner Horizontal 4.9m
Plot 1I	332436.46	362533.76	12	44	Yes	Inner Horizontal 5.9m
Plot 1J	332728.32	362547.57	12	40	Yes	Inner Horizontal 1.9m
Plot 1K	332680.94	362520.11	12	41	Yes	Inner Horizontal 2.9m
Plot 1L	332609.72	362515.86	12	42	Yes	Inner Horizontal 3.9m
Plot 1M	332563.26	362488.08	12	43	Yes	Inner Horizontal 4.9m
Plot 1N	332499.54	362475.38	12	44	Yes	Inner Horizontal 5.9m
Plot 10	332393.12	362503.46	12	45	Yes	Inner Horizontal 6.9m
Plot 1P	332393.27	362514.28	12	40	Yes	Inner Horizontal 1.9m
Plot 1Q	332722.40	362483.36	12	41	Yes	Inner Horizontal 2.9m
Plot 1R	332652.27	362476.62	12	42	Yes	Inner Horizontal 3.9m
Plot 1S	332615.51	362438.82	12	43	Yes	Inner Horizontal 4.9m
Plot 1T	332563.18	362416.38	12	44	Yes	Inner Horizontal 5.9m
Plot 1U	332462.23	362438.20	12	45	Yes	Inner Horizontal 6.9m
Plot 1V	332400.78	362427.63	12	46	Yes	Inner Horizontal 7.9m
Plot 1W	332762.74	362445.40	12	41	Yes	Inner Horizontal 2.9m
Plot 1X	332697.20	362435.20	12	42	Yes	Inner Horizontal 3.9m
Plot 1Y	332667.79	362391.41	12	43	Yes	Inner Horizontal 4.9m
Plot 1Z	332626.26	362357.69	12	44	Yes	Inner Horizontal 5.9m
Plot 2A	332532.67	362374.16	12	45	Yes	Inner Horizontal 6.9m
Plot 2B	332458.35	362373.66	12	46	Yes	Inner Horizontal 7.9m
Plot 2C	332404.56	362353.71	12	47	Yes	Inner Horizontal 8.9m
Plot 2D	332739.56	362395.35	12	42	Yes	Inner Horizontal 3.9m
Plot 2E	332718.40	362344.34	12	43	Yes	Inner Horizontal 4.9m
Plot 2F	332601.63	362310.44	12	45	Yes	Inner Horizontal 6.9m
Plot 2G	332517.40	362318.74	12	46	Yes	Inner Horizontal 7.9m
Plot 2H	332690.65	362299.30	12	44	Yes	Inner Horizontal 5.9m
Plot 2I	332472.98	362291.55	12	47	Yes	Inner Horizontal 8.9m
Plot 2J	332765.66	362230.25	12	44	Yes	Inner Horizontal 5.9m
Plot 2K	332671.14	362246.42	12	45	Yes	Inner Horizontal 6.9m
Plot 2L	332575.71	362264.45	12	6	Yes	Inner Horizontal 7.9m
Plot 2M	332742.51	362195.96	12	40	Yes	Inner Horizontal 1.9m
			i	1		- :

Plot 2N	332635.70	362210.45	12	46	Yes	Inner Horizontal 7.9m
Plot 20	332540.48	362230.02	12	47	Yes	Inner Horizontal 8.9m
	Residentia	al Development	based on 8r	n build Height		
Plot 2P	332827.03	362102.36	8	45	Yes	Inner Horizontal 2.905m
Plot 2Q	332790.69	362068.26	8	50	Yes	Inner Horizontal 7.905m
Plot 2R	332747.93	362105.64	8	50	Yes	Inner Horizontal 7.905m
Plot 2S	332695.12	362089.07	8	51	Yes	Inner Horizontal 8.905m
Plot 2T	332711.08	362140.46	8	50	Yes	Inner Horizontal 7.905m
Plot 2U	332628.29	362080.12	8	52	Yes	Inner Horizontal 9.905m
Plot 2V	332632.89	362143.11	8	51	Yes	Inner Horizontal 8.905m
Plot 2W	332599.64	362037.57	8	53	Yes	Inner Horizontal 10.905m
Plot 2X	332564.80	362136.34	8	52	Yes	Inner Horizontal 9.905m
Plot 2Y	332571.35	361994.70	8	54	Yes	Inner Horizontal 11.905m
Plot 2Z	332528.08	362035.49	8	54	Yes	Inner Horizontal 11.905m
Plot 3A	332513.61	362116.36	8	53	Yes	Inner Horizontal 10.905m
Plot 3B	332546.20	361950.24	8	55	Yes	Inner Horizontal 12.905m
Plot 3C	332463.65	362025.27	8	55	Yes	Inner Horizontal 12.905m
Plot 3D	332471.53	362083.88	8	54	Yes	Inner Horizontal 11.905m
Plot 3E	332379.63	362036.04	8	56	Yes	Inner Horizontal 13.905m
Plot 3F	332420.22	362134.37	8	54	Yes	Inner Horizontal 11.905m
Plot 3G	332387.34	362095.27	8	55	Yes	Inner Horizontal 12.905m
Plot 3H	332335.97	362075.60	8	56	Yes	Inner Horizontal 13.905m
Plot 3I	332338.21	362141.71	8	55	Yes	Inner Horizontal 12.905m
Plot 3J	332299.47	362108.57	8	56	Yes	Inner Horizontal 13.905m
Plot 3K	332330.54	362216.61	8	54	Yes	Inner Horizontal 11.905m
Plot 3L	332288.52	362188.15	8	55	Yes	Inner Horizontal 12.905m
Plot 3M	332247.63	362226.44	8	55	Yes	Inner Horizontal 12.905m
Plot 3N	332206.52	362262.25	8	55	Yes	Inner Horizontal 12.905m

#### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 4 June 2021 at 10:57:11

Reference: Plot A Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height Checks Warren

Hall

Description:

Easting: 332630.04 Northing: 362994.93 Magnetic Brg from ARP °: 226.6471 Latitude: 53° 9' 35.3400" N Longitude: 3° 0' 32.5100" W Distance from ARP (m): 2923.89

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 35
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 47

#### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-3.1)	50.095	15.095
22	Take Off Climb 22	No (-4.85)	51.846	16.846
04	Approach 04	No (-5.32)	52.321	17.321
04	ILS Approach 04	No (-5.32)	52.321	17.321
22	Departure Area 22	No (-18.48)	65.478	30.478
22	ILS Missed Approach 22	No (-26.45)	73.446	38.446
Hawarden	Drone restriction zones	No (-74.92)	121.92	86.92

#### EGNR - Hawarden

#### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 4 June 2021 at 10:52:19

Reference: Plot B Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332592.55 Northing: 362957.75 Magnetic Brg from ARP °: 226.6221 Latitude: 53° 9' 34.1200" N Longitude: 3° 0' 34.5000" W Distance from ARP (m): 2976.67

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 36
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 48

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-2.1)	50.095	14.095
22	Take Off Climb 22	No (-4.9)	52.9	16.9
04	Approach 04	No (-5.38)	53.375	17.375
04	ILS Approach 04	No (-5.38)	53.375	17.375
22	Departure Area 22	No (-18.8)	66.795	30.795
22	ILS Missed Approach 22	No (-26.76)	74.764	38.764
Hawarden	Drone restriction zones	No (-73.92)	121.92	85.92

#### Obstruction Information Summary Report

Report Generated by : GDMS Administrator on 4 June 2021 at 10:59:22

Reference: Plot C Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332541.67
 Northing:
 362932.82
 Magnetic Brg from ARP %:
 226.9401

 Latitude:
 53° 9′ 33.2900" N
 Longitude:
 3° 0′ 37.2200" W
 Distance from ARP (m):
 3030.82

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 37
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 49

#### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-1.1)	50.095	13.095
22	Take Off Climb 22	No (-4.95)	53.95	16.95
04	Approach 04	No (-5.43)	54.425	17.425
04	ILS Approach 04	No (-5.43)	54.425	17.425
22	Departure Area 22	No (-19.11)	68.108	31.108
22	ILS Missed Approach 22	No (-27.08)	76.076	39.076
Hawarden	Drone restriction zones	No (-72.92)	121.92	84.92

## EGNR - Hawarden

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 4 June 2021 at 11:02:33

Reference: Plot D Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332542.16 Northing: 362967.43 Magnetic Brg from ARP °: 227.4156 Latitude: 53° 9' 34.4100" N Longitude: 3° 0' 37.2200" W Distance from ARP (m): 3006.94

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 35
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 47

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-3.1)	50.095	15.095
22	Take Off Climb 22	No (-6.43)	53.427	18.427
04	Approach 04	No (-6.9)	53.902	18.902
04	ILS Approach 04	No (-6.9)	53.902	18.902
22	Departure Area 22	No (-20.45)	67.454	32.454
22	ILS Missed Approach 22	No (-28.42)	75.423	40.423
Hawarden	Drone restriction zones	No (-74.92)	121.92	86.92

#### Obstruction Information Summary Report

Report Generated by : GDMS Administrator on 4 June 2021 at 11:06:05

Reference: Plot E Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height Checks Warren

Hall

Description:

Easting: 332725.25 Northing: 362975.66 Magnetic Brg from ARP °: 225.0618 Latitude: 53° 9′ 34.7600" N Longitude: 3° 0′ 27.3700" W Distance from ARP (m): 2868.98

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 34
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 46

#### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-4.1)	50.095	16.095
22	Take Off Climb 22	No (-4.86)	50.864	16.864
04	Approach 04	No (-5.34)	51.34	17.34
04	ILS Approach 04	No (-5.34)	51.34	17.34
22	Departure Area 22	No (-18.25)	64.251	30.251
22	ILS Missed Approach 22	No (-26.22)	72.219	38.219
Hawarden	Drone restriction zones	No (-75.92)	121.92	87.92

#### EGNR - Hawarden

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 4 June 2021 at 11:08:27

Reference: Plot F Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332694.57
 Northing:
 362934.37
 Magnetic Brg from ARP °:
 224.9134

 Latitude:
 53° 9' 33.4100" N
 Longitude:
 3° 0' 28.9900" W
 Distance from ARP (m):
 2919.87

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 35
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 47

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-3.1)	50.095	15.095
22	Take Off Climb 22	No (-4.89)	51.889	16.889
04	Approach 04	No (-5.36)	52.364	17.364
04	ILS Approach 04	No (-5.36)	52.364	17.364
22	Departure Area 22	No (-18.53)	65.532	30.532
22	ILS Missed Approach 22	No (-26.5)	73.5	38.5
Hawarden	Drone restriction zones	No (-74.92)	121.92	86.92

#### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 4 June 2021 at 11:11:07

Reference: Plot G Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332637.83 Northing: 362915.08 Magnetic Brg from ARP °: 225.4252 Latitude: 53° 9′ 32.7600" N Longitude: 3° 0′ 32.0300" W Distance from ARP (m): 2973.71

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 36
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 48

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-2.1)	50.095	14.095
22	Take Off Climb 22	No (-4.93)	52.933	16.933
04	Approach 04	No (-5.41)	53.408	17.408
04	ILS Approach 04	No (-5.41)	53.408	17.408
22	Departure Area 22	No (-18.84)	66.836	30.836
22	ILS Missed Approach 22	No (-26.8)	74.805	38.805
Hawarden	Drone restriction zones	No (-73.92)	121.92	85.92

#### EGNR - Hawarden

#### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 4 June 2021 at 11:13:25

Reference: Plot H Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332600.19 Northing: 362880.38 Magnetic Brg from ARP °: 225.4574 Latitude: 53° 9' 31.6200" N Longitude: 3° 0' 34.0300" W Distance from ARP (m): 3024.88

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 37
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 49

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-1.1)	50.095	13.095
22	Take Off Climb 22	No (-4.95)	53.952	16.952
04	Approach 04	No (-5.43)	54.427	17.427
04	ILS Approach 04	No (-5.43)	54.427	17.427
22	Departure Area 22	No (-19.11)	68.11	31.11
22	ILS Missed Approach 22	No (-27.08)	76.079	39.079
Hawarden	Drone restriction zones	No (-72.92)	121.92	84.92

#### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 4 June 2021 at 11:52:58

Reference: Plot I Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332554.27
 Northing:
 362851.97
 Magnetic Brg from ARP °:
 225.6801

 Latitude:
 53° 9′ 30.6800" N
 Longitude:
 3° 0′ 36.4800" W
 Distance from ARP (m):
 3077.55

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 38
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 50

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-0.1)	50.095	12.095
22	Take Off Climb 22	No (-4.99)	54.987	16.987
04	Approach 04	No (-5.46)	55.463	17.463
04	ILS Approach 04	No (-5.46)	55.463	17.463
22	Departure Area 22	No (-19.4)	69.405	31.405
22	ILS Missed Approach 22	No (-27.37)	77.373	39.373
Hawarden	Drone restriction zones	No (-71.92)	121.92	83.92

## **EGNR - Hawarden**

## Obstruction Information Summary Report

Report Generated by : GDMS Administrator on 4 June 2021 at 11:58:02

Reference: Plot J Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332756.60 Northing: 362946.48 Magnetic Brg from ARP °: 224.2065 Latitude: 53° 9' 33.8300" N Longitude: 3° 0' 25.6600" W Distance from ARP (m): 2867.72

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 34
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 46

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-4.1)	50.095	16.095
22	Take Off Climb 22	No (-4.88)	50.881	16.881
04	Approach 04	No (-5.36)	51.357	17.357
04	ILS Approach 04	No (-5.36)	51.357	17.357
22	Departure Area 22	No (-18.27)	64.273	30.273
22	ILS Missed Approach 22	No (-26.24)	72.241	38.241
Hawarden	Drone restriction zones	No (-75.92)	121.92	87.92

#### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 12:08:14

Reference: Plot K Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332726.85
 Northing:
 362904.86
 Magnetic Brg from ARP °:
 224.0556

 Latitude:
 53° 9' 32.4700" N
 Longitude:
 3° 0' 27.2300" W
 Distance from ARP (m):
 2918.3

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 35
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 47

#### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-3.1)	50.095	15.095
22	Take Off Climb 22	No (-4.9)	51.899	16.899
04	Approach 04	No (-5.37)	52.374	17.374
04	ILS Approach 04	No (-5.37)	52.374	17.374
22	Departure Area 22	No (-18.54)	65.544	30.544
22	ILS Missed Approach 22	No (-26.51)	73.512	38.512
Hawarden	Drone restriction zones	No (-74.92)	121.92	86.92

## **EGNR** - Hawarden

#### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 12:12:50

Reference: Plot L Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332684.61 Northing: 362873.32 Magnetic Brg from ARP °: 224.218 Latitude: 53° 9' 31.4300" N Longitude: 3° 0' 29.4800" W Distance from ARP (m): 2970.36

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 36
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 48

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-2.1)	50.095	14.095
22	Take Off Climb 22	No (-4.93)	52.932	16.932
04	Approach 04	No (-5.41)	53.407	17.407
04	ILS Approach 04	No (-5.41)	53.407	17.407
22	Departure Area 22	No (-18.84)	66.836	30.836
22	ILS Missed Approach 22	No (-26.8)	74.804	38.804
Hawarden	Drone restriction zones	No (-73.92)	121.92	85.92

#### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 12:15:07

Reference: Plot M Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions Spot Height

Description: Checks Warren

Hall

Easting: 332659.22 Northing: 362825.15 Magnetic Brg from ARP °: 223.9261 Latitude: 53° 9′ 29.8600" N Longitude: 3° 0′ 30.8100" W Distance from ARP (m): 3022.62

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 37
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 49

#### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-1.1)	50.095	13.095
22	Take Off Climb 22	No (-4.99)	53.989	16.989
04	Approach 04	No (-5.46)	54.464	17.464
04	ILS Approach 04	No (-5.46)	54.464	17.464
22	Departure Area 22	No (-19.16)	68.156	31.156
22	ILS Missed Approach 22	No (-27.12)	76.125	39.125
Hawarden	Drone restriction zones	No (-72.92)	121.92	84.92

#### EGNR - Hawarden

#### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 12:17:01

Reference: Plot N Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332611.10 Northing: 362797.70 Magnetic Brg from ARP °: 224.2172 Latitude: 53° 9' 28.9500" N Longitude: 3° 0' 33.3800" W Distance from ARP (m): 3075.82

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 38
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 50

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-0.1)	50.095	12.095
22	Take Off Climb 22	No (-5.04)	55.039	17.039
04	Approach 04	No (-5.51)	55.515	17.515
04	ILS Approach 04	No (-5.51)	55.515	17.515
22	Departure Area 22	No (-19.47)	69.47	31.47
22	ILS Missed Approach 22	No (-27.44)	77.438	39.438
Hawarden	Drone restriction zones	No (-71.92)	121.92	83.92

#### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 12:18:19

Reference: Plot o Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332585.72
 Northing:
 362750.47
 Magnetic Brg from ARP °:
 223.9468

 Latitude:
 53° 9' 27.4100" N
 Longitude:
 3° 0' 34.7100" W
 Distance from ARP (m):
 3127.4

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 39
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 51

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (0.9)	50.095	11.095
22	Take Off Climb 22	No (-5.08)	56.082	17.082
04	Approach 04	No (-5.56)	56.557	17.557
04	ILS Approach 04	No (-5.56)	56.557	17.557
22	Departure Area 22	No (-19.77)	70.773	31.773
22	ILS Missed Approach 22	No (-27.74)	78.742	39.742
Hawarden	Drone restriction zones	No (-70.92)	121.92	82.92

## EGNR - Hawarden

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 12:24:44

Reference: Plot P Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332759.12 Northing: 362874.43 Magnetic Brg from ARP °: 223.1847 Latitude: 53° 9' 31.5000" N Longitude: 3° 0' 25.4700" W Distance from ARP (m): 2918.08

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 35
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 47

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-3.1)	50.095	15.095
22	Take Off Climb 22	No (-4.92)	51.922	16.922
04	Approach 04	No (-5.4)	52.398	17.398
04	ILS Approach 04	No (-5.4)	52.398	17.398
22	Departure Area 22	No (-18.57)	65.574	30.574
22	ILS Missed Approach 22	No (-26.54)	73.542	38.542
Hawarden	Drone restriction zones	No (-74.92)	121.92	86.92

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 12:26:48

Reference: Plot Q Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332725.13 Northing: 362835.35 Magnetic Brg from ARP °: 223.1468 Latitude: 53° 9' 30.2200" N Longitude: 3° 0' 27.2700" W Distance from ARP (m): 2969.83

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 36
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 48

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-2.1)	50.095	14.095
22	Take Off Climb 22	No (-4.96)	52.958	16.958
04	Approach 04	No (-5.43)	53.434	17.434
04	ILS Approach 04	No (-5.43)	53.434	17.434
22	Departure Area 22	No (-18.87)	66.868	30.868
22	ILS Missed Approach 22	No (-26.84)	74.837	38.837
Hawarden	Drone restriction zones	No (-73.92)	121.92	85.92

## **EGNR** - Hawarden

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 12:28:49

Reference: Plot R Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332765.08 Northing: 362796.77 Magnetic Brg from ARP °: 222.0759
Latitude: 53° 9' 28.9900" N Longitude: 3° 0' 25.0900" W Distance from ARP (m): 2971.17

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 36
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 48

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-2.1)	50.095	14.095
22	Take Off Climb 22	No (-5)	53.001	17.001
04	Approach 04	No (-5.48)	53.477	17.477
04	ILS Approach 04	No (-5.48)	53.477	17.477
22	Departure Area 22	No (-18.92)	66.922	30.922
22	ILS Missed Approach 22	No (-26.89)	74.891	38.891
Hawarden	Drone restriction zones	No (-73.92)	121.92	85.92

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 12:30:52

Reference: Plot S Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332719.91 Northing: 362768.36 Magnetic Brg from ARP °: 222.3505 Latitude: 53° 9' 28.0500" N Longitude: 3° 0' 27.5000" W Distance from ARP (m): 3022.57

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 37
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 49

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-1.1)	50.095	13.095
22	Take Off Climb 22	No (-5.03)	54.027	17.027
04	Approach 04	No (-5.5)	54.502	17.502
04	ILS Approach 04	No (-5.5)	54.502	17.502
22	Departure Area 22	No (-19.2)	68.204	31.204
22	ILS Missed Approach 22	No (-27.17)	76.173	39.173
Hawarden	Drone restriction zones	No (-72.92)	121.92	84.92

## **EGNR** - Hawarden

## Obstruction Information Summary Report

Report Generated by : GDMS Administrator on 7 June 2021 at 12:33:20

Reference: Plot T Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332668.87 Northing: 362744.66 Magnetic Brg from ARP °: 222.756

Latitude: 53° 9' 27.2600" N Longitude: 3° 0' 30.2300" W Distance from ARP (m): 3074.55

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 38
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 50

