

The Hillingdon Hospital Redevelopment - Mount Vernon Hospital Decant Parking Transport Technical Note

Project:	The Hillingdon Hospital Redevelopment		
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Subject:	Mount Vernon Hospital Decant Parking Transport Technical Note		

1 Introduction

Mott MacDonald has been appointed by The Hillingdon Hospitals NHS Foundation Trust (the Trust) to provide transport planning advice and to prepare a Transport Technical Note in support of a planning application for the use of existing on-site car parking areas, to accommodate additional parking demand generated by the decant from Hillingdon Hospital.

1.1 Purpose

This Technical Note sets out the basis on which decanting of parking from the Hillingdon Hospital development is being addressed within the Mount Vernon Hospital estate.

1.2 The Trust

The Trust operates two hospital sites in the London Borough of Hillingdon. Hillingdon Hospital is a major acute hospital with services including accident and emergency, inpatients, day surgery and outpatients. The Hillingdon Hospital is located on Pield Heath Road, approximately two miles south of Uxbridge and three miles north of West Drayton.

The Trust also operates Mount Vernon Hospital, in cooperation with the East and North Hertfordshire NHS Trust. Mount Vernon Hospital has a modern Diagnostic and Treatment Centre and existing Princess Christian Unit. These house four state-of-the-art operating theatres for elective surgery. Mount Vernon Hospital is located on Rickmansworth Road in the north of the London Borough of Hillingdon approximately one mile north-west of Northwood Town Centre.

1.3 Redevelopment of Hillingdon Hospital

The current Hillingdon Hospital is an old building with parts of the estate built in the 1930s as emergency wartime accommodation. Some of the older wards have become unsafe and have been closed to protect patients and staff.

81% of the hospital building will require major repair or replacement soon. Works have been undertaken and more are planned to enable the Trust to continue providing services safely in the short term. However, if necessary repairs were undertaken, it would cost over £211m (the second most expensive maintenance bill for a hospital trust in England) and many of the repairs would not be long term solutions.

Given the above, it is clear that there is an urgent need for significant investment to redevelop Hillingdon Hospital. Without this, the estate will continue to deteriorate until the delivery of modern healthcare on the site is no longer possible.

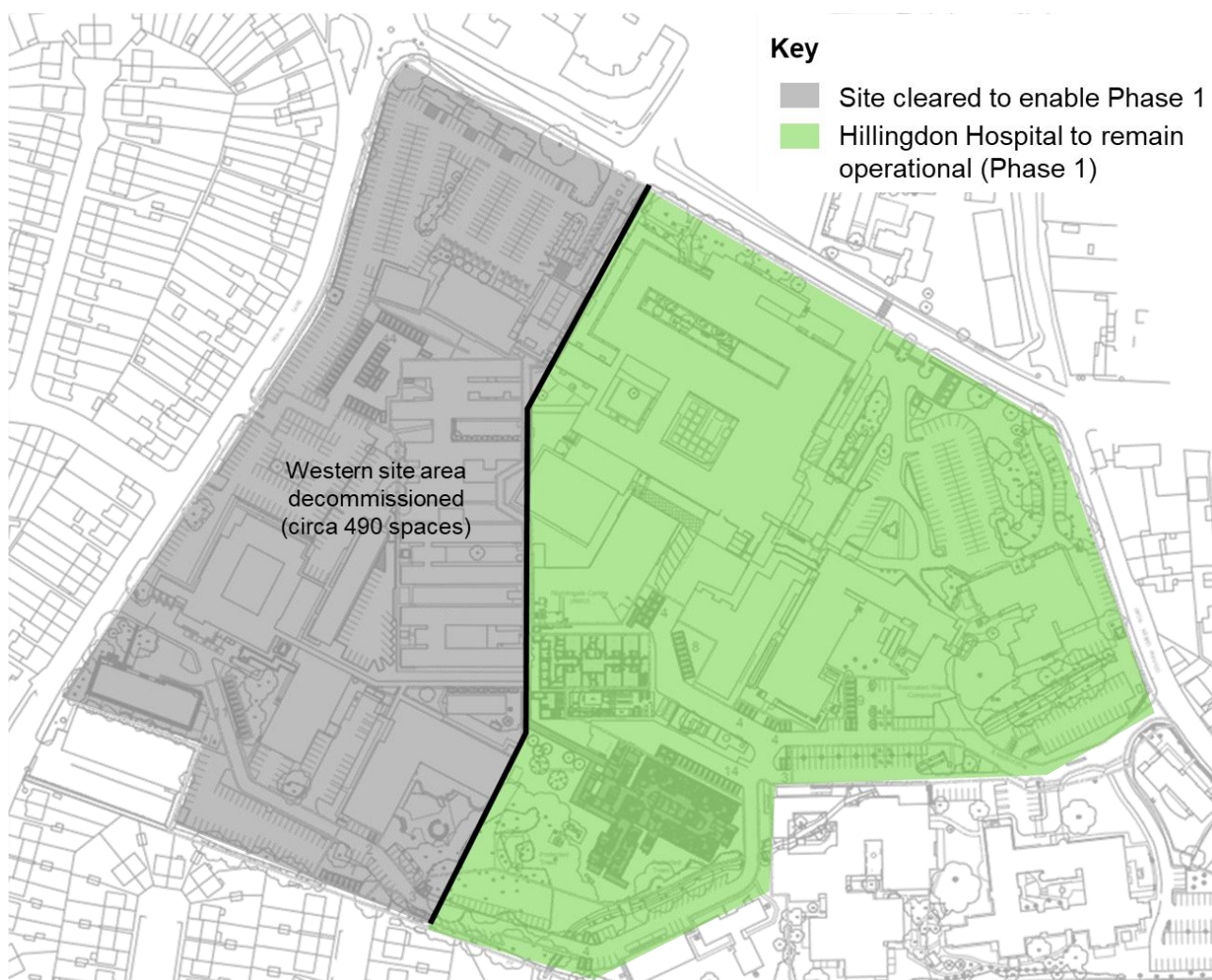
Work is continuing to be undertaken and the Trust has been engaging with the London Borough of Hillingdon (LBH) through pre-application consultation in relation to the emerging proposals and to seek feedback in order to steer the new hospital and associated masterplan.

The proposed development at Hillingdon Hospital comprises the phased construction of a new hospital building including a new multi-storey car park and a mixed-use development.

In order to enable the construction works to begin on the new hospital, the Trust has commissioned consultants to assist with the planning of decant works which will unlock the construction area to enable Phase 1 (the new hospital) to commence.

Unlocking this parcel on the Hillingdon Hospital site will require the loss of approximately 490 spaces at the Hillingdon Hospital site, this is illustrated in Figure 1.1.

Figure 1.1: The Hillingdon Hospital Redevelopment Phase 1 Clearance



The existing estate at Mount Vernon Hospital can accommodate some of this demand by making use of existing underused car parking areas on the Mount Vernon Hospital site, as discussed later in the 'Proposed Development' section.

2 Existing Conditions

2.1 Introduction

This section describes the existing transport conditions and accessibility of the site by all modes. It describes the existing local highway network, and how the site can be accessed by sustainable transport modes.

2.2 Site Location

Mount Vernon Hospital is located in Northwood, an area of northwest Greater London. The site is in an edge-of-town/semi-rural location. The site location is shown in Figure 2.1.

Nearby urban centres in Rickmansworth and Northwood provide access to amenities along with onward connections by rail and underground respectively. Further, although located in an edge of town location the site can be accessed within around 20-minutes from Watford, Harrow, Ruislip, and Amersham.

Figure 2.1: Mount Vernon Hospital Site Redline Boundary



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2.3 Existing Site Users

The site users at the hospital are as follows:

- East and North Hertfordshire Trust (Cancer Services)

- Mount Vernon Cancer Care
- Lynda Jackson Macmillan Centre (support and information for people affected by cancer)
- The Royal Free (Plastic Surgery)
- Northwood and Pinner Cottage Hospital

There are further complementary uses and accommodation on site including catering facilities associated with the hospital, medical research facilities, a hospice, post-graduate medical centre, and staff accommodation blocks.

2.4 Vehicular Access

There are three vehicle access points into Mount Vernon Hospital, as illustrated in Figure 2.2. Two accesses on the eastern boundary from Rickmansworth Road and one in the western corner of the site from White Hill.

Within the site internal links between the access points are restricted to prevent through traffic and only permit authorised vehicles (including emergency vehicles) between the eastern and western parts of the site. These barriers are manually lifted and dropped by on site staff and tend to be closed during peak times and open for much of the working day.

