



**Colnbrook By-Pass
Harmondsworth
West Drayton
UB7 0FX**

51.483918, -0.485311

Parking Survey Report

**S25-240/PSR
May 2026**

Revision 2

Prepared by :

**Southwest Environmental Limited
10 Park Street
Bristol
BS1 5HX**

On behalf of :

**Three Sixty Design Solutions
Apuldrum
Chichester
PO20 7EG**



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0.0 Executive Summary

This parking report assesses the proposed parking expansion for the Colnbrook Immigration Removal Centre (IRC), a 24-hour high-security facility (Use Class C2A) located on the A4 Colnbrook By-Pass.

- **Site address:** Colnbrook IRC, Harmondsworth, West Drayton UB7 0HB
- **Capacity:** 400 residence
- **Proposed Development:** Construction of 72 additional parking spaces
- **Parking strategy:** Formalisation of existing “informal” demand to restore safety and operational efficiency.

Parking Provision Assessment:

- **Current Parking Provisions:** 308 spaces (Ratio of 0.77 per resident).
- **Proposed Total Parking Provisions:** 380 spaces (Ratio of 0.95 per resident).
- **Operational benchmark:** Aligns with recent UK sector precedents (e.g. HMP Parc 2025) which require a 0.90 - 1.0 ratio for shift based secure facilities.
- **Documented Shortfall:** A site survey on 16th April recorded a deficit of 59 vehicles currently displaced onto grass verges, double yellow lines or pavements.
- **Practical Capacity:** The proposal utilises the 85% occupancy threshold (CIHT, 2006). This is intended to maintain operational functionality and keep internal routes accessible for emergency services.
- **Compliance Status:** The expansion is intended to resolve an existing operational deficit and formalise demand, aiming to bring the site into alignment with NPPF Paragraph 117 and Hillingdon Local Plan safety standards.



1.0 Introduction

Southwest Environmental Limited have been commissioned to prepare a Parking Survey Report for Colnbrook by-pass by Three Sixty Design Solutions.

1.1 Scope of Works

This parking report assesses the requirement for 72 additional parking spaces at Colnbrook Immigration Removal Centre, Harmondsworth, UB7 0FX. The assessment identifies an operational shortfall in parking capacity, primarily driven by a significant tidal influx of vehicles during morning shift changes (06:00–12:00).

The analysis indicates that during peak periods, the site reaches its functional capacity. The provision of 72 additional spaces is intended to return the site to industry-standard "Practical Capacity" levels to manage documented demand safely and ensure compliance with the National Planning Policy Framework (NPPF) and Hillingdon Local Plan Policy DMT 6.

The report examines:

- Site constraints: security and A4 By-Pass restrictions;
- Policy Compliance: Alignment with NPPF and Hillingdon standards.
- Transport Gaps: PTAL 1b;
- Current deficit: Documented parking overflow;
- Operational Benchmarking: Use of 0.95 ratio standard;
- Practical Capacity: Application of the 85% Rule (based on CIHT/ITE guidance);

1.2 Site Location

Site Address	Colnbrook By-Pass Harmondsworth West Drayton UB7 0FX
Grid Reference	51.483918, -0.485311
Site Area	0.9795 ha Approx.
Current Landuse	Car Parking



The site is located on the Colnbrook By-Pass (A4) in Harmondsworth, within the London Borough of Hillingdon. Positioned immediately to the north of London Heathrow Airport, the locality is primarily defined by large-scale strategic infrastructure, airport-related commercial operations, and the adjacent Harmondsworth Immigration Removal Centre. As shown in **Appendix 1**.

1.3 Public Transport:

The site is situated within an area of low public transport accessibility, designated as PTAL 1b (Poor)¹ - as shown in **Appendix 2**.

Bus Services:

- Colnbrook By-Pass / Duke's Bridge (approx. 200m walking distance) is served by routes A4, 350 and 7x
- Heathrow Park Thistle Hotel (approx. 600m walking distance) is served by routes 81 and 423.