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-0.1)	50.095	12.095
22	Take Off Climb 22	No (-5.06)	55.06	17.06
04	Approach 04	No (-5.54)	55.536	17.536
04	ILS Approach 04	No (-5.54)	55.536	17.536
22	Departure Area 22	No (-19.5)	69.496	31.496
22	ILS Missed Approach 22	No (-27.46)	77.465	39.465
Hawarden	Drone restriction zones	No (-71.92)	121.92	83.92

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 12:35:05

Reference: Plot U Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332629.92 Northing: 362709.66 Magnetic Brg from ARP °: 222.8447 Latitude: 53° 9' 26.1100" N Longitude: 3° 0' 32.3000" W Distance from ARP (m): 3126.69

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 39
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 51

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (0.9)	50.095	11.095
22	Take Off Climb 22	No (-5.1)	56.101	17.101
04	Approach 04	No (-5.58)	56.577	17.577
04	ILS Approach 04	No (-5.58)	56.577	17.577
22	Departure Area 22	No (-19.8)	70.797	31.797
22	ILS Missed Approach 22	No (-27.77)	78.766	39.766
Hawarden	Drone restriction zones	No (-70.92)	121.92	82.92

## **EGNR** - Hawarden

#### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 12:37:20

Reference: Plot V Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332777.67
 Northing:
 362714.08
 Magnetic Brg from ARP °:
 220.8492

 Latitude:
 53° 9' 26.3200" N
 Longitude:
 3° 0' 24.3500" W
 Distance from ARP (m):
 3024.82

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 37
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 49

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-1.1)	50.095	13.095
22	Take Off Climb 22	No (-5.07)	54.067	17.067
04	Approach 04	No (-5.54)	54.542	17.542
04	ILS Approach 04	No (-5.54)	54.542	17.542
22	Departure Area 22	No (-19.25)	68.254	31.254
22	ILS Missed Approach 22	No (-27.22)	76.223	39.223
Hawarden	Drone restriction zones	No (-72.92)	121.92	84.92

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 12:53:19

Reference: Plot X Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332673.93 Northing: 362669.18 Magnetic Brg from ARP °: 221.7489 Latitude: 53° 9′ 24.8200" N Longitude: 3° 0′ 29.9000" W Distance from ARP (m): 3127.02

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 39
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 51

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (0.9)	50.095	11.095
22	Take Off Climb 22	No (-5.12)	56.119	17.119
04	Approach 04	No (-5.59)	56.594	17.594
04	ILS Approach 04	No (-5.59)	56.594	17.594
22	Departure Area 22	No (-19.82)	70.819	31.819
22	ILS Missed Approach 22	No (-27.79)	78.788	39.788
Hawarden	Drone restriction zones	No (-70.92)	121.92	82.92

## EGNR - Hawarden

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 12:56:42

Reference: Plot Y Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332605.85
 Northing:
 362662.72
 Magnetic Brg from ARP °:
 222.5873

 Latitude:
 53° 9′ 24.5800" N
 Longitude:
 3° 0′ 33.5600" W
 Distance from ARP (m):
 3177.51

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 40
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 52

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (1.9)	50.095	10.095
22	Take Off Climb 22	No (-5.12)	57.122	17.122
04	Approach 04	No (-5.6)	57.598	17.598
04	ILS Approach 04	No (-5.6)	57.598	17.598
22	Departure Area 22	No (-20.07)	72.074	32.074
22	ILS Missed Approach 22	No (-28.04)	80.042	40.042
Hawarden	Drone restriction zones	No (-69.92)	121.92	81.92

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 12:59:50

Reference: Plot Z Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332781.84 Northing: 362640.77 Magnetic Brg from ARP °: 219.8979 Latitude: 53° 9' 23.9500" N Longitude: 3° 0' 24.0700" W Distance from ARP (m): 3077.97

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 38
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 50

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	No (-0.1)	50.095	12.095
22	Take Off Climb 22	No (-5.1)	55.104	17.104
04	Approach 04	No (-5.58)	55.58	17.58
04	ILS Approach 04	No (-5.58)	55.58	17.58
22	Departure Area 22	No (-19.55)	69.551	31.551
22	ILS Missed Approach 22	No (-27.52)	77.52	39.52
Hawarden	Drone restriction zones	No (-71.92)	121.92	83.92

## EGNR - Hawarden

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 13:01:47

Reference: Plot 1A Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332724.24
 Northing:
 362627.05
 Magnetic Brg from ARP °:
 220.5466

 Latitude:
 53° 9' 23.4800" N
 Longitude:
 3° 0' 27.1600" W
 Distance from ARP (m):
 3125.63

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 39
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 51

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (0.9)	50.095	11.095
22	Take Off Climb 22	No (-5.08)	56.076	17.076
04	Approach 04	No (-5.55)	56.552	17.552
04	ILS Approach 04	No (-5.55)	56.552	17.552
22	Departure Area 22	No (-19.77)	70.766	31.766
22	ILS Missed Approach 22	No (-27.73)	78.735	39.735
Hawarden	Drone restriction zones	No (-70.92)	121.92	82.92

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 13:21:20

Reference: Plot 1B Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332646.18 Northing: 362624.44 Magnetic Brg from ARP °: 221.5852 Latitude: 53° 9' 23.3600" N Longitude: 3° 0' 31.3600" W Distance from ARP (m): 3178.88

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 40
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 52

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (1.9)	50.095	10.095
22	Take Off Climb 22	No (-5.16)	57.156	17.156
04	Approach 04	No (-5.63)	57.631	17.631
04	ILS Approach 04	No (-5.63)	57.631	17.631
22	Departure Area 22	No (-20.12)	72.115	32.115
22	ILS Missed Approach 22	No (-28.08)	80.084	40.084
Hawarden	Drone restriction zones	No (-69.92)	121.92	81.92

## EGNR - Hawarden

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 13:38:36

Reference: Plot 1C Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332598.98
 Northing:
 362596.98
 Magnetic Brg from ARP °:
 221.8881

 Latitude:
 53° 9′ 22.4500" N
 Longitude:
 3° 0′ 33.8800" W
 Distance from ARP (m):
 3230.8

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 41
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 53

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Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (2.9)	50.095	9.095
22	Take Off Climb 22	No (-5.19)	58.194	17.194
04	Approach 04	No (-5.67)	58.67	17.67
04	ILS Approach 04	No (-5.67)	58.67	17.67
22	Departure Area 22	No (-20.41)	73.413	32.413
22	ILS Missed Approach 22	No (-28.38)	81.382	40.382
Hawarden	Drone restriction zones	No (-68.92)	121.92	80.92

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 13:43:58

Plot 1D BUILDING Reference: Type: Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Checks Warren Description:

Hall

Easting: 332772.04 Northing: 362578.17 Magnetic Brg from ARP °: 219.3009 Latitude: 53° 9' 21.9200" N 3° 0' 24.5500" W Distance from ARP (m): Longitude: 3132.45

Horizontal Extents (Radius in m): N/A Ground level above mean sea level (m): 39 Height of structure above ground level (m): 12 Height of structure above mean sea level (m): 51

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (0.9)	50.095	11.095
22	Take Off Climb 22	No (-5.17)	56.168	17.168
04	Approach 04	No (-5.64)	56.644	17.644
04	ILS Approach 04	No (-5.64)	56.644	17.644
22	Departure Area 22	No (-19.88)	70.881	31.881
22	ILS Missed Approach 22	No (-27.85)	78.85	39.85
Hawarden	Drone restriction zones	No (-70.92)	121.92	82.92

## EGNR - Hawarden

## Obstruction Information **Summary Report**

Report Generated by: GDMS Administrator on 7 June 2021 at 13:50:28

BUILDING Reference: Plot 1E Type: Mobility: Permanent

2021 Obstructions Group: Spot Height

Description: Checks Warren

Hall

Easting: 332687.07 Northing: 362586.16 Magnetic Brg from ARP °: 220.5766 Latitude: 53° 9' 22.1400" N Distance from ARP (m): Longitude: 3° 0' 29.1300" W 3180.87

Horizontal Extents (Radius in m): N/A Ground level above mean sea level (m): 40 Height of structure above ground level (m): 12 Height of structure above mean sea level (m): 52

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (1.9)	50.095	10.095
22	Take Off Climb 22	No (-5.18)	57.182	17.182
04	Approach 04	No (-5.66)	57.657	17.657
04	ILS Approach 04	No (-5.66)	57.657	17.657
22	Departure Area 22	No (-20.15)	72.148	32.148
22	ILS Missed Approach 22	No (-28.12)	80.116	40.116
Hawarden	Drone restriction zones	No (-69.92)	121.92	81.92

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 13:53:33

Reference: Plot 1F Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332638.58
 Northing:
 362559.65
 Magnetic Brg from ARP °:
 220.9237

 Latitude:
 53° 9′ 21.2600" N
 Longitude:
 3° 0′ 31.7200" W
 Distance from ARP (m):
 3232.61

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 41
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 53

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (2.9)	50.095	9.095
22	Take Off Climb 22	No (-5.22)	58.223	17.223
04	Approach 04	No (-5.7)	58.699	17.699
04	ILS Approach 04	No (-5.7)	58.699	17.699
22	Departure Area 22	No (-20.45)	73.45	32.45
22	ILS Missed Approach 22	No (-28.42)	81.418	40.418
Hawarden	Drone restriction zones	No (-68.92)	121.92	80.92

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 13:55:28

Reference: Plot 1G Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332566.44 Northing: 362555.72 Magnetic Brg from ARP °: 221.83 Latitude: 53° 9′ 21.1000" N Longitude: 3° 0′ 35.6000" W Distance from ARP (m): 3283.24

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 42
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 54

#### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (3.9)	50.095	8.095
22	Take Off Climb 22	No (-5.24)	59.243	17.243
04	Approach 04	No (-5.72)	59.719	17.719
04	ILS Approach 04	No (-5.72)	59.719	17.719
22	Departure Area 22	No (-20.72)	74.725	32.725
22	ILS Missed Approach 22	No (-28.69)	82.693	40.693
Hawarden	Drone restriction zones	No (-67.92)	121.92	79.92

## **EGNR** - Hawarden

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 13:58:24

Reference: Plot 1H Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332512.44 Northing: 362533.61 Magnetic Brg from ARP °: 222.2679 Latitude: 53° 9' 20.3600" N Longitude: 3° 0' 38.4900" W Distance from ARP (m): 3335.83

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 43
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 55

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (4.9)	50.095	7.095
22	Take Off Climb 22	No (-5.29)	60.292	17.292
04	Approach 04	No (-5.77)	60.768	17.768
04	ILS Approach 04	No (-5.77)	60.768	17.768
22	Departure Area 22	No (-21.04)	76.036	33.036
22	ILS Missed Approach 22	No (-29)	84.005	41.005
Hawarden	Drone restriction zones	No (-66.92)	121.92	78.92

#### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 14:04:52

Reference: Plot 11 Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332436.46 Northing: 362533.76 Magnetic Brg from ARP °: 223.2206 Latitude: 53° 9' 20.3300" N Longitude: 3° 0' 42.5800" W Distance from ARP (m): 3387.29

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 44
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 56

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (5.9)	50.095	6.095
22	Take Off Climb 22	No (-5.3)	61.303	17.303
04	Approach 04	No (-5.78)	61.778	17.778
04	ILS Approach 04	No (-5.78)	61.778	17.778
22	Departure Area 22	No (-21.3)	77.299	33.299
22	ILS Missed Approach 22	No (-29.27)	85.268	41.268
Hawarden	Drone restriction zones	No (-65.92)	121.92	77.92

## EGNR - Hawarden

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 14:07:06

Reference: Plot 1J Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332728.32 Northing: 362547.57 Magnetic Brg from ARP °: 219.5609 Latitude: 53° 9' 20.9100" N Longitude: 3° 0' 26.8800" W Distance from ARP (m): 3183.85

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 40
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 52

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (1.9)	50.095	10.095
22	Take Off Climb 22	No (-5.21)	57.207	17.207
04	Approach 04	No (-5.68)	57.683	17.683
04	ILS Approach 04	No (-5.68)	57.683	17.683
22	Departure Area 22	No (-20.18)	72.18	32.18
22	ILS Missed Approach 22	No (-28.15)	80.148	40.148
Hawarden	Drone restriction zones	No (-69.92)	121.92	81.92

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 14:09:09

Reference: Plot 1K Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332680.94 Northing: 362520.11 Magnetic Brg from ARP °: 219.8982 Latitude: 53° 9' 20.0000" N Longitude: 3° 0' 29.4100" W Distance from ARP (m): 3235.26

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 41
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 53

#### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (2.9)	50.095	9.095
22	Take Off Climb 22	No (-5.25)	58.248	17.248
04	Approach 04	No (-5.72)	58.724	17.724
04	ILS Approach 04	No (-5.72)	58.724	17.724
22	Departure Area 22	No (-20.48)	73.481	32.481
22	ILS Missed Approach 22	No (-28.45)	81.45	40.45
Hawarden	Drone restriction zones	No (-68.92)	121.92	80.92

## **EGNR** - Hawarden

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 14:13:31

Reference: Plot 1L Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332609.72 Northing: 362515.86 Magnetic Brg from ARP °: 220.8037 Latitude: 53° 9′ 19.8300" N Longitude: 3° 0′ 33.2400" W Distance from ARP (m): 3284.6

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 42
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 54

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (3.9)	50.095	8.095
22	Take Off Climb 22	No (-5.26)	59.261	17.261
04	Approach 04	No (-5.74)	59.736	17.736
04	ILS Approach 04	No (-5.74)	59.736	17.736
22	Departure Area 22	No (-20.75)	74.747	32.747
22	ILS Missed Approach 22	No (-28.72)	82.715	40.715
Hawarden	Drone restriction zones	No (-67.92)	121.92	79.92

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 14:16:00

Reference: Plot 1M Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332563.26 Northing: 362488.08 Magnetic Brg from ARP °: 221.096 Latitude: 53° 9' 18.9100" N Longitude: 3° 0' 35.7200" W Distance from ARP (m): 3336.04

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 43
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 55

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (4.9)	50.095	7.095
22	Take Off Climb 22	No (-5.29)	60.294	17.294
04	Approach 04	No (-5.77)	60.77	17.77
04	ILS Approach 04	No (-5.77)	60.77	17.77
22	Departure Area 22	No (-21.04)	76.039	33.039
22	ILS Missed Approach 22	No (-29.01)	84.007	41.007
Hawarden	Drone restriction zones	No (-66.92)	121.92	78.92

## EGNR - Hawarden

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 14:32:08

Reference: Plot 1N Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332499.54 Northing: 362475.38 Magnetic Brg from ARP °: 221.7669 Latitude: 53° 9' 18.4700" N Longitude: 3° 0' 39.1400" W Distance from ARP (m): 3387.72

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 44
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 56

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (5.9)	50.095	6.095
22	Take Off Climb 22	No (-5.33)	61.333	17.333
04	Approach 04	No (-5.81)	61.808	17.808
04	ILS Approach 04	No (-5.81)	61.808	17.808
22	Departure Area 22	No (-21.34)	77.337	33.337
22	ILS Missed Approach 22	No (-29.31)	85.305	41.305
Hawarden	Drone restriction zones	No (-65.92)	121.92	77.92

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 14:36:42

Reference: Plot 10 Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332393.12
 Northing:
 362503.46
 Magnetic Brg from ARP °:
 223.4012

 Latitude:
 53° 9' 19.3300" N
 Longitude:
 3° 0' 44.8900" W
 Distance from ARP (m):
 3439.07

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 45
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 57

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (6.9)	50.095	5.095
22	Take Off Climb 22	No (-5.33)	62.332	17.332
04	Approach 04	No (-5.81)	62.808	17.808
04	ILS Approach 04	No (-5.81)	62.808	17.808
22	Departure Area 22	No (-21.59)	78.586	33.586
22	ILS Missed Approach 22	No (-29.55)	86.555	41.555
Hawarden	Drone restriction zones	No (-64.92)	121.92	76.92

## EGNR - Hawarden

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 14:40:45

Reference: Plot 1P Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332393.27 Northing: 362514.28 Magnetic Brg from ARP °: 223.5235 Latitude: 53° 9' 19.6800" N Longitude: 3° 0' 44.8900" W Distance from ARP (m): 3431.11

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 40
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 52

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (1.9)	50.095	10.095
22	Take Off Climb 22	No (-10.17)	62.169	22.169
04	Approach 04	No (-10.64)	62.644	22.644
04	ILS Approach 04	No (-10.64)	62.644	22.644
22	Departure Area 22	No (-26.38)	78.382	38.382
22	ILS Missed Approach 22	No (-34.35)	86.35	46.35
Hawarden	Drone restriction zones	No (-69.92)	121.92	81.92

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 14:55:37

Reference: Plot 1Q Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332722.40 Northing: 362483.36 Magnetic Brg from ARP °: 218.9179 Latitude: 53° 9' 18.8300" N Longitude: 3° 0' 27.1500" W Distance from ARP (m): 3237.32

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 41
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 53

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (2.9)	50.095	9.095
22	Take Off Climb 22	No (-5.24)	58.244	17.244
04	Approach 04	No (-5.72)	58.719	17.719
04	ILS Approach 04	No (-5.72)	58.719	17.719
22	Departure Area 22	No (-20.48)	73.475	32.475
22	ILS Missed Approach 22	No (-28.44)	81.444	40.444
Hawarden	Drone restriction zones	No (-68.92)	121.92	80.92

## EGNR - Hawarden

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 14:58:03

Reference: Plot 1R Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332652.27 Northing: 362476.62 Magnetic Brg from ARP °: 219.7953 Latitude: 53° 9' 18.5800" N Longitude: 3° 0' 30.9200" W Distance from ARP (m): 3287.01

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 42
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 54

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)	
Hawarden	Inner Horizontal	Yes (3.9)	50.095	8.095	
22	Take Off Climb 22	No (-5.28)	59.279	17.279	
04	Approach 04	No (-5.75)	59.754	17.754	
04	ILS Approach 04	No (-5.75)	59.754	17.754	
22	Departure Area 22	No (-20.77)	74.769	32.769	
22	ILS Missed Approach 22	No (-28.74)	82.738	40.738	
Hawarden	Drone restriction zones	No (-67.92)	121.92	79.92	

#### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 15:20:05

Reference: Plot 1S Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332615.51 Northing: 362438.82 Magnetic Brg from ARP °: 219.8647 Latitude: 53° 9' 17.3400" N Longitude: 3° 0' 32.8700" W Distance from ARP (m): 3339.59

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 43
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 55

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (4.9)	50.095	7.095
22	Take Off Climb 22	No (-5.33)	60.332	17.332
04	Approach 04	No (-5.81)	60.808	17.808
04	ILS Approach 04	No (-5.81)	60.808	17.808
22	Departure Area 22	No (-21.09)	76.086	33.086
22	ILS Missed Approach 22	No (-29.05)	84.055	41.055
Hawarden	Drone restriction zones	No (-66.92)	121.92	78.92

## EGNR - Hawarden

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 15:22:45

Reference: Plot 1T Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332563.18
 Northing:
 362416.38
 Magnetic Brg from ARP °:
 220.3005

 Latitude:
 53° 9′ 16.5900" N
 Longitude:
 3° 0′ 35.6700" W
 Distance from ARP (m):
 3390.45

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 44
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 56

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (5.9)	50.095	6.095
22	Take Off Climb 22	No (-5.36)	61.365	17.365
04	Approach 04	No (-5.84)	61.84	17.84
04	ILS Approach 04	No (-5.84)	61.84	17.84
22	Departure Area 22	No (-21.38)	77.377	33.377
22	ILS Missed Approach 22	No (-29.35)	85.345	41.345
Hawarden	Drone restriction zones	No (-65.92)	121.92	77.92

#### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 15:25:16

Reference: Plot 1U Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332462.23 Northing: 362438.20 Magnetic Brg from ARP °: 221.8179
Latitude: 53° 9' 17.2500" N Longitude: 3° 0' 41.1200" W Distance from ARP (m): 3440.31

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 45
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 57

#### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (6.9)	50.095	5.095
22	Take Off Climb 22	No (-5.38)	62.384	17.384
04	Approach 04	No (-5.86)	62.86	17.86
04	ILS Approach 04	No (-5.86)	62.86	17.86
22	Departure Area 22	No (-21.65)	78.651	33.651
22	ILS Missed Approach 22	No (-29.62)	86.62	41.62
Hawarden	Drone restriction zones	No (-64.92)	121.92	76.92

## EGNR - Hawarden

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 15:27:03

Reference: Plot 1V Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332400.78 Northing: 362427.63 Magnetic Brg from ARP °: 222.4543 Latitude: 53° 9' 16.8800" N Longitude: 3° 0' 44.4200" W Distance from ARP (m): 3489.37

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 46
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 58

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (7.9)	50.095	4.095
22	Take Off Climb 22	No (-5.36)	63.361	17.361
04	Approach 04	No (-5.84)	63.837	17.837
04	ILS Approach 04	No (-5.84)	63.837	17.837
22	Departure Area 22	No (-21.87)	79.872	33.872
22	ILS Missed Approach 22	No (-29.84)	87.841	41.841
Hawarden	Drone restriction zones	No (-63.92)	121.92	75.92