Figure 2.2: Site Access Locations



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- Gate 1 is located on Rickmansworth Road (south-east) and provides access to the south-eastern parking areas and the central area of the hospital.
- Gate 2 is located on Rickmansworth Road (north-east) and provides access to Mount Vernon Treatment Centre and northern parking areas. This access is also used by bus services.
- Gate 3 is located on White Hill (west) and provides access to Bishop Wood Hospital and western parking areas.

Pedestrians can access the site at all three points; however, Gate 3 is less accessible with only one footway along White Hill towards nearby bus stops (south-west). Pedestrian conditions in the vicinity of Gate 1 and 2 are of good quality with footways and street lighting present, providing good pedestrian connectivity to bus stops, nearby residential areas, and onwards to Northwood High Street and Underground Station.

2.5 Pedestrian Access

Footways are provided along all three vehicular access junctions and connect with existing footway provision off-site. A range of crossing facilities are also provided within the site.

2.6 Public Transport - Bus

The site is well served by buses, with five bus stands located within the site near the Mount Vernon Treatment Centre for boarding and alighting bus services. Bus stands A and B provide shelters and seating for waiting passengers, with further public seating also provided. Further to this, there are two bus stops located at the southeast access to the site on White Hill and two stops located on Rickmansworth Road adjacent to the primary vehicle access (east and west respectively).

The bus services serving the site are detailed in Table 3.1, which shows the route and typical daytime frequency.

Table 2.1: Summary of Bus Services

Service	First/Last	Frequency (buses per hour/buses per day)			Key Destinations
		Weekday	Saturday	Sunday	
282 (TfL)	05:05-00:00	4 to 6 bph	5 bph	4 bph	Northwood, Northwood Hills, Eastcote, Northolt stations, Ealing Hospital
331 (TfL)	06:22-23:58	3 to 4 bph	3 bph	2 bph	Station Parade, Northwood station and Ruislip station
8 (Arriva)	06:13--19:30	2 bph	2 bph	1 bph	Abbots Langley, Leavesden Park, Watford, South Oxley, Northwood
H11 (TfL)	05:30-00:51	3 bph	4 bph	3 bph	Harrow Bus station, Pinner station, Northwood station
R1 / R2 (Red Eagle Buses)	09:27-16:15	4 bpd	No services	No services	Maple Cross (R1) Chorleywood

This results in approximately 500 buses per day serving the site between 05:00 and 01:00, with approximately 18 buses per direction (northbound or southbound) at peak daytime frequency. The TfL bus services routing via the site are shown in Figure 2.3.

Figure 2.3: Local Bus Routes



Source: TfL

Furthermore, there is a shuttle bus service that exists for staff, patients and visitors who need to travel between Mount Vernon Hospital and Hillingdon Hospital. It runs once an hour from the main entrance between 07:00-18:00. The current timetable is shown in Table 2.2.

Table 2.2: THH Shuttle Bus Service Summary

Hillingdon Hospital Outpatients	Mount Vernon Hospital Main Entrance
0715	0745
0815	0845
0915	0945
1115	1145
1215	1245
1315	1345
1415	1445
1515	1600
1630	1700
1745	1830

The potential to increase the frequency of the Shuttle Bus by adding one additional vehicle is being explored by the Trust.

2.7 Public Transport – Underground and Rail

Northwood station is the closest underground station to the site and is served by the Metropolitan line which provides connections to Amersham, Chesham, and Watford in Hertfordshire, and to Harrow-on-the Hill, Wembley Park and Central London. It is located approximately 0.9 miles from the site which equates to an 18-minute walk or six-minute cycle along A404 Rickmansworth Road and the B469 Green lane. It can also be accessed using either the 8, 282, 331 or H11 bus services which takes seven minutes with a service approximately every five minutes thus operating jointly at a high frequency.

Rickmansworth station is served by Chiltern Railways and is located 2.4 miles north of the site with services to Aylesbury and London Marylebone. The station is located on a minor line into Marylebone, with limited coverage from direct services. The station can be accessed via a 13-minute cycle along the A404 (with no formal provision) or via the R1 or R2 bus services which takes approximately 23 minutes. Additionally, the station is on the Metropolitan line which provides onwards connections to Northwood station.

Denham station is located 4 miles from the site which equates to a 19-minute cycle. It can also be accessed from the site via the 331-bus service which takes approximately 21 minutes. Stopping services by Chiltern Railways operate between London Marylebone and Gerard's Cross.

Local rail services from stations in the area surrounding Mount Vernon Hospital are summarised in Table 2.3.

Table 2.3: Rail services

Station	Routes	Frequency (each direction)
Northwood Underground station	Metropolitan Line	8tph (northbound 4tph to Watford, 2tph to Amersham and 2tph to Chesham)
Rickmansworth station	Metropolitan Lines to Amersham and Chesham	4tp
	National Rail Lines to Aylesbury and London Marylebone	2tph
Denham Railway station	National Rail Lines to Gerrards Cross and London Marylebone	1tph
West Ruislip station	National Rail Lines to Gerrards Cross and London Marylebone	1tph
	Central Line	12tph peak, 9tph off-peak

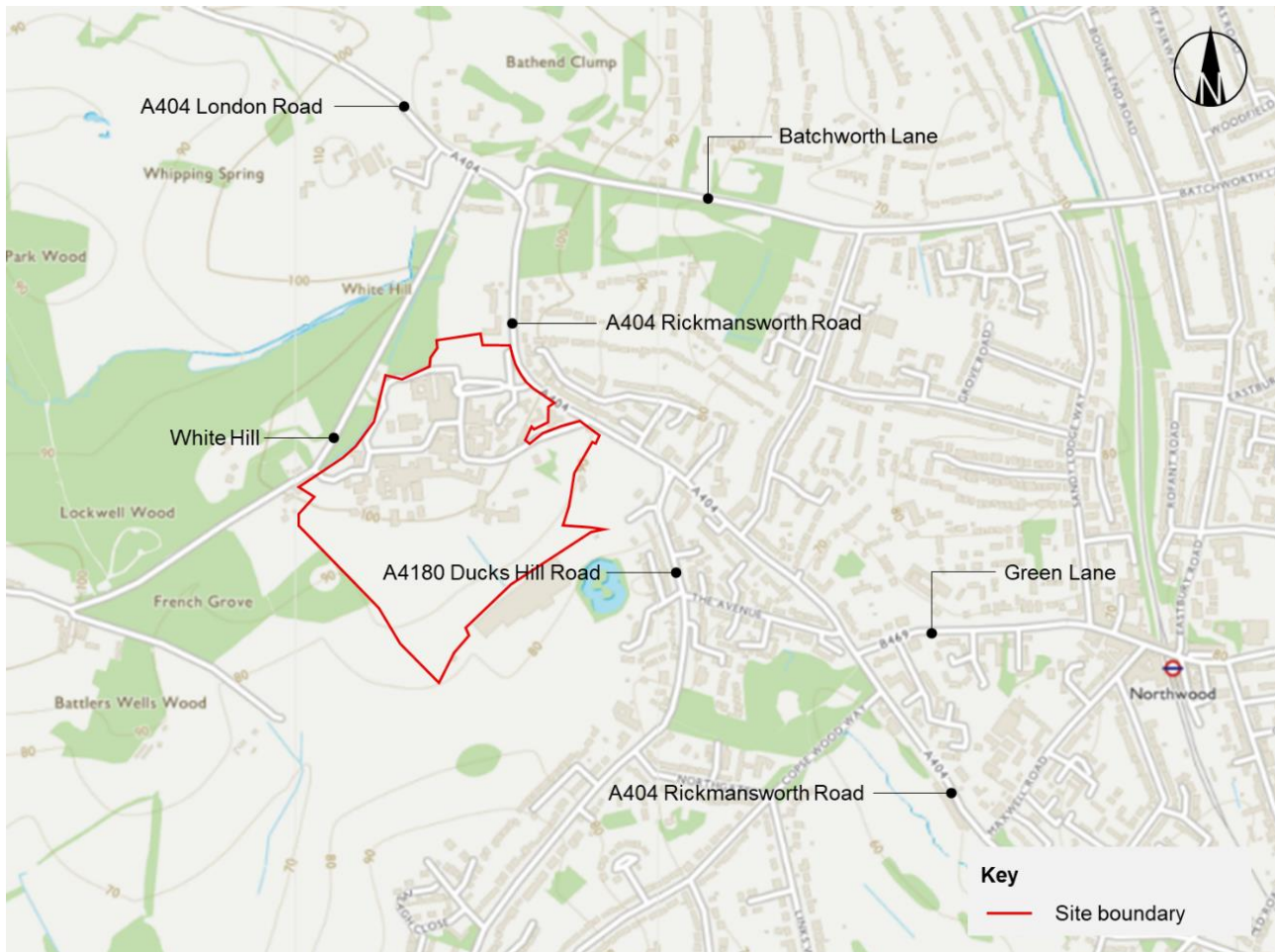
Source: National Rail, TfL

2.8 Local Highway Network

The site is accessed directly from the A404 Rickmansworth Road, running broadly north to south along the eastern site frontage. The A404 Rickmansworth Road is a single-carriageway road and in vicinity of the eastern site access locations is subject to a 30mph speed limit. Rickmansworth Road connects to London Road and Rickmansworth to the north-west, and to Northwood and Pinner Road to the south-east.