Rail and Underground Stations:

- Heathrow Terminal 5 Station (approximately 2.4 km distance)
- West Drayton Station (approximately 4.0 km distance)

1.4 Proximity to Local Amenities:

- Heathrow Terminal 5 station approximately 2.4km
- Slough city center approximately 8.4km
- Hayes & Harlington Station approximately 6.8km

1.5 Development Proposal Summary

The proposal seeks the creation of 72 additional parking spaces at Colnbrook IRC to resolve a shortfall in existing capacity. The site currently provides 308 designated spaces (comprising 272 standard spaces and 36 spaces within the designated van area).

A site survey conducted on 16th April identified that the current provision is likely insufficient to meet operational requirements, with 59 vehicles recorded in non-designated areas.

¹https://experience.arcgis.com/experience/4c88d5310df34e21bcb3a50ae9c0a159/page/PTAL-Query?block_id=layout_276_block_11&intcmp=26162



This deficit is likely influenced by the site's PTAL 1b rating, which necessitates a high level of reliance on private vehicles for staff. The proposed expansion to 380 spaces is intended to formalise this demand, which would likely ensure unobstructed emergency access routes, and support the safe 24-hour operation of the facility.

2.0 Planning Policy Context

2.1 National Planning Policy Framework (NPPF)

The NPPF Section 9 (Promoting Sustainable Transport) supports parking provision that is appropriate to local circumstances and operational requirements, ensuring that developments are safe, accessible, and efficient².

Principles:

- Local Circumstances (Para 112): Parking standards should be set taking into account the accessibility of the development, the specific type and use of the site, and the availability of public transport;
- Safe and Suitable Access (Para 115): Development proposals must ensure that safe and suitable access to the site can be achieved for all users;
- Operational Efficiency (Para 117): Site layouts should allow for the efficient delivery of goods and maintain unobstructed access for service and emergency vehicles and;
- Highway Safety (Para 116): Development should only be refused on transport grounds where there would be an unacceptable impact on highway safety.

Application to Development:

The proposal to provide 72 additional spaces is a response to these national principles. As the site is located in a PTAL 1b (Poor) accessibility area, the expansion is required to bring the facility into compliance with NPPF Paragraphs 115 and 117. By formalising the documented demand and clearing internal access routes currently obstructed by 59 overflow vehicles, the development is intended to restore highway safety and likely ensure unobstructed access for emergency services.

2.2 Hillingdon Local Plan Policy DMT 6 - Vehicle Parking

Policy DMT 6 (A) states that:

"Development proposals must comply with the parking standards transport set out in Appendix B. The Council will take into account the role of the individual development in the context of the wider area and the nature of the use."

The policy and the NPPF permit a site-specific approach to parking provision where appropriate justification is provided based on:

- Resident numbers
- Staff numbers
- Operational vehicle numbers
- Facility location

² <https://www.gov.uk/guidance/national-planning-policy-framework/9-promoting-sustainable-transport>



3.0 Site Evidence

3.1 Physical Observations

To assess the site's compliance with the "Safe and Suitable Access" requirements of the NPPF, a survey was conducted on 16th April. The survey established that the existing 308 spaces (which includes 36 designated van spaces) are currently insufficient for the facility's operational needs.

During the survey, 59 vehicles were observed parked in non-designated areas, including grass verges and double-yellow lines. This unauthorised "overspill" indicates that the formal parking provision has reached total saturation. The presence of these vehicles on internal access roads likely conflicts with NPPF Paragraph 117 regarding the maintenance of unobstructed routes for emergency and service vehicles.

Table 1: Observed unauthorised parking

Location within site	Observation	Number of vehicles
Internal Access Roads	Parked on double yellow lines, verges or pavements	35
Soft Standing Verges	Parked on grass	24
Total Overspill		59

Location of unauthorised parking shown in **Appendix 3**.

3.2 Manual Traffic Survey

A manual traffic survey was conducted on 30th April over a 24 hour period. The data indicates a significant net influx of vehicles during the morning period, with a slow rate of departure, which suggests a high duration of stay for the majority of users.