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 15:29:33

Reference: Plot 1W Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332762.74 Northing: 362445.40 Magnetic Brg from ARP °: 217.9417 Latitude: 53° 9' 17.6200" N Longitude: 3° 0' 24.9500" W Distance from ARP (m): 3241.99

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 41
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 53

### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (2.9)	50.095	9.095
22	Take Off Climb 22	No (-5.27)	58.272	17.272
04	Approach 04	No (-5.75)	58.748	17.748
04	ILS Approach 04	No (-5.75)	58.748	17.748
22	Departure Area 22	No (-20.51)	73.511	32.511
22	ILS Missed Approach 22	No (-28.48)	81.48	40.48
Hawarden	Drone restriction zones	No (-68.92)	121.92	80.92

# **EGNR** - Hawarden

# Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 15:31:37

Reference: Plot 1X Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332697.20 Northing: 362435.20 Magnetic Brg from ARP °: 218.7325 Latitude: 53° 9' 17.2600" N Longitude: 3° 0' 28.4700" W Distance from ARP (m): 3290.65

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 42
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 54

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (3.9)	50.095	8.095
22	Take Off Climb 22	No (-5.3)	59.298	17.298
04	Approach 04	No (-5.77)	59.773	17.773
04	ILS Approach 04	No (-5.77)	59.773	17.773
22	Departure Area 22	No (-20.79)	74.793	32.793
22	ILS Missed Approach 22	No (-28.76)	82.762	40.762
Hawarden	Drone restriction zones	No (-67.92)	121.92	79.92

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 15:36:33

Reference: Plot 1Y Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332667.79 Northing: 362391.41 Magnetic Brg from ARP °: 218.6562 Latitude: 53° 9' 15.8300" N Longitude: 3° 0' 30.0200" W Distance from ARP (m): 3343.21

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 43
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 55

### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (4.9)	50.095	7.095
22	Take Off Climb 22	No (-5.34)	60.343	17.343
04	Approach 04	No (-5.82)	60.818	17.818
04	ILS Approach 04	No (-5.82)	60.818	17.818
22	Departure Area 22	No (-21.1)	76.099	33.099
22	ILS Missed Approach 22	No (-29.07)	84.068	41.068
Hawarden	Drone restriction zones	No (-66.92)	121.92	78.92

# **EGNR** - Hawarden

# Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 15:39:00

Reference: Plot 1Z Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332626.26
 Northing:
 362357.69
 Magnetic Brg from ARP °:
 218.8481

 Latitude:
 53° 9′ 14.7200" N
 Longitude:
 3° 0′ 32.2300" W
 Distance from ARP (m):
 3395.5

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 44
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 56

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (5.9)	50.095	6.095
22	Take Off Climb 22	No (-5.4)	61.399	17.399
04	Approach 04	No (-5.87)	61.875	17.875
04	ILS Approach 04	No (-5.87)	61.875	17.875
22	Departure Area 22	No (-21.42)	77.42	33.42
22	ILS Missed Approach 22	No (-29.39)	85.388	41.388
Hawarden	Drone restriction zones	No (-65.92)	121.92	77.92

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 15:40:53

Reference: Plot 2A Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332532.67 Northing: 362374.16 Magnetic Brg from ARP °: 220.2332 Latitude: 53° 9' 15.2100" N Longitude: 3° 0' 37.2800" W Distance from ARP (m): 3442.39

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 45
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 57

### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (6.9)	50.095	5.095
22	Take Off Climb 22	No (-5.4)	62.401	17.401
04	Approach 04	No (-5.88)	62.876	17.876
04	ILS Approach 04	No (-5.88)	62.876	17.876
22	Departure Area 22	No (-21.67)	78.672	33.672
22	ILS Missed Approach 22	No (-29.64)	86.64	41.64
Hawarden	Drone restriction zones	No (-64.92)	121.92	76.92

# EGNR - Hawarden

# Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 15:42:54

Reference: Plot 2B Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332458.35 Northing: 362373.66 Magnetic Brg from ARP °: 221.1592 Latitude: 53° 9' 15.1600" N Longitude: 3° 0' 41.2800" W Distance from ARP (m): 3491.23

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 46
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 58

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (7.9)	50.095	4.095
22	Take Off Climb 22	No (-5.4)	63.399	17.399
04	Approach 04	No (-5.87)	63.874	17.874
04	ILS Approach 04	No (-5.87)	63.874	17.874
22	Departure Area 22	No (-21.92)	79.919	33.919
22	ILS Missed Approach 22	No (-29.89)	87.888	41.888
Hawarden	Drone restriction zones	No (-63.92)	121.92	75.92

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 15:44:59

Reference: Plot 2C Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332404.56 Northing: 362353.71 Magnetic Brg from ARP °: 221.6019 Latitude: 53° 9′ 14.4900" N Longitude: 3° 0′ 44.1600" W Distance from ARP (m): 3541.75

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 47
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 59

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (8.9)	50.095	3.095
22	Take Off Climb 22	No (-5.41)	64.413	17.413
04	Approach 04	No (-5.89)	64.888	17.888
04	ILS Approach 04	No (-5.89)	64.888	17.888
22	Departure Area 22	No (-22.19)	81.187	34.187
22	ILS Missed Approach 22	No (-30.16)	89.155	42.155
Hawarden	Drone restriction zones	No (-62.92)	121.92	74.92

## EGNR - Hawarden

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 15:49:03

Reference: Plot 2D Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332739.56
 Northing:
 362395.35
 Magnetic Brg from ARP °:
 217.7246

 Latitude:
 53° 9' 15.9900" N
 Longitude:
 3° 0' 26.1600" W
 Distance from ARP (m):
 3295.74

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 42
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 54

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (3.9)	50.095	8.095
22	Take Off Climb 22	No (-5.33)	59.328	17.328
04	Approach 04	No (-5.8)	59.803	17.803
04	ILS Approach 04	No (-5.8)	59.803	17.803
22	Departure Area 22	No (-20.83)	74.83	32.83
22	ILS Missed Approach 22	No (-28.8)	82.799	40.799
Hawarden	Drone restriction zones	No (-67.92)	121.92	79.92

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 15:51:26

Reference: Plot 2E Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332718.40 Northing: 362344.34 Magnetic Brg from ARP °: 217.4769 Latitude: 53° 9′ 14.3300" N Longitude: 3° 0′ 27.2600" W Distance from ARP (m): 3349.06

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 43
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 55

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (4.9)	50.095	7.095
22	Take Off Climb 22	No (-5.37)	60.37	17.37
04	Approach 04	No (-5.85)	60.846	17.846
04	ILS Approach 04	No (-5.85)	60.846	17.846
22	Departure Area 22	No (-21.13)	76.134	33.134
22	ILS Missed Approach 22	No (-29.1)	84.102	41.102
Hawarden	Drone restriction zones	No (-66.92)	121.92	78.92

# **EGNR - Hawarden**

# Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 15:53:21

Reference: Plot 2F Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332601.63
 Northing:
 362310.44
 Magnetic Brg from ARP °:
 218.6743

 Latitude:
 53° 9' 13.1800" N
 Longitude:
 3° 0' 33.5200" W
 Distance from ARP (m):
 3447.77

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 45
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 57

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (6.9)	50.095	5.095
22	Take Off Climb 22	No (-5.43)	62.432	17.432
04	Approach 04	No (-5.91)	62.908	17.908
04	ILS Approach 04	No (-5.91)	62.908	17.908
22	Departure Area 22	No (-21.71)	78.711	33.711
22	ILS Missed Approach 22	No (-29.68)	86.679	41.679
Hawarden	Drone restriction zones	No (-64.92)	121.92	76.92

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 15:56:28

Reference: Plot 2H Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332690.65 Northing: 362299.30 Magnetic Brg from ARP °: 217.3863 Latitude: 53° 9′ 12.8600" N Longitude: 3° 0′ 28.7200" W Distance from ARP (m): 3401.7

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 44
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 56

### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (5.9)	50.095	6.095
22	Take Off Climb 22	No (-5.41)	61.412	17.412
04	Approach 04	No (-5.89)	61.887	17.887
04	ILS Approach 04	No (-5.89)	61.887	17.887
22	Departure Area 22	No (-21.44)	77.436	33.436
22	ILS Missed Approach 22	No (-29.4)	85.404	41.404
Hawarden	Drone restriction zones	No (-65.92)	121.92	77.92

# EGNR - Hawarden

# Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 15:58:22

Reference: Plot 21 Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332472.98 Northing: 362291.55 Magnetic Brg from ARP °: 220.1073 Latitude: 53° 9' 12.5100" N Longitude: 3° 0' 40.4300" W Distance from ARP (m): 3544.01

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 47
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 59

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (8.9)	50.095	3.095
22	Take Off Climb 22	No (-5.43)	64.428	17.428
04	Approach 04	No (-5.9)	64.904	17.904
04	ILS Approach 04	No (-5.9)	64.904	17.904
22	Departure Area 22	No (-22.21)	81.206	34.206
22	ILS Missed Approach 22	No (-30.17)	89.174	42.174
Hawarden	Drone restriction zones	No (-62.92)	121.92	74.92

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 16:19:16

Reference: Plot 2J Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332765.66 Northing: 362230.25 Magnetic Brg from ARP °: 215.6814 Latitude: 53° 9' 10.6600" N Longitude: 3° 0' 24.6300" W Distance from ARP (m): 3412.52

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 44
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 56

### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (5.9)	50.095	6.095
22	Take Off Climb 22	No (-5.44)	61.442	17.442
04	Approach 04	No (-5.92)	61.917	17.917
04	ILS Approach 04	No (-5.92)	61.917	17.917
22	Departure Area 22	No (-21.47)	77.473	33.473
22	ILS Missed Approach 22	No (-29.44)	85.442	41.442
Hawarden	Drone restriction zones	No (-65.92)	121.92	77.92

# EGNR - Hawarden

# Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 16:21:10

Reference: Plot 2K Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332671.14 Northing: 362246.42 Magnetic Brg from ARP °: 217.111 Latitude: 53° 9' 11.1400" N Longitude: 3° 0' 29.7300" W Distance from ARP (m): 3455.6

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 45
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 57

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (6.9)	50.095	5.095
22	Take Off Climb 22	No (-5.46)	62.461	17.461
04	Approach 04	No (-5.94)	62.936	17.936
04	ILS Approach 04	No (-5.94)	62.936	17.936
22	Departure Area 22	No (-21.75)	78.746	33.746
22	ILS Missed Approach 22	No (-29.71)	86.715	41.715
Hawarden	Drone restriction zones	No (-64.92)	121.92	76.92