To the west the site is accessed from White Hill, in proximity of the site White Hill is also broadly aligned north to south, though generally connects with Harefield to the south-west of the site. White Hill is a single carriageway road subject to the national speed limit. The local highway network is illustrated in Figure 2.4.

Figure 2.4: Local Highway Network



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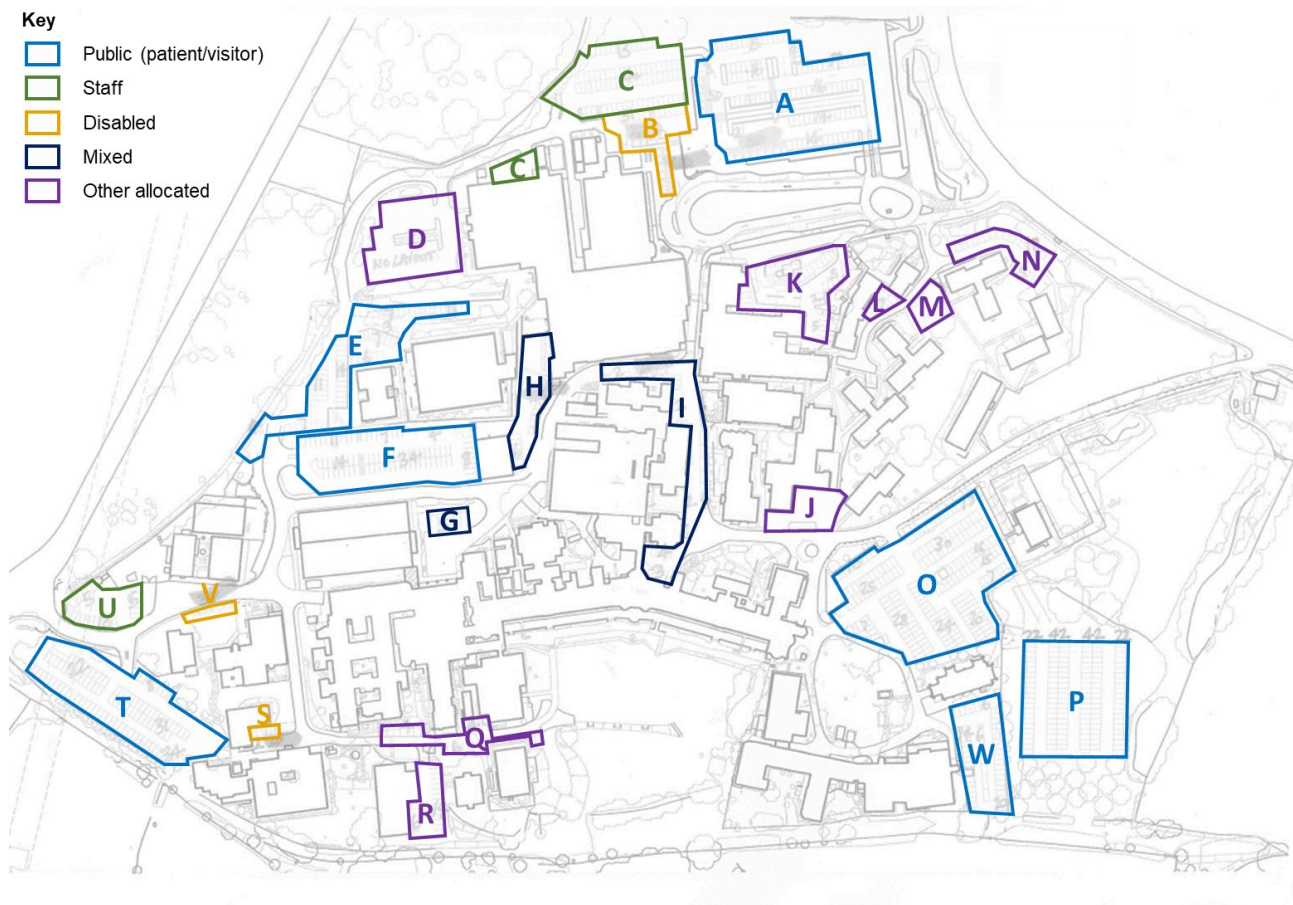
The site is well connected to the Strategic Road Network (SRN). The M25 runs to the west of the site with Junctions 17 Maple Cross Interchange and Junction 18 Chorleywood Interchange providing the closest links to the site from the south and north respectively. The M1 is located to the east of the site providing strategic connection into north-west London and to Hertfordshire and Bedfordshire. The M40 / A40 is an east/west route which runs to the south of the site connecting West London and Buckinghamshire.

2.9 Existing Parking

There are currently 1,079 physical car parking spaces within the Mount Vernon Hospital site. During a site visit on Wednesday 13 January 2021 the Car Park A Overflow (P below), and Chapel Car Park (W below) were both closed. The Chapel car park was inaccessible due to surveying/contractor works near its entry. The barrier entry to Car Park A Overflow was closed as there was ample capacity on-site at the time (noting Covid restrictions that were in place). This reduced the effective parking on site.

Figure 2.5 shows the parking that is available across the site for different users.

Figure 2.5: On-Site Parking



Source: Mott MacDonald

Table 2.4: Car Parking Allocations

Parking Area	Standard Capacity	Disabled Capacity	Total Capacity
A	133		133
B		19	19
C	90		90
D	54		54
E	71		71
F	80		80
G	5		5
H	6	12	18
I	9	17	26
J	12		12
K	12		12
L	7		7
M	7		7
N	27		27
O	174		174
P	128		128
Q	18		18

R	17	2	19
S	2	2	4
T	99		99
U	25		25
V		3	3
W	48		48
Total (on-site)	1024	55	1079

Source: Mott MacDonald

The parking varies in standard across the site. Car park A in the north eastern corner has barrier controls (not in operation at the time of surveys) with good quality surfacing and white lining. Similarly, car park T in the south western corner is a public pay and display car park with good quality surfacing and lining, however, does not have barrier controls. Car park C is a staff car park, although surfaced and lined there are maintenance issues with potholes, uneven surfacing, and ponding present. Car Park F (west) and Car park O (south-east) in the western area of the site is also high quality and is again a public pay and display car park.

The majority of remaining parking areas are provided in smaller clusters and predominantly spread across the central and southern areas of the site (car parks G, H, I J etc.).

This planning application seeks the use of car parks P and W, as shown in Figure 2.5. For clarity these are referred to from hereon as:

- P – Car Park A Overflow
- W – Chapel Car Park

Car Park A Overflow is an existing car park with 128 spaces. The car park has been used by the Trust since 2005. A planning application for a new car park in the north-eastern corner of the site was submitted in 2008 (ref: 3807/APP/2008/2548). Condition 1 required the car park (Car Park A Overflow) use to be discontinued on or before November 2013.

The Car Park A Overflow has continued to be used by the Trust as an overflow car park, occupied when parking capacity on site becomes stretched. The Car Park A Overflow has been used on an intermittent basis, as required in-line with parking stress on-site. It's use since 2005 can be seen using Google Earth satellite imagery (see Appendix A).

The level of use of this car park has been discussed with the Trust Estates team who have indicated that the Car Park A Overflow only ever reaches approximately 50% occupancy. On this basis it has been assumed that there is typically spare capacity for approximately 60 cars to use this existing car park.

The Chapel car park is an existing car park with 48 spaces. Through discussions with the Trust, it has been indicated that the Chapel car park is not currently used and has not been used for the last 10 to 12 years. This existing unused capacity has been captured in the decant parking provision calculations to make best use of the existing estate.