Table 2: Manual Traffic Survey - Cars arriving and departing the car park

Time Period	Arrivals	Departures	Net Change	Cumulative Load
12am - 6am	33	10	+23	23
6am - 12pm	329	59	+270	293
Baseline Adjustments*	-	-	-	+30
Peak site Demand	-	-	-	323 Cars

**Note on Baseline Adjustment: In line with professional judgement for 24-hour secure facilities, a baseline of 30 vehicles has been included. This represents approximately 10% of the site's total capacity and accounts for the essential night-shift and security personnel on duty at the start of the survey period (00:00). This adjustment is supported by Section 13 of the TRICS Good Practice Guide³, which states that data must be representative to avoid misleading outcomes, starting the accumulation at zero for a 24-hour operational site would fail to reflect the facility's minimum staffing requirements.*

At the midday peak, the facility is managing a demand of 323 vehicles. When measured against the formal provision of 308 spaces, the site reaches 105% occupancy. This demonstrates that the car park is operating beyond its physical limit, inevitably forcing vehicles into non-designated areas.

For full 24 hour survey data see appropriate Appendix in Transport Assessment S25-240/TA

³<https://trics.org/wp-content/uploads/2026/03/TRICS-Good-Practice-Guide-2026.pdf>



4.0 Parking Requirements

Colnbrook IRC is a Secure Residential Institution (Use Class C2A). As Hillingdon's Development Management Policy Appendix C does not provide specific parking standards for C2A uses, the requirement must be determined on a 'First Principles' basis via a Transport Assessment, as per the flexibility afforded in Policy DMT 6 (A) and London Plan Policy T6.

4.1 Parking Ratios

Benchmarking of comparable secure facility expansions in the UK (e.g., HMP Parc, 2025) indicates an operational requirement of 0.90 to 1.0 spaces per inmate. This ratio is utilized to manage the standard overlap of staff and visitors within a secure environment. The current provision at this site reflects a ratio of 0.77, which is lower than these established benchmarks. This discrepancy between the current provision and operational requirements correlates with the parking displacement observed during site inspections.

Adopting a 0.95 ratio (380 spaces) would bring the facility in line with modern operational standards. This provision is intended to allow for peak vehicle demand to be accommodated within the site boundary, which would likely resolve the documented overflow and assist in keeping internal access routes unobstructed.

Table 3: Parking Ratio Analysis

Ratio (Spaces per Inmate)	Total Spaces	Status	Impact
0.77 (Current)	308	INSUFFICIENT	59 cars parked in no designated areas
0.95 (Proposed)	380	SUFFICIENT	Meets standard; clears all overflow

4.2 The 85% Practical Capacity Threshold

In addition to ratio benchmarking, this assessment utilises an 85% occupancy threshold to determine "Practical Capacity." This methodology is consistent with the Guidelines on the Preparation of Parking Strategies and Management (Chartered Institution of Highways and Transportation, 2006).

The CIHT guidance indicates that once a parking facility exceeds 85% occupancy, it is considered operationally full. At this level, the limited availability of vacant spaces often



results in increased "parking search" time, which can lead to internal congestion and queuing. As documented in the physical observations on 16th April, exceeding this threshold has likely contributed to the displacement of vehicles into unauthorized areas, including grass verges and designated emergency access routes.

- **Current Operational Status:** With a recorded peak demand of 323 vehicles, the site is currently operating at 105% of its 308-space provision.
- **Calculated Requirement:** To accommodate the observed demand of 323 vehicles while maintaining the 15% vacancy buffer suggested for fluid site circulation, a total of 380 spaces is required ($323 / 0.85 = 380$).

Increasing the provision to 380 spaces would likely return the facility to an 85% practical capacity level. This is intended to allow peak demand to be accommodated within formal bays, which would likely maintain unobstructed internal routes for emergency and service vehicles in accordance with NPPF Paragraph 117.