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 16:22:50

Reference: Plot 2L Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332575.71 Northing: 362264.45 Magnetic Brg from ARP °: 218.535 Latitude: 53° 9′ 11.6800" N Longitude: 3° 0′ 34.8800" W Distance from ARP (m): 3499.88

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 46
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 58

### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (7.9)	50.095	4.095
22	Take Off Climb 22	No (-5.46)	63.463	17.463
04	Approach 04	No (-5.94)	63.939	17.939
04	ILS Approach 04	No (-5.94)	63.939	17.939
22	Departure Area 22	No (-22)	80	34
22	ILS Missed Approach 22	No (-29.97)	87.968	41.968
Hawarden	Drone restriction zones	No (-63.92)	121.92	75.92

# **EGNR** - Hawarden

# Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 16:24:37

Reference: Plot 2M Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332742.51 Northing: 362195.96 Magnetic Brg from ARP °: 215.6616 Latitude: 53° 9' 09.5400" N Longitude: 3° 0' 25.8500" W Distance from ARP (m): 3453.88

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 40
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 52

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (1.9)	50.095	10.095
22	Take Off Climb 22	No (-10.26)	62.262	22.262
04	Approach 04	No (-10.74)	62.737	22.737
04	ILS Approach 04	No (-10.74)	62.737	22.737
22	Departure Area 22	No (-26.5)	78.498	38.498
22	ILS Missed Approach 22	No (-34.47)	86.467	46.467
Hawarden	Drone restriction zones	No (-69.92)	121.92	81.92

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 16:26:32

Reference: Plot 2N Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332635.70
 Northing:
 362210.45
 Magnetic Brg from ARP °:
 217.2181

 Latitude:
 53° 9′ 09.9600" N
 Longitude:
 3° 0′ 31.6100" W
 Distance from ARP (m):
 3505.67

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 46
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 58

#### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (7.9)	50.095	4.095
22	Take Off Climb 22	No (-5.47)	63.469	17.469
04	Approach 04	No (-5.94)	63.945	17.945
04	ILS Approach 04	No (-5.94)	63.945	17.945
22	Departure Area 22	No (-22.01)	80.007	34.007
22	ILS Missed Approach 22	No (-29.98)	87.976	41.976
Hawarden	Drone restriction zones	No (-63.92)	121.92	75.92

# EGNR - Hawarden

# Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 7 June 2021 at 16:28:38

Reference: Plot 20 Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332540.48 Northing: 362230.02 Magnetic Brg from ARP °: 218.6337 Latitude: 53° 9' 10.5500" N Longitude: 3° 0' 36.7500" W Distance from ARP (m): 3548.76

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 47
Height of structure above ground level (m): 12
Height of structure above mean sea level (m): 59

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (8.9)	50.095	3.095
22	Take Off Climb 22	No (-5.45)	64.446	17.446
04	Approach 04	No (-5.92)	64.922	17.922
04	ILS Approach 04	No (-5.92)	64.922	17.922
22	Departure Area 22	No (-22.23)	81.228	34.228
22	ILS Missed Approach 22	No (-30.2)	89.197	42.197
Hawarden	Drone restriction zones	No (-62.92)	121.92	74.92

# **Domestic Buildings**

### EGNR - Hawarden

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 12:26:12

Reference: Plot 2P Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332827.03 Northing: 362102.36 Magnetic Brg from ARP °: 213.6338 Latitude: 53° 9′ 06.5500" N Longitude: 3° 0′ 21.2300" W Distance from ARP (m): 3482.83

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 45
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 53

### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (2.905)	50.095	5.095
04	Approach 04	No (-10.007)	63.007	18.007
04	ILS Approach 04	No (-10.007)	63.007	18.007
22	Departure Area 22	No (-25.835)	78.835	33.835
22	ILS Missed Approach 22	No (-33.803)	86.803	41.803
Hawarden	Drone restriction zones	No (-68.92)	121.92	76.92

# EGNR - Hawarden

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 12:29:31

Reference: Plot 2Q Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332790.69 Northing: 362068.26 Magnetic Brg from ARP °: 213.8181 Latitude: 53° 9' 05.4300" N Longitude: 3° 0' 23.1600" W Distance from ARP (m): 3531.37

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 50
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 58

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Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)	
Hawarden	Inner Horizontal	Yes (7.905)	50.095	0.095	
04	Approach 04	No (-6)	64	14	
04	ILS Approach 04	No (-6)	64	14	
22	Departure Area 22	No (-22.076)	80.076	30.076	
22	ILS Missed Approach 22	No (-30.044)	88.044	38.044	
Hawarden	Drone restriction zones	No (-63.92)	121.92	71.92	

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 12:33:31

Reference: Plot 2R Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332747.93 Northing: 362105.64 Magnetic Brg from ARP °: 214.7339 Latitude: 53° 9' 06.6200" N Longitude: 3° 0' 25.4900" W Distance from ARP (m): 3524.57

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 50
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 58

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (7.905)	50.095	0.095
04	Approach 04	No (-6.012)	64.012	14.012
04	ILS Approach 04	No (-6.012)	64.012	14.012
22	Departure Area 22	No (-22.092)	80.092	30.092
22	ILS Missed Approach 22	No (-30.06)	88.06	38.06
Hawarden	Drone restriction zones	No (-63.92)	121.92	71.92

# EGNR - Hawarden

# Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 12:35:33

Reference: Plot 2S Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332695.12 Northing: 362089.07 Magnetic Brg from ARP °: 215.2793 Latitude: 53° 9′ 06.0600" N Longitude: 3° 0′ 28.3200" W Distance from ARP (m): 3568.43

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 51
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 59

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (8.905)	50.095	-0.905
04	Approach 04	No (-5.963)	64.963	13.963
04	ILS Approach 04	No (-5.963)	64.963	13.963
22	Departure Area 22	No (-22.28)	81.28	30.28
22	ILS Missed Approach 22	No (-30.249)	89.249	38.249
Hawarden	Drone restriction zones	No (-62.92)	121.92	70.92

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 12:37:21

Reference: Plot 2T Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332711.08
 Northing:
 362140.46
 Magnetic Brg from ARP °:
 215.5506

 Latitude:
 53° 9' 07.7300" N
 Longitude:
 3° 0' 27.5000" W
 Distance from ARP (m):
 3517.3

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 50
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 58

### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (7.905)	50.095	0.095
04	Approach 04	No (-5.984)	63.984	13.984
04	ILS Approach 04	No (-5.984)	63.984	13.984
22	Departure Area 22	No (-22.056)	80.056	30.056
22	ILS Missed Approach 22	No (-30.025)	88.025	38.025
Hawarden	Drone restriction zones	No (-63.92)	121.92	71.92

### EGNR - Hawarden

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 12:39:04

Reference: Plot 2U Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332628.29 Northing: 362080.12 Magnetic Brg from ARP °: 216.0621 Latitude: 53° 9′ 05.7400" N Longitude: 3° 0′ 31.9100" W Distance from ARP (m): 3614.67

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 52
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 60

Surface	Penetrates	Max. AMSL (m)	Max AGL (m)	
Inner Horizontal	Yes (9.905)	50.095	-1.905	
Take Off Climb 22	No (-5.511)	65.511	13.511	
Approach 04	No (-5.987)	65.987	13.987	
ILS Approach 04	No (-5.987)	65.987	13.987	
Departure Area 22	No (-22.56)	82.56	30.56	
ILS Missed Approach 22	No (-30.529)	90.529	38.529	
Drone restriction zones	No (-61.92)	121.92	69.92	
	Inner Horizontal Take Off Climb 22 Approach 04 ILS Approach 04 Departure Area 22 ILS Missed Approach 22	Inner Horizontal         Yes (9.905)           Take Off Climb 22         No (-5.511)           Approach 04         No (-5.987)           ILS Approach 04         No (-5.987)           Departure Area 22         No (-22.56)           ILS Missed Approach 22         No (-30.529)	Inner Horizontal         Yes (9.905)         50.095           Take Off Climb 22         No (-5.511)         65.511           Approach 04         No (-5.987)         65.987           ILS Approach 04         No (-5.987)         65.987           Departure Area 22         No (-22.56)         82.56           ILS Missed Approach 22         No (-30.529)         90.529	

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 12:41:16

Reference: Plot 2V Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332632.89
 Northing:
 362143.11
 Magnetic Brg from ARP °:
 216.5988

 Latitude:
 53° 9′ 07.7800" N
 Longitude:
 3° 0′ 31.7100" W
 Distance from ARP (m):
 3561.2

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 51
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 59

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (8.905)	50.095	-0.905
22	Take Off Climb 22	No (-5.511)	64.511	13.511
04	Approach 04	No (-5.986)	64.986	13.986
04	ILS Approach 04	No (-5.986)	64.986	13.986
22	Departure Area 22	No (-22.309)	81.309	30.309
22	ILS Missed Approach 22	No (-30.278)	89.278	38.278
Hawarden	Drone restriction zones	No (-62.92)	121.92	70.92

### EGNR - Hawarden

### Obstruction Information Summary Report

Report Generated by : GDMS Administrator on 8 June 2021 at 12:44:04

Reference: Plot 2W Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332599.64 Northing: 362037.57 Magnetic Brg from ARP °: 216.0326 Latitude: 53° 9' 04.3500" N Longitude: 3° 0' 33.4200" W Distance from ARP (m): 3665.94

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 53
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 61

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (10.905)	50.095	-2.905
22	Take Off Climb 22	No (-5.528)	66.528	13.528
04	Approach 04	No (-6.003)	67.003	14.003
04	ILS Approach 04	No (-6.003)	67.003	14.003
22	Departure Area 22	No (-22.831)	83.831	30.831
22	ILS Missed Approach 22	No (-30.799)	91.799	38.799
Hawarden	Drone restriction zones	No (-60.92)	121.92	68.92

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 12:45:51

Reference: Plot 2X Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332564.80 Northing: 362136.34 Magnetic Brg from ARP °: 217.403 Latitude: 53° 9' 07.5300" N Longitude: 3° 0' 35.3700" W Distance from ARP (m): 3607.59

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 52
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 60

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (9.905)	50.095	-1.905
22	Take Off Climb 22	No (-5.519)	65.519	13.519
04	Approach 04	No (-5.995)	65.995	13.995
04	ILS Approach 04	No (-5.995)	65.995	13.995
22	Departure Area 22	No (-22.57)	82.57	30.57
22	ILS Missed Approach 22	No (-30.538)	90.538	38.538
Hawarden	Drone restriction zones	No (-61.92)	121.92	69.92