Parking on-site was observed during a site visit between 08:00 and 10:00 in February 2021. Although this took place during Covid-19 restrictions, staff parking was observed to be fully occupied across the site. Key observations are below:

- Staff parking (car parks C and U) became fully occupied between 08:00 and 09:00
- Car park E became fully occupied between 08:00 and 09:00 though the users are unknown
- Car park T became fully occupied by 10:00, during observations it appeared that this was mostly patients/visitors

- Car park Q became fully occupied between 08:00 and 09:00, these are mostly allocated spaces for the complementary uses at the south of the site
- Remaining parking was observed to have a relatively high turnover in the extended AM peak period spent on-site, particularly the central parking areas I and J along with the disabled spaces in area B.

2.10 Summary

The site is accessible by a variety of modes, due to its location car travel is the key mode currently. As a result of a site visit where parking demand across the site was observed, parking demand is already stretched which has also been confirmed by the Trust as reflecting the situation prior to Covid-19.

On the basis of the stretched parking and the need to decant some activities, staff and patients from Hillingdon Hospital to Mount Vernon Hospital, optimum use of the existing estate is required to ease pressure and ensure that the site can continue to operate effectively in delivering healthcare services to the public.

3 Proposed Development

3.1 Introduction

This section provides details on the numbers of staff and patients that will be decanted from Hillingdon Hospital to Mount Vernon Hospital for the duration of the site clearance, enabling works and Phase 1 construction works until the new hospital is constructed. A number of staff roles will be relocated to Mount Vernon Hospital increasing demand for parking on site through the decant, enabling and construction works of the new Hillingdon Hospital.

3.2 Decant Parking Demand – Trust Staff

As a result of the decant of certain activities from Hillingdon Hospital to other locations, several staff roles will be relocated to Mount Vernon Hospital. A breakdown of these staff roles and the demand created has been provided in Table 3.1.

Table 3.1: Decanted Staff Parking Demand

Building Name	Occupancy	Number of staff	Agreed staff permits	Desk Numbers
Raft	RECES	12	10	10
	HR	-	-	6
	Admission	12	24	12
	Outpatients	22	22	22
Baxter	Paed. Audiology	7	7	7
Batchworth House	HR	60	TBC	20
	Finance	37	37	19
Building 54	IT	2	TBC	2
Building 55	Hot Desk	15	-	10
	Procurement	4		4
Medical Block	Alderbourne or Beaconsfield East	20	TBC	12
OB Hall (Estate Office)	Capital Projects Team	3	TBC	3
Total		194	100	127

The Trust has rapidly adopted remote working wherever possible and will be providing several hot desks in refurbished buildings to accommodate these decanted roles at Mount Vernon Hospital. This will enable

flexibility where roles enable some agile working to take place and will assist with easing parking pressure amongst staff. This will be monitored on a regular basis alongside a continued push towards shifting staff trips to, from and at work towards sustainable modes wherever possible through continued implementation and evolution of the Trusts Sustainable Travel Transport Plan.

After identifying that the total number of staff to relocate is 194, two further exercises took place to identify; how many of the total relocating staff can be would be eligible for a parking permit and the total number of desks being provided by the decant projects. The resulting anticipated number of relocating staff requiring parking per day is 127 with only 100 staff provided with a parking permit. To represent a worst-case scenario, this number is based on the number of desks space being provided per department rather than the number of permits available to the decanted staff. The remaining 67 staff are discounted from the final number due to increased agile working, average general absence, and off-site working.

As a result of the above the total additional parking that is required to be available for staff use at the Mount Vernon Hospital site is 127. This will enable continued operation at the hospital and ensure that adequate parking is available to allow staff to access their workplace and for the hospital to deliver healthcare to the public.

3.3 Decant Parking Demand – Patients

As a result of the decant from Hillingdon Hospital a small number of patient treatment services will also be relocated through the duration of works to the new hospital. The additional daily patient demand is shown in Table 4.2.

Table 3.2: Decanted Patient Parking Demand

Building Name	Occupancy	Number of patients
Raft	RECES	-
	HR	-
	Admission	-
	Outpatients	-
Baxter	Paed. Audiology	8
Batchworth House	HR	-
	Finance	-
Building 54	IT	-
Building 55	Hot Desk	-
	Procurement	-
Medical Block	Alderbourne or Beaconsfield East	13
OB Hall (Estate Office)	Capital Projects Team	-
Total		21

Table 4.2. identifies that approximately 21 patients are expected to visit the site per day. Based on observations taken at the site and discussions with the Trust in relation to patient parking demand, it is apparent that there is adequate capacity within existing patient parking areas to cater for this marginal uplift in daily demand. Further, the 21 patients are likely to generate trips, and therefore parking demand, spread across the typical working day. These additional spaces can be accommodated for within the current car parking available for patient and visitor use.

3.4 Proposed Decant Parking

The proposed decant parking plan to accommodate activities moved from Hillingdon Hospital to Mount Vernon Hospital includes the use of two existing surface car parks and use of a small number of additional

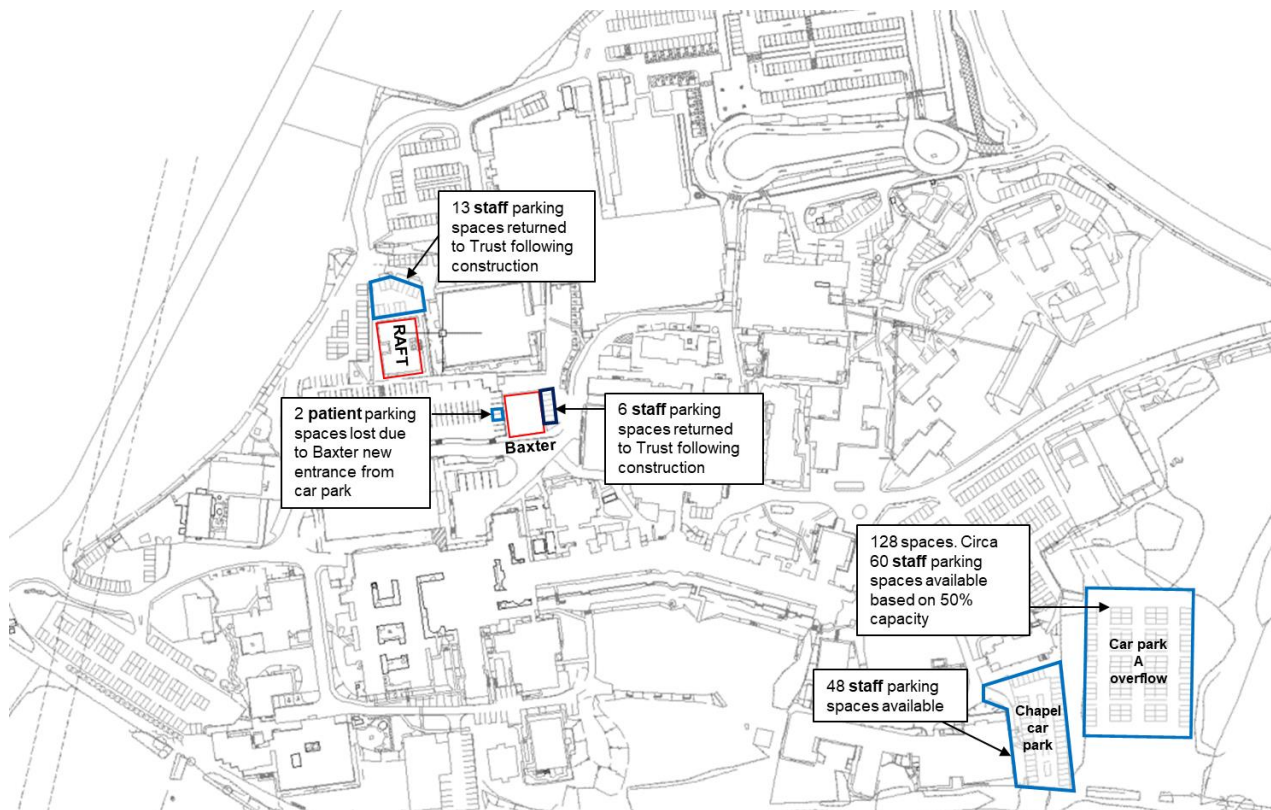
parking spaces returned to the Trust where third party tenants have vacated buildings which has associated parking provided.

The parking that is intended to be used to accommodate the uplift in staff parking demand is summarised by location below:

- RAFT Building returned by third party tenants – 13 parking spaces now returned to Trust
- Baxter Building - returned by third party tenants – 6 parking spaces now returned to Trust
- Car Park A Overflow – total capacity for 128 cars, approximate capacity for 60 cars based on current/previous usage (approximately 50% based on discussions with the Trust)
- Chapel Car Park – capacity for 48 cars
- Total car parking available – 127

The locations of the four named car parking areas above are shown in Figure 3.1.