4.3 Cycle Parking Provision

In accordance with London Plan Policy T5⁴, cycle parking should be provided to support sustainable travel options for staff. Given the secure nature of the facility, the provision is focused on the staff rather than the resident population.

It is suggested that cycle parking be provided at a ratio of 1 space per 5 staff members. These spaces should be secure and covered to encourage usage.

⁴https://www.london.gov.uk/sites/default/files/the_london_plan_2021.pdf



5.0 Conclusion

The proposal for 72 additional parking spaces at Colnbrook IRC would bring the total provision to 380 spaces. This increase is a direct response to the documented shortfall of 59 vehicles currently forced to park in non-designated areas. Benchmarking of comparable UK secure facility expansions indicates that a ratio of 0.90 to 1.0 spaces per inmate is a standard operational requirement for managing staff and visitor demand.

The current site ratio of 0.77 is below this benchmark, which correlates with the observed parking overspill. Adopting a 0.95 ratio is intended to return the facility to an 85% "Practical Capacity" level, consistent with CIHT (2006) guidelines. This 15% vacancy buffer is likely necessary to allow for fluid circulation and to keep vehicles within formal bays rather than obstructing internal access routes.

The site's PTAL rating of 1b (Poor) reflects limited connectivity to the wider transport network, which makes private vehicle use a necessity for many users. Expanding the capacity to 380 spaces is intended to internalise existing demand and restore the unobstructed routes required for service and emergency vehicles. This approach is likely required to bring the site into compliance with NPPF Paragraph 117 and Hillingdon Local Plan Policy DMT 6.

7.0 Certification

The survey data reflects internal parking conditions at the time of the site survey conducted on 16th April. While every effort has been made to ensure the accurate recording of vehicle locations and available spaces, this report represents findings at the time of survey only and is valid for planning purposes for the period surrounding the survey date.

The assessment was conducted via a physical audit of the site's internal infrastructure. This survey does not constitute an exhaustive or real-time occupancy analysis; occupancy levels are subject to significant fluctuation throughout the day and night due to:

- *Shift Handovers: Peak demand during staff rotation windows;*
- *Operational Flux: Variations in visitor numbers and professional legal visits;*
- *Emergency Access: Unscheduled movements of operational or "Blue Light" vehicles.*