## **EGNR** - Hawarden

## Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 12:48:03

Reference: Plot 2Y Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332571.35 Northing: 361994.70 Magnetic Brg from ARP °: 215.9965 Latitude: 53° 9' 02.9500" N Longitude: 3° 0' 34.9100" W Distance from ARP (m): 3717.25

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 54
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 62

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Surface	Penetrates	Max. AMSL (m)	Max AGL (m)	
Inner Horizontal	Yes (11.905)	50.095	-3.905	
Take Off Climb 22	No (-5.544)	67.544	13.544	
Approach 04	No (-6.02)	68.02	14.02	
ILS Approach 04	No (-6.02)	68.02	14.02	
Departure Area 22	No (-23.101)	85.101	31.101	
ILS Missed Approach 22	No (-31.07)	93.07	39.07	
Drone restriction zones	No (-59.92)	121.92	67.92	
	Surface Inner Horizontal Take Off Climb 22 Approach 04 ILS Approach 04 Departure Area 22 ILS Missed Approach 22	Surface         Penetrates           Inner Horizontal         Yes (11.905)           Take Off Climb 22         No (-5.544)           Approach 04         No (-6.02)           ILS Approach 04         No (-6.02)           Departure Area 22         No (-23.101)           ILS Missed Approach 22         No (-31.07)	Inner Horizontal         Yes (11.905)         50.095           Take Off Climb 22         No (-5.544)         67.544           Approach 04         No (-6.02)         68.02           ILS Approach 04         No (-6.02)         68.02           Departure Area 22         No (-23.101)         85.101           ILS Missed Approach 22         No (-31.07)         93.07	

# Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 12:50:32

Reference: Plot 2Z Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332528.08 Northing: 362035.49 Magnetic Brg from ARP °: 216.9074 Latitude: 53° 9' 04.2500" N Longitude: 3° 0' 37.2700" W Distance from ARP (m): 3710.15

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 54
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 62

### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (11.905)	50.095	-3.905
22	Take Off Climb 22	No (-5.513)	67.513	13.513
04	Approach 04	No (-5.988)	67.988	13.988
04	ILS Approach 04	No (-5.988)	67.988	13.988
22	Departure Area 22	No (-23.062)	85.062	31.062
22	ILS Missed Approach 22	No (-31.03)	93.03	39.03
Hawarden	Drone restriction zones	No (-59.92)	121.92	67.92

# EGNR - Hawarden

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 12:52:19

Reference: Plot 3A Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332513.61 Northing: 362116.36 Magnetic Brg from ARP °: 217.8502 Latitude: 53° 9′ 06.8600" N Longitude: 3° 0′ 38.1100" W Distance from ARP (m): 3654.67

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 53
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 61

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (10.905)	50.095	-2.905
22	Take Off Climb 22	No (-5.499)	66.499	13.499
04	Approach 04	No (-5.975)	66.975	13.975
04	ILS Approach 04	No (-5.975)	66.975	13.975
22	Departure Area 22	No (-22.795)	83.795	30.795
22	ILS Missed Approach 22	No (-30.764)	91.764	38.764
Hawarden	Drone restriction zones	No (-60.92)	121.92	68.92

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 12:54:16

Reference: Plot 3B Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332546.20 Northing: 361950.24 Magnetic Brg from ARP °: 215.9086 Latitude: 53° 9′ 01.5000" N Longitude: 3° 0′ 36.2300" W Distance from ARP (m): 3768.01

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 55
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 63

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (12.905)	50.095	-4.905
22	Take Off Climb 22	No (-5.543)	68.543	13.543
04	Approach 04	No (-6.018)	69.018	14.018
04	ILS Approach 04	No (-6.018)	69.018	14.018
22	Departure Area 22	No (-23.349)	86.349	31.349
22	ILS Missed Approach 22	No (-31.317)	94.317	39.317
Hawarden	Drone restriction zones	No (-58.92)	121.92	66.92

# EGNR - Hawarden

# Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 12:56:29

Reference: Plot 3C Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332463.65 Northing: 362025.27 Magnetic Brg from ARP °: 217.5995 Latitude: 53° 9' 03.8900" N Longitude: 3° 0' 40.7300" W Distance from ARP (m): 3757.29

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 55
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 63

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (12.905)	50.095	-4.905
22	Take Off Climb 22	No (-5.524)	68.524	13.524
04	Approach 04	No (-5.999)	68.999	13.999
04	ILS Approach 04	No (-5.999)	68.999	13.999
22	Departure Area 22	No (-23.325)	86.325	31.325
22	ILS Missed Approach 22	No (-31.294)	94.294	39.294
Hawarden	Drone restriction zones	No (-58.92)	121.92	66.92

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 12:57:58

Reference: Plot 3D Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332471.53 Northing: 362083.88 Magnetic Brg from ARP °: 218.0557 Latitude: 53° 9' 05.7900" N Longitude: 3° 0' 40.3500" W Distance from ARP (m): 3706.15

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 54
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 62

### **Penetration Information**

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (11.905)	50.095	-3.905
22	Take Off Climb 22	No (-5.545)	67.545	13.545
04	Approach 04	No (-6.02)	68.02	14.02
04	ILS Approach 04	No (-6.02)	68.02	14.02
22	Departure Area 22	No (-23.101)	85.101	31.101
22	ILS Missed Approach 22	No (-31.07)	93.07	39.07
Hawarden	Drone restriction zones	No (-59.92)	121.92	67.92

# **EGNR** - Hawarden

# Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 13:38:00

Reference: Plot 3E Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332379.63
 Northing:
 362036.04
 Magnetic Brg from ARP °:
 218.7021

 Latitude:
 53° 9' 04.2000" N
 Longitude:
 3° 0' 45.2600" W
 Distance from ARP (m):
 3800.72

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 56
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 64

Surface	Penetrates	Max. AMSL (m)	Max AGL (m)	
Inner Horizontal	Yes (13.905)	50.095	-5.905	
Take Off Climb 22	No (-5.483)	69.483	13.483	
Approach 04	No (-6.04)	70.04	14.04	
ILS Approach 04	No (-6.04)	70.04	14.04	
Departure Area 22	No (-23.524)	87.524	31.524	
ILS Missed Approach 22	No (-31.493)	95.493	39.493	
Drone restriction zones	No (-57.92)	121.92	65.92	
	Inner Horizontal Take Off Climb 22 Approach 04 ILS Approach 04 Departure Area 22 ILS Missed Approach 22	Inner Horizontal         Yes (13.905)           Take Off Climb 22         No (-5.483)           Approach 04         No (-6.04)           ILS Approach 04         No (-6.04)           Departure Area 22         No (-23.524)           ILS Missed Approach 22         No (-31.493)	Inner Horizontal         Yes (13.905)         50.095           Take Off Climb 22         No (-5.483)         69.483           Approach 04         No (-6.04)         70.04           ILS Approach 04         No (-6.04)         70.04           Departure Area 22         No (-23.524)         87.524           ILS Missed Approach 22         No (-31.493)         95.493	

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 14:40:48

Reference: Plot 3F Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332420.22 Northing: 362134.37 Magnetic Brg from ARP °: 219.1637 Latitude: 53° 9' 07.4000" N Longitude: 3° 0' 43.1500" W Distance from ARP (m): 3698.72

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 54
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 62

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (11.905)	50.095	-3.905
22	Take Off Climb 22	No (-5.475)	67.475	13.475
04	Approach 04	No (-5.951)	67.951	13.951
04	ILS Approach 04	No (-5.951)	67.951	13.951
22	Departure Area 22	No (-23.015)	85.015	31.015
22	ILS Missed Approach 22	No (-30.983)	92.983	38.983
Hawarden	Drone restriction zones	No (-59.92)	121.92	67.92

# EGNR - Hawarden

# Obstruction Information Summary Report

Report Generated by : GDMS Administrator on 8 June 2021 at 14:42:43

Reference: Plot 3G Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332387.34 Northing: 362095.27 Magnetic Brg from ARP °: 219.176 Latitude: 53° 9' 06.1200" N Longitude: 3° 0' 44.8900" W Distance from ARP (m): 3749.8

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 55
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 63

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (12.905)	50.095	-4.905
22	Take Off Climb 22	No (-5.497)	68.497	13.497
04	Approach 04	No (-5.972)	68.972	13.972
04	ILS Approach 04	No (-5.972)	68.972	13.972
22	Departure Area 22	No (-23.292)	86.292	31.292
22	ILS Missed Approach 22	No (-31.26)	94.26	39.26
Hawarden	Drone restriction zones	No (-58.92)	121.92	66.92

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 14:51:17

Reference: Plot 3I Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332338.21 Northing: 362141.71 Magnetic Brg from ARP °: 220.2075 Latitude: 53° 9′ 07.6000" N Longitude: 3° 0′ 47.5700" W Distance from ARP (m): 3745.45

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 55
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 63

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (12.905)	50.095	-4.905
22	Take Off Climb 22	No (-5.459)	68.459	13.459
04	Approach 04	No (-5.934)	68.934	13.934
04	ILS Approach 04	No (-5.934)	68.934	13.934
22	Departure Area 22	No (-23.244)	86.244	31.244
22	ILS Missed Approach 22	No (-31.213)	94.213	39.213
Hawarden	Drone restriction zones	No (-58.92)	121.92	66.92

# EGNR - Hawarden

# Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 14:53:06

Reference: Plot 3J Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332299.47
 Northing:
 362108.57
 Magnetic Brg from ARP °:
 220.3312

 Latitude:
 53° 9′ 06.5100" N
 Longitude:
 3° 0′ 49.6300" W
 Distance from ARP (m):
 3795.78

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 56
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 64

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (13.905)	50.095	-5.905
22	Take Off Climb 22	No (-5.469)	69.469	13.469
04	Approach 04	No (-6.023)	70.023	14.023
04	ILS Approach 04	No (-6.023)	70.023	14.023
22	Departure Area 22	No (-23.508)	87.508	31.508
22	ILS Missed Approach 22	No (-31.476)	95.476	39.476
Hawarden	Drone restriction zones	No (-57.92)	121.92	65.92

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 14:58:03

Reference: Plot 3K Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332330.54 Northing: 362216.61 Magnetic Brg from ARP °: 221.0485 Latitude: 53° 9' 10.0200" N Longitude: 3° 0' 48.0400" W Distance from ARP (m): 3693.6

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 54
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 62

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (11.905)	50.095	-3.905
22	Take Off Climb 22	No (-5.444)	67.444	13.444
04	Approach 04	No (-5.92)	67.92	13.92
04	ILS Approach 04	No (-5.92)	67.92	13.92
22	Departure Area 22	No (-22.976)	84.976	30.976
22	ILS Missed Approach 22	No (-30.944)	92.944	38.944
Hawarden	Drone restriction zones	No (-59.92)	121.92	67.92