Figure 3.1: Proposed Decant Parking Space Allocation



3.4.1 Overflow Car Park

This car park is located on the south of the site, close to the Chapel and pre-Covid, this car park was mostly opened during the day and shut during the night to prevent anti-social behaviour as it has no lighting or CCTV services. It should be noted however that there is no planning permission for use of the Overflow car park on either a temporary or permanent scenario. This car has a total of 128 as identified by Mott MacDonald and the Trust indicated that this car park is typically around 50% utilised (circa 64 occupied spaces), pre-Covid. On this basis it has been assumed that there is typically spare capacity for approximately 60 spaces which can be used for the relocating staff.

3.4.2 Chapel Car Park

There are 48 parking spaces in the Chapel car park, which are currently not in use and would be ideal to allocate to the decant staff. This car park has not been in use for almost 10 years and reopening this car park will require Planning Permission.

3.4.3 Repossessed Parking Spaces

There are two other areas where the Trust has already gained back parking spaces that could be used for the relocating staff and these areas are associated to Raft and Baxter buildings. Previously, parking spaces adjacent to these buildings were leased, Raft had 13 spaces leased and Baxter had 6 space leased. Now that these tenants have left site, these spaces now belong to the Trust. It is however important to note that there will be loss of 2 patient parking space due to the works associated with Baxter building.

Table 3.3: Total proposed spaced for reallocating staff

Car Park	Number of spaces for reallocating staff
Overflow Car Park	60
Chapel Car Park	48
Raft Car Park	13
Baxter Car park	7
Total	127

3.5 Car Park Works

The Trust has appointed a multidisciplinary team to support planning and minor works to enable safe use of the car parks. For reference, the works comprise:

- Removal of barrier at Chapel car park entry
- Improvements to lighting in both car parks and on entry route to Chapel Car Park
- Improvements to surfacing (clearance of detritus)
- Installation of new car park ticket machines

In terms of use of the parking spaces, all of the spaces in the Chapel Car Park and Car Park A Overflow are standard spaces. No allocation has been made for disabled spaces in either car park. This is appropriate as all disabled spaces on the site are located in central areas which are in more accessible locations and in closer proximity of buildings. During surveys it was apparent that disabled parking was only lightly used.

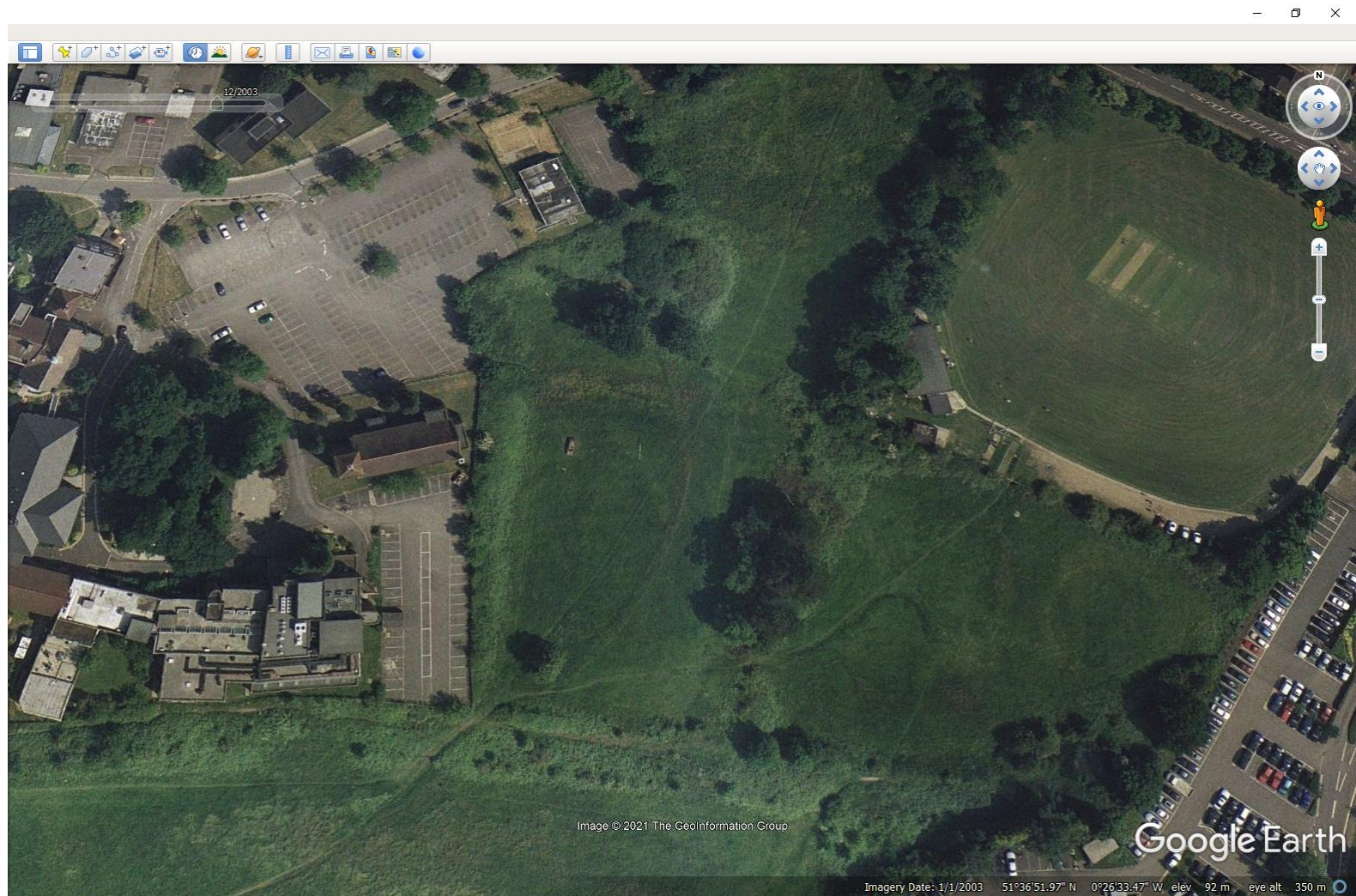
4 Summary

The existing parking situation for staff parking at Mount Vernon Hospital is currently already at capacity as a result of its usual day-to-day operation outside of the Covid-19. To provide reassurance to the Trust that their normal operations can continue to be delivered and that the additional parking requirement created by the decanting of staff from Hillingdon Hospital can be accommodated the use of existing surface car parks is being sought.

In order to achieve this for the Trust, this application seeks permission to use the existing surfaced car parking areas on the site. This comprises the opening up of the unused Chapel Car Park along with the continued use of Car Park A overflow. The use of these car parks is planned to accommodate the additional parking demand generated by the decant for the period of the construction of the new Hillingdon Hospital.