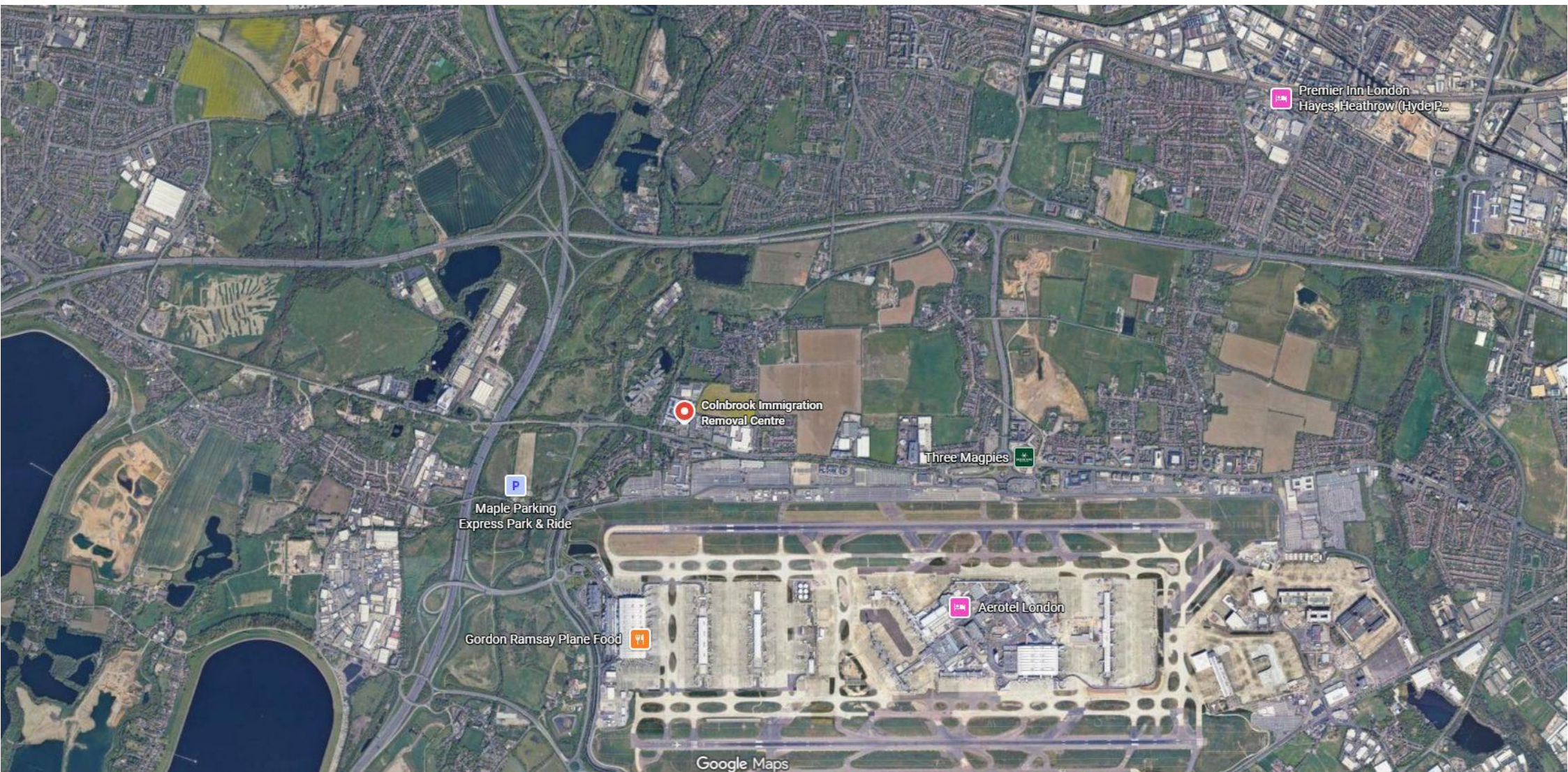
Future Parking Conditions: Site conditions are subject to change due to factors including modifications to staff shift patterns, changes in facility capacity, or further reductions in local public transport services. This report does not predict or guarantee parking availability beyond the survey timeframe or following significant changes to the facility's operational environment.

This document serves as an accurate record of the functional insufficiency observed at the time of inspection, provided to justify the formalisation of existing demand.