# EGNR - Hawarden

## Obstruction Information Summary Report

Report Generated by : GDMS Administrator on 8 June 2021 at 15:11:07

Reference: Plot 3L Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332288.52 Northing: 362188.15 Magnetic Brg from ARP °: 221.2475 Latitude: 53° 9' 09.0800" N Longitude: 3° 0' 50.2800" W Distance from ARP (m): 3742.67

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 55
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 63

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (12.905)	50.095	-4.905
22	Take Off Climb 22	No (-5.429)	68.429	13.429
04	Approach 04	No (-5.904)	68.904	13.904
04	ILS Approach 04	No (-5.904)	68.904	13.904
22	Departure Area 22	No (-23.206)	86.206	31.206
22	ILS Missed Approach 22	No (-31.175)	94.175	39.175
Hawarden	Drone restriction zones	No (-58.92)	121.92	66.92

### Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 15:13:19

Reference: Plot 3M Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

Easting: 332247.63 Northing: 362226.44 Magnetic Brg from ARP °: 222.1049
Latitude: 53° 9' 10.3000" N Longitude: 3° 0' 52.5100" W Distance from ARP (m): 3741.27

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 55
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 63

#### Penetration Information

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (12.905)	50.095	-4.905
22	Take Off Climb 22	No (-5.402)	68.402	13.402
04	Approach 04	No (-5.878)	68.878	13.878
04	ILS Approach 04	No (-5.878)	68.878	13.878
22	Departure Area 22	No (-23.174)	86.174	31.174
22	ILS Missed Approach 22	No (-31.142)	94.142	39.142
Hawarden	Drone restriction zones	No (-58.92)	121.92	66.92

# **EGNR** - Hawarden

# Obstruction Information Summary Report

Report Generated by: GDMS Administrator on 8 June 2021 at 15:14:54

Reference: Plot 3N Type: BUILDING Mobility: Permanent

Group: 2021 Obstructions

Spot Height

Description: Checks Warren

Hall

 Easting:
 332206.52
 Northing:
 362262.25
 Magnetic Brg from ARP °:
 222.9395

 Latitude:
 53° 9' 11.4400" N
 Longitude:
 3° 0' 54.7500" W
 Distance from ARP (m):
 3742.65

Horizontal Extents (Radius in m): N/A
Ground level above mean sea level (m): 55
Height of structure above ground level (m): 8
Height of structure above mean sea level (m): 63

Dsgn.	Surface	Penetrates	Max. AMSL (m)	Max AGL (m)
Hawarden	Inner Horizontal	Yes (12.905)	50.095	-4.905
22	Take Off Climb 22	No (-5.416)	68.416	13.416
04	Approach 04	No (-5.892)	68.892	13.892
04	ILS Approach 04	No (-5.892)	68.892	13.892
22	Departure Area 22	No (-23.191)	86.191	31.191
22	ILS Missed Approach 22	No (-31.159)	94.159	39.159
Hawarden	Drone restriction zones	No (-58.92)	121.92	66.92

### Appendix 2 – Airbus Further Requirements



#### [ Airbus Amber ]

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Our Reference: Warren Hall Response June 2021

6 July 2021

# Warren Hall Development - Local Development Plan Assessment against Spot Heights Given

Dear Mr Roberts,

Following a meeting held on the 17<sup>th</sup> May 2021 between Welsh Government, Flintshire County Council, Tetra Tech, Airbus Public Affairs and the Airbus Aerodrome Team, Airbus took the action to:

 Assess all spot heights provided to establish if there were any infringement to the Approach and Take off surfaces for Runway 04.

Airbus has assessed all spot heights provided and there is no infringement to the approach and take off surfaces of runway 04. There is still an infringement to the inner horizontal which **could** be acceptable subject to an approved Safety Assessment.

### Outstanding Assessments to be provided by Developer

- Safety Assessment The inner horizontal surface <u>may</u> be infringed subject to a suitable safety assessment being carried out. This suitable safety assessment should be conducted by a CAA accredited Approved Procedure Design Organisation (APDO) consultant and must consider at the very least:
  - a. The height of the structure against the inner horizontal surface penetration;
  - b. The effects to the operational safety of the aircraft within the airspace;
  - c. The detrimental effects to landing, departing and positioning of aircraft, suggesting appropriate mitigations; and

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d. Further influences that could impact operational safety such as temperature, weather and aircraft performance parameters.

The developer is responsible for sourcing the suitable safety assessment of the inner horizontal surface by a CAA accredited APDO consultant.

The Airbus Head of Aerodrome Management is the authority that will validate the suitability of the inner horizontal surface safety assessment, based on the risks and mitigations presented within the assessment. For the avoidance of doubt this means that it is Airbus' decision as the aerodrome operator responsible for managing the Obstacle Limitation Surface (OLS) if the mitigation measures related to any infringement to the OLS are acceptable.

The CAA as Hawarden's regulator may also wish to review the suitability of the inner horizontal surface safety assessment and that the overall risk mitigation plan has satisfied any safety concerns raised.

As outlined in the Airbus letter dated 15<sup>th</sup> January 2019, Airbus reference *'Warren Hall IFP Response'*, there are still a number of actions proposed that Airbus would require a conclusion to, and to support the decision process and the CAA regulator.

### • IFP - Further Impact Assessment

The IFP assessment presented at the LDP hearing on 14<sup>th</sup> April 2021 should have been measured against the indicative plan and all proposed buildings assigned to the plan, inclusive of all domestic properties. If it has not been measured against these express criteria then an additional IFP assessment will be required that does.

### Collision Risk Modelling

Airbus requires confirmation that a valid Collision Risk Modelling study has been completed to determine the obstacle clearance altitude in accordance with the indicative plan and if any concerns have been raised regarding aerodrome operations.

#### Beluga Flight Performance

Airbus further requires the provision of the Warren Hall indicative plan to allow Airbus to complete a flight performance assessment of future Beluga fleet parameters.

In addition to the above, the following assessment also needs to be commissioned and completed by the developer;

#### • A Global Navigation Satellite System (GNSS) Assessment

A GNSS Assessment will be required to identify if this development has any impact or restrictions to the future implementation of the GNSS approach technology to enhance safety for all aviation.

#### Noise Assessment

An environmental noise assessment will be required to establish if there will be any impact to human health and noise annoyance and considering the association between exposure to aircraft noise, because of its intensity, the location of the source and its variability and unpredictability of aircraft movements to/from Hawarden.

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Should the assessment show a potential exposure risk, mitigation may be required to the properties to manage the impact.

If this development is approved as part of the LDP, Airbus as a statutory consultee on the application process, would table a number of conditions (and/or planning obligations) and restrictive covenants associated to this development to ensure the safe operation and continued use of the aerodrome.

#### **Example Conditions**

### Submission of a Scheme of Aerodrome Safeguarding Measures

Development shall not commence until a Scheme of Aerodrome Safeguarding Measures has been submitted to and approved in writing by the Local Planning Authority covering the application site and any adjoining land which will be used during the construction period and such Scheme implemented. The Scheme shall include the following:

- Details of cranes and other tall construction equipment including details of obstacle lighting such schemes shall comply with Advice Note 4 'Cranes and Other Construction Issues' (available from the Advice Note links below)
- Details of temporary lighting and street lighting Such details shall comply with Advice Note 2 'Lighting near Aerodromes' (available from the Advice Note links below).
- Control and disposal of waste to prevent the attraction of birds.
- Monitoring and control of bird activity on-site. Earth working during construction has the potential
  to attract foraging birds, which would result in an increase in bird activity very close to the airfield.
   Control would be needed during the construction period to minimise the bird strike hazard
- Solar voltaic panels inclusive of Commercial and Domestic buildings (available from the Advice Note links below).

#### **Removal of Permitted Development Rights**

Notwithstanding the provisions of schedule 2, part 1, class E of the Town and Country Planning (General Permitted Development) Order 1995 (as amended for Wales) (or any order revoking and reenacting that order with or without modification), no buildings or other structures shall be erected other than those expressly authorised by this permission and shown on plan [x].

A broad brush (possibly by way of an Article 4 direction) will be required in terms of removal of permitted development rights, including (but not limited to) upward extensions, solar panels, masts, aerials, flag poles and other additions which would have a deleterious impact on the OLS.

#### Wildlife hazards

Mitigation will be required for any attenuation ponds to prevent the feeding, loafing, breeding and roosting opportunities for Waterfowl, Wader and Gulls e.g. Swans, Gulls, Geese, Ducks, Herons and Egrets, wading birds such as Lapwings, Oystercatchers etc – Such details shall comply with Advice Not 3 "Wildlife Hazards" (available from the Advice Note links below).

#### **Example Restricted Covenant**

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A restrictive covenant to be placed on the land and recorded at the Land Registry that limits what can be done to a property or piece of land associated with the development.

It will consist of an agreement in the title deeds, which will restrict any actions, re-development or modification change to the approved development that has the potential to interrupt or restrict the safety and operations of Airbus from Hawarden Aerodrome including but not limited to:.

- Housing and breeding of pigeons in either a commercial or domestic dwelling
- Large communication aerials and radio masts
- Structures breaching the maximum heights agreed on the development, which come under permitted development

Whilst restrictive covenants sit outside the planning system, it is within the gift of the current owner to enter into such restrictive covenants (as it has done previously) such that it would bind the land and offer a further layer of protection beyond the planning limitations.

It is <u>not</u> considered that a restrictive covenant obviates the need for robust planning controls.

#### Conclusion

Airbus is committed to working in partnership with Welsh Government and Flintshire County Council on this topic and looks forward to discussing the recommendations in this letter at the earliest possible opportunity.

#### **Advice Notes**

Lighting (No2) - <a href="https://www.aoa.org.uk/wp-content/uploads/2016/09/Advice-Note-2-Lighting-2016.pdf">https://www.aoa.org.uk/wp-content/uploads/2016/09/Advice-Note-2-Lighting-2016.pdf</a>

Wildlife (No3) - https://www.aoa.org.uk/wp-content/uploads/2016/09/Advice-Note-3-Wildlife-Hazards-2016.pdf

Cranes (No4) - https://www.aoa.org.uk/wp-content/uploads/2016/09/Advice-Note-4-Cranes-2016.pdf

Renewable Energy (No5) - https://www.aoa.org.uk/wp-content/uploads/2016/09/Advice-Note-5-

Renewable-Energy-2016.pdf

Yours sincerely,

Warren Brown Safeguarding & Compliance Manager For and on behalf of Airbus Operations Ltd.