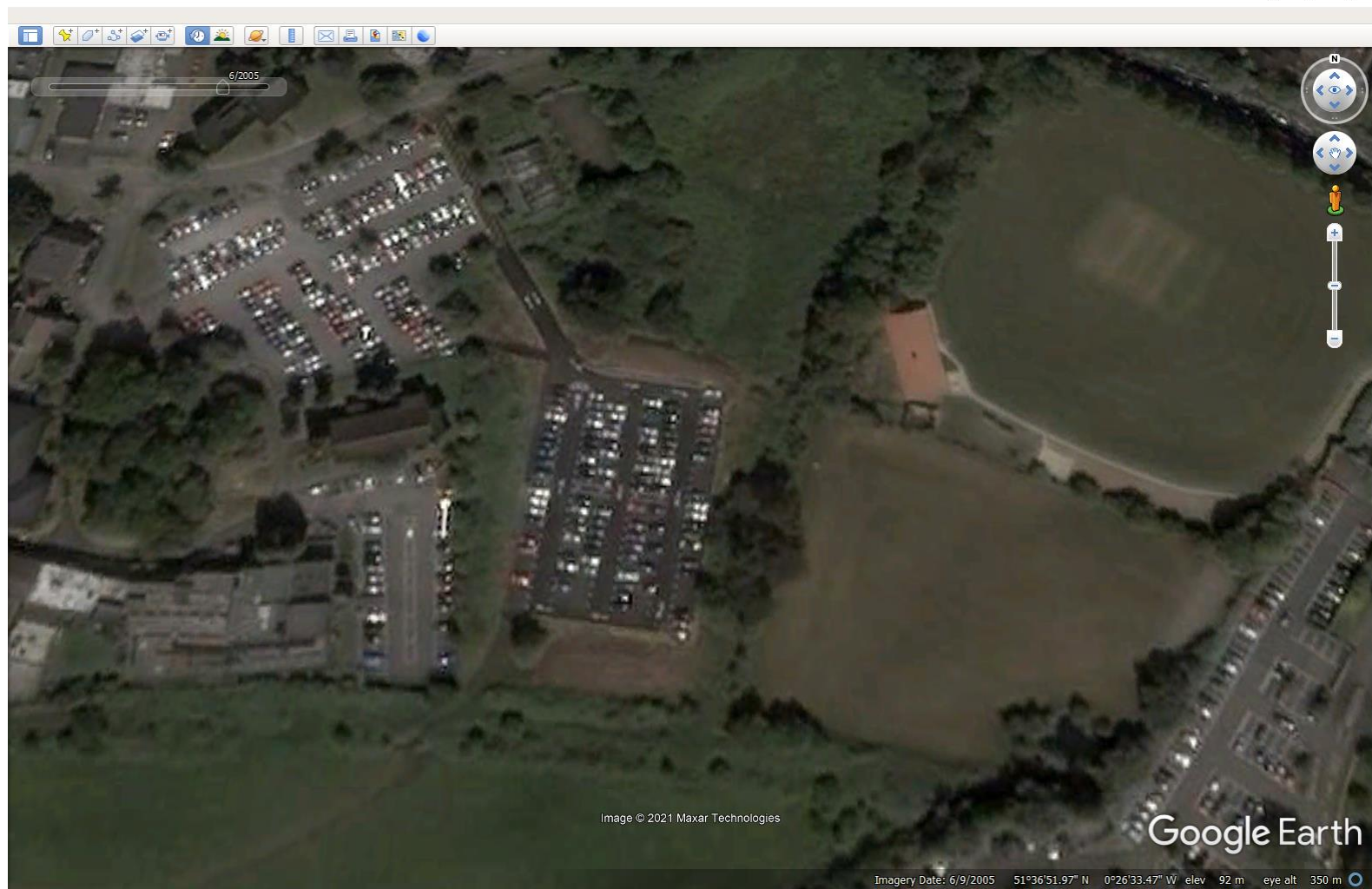
A. Google Earth Imagery of Car Park A Overflow Usage

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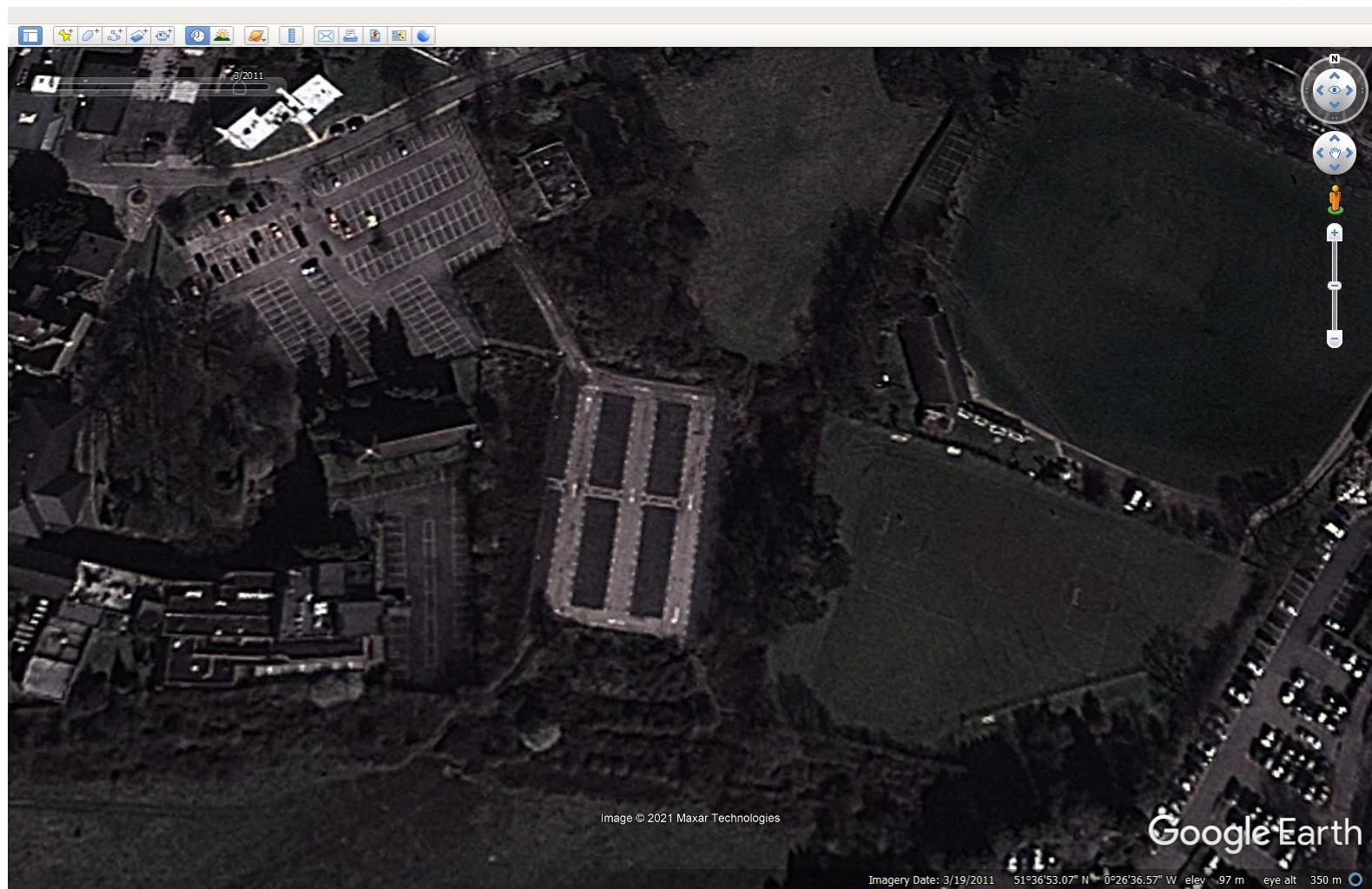
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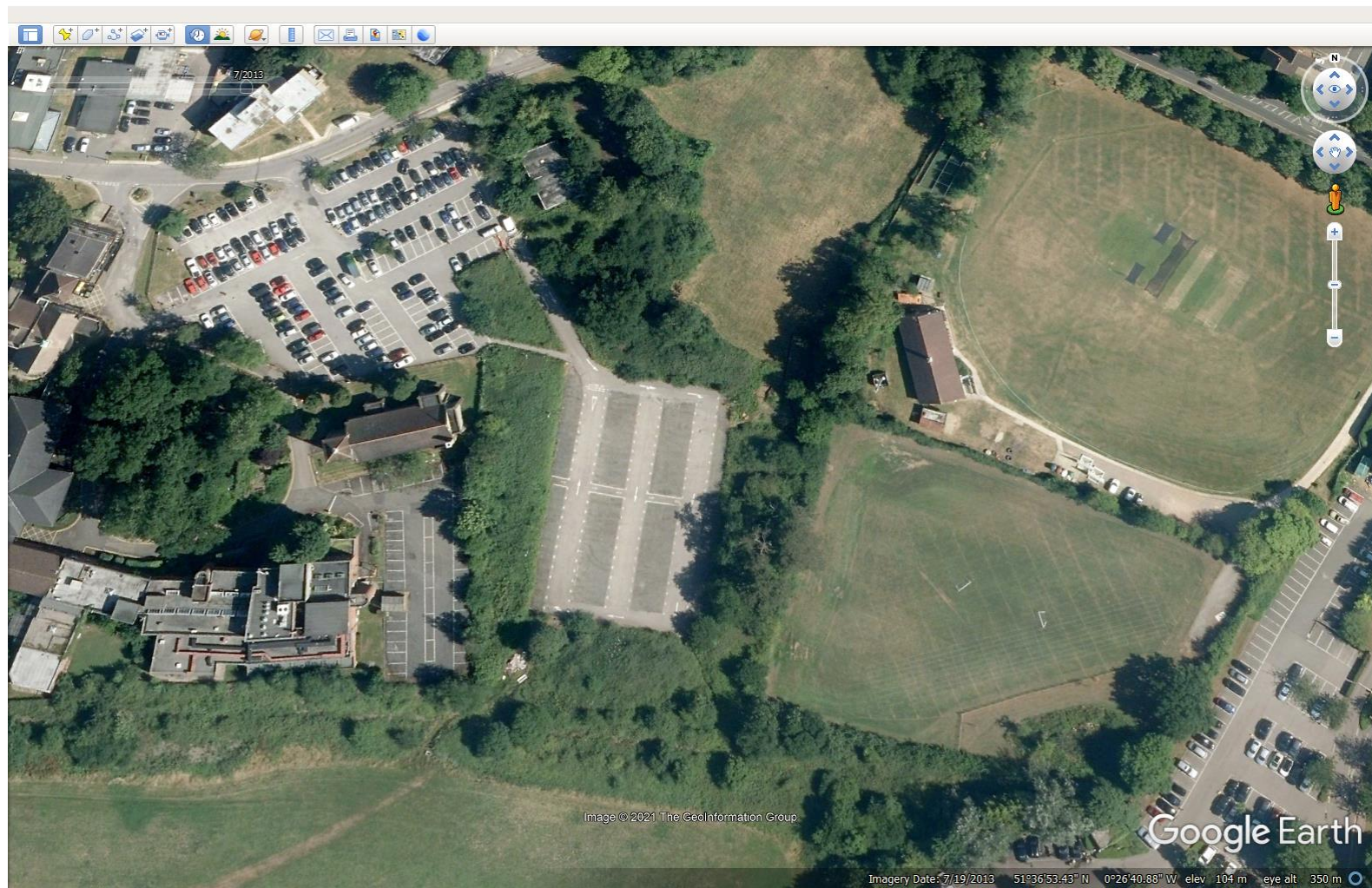