Appendix 1

Site Location and Context Plans



Colnbrook IRC Location





Project Location

Heathrow
Colnbrook By-
Pass

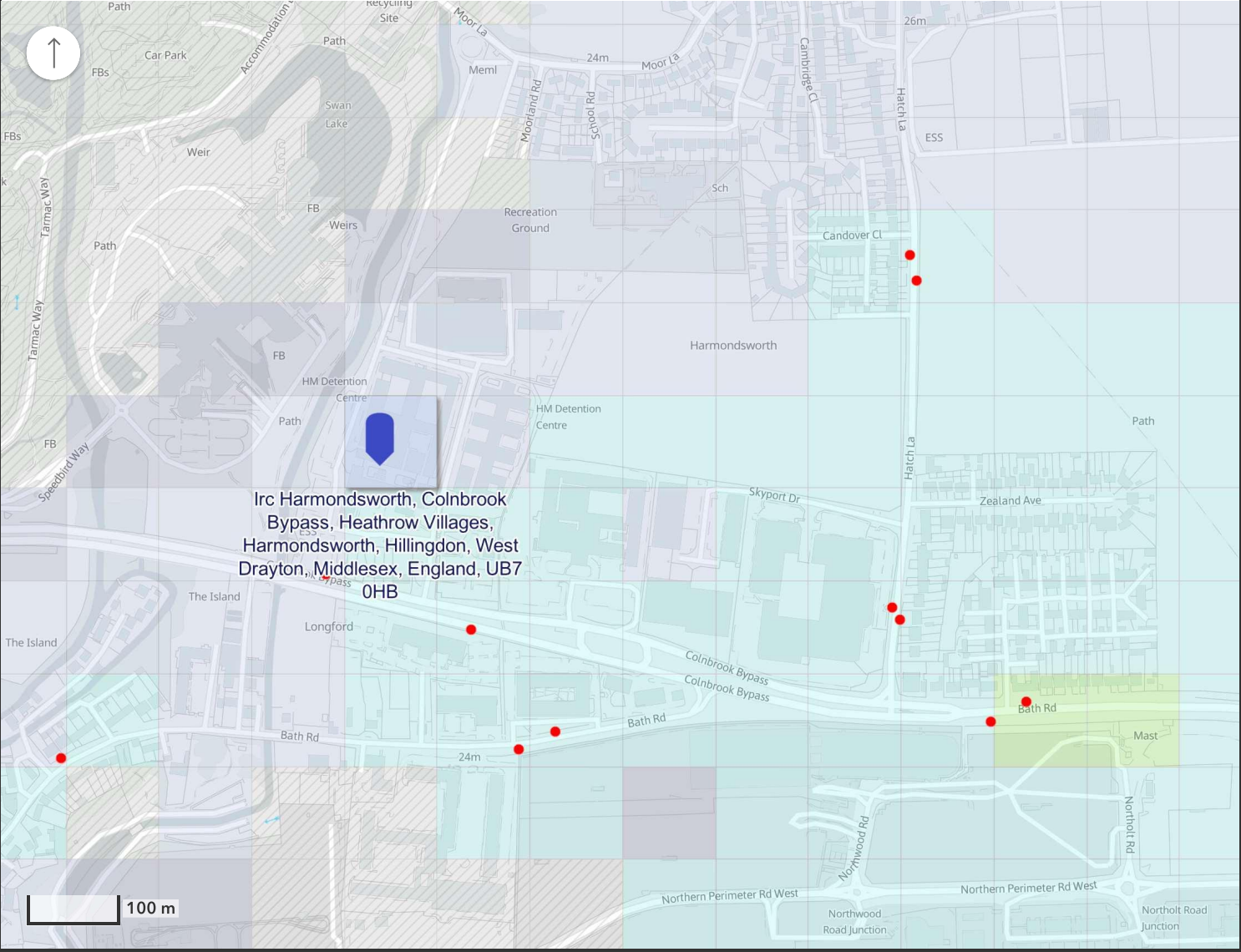
Harmondsworth
West Drayton
UB7 0FX



Appendix 2

PTAL Output Map

PTAL Report



TfL Stations
Underground Stations



National Rail Stations



Bus Stops



Elizabeth Line Stations



DLR Stations



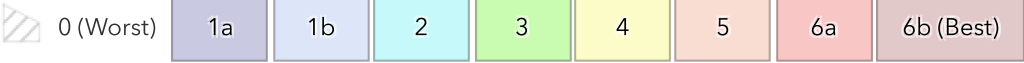
Overground Stations



Tramlink Stations



PTAL 2023 RESULT



PTAL 2023 Score

1b

Grid ID: 64357
Coordinates: 505345,177252 (BNG)

Calculation Parameters

Day of Week: Monday-Friday

Time Period: AM Peak

Walk Speed: 4.8 km per hour

Bus Walk Access Time Threshold: 8 mins

Rail Walk Access Time Threshold: 12 mins



Mode	Stop	Route	Service Frequency	Walk Distance (m)
BUS	Heathrow Park Thistle Hotel	81	5.00	602.64

Mode	Stop	Route	Service Frequency	Walk Distance (m)
BUS	Colnbrook By	350	3.00	447.30

Mode	Stop	Route	Service Frequency	Walk Distance (m)
BUS	Heathrow Park Thistle Hotel	423	3.00	602.64



Appendix 3

Unauthorised Parking Locations

Unauthorised Parking Locations