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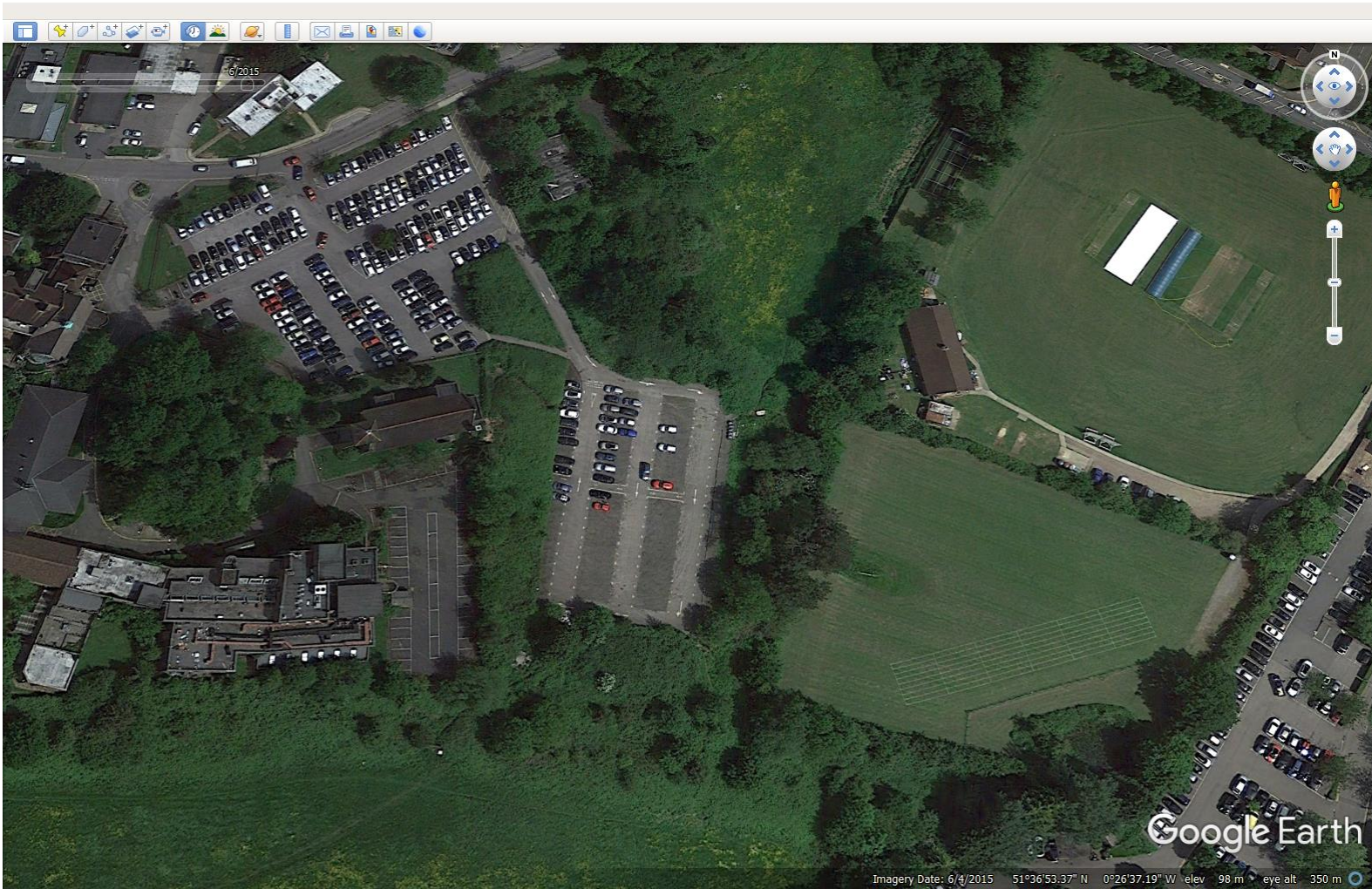


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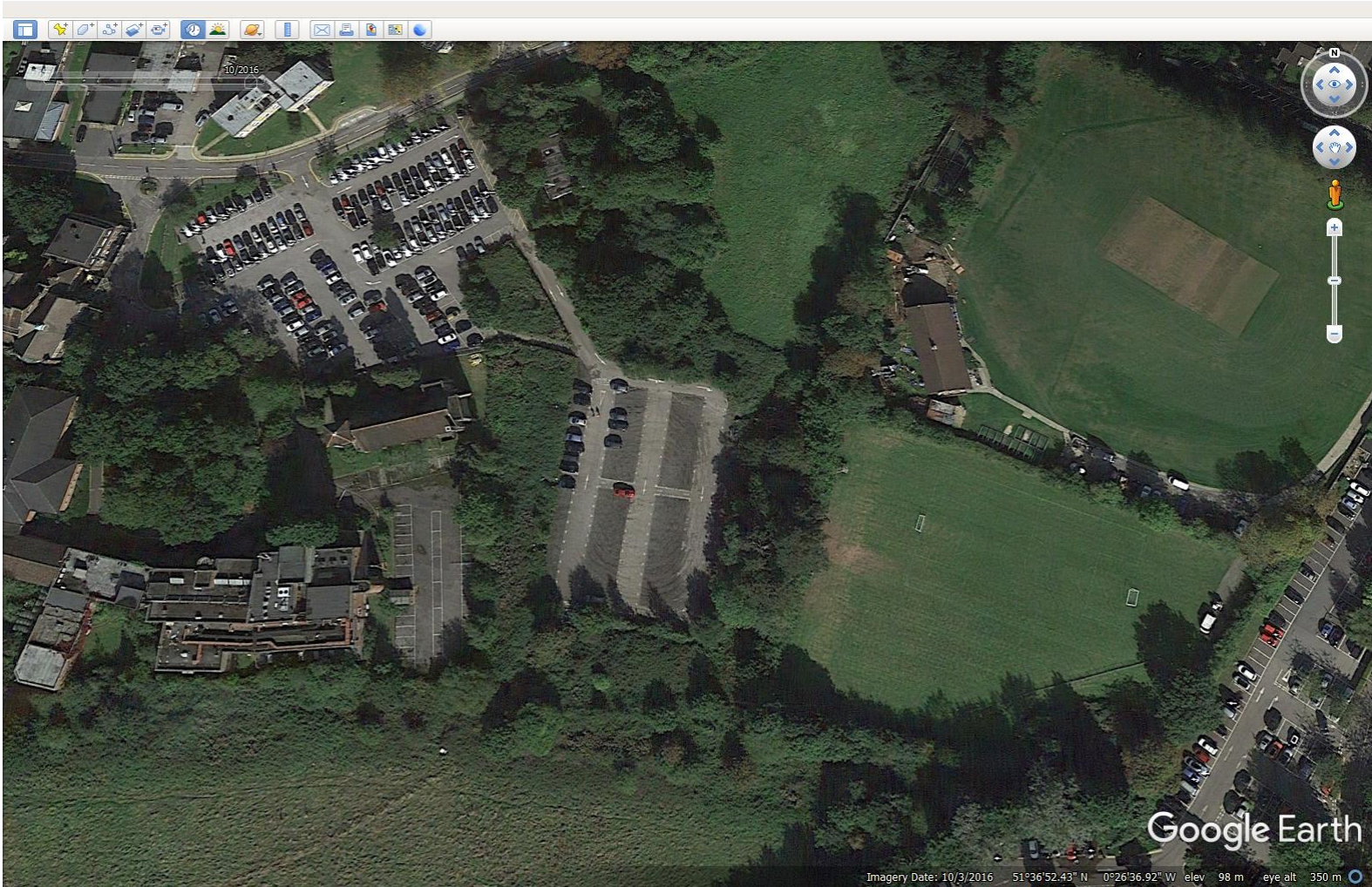


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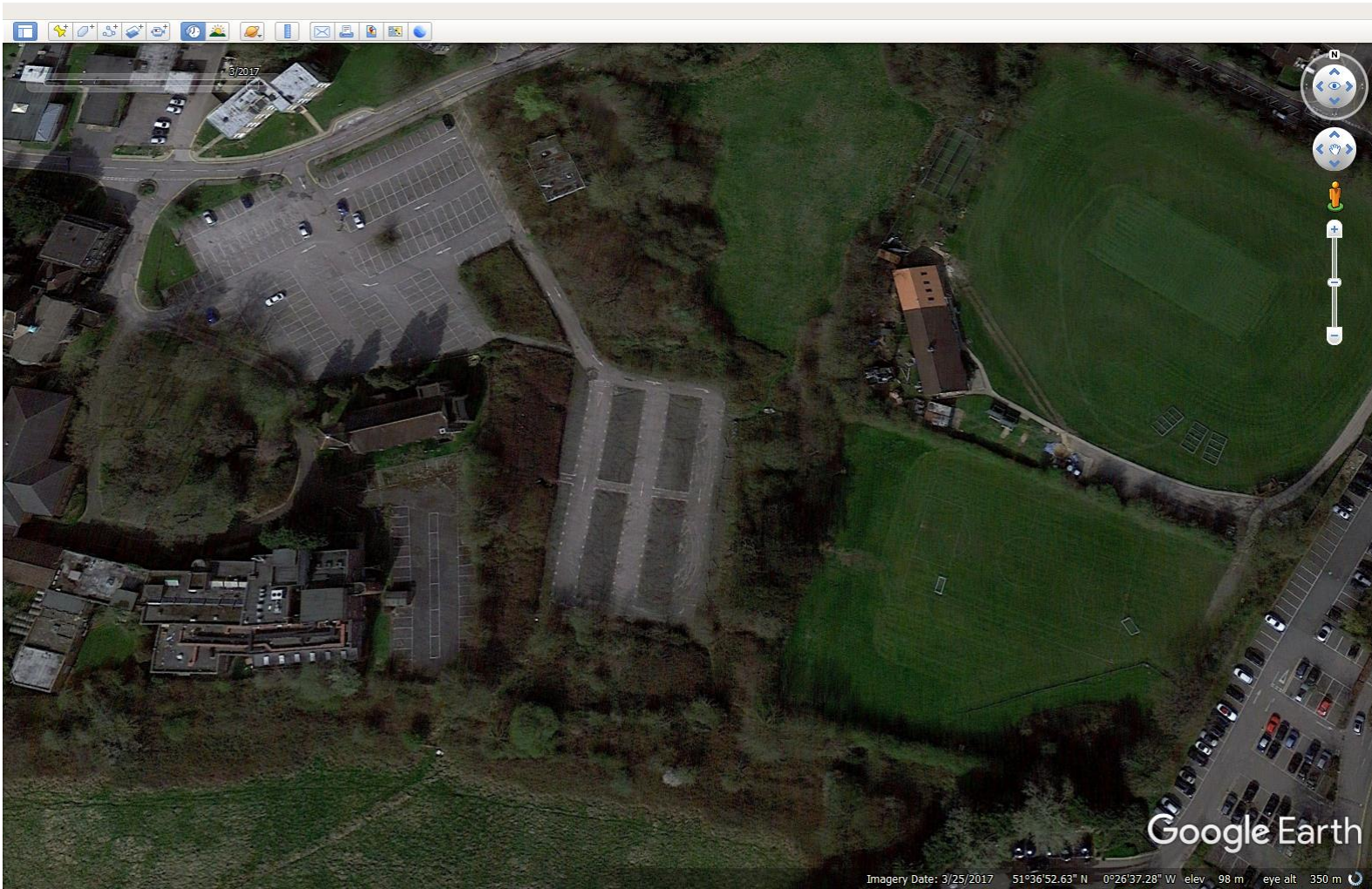
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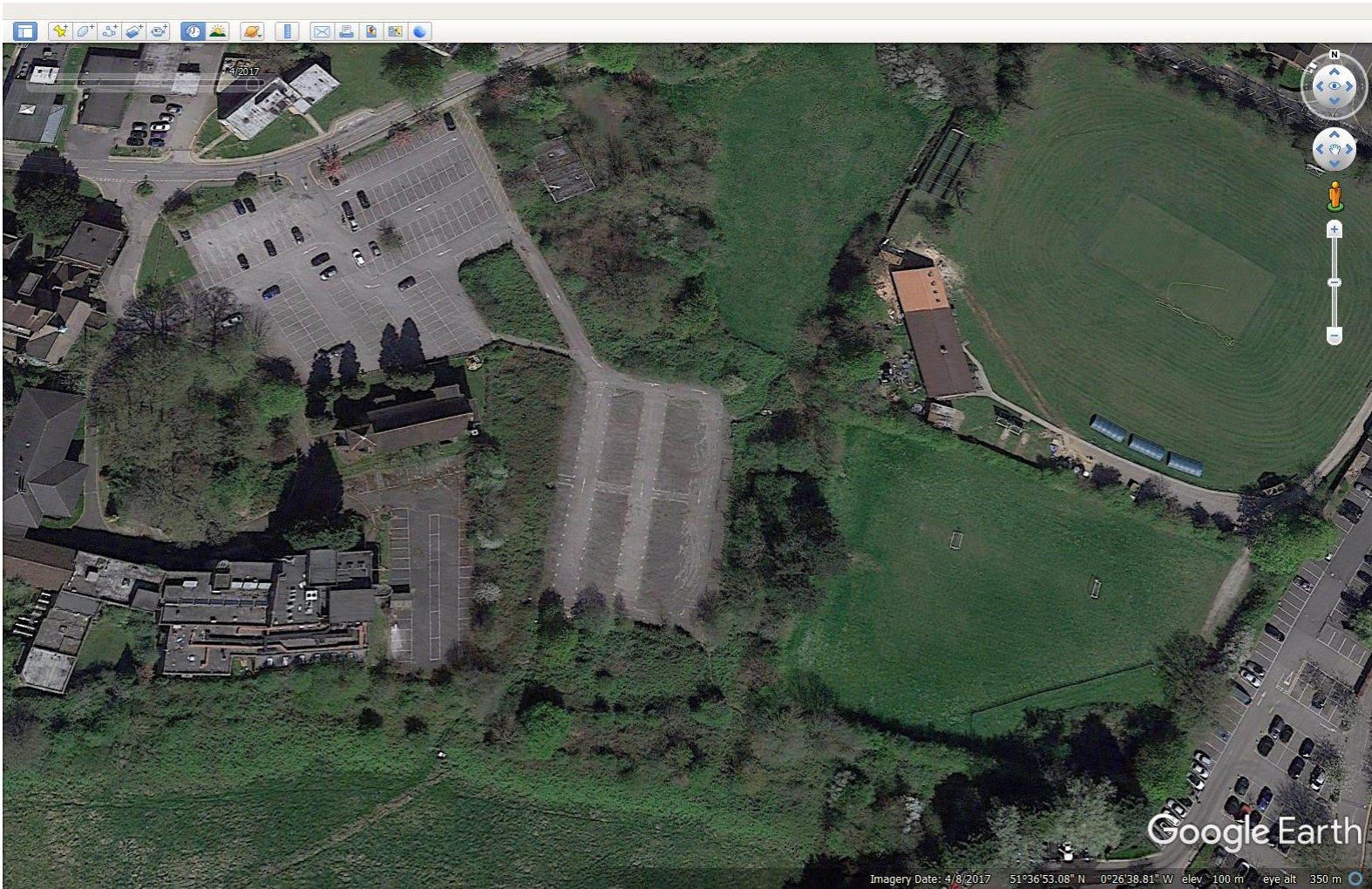


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